



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	80 A (at ≤60 °C) at ≤ 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	220 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	80 A (at 60 °C) for power circuit
Irms rated making capacity	1000 A at 440 V AC for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	110 A 40 °C - 10 min for power circuit 260 A 40 °C - 1 min for power circuit 520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit
Associated fuse rating	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	1.5 mOhm - Ith 80 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	1.4 Mcycles 80 A AC-1 at Ue ≤ 440 V
Power dissipation per pole	9.6 W AC-1
Safety cover	With
Mounting support	Plate Rail
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 ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² solid Power circuit: screw connectors 1 cable(s) 2.5...25 mm ² solid Power circuit: screw connectors 2 cable(s) 2.5...16 mm ² solid Power circuit: screw connectors 1 cable(s) 2.5...25 mm ² flexible with cable end Power circuit: screw connectors 2 cable(s) 2.5...10 mm ² flexible with cable end Power circuit: screw connectors 1 cable(s) 2.5...25 mm ² flexible without cable end Power circuit: screw connectors 2 cable(s) 2.5...16 mm ² flexible without cable end
Tightening torque	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 Power circuit: 5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 to Ø 8 mm
Operating time	4...19 ms opening 12...26 ms closing
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	6 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 Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open: 8 Gn for 11 ms Shocks contactor closed: 10 Gn for 11 ms
Height	127 mm
Width	85 mm
Depth	130 mm
Net weight	1.44 kg