

LC1D656BD

contactor TeSys LC1-D - 3 poles - AC-3 440V 65 A - coil 250 V DC



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Main

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Range of product	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-2 AC-3 AC-4
Control circuit type	DC
Coil type	DC standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	80 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit 65 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	30 kW at 380...400 V AC 50/60 Hz 30 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz 37 kW at 1000 V AC 50/60 Hz 37 kW at 500 V AC 50/60 Hz 37 kW at 660...690 V AC 50/60 Hz 18.5 kW at 220...230 V AC 50/60 Hz
Motor power hp	10 hp at 230/240 V AC 60 Hz for 1P motors conforming to CSA 10 hp at 230/240 V AC 60 Hz for 1P motors conforming to UL 20 hp at 200/208 V AC 60 Hz for 3P motors conforming to CSA 20 hp at 200/208 V AC 60 Hz for 3P motors conforming to UL 20 hp at 230/240 V AC 60 Hz for 3P motors conforming to CSA 20 hp at 230/240 V AC 60 Hz for 3P motors conforming to UL 5 hp at 115 V AC 60 Hz for 1P motors conforming to CSA 5 hp at 115 V AC 60 Hz for 1P motors conforming to UL 50 hp at 460/480 V AC 60 Hz for 3P motors conforming to CSA 50 hp at 460/480 V AC 60 Hz for 3P motors conforming to UL 50 hp at 575/600 V AC 60 Hz for 3P motors conforming to CSA 50 hp at 575/600 V AC 60 Hz for 3P motors conforming to UL
Control circuit voltage	24 V DC
Connections - terminals	Control circuit : ring lugs 1 - external diameter: 8 mm Power circuit : ring lugs 1 - external diameter: 16.5 mm

Complementary

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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	0.1...0.3 Uc at 60 °C drop-out 0.75...1.25 Uc at 60 °C operational
Time constant	34 ms
[Ui] rated insulation voltage	600 V for control circuit certifications CSA 600 V for control circuit certifications UL

	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for control circuit conforming to IEC 60947-1 690 V for power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Control circuit : 1.2 N.m - on ring lugs - with screwdriver flat Ø 6 mm M3.5 Control circuit : 1.2 N.m - on ring lugs - with screwdriver Philips No 2 M3.5 Power circuit : 5 N.m - on ring lugs - with screwdriver flat Ø 8 mm M6 Power circuit : 5 N.m - on ring lugs - with screwdriver Philips No 3 M6
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit
[Ith] conventional free air thermal current	10 A at <= 60 °C for control circuit 80 A at <= 60 °C for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 250 A DC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	At 50 Hz - Ith 80 A for power circuit
Power dissipation per pole	4.2 W AC-3 6.4 W AC-1
Inrush power in W	19 W at 20 °C
Hold-in power consumption in W	7.4 W at 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 <= 60 °C
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for 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 for 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	127 mm
Width	85 mm
Depth	176 mm
Product weight	2.185 kg


Environment

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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	-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
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed

Offer Sustainability - Hide

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0716 - 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

Contractual warranty - Hide

Period	18 months
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