Product data sheet
Characteristics

LC1D50ABD
TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 24 V DC standard coil

Product availability : Stock - Normally stocked in distribution facility

Price* : 306.00 USD

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
Power pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 690 V AC 25...400 Hz power circuit
[Ie] rated operational current	50 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 80 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Motor power kW	22 kW at 380...400 V AC 50/60 Hz AC-3 25 kW at 415 V AC 50/60 Hz AC-3 30 kW at 440 V AC 50/60 Hz AC-3 30 kW at 500 V AC 50/60 Hz AC-3 33 kW at 660...690 V AC 50/60 Hz AC-3 15 kW at 220...230 V AC 50/60 Hz AC-3 11 kW at 400 V AC 50/60 Hz AC-4
Motor power HP (UL / CSA)	3 hp at 115 V AC 50/60 Hz 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz 1 phase motors 15 hp at 200/208 V AC 50/60 Hz 3 phases motors 15 hp at 230/240 V AC 50/60 Hz 3 phases motors 40 hp at 460/480 V AC 50/60 Hz 3 phases motors 40 hp at 575/600 V AC 50/60 Hz 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	24 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	80 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	900 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	900 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 400 A <= 104 °F (40 °C) 10 s power circuit 810 A <= 104 °F (40 °C) 1 s power circuit 84 A <= 104 °F (40 °C) 10 min power circuit 208 A <= 104 °F (40 °C) 1 min power circuit
Associated fuse rating	100 A gG at <= 690 V coordination type 1 power circuit 100 A gG at <= 690 V coordination type 2 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A power circuit
[Ui] rated insulation voltage	600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
Safety 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) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm² - cable stiffness: flexible - with cable end Power circuit : screw connection 2 cable(s) 1...25 mm² - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm² - cable stiffness: solid - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm² - cable stiffness: flexible - with cable end
Tightening torque	Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 70.8 lbf.in (8 N.m) - on EverLink BTR screw connectors - cable 0.04...0.05 in² (25...35 mm²) hexagonal 0.16 in (4 mm)

	Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm² hexagonal 4 mm
Operating time	16...24 ms opening 42.5...57.5 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	10 Mcycles
Operating rate	<= 3600 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc drop-out at 140 °F (60 °C), DC 0.75...1.25 Uc operational at 60 °C, DC
Time constant	34 ms
Inrush power in W	19 W at 68 °F (20 °C)
Hold-in power consumption in W	7.4 W at 68 °F (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	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V 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 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	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	Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	4.8 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Product weight	2.05 lb(US) (0.93 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901562542
Nbr. of units in pkg.	1
Package weight(Lbs)	2.1899999999999999
Returnability	Y
Country of origin	FR

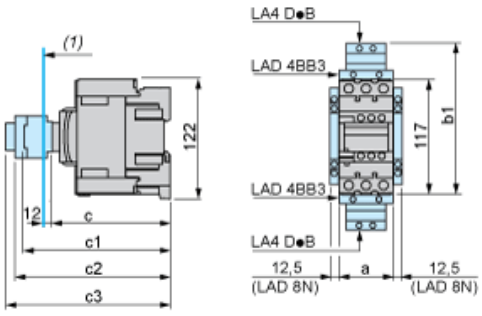
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - - - Substance 1	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
- - - - - - - More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months

Dimensions



(1) Minimum electrical clearance

LC1		D40A…D65A
a		55
b1	with LAD 4BB3	136
with LA4 DF, DT	157	
c	without cover or add-on blocks	118
with cover, without add-on blocks	120	
c1	with LAD N (1 contact)	–
with LAD N or C (2 or 4 contacts)	150	
c2	with LA6 DK10	163
c3	with LAD T, R, S	171
with LAD T, R, S and sealing cover	175	

Wiring