

Product datasheet

Specifications



contactor TeSys Deca - 3 poles - AC-3 690 V 12 A - coil 220 V AC

LC1D1210M5

! Discontinued

Main

Range	TeSys
Range Of Product	TeSys D
Product Or Component Type	Contactors
Device Short Name	LC1D
Contactors Application	Motor control Resistive load
Utilisation Category	AC-1 AC-3
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: 690 V AC 25...400 Hz
[Ie] Rated Operational Current	25 A (at <60 °C) at 440 V AC AC-1 for power circuit 12 A (at <60 °C) at 440 V AC AC-3 for power circuit
[Uc] Control Circuit Voltage	220 V AC 50 Hz

Complementary

Motor Power Kw	7.5 kW at 500 V AC 50/60 Hz 7.5 kW at 660...690 V AC 50/60 Hz 5.5 kW at 380...400 V AC 50/60 Hz 5.5 kW at 415...440 V AC 50/60 Hz 3 kW at 220...230 V AC 50/60 Hz
Motor Power Hp	1 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 1 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 10 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 10 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL 2 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 2 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 3 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 3 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 3 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 3 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 7.5 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 7.5 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for control circuit 25 A (at 60 °C) for power circuit
Irms Rated Making Capacity	250 A at 440 V AC for power circuit conforming to IEC 60947 140 A AC for control circuit conforming to IEC 60947-5-1
Rated Breaking Capacity	250 kA 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 25 A at 690 V coordination type 2 for power circuit 40 A at 690 V coordination type 1 for power circuit
Average Impedance	2.5 mOhm - lth 25 A 50 Hz for power circuit
Power Dissipation Per Pole	0.36 W AC-3 1.56 W AC-1
[U_i] Rated Insulation Voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage Category	III
[U_{imp}] Rated Impulse Withstand Voltage	6 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	15000000 cycles
Control Circuit Type	AC at 50 Hz
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...1.15 U _c (60 °C):operational AC 60 Hz
Inrush Power In Va	70 VA cos phi 0.75 (at 20 °C)
Heat Dissipation	2...3 W at 50/60 Hz for control circuit
Operating Time	4...19 ms opening 12...22 ms closing
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: solid without cable end Control circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 1...2.5 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 1...2.5 mm ² - cable stiffness: flexible with cable end
Tightening Torque	Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm hexagonal screw head Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 hexagonal screw head Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm hexagonal screw head Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 hexagonal screw head
Auxiliary Contact Composition	1 NO
Auxiliary Contacts Type	type mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
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	Plate Rail

Environment

Standards	EN/IEC 60947-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-4-1
Product Certifications	UL GL BV CCC LROS (Lloyds register of shipping) RINA CSA DNV
Ip Degree Of Protection	IP2X conforming to VDE 0106
Protective Treatment	TH conforming to IEC 60068-2-30
Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-60...80 °C storage -40...60 °C operation 60...70 °C with derating
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 opened (10 Gn) Shocks contactor closed (15 gn) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	77 mm
Width	45 mm
Depth	84 mm

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Contractual warranty

Warranty	18 months
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