# **Product datasheet**

Specifications





# TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 32 A - 24 V DC coil

LC1D32BD

#### 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-1 AC-4 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	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	24 V DC

### Complementary

• •		
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) 15 kW at 500 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 Thermal Current	10 A (at 60 °C) for signalling circuit 50 A (at 60 °C) for power circuit	
Irms Rated Making Capacity	d Making Capacity140 A AC for signalling circuit conforming to IEC 60947-5-1250 A DC for signalling circuit conforming to IEC 60947-5-1550 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	260 A 40 °C - 10 s for power circuit	
Current	430 A 40 °C - 1 s for power circuit	
	60 A 40 °C - 10 min for power circuit	
	138 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 Euco Bating		
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: 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 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	
	De 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	63 ±15 % ms closing 20 ±20 % ms opening	
Time Constant	28 ms	
Maximum Operating Rate	3600 cyc/h 60 °C	

Connections - Terminals	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 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: 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	
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

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	GL BV DNV LROS (Lloyds register of shipping) RINA UL CCC CSA GOST UKCA CB
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	-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**

PCE
1
5.000 cm
9.200 cm
11.200 cm
585.000 g
\$02
15
15.000 cm
30.000 cm
40.000 cm
9.055 kg
P06
240
75.000 cm
60.000 cm
80.000 cm
154.500 kg

### **Contractual warranty**

Warranty

12 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

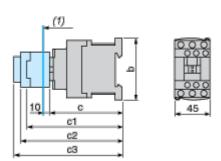
#### **Certifications & Standards**

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		

# **Product datasheet**

#### **Dimensions Drawings**

#### Dimensions



#### (1) Minimum electrical clearance

LC1		D25D38	D183D323
b		85	99
	without cover or add-on blocks	99	99
c	with cover, without add-on blocks	101	101
c1	with LAD N or C (2 or 4 contacts)	132	132
c2	with LA6 DK10	144	144
c3	with LAD T, R, S	152	152
	with LAD T, R, S and sealing cover	156	156

# **Product datasheet**

Connections and Schema

Wiring

