

Product datasheet

Specifications



Contacteur, TeSys Deca, 3P(3NO),AC-3/AC-3e/<=440V 50A, 48V AC 50/60Hz coil, screw clamp terminals

LC1D50E7

EAN Code: 3389110421286

ⓘ Discontinued

Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Motor control
Utilisation category	AC-2 AC-4 AC-3 AC-3e AC-4
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	48 V DC

Complementary

Motor power kW	25 kW at 415 V AC 50 Hz (AC-3) 30 kW at 440 V AC 50 Hz (AC-3) 30 kW at 500 V AC 50 Hz (AC-3) 33 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 220...230 V AC 50 Hz (AC-3) 11 kW at 400 V AC 50 Hz (AC-4) 30 kW at 1000 V AC 50 Hz (AC-3) 22 kW at 380...400 V AC 50 Hz (AC-3e) 25 kW at 415 V AC 50 Hz (AC-3e) 30 kW at 440 V AC 50 Hz (AC-3e) 30 kW at 500 V AC 50 Hz (AC-3e) 33 kW at 660...690 V AC 50 Hz (AC-3e) 15 kW at 220...230 V AC 50 Hz (AC-3e) 30 kW at 1000 V AC 50 Hz (AC-3e) 22 kW at 380...400 V AC 50 Hz (AC-3)
Motor power hp	7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phases motors 15 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 40 hp at 575/600 V AC 60 Hz for 3 phases motors 3 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 60 °C) for power circuit 10 A (at 60 °C) for control circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 900 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	900 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 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	9.6 W AC-1 3.7 W AC-3e 3.7 W AC-3
[Ui] rated insulation voltage	Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified conforming to IEC 60947-1 Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V CSA certified conforming to IEC 60947-1 Control circuit: 600 V CSA certified
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz 0.75...1.25 Uc (-40...60 °C):operational DC 0.1...0.3 Uc (-40...70 °C):drop-out DC
Inrush power in VA	160 VA cos phi 0.75 (at 20 °C)
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 20 °C)
Hold-in power consumption in W	7.4 W at 20 °C
Rated operational power in W	12 W at 48 V DC-13 - electrical durability: 10000000 cycles - for control circuit 38 W at 48 V DC-13 - electrical durability: 3000000 cycles - for 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 1...4 mm ² - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: rigid Power circuit: screw clamp terminals 2 2.5...16 mm ² - cable stiffness: rigid without cable end Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5...16 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: rigid
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	type mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to 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 Plate

Environment

Standards	UL 60947-4-1 IEC 60947-5-1 EN 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 IEC 60947-4-1
Product certifications	CCC BV CSA GOST UL DNV GL LROS (Lloyds register of shipping) UKCA CSA
IP degree of protection	IP2X conforming to VDE 0106 IP2X conforming to IEC 60529
Climatic withstand	conforming to IACS E10 exposure to damp heat
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to 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	127 mm
Width	85 mm
Depth	176 mm
Net weight	2.185 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.0 cm
Package 1 Width	13.5 cm
Package 1 Length	9.5 cm
Package 1 Weight	1.447 kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.695 kg
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	77.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	131.46 kg

Contractual warranty

Warranty (in months)	18
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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

Total lifecycle Carbon footprint **65**

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](#)

PVC free **Yes**

Use Again

Repack and remanufacture

End of life manual availability **No need of specific recycling operations**

Take-back **No**

WEEE Label  **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



The image shows a TeSys Deca contactor, model LC1D09, which is a three-phase AC contactor. It is a black plastic unit with a green control panel. The top panel has three main terminals labeled 1, 2, and 3. The middle panel has three auxiliary terminals labeled 13 NO, 12 NC, and 14. The bottom panel has three main terminals labeled 4, 5, and 6. The Schneider logo and 'TeSys' branding are visible on the green panel.

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

Offer Marketing Illustration

Product benefits / Features

TeSys Deca Contactors



A black TeSys Deca contactor with a green label that reads 'TeSys Schneider Electric'. The label also includes the model number 'LC1D50E7' and the Schneider Electric logo. The contactor has several terminals and a handle on top.

Reliable
Multi-standard solutions, high reliability, long mechanical and electrical durability for different sizes, and the most complete accessories.

Energy efficiency
These electronic-coil contactors require up to 80 % less energy than electro-mechanical contactors.

Universal
Multi standards certified (IEC, UL, CSA, CCC, EAC, Marine), Green Premium compliant (RoHS/REACH).

Offer Marketing Illustration

Product benefits / Features



Technical Illustration

Assembly's dimensions

