



Product designation

Product type designation

Rotary cam  
switches  
7GN20

### General characteristics

Switching diagram

10 - ON/OFF  
switch 3 poles

N° of elements

2

Mounting form

P - Plastic  
enclosure 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 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 AC3

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

Single-phase AC3

|          |    |     |
|----------|----|-----|
| 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

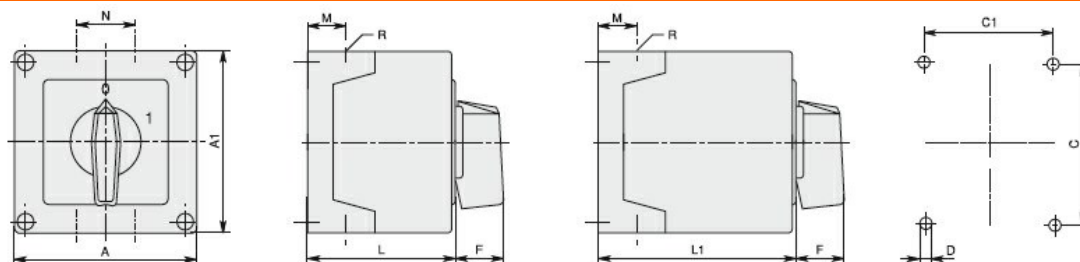
|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

## Resistance & Protection

Frontal IP degree IP65

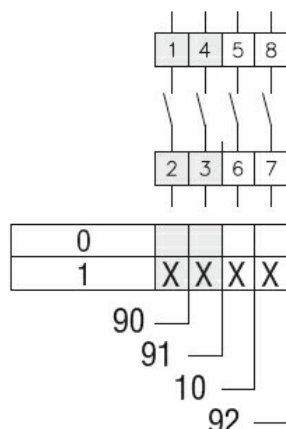
Terminals IP degree IP00

## Dimensions



| Series | Enclosure size | Number of elements |       | Dimensions |     |      |     |     |    |    |      |      |       | Cable entry      | Protection degree |
|--------|----------------|--------------------|-------|------------|-----|------|-----|-----|----|----|------|------|-------|------------------|-------------------|
|        |                | L                  | L1    | A          | A1  | C    | C1  | D   | F  | M  | N    | L    | L1    |                  |                   |
| 7GN12  | 75x75          | 1 - 2              | 3 - 4 | 75         | 75  | 50   | 64  | 4.5 | 19 | 14 | 28   | 57.5 | 79.8  | 4xPG13.5         | IP65              |
| 7GN20  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1                  | 2 - 3 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN12  | 90x90          | 1 - 3              | 4 - 6 | 90         | 90  | 79   | 63  | 4.5 | 25 | 19 | 30   | 71.3 | 98.3  | 4xPG16           | IP65              |
| 7GN20  |                | 1 - 3              | 4 - 6 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN40  |                | 1                  | 2 - 3 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN12  | 110x110        | 1 - 4              | 5 - 8 | 110        | 110 | 98.4 | 83  | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21           | IP65              |
| 7GN20  |                | 1 - 4              | 5 - 8 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1 - 3              | 4 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  |                | 1 - 3              | 4 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN40  |                | 1 - 2              | 3 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  | 125x175        | 1 - 3              | 4 - 5 | 125        | 175 | 146  | 112 | 5.5 | 32 | 21 | 68   | 84.3 | 118.3 | 4xPG21<br>2xPG11 | IP65              |
| 7GN40  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN125 |                | 1                  | 2     |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  | 180x254        | 1 - 5              | 6 - 8 | 180        | 254 | 120  | 190 | 5.5 | 32 | 35 | 76   | 121  | 175   | 4xPG29<br>2xPG11 | IP65              |
| 7GN40  |                | 1 - 4              | 5 - 7 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 3              | 4 - 6 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN125 |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |

## Wiring diagrams



## Certifications and compliance

### Compliance

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

Certificates

EAC

ETIM classification

ETIM 8.0

EC001105 - Off-  
load switch