

# เอกสารข้อมูลผลิตภัณฑ์

ข้อมูลจำเพาะ



Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e,  $\leq 440\text{V}$ , 9A, 24V AC 50/60Hz coil, screw clamp terminals

LC1D09B7

## Main

Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-4 AC-1 AC-3 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	24 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
Contact Compatibility	M2
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

<b>Irms Rated Making Capacity</b>	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
<b>Rated Breaking Capacity</b>	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>	Rail Plate
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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 CSA GOST RINA LROS (Lloyds register of shipping) UL DNV BV CCC UKCA
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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
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<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>	5.000 cm
<b>Package 1 Width</b>	9.200 cm
<b>Package 1 Length</b>	11.200 cm
<b>Package 1 Weight</b>	355.000 g
<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	20
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	7.346 kg
<b>Unit Type Of Package 3</b>	P06
<b>Number Of Units In Package 3</b>	320
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	126.688 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## ความยั่งยืน

ฉลาก **Green Premium™** เป็นความมุ่งมั่นของ Schneider Electric ในการส่งมอบผลิตภัณฑ์ที่มีประสิทธิภาพด้านสิ่งแวดล้อมที่ดีที่สุด Green Premium ให้คำมั่นว่าจะปฏิบัติตามกฎระเบียบล่าสุด ความโปร่งใสต่อผลกระทบด้านสิ่งแวดล้อม รวมถึงผลิตภัณฑ์หมุนเวียนและ CO<sub>2</sub> ต่ำ

คู่มือการประเมินความยั่งยืนของผลิตภัณฑ์เป็นเอกสารวิจัยที่ช่วยชี้แจงมาตรฐานฉลากสิ่งแวดล้อมทั่วโลกและวิธีการตีความการประเมิน

[เรียนรู้เพิ่มเติมเกี่ยวกับ Green Premium >](#)

[แนวทางในการประเมินความยั่งยืนของผลิตภัณฑ์ >](#)



ความโปร่งใส RoHS/REACH

## ประสิทธิภาพด้านสุขภาพ

Reach Free Of Svhc

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information Yes

Pvc Free

## ใบรับรองและมาตรฐาน

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Compliant  
[EU RoHS Declaration](#)

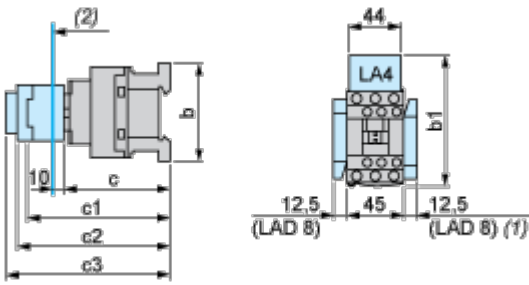
China Rohs Regulation [China RoHS declaration](#)  
Pro-active China RoHS declaration (out of China RoHS legal scope)

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](#)

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.			

Wiring

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