



#### Contact characteristics

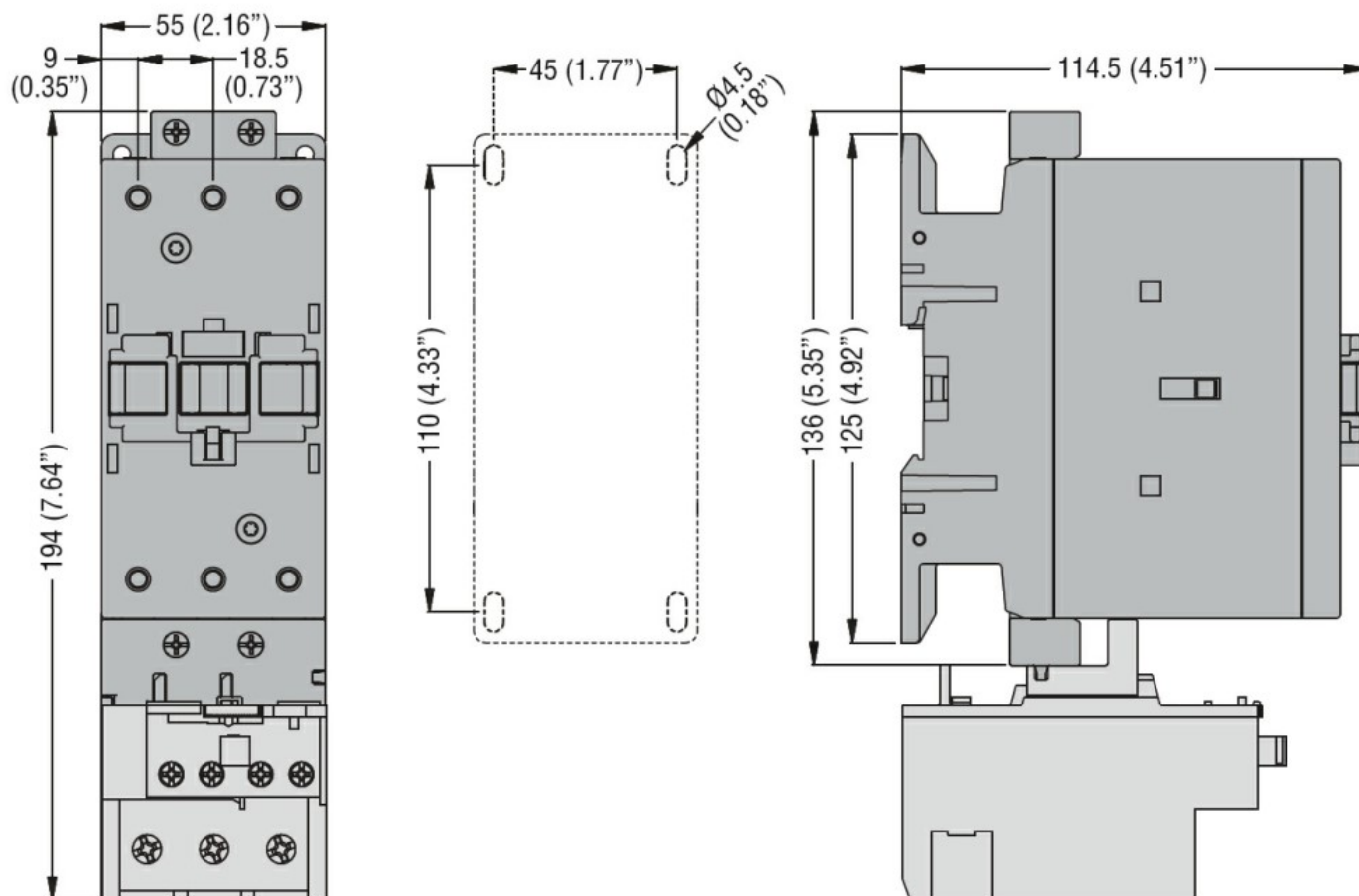
|                                                                                |                               |                                                     |
|--------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------|
| 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<br>max                    | Hz<br>Hz<br>25<br>400                               |
| IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$       | A                             | 115                                                 |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | 400V<br>600V<br>800V<br>1000V | A<br>A<br>A<br>A<br>100<br>80<br>65<br>60           |
| Short-time allowable current for 10s (IEC/EN60947-1)                           | A                             | 640                                                 |
| Protection fuse                                                                | gG (IEC)<br>aM (IEC)          | A<br>A<br>125<br>80                                 |
| Resistance per pole (average value)                                            | mΩ                            | 0.6                                                 |
| Power dissipation per pole (average value)                                     | $I_{th}$<br>W                 | 7.9                                                 |
| Tightening torque for terminals                                                | min<br>max<br>min<br>max      | Nm<br>Nm<br>lbin<br>lbin<br>4<br>5<br>2.95<br>3.69  |
| Tightening torque for coil terminal                                            | min<br>max<br>min<br>max      | Nm<br>Nm<br>lbin<br>lbin<br>0.8<br>1<br>0.8<br>0.74 |
| Max number of wires simultaneously connectable                                 | Nr.                           | 2                                                   |
| Conductor section                                                              | AWG/Kcmil                     |                                                     |
|                                                                                | max                           | 2                                                   |
| Flexible w/o lug conductor section                                             | min<br>max                    | mm <sup>2</sup><br>mm <sup>2</sup><br>1.5<br>35     |
| Flexible c/w lug conductor section                                             | min<br>max                    | mm <sup>2</sup><br>mm <sup>2</sup><br>1.5<br>35     |
| Power terminal protection according to IEC/EN 60529                            |                               | IP20 front                                          |

#### Mechanical features

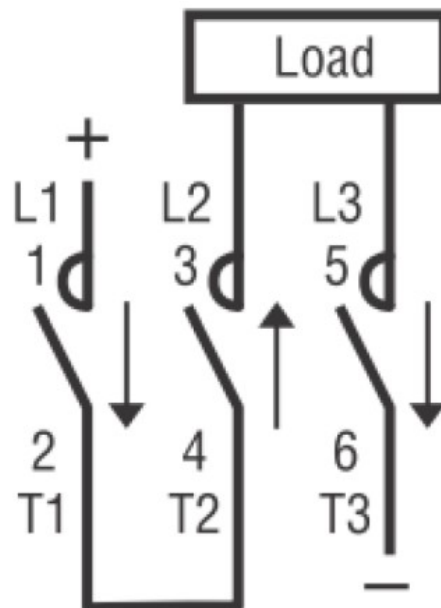
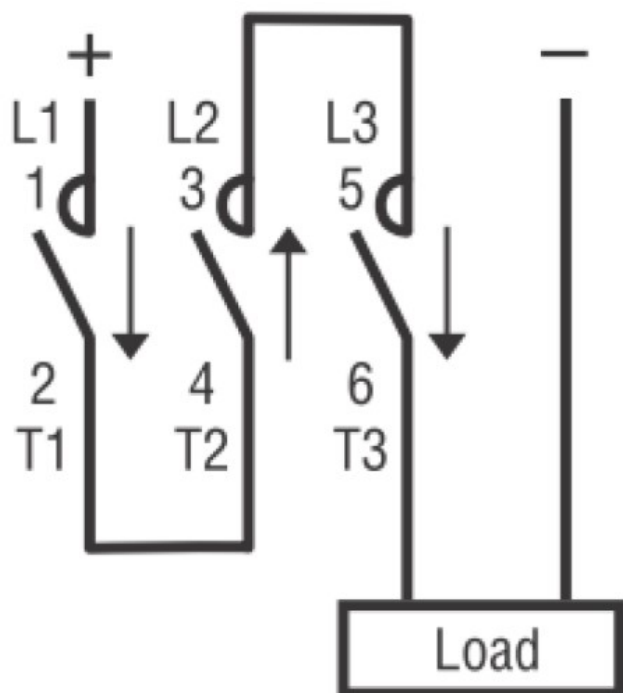
|                    |                     |                                 |
|--------------------|---------------------|---------------------------------|
| Operating position | normal<br>allowable | Vertical plan<br>$\pm 30^\circ$ |
|--------------------|---------------------|---------------------------------|

|                                                    |                 |         |                          |     |
|----------------------------------------------------|-----------------|---------|--------------------------|-----|
| Fixing                                             |                 |         | Screw / DIN rail<br>35mm |     |
| Weight                                             | g               |         | 1240                     |     |
| Operations                                         |                 |         |                          |     |
| Mechanical life                                    | cycles          |         | 15000000                 |     |
| Safety related data                                |                 |         |                          |     |
| Performance level B10d according to EN/ISO 13489-1 |                 |         |                          |     |
|                                                    | mechanical load | cycles  | 15000000                 |     |
| EMC compatibility                                  |                 |         | yes                      |     |
| AC coil operating                                  |                 |         |                          |     |
| Rated AC voltage at 50/60Hz                        | V               |         | 400                      |     |
| AC operating voltage                               |                 |         |                          |     |
| of 50/60Hz coil powered at 50Hz<br>pick-up         |                 | min     | %Us                      | 80  |
|                                                    |                 | max     | %Us                      | 110 |
| drop-out                                           |                 | min     | %Us                      | 20  |
|                                                    |                 | max     | %Us                      | 55  |
|                                                    |                 |         |                          |     |
| of 50/60Hz coil powered at 60Hz<br>pick-up         |                 | min     | %Us                      | 85  |
|                                                    |                 | max     | %Us                      | 110 |
| 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                       | 210 |
|                                                    |                 | holding | VA                       | 15  |
|                                                    |                 |         |                          |     |
| of 50/60Hz coil powered at 60Hz                    |                 | in-rush | VA                       | 195 |
|                                                    |                 | holding | VA                       | 13  |
|                                                    |                 |         |                          |     |
| of 60Hz coil powered at 60Hz                       |                 | in-rush | VA                       | 210 |
|                                                    |                 | holding | VA                       | 15  |
| Dissipation at holding ≤20°C 50Hz                  |                 |         | W                        | 5   |
| Max cycles frequency                               |                 |         |                          |     |
| Mechanical operation                               | cycles/h        |         | 3600                     |     |
| Operating times                                    |                 |         |                          |     |
| 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  |
| General USE                       |                       |      |     |      |
| Contactor                         |                       |      |     |      |
|                                   | AC current            |      | A   | 115  |
|                                   | 4 poles in series DC1 |      |     |      |
|                                   |                       | 600V | A   | 100  |
| 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/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

#### ETIM classification

ETIM 8.0

EC002552 -  
Power contactor,  
DC switching