# **Product datasheet**

Specifications





# TeSys Deca contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 12 V DC coil

LC1D253JD

#### ① Discontinued

#### Main

mann	
Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-1 AC-3 AC-4
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	25 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	12 V DC

### Complementary

Motor Power Kw	5.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	11 kW at 380400 V AC 50/60 Hz (AC-3)	
	11 kW at 415440 V AC 50/60 Hz (AC-3)	
	15 kW at 500 V AC 50/60 Hz (AC-3)	
	15 kW at 660690 V AC 50/60 Hz (AC-3)	
	5.5 kW at 400 V AC 50/60 Hz (AC-4)	
Motor Power Hp	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	2 hp at 115 V AC 50/60 Hz for 1 phase motors	
	7.5 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	15 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	20 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
	7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
Compatibility Code	LC1D	
Pole Contact Composition	3 NO	
Contact Compatibility	M4	
Protective Cover	With	
[Ith] Conventional Free Air	25 A (at 60 °C) for power circuit	
Thermal Current	10 A (at 60 °C) for signalling 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	
	450 A at 440 V for power circuit conforming to IEC 60947	
Rated Breaking Capacity	450 A at 440 V for power circuit conforming to IEC 60947	

[Icw] Rated Short-Time Withstand Current	240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min 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 40 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 25 A 50 Hz for power circuit
Power Dissipation Per Pole	3.2 W AC-1 1.25 W AC-3
[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
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947
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
Electrical Durability	1.65 Mcycles 25 A AC-3 at Ue <= 440 V 1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Control Circuit Type	DC standard
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.10.25 Uc (-4070 °C):drop-out DC 0.71.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC
Inrush Power In W	5.4 W (at 20 °C)
Hold-In Power Consumption In W	5.4 W at 20 °C
Operating Time	53.5572.45 ms closing 1624 ms opening
Time Constant	28 ms
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: spring terminals 1 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: spring terminals 1 4 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: spring terminals 2 4 mm <sup>2</sup> - cable stiffness: flexible without cable end
Auxiliary Contact Composition	1 NO + 1 NC
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 Voltage	17 V for signalling circuit
Minimum Switching Current	5 mA for signalling circuit
Insulation Resistance	> 10 MOhm 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

Mounting Support	Rail
	Plate

### Environment

Environment	
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 CCC RINA BV UL LROS (Lloyds register of shipping) DNV CSA GL
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Protective Treatment	TH conforming to IEC 60068-2-30
Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-6080 °C storage -4060 °C operation 6070 °C with derating
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	99 mm
Width	45 mm
Depth	101 mm
Net Weight	0.53 kg

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

### **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