

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - $\leq 440$ V 25 A - 230 V AC coil

LC1D25P7

### Main

Range Of Product	TeSys Deca
Product Or Component Type	Contactors
Device Short Name	LC1D
Contactors Application	Resistive load Motor control
Utilisation Category	AC-3 AC-4 AC-1 AC-3e
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: $\leq 690$ V AC 25...400 Hz Power circuit: $\leq 300$ V DC
[Ie] Rated Operational Current	25 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-3 for power circuit 40 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit 25 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	230 V AC 50/60 Hz

### Complementary

Motor Power Kw	5.5 kW at 220...230 V AC 50/60 Hz (AC-3) 11 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 415...440 V AC 50/60 Hz (AC-3) 15 kW at 500 V AC 50/60 Hz (AC-3) 15 kW at 660...690 V AC 50/60 Hz (AC-3) 5.5 kW at 400 V AC 50/60 Hz (AC-4) 5.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 11 kW at 380...400 V AC 50/60 Hz (AC-3e) 11 kW at 415...440 V AC 50/60 Hz (AC-3e) 15 kW at 500 V AC 50/60 Hz (AC-3e) 15 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor Power Hp	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 15 hp at 460/480 V AC 50/60 Hz for 3 phases motors 20 hp at 575/600 V AC 50/60 Hz for 3 phases motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 40 A (at 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 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	450 A at 440 V for power circuit conforming to IEC 60947

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

<b>[Icw] Rated Short-Time Withstand Current</b>	240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 50 A 40 °C - 10 min for power circuit 120 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 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
<b>Average Impedance</b>	2 mOhm - lth 40 A 50 Hz for power circuit
<b>Power Dissipation Per Pole</b>	3.2 W AC-1 1.25 W AC-3 1.25 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>	1.65 Mcycles 25 A AC-3 at Ue <= 440 V 1.4 Mcycles 40 A AC-1 at Ue <= 440 V 1.65 Mcycles 25 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 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (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>	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
	Power circuit: screw clamp terminals 1 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 1...10 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.5...10 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: solid without cable end

<b>Tightening Torque</b>	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
	Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
	Power circuit: 2.5 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: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2	

<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

<b>Mounting Support</b>	Rail
	Plate

## 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

<b>Product Certifications</b>	UL
	GL
	CCC
	RINA
	GOST
	DNV
	BV
	LROS (Lloyds register of shipping)
	CSA
	UKCA

<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 closed (15 Gn for 11 ms) Shocks contactor open (8 Gn for 11 ms)
<b>Height</b>	85 mm
<b>Width</b>	45 mm
<b>Depth</b>	92 mm
<b>Net Weight</b>	0.37 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>	9.000 cm
<b>Package 1 Length</b>	11.000 cm
<b>Package 1 Weight</b>	417.000 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>	8.576 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>	80.000 cm
<b>Package 3 Length</b>	60.000 cm
<b>Package 3 Weight</b>	145.488 kg

## Contractual warranty

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

**Green Premium™ 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<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

 Reach Free Of Svhc

 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

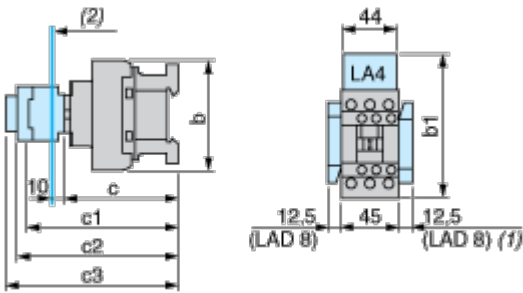
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

[End of Life Information](#)

Dimensions Drawings

Dimensions



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

LC1		D25...D38 (3-pole)
<b>b</b>	without add-on blocks	85
	with LAD 4BB	98
<b>b1</b>	with LA4 D•2	114 <sup>(1)</sup>
	with LA4 DF, DT	123 <sup>(1)</sup>
	with LA4 DW, DL	130 <sup>(1)</sup>
<b>c</b>	without cover or add-on blocks	90
	with cover, without add-on blocks	92
<b>c1</b>	with LAD N or C (2 or 4 contacts)	123
<b>c2</b>	with LA6 DK10, LAD 6K10	135
<b>c3</b>	with LAD T, R, S	143
	with LAD T, R, S and sealing cover	147
<b>(1)</b>	Including LAD 4BB.	

Connections and Schema

Wiring

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