# **Product datasheet**

Specifications





## Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 12A, 230V AC 50/60Hz coil, spring terminals

LC1D123P7

#### Main

Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load Motor control	
Utilisation Category	AC-3 AC-4 AC-1 AC-3e	
Poles Description	3P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	16 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	
[Uc] Control Circuit Voltage	230 V AC 50/60 Hz	

#### Complementary

Motor Power Kw	3 kW at 220230 V AC 50/60 Hz (AC-3)
	5.5 kW at 380400 V AC 50/60 Hz (AC-3)
	5.5 kW at 415 V AC 50/60 Hz (AC-3)
	5.5 kW at 440 V AC 50/60 Hz (AC-3)
	7.5 kW at 500 V AC 50/60 Hz (AC-3)
	7.5 kW at 660690 V AC 50/60 Hz (AC-3)
	3 kW at 220230 V AC 50/60 Hz (AC-3e)
	5.5 kW at 380400 V AC 50/60 Hz (AC-3e)
	5.5 kW at 415 V AC 50/60 Hz (AC-3e)
	5.5 kW at 440 V AC 50/60 Hz (AC-3e)
	7.5 kW at 500 V AC 50/60 Hz (AC-3e)
	7.5 kW at 660690 V AC 50/60 Hz (AC-3e)
	3.7 kW at 400 V AC 50/60 Hz (AC-4)
Motor Power Hp	0.5 hp at 115 V AC 50/60 Hz for 1 phase motors
	2 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	3 hp at 200/208 V AC 50/60 Hz for 3 phases motors
	3 hp at 230/240 V AC 50/60 Hz for 3 phases motors
	7.5 hp at 460/480 V AC 50/60 Hz for 3 phases motors
	10 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M2
Protective Cover	With
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	16 A (at 60 °C) for power 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	105 A 40 $^{\circ}$ C - 10 s for power circuit 210 A 40 $^{\circ}$ C - 1 s for power circuit 30 A 40 $^{\circ}$ C - 10 min for power circuit 61 A 40 $^{\circ}$ 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 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 16 A 50 Hz for power circuit
Power Dissipation Per Pole	0.36 W AC-3 1.56 W AC-1 0.36 W AC-3e
[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	15 Mcycles
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
Control Circuit Type	AC at 50/60 Hz
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
Operating Time	1222 ms closing 419 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Power circuit: spring terminals 1 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: spring terminals 2 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end 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
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	Plate Rail	

### 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
	IEC 60335-1
Product Certifications	LROS (Lloyds register of shipping)
	GL
	BV
	UL
	CSA
	CCC
	DNV
	RINA
	GOST
	UKCA
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	-4060 °C
Temperature Around The Device	
Temperature Around The Bevice	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 open (10 Gn for 11 ms)
	Shocks contactor closed (15 Gn for 11 ms)
	Shocks contactor closed (15 GH for 11 Hs)
Height	99 mm
Width	45 mm
Depth	86 mm
Net Weight	0.325 kg
	0.020 kg

# **Packing Units**

V	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.200 cm
Package 1 Width	10.800 cm
Package 1 Length	12.200 cm
Package 1 Weight	382.000 g
Unit Type Of Package 2	S02

Number Of Units In Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.296 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	240
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	108.736 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