

# LC1D50B7

IEC contactor, TeSys D, nonreversing, 50A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VAC 50/60Hz coil, open



## Main

Range of Product	TeSys D TeSys Deca
Range	TeSys
Product or Component Type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-4 AC-3 AC-1 AC-2 AC-3e
Control circuit type	AC 50/60 Hz
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	50 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 80 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit 50 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit
Motor power kW	22 KW 380...400 V AC 50 Hz AC-3) 25 KW 415 V AC 50 Hz AC-3) 30 KW 440 V AC 50 Hz AC-3) 30 KW 500 V AC 50 Hz AC-3) 33 KW 660...690 V AC 50 Hz AC-3) 15 KW 220...230 V AC 50 Hz AC-3) 11 KW 400 V AC 50 Hz AC-4) 30 KW 1000 V AC 50 Hz AC-3) 22 KW 380...400 V AC 50 Hz AC-3e) 25 KW 415 V AC 50 Hz AC-3e) 30 KW 440 V AC 50 Hz AC-3e) 30 KW 500 V AC 50 Hz AC-3e) 33 KW 660...690 V AC 50 Hz AC-3e) 15 KW 220...230 V AC 50 Hz AC-3e) 30 kW 1000 V AC 50 Hz AC-3e)

## Complementary

Coil technology	Without 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 7.5 Hp 230/240 V at AC 60 Hz for 1 phase 15 Hp 200/208 V at AC 60 Hz for 3 phase 15 Hp 230/240 V at AC 60 Hz for 3 phase 40 Hp 460/480 V at AC 60 Hz for 3 phase 40 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	24 V AC 50/60 Hz
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

[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
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
Mounting Support	Rail Plate
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )rigid Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )rigid Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )rigid Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )rigid Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )flexible without cable end Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )flexible without cable end Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )flexible with cable end Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )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
[Ue] rated operational voltage	Power circuit ≤ 690 V AC 25...400 Hz
[Ith] 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	900 A 440 V power circuit IEC 60947 140 A AC control circuit IEC 60947-5-1
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
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
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 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C))
Operating time	4...19 ms opening 12...26 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 2000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	6000000 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	2.95 in (75 mm)
Depth	4.69 in (119 mm)
Net Weight	3.09 lb(US) (1.4 kg)

## Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 UL 508 IEC 60947-4-1 IEC 60947-5-1
Product Certifications	CSA UL GOST GL DNV LROS (Lloyds register of shipping) CCC RINA BV UKCA
IP degree of protection	IP2x IEC 60529 IP2x VDE 0106
Climatic withstand	IACS E10
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
Heat dissipation	4...5 W 50/60 Hz control circuit

## Ordering and shipping details

Category	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
GTIN	3389110420913
Nbr. of units in pkg.	1
Package weight(Lbs)	3.17 lb(US) (1.436 kg)
Returnability	Yes
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	3.74 in (9.5 cm)
Package 1 width	5.20 in (13.2 cm)
Package 1 Length	5.51 in (14 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Weight	16.54 lb(US) (7.502 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 3 Height	30.31 in (77 cm)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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
----------	-----------