Product data sheet
Characteristics

LC1D32BD
TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 32 A - 24 V DC coil

Product availability : Stock - Normally stocked in distribution facility

Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
Pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 690 V AC 25...400 Hz power circuit
[Ie] rated operational current	32 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 50 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Motor power kW	15 kW at 380...400 V AC 50/60 Hz AC-3 7.5 kW at 220...230 V AC 50/60 Hz AC-3 18.5 kW at 500 V AC 50/60 Hz AC-3 18.5 kW at 660...690 V AC 50/60 Hz AC-3 15 kW at 415...440 V AC 50/60 Hz AC-3 7.5 kW at 400 V AC 50/60 Hz AC-4
Motor power hp	2 hp at 115 V AC 50/60 Hz 1 phase motors 5 hp at 230/240 V AC 50/60 Hz 1 phase motors 7.5 hp at 200/208 V AC 50/60 Hz 3 phases motors 10 hp at 230/240 V AC 50/60 Hz 3 phases motors 20 hp at 460/480 V AC 50/60 Hz 3 phases motors 30 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	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	50 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	550 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	550 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	138 A <= 104 °F (40 °C) 1 min power circuit 260 A <= 104 °F (40 °C) 10 s power circuit 430 A <= 104 °F (40 °C) 1 s power circuit 60 A <= 104 °F (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 power circuit 63 A gG at <= 690 V coordination type 2 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	2 mOhm at 50 Hz - Ith 50 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	1.65 Mcycles 32 A AC-3 at Ue <= 440 V 1.4 Mcycles 50 A AC-1 at Ue <= 440 V
Power dissipation per pole	2 W AC-3 5 W AC-1
Protective cover	With
Mounting support	Rail Plate
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	UL LROS (Lloyds register of shipping) RINA GL GOST DNV CSA CCC BV
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.02 in² (1.5...10 mm²) - cable stiffness: solid - without 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 clamp terminals 1 cable(s) 0...0.02 in² (2.5...10 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...10 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.02 in² (1...10 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1.5...6 mm²) - cable stiffness: flexible - with cable end

	Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...10 mm²) - cable stiffness: solid - without 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: 22.12 lbf.in (2.5 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 22.12 lbf.in (2.5 N.m) - on screw clamp terminals - with screwdriver Philips No 2
Operating time	53.55...72.45 ms closing 16...24 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 <= 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.25 Uc drop-out at 140 °F (60 °C), DC 0.7...1.25 Uc operational at 140 °F (60 °C), DC
Time constant	28 ms
Inrush power in W	5.4 W at 68 °F (20 °C)
Hold-in power consumption in W	5.4 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 energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm signalling circuit
Power range	7...11 kW 200...240 V 3 phases 15...25 kW 380...440 V 3 phases 15...25 kW 480...500 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	24 V DC standard

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	-4...140 °F (-20...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 closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms
Height	3.35 in (85 mm)
Width	1.77 in (45 mm)
Depth	3.98 in (101 mm)
Product weight	1.18 lb(US) (0.535 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW

Discount Schedule	I12
GTIN	00785901207313
Nbr. of units in pkg.	1
Package weight(Lbs)	1.29
Returnability	Y
Country of origin	ID

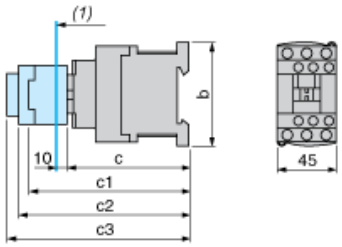
Offer Sustainability

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 Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months

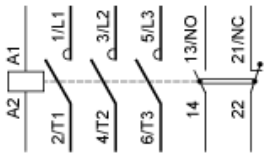
Dimensions



(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 15 kW and 415 VAC

Motor Power (kW)	Icu (kA)	Breaker	Contactor
15	10	 GV2ME32	 LC1D32BD

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.