

Product data sheet

Specifications



Contact, TeSys Deca, 3P(3 NO), AC-3/AC-3e, <=400V, 50A, 110V DC coil, lugs-ring terminals

LC1D506FW

⚠ Discontinued on: Jan 23, 2021

⚠ Discontinued

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contact
Device short name	LC1D
Contact application	Resistive load Motor control
Utilisation category	AC-2 AC-4 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	50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	110 V DC

Complementary

Motor power kW	22 kW at 380...400 V AC 50 Hz 25 kW at 415 V AC 50 Hz 30 kW at 440 V AC 50 Hz 30 kW at 500 V AC 50 Hz 33 kW at 660...690 V AC 50 Hz 15 kW at 220...230 V AC 50 Hz 30 kW at 1000 V AC 50 Hz
Maximum Horse Power Rating	3 hp at 115 V AC 60 Hz for 1 phase motors 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 phase motors 15 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 40 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 control circuit 80 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 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.

Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 for power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
[Ui] rated insulation voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 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	10000000 cycles
Control circuit type	DC wide range
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc (-40...158 °F (-40...70 °C)):drop-out DC 0.75...1.25 Uc (-40...140 °F (-40...60 °C)):operational DC 1...1.25 Uc (140...158 °F (60...70 °C)):operational DC
Inrush power in W	19 W 68 °F (20 °C)
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Operating time	20 ms opening 50 ms closing
Time constant	34 ms
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 0.3 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 0.6 in (16 mm)
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) lugs Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) lugs flat Ø 6 mm Power circuit 22.1 lbf.in (2.5 N.m) lugs flat Ø 8 mm Control circuit 15.05 lbf.in (1.7 N.m) lugs 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
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	Rail Plate

Environment

Standards	IEC 60947-4-1 EN 60947-4-1 EN 60947-5-1 IEC 60947-5-1 CSA C22.2 No 14 UL 60947-4-1
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Product Certifications	GL BV CCC LROS (Lloyds register of shipping) RINA UL GOST DNV CSA UKCA
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
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 opened 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz)
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	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
GTIN	3389118093256
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.5 in (9.0 cm)
Package 1 Width	5.7 in (14.5 cm)
Package 1 Length	7.09 in (18.0 cm)
Package weight(Lbs)	5.3 lb(US) (2.4 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 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	14 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.4 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	46 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	5 kg CO2 eq.

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 Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	76
Circularity Profile	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



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



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

