

# Product data sheet

Specifications



## Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, $\leq 440\text{V}$ , 32A, 24V DC coil, with electrical interlocking, screw clamp terminals

LC2D32BD

### 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 $\leq 690\text{ V AC } 25\text{...}400\text{ Hz}$ Power circuit $\leq 300\text{ V DC}$
[Ie] rated operational current	32 A (at $140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) at $\leq 440\text{ V AC AC-3}$ for power circuit 50 A (at $140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) at $\leq 440\text{ V AC AC-1}$ for power circuit 32 A (at $140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) at $\leq 440\text{ V AC AC-3e}$ for power circuit
Motor power kW	7.5 kW at 220...230 V AC 50...60 Hz 15 kW at 380...400 V AC 50...60 Hz 15 kW at 415 V AC 50...60 Hz 15 kW at 440 V AC 50...60 Hz 18.5 kW at 500 V AC 50...60 Hz 18.5 kW at 660...690 V AC 50...60 Hz
Motor power hp	2 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 hp at 200/208 V AC 60 Hz for 3 phases motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overtoltage category	III
[Ith] conventional free air thermal current	10 A (at $140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) for signalling circuit 50 A (at $140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947

<b>Rated breaking capacity</b>	550 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	60 A 104 °F (40 °C) - 10 min for power circuit 138 A 104 °F (40 °C) - 1 min for power circuit 260 A 104 °F (40 °C) - 10 s for power circuit 430 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 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	2 mOhm - lth 50 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 32 A AC-3 <= 440 V 1.4 Mcycles 50 A AC-1 <= 440 V 1.65 Mcycles 32 A AC-3e <= 440 V
<b>Power dissipation per pole</b>	2 W AC-3 5 W AC-1 2 W AC-3e
<b>Front cover</b>	With
<b>Interlocking type</b>	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>	UL CSA RINA GOST CCC DNV LROS (Lloyds register of shipping) GL BV UKCA CB
<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 0.004...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 2 0.004...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 1 0.002...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 1 0.002...0.02 in <sup>2</sup> (1.5...10 mm <sup>2</sup> )solid Power circuit screw clamp terminals 2 0.004...0.02 in <sup>2</sup> (2.5...10 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 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
<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 EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	30 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)

## Complementary

<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.25 Uc (-40...158 °F (-40...70 °C)):drop-out DC 0.7...1.25 Uc (-40...140 °F (-40...60 °C)):operational DC 1...1.25 Uc (140...158 °F (60...70 °C)):operational DC
<b>Time constant</b>	28 ms
<b>Inrush power in W</b>	5.4 W 68 °F (20 °C))
<b>Hold-in power consumption in W</b>	5.4 W 68 °F (20 °C)
<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...3000 m
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 UL 94
<b>Mechanical robustness</b>	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
<b>Height</b>	3.3 in (85 mm)
<b>Width</b>	3.5 in (90 mm)
<b>Depth</b>	4.0 in (101 mm)

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Net weight	2.485 lb(US) (1.127 kg)
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	4.3 in (11.0 cm)
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Package 1 Width	4.8 in (12.3 cm)
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Package 1 Length	5.9 in (15.0 cm)
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Package 1 Weight	2.811 lb(US) (1.275 kg)
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Unit Type of Package 2	S02
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Number of Units in Package 2	5
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Package 2 Height	5.9 in (15.0 cm)
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Package 2 Width	11.8 in (30.0 cm)
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Package 2 Length	15.7 in (40.0 cm)
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Package 2 Weight	14.70 lb(US) (6.67 kg)
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## Contractual warranty

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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	90 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	6 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	81 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	3 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again

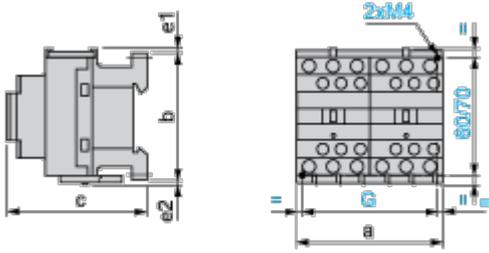


### Repack and remanufacture

Recyclability potential, in %	75
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	Nej
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

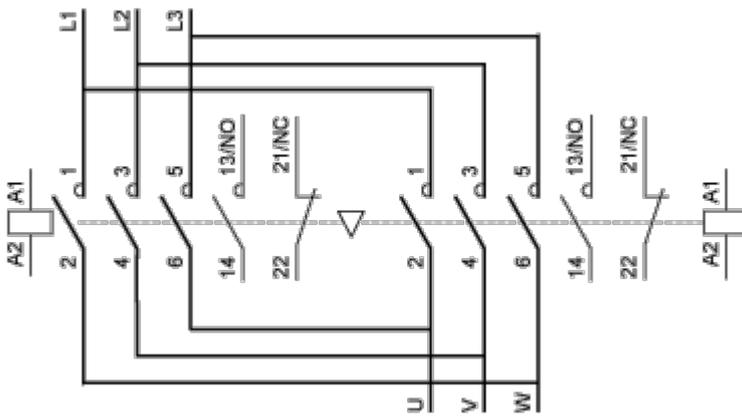


LC2 or 2 x LC1	a	b	c <sup>(1)</sup>	e1	e2	G
D09 to D18 (AC)	90	77	86	4	1.5	80
D093 to D123 (AC)	90	99	86	–	–	80
D09 to D18 (DC)	90	77	95	4	1.5	80
D093 to D123 (DC)	90	99	95	–	–	80
D25 to D38 (AC)	90	85	92	9	5	80
D183 to D383 (AC)	90	99	92	–	–	80
D25 to D32 (DC)	90	85	101	9	5	80
D183 to D383 (DC)	90	99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

Connections and Schema

Wiring

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Technical Illustration

Assembly's dimensions

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mm  
[in]

