



- Suitable for circuit connection, changeover, switching ON and OFF as well as motor starting
- Possible special circuit schemes
- IEC IP40 or IP65 front degree of protection
- Door mount, rear mount or in enclosure versions
- Wide range of features.

|                                                                                                                  | <b>SEC. - PAGE</b> |
|------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Order code structure</b> .....                                                                                | <b>12 - 2</b>      |
| <b>Special circuit scheme form</b> .....                                                                         | <b>12 - 3</b>      |
| <b>Switching</b>                                                                                                 |                    |
| ON/OFF switches, front mounting, U version .....                                                                 | 12 - 4             |
| ON/OFF switches, rear mounting, O version .....                                                                  | 12 - 7             |
| ON/OFF switches in enclosure, P/L version .....                                                                  | 12 - 9             |
| Changeover switches with or without 0, front mounting, U version .....                                           | 12 - 10            |
| Changeover switches with or without 0, rear mounting, O version .....                                            | 12 - 12            |
| Changeover switches with or without 0, in enclosure, P/L version .....                                           | 12 - 13            |
| <b>Multi-step</b>                                                                                                |                    |
| Starting with 1, front mounting, U version .....                                                                 | 12 - 14            |
| Starting with 1, rear mounting, O version .....                                                                  | 12 - 16            |
| Starting with 1 in enclosure, P/L version .....                                                                  | 12 - 17            |
| Starting with 0, front mounting, U version .....                                                                 | 12 - 18            |
| Starting with 0, rear mounting, O version .....                                                                  | 12 - 20            |
| Starting with 0, in enclosure, P/L version .....                                                                 | 12 - 21            |
| <b>Measuring</b>                                                                                                 |                    |
| Voltmeter and ammeter switches, front mounting, U version .....                                                  | 12 - 22            |
| Voltmeter and ammeter switches, rear mounting, O version .....                                                   | 12 - 24            |
| <b>Motor starting</b>                                                                                            |                    |
| Motor reversing, star-delta, Dahlander motor control, separate winding switches, front mounting, U version ..... | 12 - 26            |
| Motor reversing, star-delta, Dahlander motor control, separate winding switches, rear mounting, O version .....  | 12 - 30            |
| Motor reversing, star-delta, Dahlander motor control, separate winding switches, in enclosure, P/L version ..... | 12 - 34            |
| <b>Versions and dimensions</b> .....                                                                             | <b>12 - 36</b>     |
| <b>Accessories</b> .....                                                                                         | <b>12 - 43</b>     |
| <b>Wiring diagrams</b> .....                                                                                     | <b>12 - 44</b>     |
| <b>Technical characteristics</b> .....                                                                           | <b>12 - 48</b>     |



#### GF SERIES

- IEC conventional free air thermal current Ith 10A and 20A
- Up to 24 contacts
- Direct (positive) opening action  $\ominus$ ; according to IEC/EN/BS 60947-5-1
- Up to 12 switching positions
- Rotation angles: 30°, 45°, 60°, 90°
- Possibility of side-by-side installation
- IEC IP20 degree of protection of contacts
- IEC IP40 degree of protection of front, standard supplied.



#### 7GN SERIES

- IEC conventional free air thermal current Ith 16...125A
- Round-shaped contact body
- Up to 24 contacts
- Direct (positive) opening action  $\ominus$ ; according to IEC/EN/BS 60947-5-1
- Up to 12 switching positions
- Rotation angles: 30°, 45°, 60°, 90°
- Available versions in plastic enclosure
- IEC IP40 degree of protection of front, standard supplied.



#### GX SERIES

- IEC conventional free air thermal current Ith 16...40A
- Square-shaped contact body
- Up to 24 contacts
- Direct (positive) opening action  $\ominus$ ; according to IEC/EN/BS 60947-5-1
- Up to 12 switching positions
- Rotation angles: 30°, 45°, 60°, 90°
- Available versions in plastic enclosure
- Possibility of side-by-side installation
- IEC IP20 degree of protection of contacts
- IEC IP65 degree of protection of front, standard supplied.



#### GN SERIES

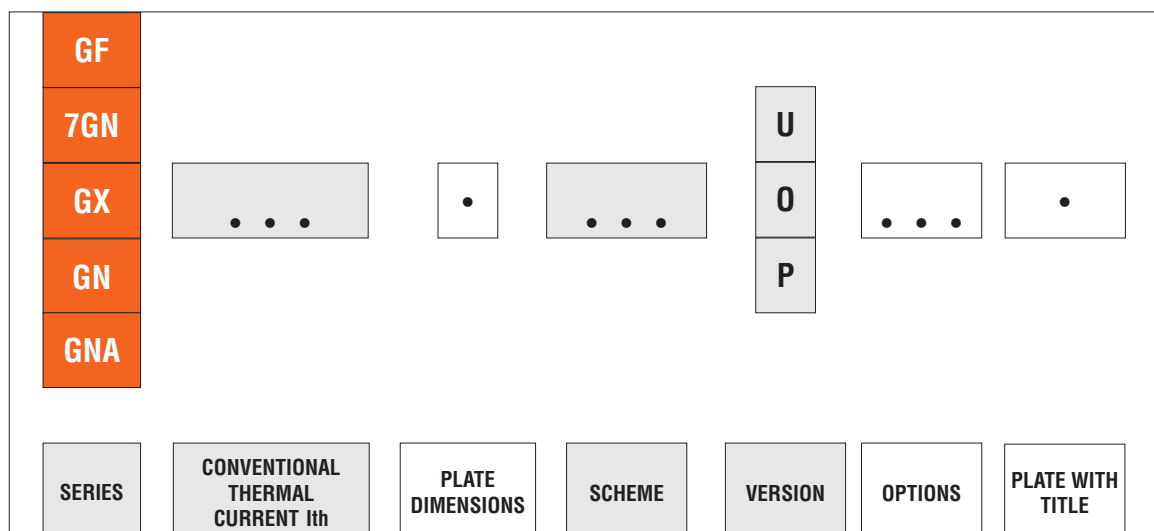
- IEC conventional free air thermal current Ith 200...315A
- Available on request versions up to 2000A
- Up to 24 contacts
- Direct (positive) opening action  $\ominus$ ; according to IEC/EN/BS 60947-5-1
- Up to 12 switching positions
- Rotation angles: 30°, 45°, 60°, 90°
- Available versions in metal enclosure
- 200A to 315A versions cURus approved.



Page 12-42

#### GNA20 SERIES

- IEC conventional free air thermal current Ith 20A
- Up to 48 contacts
- Direct (positive) opening action  $\ominus$ ; according to IEC/EN/BS 60947-5-1
- 4 contacts for each element
- Reduced depth
- Rotation angles: 30°, 45°, 60°, 90°
- Available versions in plastic enclosure
- IEC IP20 degree of protection of contacts.



**GF**  
IEC protection:  
Front = IP40  
Contacts = IP20

**7GN**  
IEC protection:  
Front = IP40  
Contacts = IP00

**GX**  
IEC protection:  
Front = IP65  
Contacts = IP20

**GN**  
IEC protection:  
Front = IP40  
Contacts = IP00

**GNA**  
IEC protection:  
Front = IP40  
Contacts = IP20

| GF  | 7GN  | GX  | GN   | GNA |
|-----|------|-----|------|-----|
| 10A | 16A  | 16A | 200A | 20A |
| 20A | 20A  | 20A | 315A |     |
|     | 25A  | 32A |      |     |
|     | 32A  | 40A |      |     |
|     | 40A  |     |      |     |
|     | 63A  |     |      |     |
|     | 125A |     |      |     |

90  
91  
10  
92  
99  
100  
....  
❶

**U** = Front mount  
**O** = Rear mount  
**P** = In plastic enclosure  
**L** = In metal enclosure  
(only for GN series)

**N** = Add N for version  
with front plate  
with title and  
neutral label

Insert H when an enlarged front plate is required

| Standard plate | Enlarged plate |
|----------------|----------------|
| 30x30mm        | 48x48mm        |
| 48x48mm        | 65x65mm        |
| 65x65mm        | 90x90mm        |

Front plate standard dimension in the different options are available from 12-36.

Example for ordering:

**GX1653P** = Changeover switch, 16A, 3 poles, 3 positions, 3 wafers in 90x90mm IEC IP65 enclosure.

**7GN25H90U51** = ON-OFF switch, 25A, 1 pole, 2 positions, 1 wafer with enlarged 65x65mm front plate and IEC IP65 protection.

Consult Technical support for information; see contact details on inside front cover.

|     |                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------|
| 25  | Front mounting with red/yellow handle padlockable in 0 and protection covers                          |
| 65  | Front mounting with red/yellow handle padlockable in 0 and protection covers (7GN only)               |
| 11  | Front mounting with black handle without front plate for hole Ø22mm fixing                            |
| 12  | Front mounting without front plate with key operation for hole Ø22mm fixing                           |
| 47  | Snap on front mounting with black handle for hole Ø22mm fixing                                        |
| 48  | Modular service cover for 35mm DIN rail mounting with black handle                                    |
| 88  | Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers            |
| 98  | Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers (7GN only) |
| 4V  | Front mounting with 4 screws fixing                                                                   |
| 51  | Front mounting with black handle with IP65 front protection                                           |
| 24  | Front mounting with red/yellow handle not padlockable in 0 and without protection covers              |
| 29  | Front mounting with front plate with key operation for hole Ø22mm fixing                              |
| 29D | Snap on front mounting with key operation for hole Ø22mm fixing                                       |
| 06  | Front mounting with black handle padlockable in 0                                                     |
| 49  | Modular service cover for 35mm DIN rail mounting with key operation                                   |

❶ Special schemes are available on request; complete the form on page 12-3.



Consult manual I230 on the website [www.LovatoElectric.com](http://www.LovatoElectric.com) for further information (configuration of contacts, diagrams, plate indications, etc.).

# 12 Rotary cam switches

## Special circuit scheme form

INDEX

12

|  |  |                                                         |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|--|--|---------------------------------------------------------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
|  |  | 1                                                       | 4 | 5 | 8 | 9  | 12 | 13 | 16 | 17 | 20 | 21 | 24 | 25 | 28 | 29 | 32 | 33 | 36 | 37 | 40 | 41 | 44 | 45 | 48 |  |  |
|  |  | Simplified representation of the contact wiring diagram |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|  |  | 2                                                       | 3 | 6 | 7 | 10 | 11 | 14 | 15 | 18 | 19 | 22 | 23 | 26 | 27 | 30 | 31 | 34 | 35 | 38 | 39 | 42 | 43 | 46 | 47 |  |  |

**Plate indication**

**Pos.**

|          |    |
|----------|----|
|          |    |
|          | 7  |
| <b>C</b> | 8  |
|          | 9  |
|          | 10 |
| <b>D</b> | 11 |
|          | 12 |
|          | 1  |
| <b>A</b> | 2  |
|          | 3  |
|          | 4  |
| <b>B</b> | 5  |
|          | 6  |

**Front plate**

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 1 | X |   | X |   | X |   | X |   |
| 2 |   | X |   | X |   | X |   | X |

|                      |                                      |                      |                |               |
|----------------------|--------------------------------------|----------------------|----------------|---------------|
| Overlapping contacts | Close contact in 2 or more positions | Open/passing contact | Closed contact | Spring return |
|----------------------|--------------------------------------|----------------------|----------------|---------------|

|          |             |     |                        |    |               |                      |
|----------|-------------|-----|------------------------|----|---------------|----------------------|
| SERIES:  | GF          | 7GN | GX                     | GN | GNA           | Current rating ..... |
| VERSION: | Front mount |     | Rear mount             |    | Enclosed      | Other .....          |
| FINISH:  | Standard ❶  |     | Red/yellow padlockable |    | Special ..... |                      |
| FIXING:  | 2 screws    |     | 4 screws               |    | Snap          |                      |

Qty:..... Company name: .....

Contact details: .....

❶ Standard supplied finish is black front plate while 0-12 indication and the handle are black; any other is considered special.  
Also consult technical instruction I230 on the website [www.LovatoElectric.com](http://www.LovatoElectric.com).



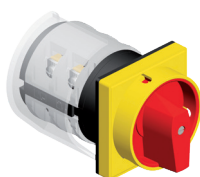
## ON/OFF SWITCHES

Front mounting with black handle (U)①



| WIRING DIAGRAMS |                  |                                       |                    | ②90                                                                               | ②91      | ②10       | ②92       | ③05                                                                                 | ③06      | ③07       | ③08       | ③03                                                                                 |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|----------|-----------|-----------|-------------------------------------------------------------------------------------|----------|-----------|-----------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2        | 3         | 4         | 1                                                                                   | 2        | 3         | 4         | 3                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |          |           |           |  |          |           |           |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |          |           |           |                                                                                     |          |           |           |                                                                                     |
| GF...           | □30              | 10                                    | 10                 | GF1090U                                                                           | GF1091U  | GF1010U   | GF1092U   | GF1005U                                                                             | GF1006U  | GF1007U   | GF1008U   | GF1003U                                                                             |
|                 | □48              | 20                                    | 15                 | GF2090U                                                                           | GF2091U  | GF2010U   | GF2092U   | GF2005U                                                                             | GF2006U  | GF2007U   | GF2008U   | GF2003U                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1290U                                                                          | 7GN1291U | 7GN1210U  | 7GN1292U  | 7GN1205U                                                                            | 7GN1206U | 7GN1207U  | 7GN1208U  | 7GN1203U                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2090U                                                                          | 7GN2091U | 7GN2010U  | 7GN2092U  | 7GN2005U                                                                            | 7GN2006U | 7GN2007U  | 7GN2008U  | 7GN2003U                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2590U                                                                          | 7GN2591U | 7GN2510U  | 7GN2592U  | 7GN2505U                                                                            | 7GN2506U | 7GN2507U  | 7GN2508U  | 7GN2503U                                                                            |
|                 | □65              | 32                                    | 40                 | 7GN3290U                                                                          | 7GN3291U | 7GN3210U  | 7GN3292U  | 7GN3205U                                                                            | 7GN3206U | 7GN3207U  | 7GN3208U  | 7GN3203U                                                                            |
|                 |                  | 40                                    | 50                 | 7GN4090U                                                                          | 7GN4091U | 7GN4010U  | 7GN4092U  | 7GN4005U                                                                            | 7GN4006U | 7GN4007U  | 7GN4008U  | 7GN4003U                                                                            |
|                 |                  | 63                                    | 60                 | —                                                                                 | —        | 7GN6310U  | 7GN6392U  | —                                                                                   | —        | 7GN6307U  | 7GN6308U  | 7GN6303U                                                                            |
|                 | □90              | 125                                   | 130                | —                                                                                 | —        | 7GN12510U | 7GN12592U | —                                                                                   | —        | 7GN12507U | 7GN12508U | 7GN12503U                                                                           |
| GX...           | □48              | 16                                    | 12                 | GX1690U                                                                           | GX1691U  | GX1610U   | GX1692U   | GX1605U                                                                             | GX1606U  | GX1607U   | GX1608U   | GX1603U                                                                             |
|                 |                  | 20                                    | 15                 | GX2090U                                                                           | GX2091U  | GX2010U   | GX2092U   | GX2005U                                                                             | GX2006U  | GX2007U   | GX2008U   | GX2003U                                                                             |
|                 | □65              | 32                                    | 32                 | GX3290U                                                                           | GX3291U  | GX3210U   | GX3292U   | GX3205U                                                                             | GX3206U  | GX3207U   | GX3208U   | GX3203U                                                                             |
|                 |                  | 40                                    | 40                 | GX4090U                                                                           | GX4091U  | GX4010U   | GX4092U   | GX4005U                                                                             | GX4006U  | GX4007U   | GX4008U   | GX4003U                                                                             |
| GN...           | □132             | 200                                   | 200                | —                                                                                 | —        | GN20010U  | GN20092U  | —                                                                                   | —        | GN20007U  | GN20008U  | GN20003U                                                                            |
|                 |                  | 315                                   | 255                | —                                                                                 | —        | GN31510U  | GN31592U  | —                                                                                   | —        | GN31507U  | GN31508U  | GN31503U                                                                            |

Front mounting with red/yellow handle padlockable in 0 and protection covers (U25)④



| WIRING DIAGRAMS |                  |                                       |                    | ②90                                                                                 | ②91        | ②10        | ②92        | ③05                                                                                   | ③06        | ③07        | ③08        |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |
| GF...           | □48              | 20                                    | 15                 | GF2090U25                                                                           | GF2091U25  | GF2010U25  | GF2092U25  | GF2005U25                                                                             | GF2006U25  | GF2007U25  | GF2008U25  |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1290U25                                                                          | 7GN1291U25 | 7GN1210U25 | 7GN1292U25 | 7GN1205U25                                                                            | 7GN1206U25 | 7GN1207U25 | 7GN1208U25 |
|                 |                  | 20                                    | 20                 | 7GN2090U25                                                                          | 7GN2091U25 | 7GN2010U25 | 7GN2092U25 | 7GN2005U25                                                                            | 7GN2006U25 | 7GN2007U25 | 7GN2008U25 |
|                 |                  | 25                                    | 30                 | 7GN2590U25                                                                          | 7GN2591U25 | 7GN2510U25 | 7GN2592U25 | 7GN2505U25                                                                            | 7GN2506U25 | 7GN2507U25 | 7GN2508U25 |
|                 |                  | 32                                    | 40                 | 7GN3290U25                                                                          | 7GN3291U25 | 7GN3210U25 | 7GN3292U25 | 7GN3205U25                                                                            | 7GN3206U25 | 7GN3207U25 | 7GN3208U25 |
|                 | □40              | 50                                    | 50                 | 7GN4090U25                                                                          | 7GN4091U25 | 7GN4010U25 | 7GN4092U25 | 7GN4005U25                                                                            | 7GN4006U25 | 7GN4007U25 | 7GN4008U25 |
| GX...           | □48              | 16                                    | 12                 | GX1690U25                                                                           | GX1691U25  | GX1610U25  | GX1692U25  | GX1605U25                                                                             | GX1606U25  | GX1607U25  | GX1608U25  |
|                 |                  | 20                                    | 15                 | GX2090U25                                                                           | GX2091U25  | GX2010U25  | GX2092U25  | GX2005U25                                                                             | GX2006U25  | GX2007U25  | GX2008U25  |
|                 | □65              | 32                                    | 32                 | GX3290U25                                                                           | GX3291U25  | GX3210U25  | GX3292U25  | GX3205U25                                                                             | GX3206U25  | GX3207U25  | GX3208U25  |
|                 |                  | 40                                    | 40                 | GX4090U25                                                                           | GX4091U25  | GX4010U25  | GX4092U25  | GX4005U25                                                                             | GX4006U25  | GX4007U25  | GX4008U25  |

① For version with black handle padlockable in 0 without protection cover add 06 (e.g. GF1090U06).

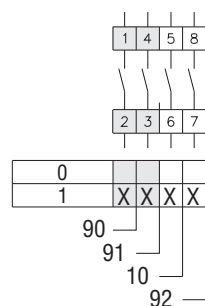
② Standard version provided with 0-1 front plate. For version with 0-I front plate add C (e.g. GF20C90U). For version with OFF-ON front plate add D (e.g. GF20D90U).

③ For version with OFF-ON front plate add C (e.g. GF20C05U).

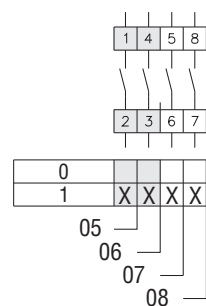
④ For version with red/yellow not padlockable handle without protection covers replace U25 with U24 (e.g. GF2090U24).

## WIRING DIAGRAMS

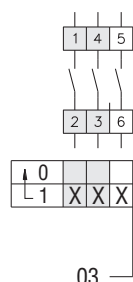
90-91-10-92



05-06-07-08

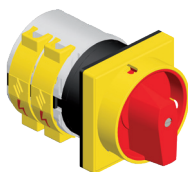


03



## ON/OFF SWITCHES

Front mounting with red/yellow handle  
padlockable in 0 and protection covers  
(U65)



| WIRING DIAGRAMS |                  |                                       |                    | 190                                                                               | 191        | 110         | 192         | 205                                                                                 | 206        | 207         | 208         |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|-------------|-------------|-------------------------------------------------------------------------------------|------------|-------------|-------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3           | 4           | 1                                                                                   | 2          | 3           | 4           |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |             |             |  |            |             |             |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |             |             |                                                                                     |            |             |             |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1290U65                                                                        | 7GN1291U65 | 7GN1210U65  | 7GN1292U65  | 7GN1205U65                                                                          | 7GN1206U65 | 7GN1207U65  | 7GN1208U65  |
|                 |                  | 20                                    | 20                 | 7GN2090U65                                                                        | 7GN2091U65 | 7GN2010U65  | 7GN2092U65  | 7GN2005U65                                                                          | 7GN2006U65 | 7GN2007U65  | 7GN2008U65  |
|                 |                  | 25                                    | 30                 | 7GN2590U65                                                                        | 7GN2591U65 | 7GN2510U65  | 7GN2592U65  | 7GN2505U65                                                                          | 7GN2506U65 | 7GN2507U65  | 7GN2508U65  |
|                 |                  | 32                                    | 40                 | 7GN3290U65                                                                        | 7GN3291U65 | 7GN3210U65  | 7GN3292U65  | 7GN3205U65                                                                          | 7GN3206U65 | 7GN3207U65  | 7GN3208U65  |
|                 |                  | 40                                    | 50                 | 7GN4090U65                                                                        | 7GN4091U65 | 7GN4010U65  | 7GN4092U65  | 7GN4005U65                                                                          | 7GN4006U65 | 7GN4007U65  | 7GN4008U65  |
|                 |                  | 63                                    | 60                 | —                                                                                 | —          | 7GN6310U65  | 7GN6392U65  | —                                                                                   | —          | 7GN6307U65  | 7GN6308U65  |
|                 | □90              | 125                                   | 130                | —                                                                                 | —          | 7GN12510U65 | 7GN12592U65 | —                                                                                   | —          | 7GN12507U65 | 7GN12508U65 |

Front mounting with black handle without  
front plate for hole Ø22mm fixing (U11)



| WIRING DIAGRAMS |                  |                                       |                    | 90                                                                                  | 91         | 10         | 92         | 05                                                                                    | 06         | 07         | 08         | 03                                                                                    |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          | 3                                                                                     |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |                                                                                       |
| GF...           | —                | 20                                    | 15                 | GF2090U11                                                                           | GF2091U11  | GF2010U11  | GF2092U11  | GF2005U11                                                                             | GF2006U11  | GF2007U11  | GF2008U11  | GF2003U11                                                                             |
| 7GN...          | —                | 16                                    | 15                 | 7GN1290U11                                                                          | 7GN1291U11 | 7GN1210U11 | 7GN1292U11 | 7GN1205U11                                                                            | 7GN1206U11 | 7GN1207U11 | 7GN1208U11 | 7GN1203U11                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2090U11                                                                          | 7GN2091U11 | 7GN2010U11 | 7GN2092U11 | 7GN2005U11                                                                            | 7GN2006U11 | 7GN2007U11 | 7GN2008U11 | 7GN2003U11                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2590U11                                                                          | 7GN2591U11 | 7GN2510U11 | 7GN2592U11 | 7GN2505U11                                                                            | 7GN2506U11 | 7GN2507U11 | 7GN2508U11 | 7GN2503U11                                                                            |
| GX...           | —                | 16                                    | 12                 | GX1690U11                                                                           | GX1691U11  | GX1610U11  | GX1692U11  | GX1605U11                                                                             | GX1606U11  | GX1607U11  | GX1608U11  | GX1603U11                                                                             |
|                 |                  | 20                                    | 15                 | GX2090U11                                                                           | GX2091U11  | GX2010U11  | GX2092U11  | GX2005U11                                                                             | GX2006U11  | GX2007U11  | GX2008U11  | GX2003U11                                                                             |

① Standard version provided with 0-1 front plate. For version with 0-I front plate add C (e.g. 7GN12C90U65). For version with OFF-ON front plate add D (e.g. 7GN12D90U65).

② For version with OFF-ON front plate add C (e.g. 7GN12C05U65).

## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    |                           |           |           |           |           |                             |                              |
| GF10...   | 10                                    | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                        | 3                            |
| GF20...   | 20                                    | 15                 | —                         | 1         | 3         | —         | —         | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                                    | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

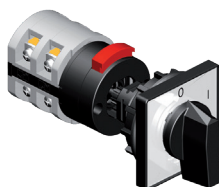
## ON/OFF SWITCHES

Front mounting without front plate with key operation for hole Ø22mm fixing (U12)①



| WIRING DIAGRAMS |                  |                                       |                    | 90                                                                                | 91         | 10         | 92         | 05                                                                                  | 06         | 07         | 08         | 03                                                                                  |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|------------|------------|-------------------------------------------------------------------------------------|------------|------------|------------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3          | 4          | 1                                                                                   | 2          | 3          | 4          | 3                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |            |            |                                                                                     |            |            |            |                                                                                     |
| GF...           | —                | 20                                    | 15                 | GF2090U12                                                                         | GF2091U12  | GF2010U12  | GF2092U12  | GF2005U12                                                                           | GF2006U12  | GF2007U12  | GF2008U12  | GF2003U12                                                                           |
| 7GN...          | —                | 16                                    | 15                 | 7GN1290U12                                                                        | 7GN1291U12 | 7GN1210U12 | 7GN1292U12 | 7GN1205U12                                                                          | 7GN1206U12 | 7GN1207U12 | 7GN1208U12 | 7GN1203U12                                                                          |
|                 |                  | 20                                    | 20                 | 7GN2090U12                                                                        | 7GN2091U12 | 7GN2010U12 | 7GN2092U12 | 7GN2005U12                                                                          | 7GN2006U12 | 7GN2007U12 | 7GN2008U12 | 7GN2003U12                                                                          |
|                 |                  | 25                                    | 30                 | 7GN2590U12                                                                        | 7GN2591U12 | 7GN2510U12 | 7GN2592U12 | 7GN2505U12                                                                          | 7GN2506U12 | 7GN2507U12 | 7GN2508U12 | 7GN2503U12                                                                          |
| GX...           | —                | 16                                    | 12                 | GX1690U12                                                                         | GX1691U12  | GX1610U12  | GX1692U12  | GX1605U12                                                                           | GX1606U12  | GX1607U12  | GX1608U12  | GX1603U12                                                                           |
|                 |                  | 20                                    | 15                 | GX2090U12                                                                         | GX2091U12  | GX2010U12  | GX2092U12  | GX2005U12                                                                           | GX2006U12  | GX2007U12  | GX2008U12  | GX2003U12                                                                           |

Snap on front mounting with black handle for hole Ø22mm fixing (U47)④



| WIRING DIAGRAMS |                  |                                       |                    | 290                                                                                 | 291        | 210        | 292        | 305                                                                                   | 306        | 307        | 308        | 303                                                                                   |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          | 3                                                                                     |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |                                                                                       |
| GF...           | □30              | 10                                    | 10                 | GF1090U47                                                                           | GF1091U47  | GF1010U47  | GF1092U47  | GF1005U47                                                                             | GF1006U47  | GF1007U47  | GF1008U47  | GF1003U47                                                                             |
|                 | □48              | 20                                    | 15                 | GF2090U47                                                                           | GF2091U47  | GF2010U47  | GF2092U47  | GF2005U47                                                                             | GF2006U47  | GF2007U47  | GF2008U47  | GF2003U47                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1290U47                                                                          | 7GN1291U47 | 7GN1210U47 | 7GN1292U47 | 7GN1205U47                                                                            | 7GN1206U47 | 7GN1207U47 | 7GN1208U47 | 7GN1203U47                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2090U47                                                                          | 7GN2091U47 | 7GN2010U47 | 7GN2092U47 | 7GN2005U47                                                                            | 7GN2006U47 | 7GN2007U47 | 7GN2008U47 | 7GN2003U47                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2590U47                                                                          | 7GN2591U47 | 7GN2510U47 | 7GN2592U47 | 7GN2505U47                                                                            | 7GN2506U47 | 7GN2507U47 | 7GN2508U47 | 7GN2503U47                                                                            |
| GX...           | □48              | 16                                    | 12                 | GX1690U47                                                                           | GX1691U47  | GX1610U47  | GX1692U47  | GX1605U47                                                                             | GX1606U47  | GX1607U47  | GX1608U47  | GX1603U47                                                                             |
|                 |                  | 20                                    | 15                 | GX2090U47                                                                           | GX2091U47  | GX2010U47  | GX2092U47  | GX2005U47                                                                             | GX2006U47  | GX2007U47  | GX2008U47  | GX2003U47                                                                             |

① For version with front plate replace U12 with U29 (e.g. GF2090U29).

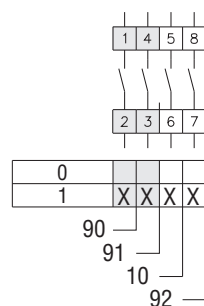
② Standard version provided with 0-1 front plate. For version with 0-I front plate add C (e.g. GF20C90U12). For version with OFF-ON front plate add D (e.g. GF20D90U12).

③ For version with OFF-ON front plate add C (e.g. GF20C05U12).

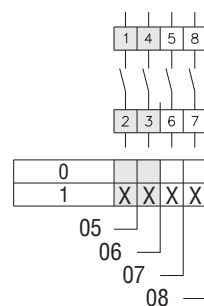
④ For key operation version replace U47 with U29D (e.g. GF2090U29D).

## WIRING DIAGRAMS

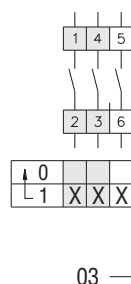
## 90-91-10-92



## 05-06-07-08



## 03



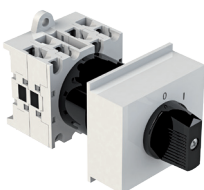
## ON/OFF SWITCHES

Rear mounting with black handle (0)



| WIRING DIAGRAMS |                  |                                       |                    | 190                                                                               | 191      | 110      | 192      | 305                                                                                 | 306      | 307      | 308      | 303                                                                                 |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|----------|----------|----------|-------------------------------------------------------------------------------------|----------|----------|----------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2        | 3        | 4        | 1                                                                                   | 2        | 3        | 4        | 3                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |          |          |          |  |          |          |          |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |          |          |          |                                                                                     |          |          |          |                                                                                     |
| GF...           | □48              | 20                                    | 15                 | GF20900                                                                           | GF20910  | GF20100  | GF20920  | GF20050                                                                             | GF20060  | GF20070  | GF20080  | GF20030                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12900                                                                          | 7GN12910 | 7GN12100 | 7GN12920 | 7GN12050                                                                            | 7GN12060 | 7GN12070 | 7GN12080 | 7GN12030                                                                            |
|                 |                  | 20                                    | 20                 | 7GN20900                                                                          | 7GN20910 | 7GN20100 | 7GN20920 | 7GN20050                                                                            | 7GN20060 | 7GN20070 | 7GN20080 | 7GN20030                                                                            |
|                 |                  | 25                                    | 30                 | 7GN25900                                                                          | 7GN25910 | 7GN25100 | 7GN25920 | 7GN25050                                                                            | 7GN25060 | 7GN25070 | 7GN25080 | 7GN25030                                                                            |
|                 | □65              | 32                                    | 40                 | 7GN32900                                                                          | 7GN32910 | 7GN32100 | 7GN32920 | 7GN32050                                                                            | 7GN32060 | 7GN32070 | 7GN32080 | 7GN32030                                                                            |
|                 |                  | 40                                    | 50                 | 7GN40900                                                                          | 7GN40910 | 7GN40100 | 7GN40920 | 7GN40050                                                                            | 7GN40060 | 7GN40070 | 7GN40080 | 7GN40030                                                                            |
|                 |                  | 63                                    | 60                 | —                                                                                 | —        | 7GN63100 | 7GN63920 | —                                                                                   | —        | 7GN63070 | 7GN63080 | 7GN63030                                                                            |
| GX...           | □48              | 16                                    | 12                 | GX16900                                                                           | GX16910  | GX16100  | GX16920  | GX16050                                                                             | GX16060  | GX16070  | GX16080  | GX16030                                                                             |
|                 |                  | 20                                    | 15                 | GX20900                                                                           | GX20910  | GX20100  | GX20920  | GX20050                                                                             | GX20060  | GX20070  | GX20080  | GX20030                                                                             |
|                 | □65              | 32                                    | 32                 | GX32900                                                                           | GX32910  | GX32100  | GX32920  | GX32050                                                                             | GX32060  | GX32070  | GX32080  | GX32030                                                                             |
|                 |                  | 40                                    | 40                 | GX40900                                                                           | GX40910  | GX40100  | GX40920  | GX40050                                                                             | GX40060  | GX40070  | GX40080  | GX40030                                                                             |
| GN...           | □132             | 200                                   | 200                | —                                                                                 | —        | GN200100 | GN200920 | —                                                                                   | —        | GN200070 | GN200080 | GN200030                                                                            |
|                 |                  | 315                                   | 255                | —                                                                                 | —        | GN315100 | GN315920 | —                                                                                   | —        | GN315070 | GN315080 | GN315030                                                                            |

Modular service cover for 35mm DIN rail mounting with black handle (048)②



| WIRING DIAGRAMS |                |                                       |                    | 190                                                                                 | 191        | 110        | 192        | 305                                                                                   | 306        | 307        | 308        |
|-----------------|----------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|
| Poles           |                |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]           | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |
| GF...           | 45x54          | 20                                    | 15                 | GF2090048                                                                           | GF2091048  | GF2010048  | GF2092048  | GF2005048                                                                             | GF2006048  | GF2007048  | GF2008048  |
| 7GN...          | 45x54          | 16                                    | 15                 | 7GN1290048                                                                          | 7GN1291048 | 7GN1210048 | 7GN1292048 | 7GN1205048                                                                            | 7GN1206048 | 7GN1207048 | 7GN1208048 |
|                 |                | 20                                    | 20                 | 7GN2090048                                                                          | 7GN2091048 | 7GN2010048 | 7GN2092048 | 7GN2005048                                                                            | 7GN2006048 | 7GN2007048 | 7GN2008048 |
|                 |                | 25                                    | 30                 | 7GN2590048                                                                          | 7GN2591048 | 7GN2510048 | 7GN2592048 | 7GN2505048                                                                            | 7GN2506048 | 7GN2507048 | 7GN2508048 |
| GX...           | 45x54          | 16                                    | 12                 | GX1690048                                                                           | GX1691048  | GX1610048  | GX1692048  | GX1605048                                                                             | GX1606048  | GX1607048  | GX1608048  |
|                 |                | 20                                    | 15                 | GX2090048                                                                           | GX2091048  | GX2010048  | GX2092048  | GX2005048                                                                             | GX2006048  | GX2007048  | GX2008048  |

① Standard version provided with 0-1 front plate. For version with 0-I front plate add C (e.g. GF20C900). For version with OFF-ON front plate add D (e.g. GF20D900).

② For key operation version replace 048 with 049 (e.g. GF2090049).

③ For version with OFF-ON front plate add C (e.g. GF20C050).

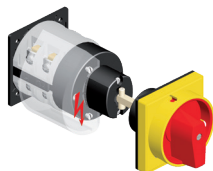
## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|           | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GF10...   | 10                                    | 10                 | —                         | 0.75 | 2        | —    | —    | 0.75                        | 3                            |
| GF20...   | 20                                    | 15                 | —                         | 1    | 3        | —    | —    | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10   | 15       | 25   | 25   | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15   | 25       | 50   | 40   | 11                          | 45                           |

| Series  | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         |                           |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|         | [A]                       | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|         |                           |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                        | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                        | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                        | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                        | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |
| GN200   | 200                       | 200                | 15                        | 30   | 50       | 100  | 75   | —                           | 47                           |
| GN315   | 315                       | 255                | 15                        | 30   | 50       | 100  | 75   | 37                          | 110                          |

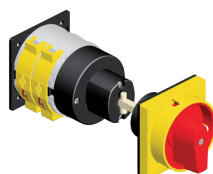
## ON/OFF SWITCHES

Rear mounting with red/yellow handle  
padlockable in 0, door coupling and  
protection covers (**088**)



| WIRING DIAGRAMS |                  |                                       |                    | 190                                                                               | 191        | 110        | 192        | 205                                                                                 | 206        | 207        | 208        |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|------------|------------|-------------------------------------------------------------------------------------|------------|------------|------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3          | 4          | 1                                                                                   | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |            |            |                                                                                     |            |            |            |
| GF...           | □48              | 20                                    | 15                 | GF2090088                                                                         | GF2091088  | GF2010088  | GF2092088  | GF2005088                                                                           | GF2006088  | GF2007088  | GF2008088  |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1290088                                                                        | 7GN1291088 | 7GN1210088 | 7GN1292088 | 7GN1205088                                                                          | 7GN1206088 | 7GN1207088 | 7GN1208088 |
|                 |                  | 20                                    | 20                 | 7GN2090088                                                                        | 7GN2091088 | 7GN2010088 | 7GN2092088 | 7GN2005088                                                                          | 7GN2006088 | 7GN2007088 | 7GN2008088 |
|                 |                  | 25                                    | 30                 | 7GN2590088                                                                        | 7GN2591088 | 7GN2510088 | 7GN2592088 | 7GN2505088                                                                          | 7GN2506088 | 7GN2507088 | 7GN2508088 |
|                 |                  | 32                                    | 40                 | 7GN3290088                                                                        | 7GN3291088 | 7GN3210088 | 7GN3292088 | 7GN3205088                                                                          | 7GN3206088 | 7GN3207088 | 7GN3208088 |
|                 |                  | 40                                    | 50                 | 7GN4090088                                                                        | 7GN4091088 | 7GN4010088 | 7GN4092088 | 7GN4005088                                                                          | 7GN4006088 | 7GN4007088 | 7GN4008088 |
| GX...           | □48              | 16                                    | 12                 | GX1690088                                                                         | GX1691088  | GX1610088  | GX1692088  | GX1605088                                                                           | GX1606088  | GX1607088  | GX1608088  |
|                 |                  | 20                                    | 15                 | GX2090088                                                                         | GX2091088  | GX2010088  | GX2092088  | GX2005088                                                                           | GX2006088  | GX2007088  | GX2008088  |
|                 | □65              | 32                                    | 32                 | GX3290088                                                                         | GX3291088  | GX3210088  | GX3292088  | GX3205088                                                                           | GX3206088  | GX3207088  | GX3208088  |
|                 |                  | 40                                    | 40                 | GX4090088                                                                         | GX4091088  | GX4010088  | GX4092088  | GX4005088                                                                           | GX4006088  | GX4007088  | GX4008088  |

Rear mounting with red/yellow handle  
padlockable in 0, door coupling and  
protection covers (**098**)



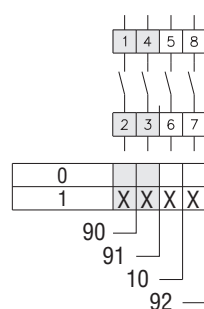
| WIRING DIAGRAMS |                  |                                       |                    | 190                                                                                 | 191        | 110        | 192        | 205                                                                                   | 206        | 207        | 208        |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1290098                                                                          | 7GN1291098 | 7GN1210098 | 7GN1292098 | 7GN1205098                                                                            | 7GN1206098 | 7GN1207098 | 7GN1208098 |
|                 |                  | 20                                    | 20                 | 7GN2090098                                                                          | 7GN2091098 | 7GN2010098 | 7GN2092098 | 7GN2005098                                                                            | 7GN2006098 | 7GN2007098 | 7GN2008098 |
|                 |                  | 25                                    | 30                 | 7GN2590098                                                                          | 7GN2591098 | 7GN2510098 | 7GN2592098 | 7GN2505098                                                                            | 7GN2506098 | 7GN2507098 | 7GN2508098 |
|                 |                  | 32                                    | 40                 | 7GN3290098                                                                          | 7GN3291098 | 7GN3210098 | 7GN3292098 | 7GN3205098                                                                            | 7GN3206098 | 7GN3207098 | 7GN3208098 |
|                 |                  | 40                                    | 50                 | 7GN4090098                                                                          | 7GN4091098 | 7GN4010098 | 7GN4092098 | 7GN4005098                                                                            | 7GN4006098 | 7GN4007098 | 7GN4008098 |
|                 |                  | 63                                    | 60                 | —                                                                                   | —          | 7GN6310098 | 7GN6392098 | —                                                                                     | —          | 7GN6307098 | 7GN6308098 |

① Standard version provided with 0-1 front plate. For version with 0-1 front plate add C (e.g. GF20C90088). For version with OFF-ON front plate add D (e.g. GF20D90088).

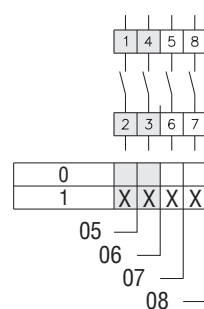
② For version with OFF-ON front plate add C (e.g. GF20C05088).

## WIRING DIAGRAMS

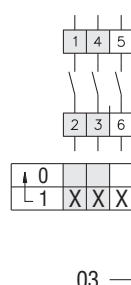
## 90-91-10-92



## 05-06-07-08



## 03



## ON/OFF SWITCHES

Cam switch in plastic enclosure  
with black handle (P)

Cam switch in metallic enclosure  
with black handle (L)



| WIRING DIAGRAMS |                |                                       |                    | 190      | 191      | 110       | 192       | 205      | 206      | 207       | 208       | 203       |
|-----------------|----------------|---------------------------------------|--------------------|----------|----------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| Poles           |                |                                       |                    | 1        | 2        | 3         | 4         | 1        | 2        | 3         | 4         | 3         |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |          |          |           |           |          |          |           |           |           |
|                 | [mm]           | [A]                                   | [A]                |          |          |           |           |          |          |           |           |           |
| 7GN...          | 75x75          | 16                                    | 15                 | 7GN1290P | 7GN1291P | 7GN1210P  | 7GN1292P  | 7GN1205P | 7GN1206P | 7GN1207P  | 7GN1208P  | 7GN1203P  |
|                 |                | 20                                    | 20                 | 7GN2090P | 7GN2091P | 7GN2010P  | 7GN2092P  | 7GN2005P | 7GN2006P | 7GN2007P  | 7GN2008P  | 7GN2003P  |
|                 |                | 25                                    | 30                 | 7GN2590P | 7GN2591P | 7GN2510P  | 7GN2592P  | 7GN2505P | 7GN2506P | 7GN2507P  | 7GN2508P  | 7GN2503P  |
|                 | 90x90          | 32                                    | 40                 | 7GN3290P | 7GN3291P | 7GN3210P  | 7GN3292P  | 7GN3205P | 7GN3206P | 7GN3207P  | 7GN3208P  | 7GN3203P  |
|                 | 110x110        | 40                                    | 50                 | 7GN4090P | 7GN4091P | 7GN4010P  | 7GN4092P  | 7GN4005P | 7GN4006P | 7GN4007P  | 7GN4008P  | 7GN4003P  |
|                 | 125x175        | 63                                    | 60                 | —        | —        | 7GN6310P  | 7GN6392P  | —        | —        | 7GN6307P  | 7GN6308P  | 7GN6303P  |
|                 | 198x248        | 125                                   | 130                | —        | —        | 7GN12510P | 7GN12592P | —        | —        | 7GN12507P | 7GN12508P | 7GN12503P |
| GX...           | 90x90          | 16                                    | 12                 | GX1690P  | GX1691P  | GX1610P   | GX1692P   | GX1605P  | GX1606P  | GX1607P   | GX1608P   | GX1603P   |
|                 |                | 20                                    | 15                 | GX2090P  | GX2091P  | GX2010P   | GX2092P   | GX2005P  | GX2006P  | GX2007P   | GX2008P   | GX2003P   |
|                 | 110x110        | 32                                    | 32                 | GX3290P  | GX3291P  | GX3210P   | GX3292P   | GX3205P  | GX3206P  | GX3207P   | GX3208P   | GX3203P   |
|                 |                | 40                                    | 40                 | GX4090P  | GX4091P  | GX4010P   | GX4092P   | GX4005P  | GX4006P  | GX4007P   | GX4008P   | GX4003P   |
| GN...           | 250x316        | 200                                   | 200                | —        | —        | GN20010L  | GN20092L  | —        | —        | GN20007L  | GN20008L  | GN20003L  |
|                 |                | 315                                   | 255                | —        | —        | GN31510L  | GN31592L  | —        | —        | GN31507L  | GN31508L  | GN31503L  |

Cam switch in plastic enclosure  
with red/yellow handle  
padlockable in 0 (P25)



| WIRING DIAGRAMS |                             |                                       |                    | 190        | 191        | 110         | 192        | 205        | 206        | 207         | 208         |
|-----------------|-----------------------------|---------------------------------------|--------------------|------------|------------|-------------|------------|------------|------------|-------------|-------------|
| Poles           |                             |                                       |                    | 1          | 2          | 3           | 4          | 1          | 2          | 3           | 4           |
| Series          | Enclosure size              | Rated thermal current I <sub>th</sub> | UL/CSA general use |            |            |             |            |            |            |             |             |
|                 | [mm]                        | [A]                                   | [A]                |            |            |             |            |            |            |             |             |
| 7GN...          | 75x75 or 90x90 <sup>②</sup> | 16                                    | 15                 | 7GN1290P25 | 7GN1291P25 | 7GN1210P25  | 7GN1292P25 | 7GN1205P25 | 7GN1206P25 | 7GN1207P25  | 7GN1208P25  |
|                 |                             | 20                                    | 20                 | 7GN2090P25 | 7GN2091P25 | 7GN2010P25  | 7GN2092P25 | 7GN2005P25 | 7GN2006P25 | 7GN2007P25  | 7GN2008P25  |
|                 |                             | 25                                    | 30                 | 7GN2590P25 | 7GN2591P25 | 7GN2510P25  | 7GN2592P25 | 7GN2505P25 | 7GN2506P25 | 7GN2507P25  | 7GN2508P25  |
|                 | 90x90                       | 32                                    | 40                 | 7GN3290P25 | 7GN3291P25 | 7GN3210P25  | 7GN3292P25 | 7GN3205P25 | 7GN3206P25 | 7GN3207P25  | 7GN3208P25  |
|                 | 110x110                     | 40                                    | 50                 | 7GN4090P25 | 7GN4091P25 | 7GN4010P25  | 7GN4092P25 | 7GN4005P25 | 7GN4006P25 | 7GN4007P25  | 7GN4008P25  |
|                 | 125x175                     | 63                                    | 60                 | —          | —          | 7GN6310P25  | 7GN6392P25 | —          | —          | 7GN6307P25  | 7GN6308P25  |
|                 | 198x248                     | 125                                   | 130                | —          | —          | 7GN12510P25 | —          | —          | —          | 7GN12507P25 | 7GN12508P25 |
| GX...           | 90x90                       | 16                                    | 12                 | GX1690P25  | GX1691P25  | GX1610P25   | GX1692P25  | GX1605P25  | GX1606P25  | GX1607P25   | GX1608P25   |
|                 |                             | 20                                    | 15                 | GX2090P25  | GX2091P25  | GX2010P25   | GX2092P25  | GX2005P25  | GX2006P25  | GX2007P25   | GX2008P25   |
|                 | 110x110                     | 32                                    | 32                 | GX3290P25  | GX3291P25  | GX3210P25   | GX3292P25  | GX3205P25  | GX3206P25  | GX3207P25   | GX3208P25   |
|                 |                             | 40                                    | 40                 | GX4090P25  | GX4091P25  | GX4010P25   | GX4092P25  | GX4005P25  | GX4006P25  | GX4007P25   | GX4008P25   |

① Standard version provided with 0-1 front plate. For version with 0-1 front plate add C (e.g. 7GN12C90P). For version with OFF-ON front plate add D (e.g. 7GN12D90P).

② For version with OFF-ON front plate add C (e.g. 7GN12C05P).

③ Standard enclosure is 90x90mm. 75x75mm enclosure is available by adding B0 at the end of the part number. E.g. 7GN1290P25B0.

## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|           | [A]                                   | [A]                | 1 phase                   |      | 3 phases |      |      | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    | 120V                      | 240V | 240V     | 480V | 600V |                             |                              |
|           |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GF20...   | 20                                    | 15                 | —                         | 1    | 3        | —    | —    | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10   | 15       | 25   | 25   | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15   | 25       | 50   | 40   | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         | [A]                                   | [A]                | 1 phase                   |      | 3 phases |      |      | [kW] at 230V                | [kW] at 400V                 |
|         |                                       |                    | 120V                      | 240V | 240V     | 480V | 600V |                             |                              |
|         |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                                    | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30   | 50       | 100  | 75   | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30   | 50       | 100  | 75   | 37                          | 110                          |



## CHANGEOVER SWITCHES WITH OR WITHOUT 0

Front mounting with black handle (U)



| Type            |                  |                                       |                    | Changeover switches with 0                                                        |           |           |           | Changeover switches without 0                                                       |           |           |           |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------|-----------|-----------|-------------------------------------------------------------------------------------|-----------|-----------|-----------|
| WIRING DIAGRAMS |                  |                                       |                    | 51                                                                                | 52        | 53        | 75        | 54                                                                                  | 55        | 56        | 69        |
| Poles           |                  |                                       |                    | 1                                                                                 | 2         | 3         | 4         | 1                                                                                   | 2         | 3         | 4         |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |           |           |           |  |           |           |           |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |           |           |           |                                                                                     |           |           |           |
| GF...           | □30              | 10                                    | 10                 | GF1051U                                                                           | GF1052U   | GF1053U   | GF1075U   | GF1054U                                                                             | GF1055U   | GF1056U   | GF1069U   |
|                 | □48              | 20                                    | 15                 | GF2051U                                                                           | GF2052U   | GF2053U   | GF2075U   | GF2054U                                                                             | GF2055U   | GF2056U   | GF2069U   |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1251U                                                                          | 7GN1252U  | 7GN1253U  | 7GN1275U  | 7GN1254U                                                                            | 7GN1255U  | 7GN1256U  | 7GN1269U  |
|                 |                  | 20                                    | 20                 | 7GN2051U                                                                          | 7GN2052U  | 7GN2053U  | 7GN2075U  | 7GN2054U                                                                            | 7GN2055U  | 7GN2056U  | 7GN2069U  |
|                 |                  | 25                                    | 30                 | 7GN2551U                                                                          | 7GN2552U  | 7GN2553U  | 7GN2575U  | 7GN2554U                                                                            | 7GN2555U  | 7GN2556U  | 7GN2569U  |
|                 | □65              | 32                                    | 40                 | 7GN3251U                                                                          | 7GN3252U  | 7GN3253U  | 7GN3275U  | 7GN3254U                                                                            | 7GN3255U  | 7GN3256U  | 7GN3269U  |
|                 |                  | 40                                    | 50                 | 7GN4051U                                                                          | 7GN4052U  | 7GN4053U  | 7GN4075U  | 7GN4054U                                                                            | 7GN4055U  | 7GN4056U  | 7GN4069U  |
|                 |                  | 63                                    | 60                 | —                                                                                 | 7GN6352U  | 7GN6353U  | 7GN6375U  | —                                                                                   | 7GN6355U  | 7GN6356U  | 7GN6369U  |
|                 | □90              | 125                                   | 130                | —                                                                                 | 7GN12552U | 7GN12553U | 7GN12575U | —                                                                                   | 7GN12555U | 7GN12556U | 7GN12569U |
| GX...           | □48              | 16                                    | 12                 | GX1651U                                                                           | GX1652U   | GX1653U   | GX1675U   | GX1654U                                                                             | GX1655U   | GX1656U   | GX1669U   |
|                 |                  | 20                                    | 15                 | GX2051U                                                                           | GX2052U   | GX2053U   | GX2075U   | GX2054U                                                                             | GX2055U   | GX2056U   | GX2069U   |
|                 | □65              | 32                                    | 32                 | GX3251U                                                                           | GX3252U   | GX3253U   | GX3275U   | GX3254U                                                                             | GX3255U   | GX3256U   | GX3269U   |
|                 |                  | 40                                    | 40                 | GX4051U                                                                           | GX4052U   | GX4053U   | GX4075U   | GX4054U                                                                             | GX4055U   | GX4056U   | GX4069U   |
| GN...           | □132             | 200                                   | 200                | —                                                                                 | GN20052U  | GN20053U  | GN20075U  | —                                                                                   | GN20055U  | GN20056U  | GN20069U  |
|                 |                  | 315                                   | 255                | —                                                                                 | GN31552U  | GN31553U  | GN31575U  | —                                                                                   | GN31555U  | GN31556U  | GN31569U  |

Front mounting with black handle without front plate for hole Ø22mm fixing (U11)

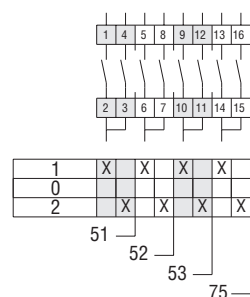


| Type            |                  |                                       |                    | Changeover switches with 0                                                          |            |            |            | Changeover switches without 0                                                         |            |            |            |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 51                                                                                  | 52         | 53         | 75         | 54                                                                                    | 55         | 56         | 69         |
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |
| GF              | —                | 20                                    | 15                 | GF2051U11                                                                           | GF2052U11  | GF2053U11  | GF2075U11  | GF2054U11                                                                             | GF2055U11  | GF2056U11  | GF2069U11  |
| 7GN...          | —                | 16                                    | 15                 | 7GN1251U11                                                                          | 7GN1252U11 | 7GN1253U11 | 7GN1275U11 | 7GN1254U11                                                                            | 7GN1255U11 | 7GN1256U11 | 7GN1269U11 |
|                 |                  | 20                                    | 20                 | 7GN2051U11                                                                          | 7GN2052U11 | 7GN2053U11 | 7GN2075U11 | 7GN2054U11                                                                            | 7GN2055U11 | 7GN2056U11 | 7GN2069U11 |
|                 |                  | 25                                    | 30                 | 7GN2551U11                                                                          | 7GN2552U11 | 7GN2553U11 | 7GN2575U11 | 7GN2554U11                                                                            | 7GN2555U11 | 7GN2556U11 | 7GN2569U11 |
| GX...           | —                | 16                                    | 12                 | GX1651U11                                                                           | GX1652U11  | GX1653U11  | GX1675U11  | GX1654U11                                                                             | GX1655U11  | GX1656U11  | GX1669U11  |
|                 |                  | 20                                    | 15                 | GX2051U11                                                                           | GX2052U11  | GX2053U11  | GX2075U11  | GX2054U11                                                                             | GX2055U11  | GX2056U11  | GX2069U11  |

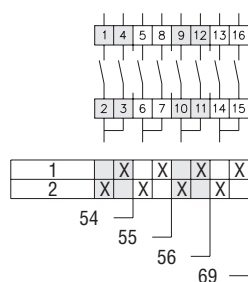
For version with MAN-O-AUTO front plate add D (e.g. GF10D51U).

### WIRING DIAGRAMS

#### 51-52-53-75



#### 54-55-56-69



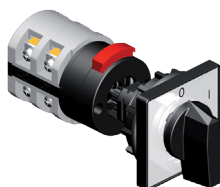
## CHANGEOVER SWITCHES WITH OR WITHOUT 0

Front mounting without front plate with  
key operation for hole Ø22mm fixing  
(U12)①



| Type            |                  |                                       |                    | Changeover switches with 0                                                        |            |            |            | Changeover switches without 0                                                       |            |            |            |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|------------|------------|-------------------------------------------------------------------------------------|------------|------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 51                                                                                | 52         | 53         | 75         | 54                                                                                  | 55         | 56         | 69         |
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3          | 4          | 1                                                                                   | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |            |            |                                                                                     |            |            |            |
| GF              | —                | 20                                    | 15                 | GF2051U12                                                                         | GF2052U12  | GF2053U12  | GF2075U12  | GF2054U12                                                                           | GF2055U12  | GF2056U12  | GF2069U12  |
| 7GN...          | —                | 16                                    | 15                 | 7GN1251U12                                                                        | 7GN1252U12 | 7GN1253U12 | 7GN1275U12 | 7GN1254U12                                                                          | 7GN1255U12 | 7GN1256U12 | 7GN1269U12 |
|                 |                  | 20                                    | 20                 | 7GN2051U12                                                                        | 7GN2052U12 | 7GN2053U12 | 7GN2075U12 | 7GN2054U12                                                                          | 7GN2055U12 | 7GN2056U12 | 7GN2069U12 |
|                 |                  | 25                                    | 30                 | 7GN2551U12                                                                        | 7GN2552U12 | 7GN2553U12 | 7GN2575U12 | 7GN2554U12                                                                          | 7GN2555U12 | 7GN2556U12 | 7GN2569U12 |
| GX...           | —                | 16                                    | 12                 | GX1651U12                                                                         | GX1652U12  | GX1653U12  | GX1675U12  | GX1654U12                                                                           | GX1655U12  | GX1656U12  | GX1669U12  |
|                 |                  | 20                                    | 15                 | GX2051U12                                                                         | GX2052U12  | GX2053U12  | GX2075U12  | GX2054U12                                                                           | GX2055U12  | GX2056U12  | GX2069U12  |

Snap on front mounting with black  
handle for hole Ø22mm fixing (U47)②



| Type            |                  |                                       |                    | Changeover switches with 0                                                          |            |            |            | Changeover switches without 0                                                         |            |            |            |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|------------|------------|------------|---------------------------------------------------------------------------------------|------------|------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 51                                                                                  | 52         | 53         | 75         | 54                                                                                    | 55         | 56         | 69         |
| Poles           |                  |                                       |                    | 1                                                                                   | 2          | 3          | 4          | 1                                                                                     | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |            |  |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |            |            |            |                                                                                       |            |            |            |
| GF              | □30              | 10                                    | 10                 | GF1051U47                                                                           | GF1052U47  | GF1053U47  | GF1075U47  | GF1054U47                                                                             | GF1055U47  | GF1056U47  | GF1069U47  |
|                 | □48              | 20                                    | 15                 | GF2051U47                                                                           | GF2052U47  | GF2053U47  | GF2075U47  | GF2054U47                                                                             | GF2055U47  | GF2056U47  | GF2069U47  |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1251U47                                                                          | 7GN1252U47 | 7GN1253U47 | 7GN1275U47 | 7GN1254U47                                                                            | 7GN1255U47 | 7GN1256U47 | 7GN1269U47 |
|                 |                  | 20                                    | 20                 | 7GN2051U47                                                                          | 7GN2052U47 | 7GN2053U47 | 7GN2075U47 | 7GN2054U47                                                                            | 7GN2055U47 | 7GN2056U47 | 7GN2069U47 |
|                 |                  | 25                                    | 30                 | 7GN2551U47                                                                          | 7GN2552U47 | 7GN2553U47 | 7GN2575U47 | 7GN2554U47                                                                            | 7GN2555U47 | 7GN2556U47 | 7GN2569U47 |
| GX...           | □48              | 16                                    | 12                 | GX1651U47                                                                           | GX1652U47  | GX1653U47  | GX1675U47  | GX1654U47                                                                             | GX1655U47  | GX1656U47  | GX1669U47  |
|                 |                  | 20                                    | 15                 | GX2051U47                                                                           | GX2052U47  | GX2053U47  | GX2075U47  | GX2054U47                                                                             | GX2055U47  | GX2056U47  | GX2069U47  |

① For version with front plate replace U12 with U29 (e.g. GF2051U29).

② For version with MAN-O-AUTO front plate add D (e.g. GF2051U12).

③ For key operation version replace U47 with U29D (e.g. GF2051U29D).

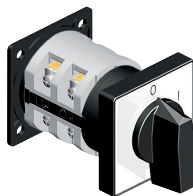
### Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    |                           |           |           |           |           |                             |                              |
| GF10...   | 10                                    | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                        | 3                            |
| GF20...   | 20                                    | 15                 | —                         | 1         | 3         | —         | —         | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                                    | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

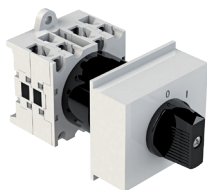
## CHANGEOVER SWITCHES WITH OR WITHOUT 0

Rear mounting with black handle (0)



| Type            |                  |                                       |                    | Changeover switches with 0 |           |           |           | Changeover switches without 0 |           |           |           |
|-----------------|------------------|---------------------------------------|--------------------|----------------------------|-----------|-----------|-----------|-------------------------------|-----------|-----------|-----------|
| WIRING DIAGRAMS |                  |                                       |                    | 151                        | 152       | 153       | 175       | 54                            | 55        | 56        | 69        |
| Poles           |                  |                                       |                    | 1                          | 2         | 3         | 4         | 1                             | 2         | 3         | 4         |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |                            |           |           |           |                               |           |           |           |
|                 | [mm]             | [A]                                   | [A]                |                            |           |           |           |                               |           |           |           |
| GF...           | □48              | 20                                    | 15                 | GF20510                    | GF20520   | GF20530   | GF20750   | GF20540                       | GF20550   | GF20560   | GF20690   |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12510                   | 7GN12520  | 7GN12530  | 7GN12750  | 7GN12540                      | 7GN12550  | 7GN12560  | 7GN12690  |
|                 |                  | 20                                    | 20                 | 7GN20510                   | 7GN20520  | 7GN20530  | 7GN20750  | 7GN20540                      | 7GN20550  | 7GN20560  | 7GN20690  |
|                 |                  | 25                                    | 30                 | 7GN25510                   | 7GN25520  | 7GN25530  | 7GN25750  | 7GN25540                      | 7GN25550  | 7GN25560  | 7GN25690  |
|                 | □65              | 32                                    | 40                 | 7GN32510                   | 7GN32520  | 7GN32530  | 7GN32750  | 7GN32540                      | 7GN32550  | 7GN32560  | 7GN32690  |
|                 |                  | 40                                    | 50                 | 7GN40510                   | 7GN40520  | 7GN40530  | 7GN40750  | 7GN40540                      | 7GN40550  | 7GN40560  | 7GN40690  |
|                 |                  | 63                                    | 60                 | —                          | 7GN63520  | 7GN63530  | 7GN63750  | —                             | 7GN63550  | 7GN63560  | 7GN63690  |
| GX...           | □48              | 125                                   | 130                | —                          | 7GN125520 | 7GN125530 | 7GN125750 | —                             | 7GN125550 | 7GN125560 | 7GN125690 |
|                 |                  | 16                                    | 12                 | GX16510                    | GX16520   | GX16530   | GX16750   | GX16540                       | GX16550   | GX16560   | GX16690   |
|                 | □65              | 20                                    | 15                 | GX20510                    | GX20520   | GX20530   | GX20750   | GX20540                       | GX20550   | GX20560   | GX20690   |
|                 |                  | 32                                    | 32                 | GX32510                    | GX32520   | GX32530   | GX32750   | GX32540                       | GX32550   | GX32560   | GX32690   |
| GN...           | □132             | 40                                    | 40                 | GX40510                    | GX40520   | GX40530   | GX40750   | GX40540                       | GX40550   | GX40560   | GX40690   |
|                 |                  | 200                                   | 200                | —                          | GN200520  | GN200530  | GN200750  | —                             | GN200550  | GN200560  | GN200690  |
|                 |                  | 315                                   | 255                | —                          | GN315520  | GN315530  | GN315750  | —                             | GN315550  | GN315560  | GN315690  |

Modular service cover for 35mm DIN rail mounting with black handle (048)⊗

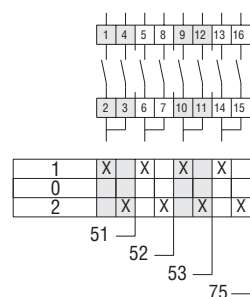


| Type            |                  |                                       |                    | Changeover switches with 0 |            |            |            | Changeover switches without 0 |            |            |            |
|-----------------|------------------|---------------------------------------|--------------------|----------------------------|------------|------------|------------|-------------------------------|------------|------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 151                        | 152        | 153        | 175        | 54                            | 55         | 56         | 69         |
| Poles           |                  |                                       |                    | 1                          | 2          | 3          | 4          | 1                             | 2          | 3          | 4          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |                            |            |            |            |                               |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |                            |            |            |            |                               |            |            |            |
| GF              | 45x54            | 20                                    | 15                 | GF2051048                  | GF2052048  | GF2053048  | GF2075048  | GF2054048                     | GF2055048  | GF2056048  | GF2069048  |
| 7GN...          | 45x54            | 16                                    | 15                 | 7GN1251048                 | 7GN1252048 | 7GN1253048 | 7GN1275048 | 7GN1254048                    | 7GN1255048 | 7GN1256048 | 7GN1269048 |
|                 |                  | 20                                    | 20                 | 7GN2051048                 | 7GN2052048 | 7GN2053048 | 7GN2075048 | 7GN2054048                    | 7GN2055048 | 7GN2056048 | 7GN2069048 |
|                 |                  | 25                                    | 30                 | 7GN2551048                 | 7GN2552048 | 7GN2553048 | 7GN2575048 | 7GN2554048                    | 7GN2555048 | 7GN2556048 | 7GN2569048 |
| GX...           | 45x54            | 16                                    | 12                 | GX1651048                  | GX1652048  | GX1653048  | GX1675048  | GX1654048                     | GX1655048  | GX1656048  | GX1669048  |
|                 |                  | 20                                    | 15                 | GX2051048                  | GX2052048  | GX2053048  | GX2075048  | GX2054048                     | GX2055048  | GX2056048  | GX2069048  |

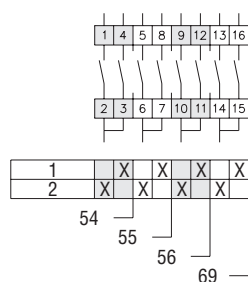
- ① For version with MAN-O-AUTO front plate add D (e.g. GF20D510).  
 ⊗ For key operation version replace 048 with 049 (e.g. GF2051049).

### WIRING DIAGRAMS

#### 51-52-53-75



#### 54-55-56-69



## CHANGEOVER SWITCHES WITH OR WITHOUT 0

Cam switch in plastic enclosure with black handle (**P**)

Cam switch in metallic enclosure with black handle (**L**)



| Type            |                |                                       |                    | Changeover switches with 0                                                        |           |           |                       | Changeover switches without 0                                                       |           |           |                       |
|-----------------|----------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------|-----------|-----------------------|-------------------------------------------------------------------------------------|-----------|-----------|-----------------------|
| WIRING DIAGRAMS |                |                                       |                    | 151                                                                               | 152       | 153       | 175                   | 54                                                                                  | 55        | 56        | 69                    |
| Poles           |                |                                       |                    | 1                                                                                 | 2         | 3         | 4                     | 1                                                                                   | 2         | 3         | 4                     |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |           |           |                       |  |           |           |                       |
|                 | [mm]           | [A]                                   | [A]                |                                                                                   |           |           |                       |                                                                                     |           |           |                       |
| 7GN...          | 75x75          | 16                                    | 15                 | 7GN1251P                                                                          | 7GN1252P  | 7GN1253P  | 7GN1275P              | 7GN1254P                                                                            | 7GN1255P  | 7GN1256P  | 7GN1269P              |
|                 |                | 20                                    | 20                 | 7GN2051P                                                                          | 7GN2052P  | 7GN2053P  | 7GN2075P              | 7GN2054P                                                                            | 7GN2055P  | 7GN2056P  | 7GN2069P              |
|                 |                | 25                                    | 30                 | 7GN2551P                                                                          | 7GN2552P  | 7GN2553P  | 7GN2575P <sup>②</sup> | 7GN2554P                                                                            | 7GN2555P  | 7GN2556P  | 7GN2569P <sup>②</sup> |
|                 | 90x90          | 32                                    | 40                 | 7GN3251P                                                                          | 7GN3252P  | 7GN3253P  | 7GN3275P              | 7GN3254P                                                                            | 7GN3255P  | 7GN3256P  | 7GN3269P              |
|                 | 110x110        | 40                                    | 50                 | 7GN4051P                                                                          | 7GN4052P  | 7GN4053P  | 7GN4075P              | 7GN4054P                                                                            | 7GN4055P  | 7GN4056P  | 7GN4069P              |
|                 | 125x175        | 63                                    | 60                 | —                                                                                 | 7GN6352P  | 7GN6353P  | 7GN6375P              | —                                                                                   | 7GN6355P  | 7GN6356P  | 7GN6369P              |
|                 | 198x248        | 125                                   | 130                | —                                                                                 | 7GN12552P | 7GN12553P | 7GN12575P             | —                                                                                   | 7GN12555P | 7GN12556P | 7GN12569P             |
| GX...           | 90x90          | 16                                    | 12                 | GX1651P                                                                           | GX1652P   | GX1653P   | GX1675P               | GX1654P                                                                             | GX1655P   | GX1656P   | GX1669P               |
|                 |                | 20                                    | 15                 | GX2051P                                                                           | GX2052P   | GX2053P   | GX2075P               | GX2054P                                                                             | GX2055P   | GX2056P   | GX2069P               |
|                 | 110x110        | 32                                    | 32                 | GX3251P                                                                           | GX3252P   | GX3253P   | GX3275P               | GX3254P                                                                             | GX3255P   | GX3256P   | GX3269P               |
|                 |                | 40                                    | 40                 | GX4051P                                                                           | GX4052P   | GX4053P   | GX4075P               | GX4054P                                                                             | GX4055P   | GX4056P   | GX4069P               |
| GN...           | 250x316        | 200                                   | 200                | —                                                                                 | GN20052L  | GN20053L  | GN20075L              | —                                                                                   | GN20055L  | GN20056L  | GN20069L              |
|                 |                | 315                                   | 255                | —                                                                                 | GN31552L  | GN31553L  | GN31575L              | —                                                                                   | GN31555L  | GN31556L  | GN31569L              |

① For version with MAN-O-AUTO front plate add D (e.g. 7GN12D51P).

② Enclosure size 90x90mm.

### Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|           | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|           | [HP]                                  | [HP]               | [HP]                      | [HP] | [HP]     |      |      |                             |                              |
| GF20...   | 20                                    | 15                 | —                         | 1    | 3        | —    | —    | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10   | 15       | 25   | 25   | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15   | 25       | 50   | 40   | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|         | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|         |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                                    | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30   | 50       | 100  | 75   | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30   | 50       | 100  | 75   | 37                          | 110                          |

## STARTING WITH 1

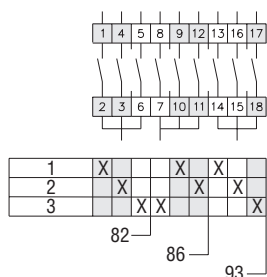
Front mounting with black handle (U)



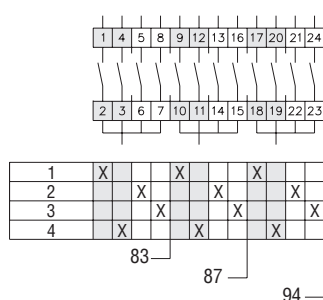
| WIRING DIAGRAMS |                  |                                       |                    | 82                                                                                | 86        | 93        | 83                                                                                 | 87        | 94        | 84                                                                                  | 85                                                                                  |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------|-----------|------------------------------------------------------------------------------------|-----------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2         | 3         | 1                                                                                  | 2         | 3         | 1                                                                                   | 1                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |           |           |  |           |           |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |           |           |                                                                                    |           |           |                                                                                     |                                                                                     |
| GF...           | □30              | 10                                    | 10                 | GF1082U                                                                           | GF1086U   | GF1093U   | GF1083U                                                                            | GF1087U   | GF1094U   | GF1084U                                                                             | GF1085U                                                                             |
|                 | □48              | 20                                    | 15                 | GF2082U                                                                           | GF2086U   | GF2093U   | GF2083U                                                                            | GF2087U   | GF2094U   | GF2084U                                                                             | GF2085U                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1282U                                                                          | 7GN1286U  | 7GN1293U  | 7GN1283U                                                                           | 7GN1287U  | 7GN1294U  | 7GN1284U                                                                            | 7GN1285U                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2082U                                                                          | 7GN2086U  | 7GN2093U  | 7GN2083U                                                                           | 7GN2087U  | 7GN2094U  | 7GN2084U                                                                            | 7GN2085U                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2582U                                                                          | 7GN2586U  | 7GN2593U  | 7GN2583U                                                                           | 7GN2587U  | 7GN2594U  | 7GN2584U                                                                            | 7GN2585U                                                                            |
|                 | □65              | 32                                    | 40                 | 7GN3282U                                                                          | 7GN3286U  | 7GN3293U  | 7GN3283U                                                                           | 7GN3287U  | 7GN3294U  | 7GN3284U                                                                            | 7GN3285U                                                                            |
|                 |                  | 40                                    | 50                 | 7GN4082U                                                                          | 7GN4086U  | 7GN4093U  | 7GN4083U                                                                           | 7GN4087U  | 7GN4094U  | 7GN4084U                                                                            | 7GN4085U                                                                            |
|                 |                  | 63                                    | 60                 | 7GN6382U                                                                          | 7GN6386U  | 7GN6393U  | 7GN6383U                                                                           | 7GN6387U  | 7GN6394U  | 7GN6384U                                                                            | 7GN6385U                                                                            |
|                 | □90              | 125                                   | 130                | 7GN12582U                                                                         | 7GN12586U | 7GN12593U | 7GN12583U                                                                          | 7GN12587U | 7GN12594U | 7GN12584U                                                                           | 7GN12585U                                                                           |
| GX...           | □48              | 16                                    | 12                 | GX1682U                                                                           | GX1686U   | GX1693U   | GX1683U                                                                            | GX1687U   | GX1694U   | GX1684U                                                                             | GX1685U                                                                             |
|                 |                  | 20                                    | 15                 | GX2082U                                                                           | GX2086U   | GX2093U   | GX2083U                                                                            | GX2087U   | GX2094U   | GX2084U                                                                             | GX2085U                                                                             |
|                 | □65              | 32                                    | 32                 | GX3282U                                                                           | GX3286U   | GX3293U   | GX3283U                                                                            | GX3287U   | GX3294U   | GX3284U                                                                             | GX3285U                                                                             |
|                 |                  | 40                                    | 40                 | GX4082U                                                                           | GX4086U   | GX4093U   | GX4083U                                                                            | GX4087U   | GX4094U   | GX4084U                                                                             | GX4085U                                                                             |
| GN...           | □132             | 200                                   | 200                | GN20082U                                                                          | GN20086U  | GN20093U  | GN20083U                                                                           | GN20087U  | GN20094U  | GN20084U                                                                            | GN20085U                                                                            |
|                 |                  | 315                                   | 255                | GN31582U                                                                          | GN31586U  | GN31593U  | GN31583U                                                                           | GN31587U  | GN31594U  | GN31584U                                                                            | GN31585U                                                                            |

## WIRING DIAGRAMS

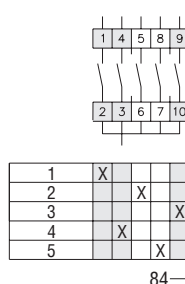
## 82-86-93



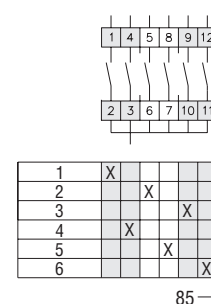
## 83-87-94



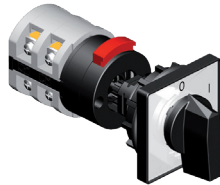
## 84



## 85



## STARTING WITH 1



Snap on front mounting with black handle  
for hole Ø22mm fixing (U47)❶

| WIRING DIAGRAMS |                  |                                       |                    | 82                                                                                | 86         | 93         | 83                                                                                  | 87         | 94         | 84                                                                                  | 85                                                                                  |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3          | 1                                                                                   | 2          | 3          | 1                                                                                   | 1                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |  |            |            |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |            |                                                                                     |            |            |                                                                                     |                                                                                     |
| GF...           | □30              | 10                                    | 10                 | GF1082U47                                                                         | GF1086U47  | GF1093U47  | GF1083U47                                                                           | GF1087U47  | GF1094U47  | GF1084U47                                                                           | GF1085U47                                                                           |
|                 | □48              | 20                                    | 15                 | GF2082U47                                                                         | GF2086U47  | GF2093U47  | GF2083U47                                                                           | GF2087U47  | GF2094U47  | GF2084U47                                                                           | GF2085U47                                                                           |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1282U47                                                                        | 7GN1286U47 | 7GN1293U47 | 7GN1283U47                                                                          | 7GN1287U47 | 7GN1294U47 | 7GN1284U47                                                                          | 7GN1285U47                                                                          |
|                 |                  | 20                                    | 20                 | 7GN2082U47                                                                        | 7GN2086U47 | 7GN2093U47 | 7GN2083U47                                                                          | 7GN2087U47 | 7GN2094U47 | 7GN2084U47                                                                          | 7GN2085U47                                                                          |
|                 |                  | 25                                    | 30                 | 7GN2582U47                                                                        | 7GN2586U47 | 7GN2593U47 | 7GN2583U47                                                                          | 7GN2587U47 | 7GN2594U47 | 7GN2584U47                                                                          | 7GN2585U47                                                                          |
| GX...           | □48              | 16                                    | 12                 | GX1682U47                                                                         | GX1686U47  | GX1693U47  | GX1683U47                                                                           | GX1687U47  | GX1694U47  | GX1684U47                                                                           | GX1685U47                                                                           |
|                 |                  | 20                                    | 15                 | GX2082U47                                                                         | GX2086U47  | GX2093U47  | GX2083U47                                                                           | GX2087U47  | GX2094U47  | GX2084U47                                                                           | GX2085U47                                                                           |

❶ For key operation version replace U47 with U29D (e.g. GF2082U29D).

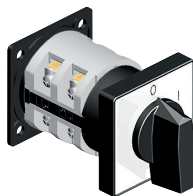
## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    |                           |           |           |           |           |                             |                              |
| GF10...   | 10                                    | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                        | 3                            |
| GF20...   | 20                                    | 15                 | —                         | 1         | 3         | —         | —         | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                                    | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

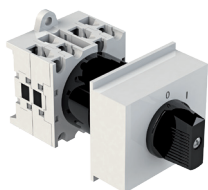
## STARTING WITH 1

Rear mounting with black handle (0)



| WIRING DIAGRAMS |                  |                                       |                    | 82        | 86        | 93        | 83        | 87        | 94        | 84        | 85        |
|-----------------|------------------|---------------------------------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Poles           |                  |                                       |                    | 1         | 2         | 3         | 1         | 2         | 3         | 1         | 1         |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |           |           |           |           |           |           |           |           |
|                 | [mm]             | [A]                                   | [A]                |           |           |           |           |           |           |           |           |
| GF...           | □48              | 20                                    | 15                 | GF20820   | GF20860   | GF20930   | GF20830   | GF20870   | GF20940   | GF20840   | GF20850   |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12820  | 7GN12860  | 7GN12930  | 7GN12830  | 7GN12870  | 7GN12940  | 7GN12840  | 7GN12850  |
|                 |                  | 20                                    | 20                 | 7GN20820  | 7GN20860  | 7GN20930  | 7GN20830  | 7GN20870  | 7GN20940  | 7GN20840  | 7GN20850  |
|                 |                  | 25                                    | 30                 | 7GN25820  | 7GN25860  | 7GN25930  | 7GN25830  | 7GN25870  | 7GN25940  | 7GN25840  | 7GN25850  |
|                 | □65              | 32                                    | 40                 | 7GN32820  | 7GN32860  | 7GN32930  | 7GN32830  | 7GN32870  | 7GN32940  | 7GN32840  | 7GN32850  |
|                 |                  | 40                                    | 50                 | 7GN40820  | 7GN40860  | 7GN40930  | 7GN40830  | 7GN40870  | 7GN40940  | 7GN40840  | 7GN40850  |
|                 |                  | 63                                    | 60                 | 7GN63820  | 7GN63860  | 7GN63930  | 7GN63830  | 7GN63870  | 7GN63940  | 7GN63840  | 7GN63850  |
|                 | □90              | 125                                   | 130                | 7GN125820 | 7GN125860 | 7GN125930 | 7GN125830 | 7GN125870 | 7GN125940 | 7GN125840 | 7GN125850 |
| GX...           | □48              | 16                                    | 12                 | GX16820   | GX16860   | GX16930   | GX16830   | GX16870   | GX16940   | GX16840   | GX16850   |
|                 |                  | 20                                    | 15                 | GX20820   | GX20860   | GX20930   | GX20830   | GX20870   | GX20940   | GX20840   | GX20850   |
|                 | □65              | 32                                    | 32                 | GX32820   | GX32860   | GX32930   | GX32830   | GX32870   | GX32940   | GX32840   | GX32850   |
|                 |                  | 40                                    | 40                 | GX40820   | GX40860   | GX40930   | GX40830   | GX40870   | GX40940   | GX40840   | GX40850   |
| GN...           | □132             | 200                                   | 200                | GN200820  | GN200860  | GN200930  | GN200830  | GN200870  | GN200940  | GN200840  | GN200850  |
|                 |                  | 315                                   | 255                | GN315820  | GN315860  | GN315930  | GN315830  | GN315870  | GN315940  | GN315840  | GN315850  |

Modular service cover for 35mm DIN rail mounting with black handle (048)①

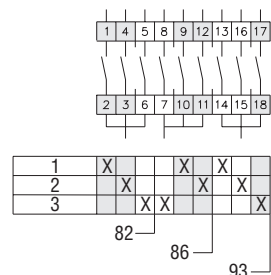


| WIRING DIAGRAMS |                |                                       |                    | 82         | 86         | 93         | 83         | 87         | 94         | 84         | 85         |
|-----------------|----------------|---------------------------------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Poles           |                |                                       |                    | 1          | 2          | 3          | 1          | 2          | 3          | 1          | 1          |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |            |            |            |            |            |            |            |            |
|                 | [mm]           | [A]                                   | [A]                |            |            |            |            |            |            |            |            |
| GF...           | 45x54          | 20                                    | 15                 | GF2082048  | GF2086048  | GF2093048  | GF2083048  | GF2087048  | GF2094048  | GF2084048  | GF2085048  |
| 7GN...          | 45x54          | 16                                    | 15                 | 7GN1282048 | 7GN1286048 | 7GN1293048 | 7GN1283048 | 7GN1287048 | 7GN1294048 | 7GN1284048 | 7GN1285048 |
|                 |                | 20                                    | 20                 | 7GN2082048 | 7GN2086048 | 7GN2093048 | 7GN2083048 | 7GN2087048 | 7GN2094048 | 7GN2084048 | 7GN2085048 |
|                 |                | 25                                    | 30                 | 7GN2582048 | 7GN2586048 | 7GN2593048 | 7GN2583048 | 7GN2587048 | 7GN2594048 | 7GN2584048 | 7GN2585048 |
| GX...           | 45x54          | 16                                    | 12                 | GX1682048  | GX1686048  | GX1693048  | GX1683048  | GX1687048  | GX1694048  | GX1684048  | GX1685048  |
|                 |                | 20                                    | 15                 | GX2082048  | GX2086048  | GX2093048  | GX2083048  | GX2087048  | GX2094048  | GX2084048  | GX2085048  |

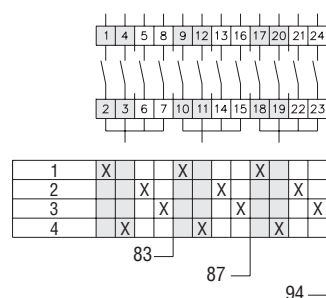
① For key operation version replace 048 with 049 (e.g. GF2082049).

## WIRING DIAGRAMS

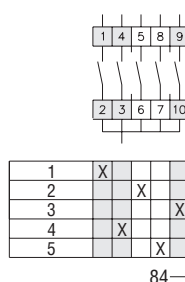
## 82-86-93



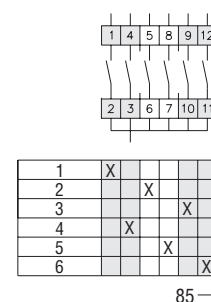
## 83-87-94



## 84



## 85





## STARTING WITH 1

Cam switch in plastic enclosure with black handle (P)

Cam switch in metallic enclosure with black handle (L)



| WIRING DIAGRAMS |                |                                       |                    | 82                                                                                | 86        | 93                    | 83                                                                                  | 87                    | 94                    | 84                                                                                  | 85                                                                                  |
|-----------------|----------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------|-----------------------|-------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Poles           |                |                                       |                    | 1                                                                                 | 2         | 3                     | 1                                                                                   | 2                     | 3                     | 1                                                                                   | 1                                                                                   |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |           |                       |  |                       |                       |  |  |
|                 | [mm]           | [A]                                   | [A]                |                                                                                   |           |                       |                                                                                     |                       |                       |                                                                                     |                                                                                     |
| 7GN...          | 75x75          | 16                                    | 15                 | 7GN1282P                                                                          | 7GN1286P  | 7GN1293P <sup>①</sup> | 7GN1283P                                                                            | 7GN1287P              | 7GN1294P <sup>①</sup> | 7GN1284P                                                                            | 7GN1285P                                                                            |
|                 |                | 20                                    | 20                 | 7GN2082P                                                                          | 7GN2086P  | 7GN2093P <sup>①</sup> | 7GN2083P                                                                            | 7GN2087P              | 7GN2094P <sup>①</sup> | 7GN2084P                                                                            | 7GN2085P                                                                            |
|                 |                | 25                                    | 30                 | 7GN2582P                                                                          | 7GN2586P  | 7GN2593P <sup>②</sup> | 7GN2583P                                                                            | 7GN2587P <sup>①</sup> | —                     | 7GN2584P                                                                            | 7GN2585P <sup>①</sup>                                                               |
|                 | 90x90          | 32                                    | 40                 | 7GN3282P                                                                          | 7GN3286P  | 7GN3293P              | 7GN3283P                                                                            | 7GN3287P              | 7GN3294P <sup>①</sup> | 7GN3284P                                                                            | 7GN3285P                                                                            |
|                 | 110x110        | 40                                    | 50                 | 7GN4082P                                                                          | 7GN4086P  | 7GN4093P              | 7GN4083P                                                                            | 7GN4087P              | 7GN4094P <sup>③</sup> | 7GN4084P                                                                            | 7GN4085P                                                                            |
|                 | 125x175        | 63                                    | 60                 | 7GN6382P                                                                          | 7GN6386P  | 7GN6393P <sup>③</sup> | 7GN6383P                                                                            | 7GN6387P              | 7GN6394P <sup>③</sup> | 7GN6384P                                                                            | 7GN6385P <sup>③</sup>                                                               |
|                 | 198x248        | 125                                   | 130                | 7GN12582P                                                                         | 7GN12586P | —                     | 7GN12583P                                                                           | 7GN12587P             | —                     | 7GN12584P                                                                           | —                                                                                   |
| GX...           | 90x90          | 16                                    | 12                 | GX1682P                                                                           | GX1686P   | GX1693P               | GX1683P                                                                             | GX1687P               | GX1694P <sup>②</sup>  | GX1684P                                                                             | GX1685P                                                                             |
|                 |                | 20                                    | 15                 | GX2082P                                                                           | GX2086P   | GX2093P               | GX2083P                                                                             | GX2087P               | GX2094P <sup>②</sup>  | GX2084P                                                                             | GX2085P                                                                             |
|                 | 110x110        | 32                                    | 32                 | GX3282P                                                                           | GX3286P   | —                     | GX3283P                                                                             | GX3287P               | —                     | GX3284P                                                                             | —                                                                                   |
|                 |                | 40                                    | 40                 | GX4082P                                                                           | GX4086P   | —                     | GX4083P                                                                             | GX4087P               | —                     | GX4084P                                                                             | —                                                                                   |
| GN...           | 250x316        | 200                                   | 200                | GN20082L                                                                          | GN20086L  | GN20093L              | GN20083L                                                                            | GN20087L              | GN20094L              | GN20084L                                                                            | GN20085L                                                                            |
|                 |                | 315                                   | 255                | GN31582L                                                                          | GN31586L  | GN31593L              | GN31583L                                                                            | GN31587L              | GN31594L              | GN31584L                                                                            | GN31585L                                                                            |

- ① Enclosure size 90x90mm.  
 ② Enclosure size 110x110mm.  
 ③ Enclosure size 198x248mm.

## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                                    | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

## STARTING WITH 0

Front mounting with black handle (U)



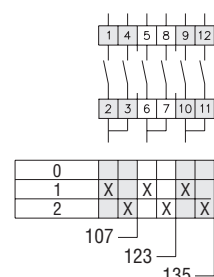
| WIRING DIAGRAMS |                  |                                       |                    | 107                                                                               | 123        | 135        | 108                                                                                | 124        | 136        | 109                                                                                 | 110        |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------|------------|------------------------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------------------------|------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2          | 3          | 1                                                                                  | 2          | 3          | 1                                                                                   | 1          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |            |            |  |            |            |  |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |            |            |                                                                                    |            |            |                                                                                     |            |
| GF...           | □30              | 10                                    | 10                 | GF10107U                                                                          | GF10123U   | GF10135U   | GF10108U                                                                           | GF10124U   | GF10136U   | GF10109U                                                                            | GF10110U   |
|                 | □48              | 20                                    | 15                 | GF20107U                                                                          | GF20123U   | GF20135U   | GF20108U                                                                           | GF20124U   | GF20136U   | GF20109U                                                                            | GF20110U   |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12107U                                                                         | 7GN12123U  | 7GN12135U  | 7GN12108U                                                                          | 7GN12124U  | 7GN12136U  | 7GN12109U                                                                           | 7GN12110U  |
|                 |                  | 20                                    | 20                 | 7GN20107U                                                                         | 7GN20123U  | 7GN20135U  | 7GN20108U                                                                          | 7GN20124U  | 7GN20136U  | 7GN20109U                                                                           | 7GN20110U  |
|                 |                  | 25                                    | 30                 | 7GN25107U                                                                         | 7GN25123U  | 7GN25135U  | 7GN25108U                                                                          | 7GN25124U  | 7GN25136U  | 7GN25109U                                                                           | 7GN25110U  |
|                 | □65              | 32                                    | 40                 | 7GN32107U                                                                         | 7GN32123U  | 7GN32135U  | 7GN32108U                                                                          | 7GN32124U  | 7GN32136U  | 7GN32109U                                                                           | 7GN32110U  |
|                 |                  | 40                                    | 50                 | 7GN40107U                                                                         | 7GN40123U  | 7GN40135U  | 7GN40108U                                                                          | 7GN40124U  | 7GN40136U  | 7GN40109U                                                                           | 7GN40110U  |
|                 |                  | 63                                    | 60                 | 7GN63107U                                                                         | 7GN63123U  | 7GN63135U  | 7GN63108U                                                                          | 7GN63124U  | 7GN63136U  | 7GN63109U                                                                           | 7GN63110U  |
|                 | □90              | 125                                   | 130                | 7GN125107U                                                                        | 7GN125123U | 7GN125135U | 7GN125108U                                                                         | 7GN125124U | 7GN125136U | 7GN125109U                                                                          | 7GN125110U |
| GX...           | □48              | 16                                    | 12                 | GX16107U                                                                          | GX16123U   | GX16135U   | GX16108U                                                                           | GX16124U   | GX16136U   | GX16109U                                                                            | GX16110U   |
|                 |                  | 20                                    | 15                 | GX20107U                                                                          | GX20123U   | GX20135U   | GX20108U                                                                           | GX20124U   | GX20136U   | GX20109U                                                                            | GX20110U   |
|                 | □65              | 32                                    | 32                 | GX32107U                                                                          | GX32123U   | GX32135U   | GX32108U                                                                           | GX32124U   | GX32136U   | GX32109U                                                                            | GX32110U   |
|                 |                  | 40                                    | 40                 | GX40107U                                                                          | GX40123U   | GX40135U   | GX40108U                                                                           | GX40124U   | GX40136U   | GX40109U                                                                            | GX40110U   |
| GN...           | □132             | 200                                   | 200                | GN200107U                                                                         | GN200123U  | GN200135U  | GN200108U                                                                          | GN200124U  | GN200136U  | GN200109U                                                                           | GN200110U  |
|                 |                  | 315                                   | 255                | GN315107U                                                                         | GN315123U  | GN315135U  | GN315108U                                                                          | GN315124U  | GN315136U  | GN315109U                                                                           | GN315110U  |

❶ Front plate for GF..., 7GN12... to 7GN63..., GX..., GN...

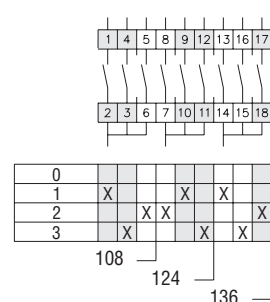
❷ Front plate for 7GN125...

## WIRING DIAGRAMS

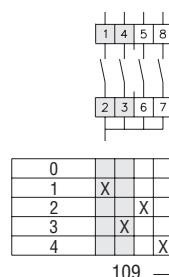
## 107-123-135



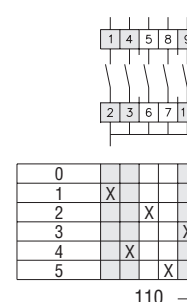
## 108-124-136



## 109

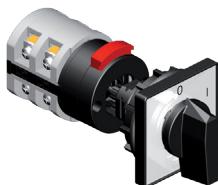


## 110



## STARTING WITH 0

Snap on front mounting with black handle  
for hole Ø22mm fixing (U47)❶



| WIRING DIAGRAMS |                  |                                       |                    | 107                                                                               | 123         | 135         | 108                                                                                 | 124         | 136         | 109                                                                                 | 110                                                                                 |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Poles           |                  |                                       |                    | 1                                                                                 | 2           | 3           | 1                                                                                   | 2           | 3           | 1                                                                                   | 1                                                                                   |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |             |             |  |             |             |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |             |             |                                                                                     |             |             |                                                                                     |                                                                                     |
| GF...           | □30              | 10                                    | 10                 | GF10107U47                                                                        | GF10123U47  | GF10135U47  | GF10108U47                                                                          | GF10124U47  | GF10136U47  | GF10109U47                                                                          | GF10110U47                                                                          |
|                 | □48              | 20                                    | 15                 | GF20107U47                                                                        | GF20123U47  | GF20135U47  | GF20108U47                                                                          | GF20124U47  | GF20136U47  | GF20109U47                                                                          | GF20110U47                                                                          |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12107U47                                                                       | 7GN12123U47 | 7GN12135U47 | 7GN12108U47                                                                         | 7GN12124U47 | 7GN12136U47 | 7GN12109U47                                                                         | 7GN12110U47                                                                         |
|                 |                  | 20                                    | 20                 | 7GN20107U47                                                                       | 7GN20123U47 | 7GN20135U47 | 7GN20108U47                                                                         | 7GN20124U47 | 7GN20136U47 | 7GN20109U47                                                                         | 7GN20110U47                                                                         |
|                 |                  | 25                                    | 30                 | 7GN25107U47                                                                       | 7GN25123U47 | 7GN25135U47 | 7GN25108U47                                                                         | 7GN25124U47 | 7GN25136U47 | 7GN25109U47                                                                         | 7GN25110U47                                                                         |
| GX...           | □48              | 16                                    | 12                 | GX16107U47                                                                        | GX16123U47  | GX16135U47  | GX16108U47                                                                          | GX16124U47  | GX16136U47  | GX16109U47                                                                          | GX16110U47                                                                          |
|                 |                  | 20                                    | 15                 | GX20107U47                                                                        | GX20123U47  | GX20135U47  | GX20108U47                                                                          | GX20124U47  | GX20136U47  | GX20109U47                                                                          | GX20110U47                                                                          |

❶ For key operation version replace U47 with U29D (e.g. GF20107U29D).

## Technical characteristics

| Series    | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
|           |                                       |                    |                           |           |           |           |           |                             |                              |
| GF10...   | 10                                    | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                        | 3                            |
| GF20...   | 20                                    | 15                 | —                         | 1         | 3         | —         | —         | 2                           | 7.5                          |
| 7GN12...  | 16                                    | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                                    | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                                    | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                                    | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                                    | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                                   | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|         | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|         |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                                    | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30   | 50       | 100  | 75   | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30   | 50       | 100  | 75   | 37                          | 110                          |

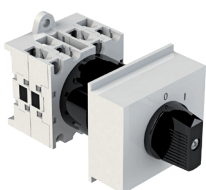
## STARTING WITH 0

Rear mounting with black handle (0)



| WIRING DIAGRAMS |                  |                                       |                    | 107        | 123        | 135        | 108        | 124        | 136        | 109        | 110        |
|-----------------|------------------|---------------------------------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Poles           |                  |                                       |                    | 1          | 2          | 3          | 1          | 2          | 3          | 1          | 1          |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |            |            |            |            |            |            |            |            |
|                 | [mm]             | [A]                                   | [A]                |            |            |            |            |            |            |            |            |
| GF...           | □48              | 20                                    | 15                 | GF201070   | GF201230   | GF201350   | GF201080   | GF201240   | GF201360   | GF201090   | GF201100   |
| 7GN...          | □48              | 16                                    | 15                 | 7GN121070  | 7GN121230  | 7GN121350  | 7GN121080  | 7GN121240  | 7GN121360  | 7GN121090  | 7GN121100  |
|                 |                  | 20                                    | 20                 | 7GN201070  | 7GN201230  | 7GN201350  | 7GN201080  | 7GN201240  | 7GN201360  | 7GN201090  | 7GN201100  |
|                 |                  | 25                                    | 30                 | 7GN251070  | 7GN251230  | 7GN251350  | 7GN251080  | 7GN251240  | 7GN251360  | 7GN251090  | 7GN251100  |
|                 | □65              | 32                                    | 40                 | 7GN321070  | 7GN321230  | 7GN321350  | 7GN321080  | 7GN321240  | 7GN321360  | 7GN321090  | 7GN321100  |
|                 |                  | 40                                    | 50                 | 7GN401070  | 7GN401230  | 7GN401350  | 7GN401080  | 7GN401240  | 7GN401360  | 7GN401090  | 7GN401100  |
|                 |                  | 63                                    | 60                 | 7GN631070  | 7GN631230  | 7GN631350  | 7GN631080  | 7GN631240  | 7GN631360  | 7GN631090  | 7GN631100  |
| GX...           | □48              | 125                                   | 130                | 7GN1251070 | 7GN1251230 | 7GN1251350 | 7GN1251080 | 7GN1251240 | 7GN1251360 | 7GN1251090 | 7GN1251100 |
|                 |                  | 16                                    | 12                 | GX161070   | GX161230   | GX161350   | GX161080   | GX161240   | GX161360   | GX161090   | GX161100   |
|                 | □65              | 20                                    | 15                 | GX201070   | GX201230   | GX201350   | GX201080   | GX201240   | GX201360   | GX201090   | GX201100   |
|                 |                  | 32                                    | 32                 | GX321070   | GX321230   | GX321350   | GX321080   | GX321240   | GX321360   | GX321090   | GX321100   |
| GN...           | □132             | 40                                    | 40                 | GX401070   | GX401230   | GX401350   | GX401080   | GX401240   | GX401360   | GX401090   | GX401100   |
|                 |                  | 200                                   | 200                | GN2001070  | GN2001230  | GN2001350  | GN2001080  | GN2001240  | GN2001360  | GN2001090  | GN2001100  |
|                 |                  | 315                                   | 255                | GN3151070  | GN3151230  | GN3151350  | GN3151080  | GN3151240  | GN3151360  | GN3151090  | GN3151100  |

Modular service cover for 35mm DIN rail mounting with black handle (048)Ⓢ



| WIRING DIAGRAMS |                  |                                       |                    | 107         | 123         | 135         | 108         | 124         | 136         | 109         | 110         |
|-----------------|------------------|---------------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Poles           |                  |                                       |                    | 1           | 2           | 3           | 1           | 2           | 3           | 1           | 1           |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |             |             |             |             |             |             |             |             |
|                 | [mm]             | [A]                                   | [A]                |             |             |             |             |             |             |             |             |
| GF...           | 45x54            | 20                                    | 15                 | GF20107048  | GF20123048  | GF20135048  | GF20108048  | GF20124048  | GF20136048  | GF20109048  | GF20110048  |
| 7GN...          | 45x54            | 16                                    | 15                 | 7GN12107048 | 7GN12123048 | 7GN12135048 | 7GN12108048 | 7GN12124048 | 7GN12136048 | 7GN12109048 | 7GN12110048 |
|                 |                  | 20                                    | 20                 | 7GN20107048 | 7GN20123048 | 7GN20135048 | 7GN20108048 | 7GN20124048 | 7GN20136048 | 7GN20109048 | 7GN20110048 |
|                 |                  | 25                                    | 30                 | 7GN25107048 | 7GN25123048 | 7GN25135048 | 7GN25108048 | 7GN25124048 | 7GN25136048 | 7GN25109048 | 7GN25110048 |
| GX...           | 45x54            | 16                                    | 12                 | GX16107048  | GX16123048  | GX16135048  | GX16108048  | GX16124048  | GX16136048  | GX16109048  | GX16110048  |
|                 |                  | 20                                    | 15                 | GX20107048  | GX20123048  | GX20135048  | GX20108048  | GX20124048  | GX20136048  | GX20109048  | GX20110048  |

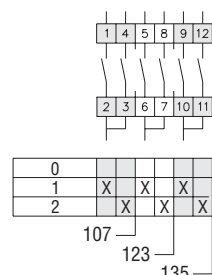
① Front plate for GF..., 7GN12... to 7GN63..., GX..., GN...

② Front plate for 7GN125...

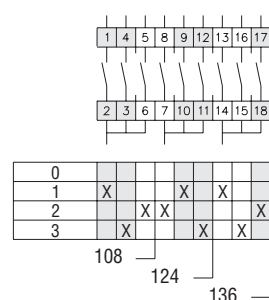
③ For key operation version replace 048 with 049 (e.g. GF20107049).

## WIRING DIAGRAMS

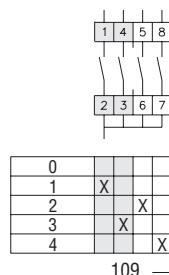
## 107-123-135



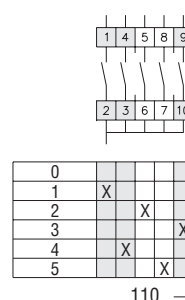
## 108-124-136



## 109



## 110



## STARTING WITH 0

Cam switch in plastic enclosure with black handle (P)

Cam switch in metallic enclosure with black handle (L)



| WIRING DIAGRAMS |                |                                       |                    | 107                                                                               | 123       | 135       | 108                                                                                 | 124       | 136        | 109                                                                                 | 110       |
|-----------------|----------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------|-----------|-------------------------------------------------------------------------------------|-----------|------------|-------------------------------------------------------------------------------------|-----------|
| Poles           |                |                                       |                    | 1                                                                                 | 2         | 3         | 1                                                                                   | 2         | 3          | 1                                                                                   | 1         |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |           |           |  |           |            |  |           |
|                 | [mm]           | [A]                                   | [A]                |                                                                                   |           |           |                                                                                     |           |            |                                                                                     |           |
| 7GN...          | 75x75          | 16                                    | 15                 | 7GN12107P                                                                         | 7GN12123P | 7GN12135P | 7GN12108P                                                                           | 7GN12124P | 7GN12136P⑥ | 7GN12109P                                                                           | 7GN12110P |
|                 |                | 20                                    | 20                 | 7GN20107P                                                                         | 7GN20123P | 7GN20135P | 7GN20108P                                                                           | 7GN20124P | 7GN20136P⑥ | 7GN20109P                                                                           | 7GN20110P |
|                 |                | 25                                    | 30                 | 7GN25107P                                                                         | 7GN25123P | 7GN25135P | 7GN25108P                                                                           | 7GN25124P | 7GN25136P④ | 7GN25109P                                                                           | 7GN25110P |
|                 | 90x90          | 32                                    | 40                 | 7GN32107P                                                                         | 7GN32123P | 7GN32135P | 7GN32108P                                                                           | 7GN32124P | 7GN32136P  | 7GN32109P                                                                           | 7GN32110P |
|                 | 110x110        | 40                                    | 50                 | 7GN40107P                                                                         | 7GN40123P | 7GN40135P | 7GN40108P                                                                           | 7GN40124P | 7GN40136P  | 7GN40109P                                                                           | 7GN40110P |
|                 | 125x175        | 63                                    | 60                 | 7GN63107P                                                                         | 7GN63123P | 7GN63135P | 7GN63108P                                                                           | 7GN63124P | 7GN63136P⑤ | 7GN63109P                                                                           | 7GN63110P |
| GX...           | 90x90          | 16                                    | 12                 | GX16107P                                                                          | GX16123P  | GX16135P  | GX16108P                                                                            | GX16124P  | GX16136P   | GX16109P                                                                            | GX16110P  |
|                 |                | 20                                    | 15                 | GX20107P                                                                          | GX20123P  | GX20135P  | GX20108P                                                                            | GX20124P  | GX20136P   | GX20109P                                                                            | GX20110P  |
|                 |                | 32                                    | 32                 | GX32107P                                                                          | GX32123P  | GX32135P  | GX32108P                                                                            | GX32124P  | —          | GX32109P                                                                            | GX32110P  |
|                 | 110x110        | 40                                    | 40                 | GX40107P                                                                          | GX40123P  | GX40135P  | GX40108P                                                                            | GX40124P  | —          | GX40109P                                                                            | GX40110P  |
| GN...           | 250x316        | 200                                   | 200                | GN200107L                                                                         | GN200123L | GN200135L | GN200108L                                                                           | GN200124L | GN200136L  | GN200109L                                                                           | GN200110L |
|                 |                | 315                                   | 255                | GN315107L                                                                         | GN315123L | GN315135L | GN315108L                                                                           | GN315124L | GN315136L  | GN315109L                                                                           | GN315110L |

① Front plate for GF..., 7GN12... to 7GN63..., GX..., GN...

② Front plate for 7GN125...

③ Enclosure size 90x90mm.

④ Enclosure size 110x110mm.

⑤ Enclosure size 198x248mm.

## Technical characteristics

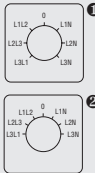
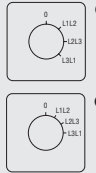
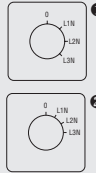
| Series    | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|           |                           |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|           | [A]                       | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|           | [HP]                      | [HP]               | [HP]                      | [HP] | [HP]     | [HP] |      |                             |                              |
| GF20...   | 20                        | 15                 | —                         | 1    | 3        | —    | —    | 2                           | 7.5                          |
| 7GN12...  | 16                        | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                         | 5.5                          |
| 7GN20...  | 20                        | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                         | 7.5                          |
| 7GN25...  | 25                        | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                         | 11                           |
| 7GN32...  | 32                        | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                           | 15                           |
| 7GN40...  | 40                        | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                           | 18.5                         |
| 7GN63...  | 63                        | 60                 | 3                         | 10   | 15       | 25   | 25   | 7.5                         | 30                           |
| 7GN125... | 125                       | 130                | 5                         | 15   | 25       | 50   | 40   | 11                          | 45                           |

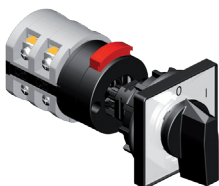
| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                                   | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                                    | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                                   | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                                   | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

## VOLTMETER AND AMMETER SWITCHES

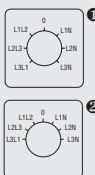
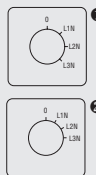
Front mounting with black handle  
(U)



| Type            |                  |                                       |                    | Voltmeter switches                                                                |                                                                                   |                                                                                    | Ammeter switches                                                                    |          |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|
| WIRING DIAGRAMS |                  |                                       |                    | 66                                                                                | 67                                                                                | 68                                                                                 | 97                                                                                  | 98       |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |          |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                    |                                                                                     |          |
| GF...           | □30              | 10                                    | 10                 | GF1066U                                                                           | GF1067U                                                                           | GF1068U                                                                            | GF1097U                                                                             | GF1098U  |
|                 | □48              | 20                                    | 15                 | GF2066U                                                                           | GF2067U                                                                           | GF2068U                                                                            | GF2097U                                                                             | GF2098U  |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1266U                                                                          | 7GN1267U                                                                          | 7GN1268U                                                                           | 7GN1297U                                                                            | 7GN1298U |
|                 |                  | 20                                    | 20                 | 7GN2066U                                                                          | 7GN2067U                                                                          | 7GN2068U                                                                           | 7GN2097U                                                                            | 7GN2098U |
|                 |                  | 25                                    | 30                 | 7GN2566U                                                                          | 7GN2567U                                                                          | 7GN2568U                                                                           | 7GN2597U                                                                            | 7GN2598U |
|                 | □65              | 32                                    | 40                 | 7GN3266U                                                                          | 7GN3267U                                                                          | 7GN3268U                                                                           | 7GN3297U                                                                            | 7GN3298U |
|                 |                  | 40                                    | 50                 | 7GN4066U                                                                          | 7GN4067U                                                                          | 7GN4068U                                                                           | 7GN4097U                                                                            | 7GN4098U |
| GX...           | □48              | 16                                    | 12                 | GX1666U                                                                           | GX1667U                                                                           | GX1668U                                                                            | GX1697U                                                                             | GX1698U  |
|                 |                  | 20                                    | 15                 | GX2066U                                                                           | GX2067U                                                                           | GX2068U                                                                            | GX2097U                                                                             | GX2098U  |
|                 | □65              | 32                                    | 32                 | GX3266U                                                                           | GX3267U                                                                           | GX3268U                                                                            | GX3297U                                                                             | GX3298U  |
|                 |                  | 40                                    | 40                 | GX4066U                                                                           | GX4067U                                                                           | GX4068U                                                                            | GX4097U                                                                             | GX4098U  |



Snap on front mounting with black handle  
for hole Ø22mm fixing (U47)Ⓢ

| Type            |                  |                                       |                    | Voltmeter switches                                                                  |                                                                                     |                                                                                      | Ammeter switches                                                                      |            |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 66                                                                                  | 67                                                                                  | 68                                                                                   | 97                                                                                    | 98         |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |            |
| GF...           | □30              | 10                                    | 10                 | GF1066U47                                                                           | GF1067U47                                                                           | GF1068U47                                                                            | GF1097U47                                                                             | GF1098U47  |
|                 | □48              | 20                                    | 15                 | GF2066U47                                                                           | GF2067U47                                                                           | GF2068U47                                                                            | GF2097U47                                                                             | GF2098U47  |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1266U47                                                                          | 7GN1267U47                                                                          | 7GN1268U47                                                                           | 7GN1297U47                                                                            | 7GN1298U47 |
|                 |                  | 20                                    | 20                 | 7GN2066U47                                                                          | 7GN2067U47                                                                          | 7GN2068U47                                                                           | 7GN2097U47                                                                            | 7GN2098U47 |
|                 |                  | 25                                    | 30                 | 7GN2566U47                                                                          | 7GN2567U47                                                                          | 7GN2568U47                                                                           | 7GN2597U47                                                                            | 7GN2598U47 |
| GX...           | □48              | 16                                    | 12                 | GX1666U47                                                                           | GX1667U47                                                                           | GX1668U47                                                                            | GX1697U47                                                                             | GX1698U47  |
|                 |                  | 20                                    | 15                 | GX2066U47                                                                           | GX2067U47                                                                           | GX2068U47                                                                            | GX2097U47                                                                             | GX2098U47  |

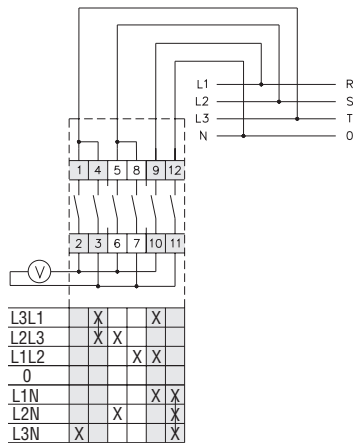
❶ Front plate for GF20..., 7GN..., GX..., GN...

❷ Front plate for GF10...

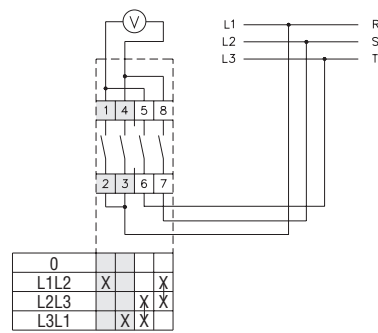
Ⓢ For key operation version replace U47 with U29D (e.g. GF2066U29D).

### WIRING DIAGRAMS

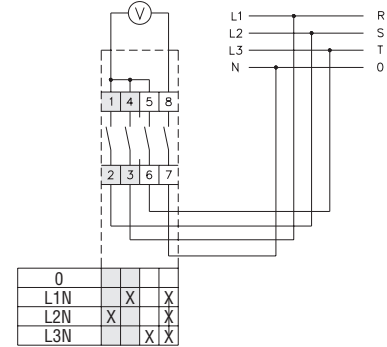
66



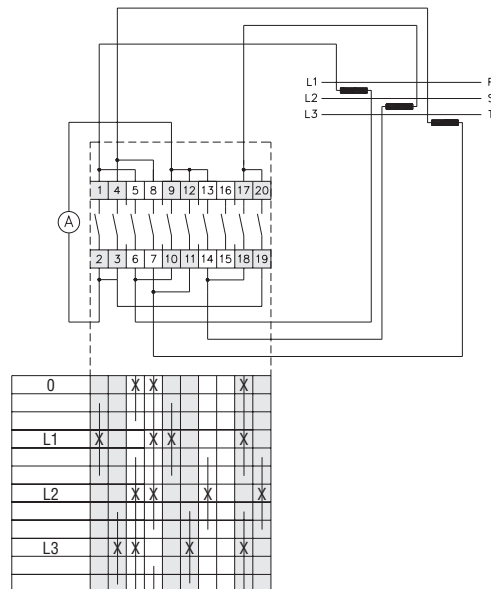
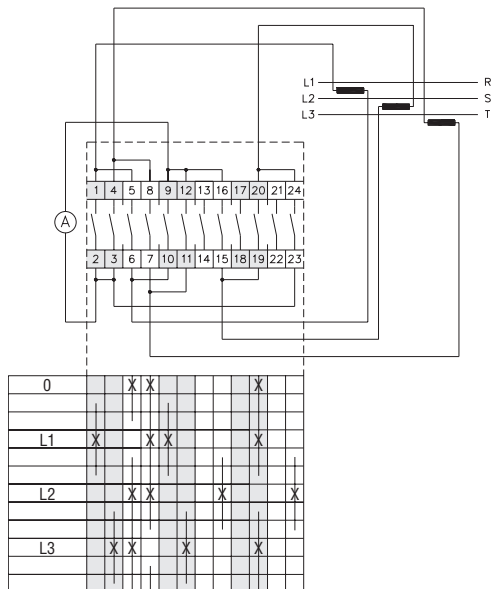
67



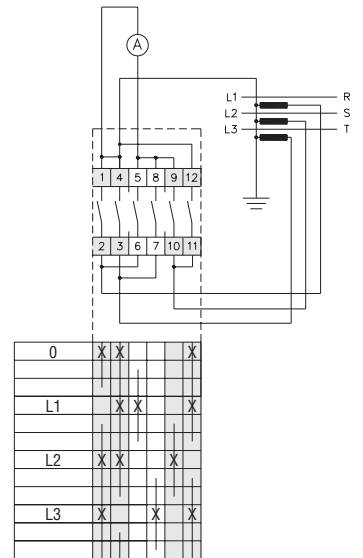
68



97



98



12

### Technical characteristics

| Series   | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|          |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|          | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|          |                                       |                    |                           | [HP] | [HP]     | [HP] | [HP] | [HP]                        |                              |
| GF10...  | 10                                    | 10                 | —                         | 0.75 | 2        | —    | —    | 0.75                        | 3                            |
| GF20...  | 20                                    | 15                 | —                         | 1    | 3        | —    | —    | 2                           | 7.5                          |
| 7GN12... | 16                                    | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                         | 5.5                          |
| 7GN20... | 20                                    | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                         | 7.5                          |
| 7GN25... | 25                                    | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                         | 11                           |
| 7GN32... | 32                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                           | 15                           |
| 7GN40... | 40                                    | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                           | 18.5                         |

| Series  | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         |                           |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|         | [A]                       | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|         |                           |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                        | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                        | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                        | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                        | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |

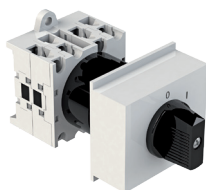
## VOLTMETER AND AMMETER SWITCHES

Rear mounting with black handle  
(0)



| Type            |                  |                                       |                    | Voltmeter switches                                                                |                                                                                   |                                                                                    | Ammeter switches                                                                    |          |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|
| WIRING DIAGRAMS |                  |                                       |                    | 66                                                                                | 67                                                                                | 68                                                                                 | 97                                                                                  | 98       |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |          |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                    |                                                                                     |          |
| GF...           | □48              | 20                                    | 15                 | GF20660                                                                           | GF20670                                                                           | GF20680                                                                            | GF20970                                                                             | GF20980  |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12660                                                                          | 7GN12670                                                                          | 7GN12680                                                                           | 7GN12970                                                                            | 7GN12980 |
|                 |                  | 20                                    | 20                 | 7GN20660                                                                          | 7GN20670                                                                          | 7GN20680                                                                           | 7GN20970                                                                            | 7GN20980 |
|                 |                  | 25                                    | 30                 | 7GN25660                                                                          | 7GN25670                                                                          | 7GN25680                                                                           | 7GN25970                                                                            | 7GN25980 |
|                 | □65              | 32                                    | 40                 | 7GN32660                                                                          | 7GN32670                                                                          | 7GN32680                                                                           | 7GN32970                                                                            | 7GN32980 |
|                 |                  | 40                                    | 50                 | 7GN40660                                                                          | 7GN40670                                                                          | 7GN40680                                                                           | 7GN40970                                                                            | 7GN40980 |
| GX...           | □48              | 16                                    | 12                 | GX16660                                                                           | GX16670                                                                           | GX16680                                                                            | GX16970                                                                             | GX16980  |
|                 |                  | 20                                    | 15                 | GX20660                                                                           | GX20670                                                                           | GX20680                                                                            | GX20970                                                                             | GX20980  |
|                 | □65              | 32                                    | 32                 | GX32660                                                                           | GX32670                                                                           | GX32680                                                                            | GX32970                                                                             | GX32980  |
|                 |                  | 40                                    | 40                 | GX40660                                                                           | GX40670                                                                           | GX40680                                                                            | GX40970                                                                             | GX40980  |

Modular service cover for 35mm DIN rail mounting with black handle (048)❶



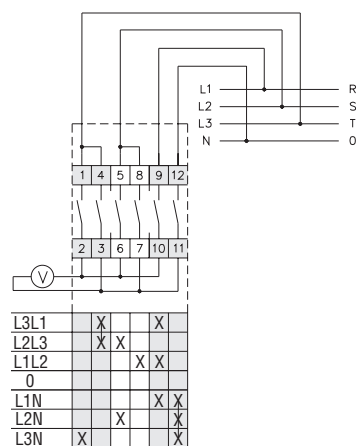
| Type            |                  |                                       |                    | Voltmeter switches                                                                  |                                                                                     |                                                                                      | Ammeter switches                                                                      |            |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------|
| WIRING DIAGRAMS |                  |                                       |                    | 66                                                                                  | 67                                                                                  | 68                                                                                   | 97                                                                                    | 98         |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |            |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                      |                                                                                       |            |
| GF...           | □45X54           | 20                                    | 15                 | GF2066048                                                                           | GF2067048                                                                           | GF2068048                                                                            | GF2097048                                                                             | GF2098048  |
| 7GN...          | □45X54           | 16                                    | 15                 | 7GN1266048                                                                          | 7GN1267048                                                                          | 7GN1268048                                                                           | 7GN1297048                                                                            | 7GN1298048 |
|                 |                  | 20                                    | 20                 | 7GN2066048                                                                          | 7GN2067048                                                                          | 7GN2068048                                                                           | 7GN2097048                                                                            | 7GN2098048 |
|                 |                  | 25                                    | 30                 | 7GN2566048                                                                          | 7GN2567048                                                                          | 7GN2568048                                                                           | 7GN2597048                                                                            | 7GN2598048 |
| GX...           | □45X54           | 16                                    | 12                 | GX1666048                                                                           | GX1667048                                                                           | GX1668048                                                                            | GX1697048                                                                             | GX1698048  |
|                 |                  | 20                                    | 15                 | GX2066048                                                                           | GX2067048                                                                           | GX2068048                                                                            | GX2097048                                                                             | GX2098048  |

❶ For key operation version replace 048 with 049 (e.g. GF2066049).

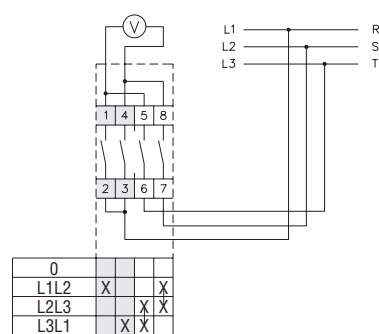


## WIRING DIAGRAMS

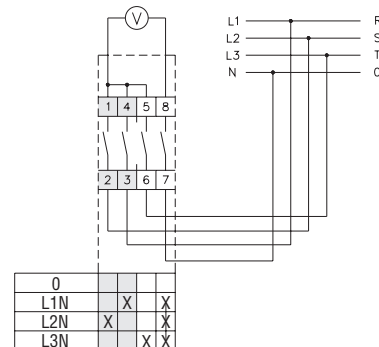
66



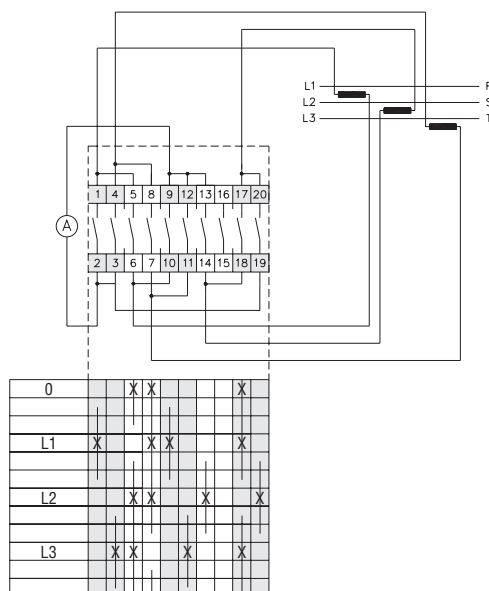
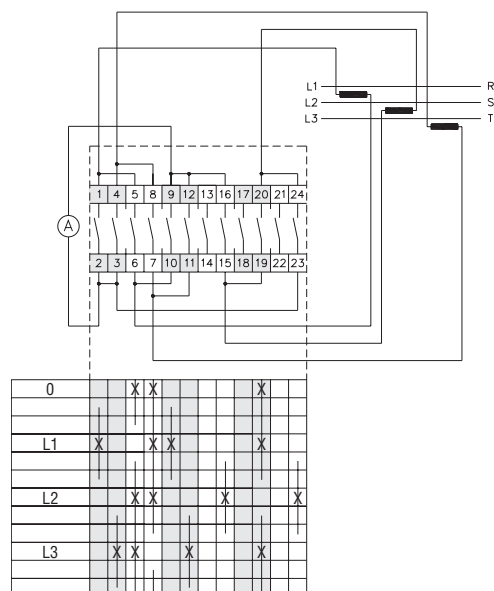
67



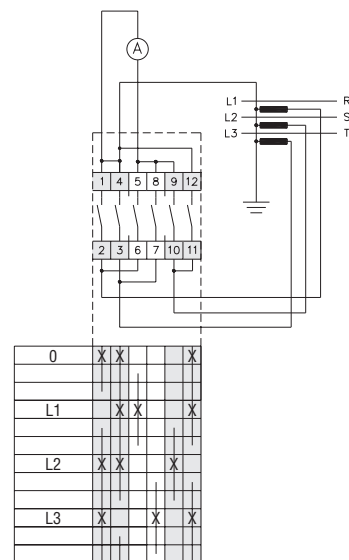
68



97



98



12

## Technical characteristics

| Series   | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |              |              |              |              | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------|---------------------------|--------------------|---------------------------|--------------|--------------|--------------|--------------|-----------------------------|------------------------------|
|          |                           |                    | 1 phase                   |              | 3 phases     |              |              |                             |                              |
|          | [A]                       | [A]                | 120V<br>[HP]              | 240V<br>[HP] | 240V<br>[HP] | 480V<br>[HP] | 600V<br>[HP] | [kW] at 230V                | [kW] at 400V                 |
| GF10...  | 10                        | 10                 | —                         | 0.75         | 2            | —            | —            | 0.75                        | 3                            |
| GF20...  | 20                        | 15                 | —                         | 1            | 3            | —            | —            | 2                           | 7.5                          |
| 7GN12... | 16                        | 15                 | 0.5                       | 1            | 3            | —            | —            | 1.7                         | 5.5                          |
| 7GN20... | 20                        | 20                 | 0.75                      | 2            | 3            | 7.5          | 10           | 2.5                         | 7.5                          |
| 7GN25... | 25                        | 30                 | 1.5                       | 3            | 5            | 10           | 15           | 3.7                         | 11                           |
| 7GN32... | 32                        | 40                 | 2                         | 5            | 10           | 15           | 15           | 4                           | 15                           |
| 7GN40... | 40                        | 50                 | 2                         | 5            | 10           | 20           | 20           | 6                           | 18.5                         |

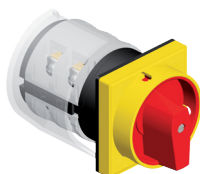
| Series  | Rated thermal current I <sub>th</sub> | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|         |                                       |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|         | [A]                                   | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|         |                                       |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| GX16... | 16                                    | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| GX20... | 20                                    | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| GX32... | 32                                    | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| GX40... | 40                                    | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |

## MOTOR REVERSING, STAR-DELTA, DAHLANDER MOTOR CONTROL, SEPARATE WINDINGS SWITCHES



Front mount with black handle (U)

| Type            |                  |                                       |                    | Motor reversing                                                                   |                                                                                   |                                                                                   | Star-delta                                                                        | Dahlander motor control                                                            |                                                                                     |                                                                                     | Separate windings                                                                   |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                | 11                                                                                | 26                                                                                | 12                                                                                | 13                                                                                 | 19                                                                                  | 20                                                                                  | 53                                                                                  |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| GF...           | □30              | 10                                    | 10                 | GF1025U                                                                           | GF1011U                                                                           | GF1026U                                                                           | GF1012U                                                                           | GF1013U                                                                            | GF1019U                                                                             | GF1020U                                                                             | GF1053U                                                                             |
|                 | □48              | 20                                    | 15                 | GF2025U                                                                           | GF2011U                                                                           | GF2026U                                                                           | GF2012U                                                                           | GF2013U                                                                            | GF2019U                                                                             | GF2020U                                                                             | GF2053U                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1225U                                                                          | 7GN1211U                                                                          | 7GN1226U                                                                          | 7GN1212U                                                                          | 7GN1213U                                                                           | 7GN1219U                                                                            | 7GN1220U                                                                            | 7GN1253U                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2025U                                                                          | 7GN2011U                                                                          | 7GN2026U                                                                          | 7GN2012U                                                                          | 7GN2013U                                                                           | 7GN2019U                                                                            | 7GN2020U                                                                            | 7GN2053U                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2525U                                                                          | 7GN2511U                                                                          | 7GN2526U                                                                          | 7GN2512U                                                                          | 7GN2513U                                                                           | 7GN2519U                                                                            | 7GN2520U                                                                            | 7GN2553U                                                                            |
|                 | □65              | 32                                    | 40                 | 7GN3225U                                                                          | 7GN3211U                                                                          | 7GN3226U                                                                          | 7GN3212U                                                                          | 7GN3213U                                                                           | 7GN3219U                                                                            | 7GN3220U                                                                            | 7GN3253U                                                                            |
|                 |                  | 40                                    | 50                 | 7GN4025U                                                                          | 7GN4011U                                                                          | 7GN4026U                                                                          | 7GN4012U                                                                          | 7GN4013U                                                                           | 7GN4019U                                                                            | 7GN4020U                                                                            | 7GN4053U                                                                            |
|                 |                  | 63                                    | 60                 | 7GN6325U                                                                          | 7GN6311U                                                                          | 7GN6326U                                                                          | 7GN6312U                                                                          | 7GN6313U                                                                           | 7GN6319U                                                                            | 7GN6320U                                                                            | 7GN6353U                                                                            |
|                 | □90              | 125                                   | 130                | 7GN12525U                                                                         | 7GN12511U                                                                         | 7GN12526U                                                                         | 7GN12512U                                                                         | 7GN12513U                                                                          | 7GN12519U                                                                           | 7GN12520U                                                                           | 7GN12553U                                                                           |
|                 |                  |                                       |                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| GX...           | □48              | 16                                    | 12                 | GX1625U                                                                           | GX1611U                                                                           | GX1626U                                                                           | GX1612U                                                                           | GX1613U                                                                            | GX1619U                                                                             | GX1620U                                                                             | GX1653U                                                                             |
|                 |                  | 20                                    | 15                 | GX2025U                                                                           | GX2011U                                                                           | GX2026U                                                                           | GX2012U                                                                           | GX2013U                                                                            | GX2019U                                                                             | GX2020U                                                                             | GX2053U                                                                             |
|                 | □65              | 32                                    | 32                 | GX3225U                                                                           | GX3211U                                                                           | GX3226U                                                                           | GX3212U                                                                           | GX3213U                                                                            | GX3219U                                                                             | GX3220U                                                                             | GX3253U                                                                             |
|                 |                  | 40                                    | 40                 | GX4025U                                                                           | GX4011U                                                                           | GX4026U                                                                           | GX4012U                                                                           | GX4013U                                                                            | GX4019U                                                                             | GX4020U                                                                             | GX4053U                                                                             |
| GN...           | □132             | 200                                   | 200                | GN20025U                                                                          | GN20011U                                                                          | GN20026U                                                                          | GN20012U                                                                          | GN20013U                                                                           | GN20019U                                                                            | GN20020U                                                                            | GN20053U                                                                            |
|                 |                  | 315                                   | 255                | GN31525U                                                                          | GN31511U                                                                          | GN31526U                                                                          | GN31512U                                                                          | GN31513U                                                                           | GN31519U                                                                            | GN31520U                                                                            | GN31553U                                                                            |



Front mounting with red/yellow handle padlockable in 0 and protection covers (U25)®

| Type            |                  |                                       |                    | Motor reversing                                                                     |                                                                                     |                                                                                     | Star-delta                                                                          | Dahlander motor control                                                              |                                                                                       |                                                                                       | Separate windings                                                                     |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                  | 11                                                                                  | 26                                                                                  | 12                                                                                  | 13                                                                                   | 19                                                                                    | 20                                                                                    | 53                                                                                    |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| GF...           | □48              | 20                                    | 15                 | GF2025U25                                                                           | GF2011U25                                                                           | GF2026U25                                                                           | GF2012U25                                                                           | GF2013U25                                                                            | GF2019U25                                                                             | GF2020U25                                                                             | GF2053U25                                                                             |
| GX...           | □48              | 16                                    | 12                 | GX1625U25                                                                           | GX1611U25                                                                           | GX1626U25                                                                           | GX1612U25                                                                           | GX1613U25                                                                            | GX1619U25                                                                             | GX1620U25                                                                             | GX1653U25                                                                             |
|                 |                  | 20                                    | 15                 | GX2025U25                                                                           | GX2011U25                                                                           | GX2026U25                                                                           | GX2012U25                                                                           | GX2013U25                                                                            | GX2019U25                                                                             | GX2020U25                                                                             | GX2053U25                                                                             |
|                 | □65              | 32                                    | 32                 | GX3225U25                                                                           | GX3211U25                                                                           | GX3226U25                                                                           | GX3212U25                                                                           | GX3213U25                                                                            | GX3219U25                                                                             | GX3220U25                                                                             | GX3253U25                                                                             |
|                 |                  | 40                                    | 40                 | GX4025U25                                                                           | GX4011U25                                                                           | GX4026U25                                                                           | GX4012U25                                                                           | GX4013U25                                                                            | GX4019U25                                                                             | GX4020U25                                                                             | GX4053U25                                                                             |

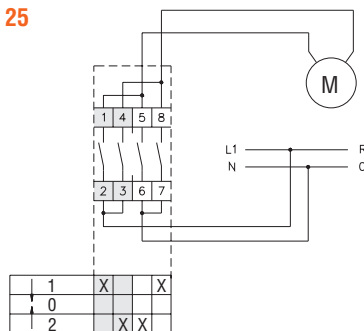
① Front plate for GF20..., 7GN..., GX...

② Front plate for GF10..., GN...

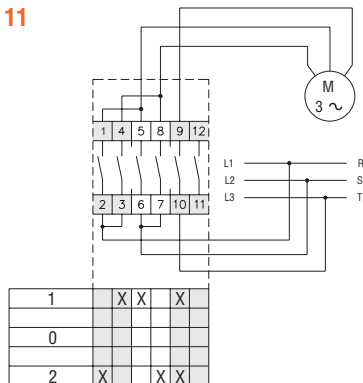
③ For version not padlockable and without protection covers replace U25 with U24 (e.g. GF1025U24).

### WIRING DIAGRAMS

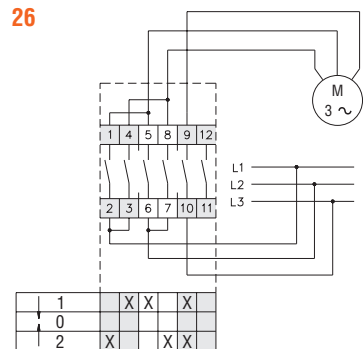
25



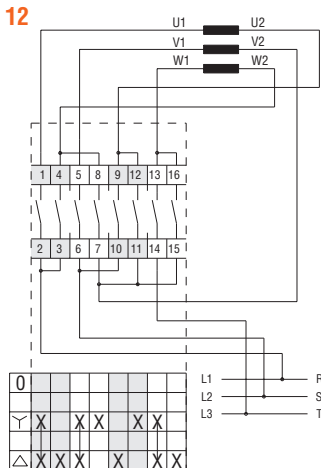
11



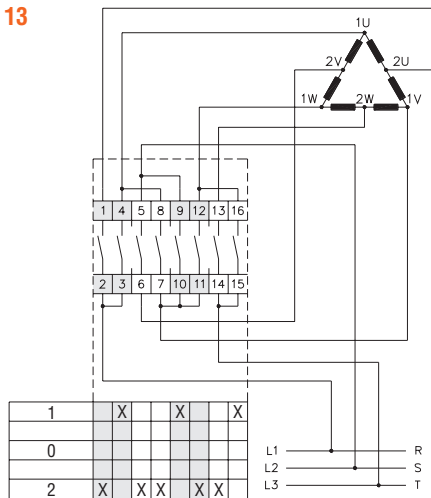
26



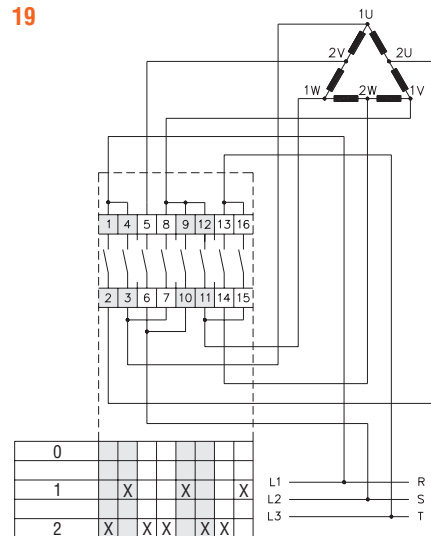
12



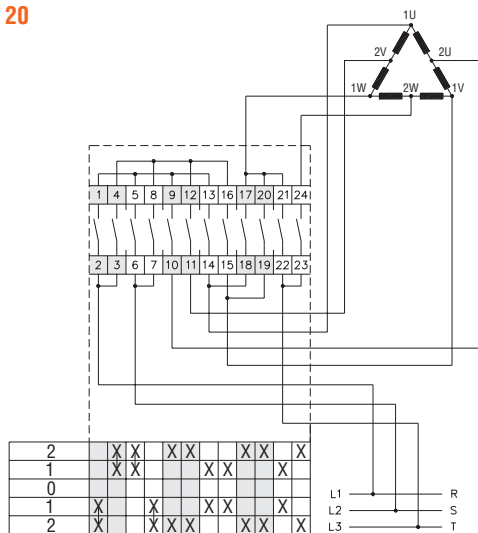
13



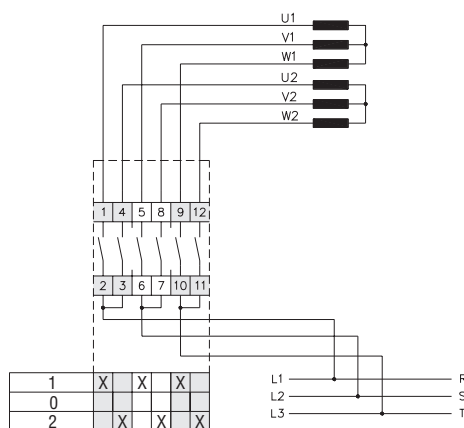
19



20



53



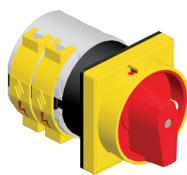
### Technical characteristics

| Series    | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|           |                           |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|           | [A]                       | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GF10...   | 10                        | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                        | 3                            |
| GF20...   | 20                        | 15                 | —                         | 1         | 3         | —         | —         | 2                           | 7.5                          |
| 7GN12...  | 16                        | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                         | 5.5                          |
| 7GN20...  | 20                        | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                         | 7.5                          |
| 7GN25...  | 25                        | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                         | 11                           |
| 7GN32...  | 32                        | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                           | 15                           |
| 7GN40...  | 40                        | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                           | 18.5                         |
| 7GN63...  | 63                        | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                         | 30                           |
| 7GN125... | 125                       | 130                | 5                         | 15        | 25        | 50        | 40        | 11                          | 45                           |

| Series  | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|---------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|         |                           |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|         | [A]                       | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| GX16... | 16                        | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| GX20... | 20                        | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| GX32... | 32                        | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| GX40... | 40                        | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| GN200   | 200                       | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| GN315   | 315                       | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

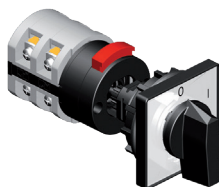
## MOTOR REVERSING, STAR-DELTA, DAHLANDER MOTOR CONTROL, SEPARATE WINDINGS SWITCHES

Front mounting with red/yellow handle  
padlockable in 0 and protection covers  
(U65)



| Type            |                  |                                       |                    | Motor reversing                                                                   |                                                                                   |                                                                                   | Star-delta                                                                        | Dahlander motor control                                                            |                                                                                     |                                                                                     | Separate windings                                                                   |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                | 11                                                                                | 26                                                                                | 12                                                                                | 13                                                                                 | 19                                                                                  | 20                                                                                  | 53                                                                                  |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1225U65                                                                        | 7GN1211U65                                                                        | 7GN1226U65                                                                        | 7GN1212U65                                                                        | 7GN1213U65                                                                         | 7GN1219U65                                                                          | 7GN1220U65                                                                          | 7GN1253U65                                                                          |
|                 |                  | 20                                    | 20                 | 7GN2025U65                                                                        | 7GN2011U65                                                                        | 7GN2026U65                                                                        | 7GN2012U65                                                                        | 7GN2013U65                                                                         | 7GN2019U65                                                                          | 7GN2020U65                                                                          | 7GN2053U65                                                                          |
|                 |                  | 25                                    | 30                 | 7GN2525U65                                                                        | 7GN2511U65                                                                        | 7GN2526U65                                                                        | 7GN2512U65                                                                        | 7GN2513U65                                                                         | 7GN2519U65                                                                          | 7GN2520U65                                                                          | 7GN2553U65                                                                          |
|                 |                  | 32                                    | 40                 | 7GN3225U65                                                                        | 7GN3211U65                                                                        | 7GN3226U65                                                                        | 7GN3212U65                                                                        | 7GN3213U65                                                                         | 7GN3219U65                                                                          | 7GN3220U65                                                                          | 7GN3253U65                                                                          |
|                 |                  | 40                                    | 50                 | 7GN4025U65                                                                        | 7GN4011U65                                                                        | 7GN4026U65                                                                        | 7GN4012U65                                                                        | 7GN4013U65                                                                         | 7GN4019U65                                                                          | 7GN4020U65                                                                          | 7GN4053U65                                                                          |
|                 |                  | 63                                    | 60                 | 7GN6325U65                                                                        | 7GN6311U65                                                                        | 7GN6326U65                                                                        | 7GN6312U65                                                                        | 7GN6313U65                                                                         | 7GN6319U65                                                                          | 7GN6320U65                                                                          | 7GN6353U65                                                                          |
|                 | □90              | 125                                   | 130                | 7GN12525U65                                                                       | 7GN12511U65                                                                       | 7GN12526U65                                                                       | 7GN12512U65                                                                       | 7GN12513U65                                                                        | 7GN12519U65                                                                         | 7GN12520U65                                                                         | 7GN12553U65                                                                         |

Snap on front mounting with black handle  
for hole Ø22mm fixing (U47)❶



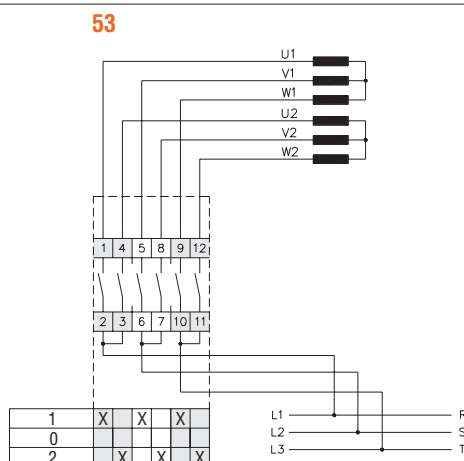
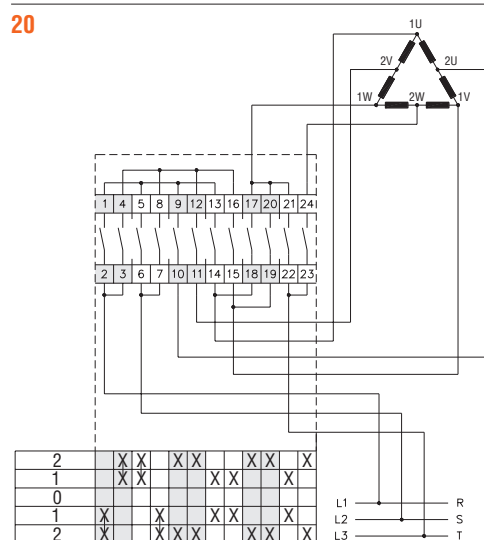
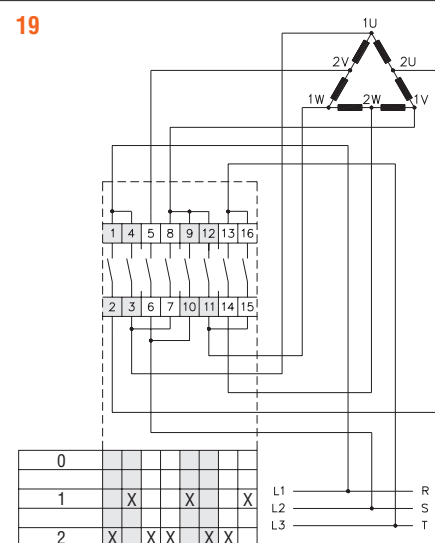
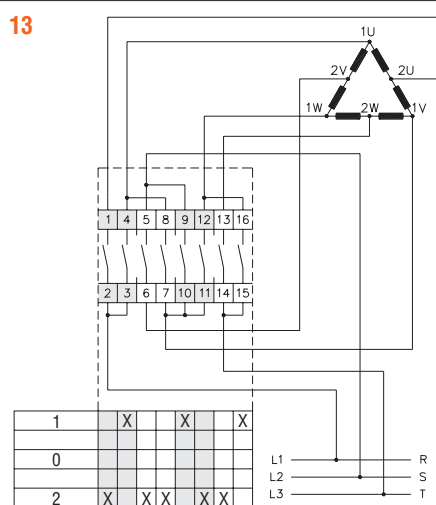
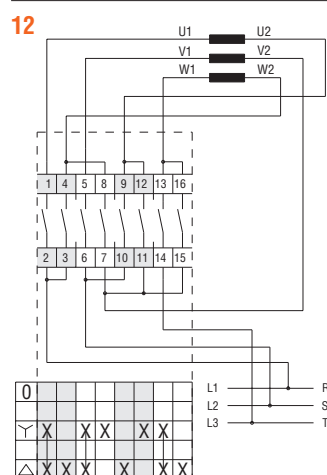
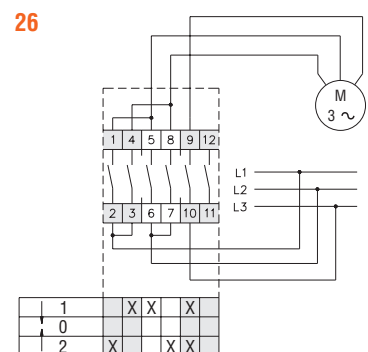
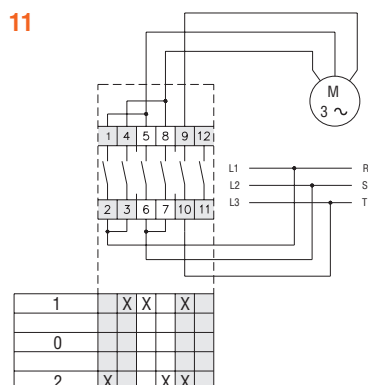
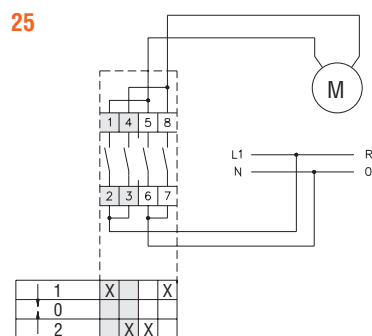
| Type            |                  |                                       |                    | Motor reversing                                                                     |                                                                                     |                                                                                     | Star-delta                                                                          | Dahlander motor control                                                              |                                                                                       |                                                                                       | Separate windings                                                                     |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                  | 11                                                                                  | 26                                                                                  | 12                                                                                  | 13                                                                                   | 19                                                                                    | 20                                                                                    | 53                                                                                    |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| GF...           | □30              | 10                                    | 10                 | GF1025U47                                                                           | GF1011U47                                                                           | GF1026U47                                                                           | GF1012U47                                                                           | GF1013U47                                                                            | GF1019U47                                                                             | GF1020U47                                                                             | GF1053U47                                                                             |
|                 | □48              | 20                                    | 15                 | GF2025U47                                                                           | GF2011U47                                                                           | GF2026U47                                                                           | GF2012U47                                                                           | GF2013U47                                                                            | GF2019U47                                                                             | GF2020U47                                                                             | GF2053U47                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN1225U47                                                                          | 7GN1211U47                                                                          | 7GN1226U47                                                                          | 7GN1212U47                                                                          | 7GN1213U47                                                                           | 7GN1219U47                                                                            | 7GN1220U47                                                                            | 7GN1253U47                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2025U47                                                                          | 7GN2011U47                                                                          | 7GN2026U47                                                                          | 7GN2012U47                                                                          | 7GN2013U47                                                                           | 7GN2019U47                                                                            | 7GN2020U47                                                                            | 7GN2053U47                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2525U47                                                                          | 7GN2511U47                                                                          | 7GN2526U47                                                                          | 7GN2512U47                                                                          | 7GN2513U47                                                                           | 7GN2519U47                                                                            | 7GN2520U47                                                                            | 7GN2553U47                                                                            |
| GX...           | □48              | 16                                    | 12                 | GX1625U47                                                                           | GX1611U47                                                                           | GX1626U47                                                                           | GX1612U47                                                                           | GX1613U47                                                                            | GX1619U47                                                                             | GX1620U47                                                                             | GX1653U47                                                                             |
|                 |                  | 20                                    | 15                 | GX2025U47                                                                           | GX2011U47                                                                           | GX2026U47                                                                           | GX2012U47                                                                           | GX2013U47                                                                            | GX2019U47                                                                             | GX2020U47                                                                             | GX2053U47                                                                             |

❶ For key operation version replace U47 with U29D (e.g. GF2025U29D).

❷ Front plate for GF20..., 7GN..., GX...

❸ Front plate for GF10..., GN...

## WIRING DIAGRAMS



## Technical characteristics

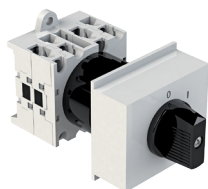
| Series    | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase<br>[kW] at 230V | Max. IEC AC23 power 3 phases<br>[kW] at 400V |
|-----------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|---------------------------------------------|----------------------------------------------|
|           |                           |                    | 1 phase                   |           | 3 phases  |           |           |                                             |                                              |
|           |                           |                    | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] |                                             |                                              |
|           | [A]                       | [A]                |                           |           |           |           |           |                                             |                                              |
| GF10...   | 10                        | 10                 | —                         | 0.75      | 2         | —         | —         | 0.75                                        | 3                                            |
| GF20...   | 20                        | 15                 | —                         | 1         | 3         | —         | —         | 2                                           | 7.5                                          |
| 7GN12...  | 16                        | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                                         | 5.5                                          |
| 7GN20...  | 20                        | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                                         | 7.5                                          |
| 7GN25...  | 25                        | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                                         | 11                                           |
| 7GN32...  | 32                        | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                                           | 15                                           |
| 7GN40...  | 40                        | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                                           | 18.5                                         |
| 7GN63...  | 63                        | 60                 | 3                         | 10        | 15        | 25        | 25        | 7.5                                         | 30                                           |
| 7GN125... | 125                       | 130                | 5                         | 15        | 25        | 50        | 40        | 11                                          | 45                                           |

| Series         | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|                |                           |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|                | [A]                       | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| <b>GX16...</b> | 16                        | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| <b>GX20...</b> | 20                        | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |

## MOTOR REVERSING, STAR-DELTA, DAHLANDER MOTOR CONTROL, SEPARATE WINDINGS SWITCHES

Rear mounting with black handle  
(0)

| Type            |                  |                                       |                    | Motor reversing                                                                   |                                                                                   |                                                                                   | Star-delta                                                                        | Dahlander motor control                                                            |                                                                                     |                                                                                     | Separate windings                                                                   |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                | 11                                                                                | 26                                                                                | 12                                                                                | 13                                                                                 | 19                                                                                  | 20                                                                                  | 53                                                                                  |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| GF...           | □48              | 20                                    | 15                 | GF20250                                                                           | GF20110                                                                           | GF20260                                                                           | GF20120                                                                           | GF20130                                                                            | GF20190                                                                             | GF20200                                                                             | GF20530                                                                             |
| 7GN...          | □48              | 16                                    | 15                 | 7GN12250                                                                          | 7GN12110                                                                          | 7GN12260                                                                          | 7GN12120                                                                          | 7GN12130                                                                           | 7GN12190                                                                            | 7GN12200                                                                            | 7GN12530                                                                            |
|                 |                  | 20                                    | 20                 | 7GN20250                                                                          | 7GN20110                                                                          | 7GN20260                                                                          | 7GN20120                                                                          | 7GN20130                                                                           | 7GN20190                                                                            | 7GN20200                                                                            | 7GN20530                                                                            |
|                 |                  | 25                                    | 30                 | 7GN25250                                                                          | 7GN25110                                                                          | 7GN25260                                                                          | 7GN25120                                                                          | 7GN25130                                                                           | 7GN25190                                                                            | 7GN25200                                                                            | 7GN25530                                                                            |
|                 | □65              | 32                                    | 40                 | 7GN32250                                                                          | 7GN32110                                                                          | 7GN32260                                                                          | 7GN32120                                                                          | 7GN32130                                                                           | 7GN32190                                                                            | 7GN32200                                                                            | 7GN32530                                                                            |
|                 |                  | 40                                    | 50                 | 7GN40250                                                                          | 7GN40110                                                                          | 7GN40260                                                                          | 7GN40120                                                                          | 7GN40130                                                                           | 7GN40190                                                                            | 7GN40200                                                                            | 7GN40530                                                                            |
|                 | □90              | 125                                   | 130                | 7GN125250                                                                         | 7GN125110                                                                         | 7GN125260                                                                         | 7GN125120                                                                         | 7GN125130                                                                          | 7GN125190                                                                           | 7GN125200                                                                           | 7GN125530                                                                           |
| GX...           | □48              | 16                                    | 12                 | GX16250                                                                           | GX16110                                                                           | GX16260                                                                           | GX16120                                                                           | GX16130                                                                            | GX16190                                                                             | GX16200                                                                             | GX16530                                                                             |
|                 |                  | 20                                    | 15                 | GX20250                                                                           | GX20110                                                                           | GX20260                                                                           | GX20120                                                                           | GX20130                                                                            | GX20190                                                                             | GX20200                                                                             | GX20530                                                                             |
|                 | □65              | 32                                    | 32                 | GX32250                                                                           | GX32110                                                                           | GX32260                                                                           | GX32120                                                                           | GX32130                                                                            | GX32190                                                                             | GX32200                                                                             | GX32530                                                                             |
|                 |                  | 40                                    | 40                 | GX40250                                                                           | GX40110                                                                           | GX40260                                                                           | GX40120                                                                           | GX40130                                                                            | GX40190                                                                             | GX40200                                                                             | GX40530                                                                             |
| GN...           | □132             | 200                                   | 200                | GN200250                                                                          | GN200110                                                                          | GN200260                                                                          | GN200120                                                                          | GN200130                                                                           | GN200190                                                                            | GN200200                                                                            | GN200530                                                                            |
|                 |                  | 315                                   | 255                | GN315250                                                                          | GN315110                                                                          | GN315260                                                                          | GN315120                                                                          | GN315130                                                                           | GN315190                                                                            | GN315200                                                                            | GN315530                                                                            |



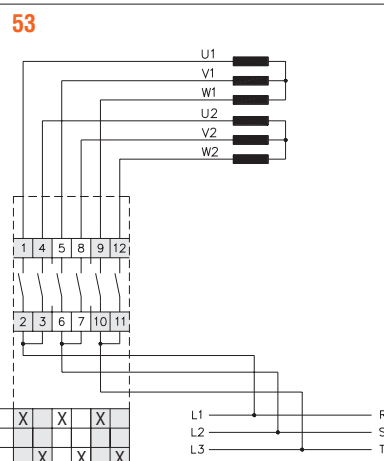
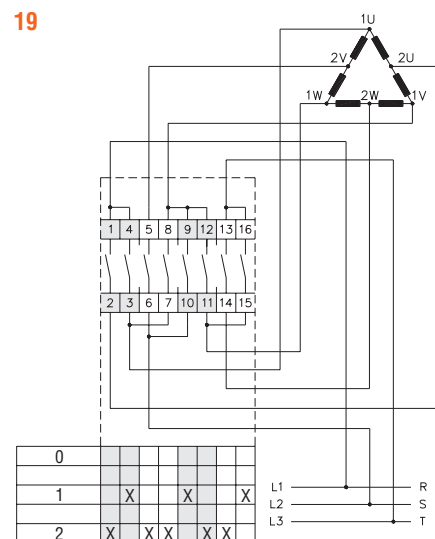
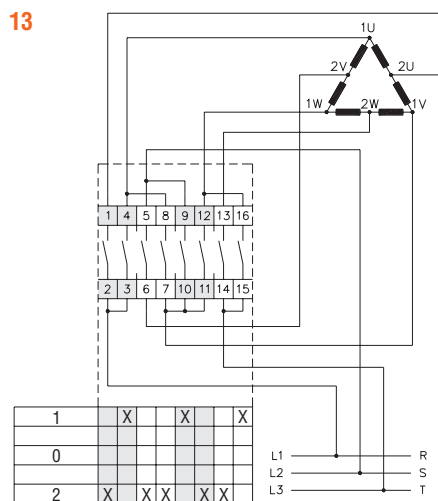
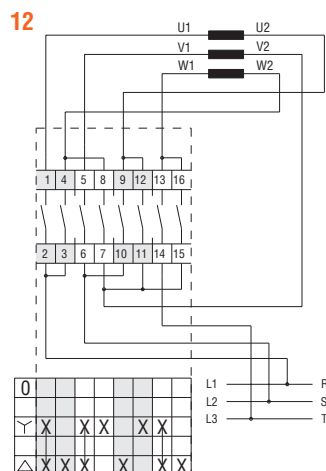
Modular service cover for 35mm DIN rail mounting with black handle (048)Ⓢ

| Type            |                  |                                       |                    | Motor reversing                                                                     |                                                                                     |                                                                                     | Star-delta                                                                          | Dahlander motor control                                                              |                                                                                       |                                                                                       | Separate windings                                                                     |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                  | 11                                                                                  | 26                                                                                  | 12                                                                                  | 13                                                                                   | 19                                                                                    | 20                                                                                    | 53                                                                                    |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]             | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
| GF...           | 45x54            | 20                                    | 15                 | GF2025048                                                                           | GF2011048                                                                           | GF2026048                                                                           | GF2012048                                                                           | GF2013048                                                                            | GF2019048                                                                             | GF2020048                                                                             | GF2053048                                                                             |
| 7GN...          | 45x54            | 16                                    | 15                 | 7GN1225048                                                                          | 7GN1211048                                                                          | 7GN1226048                                                                          | 7GN1212048                                                                          | 7GN1213048                                                                           | 7GN1219048                                                                            | 7GN1220048                                                                            | 7GN1253048                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2025048                                                                          | 7GN2011048                                                                          | 7GN2026048                                                                          | 7GN2012048                                                                          | 7GN2013048                                                                           | 7GN2019048                                                                            | 7GN2020048                                                                            | 7GN2053048                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2525048                                                                          | 7GN2511048                                                                          | 7GN2526048                                                                          | 7GN2512048                                                                          | 7GN2513048                                                                           | 7GN2519048                                                                            | 7GN2520048                                                                            | 7GN2553048                                                                            |
| GX...           | 45x54            | 16                                    | 12                 | GX1625048                                                                           | GX1611048                                                                           | GX1626048                                                                           | GX1612048                                                                           | GX1613048                                                                            | GX1619048                                                                             | GX1620048                                                                             | GX1653048                                                                             |
|                 |                  | 20                                    | 15                 | GX2025048                                                                           | GX2011048                                                                           | GX2026048                                                                           | GX2012048                                                                           | GX2013048                                                                            | GX2019048                                                                             | GX2020048                                                                             | GX2053048                                                                             |

① Front plate for GF20..., 7GN..., GX...

② Front plate for GF10..., GN...

Ⓢ For key operation version replace 048 with 049 (e.g. GF2025049).

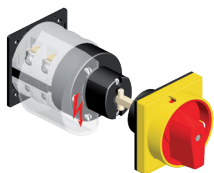


| Series           | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase<br>[kW] at 230V | Max. IEC AC23 power 3 phases<br>[kW] at 400V |
|------------------|---------------------------|--------------------|---------------------------|------|----------|------|------|---------------------------------------------|----------------------------------------------|
|                  |                           |                    | 1 phase                   |      | 3 phases |      |      |                                             |                                              |
|                  |                           |                    | 120V                      | 240V | 240V     | 480V | 600V |                                             |                                              |
|                  | [HP]                      | [HP]               | [HP]                      | [HP] | [HP]     |      |      |                                             |                                              |
| <b>GF20...</b>   | 20                        | 15                 | —                         | 1    | 3        | —    | —    | 2                                           | 7.5                                          |
| <b>7GN12...</b>  | 16                        | 15                 | 0.5                       | 1    | 3        | —    | —    | 1.7                                         | 5.5                                          |
| <b>7GN20...</b>  | 20                        | 20                 | 0.75                      | 2    | 3        | 7.5  | 10   | 2.5                                         | 7.5                                          |
| <b>7GN25...</b>  | 25                        | 30                 | 1.5                       | 3    | 5        | 10   | 15   | 3.7                                         | 11                                           |
| <b>7GN32...</b>  | 32                        | 40                 | 2                         | 5    | 10       | 15   | 15   | 4                                           | 15                                           |
| <b>7GN40...</b>  | 40                        | 50                 | 2                         | 5    | 10       | 20   | 20   | 6                                           | 18.5                                         |
| <b>7GN63...</b>  | 63                        | 60                 | 3                         | 10   | 15       | 25   | 25   | 7.5                                         | 30                                           |
| <b>7GN125...</b> | 125                       | 130                | 5                         | 15   | 25       | 50   | 40   | 11                                          | 45                                           |

| Series         | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|-----------------------------|------------------------------|
|                |                           |                    | 1 phase                   |           | 3 phases  |           |           |                             |                              |
|                | [A]                       | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] | [kW] at 230V                | [kW] at 400V                 |
| <b>GX16...</b> | 16                        | 12                 | 0.75                      | 1         | 3         | 5         | 5         | 1.8                         | 6.5                          |
| <b>GX20...</b> | 20                        | 15                 | 0.75                      | 1.5       | 3         | 5         | 5         | 2.2                         | 7.5                          |
| <b>GX32...</b> | 32                        | 32                 | 1.5                       | 3         | 7.5       | 15        | 15        | 3.5                         | 15                           |
| <b>GX40...</b> | 40                        | 40                 | 2                         | 5         | 10        | 15        | 15        | 5.2                         | 18.5                         |
| <b>GN200</b>   | 200                       | 200                | 15                        | 30        | 50        | 100       | 75        | —                           | 47                           |
| <b>GN315</b>   | 315                       | 255                | 15                        | 30        | 50        | 100       | 75        | 37                          | 110                          |

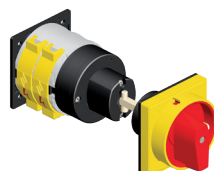
## MOTOR REVERSING, STAR-DELTA, DAHLANDER MOTOR CONTROL, SEPARATE WINDINGS SWITCHES

Rear mounting with red/yellow handle  
padlockable in 0, door coupling and  
protection covers **(088)**



| Type            |                  |                                       |                    | Motor reversing                                                                   |                                                                                   |                                                                                   | Star-delta                                                                        | Dahlander motor control                                                            |                                                                                     |                                                                                     | Separate windings                                                                   |
|-----------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                | 11                                                                                | 26                                                                                | 12                                                                                | 13                                                                                 | 19                                                                                  | 20                                                                                  | 53                                                                                  |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
| GF...           | □48              | 20                                    | 15                 | GF2025088                                                                         | GF2011088                                                                         | GF2026088                                                                         | GF2012088                                                                         | GF2013088                                                                          | GF2019088                                                                           | GF2020088                                                                           | GF2053088                                                                           |
| GX...           | □48              | 16                                    | 12                 | GX1625088                                                                         | GX1611088                                                                         | GX1626088                                                                         | GX1612088                                                                         | GX1613088                                                                          | GX1619088                                                                           | GX1620088                                                                           | GX1653088                                                                           |
|                 |                  | 20                                    | 15                 | GX2025088                                                                         | GX2011088                                                                         | GX2026088                                                                         | GX2012088                                                                         | GX2013088                                                                          | GX2019088                                                                           | GX2020088                                                                           | GX2053088                                                                           |
|                 | □65              | 32                                    | 32                 | GX3225088                                                                         | GX3211088                                                                         | GX3226088                                                                         | GX3212088                                                                         | GX3213088                                                                          | GX3219088                                                                           | GX3220088                                                                           | GX3253088                                                                           |
|                 |                  | 40                                    | 40                 | GX4025088                                                                         | GX4011088                                                                         | GX4026088                                                                         | GX4012088                                                                         | GX4013088                                                                          | GX4019088                                                                           | GX4020088                                                                           | GX4053088                                                                           |

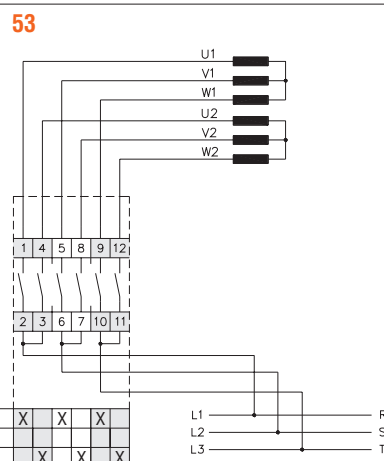
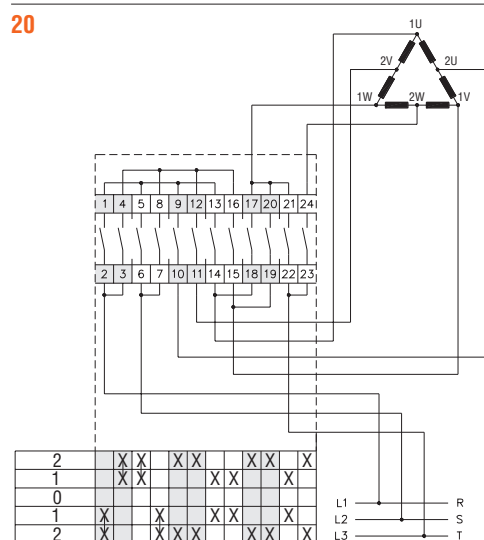
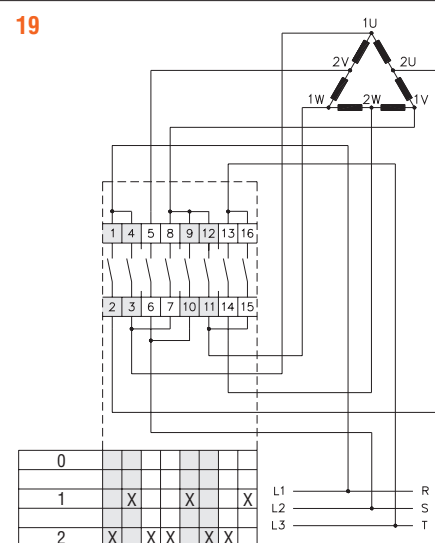
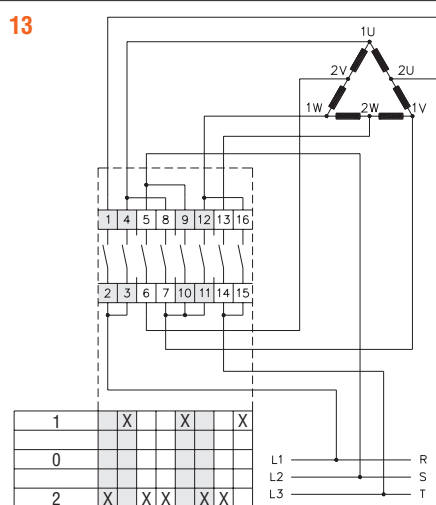
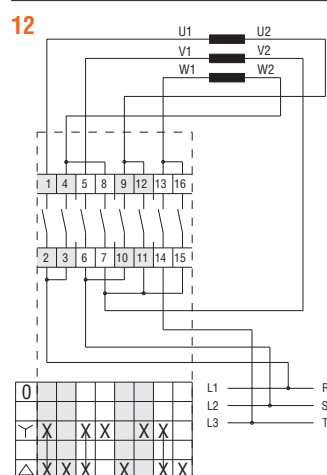
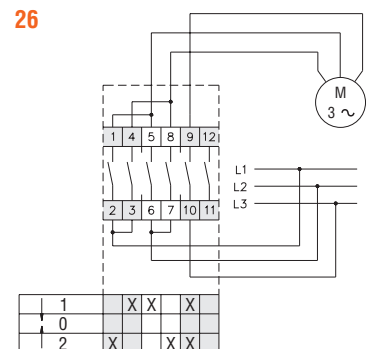
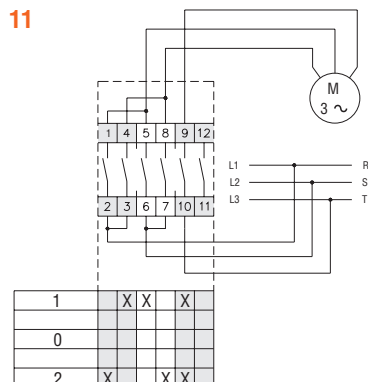
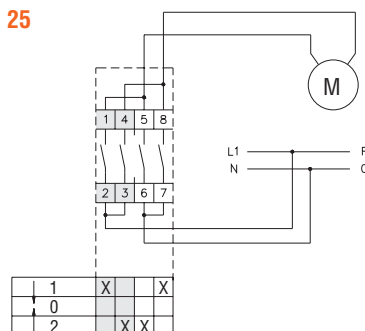
Rear mounting with red/yellow handle  
padlockable in 0, door coupling and  
protection covers **(098)**



| Type            |                  |                                       |                    | Motor reversing                                                                     |                                                                                     |                                                                                     | Star-delta                                                                          | Dahlander motor control                                                              |                                                                                       |                                                                                       | Separate windings                                                                     |
|-----------------|------------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                  |                                       |                    | 25                                                                                  | 11                                                                                  | 26                                                                                  | 12                                                                                  | 13                                                                                   | 19                                                                                    | 20                                                                                    | 53                                                                                    |
| Series          | Front plate size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
| 7GN...          | □65              | 16                                    | 15                 | 7GN1225098                                                                          | 7GN1211098                                                                          | 7GN1226098                                                                          | 7GN1212098                                                                          | 7GN1213098                                                                           | 7GN1219098                                                                            | 7GN1220098                                                                            | 7GN1253098                                                                            |
|                 |                  | 20                                    | 20                 | 7GN2025098                                                                          | 7GN2011098                                                                          | 7GN2026098                                                                          | 7GN2012098                                                                          | 7GN2013098                                                                           | 7GN2019098                                                                            | 7GN2020098                                                                            | 7GN2053098                                                                            |
|                 |                  | 25                                    | 30                 | 7GN2525098                                                                          | 7GN2511098                                                                          | 7GN2526098                                                                          | 7GN2512098                                                                          | 7GN2513098                                                                           | 7GN2519098                                                                            | 7GN2520098                                                                            | 7GN2553098                                                                            |
|                 |                  | 32                                    | 40                 | 7GN3225098                                                                          | 7GN3211098                                                                          | 7GN3226098                                                                          | 7GN3212098                                                                          | 7GN3213098                                                                           | 7GN3219098                                                                            | 7GN3220098                                                                            | 7GN3253098                                                                            |
|                 |                  | 40                                    | 50                 | 7GN4025098                                                                          | 7GN4011098                                                                          | 7GN4026098                                                                          | 7GN4012098                                                                          | 7GN4013098                                                                           | 7GN4019098                                                                            | 7GN4020098                                                                            | 7GN4053098                                                                            |



## 25



| Series          | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |           |           |           |           | Max. IEC AC23 power 1 phase<br>[kW] at 230V | Max. IEC AC23 power 3 phases<br>[kW] at 400V |
|-----------------|---------------------------|--------------------|---------------------------|-----------|-----------|-----------|-----------|---------------------------------------------|----------------------------------------------|
|                 |                           |                    | 1 phase                   |           | 3 phases  |           |           |                                             |                                              |
|                 | [A]                       | [A]                | 120V [HP]                 | 240V [HP] | 240V [HP] | 480V [HP] | 600V [HP] |                                             |                                              |
| <b>GF20...</b>  | 20                        | 15                 | —                         | 1         | 3         | —         | —         | 2                                           | 7.5                                          |
| <b>7GN12...</b> | 16                        | 15                 | 0.5                       | 1         | 3         | —         | —         | 1.7                                         | 5.5                                          |
| <b>7GN20...</b> | 20                        | 20                 | 0.75                      | 2         | 3         | 7.5       | 10        | 2.5                                         | 7.5                                          |
| <b>7GN25...</b> | 25                        | 30                 | 1.5                       | 3         | 5         | 10        | 15        | 3.7                                         | 11                                           |
| <b>7GN32...</b> | 32                        | 40                 | 2                         | 5         | 10        | 15        | 15        | 4                                           | 15                                           |
| <b>7GN40...</b> | 40                        | 50                 | 2                         | 5         | 10        | 20        | 20        | 6                                           | 18.5                                         |

| Series         | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |              |              |              |              | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------------|---------------------------|--------------------|---------------------------|--------------|--------------|--------------|--------------|-----------------------------|------------------------------|
|                |                           |                    | 1 phase                   |              | 3 phases     |              |              |                             |                              |
|                | [A]                       | [A]                | 120V<br>[HP]              | 240V<br>[HP] | 240V<br>[HP] | 480V<br>[HP] | 600V<br>[HP] | [kW] at 230V                | [kW] at 400V                 |
| <b>GX16...</b> | 16                        | 12                 | 0.75                      | 1            | 3            | 5            | 5            | 1.8                         | 6.5                          |
| <b>GX20...</b> | 20                        | 15                 | 0.75                      | 1.5          | 3            | 5            | 5            | 2.2                         | 7.5                          |
| <b>GX32...</b> | 32                        | 32                 | 1.5                       | 3            | 7.5          | 15           | 15           | 3.5                         | 15                           |
| <b>GX40...</b> | 40                        | 40                 | 2                         | 5            | 10           | 15           | 15           | 5.2                         | 18.5                         |

## MOTOR REVERSING, STAR-DELTA, DAHLANDER MOTOR CONTROL, SEPARATE WINDINGS SWITCHES

Cam switch in plastic enclosure with black handle (P)  
Cam switch in metallic enclosure with black handle (L)



| Type            |                |                                       |                    | Motor reversing                                                                   |                                                                                   |                                                                                   | Star-delta                                                                        | Dahlander motor control                                                             |                                                                                     |                                                                                     | Separate windings                                                                   |
|-----------------|----------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                |                                       |                    | 25                                                                                | 11                                                                                | 26                                                                                | 12                                                                                | 13                                                                                  | 19                                                                                  | 20                                                                                  | 53                                                                                  |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |  |
|                 | [mm]           | [A]                                   | [A]                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 7GN...          | 75x75          | 16                                    | 15                 | 7GN1225P                                                                          | 7GN1211P                                                                          | 7GN1226P                                                                          | 7GN1212P                                                                          | 7GN1213P                                                                            | 7GN1219P                                                                            | —                                                                                   | 7GN1253P                                                                            |
|                 |                | 20                                    | 20                 | 7GN2025P                                                                          | 7GN2011P                                                                          | 7GN2026P                                                                          | 7GN2012P                                                                          | 7GN2013P                                                                            | 7GN2019P                                                                            | —                                                                                   | 7GN2053P                                                                            |
|                 |                | 25                                    | 30                 | 7GN2525P                                                                          | 7GN2511P                                                                          | 7GN2526P                                                                          | 7GN2512P①                                                                         | 7GN2513P①                                                                           | 7GN2519P①                                                                           | —                                                                                   | 7GN2553P                                                                            |
|                 | 90x90          | 32                                    | 40                 | 7GN3225P                                                                          | 7GN3211P                                                                          | 7GN3226P                                                                          | 7GN3212P                                                                          | 7GN3213P                                                                            | 7GN3219P                                                                            | —                                                                                   | 7GN3253P                                                                            |
|                 | 110x110        | 40                                    | 50                 | 7GN4025P                                                                          | 7GN4011P                                                                          | 7GN4026P                                                                          | 7GN4012P                                                                          | 7GN4013P                                                                            | 7GN4019P                                                                            | —                                                                                   | 7GN4053P                                                                            |
|                 | 125x175        | 63                                    | 60                 | 7GN6325P                                                                          | 7GN6311P                                                                          | 7GN6326P                                                                          | 7GN6312P                                                                          | 7GN6313P                                                                            | 7GN6319P                                                                            | —                                                                                   | 7GN6353P                                                                            |
| GX...           | 90x90          | 16                                    | 12                 | GX1625P                                                                           | GX1611P                                                                           | GX1626P                                                                           | GX1612P                                                                           | GX1613P                                                                             | GX1619P                                                                             | —                                                                                   | GX1653P                                                                             |
|                 |                | 20                                    | 15                 | GX2025P                                                                           | GX2011P                                                                           | GX2026P                                                                           | GX2012P                                                                           | GX2013P                                                                             | GX2019P                                                                             | —                                                                                   | GX2053P                                                                             |
|                 | 110x110        | 32                                    | 32                 | GX3225P                                                                           | GX3211P                                                                           | GX3226P                                                                           | GX3212P                                                                           | GX3213P                                                                             | GX3219P                                                                             | —                                                                                   | GX3253P                                                                             |
|                 |                | 40                                    | 40                 | GX4025P                                                                           | GX4011P                                                                           | GX4026P                                                                           | GX4012P                                                                           | GX4013P                                                                             | GX4019P                                                                             | —                                                                                   | GX4053P                                                                             |
| GN...           | 250x316        | 200                                   | 200                | GN20025L                                                                          | GN20011L                                                                          | GN20026L                                                                          | GN20012L                                                                          | GN20013L                                                                            | GN20019L                                                                            | GN20020L                                                                            | GN20053L                                                                            |
|                 |                | 315                                   | 255                | GN31525L                                                                          | GN31511L                                                                          | GN31526L                                                                          | GN31512L                                                                          | GN31513L                                                                            | GN31519L                                                                            | GN31520L                                                                            | GN31553L                                                                            |

Cam switch in plastic enclosure with red/yellow handle padlockable in 0 (P25)

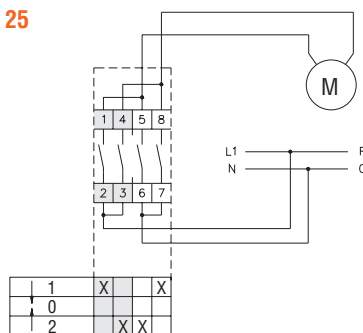


| Type            |                |                                       |                    | Motor reversing                                                                     |                                                                                     |                                                                                     | Star-delta                                                                          | Dahlander motor control                                                               |                                                                                       | Separate windings                                                                     |
|-----------------|----------------|---------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WIRING DIAGRAMS |                |                                       |                    | 25                                                                                  | 11                                                                                  | 26                                                                                  | 12                                                                                  | 13                                                                                    | 19                                                                                    | 53                                                                                    |
| Series          | Enclosure size | Rated thermal current I <sub>th</sub> | UL/CSA general use |  |  |  |  |  |  |  |
|                 | [mm]           | [A]                                   | [A]                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |
| 7GN...          | 90x90          | 16                                    | 15                 | 7GN1225P25                                                                          | 7GN1211P25                                                                          | 7GN1226P25                                                                          | 7GN1212P25                                                                          | 7GN1213P25                                                                            | 7GN1219P25                                                                            | 7GN1253P25                                                                            |
|                 |                | 20                                    | 20                 | 7GN2025P25                                                                          | 7GN2011P25                                                                          | 7GN2026P25                                                                          | 7GN2012P25                                                                          | 7GN2013P25                                                                            | 7GN2019P25                                                                            | 7GN2053P25                                                                            |
|                 |                | 25                                    | 30                 | 7GN2525P25                                                                          | 7GN2511P25                                                                          | 7GN2526P25                                                                          | 7GN2512P25③                                                                         | 7GN2513P25③                                                                           | 7GN2519P25③                                                                           | 7GN2553P25                                                                            |
|                 |                | 32                                    | 40                 | 7GN3225P25                                                                          | 7GN3211P25                                                                          | 7GN3226P25                                                                          | 7GN3212P25                                                                          | 7GN3213P25                                                                            | 7GN3219P25                                                                            | 7GN3253P25                                                                            |
|                 | 110x110        | 40                                    | 50                 | 7GN4025P25                                                                          | 7GN4011P25                                                                          | 7GN4026P25                                                                          | 7GN4012P25                                                                          | 7GN4013P25                                                                            | 7GN4019P25                                                                            | 7GN4053P25                                                                            |
|                 | 125x175        | 63                                    | 60                 | 7GN6325P25                                                                          | 7GN6311P25                                                                          | 7GN6326P25                                                                          | 7GN6312P25                                                                          | 7GN6313P25                                                                            | 7GN6319P25                                                                            | 7GN6353P25                                                                            |
| 198x248         | 125            | 130                                   | 7GN12525P25        | 7GN12511P25                                                                         | 7GN12526P25                                                                         | 7GN12512P25                                                                         | 7GN12513P25                                                                         | 7GN12519P25                                                                           | 7GN12553P25                                                                           |                                                                                       |
| GX...           | 90x90          | 16                                    | 12                 | GX1625P25                                                                           | GX1611P25                                                                           | GX1626P25                                                                           | GX1612P25                                                                           | GX1613P25                                                                             | GX1619P25                                                                             | GX1653P25                                                                             |
|                 |                | 20                                    | 15                 | GX2025P25                                                                           | GX2011P25                                                                           | GX2026P25                                                                           | GX2012P25                                                                           | GX2013P25                                                                             | GX2019P25                                                                             | GX2053P25                                                                             |
|                 | 110x110        | 32                                    | 32                 | GX3225P25                                                                           | GX3211P25                                                                           | GX3226P25                                                                           | GX3212P25                                                                           | GX3213P25                                                                             | GX3219P25                                                                             | GX3253P25                                                                             |
|                 |                | 40                                    | 40                 | GX4025P25                                                                           | GX4011P25                                                                           | GX4026P25                                                                           | GX4012P25                                                                           | GX4013P25                                                                             | GX4019P25                                                                             | GX4053P25                                                                             |

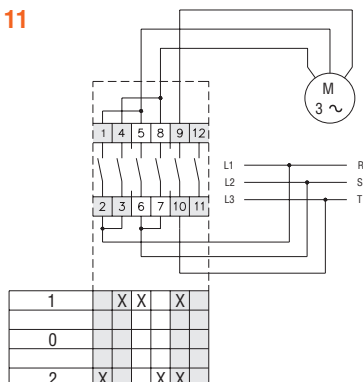
① Enclosure size 90x90mm.

## WIRING DIAGRAMS

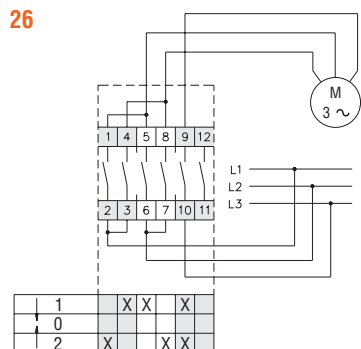
25



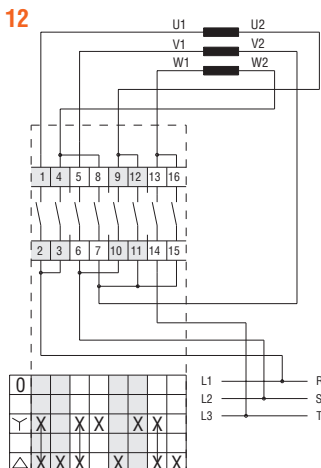
11



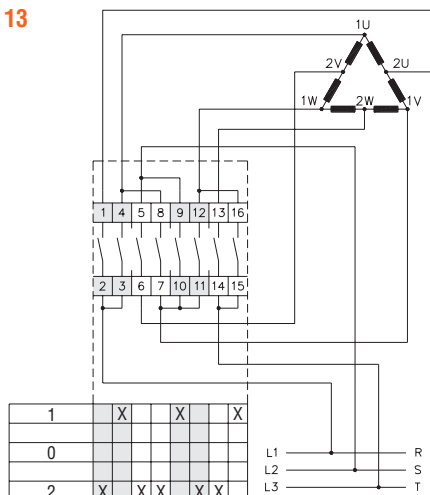
26



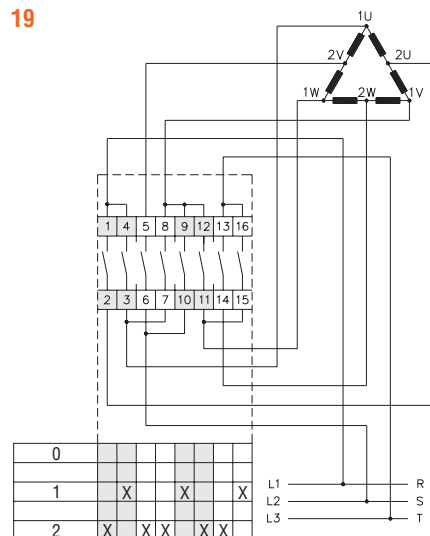
12



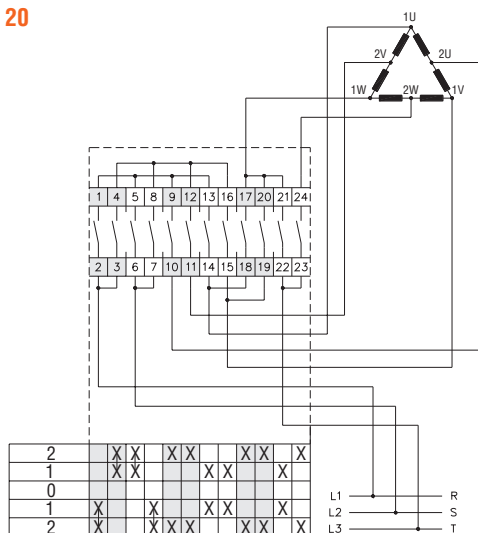
13



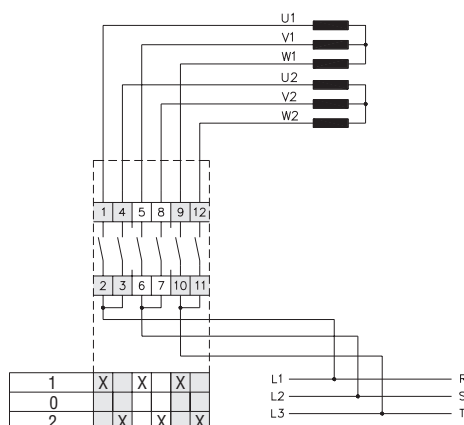
19



20



53



## Technical characteristics

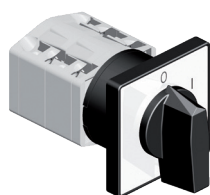
| Series    | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |              |              |              |              | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|-----------|---------------------------|--------------------|---------------------------|--------------|--------------|--------------|--------------|-----------------------------|------------------------------|
|           |                           |                    | 1 phase                   |              | 3 phases     |              |              |                             |                              |
|           | [A]                       | [A]                | 120V<br>[HP]              | 240V<br>[HP] | 240V<br>[HP] | 480V<br>[HP] | 600V<br>[HP] | [kW] at 230V                | [kW] at 400V                 |
| 7GN12...  | 16                        | 15                 | 0.5                       | 1            | 3            | —            | —            | 1.7                         | 5.5                          |
| 7GN20...  | 20                        | 20                 | 0.75                      | 2            | 3            | 7.5          | 10           | 2.5                         | 7.5                          |
| 7GN25...  | 25                        | 30                 | 1.5                       | 3            | 5            | 10           | 15           | 3.7                         | 11                           |
| 7GN32...  | 32                        | 40                 | 2                         | 5            | 10           | 15           | 15           | 4                           | 15                           |
| 7GN40...  | 40                        | 50                 | 2                         | 5            | 10           | 20           | 20           | 6                           | 18.5                         |
| 7GN63...  | 63                        | 60                 | 3                         | 10           | 15           | 25           | 25           | 7.5                         | 30                           |
| 7GN125... | 125                       | 130                | 5                         | 15           | 25           | 50           | 40           | 11                          | 45                           |

| Series         | Rated thermal current Ith | UL/CSA general use | UL/CSA horsepower ratings |      |          |      |      | Max. IEC AC23 power 1 phase | Max. IEC AC23 power 3 phases |
|----------------|---------------------------|--------------------|---------------------------|------|----------|------|------|-----------------------------|------------------------------|
|                |                           |                    | 1 phase                   |      | 3 phases |      |      |                             |                              |
|                | [A]                       | [A]                | 120V                      | 240V | 240V     | 480V | 600V | [kW] at 230V                | [kW] at 400V                 |
|                |                           |                    | [HP]                      | [HP] | [HP]     | [HP] | [HP] |                             |                              |
| <b>GX16...</b> | 16                        | 12                 | 0.75                      | 1    | 3        | 5    | 5    | 1.8                         | 6.5                          |
| <b>GX20...</b> | 20                        | 15                 | 0.75                      | 1.5  | 3        | 5    | 5    | 2.2                         | 7.5                          |
| <b>GX32...</b> | 32                        | 32                 | 1.5                       | 3    | 7.5      | 15   | 15   | 3.5                         | 15                           |
| <b>GX40...</b> | 40                        | 40                 | 2                         | 5    | 10       | 15   | 15   | 5.2                         | 18.5                         |
| <b>GN200</b>   | 200                       | 200                | 15                        | 30   | 50       | 100  | 75   | —                           | 47                           |
| <b>GN315</b>   | 315                       | 255                | 15                        | 30   | 50       | 100  | 75   | 37                          | 110                          |

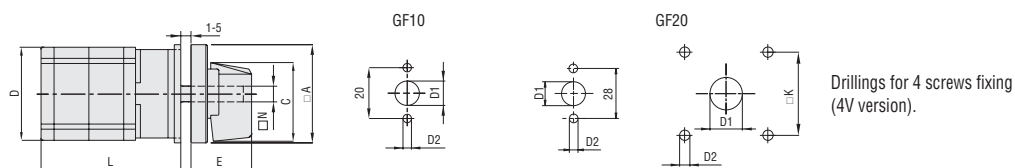
# 12 Rotary cam switches

Versions and dimensions [mm]

## Front mounting with black handle (U)



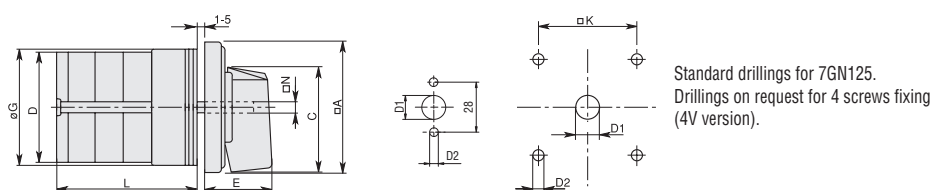
GF...



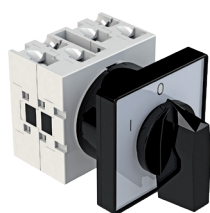
| Series | Dimensions |      |    |     |     |      |    |    | L Number of elements |      |    |      |    |       |     |       |     |       |     |       |
|--------|------------|------|----|-----|-----|------|----|----|----------------------|------|----|------|----|-------|-----|-------|-----|-------|-----|-------|
|        | □A         | C    | D  | ØD1 | ØD2 | E    | □K | N  | 1                    | 2    | 3  | 4    | 5  | 6     | 7   | 8     | 9   | 10    | 11  | 12    |
| GF10   | 30         | 24   | 29 | 9   | 3.2 | 18.5 | —  | Ø5 | 40                   | 52   | 64 | 76   | 88 | 100   | 112 | 124   | —   | —     | —   | —     |
| GF20   | 48         | 39.5 | 36 | 12  | 5   | 26.5 | 36 | □6 | 44                   | 57.5 | 71 | 84.5 | 98 | 111.5 | 125 | 138.5 | 152 | 165.5 | 179 | 192.5 |



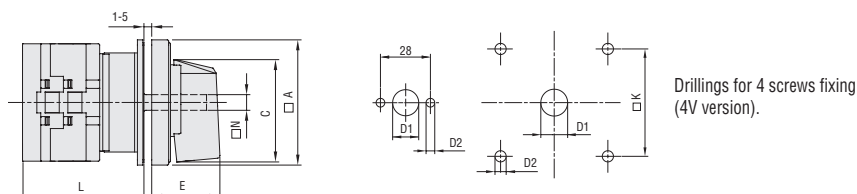
7GN...



| Series | Dimensions |      |    |     |     |      |      |    |    | L    Number of elements |      |       |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|-----|------|------|----|----|-------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | C    | ØD | ØD1 | ØD2 | E    | ØG   | □K | □N | 1                       | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| 7GN12  | 48         | 39.5 | 39 | 12  | 5   | 26.5 | 38   | 36 | 6  | 36.1                    | 45.8 | 55.5  | 65.2  | 74.9  | 84.6  | 94.3  | 104   | 113.7 | 123.4 | 133.1 | 142.8 |
| 7GN20  | 48         | 39.5 | 39 | 12  | 5   | 26.5 | 38   | 36 | 6  | 36.1                    | 45.8 | 55.5  | 65.2  | 74.9  | 84.6  | 94.3  | 104   | 113.7 | 123.4 | 133.1 | 142.8 |
| 7GN25  | 48         | 39.5 | 43 | 12  | 5   | 26.5 | 38   | 36 | 6  | 40.5                    | 54.1 | 67.7  | 81.3  | 94.9  | 108.5 | 122.1 | 135.7 | 147.3 | 162.9 | 176.5 | 190.1 |
| 7GN32  | 65         | 53   | 58 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 46.5                    | 61.6 | 76.7  | 91.8  | 106.9 | 122   | 137.1 | 152.2 | 167.3 | 182.4 | 197.5 | 212.6 |
| 7GN40  | 65         | 53   | 58 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 46.5                    | 61.6 | 76.7  | 91.8  | 106.9 | 122   | 137.1 | 152.2 | 167.3 | 182.4 | 197.5 | 212.6 |
| 7GN63  | 65         | 53   | 62 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 50.3                    | 68.4 | 86.5  | 104.6 | 122.7 | 140.8 | 158.9 | 177   | 195.1 | 213.2 | 231.3 | 249.4 |
| 7GN125 | 90         | 70.5 | 86 | 16  | 6   | 41.5 | 84   | 68 | 9  | 67.3                    | 96.4 | 125.5 | 154.6 | 183.7 | 220.3 | 249.4 | 278.5 | 307.6 | 336.7 | 365.8 | 394.9 |



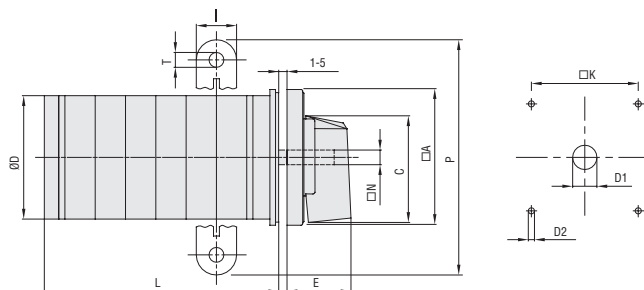
GX...



| Series | Dimensions |      |     |     |      |    |    |    | L Number of elements |    |      |    |      |     |       |     |       |     |       |    |
|--------|------------|------|-----|-----|------|----|----|----|----------------------|----|------|----|------|-----|-------|-----|-------|-----|-------|----|
|        | □A         | C    | ØD1 | ØD2 | E    | □K | □N |    | 1                    | 2  | 3    | 4  | 5    | 6   | 7     | 8   | 9     | 10  | 11    | 12 |
| GX16   | 48         | 39.5 | 12  | 5   | 26.5 | 36 | 6  | 43 | 51.5                 | 60 | 68.5 | 77 | 85.5 | 94  | 102.5 | 111 | 119.5 | 128 | 136.5 |    |
| GX20   | 48         | 39.5 | 12  | 5   | 26.5 | 36 | 6  | 43 | 51.5                 | 60 | 68.5 | 77 | 85.5 | 94  | 102.5 | 111 | 119.5 | 128 | 136.5 |    |
| GX32   | 65         | 53   | 14  | 5   | 34.5 | 48 | 7  | 51 | 63                   | 75 | 85   | 99 | 111  | 123 | 135   | 147 | 159   | 171 | 183   |    |
| GX40   | 65         | 53   | 14  | 5   | 34.5 | 48 | 7  | 51 | 63                   | 75 | 85   | 99 | 111  | 123 | 135   | 147 | 159   | 171 | 183   |    |



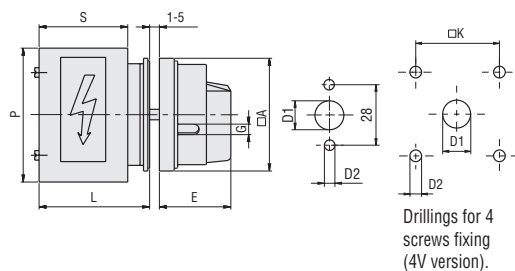
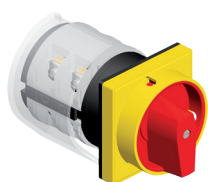
GN...



| Series | Dimensions |     |     |     |     |    |    |     |    |     |      | L Number of elements ① |     |     |     |     |     |     |     |     |     |     |     |
|--------|------------|-----|-----|-----|-----|----|----|-----|----|-----|------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | □A         | C   | ØD  | ØD1 | ØD2 | E  | I  | □K  | □N | P   | ØT   | 1                      | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
| GN200  | 132        | 104 | 120 | 16  | 5.3 | 56 | 20 | 104 | 10 | 140 | 10.5 | 77                     | 107 | 136 | 166 | 196 | 226 | 284 | 314 | 343 | 373 | 402 | 432 |
| GN315  | 132        | 104 | 120 | 16  | 5.3 | 56 | 20 | 104 | 10 | 145 | 10.5 | 77                     | 107 | 136 | 166 | 196 | 226 | 284 | 314 | 343 | 373 | 402 | 432 |

① For devices with 6 or more elements please consult Technical support, see contact details on inside front cover.

## Front mounting with red/yellow padlockable in 0 handle and protection covers (U25)

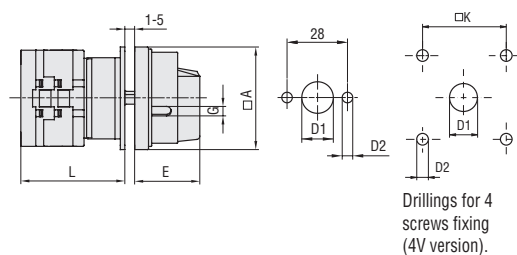


GF series

| Series      | Dimensions |    |    |      |   |    | L  |      |          |       |
|-------------|------------|----|----|------|---|----|----|------|----------|-------|
|             | □A         | D1 | D2 | E    | G | □K | 1  | 2    | 3.....12 |       |
| <b>GF20</b> | 48         | 12 | 5  | 34.2 | 5 | 36 | 44 | 57.5 | 71       | 192.5 |

7GN series

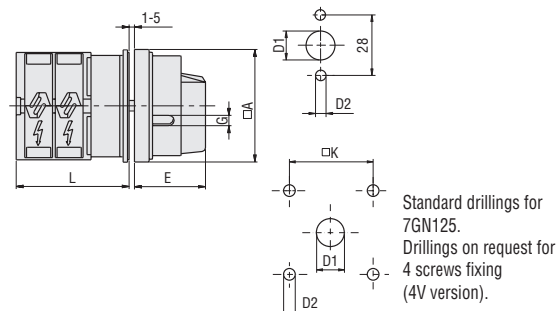
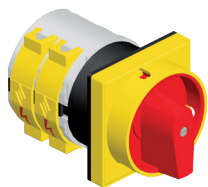
| Series       | Dimensions |    |    |      |   |    |    |    |  | L    |
|--------------|------------|----|----|------|---|----|----|----|--|------|
|              | □A         | D1 | D2 | E    | G | □K | S  | P  |  |      |
| <b>7GN12</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 43 | 64 |  | 54.3 |
| <b>7GN20</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 43 | 64 |  | 54.3 |
| <b>7GN25</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 51 | 68 |  | 62.6 |
| <b>7GN32</b> | 65         | 14 | 5  | 38   | 6 | 48 | 55 | 77 |  | 71.7 |
| <b>7GN40</b> | 65         | 14 | 5  | 38   | 6 | 48 | 55 | 77 |  | 71.7 |



GX series

| Series      | Dimensions |    |    |      |   |    | L  |      |          |       |
|-------------|------------|----|----|------|---|----|----|------|----------|-------|
|             | □A         | D1 | D2 | E    | G | □K | 1  | 2    | 3.....12 |       |
| <b>GX16</b> | 48         | 12 | 5  | 34.2 | 5 | 36 | 43 | 51.5 | 60       | 136.5 |
| <b>GX20</b> | 48         | 12 | 5  | 34.2 | 5 | 36 | 43 | 51.5 | 60       | 136.5 |
| <b>GX32</b> | 65         | 14 | 5  | 38   | 6 | 48 | 51 | 63   | 75       | 183   |
| <b>GX40</b> | 65         | 14 | 5  | 38   | 6 | 48 | 51 | 63   | 75       | 183   |

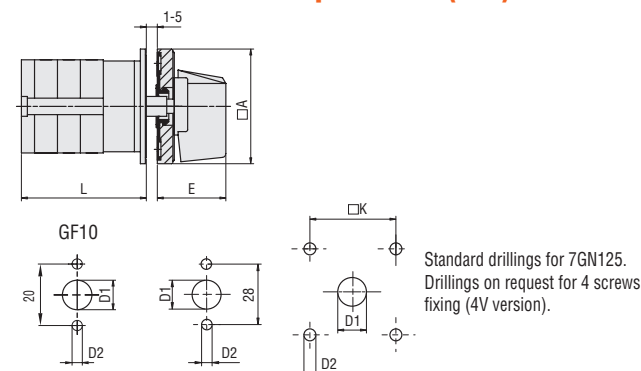
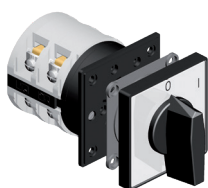
## Front mounting with red/yellow handle padlockable in 0 and protection covers (U65)



7GN series

| Series        | Dimensions |    |    |      |   |    | L    |      |          |       |
|---------------|------------|----|----|------|---|----|------|------|----------|-------|
|               | □A         | D1 | D2 | E    | G | □K | 1    | 2    | 3.....12 |       |
| <b>7GN12</b>  | 65         | 12 | 5  | 34.2 | 5 | 36 | 36.1 | 45.8 | 55.5     | 142.8 |
| <b>7GN20</b>  | 65         | 12 | 5  | 34.2 | 5 | 36 | 36.1 | 45.8 | 55.5     | 142.8 |
| <b>7GN25</b>  | 65         | 12 | 5  | 34.2 | 5 | 36 | 40.5 | 54.1 | 67.7     | 190.1 |
| <b>7GN32</b>  | 65         | 14 | 5  | 38   | 6 | 48 | 46.5 | 61.6 | 76.7     | 212.6 |
| <b>7GN40</b>  | 65         | 14 | 5  | 38   | 6 | 48 | 46.5 | 61.6 | 76.7     | 212.6 |
| <b>7GN63</b>  | 65         | 14 | 5  | 38   | 6 | 48 | 50.3 | 68.4 | 86.5     | 249.4 |
| <b>7GN125</b> | 90         | 16 | 6  | 49   | 7 | 68 | 67.3 | 96.4 | 125.5    | 394.9 |

## Front mounting with black handle with IP65 front protection (U51)



GF series

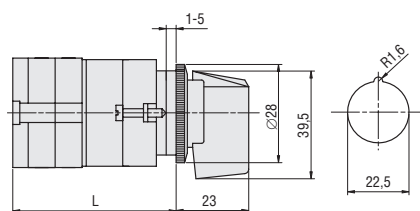
| Series      | Dimensions |    |     |      |    |  | L  |      |          |       |
|-------------|------------|----|-----|------|----|--|----|------|----------|-------|
|             | □A         | D1 | D2  | E    | □K |  | 1  | 2    | 3.....12 |       |
| <b>GF10</b> | 30         | 9  | 3.2 | 18.5 | -  |  | 40 | 52   | 64       | ①     |
| <b>GF20</b> | 48         | 12 | 5   | 26.5 | 36 |  | 44 | 57.5 | 71       | 192.5 |

① GF10: max. 8 elements.

7GN series

| Series        | Dimensions |    |    |      |    |  | L    |      |          |       |
|---------------|------------|----|----|------|----|--|------|------|----------|-------|
|               | □A         | D1 | D2 | E    | □K |  | 1    | 2    | 3.....12 |       |
| <b>7GN12</b>  | 48         | 12 | 5  | 26.5 | 36 |  | 36.1 | 45.8 | 55.5     | 142.8 |
| <b>7GN20</b>  | 48         | 12 | 5  | 26.5 | 36 |  | 36.1 | 45.8 | 55.5     | 142.8 |
| <b>7GN25</b>  | 48         | 12 | 5  | 26.5 | 36 |  | 40.5 | 54.1 | 67.7     | 190.1 |
| <b>7GN32</b>  | 65         | 14 | 5  | 34.5 | 48 |  | 46.5 | 61.6 | 76.7     | 212.6 |
| <b>7GN40</b>  | 65         | 14 | 5  | 34.5 | 48 |  | 46.5 | 61.6 | 76.7     | 212.6 |
| <b>7GN63</b>  | 65         | 14 | 5  | 34.5 | 48 |  | 50.3 | 68.4 | 86.5     | 249.4 |
| <b>7GN125</b> | 90         | 16 | 6  | 41.5 | 68 |  | 67.3 | 96.4 | 125.5    | 394.9 |

## Front mounting with black handle without front plate for hole Ø22mm fixing (U11)

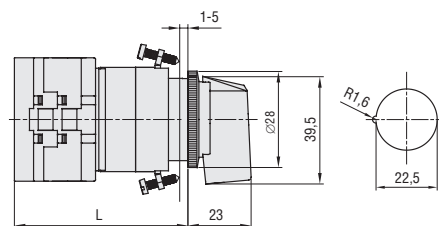


GF series

| Series | L    |    |          |     |
|--------|------|----|----------|-----|
|        | 1    | 2  | 3.....12 |     |
| GF20   | 54.5 | 68 | 81.5     | 203 |

7GN series

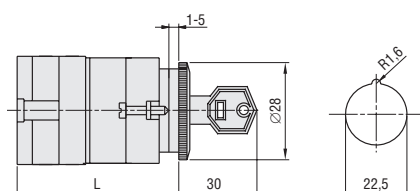
| Series | L    |      |         |       |
|--------|------|------|---------|-------|
|        | 1    | 2    | 3.....8 |       |
| 7GN12  | 47   | 56.7 | 66.4    | 114.9 |
| 7GN20  | 47   | 56.7 | 66.4    | 114.9 |
| 7GN25  | 51.4 | 65   | 78.6    | 146.6 |



GX series

| Series | L  |      |          |       |
|--------|----|------|----------|-------|
|        | 1  | 2    | 3.....12 |       |
| GX16   | 54 | 62.5 | 71       | 147.5 |
| GX20   | 54 | 62.5 | 71       | 147.5 |

## Front mounting without front plate with key operation for hole Ø22mm fixing (U12)

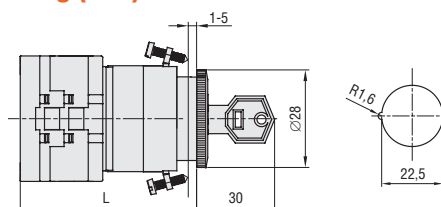


GF series

| Series | L    |    |         |     |
|--------|------|----|---------|-----|
|        | 1    | 2  | 3.....8 |     |
| GF20   | 54.5 | 68 | 81.5    | 149 |

7GN series

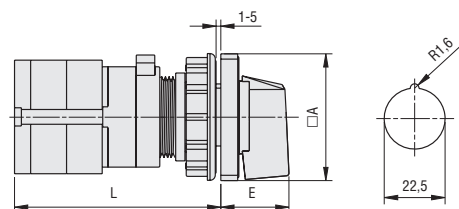
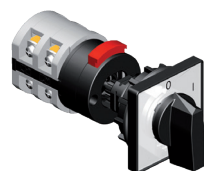
| Series | L    |      |         |       |
|--------|------|------|---------|-------|
|        | 1    | 2    | 3.....8 |       |
| 7GN12  | 47   | 56.7 | 66.4    | 114.9 |
| 7GN20  | 47   | 56.7 | 66.4    | 114.9 |
| 7GN25  | 51.4 | 65   | 78.6    | 146.6 |



GX series

| Series | L  |      |         |       |
|--------|----|------|---------|-------|
|        | 1  | 2    | 3.....8 |       |
| GX16   | 54 | 62.5 | 71      | 113.4 |
| GX20   | 54 | 62.5 | 71      | 113.4 |

## Snap on front mounting with black handle for hole Ø22mm fixing (U47)

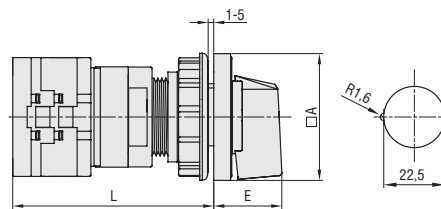


GF series

| Series | Dimensions |      | L  |      |         |       |
|--------|------------|------|----|------|---------|-------|
|        | □A         | E    | 1  | 2    | 3.....8 |       |
| GF10   | 30         | 18.5 | 60 | 72   | 84      | 144   |
| GF20   | 48         | 26.5 | 56 | 69.5 | 83      | 150.5 |

7GN series

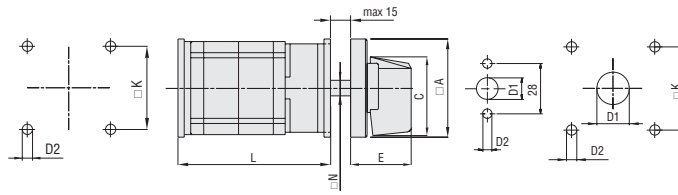
| Series | Dimensions |      | L    |      |         |       |
|--------|------------|------|------|------|---------|-------|
|        | □A         | E    | 1    | 2    | 3.....8 |       |
| 7GN12  | 48         | 26.5 | 58   | 67.7 | 77.4    | 125.9 |
| 7GN20  | 48         | 26.5 | 58   | 67.7 | 77.4    | 125.9 |
| 7GN25  | 48         | 26.5 | 62.4 | 76   | 89.6    | 157.6 |



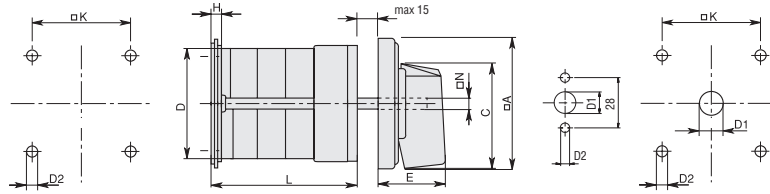
GX series

| Series | Dimensions |      | L    |      |         |       |
|--------|------------|------|------|------|---------|-------|
|        | □A         | E    | 1    | 2    | 3.....8 |       |
| GX16   | 48         | 26.5 | 64.9 | 73.4 | 81.9    | 124.4 |
| GX20   | 48         | 26.5 | 64.9 | 73.4 | 81.9    | 124.4 |

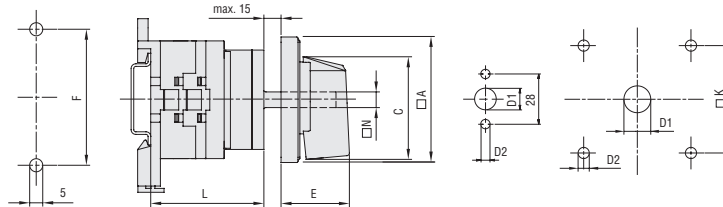
## Rear mounting with black handle (0)



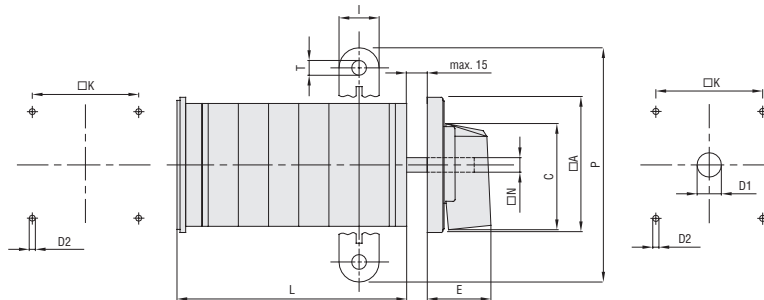
| Series      | Dimensions |      |     |     |      |    |    | L Number of elements |      |    |      |     |       |     |       |     |       |     |       |
|-------------|------------|------|-----|-----|------|----|----|----------------------|------|----|------|-----|-------|-----|-------|-----|-------|-----|-------|
|             | □A         | C    | ØD1 | ØD2 | E    | □K | N  | 1                    | 2    | 3  | 4    | 5   | 6     | 7   | 8     | 9   | 10    | 11  | 12    |
| <b>GF20</b> | 48         | 39.5 | 12  | 5   | 26.5 | 36 | □6 | 46                   | 59.5 | 73 | 86.5 | 100 | 113.5 | 127 | 140.5 | 154 | 167.5 | 181 | 194.5 |



| Series        | Dimensions |      |    |     |      |     |    |    | L Number of elements |       |      |       |       |       |       |       |       |       |       |       |
|---------------|------------|------|----|-----|------|-----|----|----|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               | □A         | C    | ØD | ØD2 | E    | H   | □K | □N | 1                    | 2     | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| <b>7GN12</b>  | 48         | 39.5 | 39 | 5   | 26.5 | 5   | 36 | 6  | 38.1                 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| <b>7GN20</b>  | 48         | 39.5 | 39 | 5   | 26.5 | 5   | 36 | 6  | 38.1                 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| <b>7GN25</b>  | 48         | 39.5 | 43 | 5   | 26.5 | 5   | 36 | 6  | 42.5                 | 56.1  | 69.7 | 83.3  | 96.9  | 110.5 | 124.1 | 137.7 | 151.3 | 164.9 | 178.5 | 192.1 |
| <b>7GN32</b>  | 65         | 53   | 58 | 5   | 34.5 | 5.5 | 48 | 7  | 48.5                 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| <b>7GN40</b>  | 65         | 53   | 58 | 5   | 34.5 | 5.5 | 48 | 7  | 48.5                 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| <b>7GN63</b>  | 65         | 53   | 62 | 6   | 34.5 | 7.5 | 68 | 7  | 53.3                 | 71.4  | 89.5 | 107.6 | 125.7 | 143.8 | 161.9 | 180   | 198.1 | 216.2 | 234.3 | 252.4 |
| <b>7GN125</b> | 90         | 70.5 | 86 | 6   | 41.4 | 7.5 | 68 | 9  | 74.8                 | 103.9 | 133  | 162.1 | 191.2 | 220.3 | 249.4 | 278.5 | 307.6 | 336.7 | 365.8 | 394.9 |



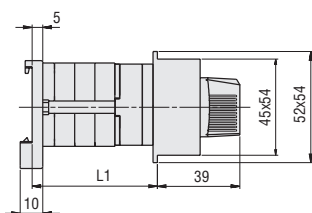
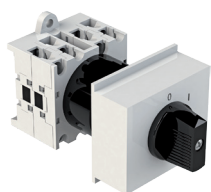
| Series      | Dimensions |      |      |    |    | L Number of elements |      |    |      |    |      |     |      |     |       |     |       |
|-------------|------------|------|------|----|----|----------------------|------|----|------|----|------|-----|------|-----|-------|-----|-------|
|             | □A         | C    | E    | F  | □N | 1                    | 2    | 3  | 4    | 5  | 6    | 7   | 8    | 9   | 10    | 11  | 12    |
| <b>GX16</b> | 48         | 39.5 | 26.5 | 52 | 6  | 37                   | 45.5 | 54 | 62.5 | 71 | 79.5 | 88  | 96.5 | 105 | 113.5 | 122 | 130.5 |
| <b>GX20</b> | 48         | 39.5 | 26.5 | 52 | 6  | 37                   | 45.5 | 54 | 62.5 | 71 | 79.5 | 88  | 96.5 | 105 | 113.5 | 122 | 130.5 |
| <b>GX32</b> | 65         | 53   | 34.5 | 68 | 7  | 48                   | 60   | 72 | 84   | 96 | 108  | 120 | 132  | 144 | 156   | 168 | 180   |
| <b>GX40</b> | 65         | 53   | 34.5 | 68 | 7  | 48                   | 60   | 72 | 84   | 96 | 108  | 120 | 132  | 144 | 156   | 168 | 180   |



| Series | Dimensions |     |     |    |    |     |    |     |      | L    Number of elements ❶ |     |     |     |     |     |     |     |     |     |     |     |
|--------|------------|-----|-----|----|----|-----|----|-----|------|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | □A         | C   | ØD2 | E  | I  | □K  | □N | P   | ØT   | 1                         | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
| GN200  | 132        | 104 | 5.3 | 56 | 20 | 104 | 10 | 140 | 10.5 | 77                        | 107 | 136 | 166 | 196 | 226 | 284 | 314 | 343 | 373 | 402 | 432 |
| GN315  | 132        | 104 | 5.3 | 56 | 20 | 104 | 10 | 145 | 10.5 | 77                        | 107 | 136 | 166 | 196 | 226 | 284 | 314 | 343 | 373 | 402 | 432 |

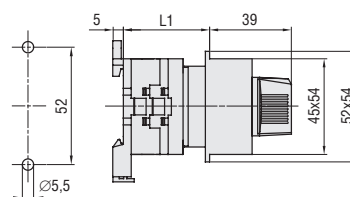
① For devices with 6 or more elements please contact please consult Technical support, see contact details on inside front cover.

## Modular service cover for 35mm DIN rail mounting with black handle (048)



GF series

| Series      | L1 |      |    |
|-------------|----|------|----|
|             | 1  | 2    | 3  |
| <b>GF20</b> | 40 | 53.5 | 67 |



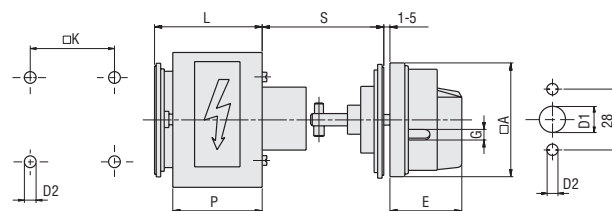
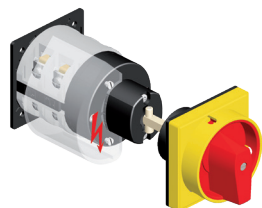
GX series

| Series      | L1 |      |    |
|-------------|----|------|----|
|             | 1  | 2    | 3  |
| <b>GX16</b> | 33 | 41.5 | 50 |
| <b>GX20</b> | 33 | 41.5 | 50 |

7GN series

| Series       | L1   |      |      |
|--------------|------|------|------|
|              | 1    | 2    | 3    |
| <b>7GN12</b> | 38.1 | 47.8 | 57.5 |
| <b>7GN20</b> | 38.1 | 47.8 | 57.5 |
| <b>7GN25</b> | 42.5 | 56.1 | 69.7 |

## Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers (088)

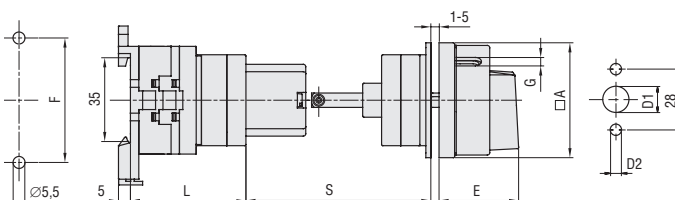


GF series

| Series      | Dimensions |    |    |      |   |    |       | L  |      |          |       |
|-------------|------------|----|----|------|---|----|-------|----|------|----------|-------|
|             | □A         | D1 | D2 | E    | G | □K | S     | 1  | 2    | 3.....12 |       |
| <b>GF20</b> | 48         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 46 | 59.5 | 73       | 194.5 |

7GN series

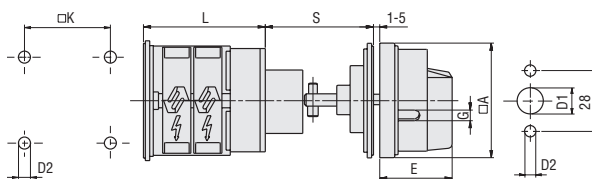
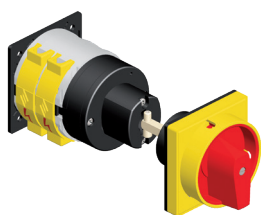
| Series       | Dimensions |    |    |      |   |    |       |    |      |  |
|--------------|------------|----|----|------|---|----|-------|----|------|--|
|              | □A         | D1 | D2 | E    | G | □K | S     | P  | L    |  |
| <b>7GN12</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 43 | 51.3 |  |
| <b>7GN20</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 43 | 51.3 |  |
| <b>7GN25</b> | 65         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 51 | 59.6 |  |
| <b>7GN32</b> | 65         | 14 | 5  | 38   | 6 | 48 | 45-55 | 55 | 68.7 |  |
| <b>7GN40</b> | 65         | 14 | 5  | 38   | 6 | 48 | 45-55 | 55 | 68.7 |  |



GX series

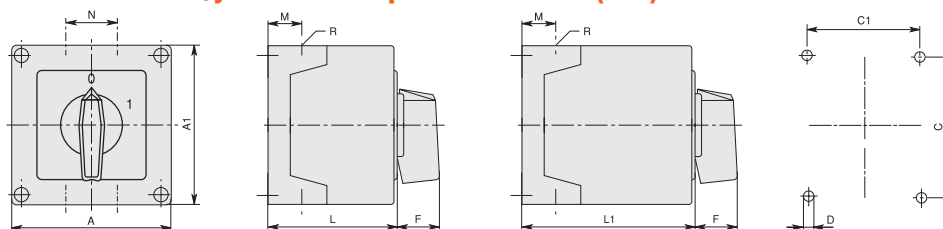
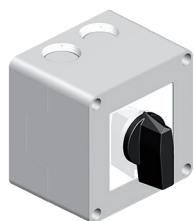
| Series      | Dimensions |    |    |      |    |    |   |       | L  |      |          |       |
|-------------|------------|----|----|------|----|----|---|-------|----|------|----------|-------|
|             | □A         | D1 | D2 | E    | F  | □K | G | S     | 1  | 2    | 3.....12 |       |
| <b>GX16</b> | 48         | 12 | 5  | 34.2 | 52 | 36 | 5 | 45-55 | 40 | 48.5 | 57       | 133.5 |
| <b>GX20</b> | 48         | 12 | 5  | 34.2 | 52 | 36 | 5 | 45-55 | 40 | 48.5 | 57       | 133.5 |
| <b>GX32</b> | 65         | 14 | 5  | 38   | 68 | 48 | 6 | 45-55 | 51 | 63   | 75       | 183   |
| <b>GX40</b> | 65         | 14 | 5  | 38   | 68 | 48 | 6 | 45-55 | 51 | 63   | 75       | 183   |



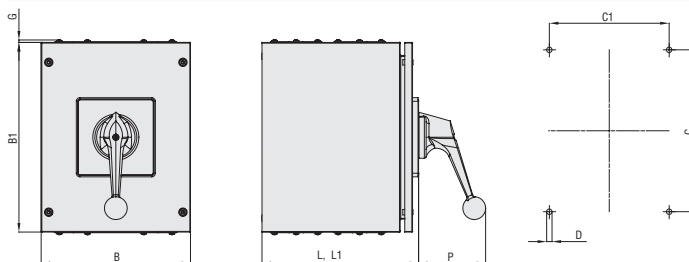


| Series | Dimensions |    |    |      |   |    |       | L    |      |          |       |
|--------|------------|----|----|------|---|----|-------|------|------|----------|-------|
|        | □A         | D1 | D2 | E    | G | □K | S     | 1    | 2    | 3.....12 |       |
| 7GN12  | 65         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 41.1 | 50.8 | 60.5     | 147.8 |
| 7GN20  | 65         | 12 | 5  | 34.2 | 5 | 36 | 45-55 | 41.1 | 50.8 | 60.5     | 147.8 |
| 7GN25  | 65         | 14 | 5  | 38   | 6 | 48 | 45-55 | 51.5 | 66.6 | 81.7     | 217.6 |
| 7GN40  | 65         | 14 | 5  | 38   | 6 | 48 | 45-55 | 51.5 | 66.6 | 81.7     | 217.6 |
| 7GN63  | 65         | 14 | 6  | 38   | 6 | 68 | 45-55 | 57.3 | 75.4 | 93.5     | 256.4 |

## 12



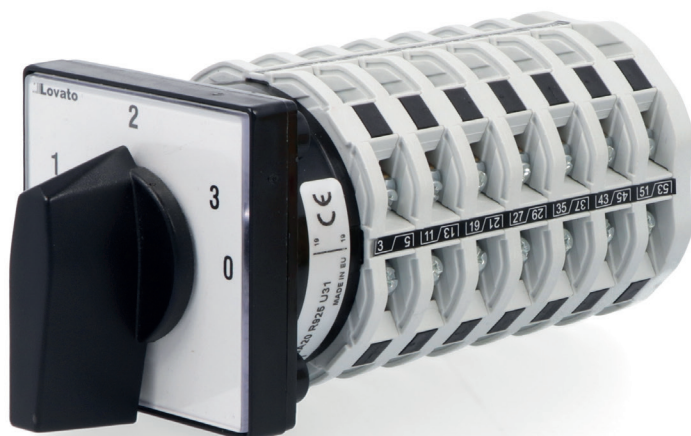
| Series          | Enclosure size | Number of elements |       | Dimensions |     |         |         |     |    |    |      |      |       | Cable entry      | Protection degree |
|-----------------|----------------|--------------------|-------|------------|-----|---------|---------|-----|----|----|------|------|-------|------------------|-------------------|
|                 |                | L                  | L1    | A          | A1  | C       | C1      | D   | F  | M  | N    | L    | L1    |                  |                   |
| 7GN12 <b>Ⓢ</b>  | 75x75 <b>Ⓢ</b> | 1 - 2              | 3 - 4 | 75         | 75  | 50      | 64      | 4.5 | 19 | 14 | 28   | 57.5 | 79.8  | 4xPG13.5         | IP65              |
| 7GN20 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25 <b>Ⓢ</b>  |                | 1                  | 2 - 3 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN12 <b>Ⓢ</b>  | 90x90          | 1 - 3              | 4 - 6 | 90         | 90  | 79      | 63      | 4.5 | 25 | 19 | 30   | 71.3 | 98.3  | 4xPG16           | IP65              |
| 7GN20 <b>Ⓢ</b>  |                | 1 - 3              | 4 - 6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40           | 110x110        | 1                  | 2 - 3 | 110        | 110 | 98.4    | 83      | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21           | IP65              |
| 7GN12           |                | 1 - 4              | 5 - 8 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN20           |                | 1 - 4              | 5 - 8 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25           |                | 1 - 3              | 4 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32 <b>Ⓢ</b>  |                | 1 - 3              | 4 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63           | 125x175        | 1 - 2              | 3 - 4 | 125        | 175 | 146     | 112     | 5.5 | 32 | 21 | 68   | 84.3 | 118.3 | 4xPG21<br>2xPG11 | IP65              |
| 7GN32           |                | 1 - 3              | 4 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63 <b>Ⓢ</b>  |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125          | 198x248        | 1                  | 2     | 198        | 248 | 190-210 | 140-180 | 5.5 | 32 | 35 | 104  | -    | 166.5 | 6xPG16-<br>21-29 | IP65              |
| 7GN32           |                | -                  | 1 - 8 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40           |                | -                  | 1 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63 <b>Ⓢ</b>  |                | -                  | 1 - 6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125 <b>Ⓢ</b> | 90x90          | -                  | 1 - 4 | 90         | 90  | 79      | 79      | 4.5 | 25 | 19 | 30   | 71.3 | 98.3  | 4xPG16           | IP65              |
| GX16 <b>Ⓢ</b>   |                | 1 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| GX20 <b>Ⓢ</b>   | 110x110        | 1 - 2              | 3 - 5 | 110        | 110 | 98.4    | 83      | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21           | IP65              |
| GX16            |                | 1 - 3              | 4 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| GX20            |                | 1 - 3              | 4 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| GX32 <b>Ⓢ</b>   |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| GX40 <b>Ⓢ</b>   |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
|                 |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |



| Series | Enclosure size | Number of elements |       | Dimensions |     |     |     |     |     |   |     |    | Protection degree |
|--------|----------------|--------------------|-------|------------|-----|-----|-----|-----|-----|---|-----|----|-------------------|
|        |                | L                  | L1    | L          | L1  | B   | B1  | C   | C1  | D | G   | P  |                   |
| GN200  | 250x316        | 1 - 3              | 4 - 6 | 162        | 252 | 250 | 316 | 270 | 200 | 9 | 4.5 | 98 | IP54              |
| GN315  |                | 1 - 3              | 4 - 6 | 162        | 252 | 250 | 316 | 270 | 200 | 9 | 4.5 | 98 | IP54              |

③ Only for cam switch in plastic enclosure with black handle (P).

# ROTARY CAM SWITCH GNA20 SERIES

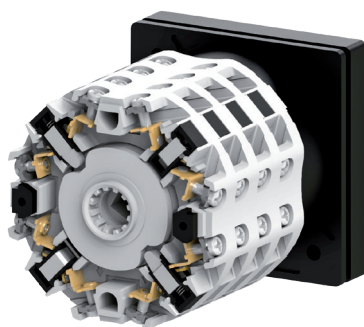


● IEC CONVENTIONAL FREE AIR THERMAL CURRENT ITH 20A.

● AVAILABLE VERSIONS IN PLASTIC ENCLOSURE.

● 48 AVAILABLE CONTACTS

The GNA20 series of cam switches has 4 contacts for each element. It can have a maximum of 12 control positions with 12 switching elements for a total of **48 contacts available**.



● REDUCED DEPTH

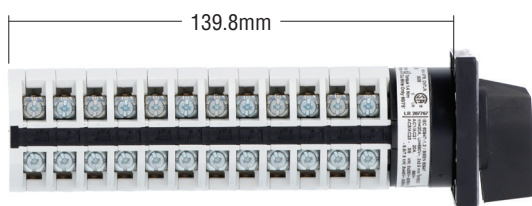
The GNA20 series cam switches are used in applications where the depths available inside the panel are limited.

**Comparison example between GNA20 and 7GN series:**

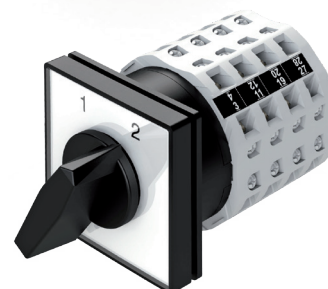
GNA20 series: 6 elements, 24 contacts.



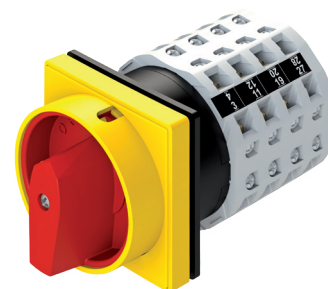
7GN series: 12 elements, 24 contacts.



Front mounting with black handle



Front mounting with padlockable yellow/red handle



Rear mounting with black handle



Consult Technical support to determine the order codes relating to the GNA20 series; see contact details on inside front cover.

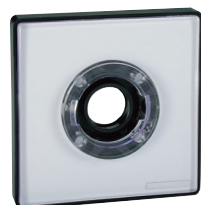
### Accessories for rotary cam switches



7A014 - 7AR114 -  
7A114 - 7AR214



7AR124 - 7A124 -  
7AR224 - 7AR324



GXM0 - GXM1 - GXM2 - GXM3 - GXM4



GXM5 - GXM6 - GXM7



7A019... -  
7A119...



7A169...



7A180 - 7A181



7A44...

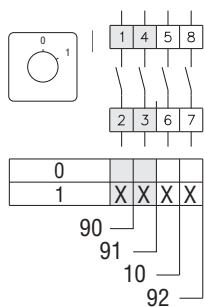
| Order code                                                                                                | Description                                                                                          | Qty<br>per<br>pkg | Wt<br>[kg] |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------|------------|
|                                                                                                           |                                                                                                      | n°                |            |
| Black operating handle <sup>❶</sup> .                                                                     |                                                                                                      |                   |            |
| <b>7A014</b>                                                                                              | For 48x48mm front plate<br>□6mm/0.24"                                                                | 1                 | 0.005      |
| <b>7AR114</b>                                                                                             | For 65x65mm front plate<br>□6mm/0.24"                                                                | 1                 | 0.010      |
| <b>7A114</b>                                                                                              | For 65x65mm front plate<br>□7mm/0.28"                                                                | 1                 | 0.010      |
| <b>7AR214</b>                                                                                             | For 90x90mm front plate<br>□7mm/0.28"                                                                | 1                 | 0.013      |
| Black operating lever <sup>❶</sup> .                                                                      |                                                                                                      |                   |            |
| <b>7AR124</b>                                                                                             | For 65x65mm front plate<br>□6mm/0.24"                                                                | 1                 | 0.019      |
| <b>7A124</b>                                                                                              | For 65x65mm front plate<br>□7mm/0.28"                                                                | 1                 | 0.020      |
| <b>7AR224</b>                                                                                             | For 90x90mm front plate<br>□7mm/0.28"                                                                | 1                 | 0.038      |
| <b>7AR324</b>                                                                                             | For 132x132mm front plate                                                                            | 1                 | 0.050      |
| Red/yellow 0-1 padlockable handle.                                                                        |                                                                                                      |                   |            |
| <b>GXA01</b>                                                                                              | 48x48mm □6mm/0.24"                                                                                   | 1                 | 0.030      |
| <b>GXA01H</b>                                                                                             | 65x65mm □6mm/0.24"                                                                                   | 1                 | 0.047      |
| <b>GXA11</b>                                                                                              | 65x65mm □7mm/0.28"                                                                                   | 1                 | 0.047      |
| IP40 front plate.                                                                                         |                                                                                                      |                   |            |
| <b>GXM0</b>                                                                                               | 30x30mm/1.2x1.2" blank front plate                                                                   | 1                 | 0.012      |
| <b>GXM1</b>                                                                                               | 48x48mm/1.9x1.9" blank front plate                                                                   | 1                 | 0.018      |
| <b>GXM2</b>                                                                                               | 65x65mm/2.6x2.6" blank front plate                                                                   | 1                 | 0.023      |
| <b>GXM3</b>                                                                                               | 90x90mm/3.6x3.6" blank front plate                                                                   | 1                 | 0.030      |
| <b>GXM4</b>                                                                                               | 132x132mm/5.2x5.2" blank front plate                                                                 | 1                 | 0.040      |
| IP40 front plate with legend plate.                                                                       |                                                                                                      |                   |            |
| <b>GXM5</b>                                                                                               | 48x60mm/1.9x2.6" blank front plate with legend                                                       | 1                 | 0.017      |
| <b>GXM6</b>                                                                                               | 65x80mm/2.6x3.1" blank front plate with legend                                                       | 1                 | 0.033      |
| <b>GXM7</b>                                                                                               | 90x110mm/3.6x4.4" blank front plate with legend                                                      | 1                 | 0.055      |
| IEC IP20 finger protection shroud for supply terminals.<br>For 2 wafers complete with screws and bracket. |                                                                                                      |                   |            |
| <b>7A0191</b>                                                                                             | For 7GN12-7GN20                                                                                      | 1                 | 0.017      |
| <b>7A0192</b>                                                                                             | For 7GN25                                                                                            | 1                 | 0.021      |
| <b>7A119U</b>                                                                                             | For 7GN32-7GN40 U version                                                                            | 1                 | 0.033      |
| <b>7A119O</b>                                                                                             | For 7GN32-7GN40 O version                                                                            | 1                 | 0.101      |
| 2-piece kit, snap-on fixing for 1 wafer.                                                                  |                                                                                                      |                   |            |
| <b>7A1691</b>                                                                                             | For 7GN32-7GN40                                                                                      | 1                 | 0.005      |
| <b>7A1692</b>                                                                                             | For 7GN63                                                                                            | 1                 | 0.006      |
| <b>7A1693</b>                                                                                             | For 7GN125                                                                                           | 1                 | 0.020      |
| <b>7A1694</b>                                                                                             | For 7GN12-7GN20                                                                                      | 1                 | 0.005      |
| <b>7A1695</b>                                                                                             | For 7GN25                                                                                            | 1                 | 0.005      |
| 35mm DIN rail (IEC/EN/BS 60715) base mounting piece for U version.                                        |                                                                                                      |                   |            |
| <b>7A180</b>                                                                                              | For 7GN12...7GN25 and GF20                                                                           | 1                 | 0.011      |
| <b>7A181</b>                                                                                              | For 7GN32...7GN63                                                                                    | 1                 | 0.018      |
| IP42 rubber protection <sup>❷</sup> . Plug-in.                                                            |                                                                                                      |                   |            |
| <b>7A441</b>                                                                                              | Ø57mm/2.3" - 90mm/3.6" long<br>for 7GN12-7GN20-7GN25<br>up to 2 elements                             | 1                 | 0.045      |
| <b>7A442</b>                                                                                              | Ø57mm/2.3" - 115mm/4.6" long<br>for 7GN12-7GN20-7GN25<br>up to 4 elements                            | 1                 | 0.065      |
| <b>7A443</b>                                                                                              | Ø57mm/2.3" - 140mm/5.5" long<br>for 7GN12-7GN20-7GN25<br>up to 6 elements                            | 1                 | 0.063      |
| <b>7A444</b>                                                                                              | Ø87mm/3.4" - 112mm/4.0" long<br>for 7GN32...7GN40 up to 4<br>elements, for 7GN63 up to 3<br>elements | 1                 | 0.065      |
| Spare keys.                                                                                               |                                                                                                      |                   |            |
| <b>GXA170</b>                                                                                             | 2-pcs key set, key code n° 122                                                                       | 1                 | 0.008      |

❶ For shaft dimensions, refer to the dimension □N present in the various executions.

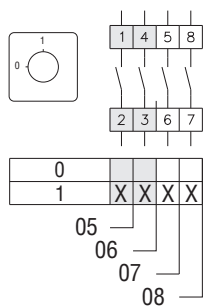
❷ Increases contact degree of protection from IEC IP00 to IP20.

### ON/OFF SWITCHES

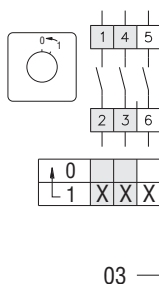
90-91-10-92



05-06-07-08

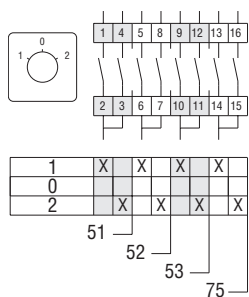


03



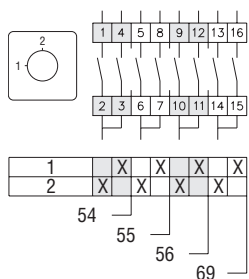
### CHANGEOVER SWITCHES WITH 0

51-52-53-75



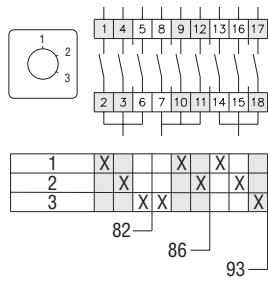
### CHANGEOVER SWITCHES WITHOUT 0

54-55-56-69

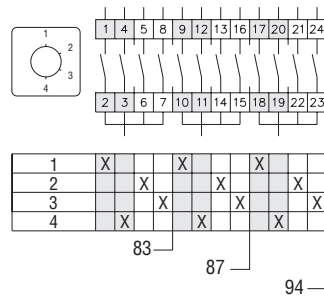


### MULTI STEP STARTING WITH 1

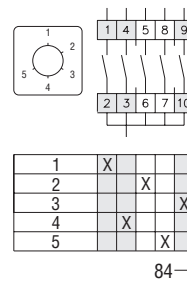
82-86-93



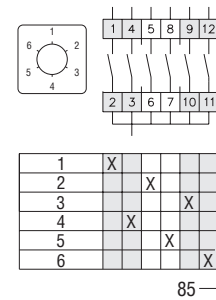
83-87-94



84

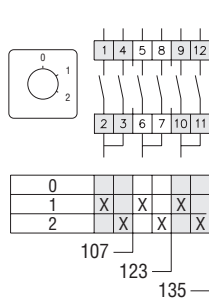


85

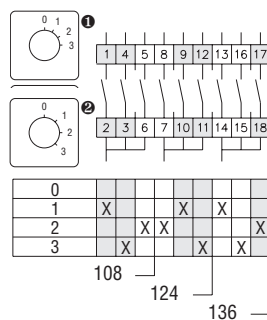


### MULTI STEP STARTING WITH 0

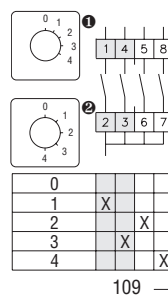
107-123-135



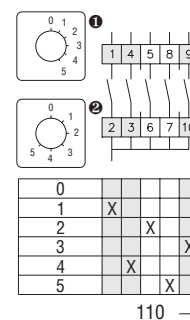
108-124-136



109



110

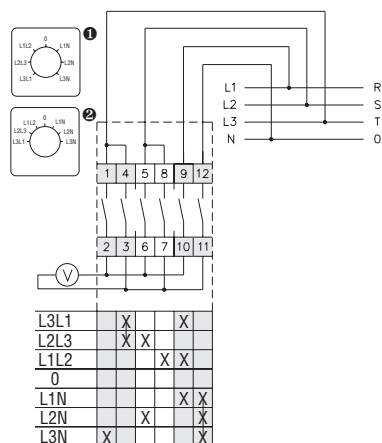


❶ Front plate for GF..., 7GN12... to 7GN63..., GX..., GN...

❷ Front plate for 7GN125...

### VOLTMETER SWITCHES

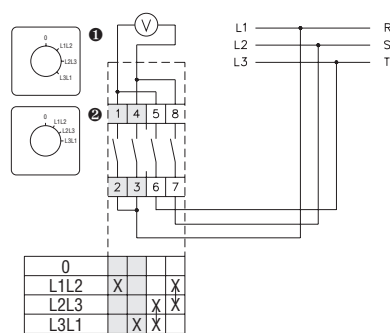
66



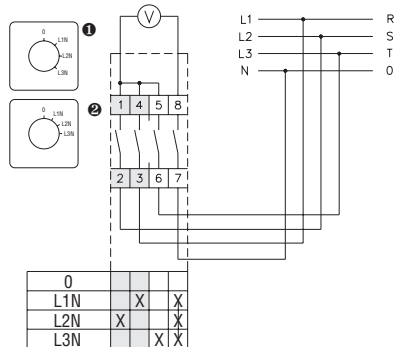
❶ Front plate for GF20..., 7GN..., GX..., GN...

❷ Front plate for GF10...

67

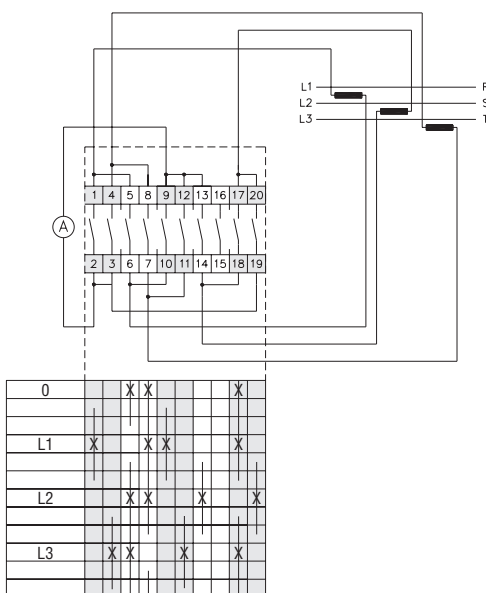
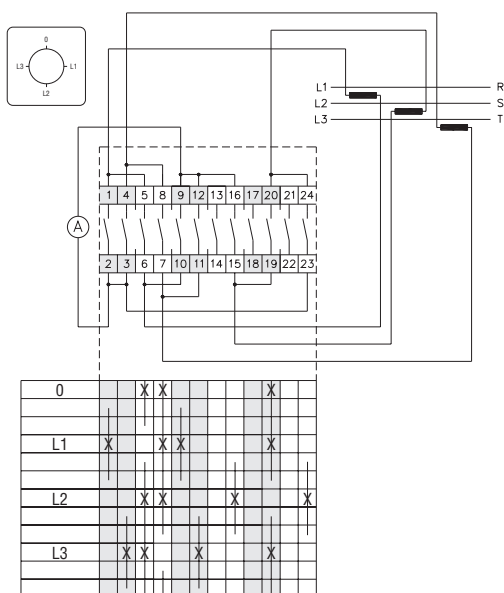


68

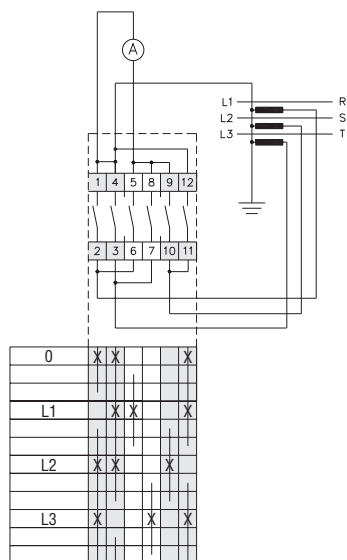


### AMMETER SWITCHES

97

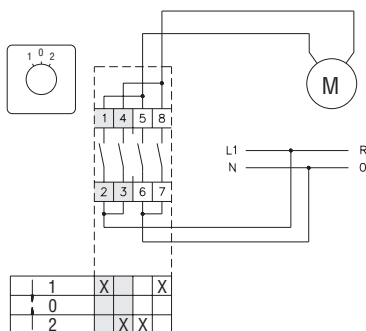


98

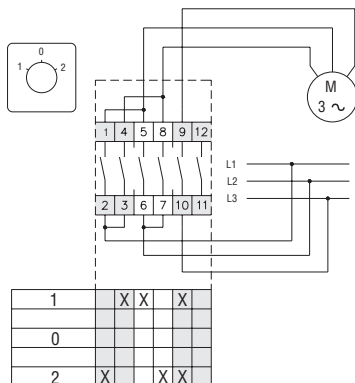


### MOTOR REVERSING

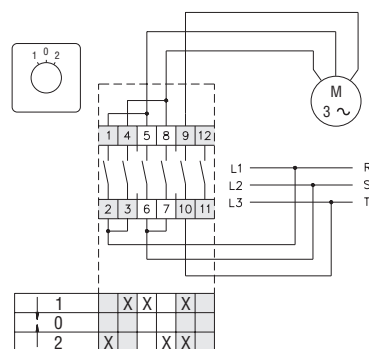
25



11

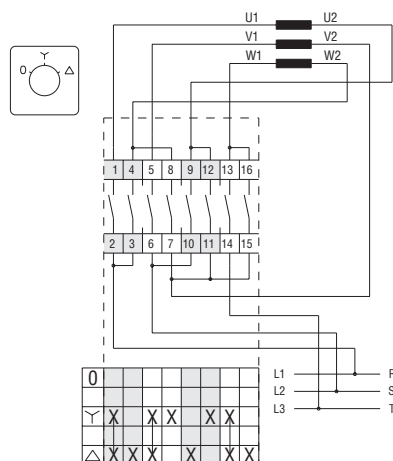


26



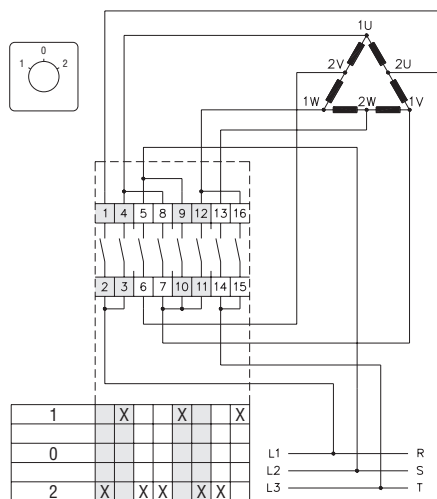
### STAR-DELTA

12

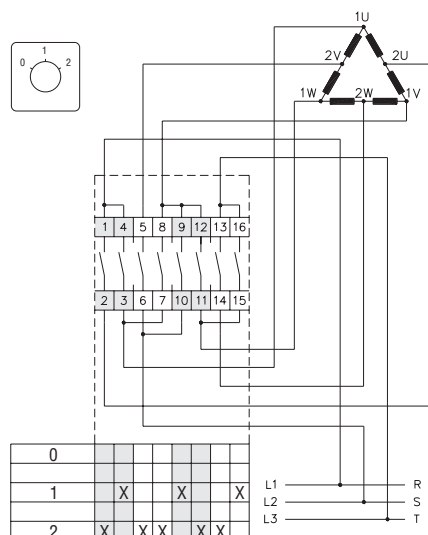


### DAHLENDER MOTOR CONTROL

13

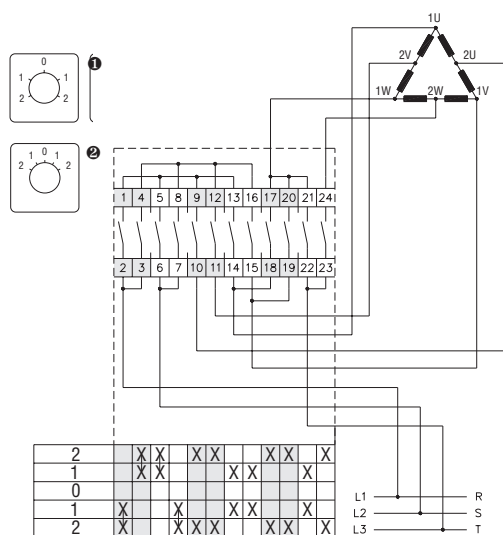


19



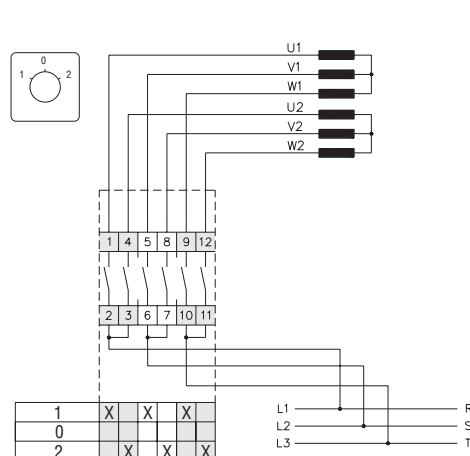
12

20



### SEPARATE WINDINGS SWITCHES

53



① Front plate for GF20..., 7GN..., GX...

② Front plate for GF10..., GN...

# 12 Rotary cam switches

## Technical characteristics

| TYPE                                                   |                          |            |      | GF10 | GF20 | 7GN12 | 7GN20 | 7GN25 | 7GN32 | 7GN40 | 7GN63 | 7GN125 | GX16 | GX20 | GX32 | GX40             | GN200            | GN315 | GNA20 |
|--------------------------------------------------------|--------------------------|------------|------|------|------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------------------|------------------|-------|-------|
| Rated insulation voltage                               |                          |            |      |      |      |       |       |       |       |       |       |        |      |      |      |                  |                  |       |       |
| Ui                                                     | IEC/EN                   | V          | 480  | 480  | 690  | 690   | 690   | 690   | 690   | 690   | 690   | 690    | 690  | 690  | 690  | 690              | 690              | 690   | 690   |
|                                                        | UL/CSA                   | V          | 240  | 240  | 600  | 600   | 600   | 600   | 600   | 600   | 600   | 600    | 600  | 600  | 600  | 600              | 600              | 600   | 600   |
| Rated impulse withstand voltage                        |                          |            | kV   | 4    | 4    | 6     | 6     | 6     | 6     | 6     | 6     | 6      | 6    | 6    | 6    | 6                | 8                | 8     | 6     |
| Uimp IEC/EN/BS 60947-3                                 |                          |            |      |      |      |       |       |       |       |       |       |        |      |      |      |                  |                  |       |       |
| Conventional free air thermal current                  |                          |            |      |      |      |       |       |       |       |       |       |        |      |      |      |                  |                  |       |       |
| Ii                                                     | IEC/EN                   | A          | 10   | 20   | 16   | 20    | 25    | 32    | 40    | 63    | 125   | 16     | 20   | 32   | 40   | 200              | 315              | 20    |       |
|                                                        | UL/CSA (general purpose) | A          | 10   | 15   | 15   | 20    | 30    | 40    | 50    | 60    | 130   | 12     | 15   | 32   | 40   | 200              | 255              | 15    |       |
| Rated operating maximum voltage (only for switch)      |                          |            | V    | 480  | 480  | 480   | 480   | 480   | 480   | 480   | 690   | 440    | 440  | 440  | 440  | 690              | 690              | 480   |       |
| Rated operational impulse voltage (only for switch)    |                          |            | kV   | 4    | 4    | 4     | 4     | 4     | 4     | 4     | 6     | 4      | 4    | 4    | 4    | 6                | 6                | 4     |       |
| Maximum fuse size for short-circuit protection In (gG) | 10kA                     | A          | 16   | 20   | 16   | 20    | 25    | 32    | 40    | 63    | 125   | 16     | 20   | 35   | 40   | 200 <sup>②</sup> | 315 <sup>②</sup> | 20    |       |
|                                                        | 15kA                     | A          | –    | 20   | 10   | 16    | 25    | 32    | 40    | 63    | 100   | 16     | 20   | 35   | 35   | 200 <sup>②</sup> | 315 <sup>②</sup> | 20    |       |
|                                                        | 25kA                     | A          | –    | 20   | 10   | 16    | 25    | 32    | 40    | 63    | 100   | 16     | 20   | 35   | 35   | –                | –                | 20    |       |
|                                                        | 50kA                     | A          | –    | –    | –    | –     | –     | 32    | 40    | 63    | 100   | –      | –    | –    | –    | –                | –                | –     |       |
|                                                        | 63kA                     | A          | –    | –    | –    | –     | –     | –     | 40    | 63    | 100   | –      | –    | –    | –    | –                | –                | –     |       |
| Short-time withstand current Icw                       |                          | 1sec       | A    | 250  | 250  | 200   | 250   | 400   | 800   | 1000  | 1600  | 2100   | 250  | 250  | 1000 | 1000             | 3300             | 5200  | 220   |
| Conductivity                                           |                          | mA/V       | 10/5 | 10/5 | 10/5 | 10/5  | 10/5  | 10/5  | 10/5  | 10/5  | 10/5  | 10/5   | 10/5 | 10/5 | 10/5 | 10/5             | –                | –     | 10/5  |
| Rated operational current Ie                           |                          |            | A    | 10   | 20   | 16    | 20    | 25    | 32    | 40    | 63    | 125    | 16   | 20   | 32   | 40               | 200              | 315   | 20    |
| AC1/AC21A (IEC/EN)                                     | AC15 (IEC/EN)            | 110...120V | A    | 5    | 10   | 10    | 10    | 16    | 25    | 25    | 32    | 40     | 10   | 10   | 25   | 25               | –                | –     | –     |
|                                                        |                          | 220...230V | A    | 3    | 8    | 8     | 8     | 12    | 20    | 22    | 25    | 28     | 8    | 8    | 20   | 22               | –                | –     | –     |
|                                                        |                          | 380...400V | A    | 2    | 6    | 4     | 6     | 8     | 10    | 12    | 15    | 15     | 4    | 6    | 10   | 12               | –                | –     | –     |
|                                                        |                          | 660...690V | A    | –    | –    | 1.5   | 1.5   | 2     | 2     | 2     | 4     | 5      | 1.5  | 1.5  | 2    | 2                | –                | –     | –     |
|                                                        |                          |            |      |      |      |       |       |       |       |       |       |        |      |      |      |                  |                  |       |       |
| Motor power for switches in AC utilisation category    |                          |            |      |      |      |       |       |       |       |       |       |        |      |      |      |                  |                  |       |       |
| AC3 (IEC/EN)                                           | 220...230V               | kW         | 1.5  | 3    | 2.5  | 3     | 5.5   | 7.5   | 8     | 11    | 18.5  | 3.5    | 3.7  | 7.5  | 7.5  | 27.5             | 37               | 3     |       |
|                                                        | 3 phases                 | 380...440V | kW   | 2.2  | 5    | 4     | 5.5   | 7.5   | 11    | 15    | 18.5  | 4.5    | 5.5  | 11   | 15   | 47               | 55               | 5.5   |       |
|                                                        |                          | 500...690V | kW   | –    | –    | 5.5   | 5.5   | 7.5   | 11    | 15    | 18.5  | 5.5    | 5.5  | 11   | 15   | –                | 69               | 5.5   |       |
| 1 phase (2 poles)                                      | 110...120V               | kW         | 0.3  | 0.5  | 0.8  | 0.8   | 1.5   | 2.2   | 3     | 3.7   | 5     | 0.55   | 0.75 | 1.8  | 2.2  | –                | 11               | 0.6   |       |
|                                                        | 220...230V               | kW         | 0.55 | 1.5  | 1.5  | 2.2   | 3     | 4     | 6.5   | 6.5   | 11    | 1.5    | 1.8  | 3.5  | 4.4  | –                | 22               | 2.2   |       |
|                                                        | 380...440V               | kW         | 0.75 | 2    | 2.2  | 3     | 5.5   | 6.5   | 8     | 11.5  | 15    | 2.2    | 3    | 5.5  | 7    | –                | 30               | 3     |       |
| AC23A (IEC/EN) <sup>①</sup>                            | 220...230V               | kW         | 1.8  | 4    | 3    | 5     | 6.5   | 8     | 8     | 12.5  | 30    | 3.7    | 4    | 8    | 9    | –                | 75               | 3.7   |       |
|                                                        | 3 phases                 | 380...440V | kW   | 3    | 7.5  | 5.5   | 7.5   | 11    | 15    | 18.5  | 30    | 45     | 6.5  | 7.5  | 15   | 18.5             | 47               | 110   | 7.5   |
|                                                        |                          | 500...690V | kW   | –    | –    | 7.5   | 7.5   | 11    | 18.5  | 22    | 30    | 37     | 7.5  | 7.5  | 15   | 15               | –                | 45    | 7.5   |
| 1 phase (2 poles)                                      | 110...120V               | kW         | 0.7  | 0.75 | 0.8  | 0.8   | 1.5   | 2.2   | 3     | 3.7   | 5     | 0.75   | 0.75 | 2.2  | 3    | –                | 15               | 0.75  |       |
|                                                        | 220...230V               | kW         | 0.75 | 2    | 1.7  | 2.5   | 3.7   | 4     | 6     | 7.5   | 11    | 1.8    | 2.2  | 3.5  | 5.2  | –                | 37               | 2.2   |       |
|                                                        | 380...440V               | kW         | 1.1  | 2.5  | 3    | 3.7   | 5.5   | 7.5   | 11    | 12.5  | 15    | 3      | 3.5  | 6    | 7.5  | –                | 55               | 3.7   |       |

① For GN200 and GN315 the use category is AC23B.

② aR fuses.



# 12 Rotary cam switches

## Technical characteristics

| TYPE                                                          |          |                   | GF10              | GF20              | 7GN12             | 7GN20             | 7GN25             | 7GN32             | 7GN40             | 7GN63             | 7GN125            | GX16              | GX20              | GX32              | GX40              | GN200             | GN315             | GNA20             |
|---------------------------------------------------------------|----------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Motor power for direct-on-line control (UL/CSA-DOL) 3 phases  | 120V     | HP                | –                 | –                 | 1.5               | 1.5               | 3                 | 5                 | 5                 | 7.5               | 15                | 1.5               | 1.5               | 3                 | 5                 | 30                | 30                | 1.5               |
|                                                               | 240V     | HP                | 2                 | 3                 | 3                 | 3                 | 5                 | 10                | 10                | 15                | 25                | 3                 | 3                 | 7.5               | 10                | 50                | 50                | 2                 |
|                                                               | 480V     | HP                | –                 | –                 | –                 | 7.5               | 10                | 15                | 20                | 25                | 50                | 5                 | 5                 | 15                | 15                | 100               | 100               | 5                 |
|                                                               | 600V     | HP                | –                 | –                 | –                 | 10                | 15                | 15                | 20                | 25                | 40                | 5                 | 5                 | 15                | 15                | 75                | 75                | 5                 |
| 1 phase (2 poles)                                             | 120V     | HP                | –                 | –                 | 0.5               | 0.75              | 1.5               | 2                 | 2                 | 3                 | 5                 | 0.75              | 0.75              | 1.5               | 2                 | 15                | 15                | –                 |
|                                                               | 240V     | HP                | 0.75              | 1                 | 1                 | 2                 | 3                 | 5                 | 5                 | 10                | 15                | 1                 | 1.5               | 3                 | 5                 | 30                | 30                | –                 |
| Motor power for switches in DC utilisation category           |          |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| DC21A                                                         | 48V      | A                 | 10                | 20                | 12                | 20                | 25                | 32                | 40                | 63                | 125               | 16                | 20                | 32                | 40                | 200               | 200               | –                 |
|                                                               | 60V      | A                 | 7                 | 20                | 12                | 20                | 25                | 32                | 40                | 50                | 80                | 16                | 20                | 32                | 40                | 200               | 200               | –                 |
|                                                               | 110V     | A                 | 2                 | 4                 | 4                 | 4                 | 4                 | 6                 | 6                 | 8                 | 10                | 4                 | 4                 | 5                 | 6                 | 35                | 35                | –                 |
|                                                               | 220V     | A                 | 0.7               | 0.7               | 0.6               | 0.6               | 0.7               | 0.9               | 0.9               | 1                 | 1.2               | 0.6               | 0.6               | 0.8               | 0.8               | 2.5               | 2.5               | –                 |
|                                                               | 440V     | A                 | 0.2               | 0.2               | 0.25              | 0.25              | –                 | –                 | –                 | –                 | –                 | 0.25              | 0.25              | 0.25              | 0.25              | 0.9               | 0.9               | –                 |
| DC23A                                                         | 24V      | A                 | –                 | –                 | 10(1)             | 20(1)             | 25(1)             | 32(1)             | 40(1)             | 50(1)             | 125(1)            | 16(1)             | 20(1)             | 32(1)             | 40(1)             | –                 | –                 | –                 |
|                                                               | 48V      | A                 | –                 | –                 | 10(2)             | 20(2)             | 25(2)             | 32(2)             | 40(2)             | 50(2)             | 125(2)            | 16(2)             | 20(2)             | 32(2)             | 40(1)             | –                 | –                 | –                 |
|                                                               | 60V      | A                 | –                 | –                 | 10(3)             | 20(3)             | 25(3)             | 32(3)             | 40(3)             | 50(3)             | 125(3)            | 16(3)             | 20(3)             | 32(3)             | 40(3)             | –                 | –                 | –                 |
| No. of contacts connected in series are indicated in brackets | 110V     | A                 | –                 | –                 | 5(3)              | 10(3)             | 12(3)             | 15(3)             | 20(3)             | 25(3)             | 50(3)             | 10(3)             | 10(3)             | 15(3)             | 40(3)             | –                 | –                 | –                 |
|                                                               | 220V     | A                 | –                 | –                 | 5(4)              | 8(4)              | 10(4)             | 12(4)             | 12(4)             | 15(4)             | 20(4)             | 7(4)              | 8(4)              | 12(4)             | 12(4)             | –                 | –                 | –                 |
| DC13                                                          | 24V      | A                 | 3                 | 6                 | 12                | 20                | 25                | 32                | 40                | 63                | 125               | 16                | 20                | 32                | 40                | –                 | –                 | –                 |
|                                                               | 48V      | A                 | 3                 | 6                 | 10                | 16                | 20                | 25                | 32                | 40                | 100               | 14                | 16                | 25                | 32                | –                 | –                 | –                 |
|                                                               | 60V      | A                 | 2                 | 3                 | 8                 | 12                | 16                | 16                | 16                | 28                | 50                | 10                | 12                | 14                | 16                | –                 | –                 | –                 |
|                                                               | 110V     | A                 | 1                 | 1                 | 1                 | 1                 | 1.5               | 3                 | 3                 | 3.3               | 4                 | 1                 | 1                 | 3                 | 3                 | –                 | –                 | –                 |
|                                                               | 220V     | A                 | 0.3               | 0.4               | 0.4               | 0.4               | 0.4               | 0.5               | –                 | –                 | –                 | 0.4               | 0.4               | 0.5               | 0.5               | –                 | –                 | –                 |
|                                                               | 440V     | A                 | 0.1               | 0.15              | 0.15              | 0.15              | –                 | –                 | –                 | –                 | –                 | 0.15              | 0.15              | 0.15              | 0.15              | –                 | –                 | –                 |
| Power dissipation                                             | w/pole   |                   | 0.4               | 0.8               | 0.8               | 0.8               | 1.1               | 1.5               | 2.0               | 3.4               | 6.3               | 0.6               | 0.6               | 1.6               | 1.6               | 26                | 64.5              | 1                 |
| Mechanical life                                               | cycles   |                   | 1x10 <sup>6</sup> | 1x10 <sup>6</sup> | 3x10 <sup>6</sup> | 5x10 <sup>6</sup> | 5x10 <sup>6</sup> | 5x10 <sup>6</sup> | 5x10 <sup>6</sup> | 5x10 <sup>6</sup> | 1x10 <sup>6</sup> | 1x10 <sup>6</sup> | 1x10 <sup>6</sup> | 1x10 <sup>6</sup> | 1x10 <sup>6</sup> | 2x10 <sup>5</sup> | 2x10 <sup>5</sup> | 1x10 <sup>6</sup> |
| Terminal screw                                                | M        |                   | 2.5               | 3                 | 3                 | 3                 | 3.5               | 4                 | 4                 | 5                 | 2x5               | 3                 | 3                 | 4                 | 4                 | 10                | 10                | 3                 |
| Tightening torque                                             | max      | Nm                | 0.4               | 0.5               | 0.5               | 0.5               | 0.8               | 1.2               | 1.2               | 2                 | 2                 | 0.5               | 0.8               | 1.2               | 1.2               | 10                | 10                | 0.5               |
| Conductor cross section                                       | max. r/f | 2xmm <sup>2</sup> | 1.5/1.5           | 2.5/2.5           | 2.5/2.5           | 2.5/2.5           | 4/4               | 6/4               | 10/6              | 16/10             | 50/50             | 2.5/2.5           | 2.5/2.5           | 10/6              | 10/6              | 1x95              | 1x185             | 2.5/25            |
|                                                               |          | 2xAWG             | 14/14             | 12/12             | 12/14             | 12/14             | 10/12             | 8/10              | 8/10              | 6/8               | 1/0 / 1/0         | 12/12             | 12/12             | 8/10              | 8/10              | 1x3/0             | 1xmcsm 350        | 12/14             |
| r: rigid/solid                                                | min. r/f | 2xmm <sup>2</sup> | 0.5/0.5           | 0.5/0.5           | 0.5/0.5           | 0.5/0.5           | 0.5/0.5           | 1.5/1.5           | 1.5/1.5           | 2.5/2.5           | 2.5/2.5           | 0.5/0.5           | 0.5/0.5           | 1.5/1.5           | 1.5/1.5           | –                 | –                 | 0.5/0.5           |
| f: flexible/stranded                                          |          | 2xAWG             | 20/20             | 20/20             | 20/20             | 20/20             | 20/20             | 16/16             | 16/16             | 14/14             | 14/14             | 20/20             | 20/20             | 16/16             | 16/16             | –                 | –                 | 20/20             |
| AMBIENT CONDITIONS                                            |          |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Operating temperature                                         |          | °C                | –25...+55         |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Storage temperature                                           |          | °C                | –40...+70         |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |