Product datasheet

Specifications

Green Premium™

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 95 A - 24 V DC standard coil

LC1D95BD

Main

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-3 AC-3e AC-4 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] Rated Operational Current	95 A (at <60 °C) at <= 440 V AC-3 for power circuit 125 A (at <60 °C) at <= 690 V AC-1 for power circuit 95 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] Control Circuit Voltage	24 V DC

Complementary

Motor Power Kw	25 kW at 220...230 V AC 50 Hz (AC-3) 45 kW at 380...400 V AC 50 Hz (AC-3) 45 kW at 415...440 V AC 50 Hz (AC-3) 55 kW at 500 V AC 50 Hz (AC-3) 45 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 400 V AC 50 Hz (AC-4) 25 kW at 220...230 V AC 50 Hz (AC-3e) 45 kW at 380...400 V AC 50 Hz (AC-3e) 45 kW at 415...440 V AC 50 Hz (AC-3e) 55 kW at 500 V AC 50 Hz (AC-3e) 45 kW at 660...690 V AC 50 Hz (AC-3e)
Motor Power Hp	7.5 hp at 120 V AC 60 Hz for 1 phase motors 15 hp at 230/240 V AC 60 Hz for 1 phase motors 30 hp at 200/208 V AC 60 Hz for 3 phases motors 30 hp at 230/240 V AC 60 Hz for 3 phases motors 60 hp at 460/480 V AC 60 Hz for 3 phases motors 60 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M9
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 125 A (at 60 °C) for power circuit

Irms Rated Making Capacity	1100 A at 440 V AC 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	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	1100 A 40 °C - 1 s for power circuit 800 A 40 °C - 10 s for power circuit 400 A 40 °C - 1 min for power circuit 135 A 40 °C - 10 min for power circuit 140 A - 100 ms for signalling circuit 120 A - 500 ms for signalling circuit 100 A - 1 s for signalling circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power Dissipation Per Pole	12.5 W AC-1 7.2 W AC-3 7.2 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	8 kV conforming to IEC 60947
Safety Reliability Level	B10d = 1.3 Mcycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20 Mcycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical Durability	10 Mcycles
Electrical Durability	1.2 Mcycles 95 A AC-3 1.3 Mcycles 125 A AC-1 1.2 Mcycles 95 A AC-3e
Control Circuit Type	DC standard
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.1...0.3 Uc (-40…70 °C):drop-out DC 0.85...1.1 Uc (-40…55 °C):operational DC 1...1.1 Uc (55…70 °C):operational DC
Inrush Power In W	22 W (at 20 °C)
Hold-In Power Consumption In W	22 W at 20 °C
Operating Time	95...130 ms closing 20...35 ms opening
Time Constant	75 ms
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: flexible without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible with cable end Power circuit: connector 2 4…16 mm² - cable stiffness: flexible with cable end Power circuit: connector 1 4…50 mm² - cable stiffness: solid without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: solid without cable end

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Tightening Torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2
	Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm
	Power circuit: 12 N.m - on connector hexagonal screw head 4 mm
	Control circuit: 1.2 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	25...400 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	EN/IEC 60947-1
	EN/IEC 60947-4-1
	EN/IEC 60947-5-1
	GB/T 14048.4
Product Certifications	IECEE CB Scheme
	CCC
	EAC
	LROS (Lloyds register of shipping)
	RINA
	BV
	DNV-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
Permissible Ambient Air Temperature Around The Device	-40...60 °C
	60...70 °C with derating
Operating Altitude	0...3000 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, 5...300 Hz)
	Shocks contactor open (8 Gn for 11 ms)
	Vibrations contactor closed (3 Gn, 5...300 Hz)
	Shocks contactor closed (10 Gn for 11 ms)
Height	127 mm
Width	85 mm
Depth	186 mm
Net Weight	2.61 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	11.000 cm
Package 1 Width	16.300 cm

Package 1 Length	21.700 cm
Package 1 Weight	2.566 kg
Unit Type Of Package 2	S02
Number Of Units In Package 2	2
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.445 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	32
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	97.892 kg

Contractual warranty

Warranty	12 months

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Sustainability

Green Premium^TM label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 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
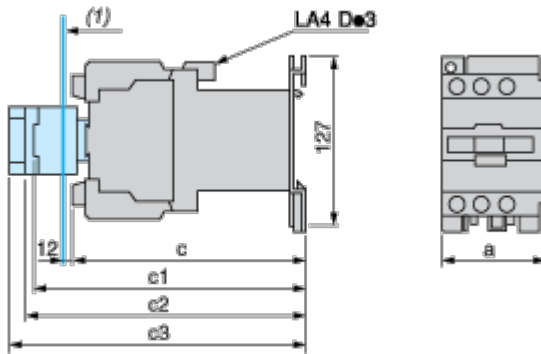
Weee   The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile   No need of specific recycling operations

Dimensions Drawings

Dimensions

(1)   Minimum electrical clearance

LC1		D80 and D95
a		85
b1	with LAD 4BB3	–
	with LA4 DF, DT	–
c	without cover or add-on blocks	181
	with cover, without add-on blocks	186
c1	with LAD N (1 contact)	204
	with LAD N or C (2 or 4 contacts)	210
c2	with LA6 DK10	221
c3	with LAD T, R, S	229
	with LAD T, R, S and sealing cover	233

Wiring