## **Product datasheet**

Specifications

### Sreen Premium<sup>™</sup>



# TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 40 A - 125 V DC standard coil

LC1D40AGD

#### Main

Range	TeSys TeSys Deca
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: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	125 V DC

### Complementary

Motor power kW	18.5 kW at 380400 V AC 50/60 Hz (AC-3)
	11 kW at 220230 V AC 50/60 Hz (AC-3)
	22 kW at 415440 V AC 50/60 Hz (AC-3)
	22 kW at 500 V AC 50/60 Hz (AC-3)
	30 kW at 660690 V AC 50/60 Hz (AC-3)
	9 kW at 400 V AC 50/60 Hz (AC-4)
	18.5 kW at 380400 V AC 50/60 Hz (AC-3e)
	11 kW at 220230 V AC 50/60 Hz (AC-3e)
	22 kW at 415440 V AC 50/60 Hz (AC-3e)
	22 kW at 500 V AC 50/60 Hz (AC-3e)
	30 kW at 660690 V AC 50/60 Hz (AC-3e)
Motor power hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors
	30 hp at 575/600 V AC 50/60 Hz for 3 phases motors
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors
	3 hp at 115 V AC 50/60 Hz for 1 phase motors
	30 hp at 460/480 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
Current	60 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
	800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand	320 A 40 °C - 10 s for power circuit
current	720 A 40 °C - 1 s for power circuit
	72 A 40 °C - 10 min for power circuit
	165 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
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1
According the second seco	
	80 A gG at <= 690 V coordination type 1 for power circuit
	80 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power dissipation per pole	2.4 W AC-3
	5.4 W AC-1
	2.4 W AC-3e
	2.4 W AC-Je
[Ui] rated insulation voltage	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
	Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	Ш
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	R10d - 1200002 suches contenter with nominal load conferming to EN/ICO 12010.1
Salety reliability level	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
Mechanical durability	10 Mcycles
Electrical durability	0.7 Mcycles 60 A AC-1 at Ue <= 440 V
	1.5 Mcycles 40 A AC-3 at Ue <= 440 V
	1.5 Mcycles 40 A AC-3e at Ue <= 440 V
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.10.3 Uc (-4070 °C):drop-out DC
	0.751.25 Uc (-4060 °C):operational DC
	11.25 Uc (6070 °C):operational DC
Inrush power in W	19 W (at 20 °C)
Hold in nower consumption in M	7.4 W = 20 °C
Hold-in power consumption in W	7.4 W at 20 °C
Operating time	50 ±15 % ms closing
	20 ±20 % ms opening
Time constant	34 ms
Maximum operating rate	3600 cyc/h 60 °C
Maximum operating rate	2600 cuc/h at 60 °C
maximum operating rate	3600 cyc/h at 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 14 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm <sup>2</sup> - cable stiffness: solid without cable end
Tightening torque	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: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm <sup>2</sup> hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm <sup>2</sup>
	hexagonal screw head 4 mm 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
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	Rail Plate

#### Environment

Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 UL 60947-4-1 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ IEC 60335-1:Clause 30.2
Product certifications	CCC UL CB Scheme CSA CE UKCA Marine EAC
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	-40…60 °C 60…70 °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 (10 Gn for 11 ms)	
Height	122 mm	
Width	55 mm	
Depth	120 mm	
Net weight	0.925 kg	

### **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.2 cm
Package 1 Width	13.7 cm
Package 1 Length	15.2 cm
Package 1 Weight	998.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.35 kg

### **Contractual warranty**

Warranty

18 months

#### Sustainability

**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 >



Sustainable Packaging Transparency RoHS/REACh

#### **Resource performance**

Sustainable Packaging

#### Well-being performance

Reach Free Of Svhc
Mercury Free
Rohs Exemption Information Yes
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