

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 115 A - 220 V AC 50/60 Hz coil

LC1D115M7

### Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-4 AC-1 AC-3 AC-3e
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 1000 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] Rated Operational Current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 115 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 115 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	220 V AC 50/60 Hz

### Complementary

Motor Power Kw	30 kW at 220...230 V AC 50/60 Hz (AC-3) 55 kW at 380...400 V AC 50/60 Hz (AC-3) 59 kW at 415...440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660...690 V AC 50/60 Hz (AC-3) 65 kW at 1000 V AC 50/60 Hz (AC-3) 18.5 kW at 400 V AC 50/60 Hz (AC-4) 30 kW at 220...230 V AC 50/60 Hz (AC-3e) 55 kW at 380...400 V AC 50/60 Hz (AC-3e) 59 kW at 415...440 V AC 50/60 Hz (AC-3e) 75 kW at 500 V AC 50/60 Hz (AC-3e) 80 kW at 660...690 V AC 50/60 Hz (AC-3e) 65 kW at 1000 V AC 50/60 Hz (AC-3e)
Motor Power Hp	30 hp at 200/208 V AC 50/60 Hz for 3 phases motors 40 hp at 230/240 V AC 50/60 Hz for 3 phases motors 75 hp at 460/480 V AC 50/60 Hz for 3 phases motors 100 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M13
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	200 A (at 60 °C) for power circuit

<b>Irms Rated Making Capacity</b>	1260 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>	1100 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] Rated Short-Time Withstand Current</b>	250 A 40 °C - 10 min for power circuit 550 A 40 °C - 1 min for power circuit 950 A 40 °C - 10 s for power circuit 1100 A 40 °C - 1 s 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>	250 A gG at ≤ 690 V coordination type 1 for power circuit 200 A gG at ≤ 690 V coordination type 2 for power circuit 10 A gG for signalling circuit
<b>Average Impedance</b>	0.6 mOhm - Ith 200 A 50 Hz for power circuit
<b>Power Dissipation Per Pole</b>	24 W AC-1 7.9 W AC-3 7.9 W AC-3e
<b>[Ui] Rated Insulation Voltage</b>	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 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>	8 kV conforming to IEC 60947
<b>Safety Reliability Level</b>	B10d = 684932 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 1000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
<b>Mechanical Durability</b>	8 Mcycles
<b>Electrical Durability</b>	0.8 Mcycles 200 A AC-1 at Ue ≤ 440 V 0.95 Mcycles 115 A AC-3 at Ue ≤ 440 V 0.95 Mcycles 115 A AC-3e at Ue ≤ 440 V
<b>Control Circuit Type</b>	AC at 50/60 Hz standard
<b>Coil Technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control Circuit Voltage Limits</b>	0.3...0.5 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.15 Uc (-40...55 °C):operational AC 50/60 Hz 1...1.15 Uc (55...70 °C):operational AC 50/60 Hz
<b>Inrush Power In Va</b>	280...350 VA 60 Hz cos phi 0.8 (at 20 °C) 280...350 VA 50 Hz cos phi 0.8 (at 20 °C)
<b>Hold-In Power Consumption In Va</b>	2...18 VA 60 Hz cos phi 0.3 (at 20 °C) 2...18 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat Dissipation</b>	3...8 W at 50/60 Hz
<b>Operating Time</b>	6...20 ms opening 20...50 ms closing
<b>Maximum Operating Rate</b>	2400 cyc/h 60 °C

<b>Connections - Terminals</b>	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...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...2.5 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 1 10...120 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 2 10...50 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 1 10...120 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 2 10...50 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 1 10...120 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 10...50 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening Torque</b>	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
<b>Auxiliary Contact Composition</b>	1 NO + 1 NC
<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
<b>Signalling Circuit Frequency</b>	25...400 Hz
<b>Minimum Switching Voltage</b>	17 V for signalling circuit
<b>Minimum Switching Current</b>	5 mA for signalling circuit
<b>Insulation Resistance</b>	> 10 MOhm for signalling circuit
<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
<b>Product Certifications</b>	RINA CSA CCC BV LROS (Lloyds register of shipping) GL GOST DNV UL UKCA
<b>Ip Degree Of Protection</b>	IP20 front face conforming to IEC 60529
<b>Protective Treatment</b>	TH conforming to IEC 60068-2-30
<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 (6 Gn for 11 ms)
<b>Height</b>	158 mm
<b>Width</b>	120 mm
<b>Depth</b>	136 mm
<b>Net Weight</b>	2.5 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>	19.000 cm
<b>Package 1 Width</b>	17.500 cm
<b>Package 1 Length</b>	21.500 cm
<b>Package 1 Weight</b>	2.469 kg
<b>Unit Type Of Package 2</b>	P06
<b>Number Of Units In Package 2</b>	27
<b>Package 2 Height</b>	75.000 cm
<b>Package 2 Width</b>	60.000 cm
<b>Package 2 Length</b>	80.000 cm
<b>Package 2 Weight</b>	79.663 kg

## Contractual warranty

<b>Warranty</b>	12 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

Mercury Free

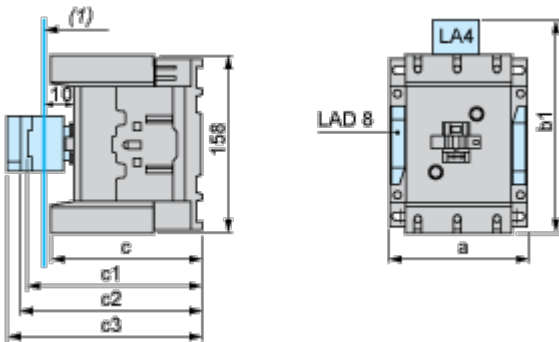
Rohs Exemption Information Yes

Pvc Free

## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>

Dimensions



(1) Minimum electrical clearance

LC1		D115 and D150 (3-pole)
<b>a</b>		120
<b>b1</b>	with LA4 DA2	174
	with LA4 DF, DT	185
	with LA4 DM, DL	188
	with LA4 DW	188
<b>c</b>	without cover or add-on blocks	132
	with cover, without add-on blocks	136
<b>c1</b>	with LAD N or C (2 or 4 contacts)	150
<b>c2</b>	with LA6 DK20	155
<b>c3</b>	with LAD T, R, S	168
	with LAD T, R, S and sealing cover	172

### Wiring

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