



Main

Range of product	TeSys D
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1
Control circuit type	AC
Coil type	Standard
Poles description	4P
Pole contact composition	4 NO
[Ie] rated operational current	60 A (≤ 140 °F (60 °C)) at 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	120 V AC 60 Hz
Connections - terminals	Control circuit: screw clamp terminal 1 cable 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminal 2 cable 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminal 2 cable 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminal 1 cable 0...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminal 2 cable 0...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid - without cable end

Complementary

Coil technology	Without 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
Control circuit voltage limits	0.3...0.6 U _c at 140 °F (60 °C) drop-out 50/60 Hz 0.85...1.1 U _c at 140 °F (60 °C) operational 60 Hz
[U _i] rated insulation voltage	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 60947-4-1 690 V power circuit conforming to IEC 60947-4-1
[U _{imp}] rated impulse withstand voltage	6 kV conforming to 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 hexagonal Power circuit: 44.25 lbf.in (5 N.m) - on screw clamp terminal - with screwdriver Philips No 2 hexagonal Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminal - with screwdriver flat Ø 6 mm
System Voltage	690 V AC 25...400 Hz power circuit
[I _{th}] conventional free air thermal current	10 A at ≤ 140 °F (60 °C) control circuit

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

	40 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 800 A at 440 V AC for power circuit conforming to IEC 60947
Rated breaking capacity	800 kA at 440 V power circuit conforming to IEC 60947
Associated fuse rating	10 A gG control circuit conforming to IEC 60947-5-1 80 A at 690 V coordination type 1 for power circuit 80 A at 690 V coordination type 2 for power circuit
Average impedance	1.5 Ohm at 50 Hz - lth 60 A for power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Inrush power in VA	140 VA at 68 °F (20 °C) (cos φ 0.75)
Operating time	4...19 ms opening 12...22 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	15000000 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

Environment

standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 508 CSA C22.2 No 14
product certifications	BV CCC CSA DNV GL LROS (Lloyds register of shipping) RINA UL
IP degree of protection	IP2x conforming to VDE 0106
protective treatment	TH conforming to IEC 60068-2-30
ambient air temperature for operation	23...140 °F (-5...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 U _c
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 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed
heat dissipation	2...3 W at 50/60 Hz for control circuit

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0701 - Schneider Electric declaration of conformity	Compliant - since 0701 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.

Contractual warranty

Warranty period	18 months
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