

Product datasheet

Specifications



Contactors, TeSys Deca, 4P(4NO),AC-1 440V 80A,48V AC coil, screw clamp terminal

LC1D65004E7

! Discontinued

Main

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

Complementary

Motor power hp	10 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 10 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 20 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 20 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 20 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 20 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 5 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 5 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 50 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 50 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL
Compatibility code	LC1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 140 A AC 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	10 A gG for control circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 2 for power circuit 160 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	1 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1

[Ui] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	6 Mcycles
Control circuit type	AC at 50/60 Hz standard
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.6 U _c (60 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (60 °C):operational AC 50 Hz 0.85...1.1 U _c (60 °C):operational AC 60 Hz
Inrush power in VA	140 VA cos phi 0.75 (at 20 °C) 160 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 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/h at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1...35 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1...25 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1...35 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver pozidriv No 2
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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	Plate Rail

Environment

Standards	UL 60947-4-1 CSA C22.2 No 14 EN 60947-5-1 EN 60947-4-1 IEC 60947-5-1 IEC 60947-4-1
Product certifications	CSA DNV LROS (Lloyds register of shipping) GL BV CCC GOST RINA UL UKCA
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Permissible ambient air temperature around the device	-5...60 °C -40...70 °C at Uc
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	130 mm
Product weight	1.44 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.2 cm
Package 1 Width	11.2 cm
Package 1 Length	13.4 cm
Package 1 Weight	1.476 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	70 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	9 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	57 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	3 kg CO2 eq.
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	Free of Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	76
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

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



Offer Marketing Illustration

Product benefits / Features

TeSys Deca Contactors



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).

