

Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <=440V, 9A, 24V DC low consumption coil, spring terminals

LC2D093BL

### Main

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Range	TeSys TeSys Deca
Product Name	TeSys D TeSys Deca
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load Motor control
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 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 16 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor Power Kw	2.2 kW at 220230 V AC 5060 Hz 4 kW at 380400 V AC 5060 Hz 4 kW at 415 V AC 5060 Hz 4 kW at 440 V AC 5060 Hz 5.5 kW at 500 V AC 5060 Hz 5.5 kW at 660690 V AC 5060 Hz
Motor Power Hp (UI / Csa)	0.5 hp at 115 V AC 60 Hz for 1 phase motors 1 hp at 230/240 V AC 60 Hz for 1 phase motors 2 hp at 200/208 V AC 60 Hz for 3 phases motors 2 hp at 230/240 V AC 60 Hz for 3 phases motors 5 hp at 460/480 V AC 60 Hz for 3 phases motors 7.5 hp at 575/600 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	16 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit
Irms Rated Making Capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated Breaking Capacity	250 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit
	105 A 40 °C - 10 s for power circuit
	210 A 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	25 A gG at <= 690 V coordination type 1 for power circuit
	20 A gG at <= 690 V coordination type 2 for power circuit
	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average Impedance	2.5 mOhm - Ith 16 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	0.6 Mcycles 25 A AC-1 at Ue <= 440 V
	2 Mcycles 9 A AC-3 at Ue <= 440 V
	2 Mcycles 9 A AC-3e at Ue <= 440 V
Power Dissipation Per Pole	0.2 W AC-3
	1.56 W AC-1
	0.2 W AC-3e
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	DNV
	CSA
	CCC
	UL
	GL LROS (Lloyds register of shipping)
	BV
	RINA
	GOST
	UKCA
Connections - Terminals	Power circuit: spring terminals 1 cable(s) 2.5 mm²flexible without cable end
	Power circuit: spring terminals 2 cable(s) 2.5 mm²flexible without cable end
	Control circuit: spring terminals 1 cable(s) 2.5 mm²flexible without cable end
	Control circuit: spring terminals 2 cable(s) 2.5 mm²flexible without cable end
Tightening Torque	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
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Maximum Operating Rate	3600 cyc/h 60 °C
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## 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**

Ip Degree Of Protection	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
Ambient Air Temperature For	-4060 °C
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 open: 10 Gn for 11 ms
	Shocks contactor closed: 15 Gn for 11 ms
Height	99 mm
Width	90 mm
Depth	95 mm
Net Weight	1.017 kg

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	13.5 cm
Package 1 Width	11.4 cm
Package 1 Length	11 cm
Package 1 Weight	1.224 kg
Unit Type Of Package 2	S02
Number Of Units In Package 2	5

Package 2 Height	15 cm	
Package 2 Width	30 cm	
Package 2 Length	40 cm	
Package 2 Weight	6.458 ka	

### **Contractual warranty**

Warranty 18 months

### **Sustainability**

**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-CO<sub>2</sub> 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



#### **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
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