



### Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	<= 690 V AC for power circuit <= 300 V DC 25...400 Hz for power circuit
[Ie] rated operational current	125 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50 Hz
[Uc] control circuit voltage	48 V AC 50 Hz
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	125 A at <= 60 °C for power circuit
Irms rated making capacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	135 A <= 40 °C 10 min power circuit 640 A <= 40 °C 10 s power circuit 990 A <= 40 °C 1 s power circuit 320 A <= 40 °C 1 min power circuit
Associated fuse rating	160 A gG at <= 690 V coordination type 2 for power circuit 200 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for power circuit certifications UL
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V

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

Power dissipation per pole	12.5 W AC-1
Safety cover	Without
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	BV GOST DNV CSA UL RINA CCC GL LROS (Lloyds register of shipping)
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 4...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 4...16 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 4...25 mm <sup>2</sup> - cable stiffness: solid - without cable end
Tightening torque	Power circuit : 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit : 9 N.m - on connector hexagonal 4 mm Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	20...35 ms closing 6...20 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Operating rate	3600 cyc/h at ≤ 60 °C

## Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U <sub>c</sub> drop-out at 55 °C, AC 50 Hz 0.85...1.1 U <sub>c</sub> operational at 55 °C, AC 50 Hz
Inrush power in VA	200 VA at 20 °C (cos φ 0.75) 50 Hz
Hold-in power consumption in VA	20 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	6...10 W at 50 Hz

## Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
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 U <sub>c</sub>
Operating altitude	3000 m without derating

Fire resistance	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 Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	127 mm
Width	96 mm
Depth	140 mm
Product weight	1.84 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0707 - 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	Need no specific recycling operations

### Contractual warranty

Warranty period	18 months
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