



# ROTARY CAM SWITCH 7GN SERIES, CHANGEOVER SWITCH 3 POLES 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

| Product designation      |   |           |      | Rotary cam switches   |
|--------------------------|---|-----------|------|---|
| Product type designation | on  |           |      | 7GN20   |
| General characteristics  |   |           |      |   |
| Switching diagram        |   |           |      | 53 - Changeover<br>switch 3 poles - 2<br>speed motor<br>starting with<br>separate<br>windings |
| N° of elements           |   |           |      | 3   |
| Mounting form            |   |           |      | O - Rear<br>mounting with<br>black handle   |
| Contact characteristics  |   |           |      |   |
| Rated insulation voltage | e Ui                                      |           |      |   |
|                          |   | IEC/EN    | V    | 690   |
|                          |   | UL/CSA    | V    | 600   |
| Rated impulse withstar   |   |           | kV   | 6   |
| Conventional free air th | ermal current Ith                         |           |      |   |
|                          |   | IEC/EN    | Α    | 20  |
|                          |   | UL/CSA    | Α    | 20  |
| Rated operational volta  |   |           | V    | 480   |
| Rated operational impu   |   |           | kV   | 4   |
| Maximum fuse size for    | short-circuit protection In (gG)          |           |      |   |
|                          |   | 10kA      | Α    | 20  |
|                          |   | 15kA      | Α    | 16  |
|                          |   | 25kA      | Α    | 16  |
| Rated short time currer  | nt Icw                                    |           |      |   |
|                          |   | 1s        | kA   | 250   |
| Conductivity             |   |           |      | 10/5 mA/V   |
| Operational current le   |   |           |      |   |
|                          | AC1/AC21A                                 |           |      |   |
|                          | 1015                                      |           | A    | 20  |
|                          | AC15                                      | 440)/     |      | 4.0   |
|                          |   | 110V      | A    | 10  |
|                          |   | 220/230V  | A    | 8   |
|                          |   | 380/400V  | A    | 6   |
| Rated operational pow    | or in AC                                  | 660/690V  | Α    | 1.5   |
| Rated operational pow    |   |           |      |   |
|                          | Three-phase AC-3                          | 220/230V  | kW   | 3   |
|                          |   | 380/440V  | kW   | 5.5   |
|                          |   | 500/690V  | kW   | 5.5   |
|                          | Single-phase AC-3                         | 300/030 V | KVV  |   |
|                          | onigio pridocino o                        | 110V      | kW   | 0.8   |
|                          |   | 220/230V  | kW   | 2.2   |
|                          |   | 380/440V  | kW   | 3   |
|                          | Three-phase AC23A                         | 000/1101  | 1000 |   |
|                          | 55 p55 . 1020/1                           | 220/230V  | kW   | 5   |
|                          |   | 380/440V  | kW   | 7.5   |
|                          |   | 500/690V  | kW   | 7.5   |
|                          | Single-phase AC23A                        | 230,000   | •    |   |
|                          | 5 - 1 ····· ··· · · · · · · · · · · · · · | 110V      | kW   | 0.8   |
|                          |   |           |      |   |



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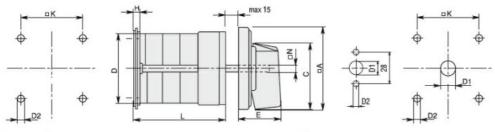
|                          |                                       | 220/230V   | kW     | 2.5               |
|--------------------------|---------------------------------------|------------|--------|-------------------|
|                          |                                       | 380/440V   | kW     | 3.7               |
| Rated operational curr   |                                       |            |        |                   |
|                          | DC21A                                 |            |        |                   |
|                          |                                       | 48V        | Α      | 20                |
|                          |                                       | 60V        | Α      | 20                |
|                          |                                       | 110V       | Α      | 4                 |
|                          |                                       | 220V       | Α      | 0.6               |
|                          |                                       | 440V       | Α      | 0.25              |
|                          | DC23A (poles in series)               |            |        |                   |
|                          |                                       | 24V        | Α      | 20 (1)            |
|                          |                                       | 48V        | Α      | 20 (2)            |
|                          |                                       | 60V        | Α      | 20 (3)            |
|                          |                                       | 110V       | Α      | 10 (3)            |
|                          |                                       | 220V       | Α      | 8 (4)             |
|                          | DC13                                  |            |        |                   |
|                          |                                       | 24V        | Α      | 20                |
|                          |                                       | 48V        | Α      | 16                |
|                          |                                       | 60V        | Α      | 12                |
|                          |                                       | 110V       | Α      | 1                 |
|                          |                                       | 220V       | A      | 0.4               |
|                          |                                       | 440V       | A      | 0.15              |
| Power dissipation        |                                       | 1101       | W      | 0.8               |
| Mechanical features      |                                       |            | V V    | 0.0               |
| Terminals screw          |                                       |            |        | M3                |
| Tightening torque for to | erminals max                          |            | Nm     | 0.5               |
| Conductor size           | ommaio max                            |            |        | 0.0               |
| Conductor SIZE           | AWG - Rigid cable                     |            |        |                   |
|                          | AWO Rigid cable                       | min        | AWG    | 20                |
|                          |                                       | Max        | AWG    | 12                |
|                          | AWG - Flexible cable                  | IVIAA      | AVVG   | 12                |
|                          | AVVG - Flexible cable                 | min        | AWG    | 20                |
|                          |                                       | min<br>Max | AWG    | 20                |
|                          | Conductor size (IEC) Flouible coble   | IVIAX      | AVVG   | 14                |
|                          | Conductor size (IEC) - Flexible cable | !          | 2      | ٥.5               |
|                          |                                       | min        | mm²    | 0.5               |
|                          | Conductor sine (IEO) Dinistration     | Max        | mm²    | 2.5               |
|                          | Conductor size (IEC) - Rigid cable    |            |        | 0.5               |
|                          |                                       | min        | mm²    | 0.5               |
|                          |                                       | Max        | mm²    | 2.5               |
| Mechanical life          |                                       |            | cycles | 5x10 <sup>6</sup> |
| UL technical data        | Parameter I                           |            |        |                   |
| Motor power for direct   |                                       |            |        |                   |
|                          | for three-phase motor                 |            |        |                   |
|                          |                                       | 120V       | HP     | 1.5               |
|                          |                                       | 240V       | HP     | 3                 |
|                          |                                       | 480V       | HP     | 7.5               |
|                          |                                       | 600V       | HP     | 10                |
|                          | for single-phase motor                |            |        |                   |
|                          |                                       | 120V       | HP     | 0.75              |
|                          |                                       | 240V       | HP     | 2                 |
| Ambient conditions       |                                       |            |        |                   |
| Temperature              |                                       |            |        |                   |
|                          | Operating temperature                 |            |        |                   |
|                          |                                       | min        | °C     | -25               |
|                          |                                       |            |        |                   |



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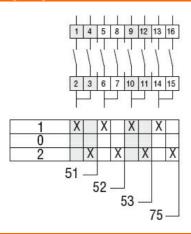
|                         | max | °C | +55  |  |
|-------------------------|-----|----|------|--|
| Storage temperature     |     |    |      |  |
|                         | min | °C | -40  |  |
|                         | max | °C | +70  |  |
| Resistance & Protection |     |    |      |  |
| Frontal IP degree       |     |    | IP40 |  |
| Terminals IP degree     |     |    | IP00 |  |
| Dimensions              |     |    |      |  |

#### **Dimensions**



| Series | Dimensions |      |    |     |      |     |    | L Number of elements |      |       |      |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|------|-----|----|----------------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | C    | ØD | ØD2 | Е    | Η   | □K | □N                   | 1    | 2     | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| 7GN12  | 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 |
| 7GN20  | 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 |
| 7GN25  | 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 |
| 7GN32  | 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 |
| 7GN40  | 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 |
| 7GN63  | 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 |
| 7GN125 | 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 |

## Wiring diagrams



### Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

UL60947-4-1

Certificates

cCSAus

EAC

UL

### ETIM classification



### 7GN2053O

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ETIM 8.0

EC001029 -Selector switch, complete