# Product data sheet
## Characteristics

# LRD380
Thermal overload relay, TeSys Deca, 690VAC, 62 to 80A, 1NO+1NC, class 10A, EverLink BTR screw



## Main

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|---|---|
| Range | TeSys<br>TeSys Deca |
| Product name | TeSys LRD<br>TeSys Deca |
| Product or component type | Differential thermal overload relay |
| Device short name | LRD |
| Relay application | Motor protection |
| Product compatibility | LC1D80A |
| Network type | AC<br>DC |
| Thermal overload class | Class 10A conforming to IEC 60947-4-1 |
| Thermal protection adjustment range | 62…80 A |
| [Ui] rated insulation voltage | Power circuit: 690 V conforming to IEC 60947-4-1<br>Power circuit: 600 V conforming to UL 60947-4-1<br>Power circuit: 600 V conforming to CSA C22.2 No 14 |

## Complementary

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|---|---|
| Network frequency | 0...400 Hz |
| Mounting support | Plate, with terminal block LAD96560 on top<br>Rail, with terminal block LAD96560 on top<br>Direct mounting under contactor |
| Tripping threshold | 1.14 +/- 0.06 Ir conforming to IEC 60947-4-1 |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Ith] conventional free air thermal current | 5 A for signalling circuit |
| Permissible current | 0.95 A at 380 V AC-15 for signalling circuit<br>0.06 A at 440 V DC-13 for signalling circuit |
| [Ue] rated operational voltage | 690 V AC 0...400 Hz for power circuit conforming to IEC 60947-4-1 |
| Associated fuse rating | 4 A gG for signalling circuit<br>4 A BS for signalling circuit |
| [Uimp] rated impulse withstand voltage | 6 KV |
| Power dissipation per pole | 4.8 W |
| Phase failure sensitivity | Tripping current 130 % of Ir on two phase, the last one at 0 |
| Control type | Red push-button: stop<br>Blue push-button: reset |
| Temperature compensation | -20…60 °C |

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|---|---|
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm² flexible with cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1…35 mm² flexible with cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1…35 mm² solid<br>Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm² solid<br>Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm² flexible<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1…35 mm² flexible<br>Power circuit: direct terminal link on top |
| Tightening torque | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 25 mm²<br>Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 35 mm² |
| Height | 70 Mm |
| Width | 55 Mm |
| Depth | 123 Mm |
| Net weight | 0.375 Kg |

## Environment

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|---|---|
| Climatic withstand | Conforming to IACS E10 |
| IP degree of protection | IP20 conforming to IEC 60529 |
| Ambient air temperature for operation | -20…60 °C without derating conforming to IEC 60947-4-1 |
| Ambient air temperature for storage | -60…70 °C |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7<br>Vibrations: 3 GN conforming to IEC 60068-2-6 |
| Dielectric strength | 1.89 KV at 50 Hz conforming to IEC 60947-1 |
| Standards | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>GB/T 14048.4<br>GB/T 14048.5 |
| Product certifications | IEC[RETURN]UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]DNV-GL[RETURN]RMR |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.000 Cm |
| Package 1 Width | 10.500 Cm |
| Package 1 Length | 13.500 Cm |
| Package 1 Weight | 392.000 G |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 13 |
| Package 2 Height | 15.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 5.383 Kg |

## Offer Sustainability

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|---|---|
| Recyclability potential, in % | 27 |
| Total lifecycle Carbon footprint | 4 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 0.45216814 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 0.5 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.532707701 |
| Carbon footprint of the distribution phase [A4] | 0.5 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.060948491 |
| Carbon footprint of the installation phase [A5] | 0.1 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 1.896335784 |
| REACh free of SVHC | Yes |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 2 kg CO2 eq. |

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| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.871212274 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.9 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 4 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| REACh Regulation | Free of Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead, which is known to the S |
| End of life manual availability | End Of Life Information |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection a |

## Contractual warranty

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| Warranty (in months) | 18 |

Product Life Status : Commercialised