

Product datasheet

Specifications



TeSys Deca contactor - 3P(3 NO) - AC-3 - ≤ 440 V 25 A - 72 V DC coil

LC1D2535SL

⚠ Discontinued

Main

Range	TeSys
Range Of Product	TeSys D
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-1 AC-3
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: ≤ 690 V AC 25...400 Hz Power circuit: ≤ 300 V DC
[Ie] Rated Operational Current	25 A (at ≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit 25 A (at ≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit
[Uc] Control Circuit Voltage	72 V DC

Complementary

Motor Power Kw	5.5 kW at 220...230 V AC 50/60 Hz 11 kW at 380...400 V AC 50/60 Hz 11 kW at 415...440 V AC 50/60 Hz 15 kW at 500 V AC 50/60 Hz 15 kW at 660...690 V AC 50/60 Hz
Motor Power Hp	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 15 hp at 460/480 V AC 50/60 Hz for 3 phases motors 20 hp at 575/600 V AC 50/60 Hz for 3 phases motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	Without
[Ith] Conventional Free Air Thermal Current	25 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit
Irms Rated Making Capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	450 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - lth 25 A 50 Hz for power circuit
Power Dissipation Per Pole	3.2 W AC-1 1.25 W AC-3
[Uj] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Overvoltage Category	III
Pollution Degree	3
[Uimp] 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	30 Mcycles
Electrical Durability	1.65 Mcycles 25 A AC-3 at Ue <= 440 V 1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Control Circuit Type	DC low consumption
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.8...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
Inrush Power In W	2.4 W (at 20 °C)
Hold-In Power Consumption In W	2.4 W at 20 °C
Operating Time	65.45...88.55 ms closing 20...30 ms opening
Time Constant	40 ms
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: spring terminals 1 2.5 mm ² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm ² - cable stiffness: flexible without cable end Power circuit: spring terminals 1 4 mm ² - cable stiffness: flexible without cable end Power circuit: spring terminals 2 4 mm ² - cable stiffness: flexible without cable end
Auxiliary Contact Composition	1 NO + 1 NC
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
Signalling Circuit Frequency	25...400 Hz
Minimum Switching Voltage	17 V for signalling circuit
Minimum Switching Current	5 mA for signalling circuit
Insulation Resistance	> 10 MOhm for signalling circuit
Non-Overlap Time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact

Mounting Support	Plate Rail
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Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
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Product Certifications	GL DNV CSA LROS (Lloyds register of shipping) RINA CCC BV UL GOST
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Ip Degree Of Protection	IP20 front face conforming to IEC 60529
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Protective Treatment	TH conforming to IEC 60068-2-30
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Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
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Permissible Ambient Air Temperature Around The Device	-60...80 °C storage -40...60 °C operation 60...70 °C with derating
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Operating Altitude	0...3000 m
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Fire Resistance	850 °C conforming to IEC 60695-2-1
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Flame Retardance	V1 conforming to UL 94
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Mechanical Robustness	Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (8 Gn for 11 ms)
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Height	99 mm
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Width	45 mm
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Depth	99 mm
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Net Weight	0.53 kg
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Packing Units

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

Warranty	18 months
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