

Product data sheet

Specifications



IEC contactor, TeSys Deca
Advanced, nonreversing, 18A, 10HP
at 480VAC, up to 100kA SCCR, 3
phase, 3 NO, 100/250VAC/VDC coil

LC1D18KUE

Product availability: Stock - Normally stocked in distribution facility

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-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	18 A (at <140 °F (60 °C)) at <= 440 V AC-3 for power circuit 32 A (at <140 °F (60 °C)) at <= 440 V AC-1 for power circuit 18 A (at <140 °F (60 °C)) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	100...250 V AC 50/60 Hz 100...250 V DC

Complementary

Motor power kW	4 kW at 220...230 V AC 50 Hz (AC-3) 7.5 kW at 380...400 V AC 50 Hz (AC-3) 9 kW at 415 V AC 50 Hz (AC-3) 9 kW at 440 V AC 50 Hz (AC-3) 10 kW at 500 V AC 50 Hz (AC-3) 10 kW at 660...690 V AC 50 Hz (AC-3) 4 kW at 220...230 V AC 50 Hz (AC-3e) 7.5 kW at 380...400 V AC 50 Hz (AC-3e) 9 kW at 415 V AC 50 Hz (AC-3e) 9 kW at 440 V AC 50 Hz (AC-3e) 10 kW at 500 V AC 50 Hz (AC-3e) 10 kW at 660...690 V AC 50 Hz (AC-3e)
Maximum Horse Power Rating	1 hp at 115 V AC 60 Hz for 1 phase motors 3 hp at 230/240 V AC 60 Hz for 1 phase motors 5 hp at 200/208 V AC 60 Hz for 3 phase motors 5 hp at 230/240 V AC 60 Hz for 3 phase motors 10 hp at 460/480 V AC 60 Hz for 3 phase motors 15 hp at 575/600 V AC 60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 32 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947

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

Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 40 A 104 °F (40 °C) - 10 min for power circuit 84 A 104 °F (40 °C) - 1 min for power circuit 145 A 104 °F (40 °C) - 10 s for power circuit 240 A 104 °F (40 °C) - 1 s for power circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3 0.8 W AC-3e
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	15 Mcycles
Electrical durability	2.2 Mcycles 15 A AC-3 <= 440 V 0.9 Mcycles 32 A AC-1 <= 440 V 2.2 Mcycles 15 A AC-3e <= 440 V
Control circuit type	AC/DC 50/60 Hz AC/DC electronic
Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc (-40...158 °F (-40...70 °C)):drop-out AC/DC 0.85...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC/DC 1...1.1 Uc (140...158 °F (60...70 °C)):operational AC/DC
Inrush power in VA	25 VA 50/60 Hz (at 68 °F (20 °C))
Inrush power in W	18 W 68 °F (20 °C))
Hold-in power consumption in VA	1.6 VA 50/60 Hz (at 68 °F (20 °C))
Hold-in power consumption in W	1.1 W 68 °F (20 °C)
Heat dissipation	1.1 W at 50/60 Hz
Operating time	45...55 ms closing 20...90 ms opening
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid Power circuit: screw clamp terminals 1 0.002...0.009 in² (1.5...6 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.002...0.009 in² (1.5...6 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.002...0.009 in² (1...6 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.002...0.009 in² (1.5...6 mm²) - cable stiffness: solid Power circuit: screw clamp terminals 2 0.002...0.009 in² (1.5...6 mm²) - cable stiffness: solid
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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	Plate Rail

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 IEC 60529
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
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	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	3.03 in (77 mm)
Width	1.8 in (45 mm)
Depth	3.4 in (86 mm)
Product Weight	0.833 lb(US) (0.378 kg)

Ordering and shipping details

Category	US10I1222356
Discount Schedule	0I12
GTIN	3606480987717
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.047 in (5.200 cm)
Package 1 Width	3.622 in (9.200 cm)
Package 1 Length	4.409 in (11.200 cm)
Package weight(Lbs)	13.898 oz (394.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	13.673 lb(US) (6.202 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	14 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	10 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.6 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	7d699774-c34b-4bf4-9ecb-388a149eefdd
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
Halogen content performance	Halogen free plastic parts & cables product

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	70
Circularity Profile	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



TeSys Deca Contactors

Range Accessories



Auxiliary contact block



Time delay auxiliary contact block



Mechanical interlock



Power connections



Assembling kits



Comb busbar



Contactor Coil

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).



Offer Marketing Illustration

Product benefits / Features



The image shows a TeSys Deca Contactor, model LC1D09, which is a black industrial-grade device. It features a green label with the 'TeSys' and 'Schneider Electric' logos. The device has multiple terminals on top and bottom, labeled with numbers and letters (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100). The device is shown against a green circular background.

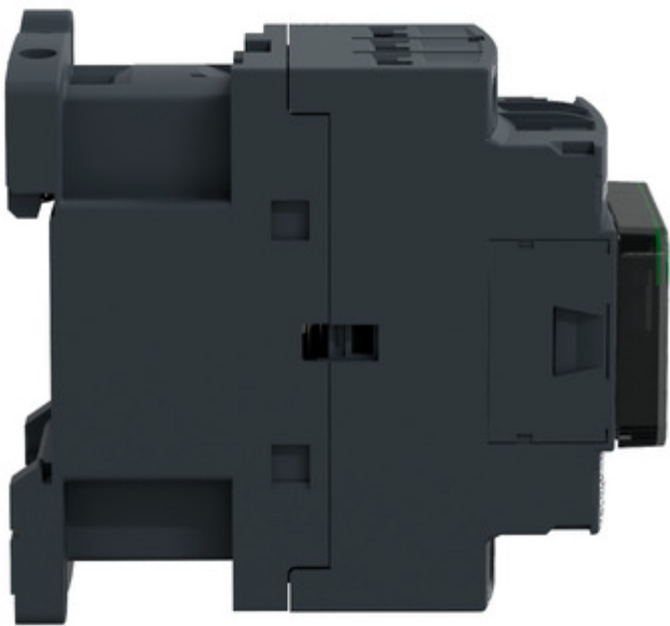
TeSys Deca Contactors

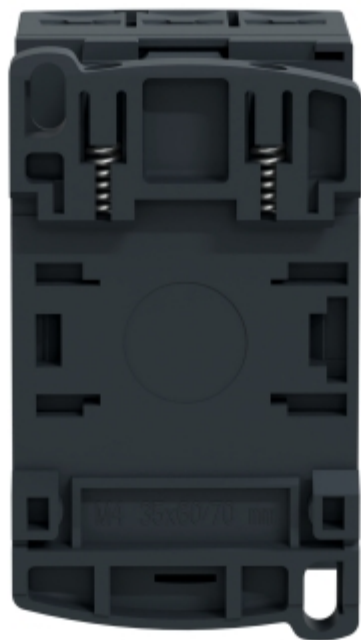
Technical Benefits

- 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

Image of product / Alternate images

Alternative





Technical Illustration

Assembly's dimensions

