

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	Contactors
Device short name	LC1D
Contactors 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 140 °F (60 °C) <= 440 V AC AC-1 power circuit 50 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 50 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit
[Uc] control circuit voltage	120 V AC 50/60 Hz

Complementary

Motor power kW	22 kW 380...400 V AC 50/60 Hz AC-3) 25 kW 415 V AC 50/60 Hz AC-3) 30 kW 440 V AC 50/60 Hz AC-3) 30 kW 500 V AC 50/60 Hz AC-3) 33 kW 660...690 V AC 50/60 Hz AC-3) 15 kW 220...230 V AC 50/60 Hz AC-3) 11 kW 400 V AC 50/60 Hz AC-4)
Maximum Horse Power Rating	3 hp 115 V at AC 60 Hz for 1 phase conforming to CSA 3 hp 115 V at AC 60 Hz for 1 phase conforming to UL 15 hp 200/208 V at AC 60 Hz for 3 phase conforming to CSA 15 hp 200/208 V at AC 60 Hz for 3 phase conforming to UL 15 hp 230/240 V at AC 60 Hz for 3 phase conforming to CSA 15 hp 230/240 V at AC 60 Hz for 3 phase conforming to UL 40 hp 460/480 V at AC 60 Hz for 3 phase conforming to CSA 40 hp 460/480 V at AC 60 Hz for 3 phase conforming to UL 40 hp 575/600 V at AC 60 Hz for 3 phase conforming to CSA 40 hp 575/600 V at AC 60 Hz for 3 phase conforming to UL 7.5 hp 230/240 V at AC 60 Hz for 1 phase conforming to CSA 7.5 hp 230/240 V at AC 60 Hz for 1 phase conforming to UL
Compatibility code	LC1D
Pole contact composition	3 NO

Protective cover	With
[I_{th}] conventional free air thermal current	10 A 140 °F (60 °C) control circuit 80 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC control circuit IEC 60947-5-1 900 A 440 V power circuit IEC 60947
Rated breaking capacity	900 A 440 V power circuit IEC 60947
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 100 A gG ≤ 690 V type 1 power circuit 100 A gG ≤ 690 V type 2 power circuit
Average impedance	1.5 mOhm - I _{th} 80 A 50 Hz power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
[U_i] 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
[U_{imp}] 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 U _c 140 °F (60 °C) drop-out AC 50/60 Hz 0.8...1.1 U _c 140 °F (60 °C) operational AC 50 Hz 0.85...1.1 U _c 140 °F (60 °C) operational AC 60 Hz
Inrush power in VA	140 VA 0.75 68 °F (20 °C)) 160 VA 0.75 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 50 Hz 0.3 68 °F (20 °C)) 15 VA 60 Hz 0.3 68 °F (20 °C))
Heat dissipation	4...5 W 50/60 Hz control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminal 1 0.00...0.01 in ² (1...4 mm ²) solid without cable end Control circuit screw clamp terminal 2 0.00...0.01 in ² (1...4 mm ²) solid without cable end Control circuit screw clamp terminal 1 0.00...0.00 in ² (1...2.5 mm ²) flexible without cable end Control circuit screw clamp terminal 2 0.00...0.00 in ² (1...2.5 mm ²) flexible without cable end Control circuit screw clamp terminal 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Control circuit screw clamp terminal 2 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Power circuit connector 1 0.00...0.05 in ² (2.5...35 mm ²) solid with cable end Power circuit connector 2 0.00...0.05 in ² (2.5...35 mm ²) solid with cable end Power circuit connector 1 0.00...0.05 in ² (2.5...35 mm ²) flexible without cable end Power circuit connector 2 0.00...0.04 in ² (2.5...25 mm ²) flexible without cable end Power circuit connector 1 0.00...0.05 in ² (2.5...35 mm ²) flexible with cable end Power circuit connector 2 0.00...0.05 in ² (2.5...35 mm ²) flexible with cable end
Tightening torque	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminal flat Ø 6 mm Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminal Philips No 2 Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal flat Ø 6 mm Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal flat Ø 8 mm Control circuit 10.62 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 control circuit
Minimum switching current	5 mA control circuit
Insulation resistance	> 10 MOhm 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	4.80 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.69 in (119 mm)
Net Weight	3.09 lb(US) (1.4 kg)

Ordering and shipping details

Category	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
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	3.19 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	16.80 lb(US) (7.621 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	289.69 lb(US) (131.400 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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
REACH Regulation	REACH Declaration
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 Pro-active China RoHS declaration (out of China RoHS legal scope)
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

Contractual warranty

Warranty	18 months
----------	-----------

Recommended replacement(s)