# Product data sheet Characteristics

# LC1D50BD CONTACTOR 600VAC 50AMP IEC +OPTIONS

Product availability: Stock - Normally stocked in distribution facility



Price\*: 382.00 USD



#### Main

Range of product	TeSys D	
Range	TeSys	
Product or component type	Contactor	
Device short name	LC1D	-
Contactor application	Motor control Resistive load	: :
Utilisation category	AC-1 AC-2 AC-3 AC-4	
Control circuit type	DC DC standard	
Poles description	3P	
Pole contact composition	3 NO	
[le] 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 380400 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 660690 V AC 50/60 Hz AC-3 15 kW at 220230 V AC 50/60 Hz AC-3 11 kW at 400 V AC 50/60 Hz AC-4 30 kW at 1000 V AC 50/60 Hz AC-3	
Motor power hp	15 hp at 200/208 V AC 60 Hz 3P motors conforming to CSA 15 hp at 200/208 V AC 60 Hz 3P motors conforming to UL 15 hp at 230/240 V AC 60 Hz 3P motors conforming to CSA 15 hp at 230/240 V AC 60 Hz 3P motors conforming to UL 3 hp at 115 V AC 60 Hz 1P motors conforming to CSA 3 hp at 115 V AC 60 Hz 1P motors conforming to UL 40 hp at 460/480 V AC 60 Hz 3P motors conforming to CSA 40 hp at 460/480 V AC 60 Hz 3P motors conforming to UL 40 hp at 575/600 V AC 60 Hz 3P motors conforming to CSA 40 hp at 575/600 V AC 60 Hz 3P motors conforming to UL 7.5 hp at 230/240 V AC 60 Hz 1P motors conforming to CSA	

Control circuit voltage	24 V DC
Connections - terminals	Control circuit: screw clamp terminal 1 cable 00.01 in² (14 mm²) - cable stiffness: solid - without cable end
	Control circuit: screw clamp terminal 2 cable 00.01 in² (14 mm²) - cable stiffness: solid - without cable end
	Power circuit: screw clamp terminal 1 cable 00.05 in² (135 mm²) - cable stiffness: solid - without cable end
	Power circuit: screw clamp terminal 2 cable 00.04 in² (125 mm²) - cable stiffness: solid - without cable end
	Power circuit: screw clamp terminal 1 cable 00.05 in² (135 mm²) - cable stiffness: flexible - without cable end
	Control circuit: screw clamp terminal 1 cable 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end
	Control circuit: screw clamp terminal 2 cable 00 in² (12.5 mm²) - cable stiffness: flexible - without cable end
	Control circuit: screw clamp terminal 2 cable 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end
	Power circuit: screw clamp terminal 2 cable 00.04 in² (125 mm²) - cable stiffness: flexible - with cable end
	Power circuit: screw clamp terminal 2 cable 00.05 in² (135 mm²) - cable stiffness: flexible - without cable end
	Power circuit: screw clamp terminal 2 cable 00.05 in² (135 mm²) - cable stiffness: solid - with cable end
	Power circuit : screw terminals

#### Complementary

Complementary	
Coil technology	Built-in bidirectional peak limiting diode suppressor
Protective cover	With
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
Auxiliary contact composition	1 NO + 1 NC
Control circuit voltage limits	0.10.3 Uc at 140 °F (60 °C) drop-out 0.751.25 Uc at 140 °F (60 °C) operational
Time constant	34 ms
[Ui] rated insulation voltage	1000 V power circuit conforming to IEC 60947-4-1 600 V control circuit certifications CSA 600 V control circuit certifications UL 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V control circuit conforming to IEC 60947-1 690 V power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Power circuit: 44.25 lbf.in (5 N.m) - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 44.25 lbf.in (5 N.m) - on screw clamp terminal - with screwdriver flat Ø 8 mm
System Voltage	<= 690 V AC 25400 Hz power circuit
[lth] conventional free air thermal current	10 A at <= 140 °F (60 °C) control circuit 80 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	250 A DC control circuit conforming to IEC 60947-5-1 900 A at 440 V power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V power circuit conforming to IEC 60947
Associated fuse rating	10 A gG control circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1 power circuit 100 A gG at <= 690 V coordination type 2 power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
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)
Operating time	20 ms opening

	50 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	10000000 cycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V control circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contacts     1.5 ms on energisation between NC and NO contacts
Insulation resistance	> 10 MOhm control circuit
Rated operational power in W	14 W at 24 V DC-13 - electrical durability: 10000000 cycles - for control circuit 48 W at 24 V DC-13 - electrical durability: 3000000 cycles - for control circuit 96 W at 24 V DC-13 - electrical durability: 1000000 cycles - for control circuit
Height	5 in (127 mm)
Width	3.35 in (85 mm)
Depth	6.93 in (176 mm)
Product weight	4.82 lb(US) (2.185 kg)

#### Environment

Environment	
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 LROS (Lloyds register of shipping) RINA UL
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
Ambient air temperature for operation	23140 °F (-560 °C)
Ambient air temperature for storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	-40158 °F (-4070 °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
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn 5300 Hz contactor opened 4 gn 5300 Hz contactor closed

### Ordering and shipping details

<u> </u>	
Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	112
GTIN	00785901420811
Nbr. of units in pkg.	1
Package weight(Lbs)	4.75
Returnability	Υ
Country of origin	CZ

## Offer Sustainability

Sustainable offer status	Green Premium product

RoHS (date code: YYWW)	Compliant - since 0706 - 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	