

### General characteristics

|                   |                                               |
|-------------------|-----------------------------------------------|
| Switching diagram | 136 - Multi-step<br>0-1-2-3 3 poles           |
| N° of elements    | 5                                             |
| Mounting form     | P - Plastic<br>enclosure with<br>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     |
|                                                           |                                 |          |           |
|                                                           | 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      |
| Rated operational power in AC                             | 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 | 48V      | A 20      |
|                                                           |                                 | 60V      | A 20      |
|                                                           |                                 |          |           |
|                                                           | DC21A                           |          |           |
|                                                           |                                 |          |           |

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

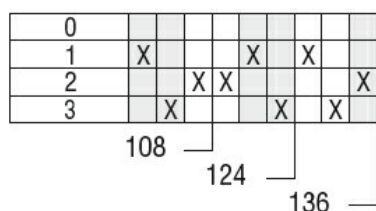
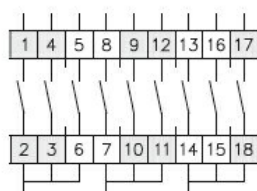
## Dimensions

| Series              | Enclosure size     | Number of elements |       | Dimensions |     |         |         |     |    |    |      |      |       | Cable entry      | Protection degree |
|---------------------|--------------------|--------------------|-------|------------|-----|---------|---------|-----|----|----|------|------|-------|------------------|-------------------|
|                     |                    | L                  | L1    | A          | A1  | C       | C1      | D   | F  | M  | N    | L    | L1    |                  |                   |
| 7GN12 <sup>Ⓟ</sup>  | 75x75 <sup>Ⓟ</sup> | 1 - 2              | 3 - 4 | 75         | 75  | 50      | 64      | 4.5 | 19 | 14 | 28   | 57.5 | 79.8  | 4xPG13.5         | IP65              |
| 7GN20 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25 <sup>Ⓟ</sup>  |                    | 1                  | 2 - 3 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN12 <sup>Ⓟ</sup>  | 90x90              | 1 - 3              | 4 - 6 | 90         | 90  | 79      | 63      | 4.5 | 25 | 19 | 30   | 71.3 | 98.3  | 4xPG16           | IP65              |
| 7GN20 <sup>Ⓟ</sup>  |                    | 1 - 3              | 4 - 6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32 <sup>Ⓟ</sup>  |                    | 1                  | 2 - 3 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40 <sup>Ⓟ</sup>  | 110x110            | 1                  | 2 - 3 | 110        | 110 | 98.4    | 83      | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21           | IP65              |
| 7GN12               |                    | 1 - 4              | 5 - 8 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN20               |                    | 1 - 4              | 5 - 8 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN25               |                    | 1 - 3              | 4 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63               |                    | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32 <sup>Ⓟ</sup>  | 125x175            | 1 - 2              | 3 - 4 | 125        | 175 | 146     | 112     | 5.5 | 32 | 21 | 68   | 84.3 | 118.3 | 4xPG21<br>2xPG11 | IP65              |
| 7GN40 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63 <sup>Ⓟ</sup>  |                    | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125 <sup>Ⓟ</sup> | 198x248            | 1                  | 2     | 198        | 248 | 190-210 | 140-180 | 5.5 | 32 | 35 | 104  | -    | 166.5 | 6xPG16-<br>21-29 | IP65              |
| 7GN32               |                    | -                  | 1 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40               |                    | -                  | 1 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63 <sup>Ⓟ</sup>  |                    | -                  | 1 - 6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125 <sup>Ⓟ</sup> |                    | -                  | 1 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |

Ⓟ Standard dimensions for cam switch in plastic enclosure with black handle (P).

Ⓟ DStandard dimensions for cam switch in plastic enclosure with red/yellow handle padlockable in 0 (P25).

## 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

EC001029 -  
Selector switch,  
complete