

Product datasheet

Specifications



TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 48 V AC coil

LC2D183E7

⚠ Discontinued on: 1 Nov 2020

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Main

Range	TeSys
Product name	TeSys Deca
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	4 kW at 220...230 V AC 50 Hz 7.5 kW at 380...400 V AC 50 Hz 9 kW at 415...440 V AC 50 Hz 10 kW at 500 V AC 50 Hz 10 kW at 660...690 V AC 50 Hz
Motor power hp	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 phases motors 5 hp at 230/240 V AC 60 Hz for 3 phases motors 10 hp at 460/480 V AC 60 Hz for 3 phases motors 15 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overtoltage category	III
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 25 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	40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min for power circuit 145 A 40 °C - 10 s for power circuit 240 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	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 25 A 50 Hz for power circuit
[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
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.8 W AC-3 2.5 W AC-1
Front cover	With
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	CCC GL RINA GOST BV LROS (Lloyds register of shipping) DNV UL CSA
Connections - terminals	Control circuit: spring terminals 1 cable(s) 2.5 mm ² flexible without cable end Control circuit: spring terminals 2 cable(s) 2.5 mm ² flexible without cable end Power circuit: spring terminals 1 cable(s) 4 mm ² flexible without cable end Power circuit: spring terminals 2 cable(s) 4 mm ² flexible without cable end
Operating time	12...22 ms closing 4...19 ms opening
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	15 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U _c (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (-40...60 °C):operational AC 50 Hz 0.85...1.1 U _c (-40...60 °C):operational AC 60 Hz 1...1.1 U _c (60...70 °C):operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)

Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2...3 W at 50/60 Hz
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 current	5 mA for signalling circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Climatic withstand	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
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	99 mm
Width	90 mm
Depth	92 mm
Net weight	0.707 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.9 cm
Package 1 Width	11.4 cm
Package 1 Length	11 cm
Package 1 Weight	730 g

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

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better



Materials and Substances

[EU RoHS Directive](#)

Compliant

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins