

Product datasheet

Specifications



Contactor, TeSys Deca Advanced,
3P(3NO), AC-3/3e, <=440V, 65A,
24...60V AC/DC coil, lugs-ring
terminals

LC1D65A6BNE

Main

Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-1 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-1 for power circuit 65 A (at <60 °C) at <= 440 V AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	24...60 V AC 50/60 Hz 24...60 V DC

Complementary

Motor power kW	18.5 kW at 220/230 V AC 50/60 Hz (AC-3) 30 kW at 380/400 V AC 50/60 Hz (AC-3) 37 kW at 415 V AC 50/60 Hz (AC-3) 37 kW at 440 V AC 50/60 Hz (AC-3) 37 kW at 500 V AC 50/60 Hz (AC-3) 37 kW at 660/690 V AC 50/60 Hz (AC-3) 18.5 kW at 220/230 V AC 50/60 Hz (AC-3e) 30 kW at 380/400 V AC 50/60 Hz (AC-3e) 37 kW at 415 V AC 50/60 Hz (AC-3e) 37 kW at 440 V AC 50/60 Hz (AC-3e) 37 kW at 500 V AC 50/60 Hz (AC-3e) 37 kW at 660/690 V AC 50/60 Hz (AC-3e) 11 kW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	5 hp at 115 V AC 60 Hz for 1 phase motors 10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 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 50 hp at 575/600 V AC 60 Hz for 3 phases 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 signalling circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1

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

Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	110 A 40 °C - 10 min for power circuit 260 A 40 °C - 1 min for power circuit 640 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1 6.3 W AC-3 6.3 W AC-3e
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 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	10 Mcycles
Electrical durability	1.8 Mcycles 57 A AC-3 at Ue <= 440 V 0.5 Mcycles 80 A AC-1 at Ue <= 440 V 1.8 Mcycles 57 A AC-3e at Ue <= 440 V
Control circuit type	AC/DC at 50/60 Hz AC/DC electronic
Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc (-40...70 °C):drop-out AC/DC 0.85...1.1 Uc (-40...60 °C):operational AC 0.8...1.1 Uc (-40...60 °C):operational DC 1...1.1 Uc (60...70 °C):operational AC/DC
Inrush power in VA	18 VA 50/60 Hz (at 20 °C)
Inrush power in W	18 W (at 20 °C)
Hold-in power consumption in VA	1.2 VA 50/60 Hz (at 20 °C)
Hold-in power consumption in W	0.7 W at 20 °C
Heat dissipation	0.7 W at 50/60 Hz
Operating time	55...65 ms closing 20...80 ms opening
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Power circuit: lugs-ring terminals - external diameter: 16.5 mm Control circuit: lugs-ring terminals - external diameter: 8 mm
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 6 N.m - on lugs-ring terminals hexagonal screw head 10 mm M6 Power circuit: 6 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M4 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M3.5
Auxiliary contact composition	1 NO + 1 NC
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
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V for signalling circuit

Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Mounting support	Rail Plate

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) UKCA
IP degree of protection	IP20 front face conforming to IEC 60529
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...60 °C 60...70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
Height	122 mm
Width	55 mm
Depth	120 mm
Product weight	1.002 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.400 cm
Package 1 Width	13.700 cm
Package 1 Length	15.400 cm
Package 1 Weight	806.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.365 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	52 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	7 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	44 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 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
SCIP Number	9bb0b51e-73b5-4128-a86b-723dbbccfe86
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
Halogen-free status	Halogen free plastic parts & cables product

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	64
End of life manual availability	End of Life Information
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, a black industrial electrical component. It has a green label with 'TeSys' and 'Schneider Electric' logos. The label also indicates 'Control' and 'LC1 D09'. The top of the device has three screw terminals labeled '1', '2', and '3'. The bottom has four screw terminals labeled '1', '2', '3', and '4'. The side of the device has two screw terminals labeled '1' and '2'. The bottom of the device has four screw terminals labeled '1', '2', '3', and '4'. The device is shown against a green circular background.

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).



Technical Illustration

Assembly's dimensions

