Product datasheet

Specifications





Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 115A, 48V AC 50/60Hz coil, screw clamp terminals

LC1D115E7

#### Main

wain	
Range	TeSys
Range Of Produc	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: <= 1000 V AC 25400 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
[Le] Control Circuit Voltage	

[Uc] Control Circuit Voltage

48 V AC 50/60 Hz

### Complementary

Motor Power Kw	30 kW at 220230 V AC 50/60 Hz (AC-3) 55 kW at 380400 V AC 50/60 Hz (AC-3) 59 kW at 415440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660690 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 220230 V AC 50/60 Hz (AC-3e) 55 kW at 380400 V AC 50/60 Hz (AC-3e) 59 kW at 415440 V AC 50/60 Hz (AC-3e) 75 kW at 500 V AC 50/60 Hz (AC-3e) 80 kW at 660690 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	200 A (at 60 °C) for power circuit

Thermal Current

Irms Rated Making Capacity	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
Rated Breaking Capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand	250 A 40 °C - 10 min for power circuit
Current	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
Associated Fuse Rating	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
Average Impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit
Power Dissipation Per Pole	24 W AC-1
	7.9 W AC-3
	7.9 W AC-3e
[Ui] Rated Insulation Voltage	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
Overvoltage Category	II
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	8 kV conforming to IEC 60947
Safety Reliability Level	B10d = 684932 cycles contactor with nominal load conforming to EN/ISO 13849-1
	B10d = 10000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical Durability	8 Mcycles
Electrical Durability	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
Control Circuit Type	AC at 50/60 Hz standard
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.30.5 Uc (-4070 °C):drop-out AC 50/60 Hz
	0.81.15 Uc (-4055 °C):operational AC 50/60 Hz
	11.15 Uc (5570 °C):operational AC 50/60 Hz
Inrush Power In Va	280350 VA 60 Hz cos phi 0.8 (at 20 °C) 280350 VA 50 Hz cos phi 0.8 (at 20 °C)
Hold-In Power Consumption In Va	218 VA 60 Hz cos phi 0.3 (at 20 °C)
	218 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	38 W at 50/60 Hz
Operating Time	620 ms opening 2050 ms closing
Maximum Operating Rate	2400 cyc/h 60 °C

Connections - Terminals	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 12.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 12.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 12.5 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: connector 1 10120 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 1 10120 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 1 10120 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm <sup>2</sup> - cable stiffness: solid without cable end
Tightening Torque	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
Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
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
Product Certifications	DNV CCC RINA GOST BV GL LROS (Lloyds register of shipping) CSA UL UKCA CE
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Protective Treatment	TH conforming to IEC 60068-2-30
Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-4060 °C 6070 °C with derating
Operating Altitude	03000 m
Fire Resistance	850 °C conforming to 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 closed (15 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)	
Height	158 mm	
Width	120 mm	
Depth	136 mm	
Net Weight	2.5 kg	
Packing Units		
Unit Type Of Package 1	PCE	
Number Of Units In Package 1	1	
Package 1 Height	20.000 cm	
Package 1 Width	19.000 cm	

-		
Package 1 Length	22.000 cm	
Package 1 Weight	2.475 kg	
Unit Type Of Package 2	P06	
Number Of Units In Package 2	27	
Package 2 Height	75.000 cm	
Package 2 Width	60.000 cm	6
Package 2 Length	80.000 cm	
Package 2 Weight	79.825 kg	41

# **Contractual warranty**

Warranty

18 months



## Sustainability Seren

**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

Mercury Free

Fa

Rohs Exemption Information
Yes

Pvc Free

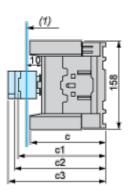
### **Certifications & Standards**

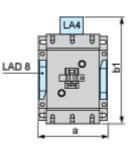
Reach Regulation	REACh Declaration	
Eu Rohs Directive	Compliant with Exemptions	
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European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

### **Product datasheet**

### **Dimensions Drawings**

#### Dimensions





#### (1) Minimum electrical clearance

LC1		D115 and D150 (3-pole)	
а		120	
	with LA4 DA2	174	
b1	with LA4 DF, DT	185	
ומ	with LA4 DM, DL	188	
	with LA4 DW	188	
	without cover or add-on blocks	132	
С	with cover, without add-on blocks	136	
c1	with LAD N or C (2 or 4 contacts)	150	
c2	with LA6 DK20	155	
c3	with LAD T, R, S	168	
C3	with LAD T, R, S and sealing cover	172	

### **Product datasheet**

LC1D115E7

Connections and Schema

Wiring

