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Specifications





## TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 18 A - 24 V DC coil

Local distributor code: 381803052

LC1D18BD

EAN Code: 3389110354775

#### Main

Range Of Produc	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	3P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 18 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
[Uc] Control Circuit Voltage	24 V DC	

Complementary		
Motor Power Kw	4 kW at 220230 V AC 50/60 Hz (AC-3) 7.5 kW at 380400 V AC 50/60 Hz (AC-3) 9 kW at 415440 V AC 50/60 Hz (AC-3) 10 kW at 500 V AC 50/60 Hz (AC-3) 10 kW at 660690 V AC 50/60 Hz (AC-3) 4 kW at 400 V AC 50/60 Hz (AC-3) 4 kW at 220230 V AC 50/60 Hz (AC-3e) 7.5 kW at 380400 V AC 50/60 Hz (AC-3e) 9 kW at 415440 V AC 50/60 Hz (AC-3e) 10 kW at 500 V AC 50/60 Hz (AC-3e) 10 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	1 hp at 115 V AC 50/60 Hz for 1 phase motors 3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 hp at 575/600 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 Thermal Current		
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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947	



Rated Breaking Capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	145 A 40 °C - 10 s for power circuit 240 A 40 °C - 1 s for power circuit 40 A 40 °C - 10 min for power circuit 84 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 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power Dissipation Per Pole	2.5 W AC-1 0.8 W AC-3 0.8 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 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V 1.65 Mcycles 18 A AC-3e at Ue <= 440 V
Control Circuit Type	DC standard
Coil Technology	With integral suppression device
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 mm² - 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 mm² - cable stiffness: solid without		
	cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without		
	cable end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: flexible without		
	cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without		
	cable end Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable		
	end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable		
	end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: solid without		
	cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid without		
	cable end		
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		
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		
nsulation Resistance	> 10 MOhm for signalling circuit		
Non-Overlap Time	<ul><li>1.5 ms on de-energisation between NC and NO contact</li><li>1.5 ms on energisation between NC and NO contact</li></ul>		
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) DNV		
	GL		
	RINA		
	BV		
	UL		
4	CSA GOST		
-	UKCA		
lp 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 open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
Height	77 mm
Width	45 mm
Depth	95 mm
Net Weight	0.49 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	9.000 cm
Package 1 Length	11.000 cm
Package 1 Weight	522.500 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	8.068 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	240
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	137.080 kg

# Contractual warranty

Warranty 18 months

# Sustainability Green 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 >

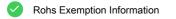




Transparency RoHS/REACh

#### Well-being performance





Yes



Pvc Free

#### **Certifications & Standards**

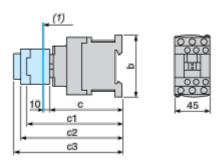
Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

### **Product datasheet**

#### LC1D18BD

#### **Dimensions Drawings**

#### **Dimensions**





#### (1) Minimum electrical clearance

LC1		D09D18	D093D123	D099D129
b		77	99	80
	without cover or add-on blocks	93	93	93
С	with cover, without add-on blocks	95	95	95
с1	with LAD N or C (2 or 4 contacts)	126	126	126
с2	with LA6 DK10	138	138	138
с3	with LAD T, R, S	146	146	146
	with LAD T, R, S and sealing cover	150	150	150



Connections and Schema

Wiring

