



### Input characteristics

|                                    |                            |    |             |
|------------------------------------|----------------------------|----|-------------|
| Control voltage                    |                            |    | 3.5...32VDC |
| Operating voltage limits           |                            |    |             |
|                                    | Operating voltage pick-up  | V  | 3.5         |
|                                    | Operating voltage drop-out | V  | 2           |
| Input current at min...max voltage |                            | mA | 10...13     |
| Input reverse voltage              |                            | V  | 32          |

### Operating times

|               |  |  |                |
|---------------|--|--|----------------|
| Switching-on  |  |  | Half cycle max |
| Switching-off |  |  | Half cycle max |

### Output characteristics

|  |      |  |                                    |
|--|------|--|------------------------------------|
| Static output type                                       |      |  | SCR (silicon controlled rectifier) |
| Switching mode   |      |  | Zero crossing                      |
| Rated operating voltage                                  | VAC  |  | 24...600                           |
| Blocking voltage   | V    |  | 1200                               |
| Operational frequency (min...max)                        | Hz   |  | 45...65                            |
| Rated operating current AC-51 (resistive load) at 40°C   | A    |  | 50                                 |
| Rated operating current AC-51 (resistive load) at 55°C   | A    |  | 42                                 |
| Thermal resistance between junction to case              | K/W  |  | 0.55                               |
| Heatsink for use at 40°C and 55°C at rated current AC-51 | K/W  |  | ≤0.9                               |
| Operational current min                                  | A    |  | 0.05                               |
| Non repetitive surge peak on state current t=10ms        | A    |  | 580                                |
| Off state leakage current                                | mA   |  | 1                                  |
| On state output voltage drop                             | V    |  | 1.3                                |
| Critical rate of rise of off-state voltage dv/dt         | V/μs |  | 500                                |
| Input - Output isolation                                 | V    |  | 4000                               |
| Input - Output to metal base                             | V    |  | 4000                               |
| I2t  | A2s  |  | 1680                               |

### Terminal characteristics

|   |                                  |     |             |
|---|----------------------------------|-----|-------------|
| Control terminals   | Type                             |     | Screw M4    |
| Terminals tool  |                                  |     | PZ2         |
| Tightening torque control terminals   |                                  |     |             |
|   | Nm                               |     | 1.2...2     |
|   | Ibin                             |     | 10.6...17.7 |
| Conductor section connectable (control terminals) with 1 or 2 wires min...max |                                  |     |             |
|   | AWG stranded                     | n°  | 18...14     |
|   | Flexible w/o lug                 | mm2 | 0.75...2.5  |
|   | Flexible c/w insulated spade lug | mm2 | 0.75...2.5  |
| Load terminals  | Type                             |     | Screw M5    |
| Load terminals tool   |                                  |     | PZ2         |
| Tightening torque load terminals  |                                  |     |             |
|   | Nm                               |     | 2...3       |
|   | Ibin                             |     | 20.4        |

Conductor section connectable (load terminals) with 1 or 2 wires min...max

|                                  |     |         |
|----------------------------------|-----|---------|
| AWG stranded                     | n°  | 16...10 |
| Flexible w/o lug                 | mm2 | 1.5...6 |
| Flexible c/w insulated spade lug | mm2 | 1.5...6 |

Operating position

allowable Any

Fixing

Screw

**Ambient conditions**

Temperature

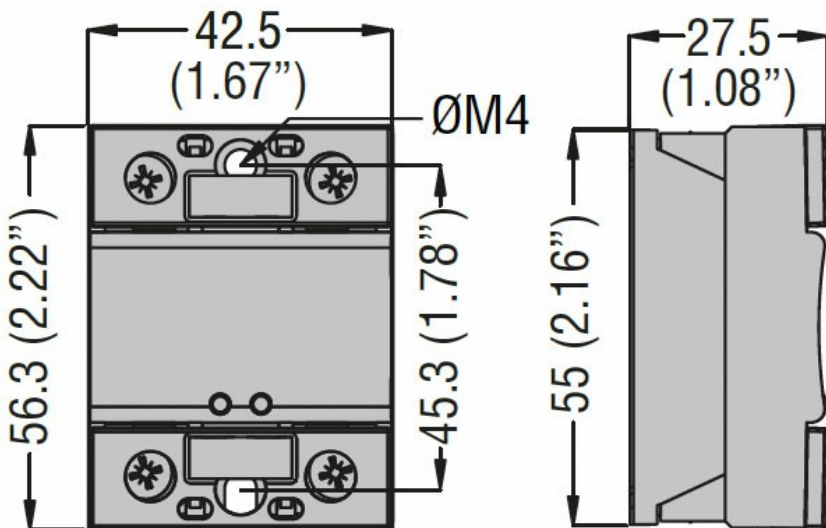
Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +90 |

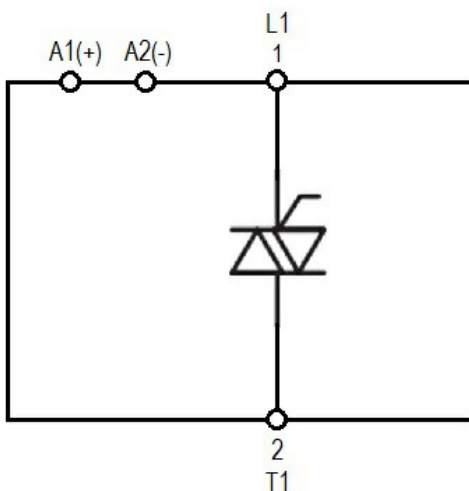
Storage temperature

|     |    |      |
|-----|----|------|
| min | °C | -40  |
| max | °C | +100 |

**Dimensions**



**Wiring diagrams**



**Certifications and compliance**

Certifications

IEC/EN/BS 60335-1  
IEC/EN/BS 60947-4-2

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IEC/EN/BS 60947-4-3

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IEC/EN/BS 62314

Compliance

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CSA

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cURus

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VDE

ETIM classification

EC000066 - Power contactor, AC switching