



#### Contact characteristics

|                                                                                |                                                   |        |
|--------------------------------------------------------------------------------|---------------------------------------------------|--------|
| Number of poles                                                                | Nr.                                               | 3      |
| Rated insulation voltage $U_i$ IEC/EN                                          | V                                                 | 1000   |
| Rated impulse withstand voltage $U_{imp}$                                      | kV                                                | 8      |
| Operational frequency                                                          | min                                               | Hz 25  |
|                                                                                | max                                               | Hz 400 |
| IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$       | A                                                 | 115    |
| Operational current $I_e$                                                      | AC-1 ( $\leq 40^\circ\text{C}$ )                  | A 115  |
|                                                                                | AC-1 ( $\leq 55^\circ\text{C}$ )                  | A 95   |
|                                                                                | AC-1 ( $\leq 70^\circ\text{C}$ )                  | A 80   |
|                                                                                | AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ ) | A 95   |
|                                                                                | AC-4 (400V)                                       | A 45   |
| Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )                     | 230V                                              | kW 30  |
|                                                                                | 400V                                              | kW 55  |
|                                                                                | 415V                                              | kW 55  |
|                                                                                | 440V                                              | kW 55  |
|                                                                                | 500V                                              | kW 55  |
|                                                                                | 690V                                              | kW 55  |
|                                                                                | 1000V                                             | kW 37  |
| Rated operational current AC-3 ( $T \leq 55^\circ\text{C}$ )                   | 230V                                              | A 94   |
|                                                                                | 400V                                              | A 94   |
|                                                                                | 415V                                              | A 94   |
|                                                                                | 440V                                              | A 94   |
|                                                                                | 500V                                              | A 78   |
|                                                                                | 690V                                              | A 57   |
|                                                                                | 1000V                                             | A 28   |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series | $\leq 24\text{V}$                                 | A 77   |
|                                                                                | 48V                                               | A 66   |
|                                                                                | 75V                                               | A 66   |
|                                                                                | 110V                                              | A 8    |
|                                                                                | 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 110  |
|                                                                                | 48V                                               | A 110  |
|                                                                                | 75V                                               | A 110  |
|                                                                                | 110V                                              | A 90   |
|                                                                                | 220V                                              | A 9    |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | $\leq 24\text{V}$                                 | A 110  |
|                                                                                | 48V                                               | A 110  |

|                                                                                  |                 |      |     |
|----------------------------------------------------------------------------------|-----------------|------|-----|
|                                                                                  | 75V             | A    | 110 |
|                                                                                  | 110V            | A    | 93  |
|                                                                                  | 220V            | A    | 95  |
| IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series      |                 |      |     |
|                                                                                  | ≤24V            | A    | 115 |
|                                                                                  | 48V             | A    | 115 |
|                                                                                  | 75V             | A    | 115 |
|                                                                                  | 110V            | A    | 110 |
|                                                                                  | 220V            | A    | 115 |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series |                 |      |     |
|                                                                                  | ≤24V            | A    | 45  |
|                                                                                  | 48V             | A    | 33  |
|                                                                                  | 75V             | A    | 33  |
|                                                                                  | 110V            | A    | 3   |
|                                                                                  | 220V            | A    | –   |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series |                 |      |     |
|                                                                                  | ≤24V            | A    | 65  |
|                                                                                  | 48V             | A    | 55  |
|                                                                                  | 75V             | A    | 55  |
|                                                                                  | 110V            | A    | 43  |
|                                                                                  | 220V            | A    | 5   |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series |                 |      |     |
|                                                                                  | ≤24V            | A    | 86  |
|                                                                                  | 48V             | A    | 75  |
|                                                                                  | 75V             | A    | 75  |
|                                                                                  | 110V            | A    | 64  |
|                                                                                  | 220V            | A    | 64  |
| IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series |                 |      |     |
|                                                                                  | ≤24V            | A    | 96  |
|                                                                                  | 48V             | A    | 95  |
|                                                                                  | 75V             | A    | 95  |
|                                                                                  | 110V            | A    | 80  |
|                                                                                  | 220V            | A    | 80  |
| Short-time allowable current for 10s (IEC/EN60947-1)                             |                 | A    | 640 |
| Protection fuse                                                                  |                 |      |     |
|                                                                                  | gG (IEC)        | A    | 125 |
|                                                                                  | aM (IEC)        | A    | 100 |
| Making capacity (RMS value)                                                      |                 | A    | 950 |
| Breaking capacity at voltage                                                     |                 |      |     |
|                                                                                  | 440V            | A    | 640 |
|                                                                                  | 500V            | A    | 625 |
|                                                                                  | 690V            | A    | 456 |
| Resistance per pole (average value)                                              |                 | mΩ   | 0.6 |
| Power dissipation per pole (average value)                                       |                 |      |     |
|                                                                                  | I <sub>th</sub> | W    | 7.9 |
|                                                                                  | AC-3            | W    | 5.4 |
| Tightening torque for terminals                                                  |                 |      |     |
|                                                                                  | min             | Nm   | 4   |
|                                                                                  | max             | Nm   | 5   |
|                                                                                  | min             | lbin | 3   |
|                                                                                  | max             | lbin | 3.7 |
| Tightening torque for coil terminal                                              |                 |      |     |
|                                                                                  | min             | Nm   | 0.8 |

|                                                     |                            |                 |                       |
|-----------------------------------------------------|----------------------------|-----------------|-----------------------|
|                                                     | max                        | Nm              | 1                     |
|                                                     | min                        | Ibin            | 0.59                  |
|                                                     | max                        | Ibin            | 0.74                  |
| Max number of wires simultaneously connectable      | Nr.                        | 2               |                       |
| Conductor section                                   |                            |                 |                       |
| Flexible w/o lug conductor section                  | min                        | mm <sup>2</sup> | 1.5                   |
|                                                     | max                        | mm <sup>2</sup> | 35                    |
| Power terminal protection according to IEC/EN 60529 |                            |                 | IP20                  |
| <b>Mechanical features</b>                          |                            |                 |                       |
| Operating position                                  | normal allowable           |                 | Vertical plan ±30°    |
| Fixing                                              |                            |                 | Screw / DIN rail 35mm |
| Weight                                              |                            | g               | 1                     |
| <b>Operations</b>                                   |                            |                 |                       |
| Mechanical life                                     |                            | cycles          | 15000000              |
| Electrical life                                     |                            | cycles          | 1100000               |
| <b>Safety related data</b>                          |                            |                 |                       |
| Performance level B10d according to EN/ISO 13489-1  | rated load mechanical load | cycles          | 1100000               |
|                                                     |                            | cycles          | 15000000              |
| EMC compatibility                                   |                            |                 | yes                   |
| <b>AC coil operating</b>                            |                            |                 |                       |
| Rated AC voltage at 60Hz                            |                            | V               | 24                    |
| AC operating voltage                                |                            |                 |                       |
| of 50/60Hz coil powered at 50Hz drop-out            | min                        | %Us             | 20                    |
|                                                     | max                        | %Us             | 55                    |
| of 50/60Hz coil powered at 60Hz pick-up             | min                        | %Us             | 85                    |
|                                                     | max                        | %Us             | 110                   |
| drop-out                                            | min                        | %Us             | 20                    |
|                                                     | max                        | %Us             | 55                    |
| of 60Hz coil powered at 60Hz pick-up                | min                        | %Us             | 80                    |
|                                                     | max                        | %Us             | 110                   |
| drop-out                                            | min                        | %Us             | 20                    |
|                                                     | max                        | %Us             | 55                    |
| AC average coil consumption at 20°C                 |                            |                 |                       |
| of 60Hz coil powered at 60Hz                        | in-rush holding            | VA              | 210                   |
|                                                     |                            | VA              | 15                    |
| Dissipation at holding ≤20°C 50Hz                   |                            | W               | 5                     |
| <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 | 28 |

Opening NO

|     |    |    |
|-----|----|----|
| min | ms | 8  |
| max | ms | 22 |

in DC

Closing NO

|     |    |    |
|-----|----|----|
| min | ms | 40 |
| max | ms | 85 |

Opening NO

|     |    |    |
|-----|----|----|
| min | ms | 20 |
| max | ms | 55 |

### UL technical data

|                                   |   |     |
|-----------------------------------|---|-----|
| Rated operational voltage AC (UL) | V | 600 |
|-----------------------------------|---|-----|

Full-load current (FLA) for three-phase AC motor

|         |   |    |
|---------|---|----|
| at 480V | A | 77 |
| at 600V | A | 77 |

Yielded mechanical performance

for three-phase AC motor

|          |    |    |
|----------|----|----|
| 200/208V | HP | 25 |
| 220/240V | HP | 30 |
| 460/480V | HP | 60 |
| 575/600V | HP | 75 |

General USE

Contactor

|            |   |     |
|------------|---|-----|
| AC current | A | 115 |
|------------|---|-----|

Short-circuit protection fuse, 600V

High fault

|                       |    |     |
|-----------------------|----|-----|
| Short circuit current | kA | 100 |
| Fuse rating           | A  | 200 |
| Fuse class            |    | J   |

Standard fault

|                       |    |     |
|-----------------------|----|-----|
| Short circuit current | kA | 10  |
| Fuse rating           | A  | 200 |
| Fuse class            |    | RK5 |

### Ambient conditions

Temperature

Operating temperature

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

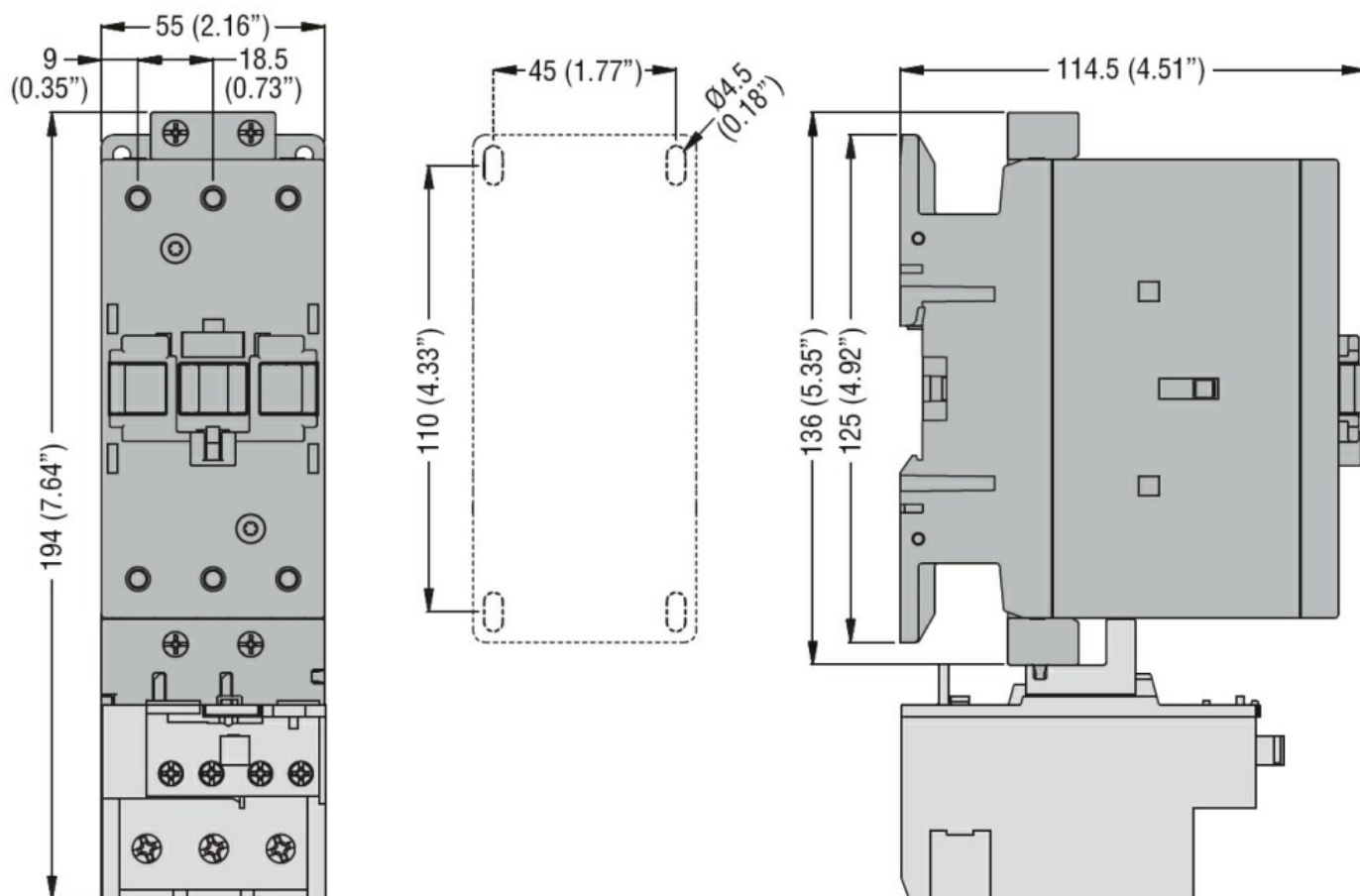
Storage temperature

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

Max altitude

|   |      |
|---|------|
| m | 3000 |
|---|------|

### 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