



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	2 NO + 2 NC
[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	110 V DC
Coil type	Wide range
[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 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
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	Plate Rail
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 EN 45545 R22 HL3

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

Product certifications	IEC CCC
Connections - terminals	Control circuit: lugs-ring terminals (external diameter: 8 mm) Power circuit: lugs-ring terminals (external diameter: 17 mm) Power circuit: bars 1 cable(s) - busbar cross section: 3 x 16 mm
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 9 N.m - on lugs-ring terminals hexagonal screw head 10 mm M6 Power circuit: 9 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm M6 Power circuit: 9 N.m - on bars - with screwdriver flat Ø 8 mm M6 Power circuit: 9 N.m - on bars hexagonal screw head 10 mm M6
Operating time	95...130 ms closing 20...35 ms opening
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	10 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.1...0.3 Uc 55 °C drop-out DC Uc -40...70 °C operational DC 0.75...1.2 Uc -5...60 °C operational DC
Time constant	75 ms
Inrush power in W	22 W at 20 °C
Hold-in power consumption in W	22 W at 20 °C

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	-25...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: 3 Gn, 5...300 Hz Shocks contactor open: 8 Gn for 11 ms Shocks contactor closed: 10 Gn for 11 ms
Height	127 mm
Width	96 mm
Depth	196 mm
Net weight	2.91 kg