



## Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit: ≤ 1000 V AC 25...400 Hz
[Ie] rated operational current	125 A (at ≤60 °C) at ≤ 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	230 V AC 50/60 Hz
Auxiliary contact composition	Without
[Uimp] rated impulse withstand voltage	8 kV 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 AC 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 for power circuit 320 A 40 °C - 1 min for power circuit 640 A 40 °C - 10 s for power circuit 990 A 40 °C - 1 s for power circuit
Associated fuse rating	200 A gG at ≤ 690 V coordination type 1 for power circuit 160 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 1000 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue ≤ 440 V
Power dissipation per pole	12.5 W AC-1
Safety cover	With
Mounting support	Rail Plate
Standards	EN/IEC 60947-4-1

Product certifications	IEC UL CSA CCC
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid Power circuit: screw connectors 1 cable(s) 4...50 mm <sup>2</sup> solid Power circuit: screw connectors 2 cable(s) 4...25 mm <sup>2</sup> solid Power circuit: screw connectors 1 cable(s) 4...50 mm <sup>2</sup> flexible with cable end Power circuit: screw connectors 2 cable(s) 4...16 mm <sup>2</sup> flexible with cable end Power circuit: screw connectors 1 cable(s) 4...50 mm <sup>2</sup> flexible without cable end Power circuit: screw connectors 2 cable(s) 4...25 mm <sup>2</sup> flexible 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 screw head 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	6...20 ms opening 20...35 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	4 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

## Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 Uc 55 °C operational AC 60 Hz 0.3...0.6 Uc 55 °C drop-out AC 50/60 Hz 0.8...1.1 Uc 55 °C operational AC 50 Hz
Inrush power in VA	245 VA 50/60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	26 VA (at 20 °C) cos phi 0.3 50/60 Hz
Heat dissipation	6...10 W at 50/60 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 Uc
Operating altitude	3000 m without
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V0 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Vibrations contactor closed: 3 Gn, 5...300 Hz Shocks contactor open: 8 Gn for 11 ms
Height	127 mm
Width	96 mm
Depth	130 mm
Net weight	1.76 kg