

# Product Datasheet

## Characteristic

# LRD05

Thermal overload relay, TeSys Deca, 690VAC, 0.63 to 1 A, 1NO+1NC, class 10A, screw clamp



## Main

Range	TeSys TeSys Deca
Product name	TeSys LRD TeSys Deca
product or component type	Differential thermal overload relay
Device short name	LRD
relay application	Motor protection
Product compatibility	LC1D25 LC1D38 LC1D12 LC1D32 LC1D18 LC1D09
Network type	AC DC
Thermal overload class	Class 10A conforming to IEC 60947-4-1
Thermal protection adjustment range	0.63...1 A
[Ui] rated insulation voltage	Power circuit: 600 V conforming to CSA Power circuit: 600 V conforming to UL Power circuit: 690 V conforming to IEC 60947-4-1

## Complementary

Network frequency	0...400 Hz
Mounting support	Plate, with specific accessories Rail, with specific accessories Under contactor
Tripping threshold	1.14 +/- 0.06 I <sub>r</sub> conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
[I <sub>th</sub> ] conventional free air thermal current	5 A for signalling circuit
Permissible current	3 A at 120 V AC-15 for signalling circuit 0.22 A at 125 V DC-13 for signalling circuit
[U <sub>e</sub> ] 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 4 A BS for signalling circuit
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV
Phase failure sensitivity	Tripping current 130 % of I <sub>r</sub> on two phase, the last one at 0

Control type	Red push-button: stop Blue push-button: reset
Temperature compensation	-20...60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end Power circuit: screw clamp terminals 1 cable(s) 1.5...10 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1...6 mm <sup>2</sup> solid without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals Power circuit: 1.7 N.m - on screw clamp terminals
Height	66 mm
Width	45 mm
Depth	70 mm
net weight	0.124 kg

## Environment

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	Vibrations: 6 Gn conforming to IEC 60068-2-6 Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7
Dielectric strength	1.89 kV at 50 Hz conforming to IEC 60947-1
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4 GB/T 14048.5 EN 50495
Product certifications	IEC UL CSA CCC EAC BV RINA DNV-GL LROS (Lloyds register of shipping) ATEX INERIS UKCA

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5 cm
Package 1 Width	7.8 cm
Package 1 Length	8.9 cm
Package 1 Weight	139 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.767 kg

Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	80 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	68.388 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	&nbsp;Pro-active China RoHS declaration (out of China RoHS legal scope)
RoHS exemption information	Yes
Environmental Disclosure	ENVPEP080206EN
Circularity Profile	ENVEOLI0802006
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins