



Product designation

Rotary cam switches

Product type designation

7GN20

### General characteristics

Switching diagram

91 - ON/OFF switch 2 poles

N° of elements

1

Mounting form

U25 - Front mounting with red/yellow handle padlockable in 0 and protection covers

### 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 | A | 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

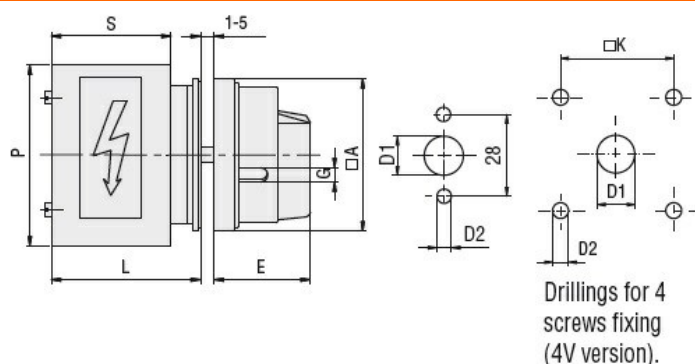
Frontal IP degree

IP40

Terminals IP degree

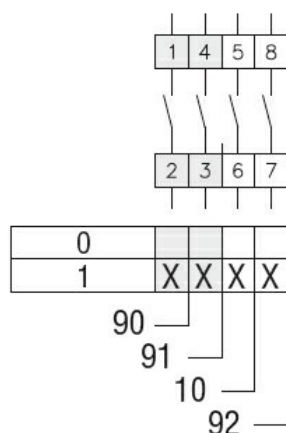
IP00

### Dimensions



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

### 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