

LC1D25BD

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 24 V DC coil



Price*: 88.70 GBP



Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component-type	Contacteur
Device short name	LC1D
Contacteur 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 25...400 Hz for power circuit
[Ie] rated operational-current	25 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 40 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	11 kW at 380...400 V AC 50/60 Hz AC-3 15 kW at 500 V AC 50/60 Hz AC-3 15 kW at 660...690 V AC 50/60 Hz AC-3 5.5 kW at 220...230 V AC 50/60 Hz AC-3 11 kW at 415...440 V AC 50/60 Hz AC-3 5.5 kW at 400 V AC 50/60 Hz AC-4
Motor power hp	2 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 15 hp at 460/480 V AC 50/60 Hz for 3 phases motors 20 hp at 575/600 V AC 50/60 Hz for 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	6 kV conforming to IEC 60947
Overtoltage category	III
[Ith] conventional-free air thermal current	40 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	450 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	450 A at 440 V for power circuit conforming-to IEC 60947

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein. *Prices are indicative

[Icw] rated short-time-withstand current	120 A <= 40 °C 1 min power circuit 240 A <= 40 °C 10 s power circuit 380 A <= 40 °C 1 s power circuit 50 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	40 A gG at <= 690 V coordination type 2 for power-circuit 63 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	2 mOhm at 50 Hz - Ith 40 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	1.65 Mcycles 25 A AC-3 at Ue <= 440 V 1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power dissipation per-pole	3.2 W AC-1 1.25 W AC-3
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	<p>Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : screw clamp terminals 1 cable(s) 1.5...10 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Power circuit : screw clamp terminals 1 cable(s) 2.5...10 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit : screw clamp terminals 2 cable(s) 2.5...10 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit : screw clamp terminals 1 cable(s) 1...10 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : screw clamp terminals 2 cable(s) 1.5...6 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : screw clamp terminals 2 cable(s) 2.5...10 mm² - cable stiffness: solid - without cable end</p>
Tightening torque	<p>Control circuit : 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p> <p>Control circuit : 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2</p> <p>Power circuit : 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p> <p>Power circuit : 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2</p>
Operating time	<p>53.55...72.45 ms closing</p> <p>16...24 ms opening</p>
Safety reliability level	<p>B10d = 1369863 cycles contactor with nominal load-conforming to EN/ISO 13849-1</p> <p>B10d = 20000000 cycles contactor with mechanical-load conforming to EN/ISO 13849-1</p>
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	<p>0.1...0.25 U_c drop-out at 60 °C, DC</p> <p>0.7...1.25 U_c operational at 60 °C, DC</p>
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	<p>Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1</p> <p>Type mirror contact (1 NC) conforming to IEC 60947-4-1</p>
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	<p>1.5 ms on energisation between NC and NO contact</p> <p>1.5 ms on de-energisation between NC and NO contact</p>
Insulation resistance	> 10 MOhm for signalling circuit
Contact compatibility	M4
Compatibility code	LC1D

Power range	7...11 kW 380...440 V 3 phases 7...11 kW 480...500 V 3 phases 4...6 kW 200...240 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	24 V DC standard

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	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °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, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 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	0.53 kg

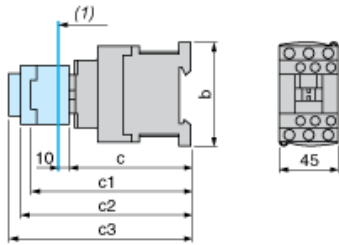
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0627 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental
Product end of life instructions	Available End Of Life Manual

Contractual warranty

Warranty period	18 months
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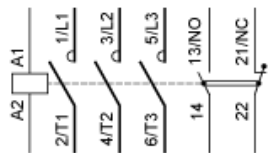
Dimensions







(1) Minimum electrical clearance

LC1		D25...D38	D183...D323
b		85	99
c	without cover or add-on blocks	99	99
	with cover, without add-on blocks	101	
c1	with LAD N or C (2 or 4 contacts)	132	132
c2	with LA6 DK10	144	144
c3	with LAD T, R, S	152	152
	with LAD T, R, S and sealing cover	156	

Wiring







Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power from 9 to 11 kW and 415 VAC

Motor power (kW)	ICU (kA)	Breaker	Contactor (*)
9	15	 GV2ME21	 LC1D25BD
11	15	 GV2ME22	 LC1D25BD

Non contractual pictures.

Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.

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Product Life Status : **Commercialised**