



#### Contact characteristics

|                                                                                |                                                   |         |
|--------------------------------------------------------------------------------|---------------------------------------------------|---------|
| Number of poles                                                                | Nr.                                               | 3       |
| 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                                                 | 32      |
| Operational current $I_e$                                                      | AC-1 ( $\leq 40^\circ\text{C}$ )                  | A 32    |
|                                                                                | AC-1 ( $\leq 55^\circ\text{C}$ )                  | A 26    |
|                                                                                | AC-1 ( $\leq 70^\circ\text{C}$ )                  | A 23    |
|                                                                                | AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ ) | A 25    |
|                                                                                | AC-4 (400V)                                       | A 10    |
| Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )                     | 230V                                              | kW 7    |
|                                                                                | 400V                                              | kW 12.5 |
|                                                                                | 415V                                              | kW 13.4 |
|                                                                                | 440V                                              | kW 13.4 |
|                                                                                | 500V                                              | kW 15   |
|                                                                                | 690V                                              | kW 11   |
| Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )                     | 230V                                              | kW 12   |
|                                                                                | 400V                                              | kW 21   |
|                                                                                | 500V                                              | kW 26   |
|                                                                                | 690V                                              | kW 36   |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | $\leq 24\text{V}$                                 | A 20    |
|                                                                                | 48V                                               | A 18    |
|                                                                                | 75V                                               | A 18    |
|                                                                                | 110V                                              | A 6     |
|                                                                                | 220V                                              | A —     |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series | $\leq 24\text{V}$                                 | A 23    |
|                                                                                | 48V                                               | A 23    |
|                                                                                | 75V                                               | A 23    |
|                                                                                | 110V                                              | A 16    |
|                                                                                | 220V                                              | A 1     |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | $\leq 24\text{V}$                                 | A 23    |
|                                                                                | 48V                                               | A 23    |
|                                                                                | 75V                                               | A 23    |
|                                                                                | 110V                                              | A 18    |
|                                                                                | 220V                                              | A 12    |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series |                                                   |         |

|                                                                      |          |      |      |
|----------------------------------------------------------------------|----------|------|------|
|                                                                      | ≤24V     | A    | –    |
|                                                                      | 48V      | A    | –    |
|                                                                      | 75V      | A    | –    |
|                                                                      | 110V     | A    | –    |
|                                                                      | 220V     | A    | –    |
| IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series |          |      |      |
|                                                                      | ≤24V     | A    | 15   |
|                                                                      | 48V      | A    | 13   |
|                                                                      | 75V      | A    | 13   |
|                                                                      | 110V     | A    | 2    |
|                                                                      | 220V     | A    | –    |
| IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series |          |      |      |
|                                                                      | ≤24V     | A    | 18   |
|                                                                      | 48V      | A    | 18   |
|                                                                      | 75V      | A    | 16   |
|                                                                      | 110V     | A    | 10   |
|                                                                      | 220V     | A    | 2    |
| IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series |          |      |      |
|                                                                      | ≤24V     | A    | 22   |
|                                                                      | 48V      | A    | 22   |
|                                                                      | 75V      | A    | 18   |
|                                                                      | 110V     | A    | 15   |
|                                                                      | 220V     | A    | 8    |
| IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series |          |      |      |
|                                                                      | ≤24V     | A    | –    |
|                                                                      | 48V      | A    | –    |
|                                                                      | 75V      | A    | –    |
|                                                                      | 110V     | A    | –    |
|                                                                      | 220V     | A    | –    |
| Short-time allowable current for 10s (IEC/EN60947-1)                 |          | A    | 200  |
| Protection fuse                                                      |          |      |      |
|                                                                      | gG (IEC) | A    | 50   |
|                                                                      | aM (IEC) | A    | 25   |
| Making capacity (RMS value)                                          |          | A    | 250  |
| Breaking capacity at voltage                                         |          |      |      |
|                                                                      | 440V     | A    | 200  |
|                                                                      | 500V     | A    | 184  |
|                                                                      | 690V     | A    | 102  |
| Resistance per pole (average value)                                  |          | mΩ   | 2.5  |
| Power dissipation per pole (average value)                           |          |      |      |
|                                                                      | Ith      | W    | 2.6  |
|                                                                      | AC-3     | W    | 1.6  |
| Tightening torque for terminals                                      |          |      |      |
|                                                                      | min      | Nm   | 1.5  |
|                                                                      | max      | Nm   | 1.8  |
|                                                                      | min      | Ibin | 1.1  |
|                                                                      | max      | Ibin | 1.5  |
| Tightening torque for coil terminal                                  |          |      |      |
|                                                                      | min      | Nm   | 0.8  |
|                                                                      | max      | Nm   | 1    |
|                                                                      | min      | Ibin | 0.8  |
|                                                                      | max      | Ibin | 0.74 |
| Max number of wires simultaneously connectable                       |          | Nr.  | 2    |

|                                                     |                 |                       |                          |
|-----------------------------------------------------|-----------------|-----------------------|--------------------------|
| Conductor section                                   |                 |                       |                          |
| AWG/Kcmil                                           | max             | 10                    |                          |
| Flexible w/o lug conductor section                  | min             | mm <sup>2</sup>       | 1                        |
|                                                     | max             | mm <sup>2</sup>       | 6                        |
| Flexible c/w lug conductor section                  | min             | mm <sup>2</sup>       | 1                        |
|                                                     | max             | mm <sup>2</sup>       | 4                        |
| Flexible with insulated spade lug conductor section | min             | mm <sup>2</sup>       | 1                        |
|                                                     | max             | mm <sup>2</sup>       | 6                        |
| Power terminal protection according to IEC/EN 60529 |                 |                       | IP20 when properly wired |
| Cable stripping lenght                              |                 |                       |                          |
|                                                     | main circuit    | mm                    | 10                       |
|                                                     | command circuit | mm                    | 8                        |
| Mechanical features                                 |                 |                       |                          |
| Operating position                                  |                 | normal allowable      | Vertical plan ±30°       |
| Fixing                                              |                 | Screw / DIN rail 35mm |                          |
| Weight                                              |                 | g                     | 502                      |
| Auxiliary contact characteristics                   |                 |                       |                          |
| Thermal current I <sub>th</sub>                     |                 | A                     | 10                       |
| IEC/EN 60947-5-1 designation                        |                 | A600 - P600           |                          |
| Operating current AC15                              |                 |                       |                          |
|                                                     | 230V            | A                     | 3                        |
|                                                     | 400V            | A                     | 1.9                      |
|                                                     | 500V            | A                     | 1.4                      |
| Operating current DC12                              |                 |                       |                          |
|                                                     | 110V            | A                     | 5.7                      |
| Operating current DC13                              |                 |                       |                          |
|                                                     | 24V             | A                     | 5.7                      |
|                                                     | 48V             | A                     | 2.9                      |
|                                                     | 60V             | A                     | 2.3                      |
|                                                     | 110V            | A                     | 1.25                     |
|                                                     | 125V            | A                     | 1.1                      |
|                                                     | 220V            | A                     | 0.55                     |
|                                                     | 600V            | A                     | 0.2                      |
| Operations                                          |                 |                       |                          |
| Mechanical life                                     |                 | cycles                | 20000000                 |
| Electrical life                                     |                 | cycles                | 1200000                  |
| Safety related data                                 |                 |                       |                          |
| Performance level B10d according to EN/ISO 13489-1  |                 |                       |                          |
|                                                     | rated load      | cycles                | 1200000                  |
|                                                     | mechanical load | cycles                | 20000000                 |
| EMC compatibility                                   |                 |                       | yes                      |
| DC coil operating                                   |                 |                       |                          |
| DC rated control voltage                            |                 | V                     | 24                       |
| DC operating voltage                                |                 |                       |                          |
| pick-up                                             |                 |                       |                          |

|                                                  |  |            |      |     |
|--------------------------------------------------|--|------------|------|-----|
|                                                  |  | min        | %Us  | 80  |
|                                                  |  | max        | %Us  | 110 |
| drop-out                                         |  |            |      |     |
|                                                  |  | min        | %Us  | 10  |
|                                                  |  | max        | %Us  | 40  |
| Average coil consumption ≤20°C                   |  |            |      |     |
|                                                  |  | in-rush    | W    | 2.4 |
|                                                  |  | holding    | W    | 2.4 |
| Max cycles frequency                             |  |            |      |     |
| Mechanical operation                             |  | cycles/h   | 3600 |     |
| Operating times                                  |  |            |      |     |
| Average time for Us control                      |  |            |      |     |
| in AC                                            |  |            |      |     |
| Closing NO                                       |  | min        | ms   | 8   |
|                                                  |  | max        | ms   | 24  |
| Opening NO                                       |  | min        | ms   | 10  |
|                                                  |  | max        | ms   | 20  |
| Closing NC                                       |  | min        | ms   | 14  |
|                                                  |  | max        | ms   | 28  |
| Opening NC                                       |  | min        | ms   | 7   |
|                                                  |  | max        | ms   | 18  |
| in DC                                            |  |            |      |     |
| Closing NO                                       |  | min        | ms   | 75  |
|                                                  |  | max        | ms   | 91  |
| Opening NO                                       |  | min        | ms   | 15  |
|                                                  |  | max        | ms   | 19  |
| UL technical data                                |  |            |      |     |
| Rated operational voltage AC (UL)                |  |            | V    | 600 |
| Full-load current (FLA) for three-phase AC motor |  |            |      |     |
|                                                  |  | at 480V    | A    | 21  |
|                                                  |  | at 600V    | A    | 17  |
| Yielded mechanical performance                   |  |            |      |     |
| for single-phase AC motor                        |  | 110/120V   | HP   | 2   |
|                                                  |  | 230V       | HP   | 3   |
| for three-phase AC motor                         |  | 200/208V   | HP   | 7.5 |
|                                                  |  | 220/240V   | HP   | 7.5 |
|                                                  |  | 460/480V   | HP   | 15  |
|                                                  |  | 575/600V   | HP   | 15  |
| General USE                                      |  |            |      |     |
| Contactor                                        |  | AC current | A    | 32  |
| Auxiliary contacts                               |  | AC voltage | V    | 600 |
|                                                  |  | AC current | A    | 10  |
|                                                  |  | DC voltage | V    | 250 |
|                                                  |  | DC current | A    | 1   |

Short-circuit protection fuse, 600V

High fault

|                       |    |     |
|-----------------------|----|-----|
| Short circuit current | kA | 100 |
| Fuse rating           | A  | 60  |
| Fuse class            | J  |     |

Standard fault

|                       |    |     |
|-----------------------|----|-----|
| Short circuit current | kA | 5   |
| Fuse rating           | A  | 100 |

Contact rating of auxiliary contacts according to UL

A600 - P600

### Ambient conditions

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 70  |

Storage temperature

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

Max altitude

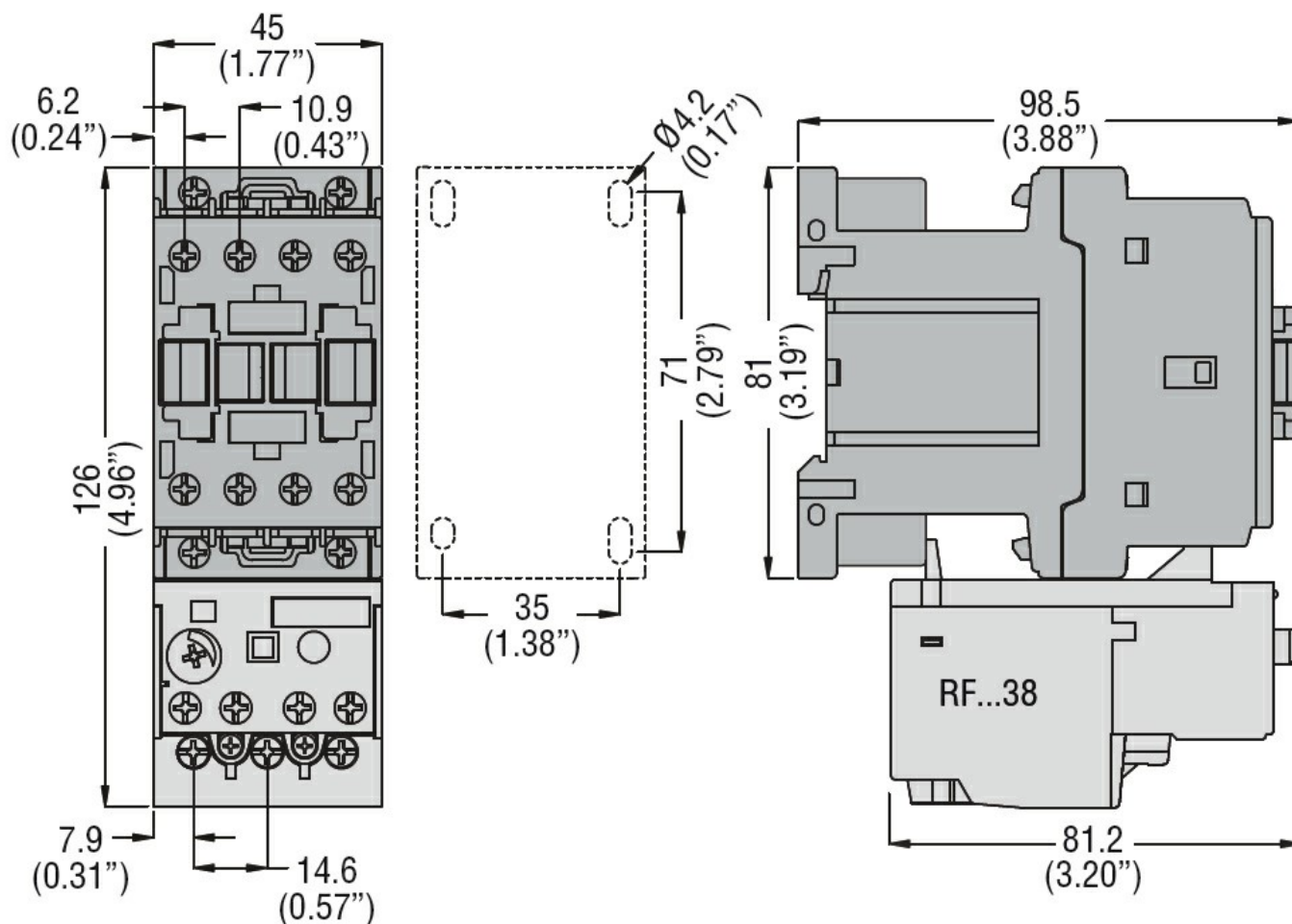
m 3000

### Resistance & Protection

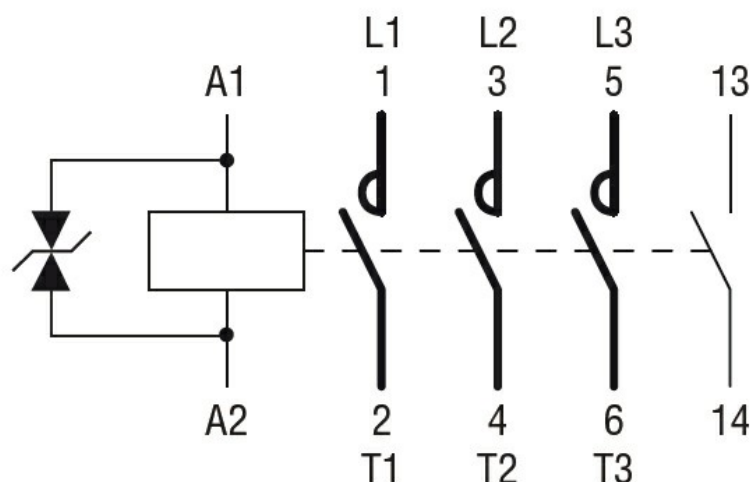
Pollution degree

3

### Dimensions



### Wiring diagrams



## Certifications and compliance

### Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60335-2-89

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

### Certificates

CCC

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

EC000066 -  
Power contactor,  
AC switching