



Rotary cam  
switches  
7GN20

Product designation

Product type designation

### General characteristics

Switching diagram

91 - ON/OFF  
switch 2 poles

N° of elements

1

Mounting form

O - Rear  
mounting with  
black handle

### Contact characteristics

Rated insulation voltage  $U_i$

|        |   |     |
|--------|---|-----|
| IEC/EN | V | 690 |
| UL/CSA | V | 600 |

Rated impulse withstand voltage  $U_{imp}$

kV 6

Conventional free air thermal current  $I_{th}$

|        |   |    |
|--------|---|----|
| IEC/EN | A | 20 |
| UL/CSA | A | 20 |

Rated operational voltage

V 480

Rated operational impulse voltage

kV 4

Maximum fuse size for short-circuit protection  $I_n$  (gG)

|      |   |    |
|------|---|----|
| 10kA | A | 20 |
| 15kA | A | 16 |
| 25kA | A | 16 |

Rated short time current  $I_{cw}$

1s kA 250

Conductivity

10/5 mA/V

Operational current  $I_e$  IEC/EN

AC1/AC21A

A 20

AC15

|          |   |     |
|----------|---|-----|
| 110V     | A | 10  |
| 220/230V | A | 8   |
| 380/400V | A | 6   |
| 660/690V | A | 1.5 |

Rated operational power in AC

Three-phase AC-3

|          |    |     |
|----------|----|-----|
| 220/230V | kW | 3   |
| 380/440V | kW | 5.5 |
| 500/690V | kW | 5.5 |

Single-phase AC-3

|          |    |     |
|----------|----|-----|
| 110V     | kW | 0.8 |
| 220/230V | kW | 2.2 |
| 380/440V | kW | 3   |

Three-phase AC23A

220/230V kW 5

|                                        |          |                 |                   |
|----------------------------------------|----------|-----------------|-------------------|
|                                        | 380/440V | kW              | 7.5               |
|                                        | 500/690V | kW              | 7.5               |
| Single-phase AC23A                     |          |                 |                   |
|                                        | 110V     | kW              | 0.8               |
|                                        | 220/230V | kW              | 2.5               |
|                                        | 380/440V | kW              | 3.7               |
| Rated operational current in DC        |          |                 |                   |
| DC21A                                  |          |                 |                   |
|                                        | 48V      | A               | 20                |
|                                        | 60V      | A               | 20                |
|                                        | 110V     | A               | 4                 |
|                                        | 220V     | A               | 0.6               |
|                                        | 440V     | A               | 0.25              |
| DC23A (poles in series)                |          |                 |                   |
|                                        | 24V      | A               | 20 (1)            |
|                                        | 48V      | A               | 20 (2)            |
|                                        | 60V      | A               | 20 (3)            |
|                                        | 110V     | A               | 10 (3)            |
|                                        | 220V     | A               | 8 (4)             |
| DC13                                   |          |                 |                   |
|                                        | 24V      | A               | 20                |
|                                        | 48V      | A               | 16                |
|                                        | 60V      | A               | 12                |
|                                        | 110V     | A               | 1                 |
|                                        | 220V     | A               | 0.4               |
|                                        | 440V     | A               | 0.15              |
| Power dissipation                      |          | W               | 0.8               |
| Mechanical features                    |          |                 |                   |
| Terminals screw                        |          |                 | M3                |
| Tightening torque for terminals max    |          | Nm              | 0.5               |
| Conductor size                         |          |                 |                   |
| AWG - Rigid cable                      |          |                 |                   |
|                                        | min      | AWG             | 20                |
|                                        | Max      | AWG             | 12                |
| AWG - Flexible cable                   |          |                 |                   |
|                                        | min      | AWG             | 20                |
|                                        | Max      | AWG             | 14                |
| Conductor size (IEC) - Flexible cable  |          |                 |                   |
|                                        | min      | mm <sup>2</sup> | 0.5               |
|                                        | Max      | mm <sup>2</sup> | 2.5               |
| Conductor size (IEC) - Rigid cable     |          |                 |                   |
|                                        | min      | mm <sup>2</sup> | 0.5               |
|                                        | Max      | mm <sup>2</sup> | 2.5               |
| Mechanical life                        |          | cycles          | 5x10 <sup>6</sup> |
| UL technical data                      |          |                 |                   |
| Motor power for direct-on-line control |          |                 |                   |
| 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 |
| max | °C | +55 |

#### Storage temperature

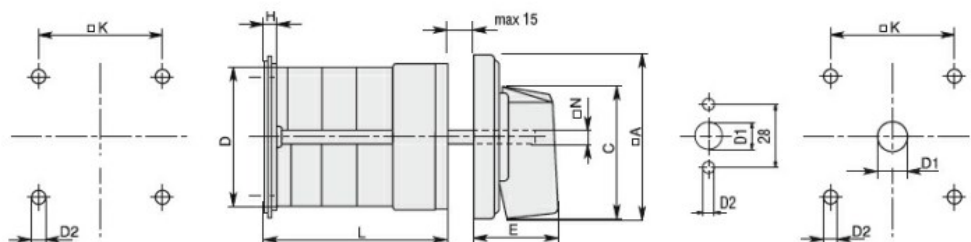
|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

## Resistance & Protection

Frontal IP degree IP40

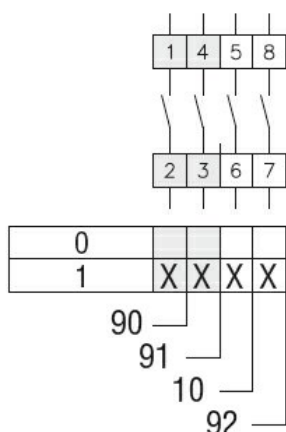
Terminals IP degree IP00

## Dimensions



| 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    |
| 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

ETIM 8.0

EC001029 -  
Selector switch,  
complete