

# Product data sheet

Specifications



## TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 24 V AC coil

LC2D18B7V

**Product availability: Stock - Normally stocked in distribution facility**

### Main

<b>Range</b>	TeSys TeSys Deca
<b>Product name</b>	TeSys Deca TeSys Deca
<b>Product or Component Type</b>	Reversing contactor
<b>Device short name</b>	LC2D
<b>Contactor application</b>	Resistive load Motor control
<b>Utilisation category</b>	AC-1 AC-3
<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>	18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
<b>Motor power kW</b>	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
<b>motor power HP (UL / CSA)</b>	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 phase motors 5 hp at 230/240 V AC 60 Hz for 3 phase motors 10 hp at 460/480 V AC 60 Hz for 3 phase motors 15 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>	24 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 32 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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	300 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>[Icw] rated short-time withstand current</b>	40 A 104 °F (40 °C) - 10 min for power circuit 84 A 104 °F (40 °C) - 1 min for power circuit 145 A 104 °F (40 °C) - 10 s for power circuit 240 A 104 °F (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>	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
<b>Average impedance</b>	2.5 mOhm - Ith 32 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>	1.65 Mcycles 18 A AC-3 <= 440 V 1 Mcycles 32 A AC-1 <= 440 V
<b>Power dissipation per pole</b>	0.8 W AC-3 2.5 W AC-1
<b>Front cover</b>	With
<b>Interlocking type</b>	Electrical and mechanical
<b>Mounting Support</b>	Rail Plate
<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>	DNV CSA CCC UL GL LROS (Lloyds register of shipping) BV RINA GOST 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 screw clamp terminals 1 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 1 0.002...0.009 in <sup>2</sup> (1...6 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 1 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )solid Power circuit screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )solid
<b>Tightening torque</b>	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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 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>	12...22 ms closing 4...19 ms opening
<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>	15 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>	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	2...3 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>	3.03 in (77 mm)
<b>Width</b>	3.5 in (90 mm)
<b>Depth</b>	3.4 in (86 mm)
<b>Net Weight</b>	1.559 lb(US) (0.707 kg)

## Ordering and shipping details

Category	US10I1222354
Discount Schedule	0I12
GTIN	3389110412130
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.800 in (9.652 cm)
Package 1 Width	4.500 in (11.430 cm)
Package 1 Length	5.500 in (13.970 cm)
Package weight(Lbs)	29.279 oz (830.073 g)
Unit Type of Package 2	CAR
Number of Units in Package 2	6
Package 2 Height	4.500 in (11.430 cm)
Package 2 Width	11.000 in (27.940 cm)
Package 2 Length	16.900 in (42.926 cm)
Package 2 Weight	11.561 lb(US) (5.244 kg)

## Contractual warranty


Warranty	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 >](#)

 <b>Environmental footprint</b>	
Carbon footprint (kg CO2 eq, Total Life cycle)	43
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better

 <b>Materials and Substances</b>	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Compliant
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
PVC free	Yes

### Use Again

 <b>Repack and remanufacture</b>	
Circularity Profile	<a href="#">End of Life Information</a>
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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mm  
[in]

