Product data sheet Characteristics

LC1DT20BD

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 20 A - 24 V DC standard coil



TSI Code: 386105072 Price*: 59.00 GBP



Main

Range	TeSys TeSys Deca	
Product name	TeSys D TeSys Deca	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Resistive load	
Utilisation category	AC-1	
Poles description	4P	
Pole contact composition	4 NO	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] rated operational current	20 A (at <60 °C) at <= 440 V AC AC-1 for power circuit	
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947	
Overvoltage category	III	
[lth] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 20 A (at 60 °C) for power circuit	
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947	
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947	
[lcw] rated short-time withstand current	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit	
Average impedance	2.5 MOhm - Ith 20 A 50 Hz for power circuit	

[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1
Power dissipation per pole	1.56 W AC-1
Protective cover	With
Mounting support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
Product certifications	GOST LROS (Lloyds register of shipping) UL CSA RINA BV CCC DNV GL
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end
	Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end
	Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver-pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver-pozidriv No 2
Operating time	1624 ms opening 53.5572.45 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming- to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming- to EN/ISO 13849-1
Mechanical durability	30 Mcycles
Maximum operating rate	3600 Cyc/H 60 °C
Complementary	
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.10.25 Uc (-4070 °C):drop-out DC 0.71.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC
Time constant	28 Ms
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W at 20 °C
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling circuit frequency	25400 Hz

Minimum switching current	5 MA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact 1.5 Ms on energisation between NC and NO contact
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529	
Protective treatment	TH conforming to IEC 60068-2-30	
Pollution degree	3	
Ambient air temperature for operation	-4060 °C 6070 °C with derating	
Ambient air temperature for storage	-6080 °C	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms	
Height	85 Mm	-
Width	45 Mm	
Depth	99 Mm	
Product weight	0.365 Kg	

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	556 G	
Package 1 Height	5.5 Cm	
Package 1 width	9.5 Cm	
Package 1 Length	12 Cm	

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	☑ REACh Declaration	
EU RoHS Directive	Compliant EEU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	€Yes	
China RoHS Regulation	China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	

Contractual warranty

Warranty	18 months

Product Life Status :	Commercialised
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