



| 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 $I_{th} \leq 40^\circ C$ | 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                          | Vertical plan   |                          |
|  | allowable                       | $\pm 30^\circ$  |                          |
| Fixing   |                                 |                 | Screw / DIN rail<br>35mm |
| Weight   | g                               | 180             |                          |
| 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  |

**Operations**

Mechanical life cycles 20000000

**Safety related data**

Performance level B10d according to EN/ISO 13489-1

mechanical load    cycles    20000000

EMC compatibility yes

**AC coil operating**

Rated AC voltage at 60Hz V 24

AC operating voltage

of 60Hz coil powered at 60Hz  
pick-up

min %Us 75  
max %Us 115

drop-out

min %Us 20  
max %Us 55

AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

in-rush VA 30  
holding VA 4

of 50/60Hz coil powered at 60Hz

in-rush VA 25  
holding VA 3

of 60Hz coil powered at 60Hz

in-rush VA 30  
holding VA 4

Dissipation at holding ≤20°C 50Hz W 0.95

**Max cycles frequency**

Mechanical operation cycles/h 3600

**Operating times**

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 | min   | ms  | 2  |    |
|            | max   | ms  | 3  |    |
| Closing NC | min   | ms  | 3  |    |
|            | max   | ms  | 5  |    |
| Opening NC | 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

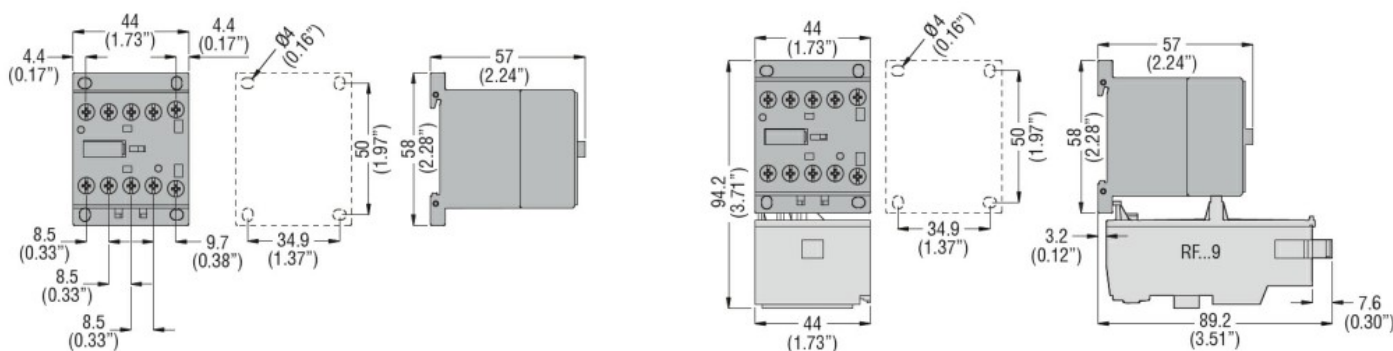
|     |    |     |
|-----|----|-----|
| min | °C | -60 |
| max | °C | +80 |

|              |   |      |
|--------------|---|------|
| Max altitude | m | 3000 |
|--------------|---|------|

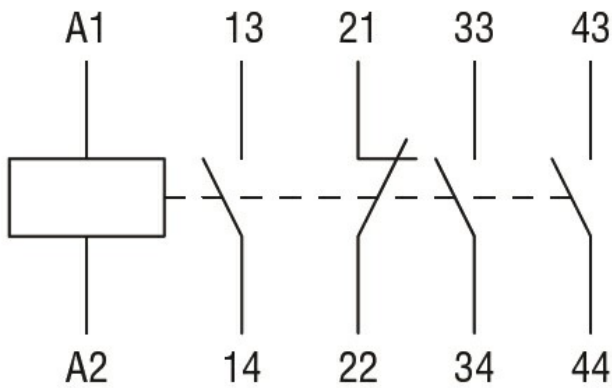
**Resistance & Protection**

|                  |   |
|------------------|---|
| 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