

# Product data sheet

Specifications



## Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, IEC, <=440V, 50A, 120V AC 60Hz coil

LC2D50G7

### Main

Range of product	TeSys Deca
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control
Utilisation category	AC-2 AC-3 AC-4
Control circuit type	AC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	Power circuit: 50 A AC AC-3 (at <60 °C)
Motor power kW	15 kW at 220...240 V AC 50/60 Hz 22 kW at 380...400 V AC 50/60 Hz 25 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 33 kW at 660...690 V AC 50/60 Hz
[Uc] control circuit voltage	120 V AC 60 Hz
Connections - terminals	Control circuit: 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: 1 cable(s) 1...35 mm <sup>2</sup> flexible with cable end Power circuit: 1 cable(s) 1...35 mm <sup>2</sup> flexible without cable end Power circuit: 1 cable(s) 1...35 mm <sup>2</sup> solid without cable end Power circuit: 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end Power circuit: 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end Power circuit: 2 cable(s) 1...25 mm <sup>2</sup> solid without cable end Power circuit: 2 cable(s) 1...35 mm <sup>2</sup> flexible with cable end Power circuit: 2 cable(s) 1...35 mm <sup>2</sup> flexible without cable end Power circuit: 2 cable(s) 1...35 mm <sup>2</sup> solid without cable end

### Complementary

Assembly style	Ready assembled
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Protective cover	With
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC

<b>Interlocking type</b>	Mechanical
<b>Control circuit voltage limits</b>	Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <60 °C) Operational: 0.8...1.1 Uc at 50 Hz (at <60 °C) Operational: 0.85...1.1 Uc at 60 Hz (at <60 °C)
<b>[Ui] rated insulation voltage</b>	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<b>Overvoltage category</b>	III
<b>Mounting support</b>	Plate Rail
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Tightening torque</b>	Control circuit: 1.7 N.m - cable 1...2.5 mm <sup>2</sup> - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - cable 1...2.5 mm <sup>2</sup> - with screwdriver Philips No 2 Control circuit: 1.7 N.m - cable 1...4 mm <sup>2</sup> - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - cable 1...4 mm <sup>2</sup> - with screwdriver Philips No 2 Power circuit: 5 N.m - cable 1...25 mm <sup>2</sup> hexagonal screw head Power circuit: 8 N.m - cable 1...35 mm <sup>2</sup> hexagonal screw head
<b>[Ue] rated operational voltage</b>	Power circuit: ≤ 1000 V AC 25...400 Hz
<b>[Ith] conventional free air thermal current</b>	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
<b>Irms rated making capacity</b>	140 A AC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	900 A at 440 V for power circuit conforming to IEC 60947
<b>Associated fuse rating</b>	10 A gG for control 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>	- Ith 80 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	3.7 W AC-3 - Ith 80 A
<b>Inrush power in VA</b>	200 VA cos phi 0.75 (at 20 °C) 220 VA cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	20 VA 50 Hz cos phi 0.3 (at 20 °C) 22 VA 60 Hz cos phi 0.3 (at 20 °C) 26 VA 50 Hz cos phi 0.3 (at 20 °C) 26 VA 60 Hz cos phi 0.3 (at 20 °C)
<b>Operating time</b>	12...26 ms closing 4...19 ms opening
<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>	6000000 cycles
<b>Maximum operating rate</b>	3600 cyc/h 60 °C
<b>Minimum switching current</b>	5 mA for control circuit
<b>Minimum switching voltage</b>	17 V for control circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
<b>Insulation resistance</b>	> 10 MOhm for control circuit
<b>Height</b>	132 mm
<b>Width</b>	165 mm
<b>Depth</b>	142 mm

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Net weight	2.4 kg
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## Environment

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Standards	IEC 60947-4-1 CSA C22.2 No 14 UL 508 IEC 60947-5-1 EN 60947-4-1 EN 60947-5-1
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Product certifications	GL UL RINA GOST CSA LROS (Lloyds register of shipping) CCC DNV BV UKCA
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IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
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Protective treatment	TH (pollution degree 3) conforming to IEC 60068
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Ambient air temperature for operation	-5...60 °C
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Ambient air temperature for storage	-60...80 °C
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Permissible ambient air temperature around the device	-40...70 °C at U <sub>c</sub>
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Operating altitude	3000 m without derating
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Fire resistance	850 °C conforming to IEC 60695-2-1
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Shock resistance	10 gn contactor closed 8 gn contactor opened
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Vibration resistance	2 gn 5...300 Hz contactor opened 3 gn 5...300 Hz contactor closed
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Heat dissipation	6...10 W at 50/60 Hz for control circuit
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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	18.034 cm
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Package 1 Width	19.050 cm
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Package 1 Length	24.892 cm
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Package 1 Weight	3.221 kg
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## Contractual warranty

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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 >](#)

### Environmental footprint

Total lifecycle Carbon footprint 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

End of life manual availability No need of specific recycling operations

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