

|                                                        |  |  |                                         |    |     |
|--------------------------------------------------------|--|--|-----------------------------------------|----|-----|
| Product designation                                    |  |  | Rotary cam switches                     |    |     |
| Product type designation                               |  |  | 7GN20                                   |    |     |
| General characteristics                                |  |  |                                         |    |     |
| Switching diagram                                      |  |  | 54 - Changeover switch without 0 1 pole |    |     |
| N° of elements                                         |  |  | 1                                       |    |     |
| Mounting form                                          |  |  | O - Rear mounting with black handle     |    |     |
| Contact characteristics                                |  |  |                                         |    |     |
| 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              |  |  | 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 In (gG) |  |  | 10kA                                    | A  | 20  |
|                                                        |  |  | 15kA                                    | A  | 16  |
|                                                        |  |  | 25kA                                    | A  | 16  |
| Rated short time current Icw                           |  |  | 1s                                      | kA | 250 |
| Conductivity                                           |  |  | 10/5 mA/V                               |    |     |
| Operational current Ie 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 |

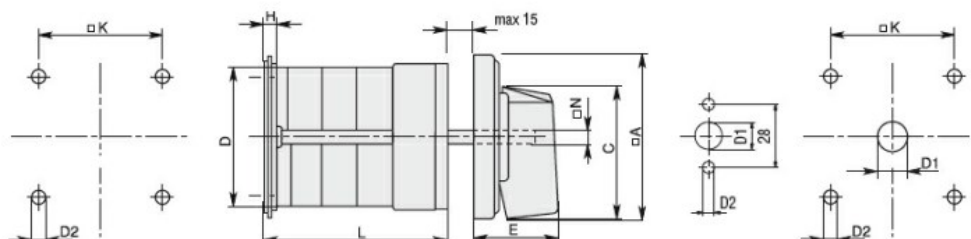
Storage temperature

min °C -40  
max °C +70

### Resistance & Protection

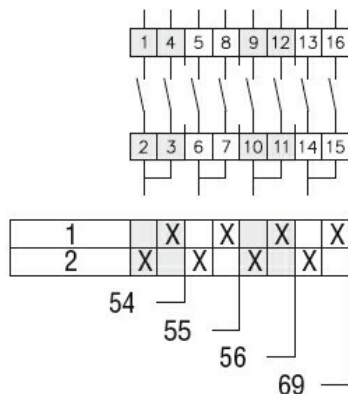
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

### Dimensions



| Series | Dimensions |      |    |     |      |     |    |    | L Number of elements |       |      |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|------|-----|----|----|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | ØA         | C    | ØD | ØD2 | E    | H   | ØK | ØN | 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