Product data sheet
Characteristics

LC1D150M7
TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V
150 A - 220 V AC coil

Price*: 696.00 USD

Main

Commercial Status	Commercialised
Range of product	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 1000 V AC 25...400 Hz for power circuit
[Ie] rated operational current	150 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 200 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	75 kW at 1000 V AC 50/60 Hz 100 kW at 660...690 V AC 50/60 Hz 90 kW at 500 V AC 50/60 Hz 80 kW at 415...440 V AC 50/60 Hz 75 kW at 380...400 V AC 50/60 Hz 40 kW at 220...230 V AC 50/60 Hz
Motor power hp	125 hp at 575/600 V AC 50/60 Hz for 3 phases motors 100 hp at 460/480 V AC 50/60 Hz for 3 phases motors 50 hp at 230/240 V AC 50/60 Hz for 3 phases motors 40 hp at 200/208 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	220 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 A at <= 140 °F (60 °C) for power circuit
Irms rated making capacity	1660 A at 440 V for power circuit conforming to IEC 60947 250 A DC for signalling circuit conforming to IEC 60947-5-1 140 A AC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	1400 A <= 104 °F (40 °C) 1 s power circuit 1200 A <= 104 °F (40 °C) 10 s power circuit 580 A <= 104 °F (40 °C) 1 min power circuit 140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit 250 A <= 104 °F (40 °C) 10 min power circuit
Associated fuse rating	250 A gG at <= 690 V coordination type 2 for power circuit 315 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	0.60 mOhm at 50 Hz - Ith 200 A for power circuit

[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for signalling circuit certifications UL 600 V for signalling circuit certifications CSA 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA
Electrical durability	1 Mcycles 200 A AC-1 at Ue <= 440 V 0.85 Mcycles 150 A AC-3 at Ue <= 440 V
Power dissipation per pole	AC-3 AC-1
Protective cover	With
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Power circuit: connector 2 cable(s) 0.02...0.08 in² (10...50 mm²) - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 0.02...0.19 in² (10...120 mm²) - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 0.02...0.08 in² (10...50 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.02...0.19 in² (10...120 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 0.02...0.08 in² (10...50 mm²) - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 0.02...0.19 in² (10...120 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end
Tightening torque	Power circuit: 106.19 lbf.in (12 N.m) - on connector hexagonal 0.16 in (4 mm) Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	40...75 ms opening 20...35 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	8 Mcycles
Operating rate	1200 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.8...1.15 Uc at 131 °F (55 °C) operational 50/60 Hz 0.3...0.5 Uc at 131 °F (55 °C) drop-out 50/60 Hz
Inrush power in VA	280...350 VA at 20 °C (cos ϕ 0.9) 50 Hz 280...350 VA at 20 °C (cos ϕ 0.9) 60 Hz
Hold-in power consumption in VA	2...18 VA at 20 °C (cos ϕ 0.9) 50 Hz 2...18 VA at 20 °C (cos ϕ 0.9) 60 Hz
Heat dissipation	3...4.5 W at 50/60 Hz
Auxiliary contacts type	Type mirror contact (1 NC) conforming to IEC 60947-4-1 Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on energisation (between NC and NO contact) 1.5 ms on de-energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 6 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor closed 4 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	6.22 in (158 mm)
Width	4.72 in (120 mm)
Depth	5.35 in (136 mm)
Product weight	5.51 lb(US) (2.5 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901899211
Nbr. of units in pkg.	1
Package weight(Lbs)	5.49
Returnability	Y
Country of origin	CZ

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0932 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Need no specific recycling operations