## **Product datasheet**

Specifications





# Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <= 440V 38A, 24V DC coil, lugs-ring terminals

LC2D386BL

### Main

Mani	
Range	TeSys TeSys Deca
Product Name	TeSys Deca TeSys Deca
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-3 AC-1
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 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor Power Kw	9 kW at 220230 V AC 50 Hz 18.5 kW at 380400 V AC 50 Hz 18.5 kW at 415440 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 660690 V AC 50 Hz
Motor Power Hp (UI / Csa)	10 hp at 230/240 V AC 60 Hz for 3 phases motors 5 hp at 240 V AC 60 Hz for 1 phase motors 10 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 480 V AC 60 Hz for 3 phases motors 25 hp at 600 V AC 60 Hz for 3 phases motors
Control Circuit Type	DC low consumption
[Uc] Control Circuit Voltage	24 V DC
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 50 A (at 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	550 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	60 A 40 °C - 10 min for power circuit 430 A 40 °C - 1 s for power circuit 150 A 40 °C - 1 min for power circuit 310 A 40 °C - 10 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 63 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Electrical Durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V
Power Dissipation Per Pole	5 W AC-1 3 W AC-3
Front Cover	With
Interlocking Type	Mechanical
Mounting Support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
Product Certifications	UL CSA RINA GOST CCC DNV LROS (Lloyds register of shipping) GL BV UKCA CB
Connections - Terminals	Control circuit: lugs-ring terminals (external diameter: 8 mm) Power circuit: lugs-ring terminals (external diameter: 10 mm)
Tightening Torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm M4 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M4 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Operating Time	65.4588.55 ms closing 2030 ms opening
Safety Reliability Level	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
Mechanical Durability	30 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

## Complementary

Coil Technology Built-in bidirectional peak limiting diode suppressor

Control Circuit Voltage Limits	0.10.3 Uc (-4070 °C):drop-out DC 0.81.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC
Time Constant	40 ms
Inrush Power In W	2.4 W (at 20 °C)
Hold-In Power Consumption In W	2.4 W at 20 °C
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
Signalling Circuit Frequency	25400 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**

IP20 front face conforming to IEC 60529   Climatic Withstand   Conforming to IACS E10   Conforming to IEC 60947-1 Annex Q category D   Protective Treatment   TH conforming to IEC 60068-2-30   Pollution Degree   3		
conforming to IEC 60947-1 Annex Q category D  Protective Treatment TH conforming to IEC 60068-2-30  Pollution Degree 3  Ambient Air Temperature For Operation 6070 °C with derating  Ambient Air Temperature For Storage -6080 °C  Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz  Vibrations contactor closed: 4 Gn, 5300 Hz  Shocks contactor closed: 15 Gn for 11 ms  Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Ip Degree Of Protection	IP20 front face conforming to IEC 60529
conforming to IEC 60947-1 Annex Q category D  Protective Treatment TH conforming to IEC 60068-2-30  Pollution Degree 3  Ambient Air Temperature For Operation 6070 °C with derating  Ambient Air Temperature For Storage -6080 °C  Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Climatic Withstand	conforming to IACS E10
Pollution Degree 3  Ambient Air Temperature For 6070 °C with derating  Ambient Air Temperature For 5080 °C  Operation -6080 °C  Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm		· · · · · · · · · · · · · · · · · · ·
Ambient Air Temperature For Operation -4060 °C 6070 °C with derating  Ambient Air Temperature For Storage -6080 °C  Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Protective Treatment	TH conforming to IEC 60068-2-30
Operation 6070 °C with derating  Ambient Air Temperature For Storage -6080 °C  Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Pollution Degree	3
Ambient Air Temperature For Storage  Operating Altitude  03000 m  Fire Resistance  850 °C conforming to IEC 60695-2-1  Flame Retardance  V1 conforming to UL 94  Mechanical Robustness  Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height  85 mm  Width  90 mm  Depth  101 mm		-4060 °C
Storage Operating Altitude 03000 m  Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Operation	6070 °C with derating
Fire Resistance 850 °C conforming to IEC 60695-2-1  Flame Retardance V1 conforming to UL 94  Mechanical Robustness Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm		-6080 °C
Flame Retardance  V1 conforming to UL 94  Mechanical Robustness  Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height  85 mm  Width  90 mm  Depth  101 mm	Operating Altitude	03000 m
Mechanical Robustness  Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height  85 mm  Width  90 mm  Depth  101 mm	Fire Resistance	850 °C conforming to IEC 60695-2-1
Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Flame Retardance	V1 conforming to UL 94
Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms  Height 85 mm  Width 90 mm  Depth 101 mm	Mechanical Robustness	Vibrations contactor open: 2 Gn, 5300 Hz
Shocks contactor open: 8 Gn for 11 ms		Vibrations contactor closed: 4 Gn, 5300 Hz
Height         85 mm           Width         90 mm           Depth         101 mm		Shocks contactor closed: 15 Gn for 11 ms
Width 90 mm Depth 101 mm		Shocks contactor open: 8 Gn for 11 ms
Depth 101 mm	Height	85 mm
<u> </u>	Width	90 mm
Net Weight 1.137 kg	Depth	101 mm
	Net Weight	1.137 kg

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.9 cm
Package 1 Width	11.4 cm
Package 1 Length	11.8 cm
Package 1 Weight	1.17 kg

## Contractual warranty



Green Premium<sup>TM</sup> label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance



Pvc Free

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information