

Product data sheet

Specifications



TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 48 V AC coil

LC2D25E7

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys TeSys Deca
Product name	TeSys D TeSys Deca
Product or Component Type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-3e
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 <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	5.5 kW at 220...230 V AC 50-60 Hz 11 kW at 380...400 V AC 50-60 Hz 11 kW at 415 V AC 50-60 Hz 11 kW at 440 V AC 50-60 Hz 15 kW at 500 V AC 50-60 Hz 15 kW at 660...690 V AC 50-60 Hz
Maximum Horse Power Rating	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 2 hp at 115 V AC 60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 60 Hz for 3 phase motors 15 hp at 460/480 V AC 60 Hz for 3 phase motors 20 hp at 575/600 V AC 60 Hz for 3 phase motors
Control circuit type	AC 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 IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 40 A (at 140 °F (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 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Icw] rated short-time withstand current	50 A 104 °F (40 °C) - 10 min for power circuit 120 A 104 °F (40 °C) - 1 min for power circuit 240 A 104 °F (40 °C) - 10 s for power circuit 380 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
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - lth 40 A 50 Hz for power circuit
[Ui] rated insulation voltage	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
Electrical durability	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V 1.65 Mcycles 25 A AC-3e <= 440 V
Power dissipation per pole	1.25 W AC-3 3.2 W AC-1 1.25 W AC-3e
Front cover	With
Interlocking type	Mechanical
Mounting Support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60335-2-Annex JJ IEC 60335-1
Product Certifications	DNV CSA CCC UL GL LROS (Lloyds register of shipping) BV RINA GOST UKCA CB
Connections - terminals	Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)solid Power circuit screw clamp terminals 1 0.004...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.002...0.02 in ² (1...10 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.002...0.009 in ² (1.5...6 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.002...0.02 in ² (1.5...10 mm ²)solid Power circuit screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²)solid

Tightening torque	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 22.1 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.1 lbf.in (2.5 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
Operating time	12...22 ms closing 4...19 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	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
Inrush power in VA	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))
Hold-in power consumption in VA	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))
Heat dissipation	2...3 W 50/60 Hz
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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 IEC 60529
Climatic withstand	IACS E10 IEC 60947-1 Annex Q category D
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open8 Gn for 11 ms
Height	3.3 in (85 mm)

Width	3.5 in (90 mm)
Depth	3.6 in (92 mm)
Product Weight	1.735 lb(US) (0.787 kg)

Ordering and shipping details

Category	US1CTR121251
Discount Schedule	CTR1
GTIN	3389110386776
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.449 in (11.300 cm)
Package 1 Width	4.449 in (11.300 cm)
Package 1 Length	5.512 in (14.000 cm)
Package weight(Lbs)	33.404 oz (947.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	11.030 lb(US) (5.003 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	196.582 lb(US) (89.168 kg)

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	
Total lifecycle Carbon footprint	254 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	5 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	247 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
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	Free of Substances of Very High Concern above the threshold
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
PVC free	Yes

Use Longer

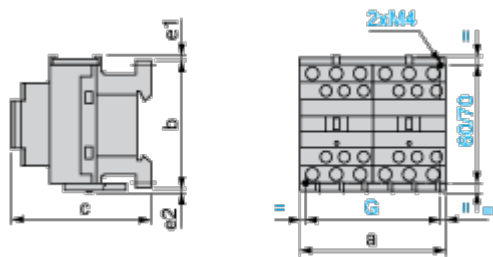
 Lifetime extension	
Repair	No

Use Again

 Repack and remanufacture	
Recyclability potential, in %	66
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.

Dimensions Drawings

Dimensions



LC2 or 2 x LC1	a	b	c ⁽¹⁾	e1	e2	G
D09 to D18 (AC)	90	77	86	4	1.5	80
D093 to D123 (AC)	90	99	86	–	–	80
D09 to D18 (DC)	90	77	95	4	1.5	80
D093 to D123 (DC)	90	99	95	–	–	80
D25 to D38 (AC)	90	85	92	9	5	80
D183 to D383 (AC)	90	99	92	–	–	80
D25 to D32 (DC)	90	85	101	9	5	80
D183 to D383 (DC)	90	99	101	–	–	80
e1 and e2: including cabling.						
(1) With safety cover, without add-on block.						

Connections and Schema

Wiring

