



### Contact characteristics

|                                                                                |           |                     |
|--------------------------------------------------------------------------------|-----------|---------------------|
| Number of poles                                                                | Nr.       | 4                   |
| 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         | 165                 |
| IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series | 400V      | A 165               |
|                                                                                | 600V      | A 165               |
|                                                                                | 800V      | A 125               |
|                                                                                | 1000V     | A 100               |
| Short-time allowable current for 10s (IEC/EN60947-1)                           | A         | 1200                |
| Protection fuse                                                                | gG (IEC)  | A 250               |
|                                                                                | aM (IEC)  | A 160               |
| Resistance per pole (average value)                                            | mΩ        | 0.45                |
| Power dissipation per pole (average value)                                     | $I_{th}$  | W 12                |
| Tightening torque for terminals                                                | min       | Nm 6                |
|                                                                                | max       | Nm 7                |
|                                                                                | min       | lbin 4.4            |
|                                                                                | max       | lbin 5.2            |
| Tightening torque for coil terminal                                            | min       | Nm 0.8              |
|                                                                                | max       | Nm 1                |
|                                                                                | min       | lbin 0.59           |
|                                                                                | max       | lbin 0.74           |
| Max number of wires simultaneously connectable                                 | Nr.       | 2                   |
| Conductor section                                                              | AWG/Kcmil |                     |
|                                                                                | max       | 2/0                 |
| Flexible w/o lug conductor section                                             | min       | mm <sup>2</sup> 1.5 |
|                                                                                | max       | mm <sup>2</sup> 70  |
| Flexible c/w lug conductor section                                             | min       | mm <sup>2</sup> 1.5 |
|                                                                                | max       | mm <sup>2</sup> 70  |
| 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                        | 2460      |            |
| 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, 60Hz                  | min                      | V         | 60         |
|                                                    | max                      | V         | 110        |
| AC operating voltage                               |                          |           |            |
| of 50/60Hz coil powered at 50Hz                    | min                      | %Us       | 80 Us min  |
| pick-up                                            | max                      | %Us       | 110 Us max |
| drop-out                                           | max                      | %Us       | ≤70 Us min |
| of 50/60Hz coil powered at 60Hz                    | min                      | %Us       | 80 Us min  |
| pick-up                                            | max                      | %Us       | 110 Us max |
| drop-out                                           | max                      | %Us       | ≤70 Us min |
| AC average coil consumption at 20°C                |                          |           |            |
| of 50/60Hz coil powered at 50Hz                    | in-rush                  | VA        | 130        |
|                                                    | holding                  | VA        | 3.5        |
| of 50/60Hz coil powered at 60Hz                    | in-rush                  | VA        | 130        |
|                                                    | holding                  | VA        | 3.5        |
| of 60Hz coil powered at 60Hz                       | in-rush                  | VA        | 130        |
|                                                    | holding                  | VA        | 3.5        |
| Dissipation at holding ≤20°C 50Hz                  | W                        | 1.3...1,5 |            |
| DC coil operating                                  |                          |           |            |
| DC rated control voltage                           | min                      | V         | 60         |
|                                                    | max                      | V         | 110        |
| max                                                |                          | V         | 110        |
| DC operating voltage                               |                          |           |            |
| pick-up                                            | min                      | %Us       | 80 Us min  |
|                                                    | max                      | %Us       | 110 Us max |
| drop-out                                           | max                      | %Us       | ≤70 Us min |
| Average coil consumption ≤20°C                     | in-rush                  | W         | 76         |
|                                                    | holding                  | W         | 1.7        |
| Max cycles frequency                               |                          |           |            |
| Mechanical operation                               | cycles/h                 | 2000      |            |
| Operating times                                    |                          |           |            |

Average time for Us control  
in AC

Closing NO

|     |    |    |
|-----|----|----|
| min | ms | 45 |
| max | ms | 40 |

Opening NO

|     |    |    |
|-----|----|----|
| min | ms | 24 |
| max | ms | 60 |

in DC

Closing NO

|     |    |    |
|-----|----|----|
| min | ms | 45 |
| max | ms | 90 |

Opening NO

|     |    |    |
|-----|----|----|
| min | ms | 24 |
| max | ms | 60 |

#### UL technical data

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

General USE

Contactor

|            |   |     |
|------------|---|-----|
| AC current | A | 165 |
|------------|---|-----|

4 poles in series DC1

|      |   |     |
|------|---|-----|
| 600V | A | 165 |
|------|---|-----|

#### Ambient conditions

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | 70  |

Storage temperature

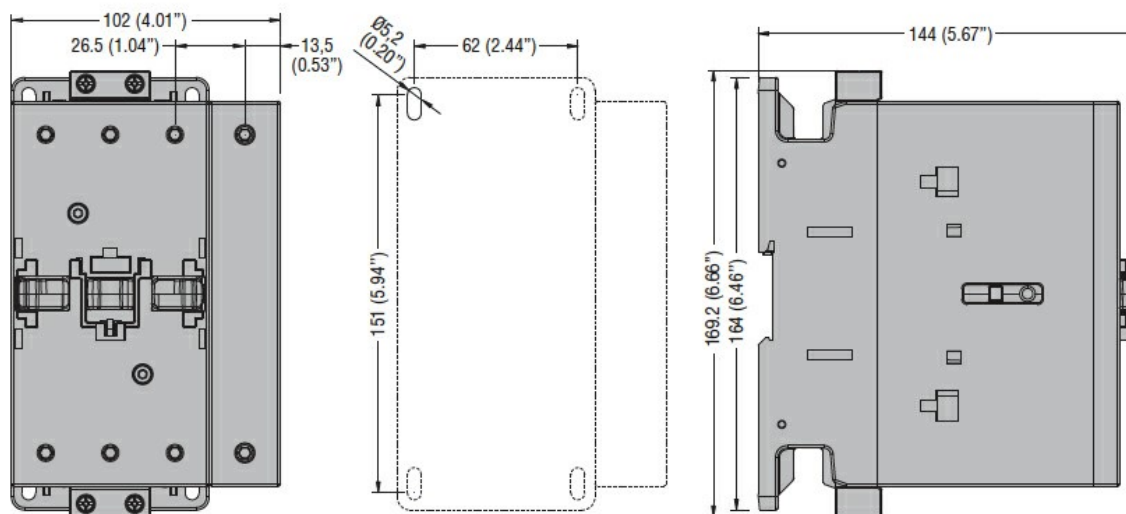
|     |    |     |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 80  |

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

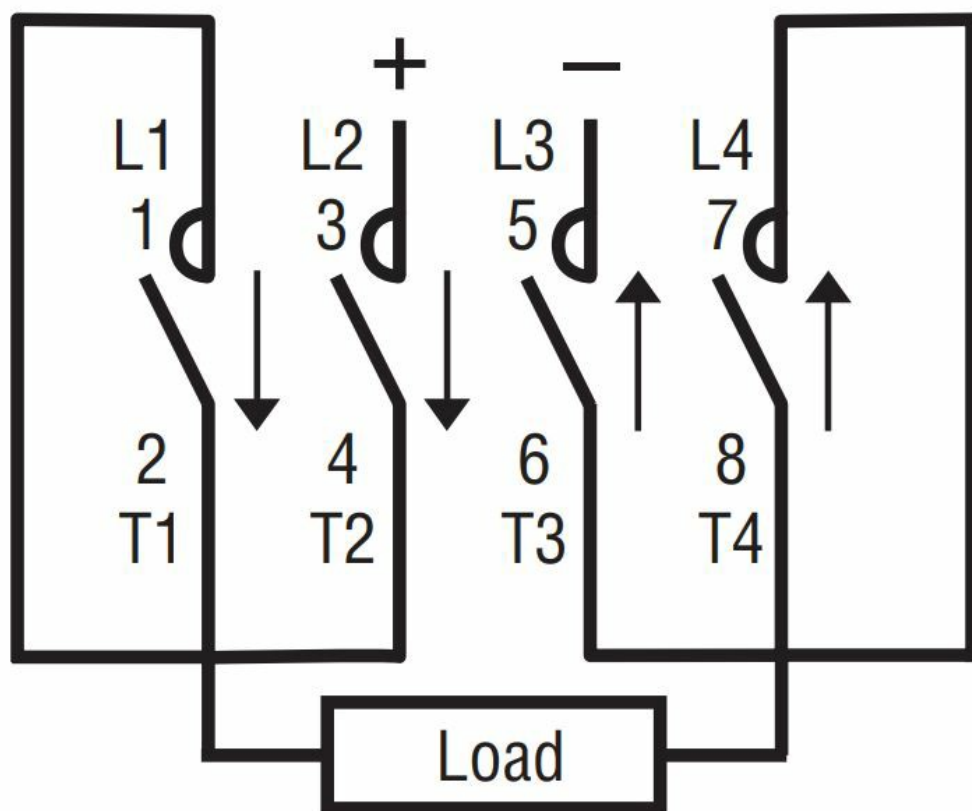
#### Resistance & Protection

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

##### Certificates

cULus

#### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching