

# Product data sheet

Specifications



## TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 200 V AC coil

LC2D50AL7

**Product availability: Non-Stock - Not normally stocked in distribution facility**

### Main

<b>Range</b>	TeSys TeSys Deca
<b>Product name</b>	TeSys D TeSys Deca
<b>Product or Component Type</b>	Reversing contactor
<b>Device short name</b>	LC2D
<b>Contactor application</b>	Motor control Resistive load
<b>Utilisation category</b>	AC-1 AC-3 AC-3e
<b>Device presentation</b>	Preassembled with reversing power busbar
<b>Poles description</b>	3P
<b>power pole contact composition</b>	3 NO
<b>[Ue] rated operational voltage</b>	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
<b>[Ie] rated operational current</b>	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
<b>Motor power kW</b>	15 kW at 220...230 V AC 50-60 Hz 22 kW at 380...400 V AC 50-60 Hz 30 kW at 500 V AC 50-60 Hz 33 kW at 660...690 V AC 50-60 Hz 25 kW at 415 V AC 50-60 Hz 30 kW at 440 V AC 50-60 Hz
<b>motor power HP (UL / CSA)</b>	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
<b>Control circuit type</b>	AC 50/60 Hz
<b>[Uc] control circuit voltage</b>	200 V AC 50/60 Hz
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Overvoltage category</b>	III
<b>[Ith] conventional free air thermal current</b>	10 A (at 140 °F (60 °C)) for signalling circuit 80 A (at 140 °F (60 °C)) for power circuit
<b>Irms rated making capacity</b>	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 900 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.

<b>Rated breaking capacity</b>	900 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	400 A 104 °F (40 °C) - 10 s for power circuit 810 A 104 °F (40 °C) - 1 s for power circuit 84 A 104 °F (40 °C) - 10 min for power circuit 208 A 104 °F (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 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	1.5 mOhm - Ith 80 A 50 Hz for power circuit
<b>[Ui] rated insulation voltage</b>	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
<b>Electrical durability</b>	1.45 Mcycles 50 A AC-3 <= 440 V 1.1 Mcycles 80 A AC-1 <= 440 V 1.45 Mcycles 50 A AC-3e <= 440 V
<b>Power dissipation per pole</b>	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
<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 60335-2-40:Annex JJ IEC 60335-1
<b>Product Certifications</b>	UL CSA RINA GOST CCC DNV LROS (Lloyds register of shipping) GL BV UKCA
<b>Connections - terminals</b>	Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid Power circuit EverLink BTR screw connectors 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible without cable end Power circuit EverLink BTR screw connectors 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )flexible without cable end Power circuit EverLink BTR screw connectors 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible with cable end Power circuit EverLink BTR screw connectors 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )flexible with cable end Power circuit EverLink BTR screw connectors 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )solid Power circuit EverLink BTR screw connectors 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )solid

<b>Tightening torque</b>	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.2 in (4 mm) Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal 0.2 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
<b>Operating time</b>	4...19 ms opening 12...26 ms closing
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	6 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)

## Complementary

<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 Uc (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 50 Hz 0.85...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 60 Hz 1...1.1 Uc (140...158 °F (60...70 °C)):operational AC 50/60 Hz
<b>Inrush power in VA</b>	140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 160 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	4...5 W 50/60 Hz
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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 IEC 60529
<b>Climatic withstand</b>	IACS E10 IEC 60947-1 Annex Q category D
<b>Protective treatment</b>	TH IEC 60068-2-30
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Ambient Air Temperature for Storage</b>	-76...176 °F (-60...80 °C)
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms

<b>Height</b>	4.8 in (122 mm)
<b>Width</b>	4.7 in (119 mm)
<b>Depth</b>	4.7 in (120 mm)
<b>Product Weight</b>	4.14 lb(US) (1.88 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222357
<b>Discount Schedule</b>	0I12
<b>GTIN</b>	3389118339705
<b>Returnability</b>	No
<b>Country of origin</b>	FR

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	5.51 in (14.0 cm)
<b>Package 1 Width</b>	6.38 in (16.2 cm)
<b>Package 1 Length</b>	7.80 in (19.8 cm)
<b>Package weight(Lbs)</b>	4.6 lb(US) (2.1 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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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

Carbon footprint (kg CO2 eq, Total Life cycle) 139

Environmental Disclosure [Product Environmental Profile](#)

## 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](http://www.P65Warnings.ca.gov)

PVC free Yes

## Use Again

### Repack and remanufacture

Circularity Profile [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.

Technical Illustration

Assembly's dimensions

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