



### Main

Range of product	TeSys D
Range	TeSys
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 standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	50 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 80 A (<= 60 °C) at <= 440 V AC AC-1 for 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 30 kW at 1000 V AC 50/60 Hz AC-3
Motor power hp	15 hp at 200/208 V AC 60 Hz for 3P motors conforming to CSA 15 hp at 200/208 V AC 60 Hz for 3P motors conforming to UL 15 hp at 230/240 V AC 60 Hz for 3P motors conforming to CSA 15 hp at 230/240 V AC 60 Hz for 3P motors conforming to UL 3 hp at 115 V AC 60 Hz for 1P motors conforming to CSA 3 hp at 115 V AC 60 Hz for 1P motors conforming to UL 40 hp at 460/480 V AC 60 Hz for 3P motors conforming to CSA 40 hp at 460/480 V AC 60 Hz for 3P motors conforming to UL 40 hp at 575/600 V AC 60 Hz for 3P motors conforming to CSA 40 hp at 575/600 V AC 60 Hz for 3P motors conforming to UL 7.5 hp at 230/240 V AC 60 Hz for 1P motors conforming to CSA 7.5 hp at 230/240 V AC 60 Hz for 1P motors conforming to UL

Disclaimer: 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

[Uc] control circuit voltage	48 V DC
Connections - terminals	Control circuit : screw clamp terminal 1 cable 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit : screw clamp terminal 2 cable 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 1 cable 1...35 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 2 cable 1...25 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 1 cable 1...35 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminal 1 cable 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit : screw clamp terminal 2 cable 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminal 2 cable 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : screw clamp terminal 2 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : screw clamp terminal 2 cable 1...35 mm <sup>2</sup> - cable stiffness: flexible - without cable end Power circuit : screw clamp terminal 2 cable 1...35 mm <sup>2</sup> - cable stiffness: solid - with cable end Power circuit : screw terminals

## 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	0.1...0.3 U <sub>c</sub> at 60 °C drop-out 0.75...1.25 U <sub>c</sub> 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 IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Power circuit : 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit : 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm
[U <sub>e</sub> ] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit
[I <sub>th</sub> ] conventional free air thermal current	10 A at <= 60 °C for control circuit 80 A at <= 60 °C for power circuit
I <sub>rms</sub> rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Power dissipation per pole	3.7 W AC-3 9.6 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	12 W at 48 V DC-13 - electrical durability: 10000000 cycles - for control circuit 38 W at 48 V DC-13 - electrical durability: 3000000 cycles - for control circuit 76 W at 48 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

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

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0706 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Available <a href="#">End of Life Information</a>

## Contractual warranty

Warranty period	18 months
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