



Rotary cam  
switches  
7GN12

Product designation

Product type designation

### General characteristics

Switching diagram

91 - ON/OFF  
switch 2 poles

N° of elements

1

Mounting form

U - Front  
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 | 16 |
| UL/CSA | A | 15 |

Rated operational voltage

V 480

Rated operational impulse voltage

kV 4

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

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

Rated short time current  $I_{cw}$

1s A 200

Conductivity

10/5 mA/V

Operational current  $I_e$  IEC/EN

AC1/AC21A

A 16

AC15

|          |   |     |
|----------|---|-----|
| 110V     | A | 10  |
| 220/230V | A | 8   |
| 380/400V | A | 4   |
| 660/690V | A | 1.5 |

Rated operational power in AC

Three-phase AC-3

|          |    |     |
|----------|----|-----|
| 220/230V | kW | 2.5 |
| 380/440V | kW | 4   |
| 500/690V | kW | 5.5 |

Single-phase AC-3

|          |    |     |
|----------|----|-----|
| 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                     |  |          |                 |                   |
|  |  | 110V     | kW              | 0.8               |
|  |  | 220/230V | kW              | 1.7               |
|  |  | 380/440V | kW              | 3                 |
| Rated operational current in DC        |  |          |                 |                   |
| DC21A                                  |  |          |                 |                   |
|  |  | 48V      | A               | 12                |
|  |  | 60V      | A               | 12                |
|  |  | 110V     | A               | 4                 |
|  |  | 220V     | A               | 0.6               |
|  |  | 440V     | A               | 0.25              |
| DC23A (poles in series)                |  |          |                 |                   |
|  |  | 24V      | A               | 10 (1)            |
|  |  | 48V      | A               | 10 (2)            |
|  |  | 60V      | A               | 10 (3)            |
|  |  | 110V     | A               | 5 (3)             |
|  |  | 220V     | A               | 5 (4)             |
| DC13                                   |  |          |                 |                   |
|  |  | 24V      | A               | 12                |
|  |  | 48V      | A               | 10                |
|  |  | 60V      | A               | 8                 |
|  |  | 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          | 3x10 <sup>6</sup> |
| UL technical data                      |  |          |                 |                   |
| Motor power for direct-on-line control |  |          |                 |                   |
| for three-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

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

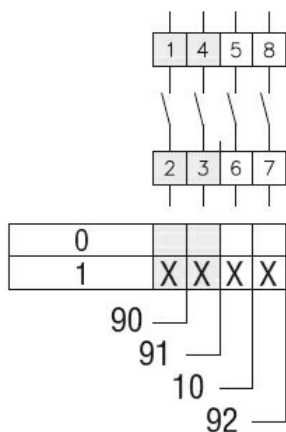
## Resistance & Protection

|                   |      |
|-------------------|------|
| Frontal IP degree | IP40 |
|-------------------|------|

|                     |      |
|---------------------|------|
| Terminals IP degree | IP00 |
|---------------------|------|

## Dimensions

## 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