

Product data sheet

Specifications



IEC contactor, TeSys D,
nonreversing, 50A, 40HP at
480VAC, up to 100kA SCCR, 3
phase, 3 NO, 120VAC 50/60Hz coil,
open

LC1D50G7

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-2 AC-4 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 50 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	22 kW at 380...400 V AC 50/60 Hz (AC-3) 25 kW at 415 V AC 50/60 Hz (AC-3) 30 kW at 440 V AC 50/60 Hz (AC-3) 30 kW at 500 V AC 50/60 Hz (AC-3) 33 kW at 660...690 V AC 50/60 Hz (AC-3) 15 kW at 220...230 V AC 50/60 Hz (AC-3) 11 kW at 400 V AC 50/60 Hz (AC-4)
Maximum Horse Power Rating	3 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 15 hp at 200/208 V AC 60 Hz for 3 phase motors conforming to CSA 15 hp at 200/208 V AC 60 Hz for 3 phase motors conforming to UL 15 hp at 230/240 V AC 60 Hz for 3 phase motors conforming to CSA 15 hp at 230/240 V AC 60 Hz for 3 phase motors conforming to UL 40 hp at 460/480 V AC 60 Hz for 3 phase motors conforming to CSA 40 hp at 460/480 V AC 60 Hz for 3 phase motors conforming to UL 40 hp at 575/600 V AC 60 Hz for 3 phase motors conforming to CSA 40 hp at 575/600 V AC 60 Hz for 3 phase motors conforming to UL 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 80 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
[Ui] rated insulation voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-1
Overvoltage category	III
[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	6000000 cycles
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.6 Uc (140 °F (60 °C)):drop-out AC 50/60 Hz 0.8...1.1 Uc (140 °F (60 °C)):operational AC 50 Hz 0.85...1.1 Uc (140 °F (60 °C)):operational AC 60 Hz
Inrush power in VA	140 VA cos phi 0.75 (at 68 °F (20 °C)) 160 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 60 Hz cos phi 0.3 (at 68 °F (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 at 60 °C
Connections - terminals	Control circuit: screw clamp terminal 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminal 1 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible with cable end Power circuit: connector 1 0.004...0.05 in ² (2.5...35 mm ²) - cable stiffness: solid with cable end Power circuit: connector 2 0.004...0.05 in ² (2.5...35 mm ²) - cable stiffness: solid with cable end Power circuit: connector 1 0.004...0.05 in ² (2.5...35 mm ²) - cable stiffness: flexible without cable end Power circuit: connector 2 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible without cable end Power circuit: connector 1 0.004...0.05 in ² (2.5...35 mm ²) - cable stiffness: flexible with cable end Power circuit: connector 2 0.004...0.05 in ² (2.5...35 mm ²) - cable stiffness: flexible with cable end

Tightening torque	Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal flat Ø 6 mm Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal Philips No 2 Power circuit 44.3 lbf.in (5 N.m) screw clamp terminal flat Ø 6 mm Power circuit 44.3 lbf.in (5 N.m) screw clamp terminal flat Ø 8 mm Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mirror contact 1 NC IEC 60947-4-1 Mechanically linked 1 NO + 1 NC 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	UL 508 EN 60947-4-1 EN 60947-5-1 IEC 60947-5-1 CSA C22.2 No 14 IEC 60947-4-1
Product Certifications	GOST LROS (pending) UL CCC RINA CSA BV GL DNV UKCA
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
Climatic withstand	IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	23...140 °F (-5...60 °C) -40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor opened 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz)
Height	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.7 in (119 mm)
Net Weight	3.09 lb(US) (1.4 kg)

Ordering and shipping details

Category	US10I1222357
Discount Schedule	0I12
GTIN	3389110421453

Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.51 in (14.000 cm)
Package 1 Width	5.20 in (13.200 cm)
Package 1 Length	3.74 in (9.500 cm)
Package 1 Weight	3.188 lb(US) (1.446 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	5
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	16.495 lb(US) (7.482 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	289.688 lb(US) (131.400 kg)

Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	62
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	REACH Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Technical Illustration

Assembly's dimensions

