

### General characteristics

|                   |                                         |
|-------------------|-----------------------------------------|
| Switching diagram | 51 - Changeover switch 1 pole           |
| N° of elements    | 1                                       |
| 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  | 25        |
|                                                           | UL/CSA   | A  | 30        |
| Rated operational voltage                                 |          | V  | 480       |
| Rated operational impulse voltage                         |          | kV | 4         |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA     | A  | 25        |
|                                                           | 15kA     | A  | 25        |
|                                                           | 25kA     | A  | 25        |
| Rated short time current $I_{cw}$                         | 1s       | kA | 400       |
| Conductivity                                              |          |    | 10/5 mA/V |
| Operational current $I_e$ IEC/EN                          |          |    |           |
| AC1/AC21A                                                 |          | A  | 25        |
| AC15                                                      | 110V     | A  | 16        |
|                                                           | 220/230V | A  | 12        |
|                                                           | 380/400V | A  | 8         |
|                                                           | 660/690V | A  | 2         |
| Rated operational power in AC                             |          |    |           |
| Three-phase AC-3                                          | 220/230V | kW | 5.5       |
|                                                           | 380/440V | kW | 7.5       |
|                                                           | 500/690V | kW | 7.5       |
| Single-phase AC-3                                         | 110V     | kW | 1.5       |
|                                                           | 220/230V | kW | 3         |
|                                                           | 380/440V | kW | 5.5       |
| Three-phase AC23A                                         | 220/230V | kW | 6.5       |
|                                                           | 380/440V | kW | 11        |
|                                                           | 500/690V | kW | 11        |
| Single-phase AC23A                                        | 110V     | kW | 1.5       |
|                                                           | 220/230V | kW | 3.7       |
|                                                           | 380/440V | kW | 5.5       |
| Rated operational current in DC                           |          |    |           |
| DC21A                                                     | 48V      | A  | 25        |
|                                                           | 60V      | A  | 25        |

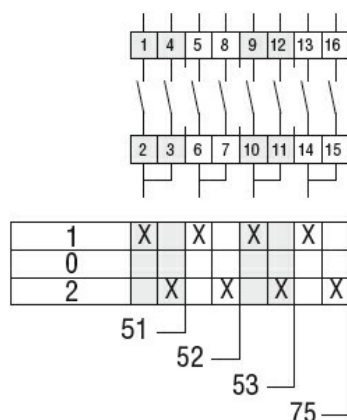
|                                        |  |      |                 |                   |
|----------------------------------------|--|------|-----------------|-------------------|
|                                        |  | 110V | A               | 4                 |
|                                        |  | 220V | A               | 0.7               |
| DC23A (poles in series)                |  |      |                 |                   |
|                                        |  | 24V  | A               | 25 (1)            |
|                                        |  | 48V  | A               | 25 (2)            |
|                                        |  | 60V  | A               | 25 (3)            |
|                                        |  | 110V | A               | 12 (3)            |
|                                        |  | 220V | A               | 10 (4)            |
| DC13                                   |  |      |                 |                   |
|                                        |  | 24V  | A               | 25                |
|                                        |  | 48V  | A               | 20                |
|                                        |  | 60V  | A               | 16                |
|                                        |  | 110V | A               | 1.5               |
|                                        |  | 220V | A               | 0.4               |
| Power dissipation                      |  |      | W               | 1.1               |
| Mechanical features                    |  |      |                 |                   |
| Terminals screw                        |  |      |                 | M3.5              |
| Tightening torque for terminals max    |  |      | Nm              | 0.8               |
| Conductor size                         |  |      |                 |                   |
| AWG - Rigid cable                      |  |      |                 |                   |
|                                        |  | min  | AWG             | 20                |
|                                        |  | Max  | AWG             | 10                |
| AWG - Flexible cable                   |  |      |                 |                   |
|                                        |  | min  | AWG             | 20                |
|                                        |  | Max  | AWG             | 12                |
| Conductor size (IEC) - Flexible cable  |  |      |                 |                   |
|                                        |  | min  | mm <sup>2</sup> | 0.5               |
|                                        |  | Max  | mm <sup>2</sup> | 4                 |
| Conductor size (IEC) - Rigid cable     |  |      |                 |                   |
|                                        |  | min  | mm <sup>2</sup> | 0.5               |
|                                        |  | Max  | mm <sup>2</sup> | 4                 |
| Mechanical life                        |  |      | cycles          | 5x10 <sup>6</sup> |
| UL technical data                      |  |      |                 |                   |
| Motor power for direct-on-line control |  |      |                 |                   |
| for three-phase motor                  |  |      |                 |                   |
|                                        |  | 120V | HP              | 3                 |
|                                        |  | 240V | HP              | 5                 |
|                                        |  | 480V | HP              | 10                |
|                                        |  | 600V | HP              | 15                |
| for single-phase motor                 |  |      |                 |                   |
|                                        |  | 120V | HP              | 1.5               |
|                                        |  | 240V | HP              | 3                 |
| 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 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 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 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40🔌   |                | 1 - 2              | 3 - 5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63    |                | 1 - 2              | 3 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32🔌   | 125x175        | 1 - 2              | 3 - 4 | 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    | 198x248        | -                  | 1 - 7 | 198        | 248 | 190-210 | 140-180 | 5.5 | 32 | 35 | 104  | -    | 166.5 | 6xPG16-<br>21-29 | IP65              |
| 7GN40    |                | -                  | 1 - 7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63🔌   |                | -                  | 1 - 6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125🔌🔌 |                | -                  | 1 - 4 |            |     |         |         |     |    |    |      |      |       |                  |                   |

① Standard dimensions for cam switch in plastic enclosure with black handle (P).

② 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