# Product data sheet

Specifications





IEC contactor, TeSys Deca, nonreversing, 18A, 10HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VAC 50/60Hz coil, open

LC1D18F7

Product availability: Stock - Normally stocked in distribution facility

Price\*: 163.20 USD

#### Main

Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Motor control Resistive load	
Utilisation Category	AC-1 AC-4 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 <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit	
[Uc] Control Circuit Voltage	110 V AC 50/60 Hz	

### 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-4)
	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)
Maximum Horse Power Rating	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 phase motors
	5 hp at 230/240 V AC 50/60 Hz for 3 phase motors
	10 hp at 460/480 V AC 50/60 Hz for 3 phase motors
	15 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	10 A (at 140 °F (60 °C)) for signalling circuit 32 A (at 140 °F (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 60947-5-1 300 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 104 °F (40 °C) - 10 s for power circuit 240 A 104 °F (40 °C) - 1 s for power circuit 40 A 104 °F (40 °C) - 10 min for power circuit 84 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 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 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	1.65 Mcycles 18 A AC-3 <= 440 V 1 Mcycles 32 A AC-1 <= 440 V 1.65 Mcycles 18 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	Control circuit: screw clamp terminals 1 0.000.01 in² (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 in² (14 mm²) - 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		
	Power circuit: screw clamp terminals 1 0.000.01 in² (1.56 mm²) - cable stiffness:		
	flexible without cable end  Power circuit: screw clamp terminals 2 0.000.01 in² (1.56 mm²) - cable stiffness:		
	flexible without cable end		
	Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (16 mm <sup>2</sup> ) - cable stiffness: flexible with cable end		
	Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness:		
	flexible with cable end		
	Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (1.56 mm <sup>2</sup> ) - cable stiffness: solid without cable end		
	Power circuit: screw clamp terminals 2 0.000.01 in² (1.56 mm²) - cable stiffness:		
	solid without cable end		
Tightening Torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat $\varnothing$ 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 liat & 6 min		
	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	<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	GL		
	RINA		
	UL CCC		
	DNV		
	LROS (Lloyds register of shipping)		
	CSA GOST		
	BV		
	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	0.73 lb(US) (0.33 kg)

# Ordering and shipping details

Category	US10I1222354	
Discount Schedule	0112	
Gtin	3389110349450	
Returnability	Yes	
Country Of Origin	MX	

### **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.05 in (5.2 cm)
Package 1 Width	3.62 in (9.2 cm)
Package 1 Length	4.41 in (11.2 cm)
Package 1 Weight	12.56 oz (356.0 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	16.58 lb(US) (7.52 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	31.50 in (80.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	23.62 in (60.0 cm)
Package 3 Weight	285.06 lb(US) (129.3 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

<b>Ø</b>	Reach Free Of Svhc		
<b>Ø</b>	Toxic Heavy Metal Free		
<b>⊘</b>	Mercury Free		
<b>⊘</b>	Rohs Exemption Information	Yes	
	Pvc Free		

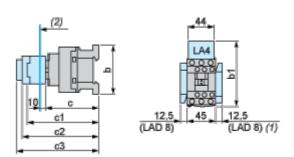
#### **Certifications & Standards**

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

## LC1D18F7

#### **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 <sup>(1)</sup>	123 <sup>(1)</sup>	111.5 <sup>(1)</sup>
	with LA4 DF, DT	<sub>119</sub> (1)	132 <sup>(1)</sup>	120.5 <sup>(1)</sup>
	with LA4 DW, DL	<sub>126</sub> (1)	139(1)	<sub>127.5</sub> (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

