

# Bảng thông số sản phẩm

Thông số kỹ thuật



Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e,  $\leq 440\text{V}$ , 9A, 110V AC 50/60Hz coil, screw clamp terminals

LC1D09F7

## Main

Range of product	TeSys Deca
product or component type	Contactor
Device short name	LC1D
contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-4 AC-3e
poles description	3P
[Ue] rated operational voltage	Power circuit: $\leq 690\text{ V AC } 25\dots 400\text{ Hz}$ Power circuit: $\leq 300\text{ V DC}$
[Ie] rated operational current	9 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-3}$ for power circuit 25 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-1}$ for power circuit 9 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-3e}$ for power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

## Complementary

Motor power kW	2.2 kW at 220...230 V AC 50/60 Hz (AC-3) 4 kW at 380...400 V AC 50/60 Hz (AC-3) 4 kW at 415...440 V AC 50/60 Hz (AC-3) 5.5 kW at 500 V AC 50/60 Hz (AC-3) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3) 2.2 kW at 400 V AC 50/60 Hz (AC-4) 2.2 kW at 220...230 V AC 50/60 Hz (AC-3e) 4 kW at 380...400 V AC 50/60 Hz (AC-3e) 4 kW at 415...440 V AC 50/60 Hz (AC-3e) 5.5 kW at 500 V AC 50/60 Hz (AC-3e) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor power hp	1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	25 A (at $60\text{ }^\circ\text{C}$ ) for power circuit 10 A (at $60\text{ }^\circ\text{C}$ ) 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

<b>[Icw] rated short-time withstand current</b>	105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 30 A 40 °C - 10 min for power circuit 61 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
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	2.5 mOhm - Ith 25 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	1.56 W AC-1 0.2 W AC-3 0.2 W AC-3e
<b>[Ui] rated insulation voltage</b>	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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	15 Mcycles
<b>Electrical durability</b>	0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V 2 Mcycles 9 A AC-3e at Ue <= 440 V
<b>Control circuit type</b>	AC at 50/60 Hz standard
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	2...3 W at 50/60 Hz
<b>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Maximum operating rate</b>	3600 cyc/h 60 °C

<b>Connections - terminals</b>	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end

<b>Tightening torque</b>	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
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<b>Auxiliary contact composition</b>	1 NO + 1 NC
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<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
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<b>Signalling circuit frequency</b>	25...400 Hz
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<b>Minimum switching voltage</b>	17 V for signalling circuit
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<b>Minimum switching current</b>	5 mA for signalling circuit
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<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
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<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
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<b>mounting support</b>	Plate Rail
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## Environment

<b>Standards</b>	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
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<b>Product certifications</b>	GL BV DNV LROS (Lloyds register of shipping) RINA UL CCC CSA GOST UKCA CB
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<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
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<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
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<b>Climatic withstand</b>	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...60 °C 60...70 °C with derating
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
<b>Height</b>	77 mm
<b>Width</b>	45 mm
<b>Depth</b>	86 mm
<b>net weight</b>	0.32 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5 cm
<b>Package 1 Width</b>	9.2 cm
<b>Package 1 Length</b>	11.3 cm
<b>Package 1 Weight</b>	351 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	7.535 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	320
<b>Package 3 Height</b>	80 cm
<b>Package 3 Width</b>	80 cm
<b>Package 3 Length</b>	60 cm
<b>Package 3 Weight</b>	130.555 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## Bền vững

Nhãn **Green Premium™** là cam kết của Schneider Electric trong việc cung cấp sản phẩm với hiệu suất môi trường tốt nhất. Green Premium cam kết tuân thủ các quy định mới nhất, minh bạch về tác động môi trường, cũng như các sản phẩm tuần hoàn và CO<sub>2</sub> thấp.

**Hướng dẫn đánh giá tính bền vững của sản phẩm** là tài liệu kỹ thuật phổ thông giúp làm rõ các tiêu chuẩn nhân sinh thái toàn cầu và cách diễn giải việc khai báo môi trường.

[Tìm hiểu thêm về Green Premium >](#)

[Hướng dẫn đánh giá về sự bền vững của sản phẩm >](#)



Minh bạch **RoHS/REACH**

## Hiệu suất sức khỏe

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

## Chứng nhận & Tiêu chuẩn

**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**

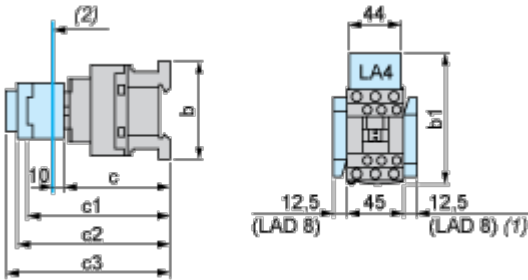
[End of Life Information](#)

# Bảng thông số sản phẩm

# LC1D09F7

## Dimensions Drawings

### Dimensions



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

LC1		D09...D18	D093...D123	D099...D129
<b>b</b>	without add-on blocks	77	99	80
<b>b1</b>	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	119 <sup>(1)</sup>	132 <sup>(1)</sup>	120.5 <sup>(1)</sup>
	with LA4 DW, DL	126 <sup>(1)</sup>	139 <sup>(1)</sup>	127.5 <sup>(1)</sup>
<b>c</b>	without cover or add-on blocks	84	84	84
	with cover, without add-on blocks	86	86	86
<b>c1</b>	with LAD N or C (2 or 4 contacts)	117	117	117
<b>c2</b>	with LA6 DK10, LAD 6K10	129	129	129
<b>c3</b>	with LAD T, R, S	137	137	137
	with LAD T, R, S and sealing cover	141	141	141
<b>(1)</b>	Including LAD 4BB.			

## Connections and Schema

### Wiring

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