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Main

Range of product	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	<= 690 V DC for power circuit <= 690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	60 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 60 Hz
Control circuit voltage	480 V AC 60 Hz
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	60 A at <= 60 °C for power circuit
Irms rated making capacity	800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	165 A <= 40 °C 1 min power circuit 72 A <= 40 °C 10 min power circuit 720 A <= 40 °C 1 s power circuit 320 A <= 40 °C 10 s power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 2 for power circuit 80 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	1.5 mOhm at 50 Hz - Ith 60 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications UL 600 V for power circuit certifications CSA 690 V for power circuit conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1
Safety cover	Without
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 n°14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS

Connections - terminals	<p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: solid - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: solid - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p>
Tightening torque	<p>Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm² hexagonal 4 mm</p> <p>Power circuit: 5 N.m - on screw clamp terminals - cable ≤ 25 mm² hexagonal 4 mm</p> <p>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2</p> <p>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p>
Operating time	<p>12...26 ms closing</p> <p>4...19 ms opening</p>
Safety reliability level	<p>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1</p> <p>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1</p>
Mechanical durability	6 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 Uc at 60 °C drop-out 60 Hz 0.85...1.1 Uc at 60 °C operational 60 Hz
Inrush power in VA	140 VA at 20 °C (cos φ 0.75) 60 Hz
Hold-in power consumption in VA	13 VA at 20 °C (cos φ 0.3) 60 Hz
Heat dissipation	4...5 W at 60 Hz

Environment

IP degree of protection	IP2x 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 derating in temperature
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	<p>Shocks contactor closed 15 Gn for 11 ms</p> <p>Shocks contactor open 10 Gn for 11 ms</p> <p>Vibrations contactor closed 4 Gn, 5...300 Hz</p> <p>Vibrations contactor open 2 Gn, 5...300 Hz</p>

Height	127 mm
Width	85 mm
Depth	125 mm
Product weight	1.44 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0707 - download declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instruction	Need no specific recycling operations Download Product environmental