Product datasheet Characteristics

LC1D38JD

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 38 A - 12 V DC standard coil



Price*: 142.89 GBP



Main

Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Motor control Resistive load	
Utilisation category	AC-1 AC-3 AC-4	
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit	:
[le] rated operational current	38 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 50 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	18.5 kW at 500 V AC 50/60 Hz AC-3 18.5 kW at 660690 V AC 50/60 Hz AC-3 7.5 kW at 400 V AC 50/60 Hz AC-4 18.5 kW at 380400 V AC 50/60 Hz AC-3 18.5 kW at 415440 V AC 50/60 Hz AC-3 9 kW at 220230 V AC 50/60 Hz AC-3	
Motor power hp	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 240 V AC 50/60 Hz for 1 phase motors 20 hp at 480 V AC 50/60 Hz for 3 phases motors 25 hp at 600 V AC 50/60 Hz for 3 phases motors	- - - :
Control circuit type	DC standard	====
[Uc] control circuit voltage	12 V DC	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947	
Overvoltage category	III	

[Ith] conventional free air thermal current	50 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	550 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	150 A <= 40 °C 1 min power circuit 310 A <= 40 °C 10 s power circuit 430 A <= 40 °C 1 s power circuit 60 A <= 40 °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2 mOhm at 50 Hz - Ith 50 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V
Power dissipation per pole	3 W AC-3 5 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
Product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 1.510 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm² - cable stiffness: solid - 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: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	53.5572.45 ms closing

	1624 ms opening
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
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor	
Control circuit voltage limits	0.10.25 Uc drop-out at 60 °C, DC 0.71.25 Uc operational at 60 °C, 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	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without derating in temperature
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 8 Gn for 11 ms
Height	85 mm
Width	45 mm
Depth	101 mm
Product weight	0.54 kg

Offer Sustainability

Green Premium product
Compliant - since 0627 - Schneider Electric declaration of conformity
Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold
Reference not containing SVHC above the threshold
Available
Product environmental
Available
☑End of life manual

Warranty period

18 months