# **Product datasheet**

Specifications





# Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 32A, 72V DC standard coil, screw clamp terminals

LC1D32SD

() Discontinued

() Discontinued on: 1 Nov 2020

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Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-4 AC-1 AC-3 AC-3e
Poles Description	ЗР
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	32 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	72 V DC

### Complementary

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Motor Power Kw	7.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	15 kW at 380400 V AC 50/60 Hz (AC-3)	
	15 kW at 415440 V AC 50/60 Hz (AC-3)	
	18.5 kW at 500 V AC 50/60 Hz (AC-3)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3)	
	7.5 kW at 400 V AC 50/60 Hz (AC-4)	
	7.5 kW at 220230 V AC 50/60 Hz (AC-3e)	
	15 kW at 380400 V AC 50/60 Hz (AC-3e)	
	15 kW at 415440 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 500 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	2 hp at 115 V AC 50/60 Hz for 1 phase motors	
	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	20 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	25 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Compatibility Code	LC1D	
Pole Contact Composition	3 NO	
Protective Cover	With	
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit	
Thermal Current	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	60 A 40 °C - 10 min for power circuit
Current	138 A 40 °C - 1 min for power circuit
	260 A 40 °C - 10 s for power circuit
	430 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
	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
Power Dissipation Per Pole	2 W AC-3
	5 W AC-1
	2 W AC-3e
[Ui] Rated Insulation Voltage	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
	Power circuit: 690 V conforming to IEC 60947-4-1
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 32 A AC-3 at Ue <= 440 V
-	1.4 Mcycles 50 A AC-1 at Ue <= 440 V
	1.65 Mcycles 32 A AC-3e at Ue <= 440 V
Control Circuit Type	DC standard
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltago Limita	$0.1 = 0.25 \text{ Hz} (40 = 70 ^{\circ}\text{C}) \text{ drag out DC}$
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	20 ±20 % ms opening
	$63 \pm 15$ % ms closing
Time Constant	28 ms
Maximum Operating Rate	3600 cyc/h 60 °C
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Connections - Terminals	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end
	control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 110 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1.56 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.510 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end
Tightening Torque	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 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 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: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
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
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	17 V for signalling circuit
Minimum Switching Voltage	17 V for signalling circuit 5 mA for signalling circuit
Minimum Switching Voltage Minimum Switching Current	
Minimum Switching Voltage Minimum Switching Current Insulation Resistance Non-Overlap Time	5 mA for signalling circuit

### 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	DNV
	CCC
	RINA
	UL
	CSA
	GL
	LROS (Lloyds register of shipping)
	GOST
	BV
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

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Permissible Ambient Air Temperature Around The Device	-4060 °C 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	85 mm
Width	45 mm
Depth	101 mm
Net Weight	0.535 kg

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	561.000 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	8.732 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

Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **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