

Product datasheet

Specifications



TeSys D contactor - 3P(3 NO) - AC-3 - ≤ 440 V 18 A - 12 V DC coil

Local distributor code:

402769509

LC1D18JL

EAN Code: 3389110361735

Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz Power circuit: ≤ 300 V DC
[Ie] rated operational current	18 A (at ≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit 32 A (at ≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit 18 A (at ≤ 60 °C) at ≤ 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	12 V DC

Complementary

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

[Icw] rated short-time withstand current	145 A 40 °C - 10 s for power circuit 240 A 40 °C - 1 s for power circuit 40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min 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	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 - lth 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 conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
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	30 Mcycles
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V 1.65 Mcycles 18 A AC-3e at Ue <= 440 V
Control circuit type	DC low consumption
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.8...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
Inrush power in W	2.4 W (at 20 °C)
Hold-in power consumption in W	2.4 W at 20 °C
Operating time	77 ±15 % ms closing 25 ±20 % ms opening
Time constant	40 ms
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	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...4 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
	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: solid without cable end
	Power circuit: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 1...6 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: solid without cable end

Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
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Auxiliary contact composition	1 NO + 1 NC
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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
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Signalling circuit frequency	25...400 Hz
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Minimum switching voltage	17 V for signalling circuit
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Minimum switching current	5 mA for signalling circuit
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Insulation resistance	> 10 MOhm for signalling circuit
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Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
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Mounting support	Rail Plate
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Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ CSA C22.2 No 60947-4-1
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Product certifications	UL CCC CSA Marine UKCA EAC CB Scheme
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IP degree of protection	IP20 front face conforming to IEC 60529
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Protective treatment	TH conforming to IEC 60068-2-30
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Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
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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
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	77 mm
Width	45 mm
Depth	95 mm
Net weight	0.49 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.700 cm
Package 1 Width	9.700 cm
Package 1 Length	11.900 cm
Package 1 Weight	532.000 g

Logistical informations

Country of origin	FR
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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	22 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
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]	18 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant with Exemptions
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
REACH Regulation	REACH Declaration
PVC free	Yes

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	75
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

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.



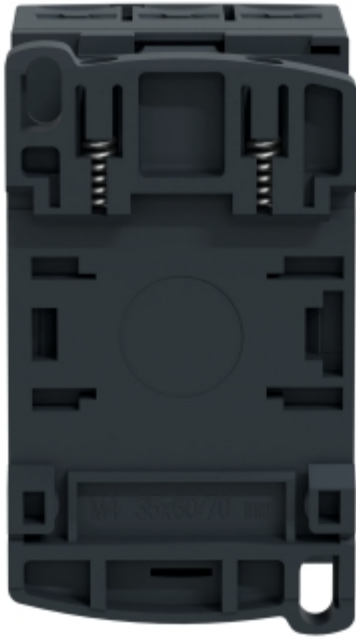
Universal

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



Image of product / Alternate images

Alternative



Technical Illustration

Assembly's dimensions

