

### General characteristics

|                   |   |
|-------------------|---|
| Switching diagram | 124 - Multi-step<br>0-1-2-3 2 poles       |
| N° of elements    | 3   |
| Mounting form     | O - Rear<br>mounting with<br>black handle |

### Contact characteristics

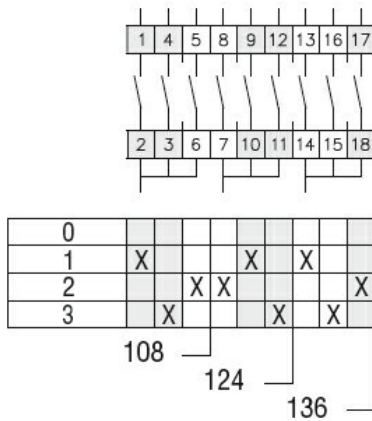
|   |                  |    |     |           |
|---|------------------|----|-----|-----------|
| Rated insulation voltage $U_i$                            | IEC/EN           | V  | 690 |           |
|   | UL/CSA           | V  | 600 |           |
| Rated impulse withstand voltage $U_{imp}$                 |                  | kV | 6   |           |
| Conventional free air thermal current $I_{th}$            | IEC/EN           | A  | 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 |           |
| Rated operational power in AC                             | 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 |           |
| 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              |
| <hr/>                                  |                                       |      |                 |                   |
| DC23A (poles in series)                |                                       | 24V  | A               | 10 (1)            |
|  |                                       | 48V  | A               | 10 (2)            |
|  |                                       | 60V  | A               | 10 (3)            |
|  |                                       | 110V | A               | 5 (3)             |
|  |                                       | 220V | A               | 5 (4)             |
| <hr/>                                  |                                       |      |                 |                   |
| DC13                                   |                                       | 24V  | A               | 12                |
|  |                                       | 48V  | A               | 10                |
|  |                                       | 60V  | A               | 8                 |
|  |                                       | 110V | A               | 1                 |
|  |                                       | 220V | A               | 0.4               |
|  |                                       | 440V | A               | 0.15              |
| <hr/>                                  |                                       |      |                 |                   |
| Power dissipation                      |                                       |      | W               | 0.8               |
| <b>Mechanical features</b>             |                                       |      |                 |                   |
| Terminals screw                        |                                       |      |                 | M3                |
| Tightening torque for terminals max    |                                       |      | Nm              | 0.5               |
| <hr/>                                  |                                       |      |                 |                   |
| Conductor size                         |                                       |      |                 |                   |
|  | AWG - Rigid cable                     |      |                 |                   |
|  |                                       | min  | AWG             | 20                |
|  |                                       | Max  | AWG             | 12                |
| <hr/>                                  |                                       |      |                 |                   |
|  | AWG - Flexible cable                  |      |                 |                   |
|  |                                       | min  | AWG             | 20                |
|  |                                       | Max  | AWG             | 14                |
| <hr/>                                  |                                       |      |                 |                   |
|  | Conductor size (IEC) - Flexible cable |      |                 |                   |
|  |                                       | min  | mm <sup>2</sup> | 0.5               |
|  |                                       | Max  | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |                                       |      |                 |                   |
|  | Conductor size (IEC) - Rigid cable    |      |                 |                   |
|  |                                       | min  | mm <sup>2</sup> | 0.5               |
|  |                                       | Max  | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |                                       |      |                 |                   |
| Mechanical life                        |                                       |      | cycles          | 3x10 <sup>6</sup> |
| <b>UL technical data</b>               |                                       |      |                 |                   |
| Motor power for direct-on-line control |                                       |      |                 |                   |
|  | for three-phase motor                 |      |                 |                   |
|  |                                       | 120V | HP              | 1.5               |
|  |                                       | 240V | HP              | 3                 |
| <hr/>                                  |                                       |      |                 |                   |
|  | for single-phase motor                |      |                 |                   |
|  |                                       | 120V | HP              | 0.5               |
|  |                                       | 240V | HP              | 1                 |
| <hr/>                                  |                                       |      |                 |                   |
| <b>Ambient conditions</b>              |                                       |      |                 |                   |
| Temperature                            |                                       |      |                 |                   |
|  | Operating temperature                 |      |                 |                   |
|  |                                       | min  | °C              | -25               |
|  |                                       | max  | °C              | +55               |
| <hr/>                                  |                                       |      |                 |                   |
|  | Storage temperature                   |      |                 |                   |
|  |                                       | min  | °C              | -40               |
|  |                                       | max  | °C              | +70               |
| <hr/>                                  |                                       |      |                 |                   |
| <b>Resistance &amp; Protection</b>     |                                       |      |                 |                   |
| Frontal IP degree                      |                                       |      |                 | IP40              |
| Terminals IP degree                    |                                       |      |                 | IP00              |
| <hr/>                                  |                                       |      |                 |                   |
| <b>Dimensions</b>                      |                                       |      |                 |                   |



| Series | Dimensions |      |    |     |      |     |    |    | L Number of elements |       |      |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|------|-----|----|----|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | C    | ∅D | ∅D2 | 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