

# LC1D65P7

IEC contactor, TeSys D, nonreversing, 65A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 230VAC 50/60Hz coil, open



## 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-2 AC-4 AC-1 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 65 A (at <140 °F (60 °C)) at 230 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at 230 V AC AC-1 for power circuit
[Uc] control circuit voltage	230 V AC 50/60 Hz

## Complementary

Motor power kW	11 KW at 400 V AC 50 Hz (AC-4) 30 KW at 380...400 V AC 50 Hz (AC-3) 37 KW at 500 V AC 50 Hz (AC-3) 37 KW at 660...690 V AC 50 Hz (AC-3) 18.5 KW at 220...230 V AC 50 Hz (AC-3) 30 KW at 415 V AC 50 Hz (AC-3) 37 KW at 1000 V AC 50 Hz (AC-3) 30 KW at 440 V AC 50 Hz (AC-3e) 37 KW at 500 V AC 50 Hz (AC-3e) 37 KW at 660...690 V AC 50 Hz (AC-3e) 18.5 KW at 220...230 V AC 50 Hz (AC-3e) 30 KW at 415 V AC 50 Hz (AC-3e) 37 KW at 1000 V AC 50 Hz (AC-3e) 37 KW at 500 V AC 50 Hz 30 kW at 380...400 V AC 50 Hz
Maximum Horse Power Rating	10 Hp at 230/240 V AC 60 Hz for 1 phase motors 20 Hp at 200/208 V AC 60 Hz for 3 phase motors 20 Hp at 230/240 V AC 60 Hz for 3 phase motors 40 Hp at 460/480 V AC 60 Hz for 3 phase motors 50 Hp at 575/600 V AC 60 Hz for 3 phase motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	80 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for control circuit
Irms rated making capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947

Rated breaking capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
[I <sub>cw</sub> ] rated short-time withstand current	520 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit
Associated fuse rating	125 A gG at ≤ 690 V coordination type 2 for power circuit 160 A gG at ≤ 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Average impedance	1.5 Ohm - I <sub>th</sub> 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 6.3 W AC-3 9.6 W AC-1
[U <sub>i</sub> ] rated insulation voltage	Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL IEC 60947-1 Control circuit 690 V IEC 60947-1 Power circuit 690 V CSA IEC 60947-1 Control circuit 600 V CSA
Overvoltage category	III
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	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
Control circuit voltage limits	0.8...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 U <sub>c</sub> 140...158 °F (60...70 °C) operational AC 50/60 Hz 0.3...0.6 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz
Inrush power in VA	160 VA cos phi 0.75 (at 68 °F (20 °C)) 140 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 13 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/mn 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: 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> ) - cable stiffness: 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> ) - cable stiffness: flexible with cable end Power circuit: screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: rigid Power circuit: screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: rigid without cable end Power circuit: screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: rigid
Tightening torque	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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm
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 energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting Support	Rail Rail

## Environment

Standards	IEC 60947-5-1 EN 60947-5-1 IEC 60947-4-1 EN 60947-4-1 CSA C22.2 No 14
Product Certifications	DNV[RETURN]GL[RETURN]BV[RETURN]CSA[RETURN]GOST[RETURN]UL[RETURN]RINA[RETURN]
IP degree of protection	IP2X VDE 0106 IP2X IEC 60529
Protective treatment	TH 3)IEC 60068-2-30
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 closed 15 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor opened 10 Gn for 11 ms)
Height	4.80 in (122 mm)
Width	2.76 in (70 mm)
Depth	4.65 in (118 mm)
Net Weight	4.82 lb(US) (2.185 kg)
Quantity per Set	Set of 10

## Ordering and shipping details

Category	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
GTIN	3389110437478
Returnability	No
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.74 in (9.5 cm)
Package 1 Width	5.31 in (13.5 cm)
Package 1 Length	5.51 in (14.0 cm)
Package 1 Weight	3.19 lb(US) (1.448 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	16.49 lb(US) (7.481 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 <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
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations <a href="#">Circularity Profile</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
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