

# Product datasheet

Specifications



## TeSys Deca contactor , 3P(3 NO) , AC-3 , <= 440V, 40 A , 12 V DC standard coil

LC1D40A3JD

⚠ Discontinued on: 23 Jan 2021

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### Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	12 V DC

### Complementary

Motor power kW	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 415...440 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 30 hp at 575/600 V AC 50/60 Hz for 3 phases motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 115 V AC 50/60 Hz for 1 phase motors 30 hp at 460/480 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 60 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 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

<b>[Icw] rated short-time withstand current</b>	320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit 72 A 40 °C - 10 min for power circuit 165 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
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	1.5 mOhm - lth 60 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	2.4 W AC-3 5.4 W AC-1
<b>[U] rated insulation voltage</b>	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 Power circuit: 690 V conforming to IEC 60947-4-1
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<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>	10 Mcycles
<b>Electrical durability</b>	0.7 Mcycles 60 A AC-1 at Ue <= 440 V 1.5 Mcycles 40 A AC-3 at Ue <= 440 V
<b>Control circuit type</b>	DC standard
<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.75...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
<b>Inrush power in W</b>	19 W (at 20 °C)
<b>Hold-in power consumption in W</b>	7.4 W at 20 °C
<b>Operating time</b>	50 ±15 % ms closing 20 ±20 % ms opening
<b>Time constant</b>	34 ms
<b>Connections - terminals</b>	Power circuit: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: spring terminals 1 0.75...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: spring terminals 2 0.75...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
<b>Tightening torque</b>	Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm
<b>Auxiliary contact composition</b>	1 NO + 1 NC

<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 voltage</b>	17 V for signalling circuit
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm 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>Mounting support</b>	Rail Plate

## Environment

<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>	UL GOST CSA CCC
<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Climatic withstand</b>	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...60 °C 60...70 °C with derating
<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 closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)
<b>Height</b>	122 mm
<b>Width</b>	55 mm
<b>Depth</b>	120 mm
<b>Net weight</b>	0.925 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>	6 cm
<b>Package 1 Width</b>	14 cm
<b>Package 1 Length</b>	15 cm
<b>Package 1 Weight</b>	850 g

## Contractual warranty





## 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

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

[End of life manual availability](#)

[End of Life Information](#)

WEEE Label



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