



#### Contact characteristics

|                                                                          |          |        |
|--------------------------------------------------------------------------|----------|--------|
| Number of poles                                                          | Nr.      | 4      |
| Rated insulation voltage $U_i$ IEC/EN                                    | V        | 690    |
| Rated impulse withstand voltage $U_{imp}$                                | kV       | 6      |
| Operational frequency                                                    | min      | Hz 25  |
|                                                                          | max      | Hz 400 |
| IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$ | A        | 10     |
| Protection fuse                                                          | gG (IEC) | A 16   |
| Tightening torque for terminals                                          | min      | Nm 0.8 |
|                                                                          | max      | Nm 1   |
|                                                                          | min      | lbin 9 |
|                                                                          | max      | lbin 9 |
| Tightening torque for coil terminal                                      | min      | Nm 0.8 |
|                                                                          | max      | Nm 1   |
|                                                                          | min      | lbin 9 |
|                                                                          | max      | lbin 9 |
| Max number of wires simultaneously connectable                           | Nr.      | 2      |

|                                                     |           |                 |                          |
|-----------------------------------------------------|-----------|-----------------|--------------------------|
| Conductor section                                   | AWG/Kcmil |                 |                          |
|                                                     | max       |                 | 12                       |
| Flexible w/o lug conductor section                  | min       | mm <sup>2</sup> | 0.75                     |
|                                                     | max       | mm <sup>2</sup> | 2.5                      |
| Flexible c/w lug conductor section                  | min       | mm <sup>2</sup> | 1.5                      |
|                                                     | max       | mm <sup>2</sup> | 2.5                      |
| Flexible with insulated spade lug conductor section | min       | mm <sup>2</sup> | 1.5                      |
|                                                     | max       | mm <sup>2</sup> | 2.5                      |
| Power terminal protection according to IEC/EN 60529 |           |                 | IP20 when properly wired |

#### Mechanical features

|                    |                  |                              |
|--------------------|------------------|------------------------------|
| Operating position | normal allowable | Vertical plan $\pm 30^\circ$ |
| Fixing             |                  | Screw / DIN rail 35mm        |
| Weight             | g                | 211                          |

#### Auxiliary contact characteristics

|                              |   |             |
|------------------------------|---|-------------|
| Thermal current $I_{th}$     | A | 10          |
| IEC/EN 60947-5-1 designation |   | A600 - Q600 |

|                                                    |                 |          |          |
|----------------------------------------------------|-----------------|----------|----------|
| Operating current AC15                             |                 |          |          |
|                                                    | 230V            | A        | 3        |
|                                                    | 400V            | A        | 1.9      |
|                                                    | 500V            | A        | 1.4      |
| Operating current DC12                             |                 |          |          |
|                                                    | 110V            | A        | 2.9      |
| Operating current DC13                             |                 |          |          |
|                                                    | 24V             | A        | 2.9      |
|                                                    | 48V             | A        | 1.4      |
|                                                    | 60V             | A        | 1.2      |
|                                                    | 110V            | A        | 0.6      |
|                                                    | 125V            | A        | 0.55     |
|                                                    | 220V            | A        | 0.3      |
|                                                    | 600V            | A        | 0.1      |
| <b>Operations</b>                                  |                 |          |          |
| Mechanical life                                    |                 | cycles   | 20000000 |
| <b>Safety related data</b>                         |                 |          |          |
| Performance level B10d according to EN/ISO 13489-1 |                 |          |          |
|                                                    | mechanical load | cycles   | 20000000 |
| EMC compatibility                                  |                 |          | yes      |
| <b>DC coil operating</b>                           |                 |          |          |
| DC rated control voltage                           |                 | V        | 220      |
| DC operating voltage                               |                 |          |          |
| pick-up                                            | min             | %Us      | 75       |
|                                                    | max             | %Us      | 115      |
| drop-out                                           |                 |          |          |
|                                                    | min             | %Us      | 10       |
|                                                    | max             | %Us      | 20       |
| Average coil consumption ≤20°C                     |                 |          |          |
|                                                    | in-rush         | W        | 3.2      |
|                                                    | holding         | W        | 3.2      |
| <b>Max cycles frequency</b>                        |                 |          |          |
| Mechanical operation                               |                 | cycles/h | 3600     |
| <b>Operating times</b>                             |                 |          |          |
| Average time for Us control                        |                 |          |          |
| in AC                                              |                 |          |          |
| Closing NO                                         | min             | ms       | 12       |
|                                                    | max             | ms       | 21       |
| Opening NO                                         | min             | ms       | 9        |
|                                                    | max             | ms       | 18       |
| Closing NC                                         | min             | ms       | 17       |
|                                                    | max             | ms       | 26       |
| Opening NC                                         | min             | ms       | 7        |
|                                                    | max             | ms       | 17       |
| in DC                                              |                 |          |          |
| Closing NO                                         | min             | ms       | 18       |
|                                                    | max             | ms       | 25       |
| Opening NO                                         |                 |          |          |

|            |     |    |    |
|------------|-----|----|----|
| Closing NC | min | ms | 2  |
|            | max | ms | 3  |
| Opening NC | min | ms | 3  |
|            | max | ms | 5  |
|            | min | ms | 11 |
|            | max | ms | 17 |

#### UL technical data

Rated operational voltage AC (UL) V 600

General USE

Contactor

AC current A 10

Contact rating of auxiliary contacts according to UL A600 - Q600

#### Ambient conditions

Temperature

Operating temperature

min °C -50  
max °C +70

Storage temperature

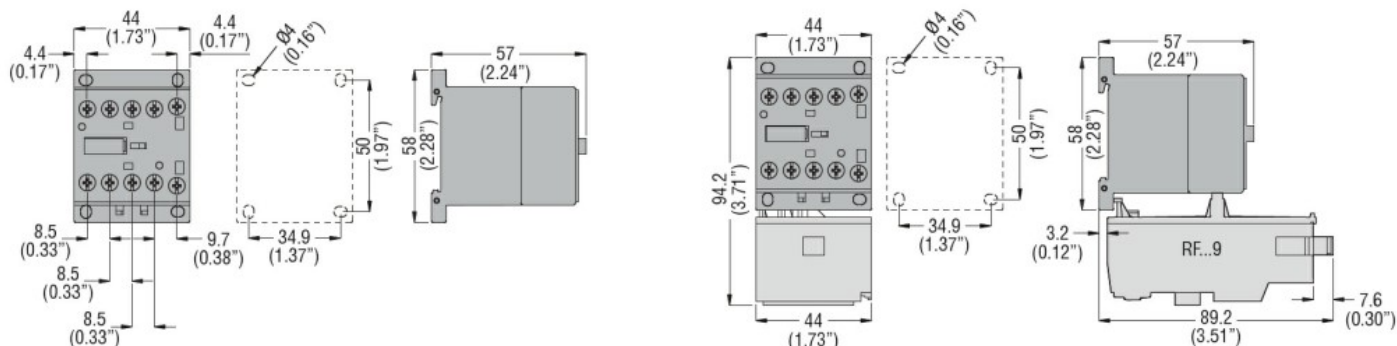
min °C -60  
max °C +80

Max altitude m 3000

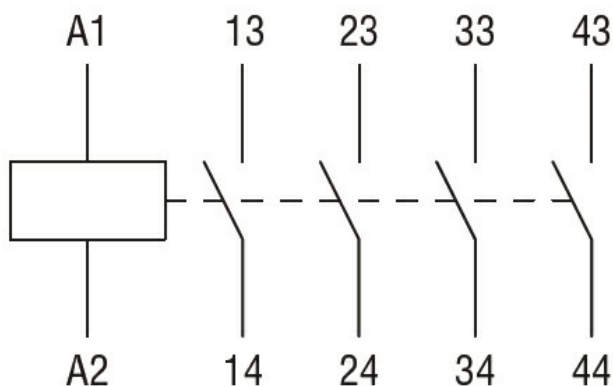
#### Resistance & Protection

Pollution degree 3

#### Dimensions



#### Wiring diagrams



#### Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-5-1

IEC/EN 60335-2-89

IEC/EN 60947-1

IEC/EN 60947-5-1

UL 60947-1

UL 60947-5-1

#### Certificates

CSA C22.2 n. 60335-2-40:22 LZGH A2L

CSA C22.2 No. 60335-2-89:21 LZGH A2L

cULus

EAC

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

#### ETIM classification

ETIM 8.0

EC000196 -  
Contactor relay