

# LC2D50G7

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



## Main

Range of Product	TeSys Deca
Product or Component Type	Reversing contactor
Device short name	LC2D
Contact 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-3 140.000000000 °F (60 °C))
Motor power kW	15 KW 220...240 V AC 50/60 Hz 22 KW 380...400 V AC 50/60 Hz 25 KW 415 V AC 50/60 Hz 30 KW 440 V AC 50/60 Hz 30 KW 500 V AC 50/60 Hz 33 kW 660...690 V AC 50/60 Hz
[Uc] control circuit voltage	120 V AC 60 Hz
Connections - terminals	Control circuit 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Power circuit 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible with cable end Power circuit 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible without cable end Power circuit 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )solid without cable end Power circuit 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )flexible with cable end Power circuit 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )flexible without cable end Power circuit 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> )solid without cable end Power circuit 2 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible with cable end Power circuit 2 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )flexible without cable end Power circuit 2 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> )solid without cable end

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Complementary

Assembly style	Ready assembled
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Protective cover	With
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
Interlocking type	Mechanical
Control circuit voltage limits	Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <140 °F (60 °C)) Operational: 0.8...1.1 Uc at 50 Hz (at <140 °F (60 °C)) Operational: 0.85...1.1 Uc at 60 Hz (at <140 °F (60 °C))
[Ui] rated insulation voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
Mounting Support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) Philips No 2 Power circuit 44.3 lbf.in (5 N.m) 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal Power circuit 70.8 lbf.in (8 N.m) 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) hexagonal
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 80 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	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
Average impedance	- Ith 80 A 50 Hz for power circuit
Power dissipation per pole	3.7 W AC-3 - Ith 80 A
Inrush power in VA	200 VA cos phi 0.75 (at 68.0000000000 °F (20 °C)) 220 VA cos phi 0.75 (at 68.0000000000 °F (20 °C))
Hold-in power consumption in VA	20 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 22 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 26 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 26 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Operating time	12...26 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	6000000 cycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Insulation resistance	> 10 MOhm for control circuit
Height	5.2 in (132 mm)
Width	6.5 in (165 mm)
Depth	5.6 in (142 mm)
Net Weight	5.3 lb(US) (2.4 kg)

## Environment

Standards	IEC 60947-4-1 CSA C22.2 No 14 UL 508 IEC 60947-5-1 EN 60947-4-1 EN 60947-5-1
Product Certifications	GL[RETURN]UL[RETURN]RINA[RETURN]GOST[RETURN]CSA[RETURN]LROS (Lloyds register of shipping) [RETURN]CCC[RETURN]DNV[RETURN]BV[RETURN]UKCA
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
Protective treatment	TH 3)IEC 60068
Ambient Air Temperature for Operation	23...140 °F (-5...60 °C)
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Shock resistance	10 gn contactor closed 8 gn contactor opened
Vibration resistance	2 gn 5...300 Hz contactor opened 3 gn 5...300 Hz contactor closed
Heat dissipation	6...10 W at 50/60 Hz for control circuit

## Ordering and shipping details

Category	US10I1222357
Discount Schedule	0I12
GTIN	3389110456677
Returnability	Yes
Country of origin	US

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.7 in (17.0 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	9.8 in (24.8 cm)
Package 1 Weight	7.242 lb(US) (3.285 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Contractual warranty

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Warranty

18 months

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