

# Product datasheet

Specifications



## TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 48 V DC coil

LC2D093ED

⚠ Discontinued on: 10 Oct 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	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 16 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	2.2 kW at 220...230 V AC 50 Hz 4 kW at 380...400 V AC 50 Hz 4 kW at 415...440 V AC 50 Hz 5.5 kW at 500 V AC 50 Hz 5.5 kW at 660...690 V AC 50 Hz
Motor power hp	0.5 hp at 115 V AC 60 Hz for 1 phase motors 1 hp at 230/240 V AC 60 Hz for 1 phase motors 2 hp at 200/208 V AC 60 Hz for 3 phases motors 2 hp at 230/240 V AC 60 Hz for 3 phases motors 5 hp at 460/480 V AC 60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	48 V DC
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	16 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit
Irms rated making capacity	250 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
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947

<b>[Icw] rated short-time withstand current</b>	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 105 A 40 °C - 10 s for power circuit 210 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
<b>Associated fuse rating</b>	25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
<b>Average impedance</b>	2.5 mOhm - lth 16 A 50 Hz for power circuit
<b>[Ui] rated insulation voltage</b>	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
<b>Electrical durability</b>	0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V
<b>Power dissipation per pole</b>	0.2 W AC-3 1.56 W AC-1
<b>Front cover</b>	With
<b>Interlocking type</b>	Mechanical
<b>Mounting support</b>	Plate Rail
<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
<b>Product certifications</b>	BV LROS (Lloyds register of shipping) GOST RINA CCC DNV GL UL CSA
<b>Connections - terminals</b>	Power circuit: spring terminals 1 cable(s) 2.5 mm <sup>2</sup> flexible without cable end Power circuit: spring terminals 2 cable(s) 2.5 mm <sup>2</sup> flexible without cable end Control circuit: spring terminals 1 cable(s) 2.5 mm <sup>2</sup> flexible without cable end Control circuit: spring terminals 2 cable(s) 2.5 mm <sup>2</sup> flexible without cable end
<b>Operating time</b>	53.55...72.45 ms closing 16...24 ms opening
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	30 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 60 °C
<b>Complementary</b>	
<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.25 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
<b>Time constant</b>	28 ms
<b>Inrush power in W</b>	5.4 W (at 20 °C)

<b>Hold-in power consumption in W</b>	5.4 W at 20 °C
<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit

## Environment

<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Climatic withstand</b>	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	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
<b>Height</b>	99 mm
<b>Width</b>	90 mm
<b>Depth</b>	95 mm
<b>Net weight</b>	1.017 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.9 cm
<b>Package 1 Width</b>	11 cm
<b>Package 1 Length</b>	11 cm
<b>Package 1 Weight</b>	1.08 kg

## Contractual warranty

<b>Warranty (in months)</b>	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