# **Product datasheet**

Specifications



#### Main

Range	TeSys	
Product Name	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	AC at 50/60 Hz	
[Uc] Control Circuit Voltage	230 V AC 50/60 Hz	
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: 600 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	Electrical and mechanical
Mounting Support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product Certifications	GOST UL LROS (Lloyds register of shipping) RINA CCC GL DNV CSA BV
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> solid Control circuit: screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> solid Control circuit: screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> solid Power circuit: screw clamp terminals 1 cable(s) 2.510 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.510 mm <sup>2</sup> solid
Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat $\emptyset$ 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat $\emptyset$ 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating Time	1222 ms closing 419 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	15 Mcycles

#### 3600 cyc/h 60 °C

#### Complementary

Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz
	0.81.1 Uc (-4060 °C):operational AC 50 Hz
	0.851.1 Uc (-4060 °C):operational AC 60 Hz
	11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush Power In Va	70 VA 60 Hz cos phi 0.75 (at 20 °C)
	70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 20 °C)
	7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	23 W at 50/60 Hz
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 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	92 mm	
Net Weight	0.807 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	815 g

### **Contractual warranty**

Warranty

18 months

### Sustainability Screen Premium

**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

Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **Certifications & Standards**

Eu Rohs Directive	Compliant
	EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information