Product data sheet

Specifications





IEC contactor, TeSys Deca, nonreversing, 12A, 7.5HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VAC 50/60Hz coil, open

LC1D12B7

Product availability: Stock - Normally stocked in distribution facility

Price*: 142.80 USD

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	25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
	12 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
	12 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	24 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 415440 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) 3.7 kW at 400 V AC 50/60 Hz (AC-4) 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 415440 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)
Maximum Horse Power Rating	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 phase motors 3 hp at 230/240 V AC 50/60 Hz for 3 phase motors 7.5 hp at 460/480 V AC 50/60 Hz for 3 phase motors 10 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M2
Protective Cover	With

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

[Ith] Conventional Free Air Thermal Current	25 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling 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 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (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 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 25 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 IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	6 kV IEC 60947
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical Durability	15 Mcycles
Electrical Durability	2 Mcycles 12 A AC-3 <= 440 V 0.8 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 12 A AC-3e <= 440 V
Control Circuit Type	AC 50/60 Hz standard
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 50/60 Hz 0.81.1 Uc -40140 °F (-4060 °C) operational AC 50 Hz 0.851.1 Uc -40140 °F (-4060 °C) operational AC 60 Hz 11.1 Uc 140158 °F (6070 °C) operational AC 50/60 Hz
Inrush Power In Va	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat Dissipation	23 W at 50/60 Hz
Operating Time	1222 ms closing 419 ms opening
Maximum Operating Rate	3600 cyc/h 140 °F (60 °C)

Connections - Terminals	Power circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end			
	Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness:			
	flexible without cable end Power circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness:			
	flexible with cable end			
	Power circuit: screw clamp terminals 2 0.000.00 in ² (12,5 mm ²) - cable stiffness: flexible with cable end			
	Power circuit: screw clamp terminals 1 0.000.01 in ² (14 mm ²) - cable stiffness:			
	solid without cable end			
	Power circuit: screw clamp terminals 2 0.000.01 in ² (14 mm ²) - cable stiffness: solid without cable end			
	Control circuit: screw clamp terminals 1 0.000.01 jn² (14 mm²) - cable stiffness:			
	flexible without cable end Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness:			
	flexible without cable end			
	Control circuit: screw clamp terminals 1 0.000.01 in ² (14 mm ²) - cable stiffness: flexible with cable end			
	Control circuit: screw clamp terminals 2 0.000.00 in² (12.5 mm²) - cable stiffness:			
	flexible with cable end			
	Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end			
	Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness:			
	solid without cable end			
Tightening Torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm			
	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2			
	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2			
	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2			
	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2			
Auxiliary Contact Composition	1 NO + 1 NC			
Auxiliary Contacts Type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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 contact1.5 ms on energisation between NC and NO contact			
Mounting Support	Rail			
	Plate			
Environment				
Standards	CSA C22.2 No 14			
ourida do	EN 60947-4-1			
	EN 60947-5-1			
	IEC 60947-4-1 IEC 60947-5-1			
	UL 508			
	IEC 60335-1			
Product Certifications	CCC			
	CSA			
	GL GOST			
	BV			
	DNV			
	RINA LROS (Lloyds register of shipping)			
	UL			
	UKCA			
Ip Degree Of Protection	IP20 front face IEC 60529			
Protective Treatment	THIEC 60068-2-30			
Climatic Withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat			



Permissible Ambient Air Temperature Around The Device	-40140 °F (-4060 °C) 140158 °F (6070 °C) with derating
Operating Altitude	09842.52 ft (03000 m)
Fire Resistance	1562 °F (850 °C) 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	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.39 in (86 mm)
Net Weight	0.72 lb(US) (0.325 kg)

Ordering and shipping details

Category	US10I1222354	
Discount Schedule	0112	
Gtin	3389110349160	
Returnability	Yes	
Country Of Origin	ID	

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	3.54 in (9.000 cm)
Package 1 Length	4.33 in (11.000 cm)
Package 1 Weight	12.66 oz (359.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	16.35 lb(US) (7.417 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	279.26 lb(US) (126.672 kg)

Contractual warranty

Warranty 18 months

Sustainability Green Premium*

Green PremiumTM **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-CO₂ 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

Ø	Reach Free Of Svhc		
Ø	Toxic Heavy Metal Free		
⊘	Mercury Free		
⊘	Rohs Exemption Information	Yes	
	Pvc Free		

Certifications & Standards

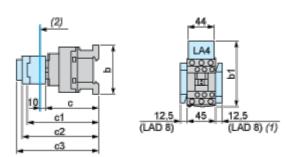
Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product data sheet

LC1D12B7

Dimensions Drawings

Dimensions



- (1) Including LAD 4BB
- (2) Minimum electrical clearance

LC1		D09D18	D093D123	D099D129
b	without add-on blocks	77	99	80
b1	with LAD 4BB	94	107	95.5
	with LA4 D●2	110 ⁽¹⁾	123 ⁽¹⁾	111.5 ⁽¹⁾
	with LA4 DF, DT	119 ⁽¹⁾	132 ⁽¹⁾	120.5 ⁽¹⁾
	with LA4 DW, DL	₁₂₆ (1)	139(1)	_{127.5} (1)
С	without cover or add-on blocks	84	84	84
	with cover, without add-on blocks	86	86	86
с1	with LAD N or C (2 or 4 contacts)	117	117	117
с2	with LA6 DK10, LAD 6K10	129	129	129
с3	with LAD T, R, S	137	137	137
	with LAD T, R, S and sealing cover	141	141	141
(1)	Including LAD 4BB.			

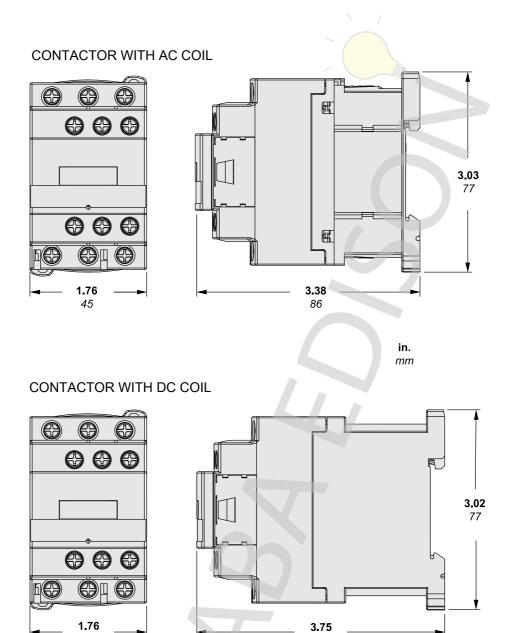
Connections and Schema

Wiring



Technical illustration

Dimensions



 $\mbox{\sc All}$ dimensions are approximate. Also refer to technical drawings and documentation.

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