



# ROTARY CAM SWITCH 7GN SERIES, MULTI-STEP 1-2-3, 2 POLES 16A, FOR FRONT MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

| Product designation                                    |                      |          | Rotary cam switches                        |
|--|----------------------|----------|--|
| Product type designation                               |                      |          | 7GN12                                      |
| General characteristics                                |                      |          |  |
| Switching diagram                                      |                      |          | 86 - Multi-step 1-<br>2-3 2 poles          |
| N° of elements   |                      |          | 3  |
| Mounting form  |                      |          | U - Front<br>mounting with<br>black handle |
| Contact characteristics                                |                      |          | Sidor Harraro                              |
| Rated insulation voltage Ui                            |                      |          |  |
|  | IEC/EN               | V        | 690  |
|  | UL/CSA               | V        | 600  |
| Rated impulse withstand voltage Uimp                   |                      | kV       | 6  |
| Conventional free air thermal current Ith              | 150/5N               |          | 4.0  |
|  | IEC/EN<br>UL/CSA     | A        | 16<br>15                                   |
| Rated operational voltage                              | UL/C5A               | A<br>V   | 480  |
| Rated operational impulse voltage                      |                      | kV       | 4  |
| Maximum fuse size for short-circuit protection In (gG) |                      | 100      | '  |
| (90)   | 10kA                 | Α        | 16   |
|  | 15kA                 | Α        | 10   |
|  | 25kA                 | Α        | 10   |
| Rated short time current lcw                           |                      |          |  |
|  | 1s                   | kA       | 200  |
| Conductivity   |                      |          | 10/5 mA/V                                  |
| Operational current le IEC/EN                          |                      |          |  |
| AC1/AC21A  |                      | Α        | 16   |
| AC15   |                      |          | 10   |
| AOTO   | 110V                 | Α        | 10   |
|  | 220/230V             | Α        | 8  |
|  | 380/400V             | Α        | 4  |
|  | 660/690V             | Α        | 1.5  |
| Rated operational power in AC                          |                      |          |  |
| Three-phase AC-3                                       | /                    |          |  |
|  | 220/230V             | kW       | 2.5  |
|  | 380/440V<br>500/690V | kW<br>kW | 4<br>5.5                                   |
| Single-phase AC-3                                      | 300/090 V            | KVV      | 3.3  |
| Olligie phase AO 5                                     | 110V                 | kW       | 0.8  |
|  | 220/230V             | kW       | 1.5  |
|  | 380/440V             | kW       | 2.2  |
| Three-phase AC23A                                      |                      |          |  |
|  | 220/230V             | kW       | 3  |
|  | 380/440V             | kW       | 5.5  |
|  | 500/690V             | kW       | 7.5  |
| Single-phase AC23A                                     | 4401                 | 1 147    | 0.0  |
|  | 110V                 | kW       | 0.8  |
|  | 220/230V<br>380/440V | kW<br>kW | 1.7<br>3                                   |
| Rated operational current in DC                        | 300/4407             | r v v    | J  |





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|                                   | DC21A                                 |      |        |                   |
|-----------------------------------|---------------------------------------|------|--------|-------------------|
|                                   | DOZTA                                 | 48V  | Α      | 12                |
|                                   |                                       | 60V  | A      | 12                |
|                                   |                                       | 110V | A      | 4                 |
|                                   |                                       | 220V | A      | 0.6               |
|                                   |                                       | 440V | A      | 0.25              |
|                                   | DC23A (poles in series)               |      |        |                   |
|                                   | ,                                     | 24V  | Α      | 10 (1)            |
|                                   |                                       | 48V  | Α      | 10 (2)            |
|                                   |                                       | 60V  | Α      | 10 (3)            |
|                                   |                                       | 110V | Α      | 5 (3)             |
|                                   |                                       | 220V | Α      | 5 (4)             |
|                                   | DC13                                  |      |        |                   |
|                                   |                                       | 24V  | Α      | 12                |
|                                   |                                       | 48V  | Α      | 10                |
|                                   |                                       | 60V  | Α      | 8                 |
|                                   |                                       | 110V | Α      | 1                 |
|                                   |                                       | 220V | Α      | 0.4               |
|                                   |                                       | 440V | Α      | 0.15              |
| Power dissipation                 |                                       |      | W      | 0.8               |
| Mechanical features               |                                       |      |        | 140               |
| Terminals screw                   | and a factor of                       |      | N1     | M3                |
| Tightening torque for te          | rminais max                           |      | Nm     | 0.5               |
| Conductor size                    | AVAC Digid coble                      |      |        |                   |
|                                   | AWG - Rigid cable                     | min  | AWG    | 20                |
|                                   |                                       | Max  | AWG    | 12                |
|                                   | AWG - Flexible cable                  | WIGH | 7,,,,  |                   |
|                                   | /We Howard dable                      | min  | AWG    | 20                |
|                                   |                                       | Max  | AWG    | 14                |
|                                   | Conductor size (IEC) - Flexible cable |      |        |                   |
|                                   |                                       | min  | mm²    | 0.5               |
|                                   |                                       | Max  | mm²    | 2.5               |
|                                   | Conductor size (IEC) - Rigid cable    |      |        |                   |
|                                   |                                       | min  | mm²    | 0.5               |
|                                   |                                       | Max  | mm²    | 2.5               |
| Mechanical life UL technical data |                                       |      | cycles | 3x10 <sup>6</sup> |
| Motor power for direct-           | on-line control                       |      |        |                   |
| oto. porror for direct t          | for three-phase motor                 |      |        |                   |
|                                   | Tot times phase motor                 | 120V | HP     | 1.5               |
|                                   |                                       | 240V | HP     | 3                 |
|                                   | for single-phase motor                |      |        |                   |
|                                   |                                       | 120V | HP     | 0.5               |
|                                   |                                       | 240V | HP     | 1                 |
| Ambient conditions                |                                       |      |        |                   |
| Temperature                       |                                       |      |        |                   |
|                                   | Operating temperature                 |      |        |                   |
|                                   |                                       | min  | °C     | -25               |
|                                   |                                       | max  | °C     | +55               |
|                                   | Storage temperature                   |      | 0.0    | 40                |
|                                   |                                       | min  | °C     | -40<br>-70        |
| Resistance & Protectio            | n                                     | max  | °C     | +70               |
| Resistance & Protectio            |                                       |      |        |                   |



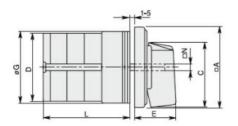
**ENERGY AND AUTOMATION** 

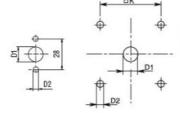
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Frontal IP degree IP40

Terminals IP degree IP00

#### Dimensions

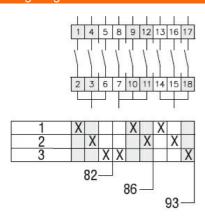




Standard drillings for 7GN125. Drillings on request for 4 screws fixing (4V version).

| Series | Dimensions |      |    |     |     |      |      |    | L Number of elements |      |      |       |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|-----|------|------|----|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | С    | ØD | ØD1 | ØD2 | Е    | 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 |

### 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

**ETIM 8.0** 

EC001029 -Selector switch, complete