

Product data sheet

Specifications



contactor TeSys LC1-D - 3 poles - AC-3 440V 40 A - coil 48 V DC

LC1D40FD

⚠ Discontinued

Product availability : Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	TeSys D
Range	TeSys
Product or Component Type	Contactors
Device short name	LC1D
Contactors application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-2 AC-1
Control circuit type	DC standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	40 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 60 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit
Motor power kW	18.5 kW 380...400 V AC 50 Hz 22 kW 500 V AC 50 Hz 30 kW 660...690 V AC 50 Hz 11 kW 220...230 V AC 50 Hz 22 kW 415 V AC 50 Hz 22 kW 440 V AC 50 Hz 22 kW 1000 V AC 50 Hz

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Front cover	With
Maximum Horse Power Rating	3 hp 115 V at AC 60 Hz for 1 phase 5 hp 230/240 V at AC 60 Hz for 1 phase 10 hp 200/208 V at AC 60 Hz for 3 phase 10 hp 230/240 V at AC 60 Hz for 3 phase 30 hp 460/480 V at AC 60 Hz for 3 phase 30 hp 575/600 V at AC 60 Hz for 3 phase
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
[Uc] control circuit voltage	110 V DC
Control circuit voltage limits	0.1...0.3 U _c -40...158 °F (-40...70 °C) drop-out DC

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

0.75...1.25 U_c -40...140 °F (-40...60 °C) operational DC
 1...1.25 U_c 140...158 °F (60...70 °C) operational DC

Time constant	34 ms
[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 Power circuit 1000 V IEC 60947-4-1
[U_{imp}] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
Mounting Support	Plate Rail
Flame retardance	V1 conforming to UL 94
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)rigid Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)rigid Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Power circuit screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²)rigid Power circuit screw terminals 2 0.00...0.02 in ² (2.5...16 mm ²)rigid Power circuit screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²)flexible without cable end Power circuit screw terminals 2 0.00...0.02 in ² (2.5...16 mm ²)flexible without cable end Power circuit screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²)flexible with cable end Power circuit screw terminals 2 0.00...0.02 in ² (2.5...10 mm ²)flexible with cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.25 lbf.in (5 N.m) screw terminal flat Ø 6 to Ø 8 mm
[U_e] rated operational voltage	Power circuit ≤ 690 V AC 25...400 Hz
[I_{th}] conventional free air thermal current	10 A 140 °F (60 °C) control circuit 60 A 140 °F (60 °C) power circuit
I_{rms} rated making capacity	250 A DC control circuit IEC 60947-5-1 800 A 440 V power circuit IEC 60947
Rated breaking capacity	800 A 440 V power circuit IEC 60947
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 80 A gG ≤ 690 V type 1 power circuit 80 A gG ≤ 690 V type 2 power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Operating time	20 ms opening 50 ms closing
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	10000000 cycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm control circuit
Height	5.00 in (127 mm)
Width	3.35 in (85 mm)
Depth	6.93 in (176 mm)
Net Weight	4.82 lb(US) (2.185 kg)

Environment

Standards	UL 508 IEC 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 EN 60947-4-1 IEC 60947-5-1
Product Certifications	LROS (Lloyds register of shipping) GOST UL RINA DNV GL CCC CSA BV
IP degree of protection	IP2x IEC 60529 IP2x VDE 0106
Ambient air temperature for operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed

Ordering and shipping details

Category	22358 - CTR, TESYS D, OPEN, 40-65A DC
Discount Schedule	I12
GTIN	03389110416817
Nbr. of units in pkg.	1
Package weight(Lbs)	4.84 lb(US) (2.20 kg)
Returnability	No
Country of origin	CZ

Packing Units

Package 1 Height	1.870 dm
Package 1 width	1.420 dm
Package 1 Length	0.900 dm

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 free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration

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
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Recommended replacement(s)

LC1D40FD is replaced by:

1x



IEC contactor, TeSys D Green, nonreversing, 40A, 30HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 48/130VAC/VDC coil
LC1D40AEHE
