

### General characteristics

|                   |                                                                                        |
|-------------------|----------------------------------------------------------------------------------------|
| Switching diagram | 53 - Changeover switch 3 poles - 2 speed motor starting with separate windings         |
| N° of elements    | 3                                                                                      |
| Mounting form     | U12 - Front mounting without front plate with key operation for hole diam. 22mm fixing |

### 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        | 16        |
|                                                           | UL/CSA             | A        | 15        |
| Rated operational voltage                                 |                    | V        | 480       |
| Rated operational impulse voltage                         |                    | kV       | 4         |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA               | A        | 16        |
|                                                           | 15kA               | A        | 10        |
|                                                           | 25kA               | A        | 10        |
|                                                           |                    |          |           |
| Rated short time current $I_{cw}$                         | 1s                 | kA       | 200       |
|                                                           |                    |          |           |
| Conductivity                                              |                    |          | 10/5 mA/V |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A          |          |           |
|                                                           |                    | A        | 16        |
|                                                           | AC15               | 110V     | A 10      |
|                                                           |                    | 220/230V | A 8       |
|                                                           |                    | 380/400V | A 4       |
|                                                           |                    | 660/690V | A 1.5     |
|                                                           | Three-phase AC-3   | 220/230V | kW 2.5    |
|                                                           |                    | 380/440V | kW 4      |
|                                                           |                    | 500/690V | kW 5.5    |
|                                                           | Single-phase AC-3  | 110V     | kW 0.8    |
|                                                           |                    | 220/230V | kW 1.5    |
|                                                           |                    | 380/440V | kW 2.2    |
| Rated operational power in AC                             | Three-phase AC23A  | 220/230V | kW 3      |
|                                                           |                    | 380/440V | kW 5.5    |
|                                                           |                    | 500/690V | kW 7.5    |
|                                                           | Single-phase AC23A | 110V     | kW 0.8    |
|                                                           |                    |          |           |
|                                                           |                    |          |           |
|                                                           |                    |          |           |

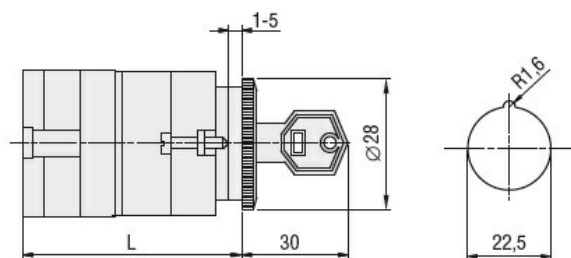
|                                        |  |          |                 |                   |
|----------------------------------------|--|----------|-----------------|-------------------|
|                                        |  | 220/230V | kW              | 1.7               |
|                                        |  | 380/440V | kW              | 3                 |
| Rated operational current in DC        |  |          |                 |                   |
| DC21A                                  |  |          |                 |                   |
|                                        |  | 48V      | A               | 12                |
|                                        |  | 60V      | A               | 12                |
|                                        |  | 110V     | A               | 4                 |
|                                        |  | 220V     | A               | 0.6               |
|                                        |  | 440V     | A               | 0.25              |
| DC23A (poles in series)                |  |          |                 |                   |
|                                        |  | 24V      | A               | 10 (1)            |
|                                        |  | 48V      | A               | 10 (2)            |
|                                        |  | 60V      | A               | 10 (3)            |
|                                        |  | 110V     | A               | 5 (3)             |
|                                        |  | 220V     | A               | 5 (4)             |
| DC13                                   |  |          |                 |                   |
|                                        |  | 24V      | A               | 12                |
|                                        |  | 48V      | A               | 10                |
|                                        |  | 60V      | A               | 8                 |
|                                        |  | 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          | 3x10 <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              | 50                |
|                                        |  | 600V     | HP              | 40                |
| for single-phase motor                 |  |          |                 |                   |
|                                        |  | 120V     | HP              | 0.5               |
|                                        |  | 240V     | HP              | 1                 |
| Ambient conditions                     |  |          |                 |                   |
| Temperature                            |  |          |                 |                   |
| Operating temperature                  |  |          |                 |                   |
|                                        |  | min      | °C              | -25               |

|                     |     |    |     |
|---------------------|-----|----|-----|
|                     | max | °C | +55 |
| Storage temperature | min | °C | -40 |
|                     | max | °C | +70 |

### Resistance & Protection

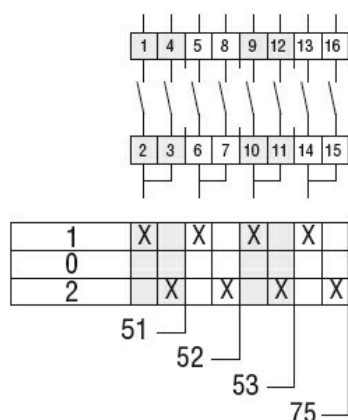
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

### Dimensions



| Series | L    |      |        |       |
|--------|------|------|--------|-------|
|        | 1    | 2    | 3....8 |       |
| 7GN12  | 47   | 56.7 | 66.4   | 114.9 |
| 7GN20  | 47   | 56.7 | 66.4   | 114.9 |
| 7GN25  | 51.4 | 65   | 78.6   | 146.6 |

### 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

EAC  
UL

### ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete