

Product data sheet

Specifications



IEC contactor, TeSys D,
nonreversing, 65A, 40HP at
480VAC, up to 100kA SCCR, 3
phase, 3 NO, 48VAC 50/60Hz coil,
open

LC1D65E7

Product availability: Non-Stock - Not 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 Motor control
Utilisation category	AC-2 AC-1 AC-3 AC-3e AC-2
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 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V DC

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) 30 kW at 380...400 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) 30 kW at 440 V AC 50 Hz (AC-3)
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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

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 AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947 250 A DC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
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 10 A gG for control circuit conforming to IEC 60947-5-1
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 4.2 W AC-3
[Ui] 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
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal 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	0.8...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 0.75...1.25 Uc (-40...140 °F (-40...60 °C)):operational DC 0.1...0.3 Uc (-40...158 °F (-40...70 °C)):drop-out DC
Inrush power in VA	160 VA cos phi 0.75 (at 68 °F (20 °C))
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Rated operational power in W	12 W 48 V DC-13 10000000 cycles - control circuit 38 W 48 V DC-13 3000000 cycles - control circuit
Operating time	12...26 ms closing 50 ms closing 20 ms opening
Time constant	34 ms
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Power circuit: screw terminals 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: rigid Power circuit: screw terminals 2 0.004...0.02 in ² (2.5...16 mm ²) - cable stiffness: rigid without cable end Power circuit: screw terminals 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible without cable end Power circuit: screw terminals 2 0.004...0.02 in ² (2.5...16 mm ²) - cable stiffness: flexible without cable end Power circuit: screw terminals 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible with cable end Power circuit: screw terminals 2 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: rigid
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.3 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 60947-4-1 IEC 60947-5-1 EN 60947-4-1 CSA C22.2 No 14 UL 508
Product Certifications	GOST CCC UL DNV RINA LROS (Lloyds register of shipping) BV GL UKCA BV
IP degree of protection	IP2X VDE 0106 IP2X IEC 60529
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	5 in (127 mm)
Width	3.3 in (85 mm)
Depth	6.9 in (176 mm)
Net Weight	4.817 lb(US) (2.185 kg)

Ordering and shipping details

Category	US10I1222357
Discount Schedule	0I12
GTIN	3389110436761
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.74 in (9.5 cm)
Package 1 Width	5.20 in (13.2 cm)
Package 1 Length	5.51 in (14.0 cm)
Package weight(Lbs)	3.179 lb(US) (1.442 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	5
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 2 Weight	16.603 lb(US) (7.531 kg)

Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Carbon footprint (kg CO2 eq, Total Life cycle)	83
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	REACH Declaration
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
PVC free	Yes

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Offer Marketing Illustration

Product benefits / Features

TeSys Deca Contactors

Technical Benefits



- Deca green delivers a consistent low consumption range of contactors from 9 A to 80 A.
- Covers control voltage from 24 to 250 V, with same coils for AC and DC.
- Designed to meet the requirements of industrial and HVAC applications
- With IEC60335-1 compliance, improved fire resistance, and dust-proof auxiliaries
- Suitable for safety applications thanks to mechanically linked contacts and mirror contacts
- Outstanding breaking/making capacity up to 20 In with PLC direct connection

Technical Illustration

Assembly's dimensions

