



#### 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 222

#### 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      |
| DC coil operating                                  |                 |          |          |
| DC rated control voltage                           |                 | V        | 48       |
| 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      |
| 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      |          |          |

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

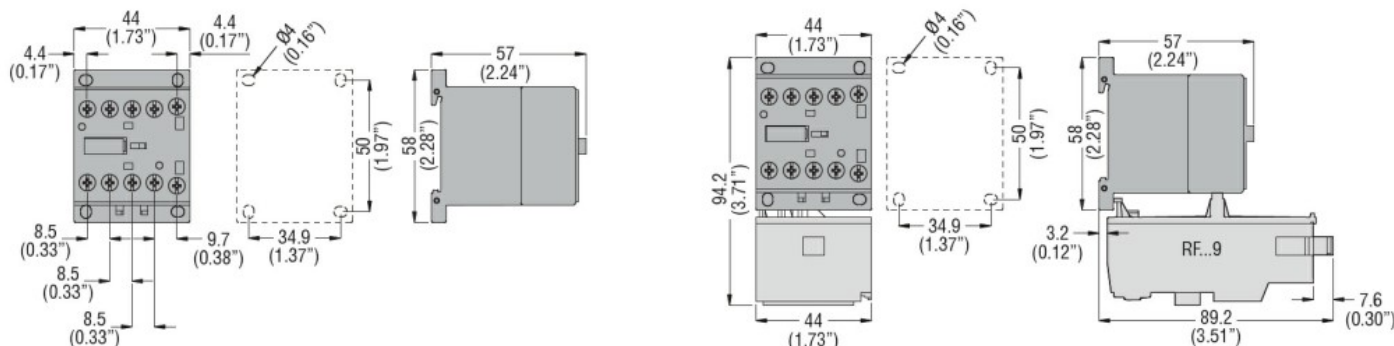
|     |    |     |
|-----|----|-----|
| min | °C | -60 |
| max | °C | +80 |

Max altitude m 3000

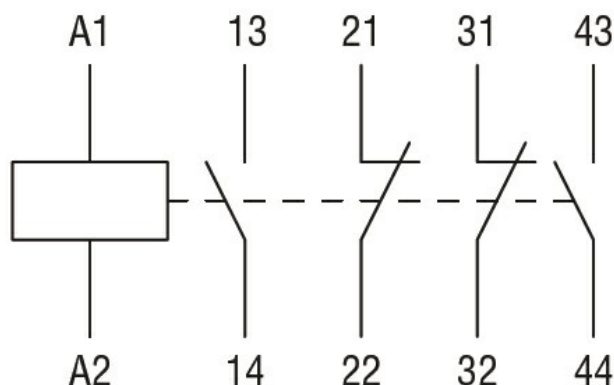
#### Resistance & Protection

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

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IEC/EN 60947-1

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IEC/EN 60947-5-1

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UL 60947-1

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UL 60947-5-1

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Certificates

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

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

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cULus

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EAC

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UL 60335-2-40 LZGH A2L

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UL 60335-2-89 LZGH A2L

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ETIM classification

ETIM 8.0

EC000196 -  
Contactor relay