

### General characteristics

|                   |                                      |
|-------------------|--------------------------------------|
| Switching diagram | 12 - Star-delta motor starter switch |
| N° of elements    | 4                                    |
| Mounting form     | O - Rear mounting with black handle  |

### Contact characteristics

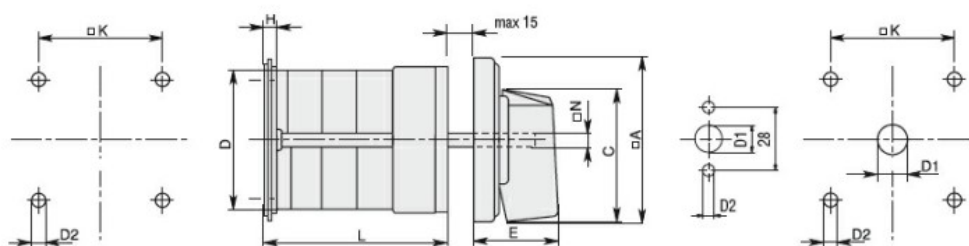
|                                                           |                    |    |           |
|-----------------------------------------------------------|--------------------|----|-----------|
| Rated insulation voltage $U_i$                            | IEC/EN             | V  | 690       |
|                                                           | UL/CSA             | V  | 600       |
| Rated impulse withstand voltage $U_{imp}$                 |                    | kV | 6         |
| Conventional free air thermal current $I_{th}$            | IEC/EN             | A  | 32        |
|                                                           | UL/CSA             | A  | 40        |
| Rated operational voltage                                 |                    | V  | 480       |
| Rated operational impulse voltage                         |                    | kV | 4         |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA               | A  | 32        |
|                                                           | 15kA               | A  | 32        |
|                                                           | 25kA               | A  | 32        |
|                                                           | 50kA               | A  | 32        |
| Rated short time current $I_{cw}$                         | 1s                 | kA | 800       |
|                                                           |                    |    | 10/5 mA/V |
| Conductivity                                              |                    |    |           |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A          |    |           |
|                                                           |                    | A  | 32        |
| Operational current $I_e$ IEC/EN                          | AC15               |    |           |
|                                                           | 110V               | A  | 25        |
|                                                           | 220/230V           | A  | 20        |
|                                                           | 380/400V           | A  | 10        |
|                                                           | 660/690V           | A  | 2         |
| Rated operational power in AC                             | Three-phase AC-3   |    |           |
|                                                           | 220/230V           | kW | 7.5       |
|                                                           | 380/440V           | kW | 11        |
|                                                           | 500/690V           | kW | 11        |
|                                                           | Single-phase AC-3  |    |           |
|                                                           | 110V               | kW | 2.2       |
|                                                           | 220/230V           | kW | 4         |
|                                                           | 380/440V           | kW | 6.5       |
|                                                           | Three-phase AC23A  |    |           |
|                                                           | 220/230V           | kW | 8         |
|                                                           | 380/440V           | kW | 15        |
|                                                           | 500/690V           | kW | 18.5      |
| Rated operational current in DC                           | Single-phase AC23A |    |           |
|                                                           | 110V               | kW | 2.2       |
|                                                           | 220/230V           | kW | 4         |
| Rated operational current in DC                           | 380/440V           | kW | 7.5       |
|                                                           | DC21A              |    |           |

|                                        |  |      |                 |                   |
|----------------------------------------|--|------|-----------------|-------------------|
|                                        |  | 48V  | A               | 32                |
|                                        |  | 60V  | A               | 32                |
|                                        |  | 110V | A               | 6                 |
|                                        |  | 220V | A               | 0.9               |
| DC23A (poles in series)                |  |      |                 |                   |
|                                        |  | 24V  | A               | 32 (1)            |
|                                        |  | 48V  | A               | 32 (2)            |
|                                        |  | 60V  | A               | 32 (3)            |
|                                        |  | 110V | A               | 15 (3)            |
|                                        |  | 220V | A               | 12 (4)            |
| DC13                                   |  |      |                 |                   |
|                                        |  | 24V  | A               | 32                |
|                                        |  | 48V  | A               | 25                |
|                                        |  | 60V  | A               | 16                |
|                                        |  | 110V | A               | 3                 |
|                                        |  | 220V | A               | 0.5               |
| Power dissipation                      |  |      | W               | 1.5               |
| Mechanical features                    |  |      |                 |                   |
| Terminals screw                        |  |      |                 | M4                |
| Tightening torque for terminals max    |  |      | Nm              | 1.2               |
| Conductor size                         |  |      |                 |                   |
| AWG - Rigid cable                      |  |      |                 |                   |
|                                        |  | min  | AWG             | 16                |
|                                        |  | Max  | AWG             | 8                 |
| AWG - Flexible cable                   |  |      |                 |                   |
|                                        |  | min  | AWG             | 16                |
|                                        |  | Max  | AWG             | 10                |
| Conductor size (IEC) - Flexible cable  |  |      |                 |                   |
|                                        |  | min  | mm <sup>2</sup> | 1.5               |
|                                        |  | Max  | mm <sup>2</sup> | 4                 |
| Conductor size (IEC) - Rigid cable     |  |      |                 |                   |
|                                        |  | min  | mm <sup>2</sup> | 1.5               |
|                                        |  | Max  | mm <sup>2</sup> | 6                 |
| Mechanical life                        |  |      | cycles          | 5x10 <sup>6</sup> |
| UL technical data                      |  |      |                 |                   |
| Motor power for direct-on-line control |  |      |                 |                   |
| for three-phase motor                  |  |      |                 |                   |
|                                        |  | 120V | HP              | 5                 |
|                                        |  | 240V | HP              | 10                |
|                                        |  | 480V | HP              | 15                |
|                                        |  | 600V | HP              | 15                |
| for single-phase motor                 |  |      |                 |                   |
|                                        |  | 120V | HP              | 2                 |
|                                        |  | 240V | HP              | 5                 |
| 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

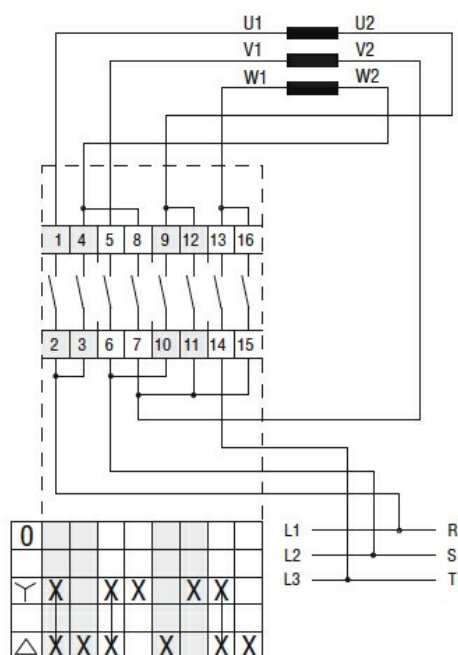
IP00

## Dimensions



| Series | Dimensions |      |    |     |      |     |    |    | L Number of elements |       |      |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|------|-----|----|----|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | C    | ØD | ØD2 | E    | H   | □K | □N | 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