

LC1D40BD

IEC contactor, TeSys D, nonreversing, 40A, 30HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VDC coil, open style



Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-2 AC-3 AC-1 AC-4 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 60 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	18.5 KW at 380...400 V AC 50 Hz (AC-3) 22 KW at 500 V AC 50 Hz (AC-3) 30 KW at 660...690 V AC 50 Hz (AC-3) 22 KW at 1000 V AC 50 Hz (AC-3) 22 KW at 415 V AC 50 Hz (AC-3) 22 KW at 440 V AC 50 Hz (AC-3) 11 KW at 220...230 V AC 50 Hz (AC-3) 9 KW at 400 V AC 50 Hz (AC-4) 18.5 KW at 380...400 V AC 50 Hz (AC-3e) 22 KW at 500 V AC 50 Hz (AC-3e) 30 KW at 660...690 V AC 50 Hz (AC-3e) 22 KW at 1000 V AC 50 Hz (AC-3e) 22 KW at 415 V AC 50 Hz (AC-3e) 22 KW at 440 V AC 50 Hz (AC-3e) 11 kW at 220...230 V AC 50 Hz (AC-3e)
Maximum Horse Power Rating	3 Hp at 115 V AC 60 Hz for 1 phase motors 5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp at 200/208 V AC 60 Hz for 3 phase motors 10 Hp at 230/240 V AC 60 Hz for 3 phase motors 30 Hp at 460/480 V AC 60 Hz for 3 phase motors 30 hp at 575/600 V AC 60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 60 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947

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Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 80 A gG at ≤ 690 V coordination type 1 for power circuit 80 A gG at ≤ 690 V coordination type 2 for power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3 2.4 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 Power circuit 1000 V IEC 60947-4-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 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	10000000 cycles
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 U _c -40...158 °F (-40...70 °C) drop-out DC 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
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Rated operational power in W	14 W 24 V DC-13 10000000 cycles - control circuit 48 W 24 V DC-13 30000000 cycles - control circuit 96 W 24 V DC-13 10000000 cycles - control circuit
Operating time	20 ms opening 50 ms closing
Time constant	34 ms
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: rigid Control circuit: screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00...0.00 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Power circuit: screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²) - cable stiffness: rigid Power circuit: screw terminals 2 0.00...0.02 in ² (2.5...16 mm ²) - cable stiffness: rigid Power circuit: screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible without cable end Power circuit: screw terminals 2 0.00...0.02 in ² (2.5...16 mm ²) - cable stiffness: flexible without cable end Power circuit: screw terminals 1 0.00...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible with cable end Power circuit: screw terminals 2 0.00...0.02 in ² (2.5...10 mm ²) - cable stiffness: 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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2
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
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	Rail Plate

Environment

Standards	CSA C22.2 No 14 IEC 60947-4-1 UL 508 EN 60947-4-1 IEC 60947-5-1 EN 60947-5-1
Product Certifications	GOST[RETURN]BV[RETURN]CSA[RETURN]CCC[RETURN]RINA[RETURN]GL[RETURN]UL (Lloyds register of shipping)[RETURN]DNV[RETURN]UKCA
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
Climatic withstand	IACS E10 exposure to damp heat
Operating altitude	0...9842.52 ft (0...3000 m)
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	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)

Ordering and shipping details



Category	22358-CTR, TESYS D, OPEN, 40-65A DC
Discount Schedule	I12
GTIN	3389110416398
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.33 in (11.000 cm)
Package 1 Width	6.42 in (16.300 cm)
Package 1 Length	8.66 in (22.000 cm)
Package 1 Weight	4.97 lb(US) (2.256 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	2
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	10.76 lb(US) (4.880 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

RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	No need of specific recycling operations
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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