



Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <60 °C) AC AC-1 for power circuit
[Uc] control circuit voltage	240 V AC 50 Hz

Complementary

Motor power hp	<p>10 Hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 10 Hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 20 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 20 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 20 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 20 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 5 Hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 5 Hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 50 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 50 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 50 Hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL</p>
Compatibility code	LC1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 140 A AC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 125 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 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V CSA certified[RETURN]Control circuit: 600 V UL certified[RETURN]Power circuit: 600 V CSA certified[RETURN]Power circuit: 600 V UL certified[RETURN]Control circuit: 690 V conforming to IEC 60947-1[RETURN]Power circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
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	6000000 cycles
Control circuit type	AC at 50 Hz standard
Coil technology	Without built-in bidirectional peak limiting diode suppressor

Control circuit voltage limits	0.3...0.6 U _c (60 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (60 °C):operational AC 50 Hz 0.85...1.1 U _c (60 °C):operational AC 60 Hz
Inrush power in VA	140 VA cos phi 0.75 (at 20 °C) 160 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4...5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 1...35 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1...35 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver pozidriv No 2
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 Type mirror contact 1 NC conforming to IEC 60947-4-1
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Mounting support	Rail Plate

Environment

Standards	CSA C22.2 No 14 IEC 60947-5-1 IEC 60947-4-1 UL 508 EN 60947-4-1 EN 60947-5-1
Product certifications	BV[RETURN]CCC[RETURN]GL[RETURN]DNV[RETURN]LROS (Lloyds register of shipping)[RETURN]RINA[RETURN]CSA[RETURN]GOST[RETURN]JUL
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Permissible ambient air temperature around the device	-5...60 °C -40...70 °C at U _c
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	Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	130 mm
Net weight	1.44 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.5 cm
Package 1 Width	13 cm
Package 1 Length	9.5 cm
Package 1 Weight	1.423 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes