

Product data sheet

Specifications



Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 25A, 120V AC 50/60Hz coil, screw clamp terminals

LC1D25G7

Main

Range Of Product	TeSys Deca
Product Or Component Type	Contactors
Device Short Name	LC1D
Contactors Application	Motor control Resistive load
Utilisation Category	AC-3 AC-4 AC-1 AC-3e
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 <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	120 V AC 50/60 Hz

Complementary

Motor Power Kw	5.5 kW at 220...230 V AC 50/60 Hz (AC-3) 11 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 415...440 V AC 50/60 Hz (AC-3) 15 kW at 500 V AC 50/60 Hz (AC-3) 15 kW at 660...690 V AC 50/60 Hz (AC-3) 5.5 kW at 400 V AC 50/60 Hz (AC-4) 5.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 11 kW at 380...400 V AC 50/60 Hz (AC-3e) 11 kW at 415...440 V AC 50/60 Hz (AC-3e) 15 kW at 500 V AC 50/60 Hz (AC-3e) 15 kW at 660...690 V AC 50/60 Hz (AC-3e)
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
Contact Compatibility	M2
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 40 A (at 140 °F (60 °C)) for power 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 104 °F (40 °C) - 10 s for power circuit 380 A 104 °F (40 °C) - 1 s for power circuit 50 A 104 °F (40 °C) - 10 min for power circuit 120 A 104 °F (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 40 A 50 Hz for power circuit
Power Dissipation Per Pole	3.2 W AC-1 1.25 W AC-3 1.25 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	6 kV IEC 60947
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical Durability	15 Mcycles
Electrical Durability	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V 1.65 Mcycles 25 A AC-3e <= 440 V
Control Circuit Type	AC 50/60 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz
Inrush Power In Va	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat Dissipation	2...3 W at 50/60 Hz
Operating Time	12...22 ms closing 4...19 ms opening
Maximum Operating Rate	3600 cyc/h 140 °F (60 °C)

Connections - Terminals	<p>Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: solid without cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) - cable stiffness: solid without cable end</p> <p>Power circuit: screw clamp terminals 1 0.00...0.02 in² (2.5...10 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 2 0.00...0.02 in² (2.5...10 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 1 0.00...0.02 in² (1...10 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 2 0.00...0.01 in² (1.5...6 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 0.00...0.02 in² (1.5...10 mm²) - cable stiffness: solid without cable end</p> <p>Power circuit: screw clamp terminals 2 0.00...0.02 in² (2.5...10 mm²) - cable stiffness: solid without cable end</p>
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Tightening Torque	<p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2</p> <p>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm</p> <p>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2</p> <p>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2</p>
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Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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	Rail Plate

Environment

Standards	<p>CSA C22.2 No 14</p> <p>EN 60947-4-1</p> <p>EN 60947-5-1</p> <p>IEC 60947-4-1</p> <p>IEC 60947-5-1</p> <p>UL 508</p> <p>IEC 60335-1</p>
Product Certifications	<p>UL</p> <p>BV</p> <p>RINA</p> <p>GOST</p> <p>DNV</p> <p>LROS (Lloyds register of shipping)</p> <p>CCC</p> <p>GL</p> <p>CSA</p> <p>UKCA</p>
Ip Degree Of Protection	IP20 front face IEC 60529
Protective Treatment	THIEC 60068-2-30
Climatic Withstand	<p>IACS E10 exposure to damp heat</p> <p>IEC 60947-1 Annex Q category D exposure to damp heat</p>

Permissible Ambient Air Temperature Around The Device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating Altitude	0...3000 m
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 UL 94
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)
Height	3.35 in (85 mm)
Width	1.77 in (45 mm)
Depth	3.62 in (92 mm)
Net Weight	0.82 lb(US) (0.37 kg)

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	3.74 in (9.500 cm)
Package 1 Length	4.53 in (11.500 cm)
Package 1 Weight	14.57 oz (413.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	18.78 lb(US) (8.517 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	318.07 lb(US) (144.272 kg)

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information Yes

✓ Pvc Free

Certifications & Standards

Reach Regulation

[REACH Declaration](#)

Eu Rohs Directive

Compliant

[EU RoHS Declaration](#)

China Rohs Regulation

[China RoHS declaration](#)

Pro-active China RoHS declaration (out of China RoHS legal scope)

Environmental Disclosure

[Product Environmental Profile](#)

Weee

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

Dimensions Drawings

Approximate Dimensions

