# **Product datasheet**

Specifications





## REVERSING CONTACTOR 575VAC 12A IEC

LC2D12F7

#### Main

Mann	
Range	TeSys
	TeSys Deca
Product Name	TeSys D
r roudet Name	•
	TeSys Deca
Product Or Component Type	Poversing contactor
	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load
	Motor control
Utilisation Category	AC-3
3 9	AC-1
	AC-3e
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
	vi
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz
index eperational totage	Power circuit: <= 300 V DC
[le] Rated Operational Current	25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
	12 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
Motor Power Kw	3 kW at 220230 V AC 50 Hz
	5.5 kW at 380400 V AC 50 Hz
	5.5 kW at 415 V AC 50 Hz
	5.5 kW at 440 V AC 50 Hz
	7.5 kW at 500 V AC 50 Hz
	7.5 kW at 660690 V AC 50 Hz
Matan Bauran Lin (III / Caa)	
Motor Power Hp (UI / Csa)	1 hp at 115 V AC 60 Hz for 1 phase motors
	2 hp at 230/240 V AC 60 Hz for 1 phase motors
	3 hp at 200/208 V AC 60 Hz for 3 phases motors
	3 hp at 230/240 V AC 60 Hz for 3 phases motors
	7.5 hp at 460/480 V AC 60 Hz for 3 phases motors
	10 hp at 575/600 V AC 60 Hz for 3 phases motors
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	110 V AC 50/60 Hz
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand	6 kV conforming to IEC 60947
Voltage	
Overvoltage Category	III
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	
	25 A (at 60 °C) for power circuit
Irms Rated Making Capacity	250 A at 440 V for power circuit conforming to IEC 60047
in the nated maning 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	10 A gG for signalling circuit conforming to IEC 60947-5-1 40 A gG at <= 690 V coordination type 1 for power circuit 25 A gG at <= 690 V coordination type 2 for power circuit				
Average Impedance	2.5 mOhm - Ith 25 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	2 Mcycles 12 A AC-3 at Ue <= 440 V 0.8 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 12 A AC-3e at Ue <= 440 V				
Power Dissipation Per Pole	1.56 W AC-1 0.36 W AC-3 0.36 W AC-3e				
Front Cover	With				
Interlocking Type	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 IEC 60335-1				
Product Certifications	DNV CSA CCC UL GL LROS (Lloyds register of shipping) BV RINA GOST UKCA				
Connections - Terminals	Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cabl				
Tightening Torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv 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
Maximum Operating Rate	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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms			
Height	77 mm			
Width	90 mm			
Depth	86 mm			
Net Weight	0.697 kg			

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	11.300 cm
Package 1 Width	9.500 cm
Package 1 Length	14.000 cm
Package 1 Weight	806.000 g
Unit Type Of Package 2	\$02
Number Of Units In Package 2	6
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.210 kg

### **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

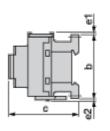
#### **Certifications & Standards**

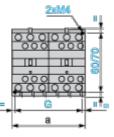
Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union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

### **Product datasheet**

#### **Dimensions Drawings**

#### Dimensions





LC2 or 2 x LC1	а	b	c <sup>(1)</sup>	e1	e2	G
D09 to D18 (AC)	90	77	86	4	1.5	80
D093 to D123 (AC)	90	99	86	-	-	80
D09 to D18 (DC)	90	77	95	4	1.5	80
D093 to D123 (DC)	90	99	95	-	-	80
D25 to D38 (AC)	90	85	92	9	5	80
D183 to D383 (AC)	90	99	92	-	-	80
D25 to D32 (DC)	90	85	101	9	5	80
D183 to D383 (DC)	90	99	101	-	-	80
e1 and e2: including cabling.						
(1) With safety cover, without add-on block.						

### **Product datasheet**

Connections and Schema

#### Wiring

