# **Product datasheet**

Specifications





### TeSys D contactor 3P 40A AC-3 up to 440V coil 48-130V AC/DC EverLink

LC1D40AEHE

#### Main

Range	TeSys TeSys Deca	
Range of product	TeSys Deca	
product or component type	Contactor	
Device short name	LC1D	
contactor application	Motor control Resistive load	
Utilisation category	AC-3 AC-1 AC-3e	
poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz	
[le] rated operational current	60 A (at <60 °C) at <= 440 V AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC-3e for power circuit	
[Uc] control circuit voltage	48130 V AC 50/60 Hz 48130 V DC	

#### Complementary

Motor power kW	11 kW at 220230 V AC 50 Hz (AC-3)
	18.5 kW at 380400 V AC 50 Hz (AC-3)
	22 kW at 415 V AC 50 Hz (AC-3)
	22 kW at 440 V AC 50 Hz (AC-3)
	22 kW at 500 V AC 50 Hz (AC-3)
	30 kW at 660690 V AC 50 Hz (AC-3)
	11 kW at 220230 V AC 50 Hz (AC-3e)
	18.5 kW at 380400 V AC 50 Hz (AC-3e)
	22 kW at 415 V AC 50 Hz (AC-3e)
	22 kW at 440 V AC 50 Hz (AC-3e)
	22 kW at 500 V AC 50 Hz (AC-3e)
	30 kW at 660690 V AC 50 Hz (AC-3e)
Motor power hp	3 hp at 115 V AC 60 Hz for 1 phase motors
	5 hp at 230/240 V AC 60 Hz for 1 phase motors
	10 hp at 200/208 V AC 60 Hz for 3 phases motors
	10 hp at 230/240 V AC 60 Hz for 3 phases motors
	30 hp at 460/480 V AC 60 Hz for 3 phases motors
	30 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal	60 A (at 60 °C) for power circuit
current	10 A (at 60 °C) for signalling circuit

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Irms rated making capacity	800 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	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand	72 A 40 °C - 10 min for power circuit
current	165 A 40 °C - 1 min for power circuit
	320 A 40 °C - 10 s for power circuit
	720 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	80 A gG at <= 690 V coordination type 1 for power circuit
	80 A gG at <= 690 V coordination type 2 for power circuit
	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power dissipation per pole	5.4 W AC-1
	2.4 W AC-3
	2.4 W AC-3e
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1
	Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety 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	6 Mcycles
Electrical durability	2 Mcycles 35 A AC-3 at Ue <= 440 V
	0.7 Mcycles 60 A AC-1 at Ue <= 440 V
	2 Mcycles 35 A AC-3e at Ue <= 440 V
Control circuit type	AC/DC at 50/60 Hz AC/DC electronic
Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	$z = 0.4 \text{ Hz} (40, -70 ^{\circ}\text{C})$ where out $4 ^{\circ}\text{C/PC}$
Control circuit voltage innits	<= 0.1 Uc (-4070 °C):drop-out AC/DC
	0.851.1 Uc (-4060 °C):operational AC/DC
	11.1 Uc (6070 °C):operational AC/DC
Inrush power in VA	23 VA 50/60 Hz (at 20 °C)
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in VA	1.4 VA 50/60 Hz (at 20 °C)
Hold-in power consumption in W	0.9 W at 20 °C
Heat dissipation	0.9 W at 50/60 Hz
Operating time	5565 ms closing
	20120 ms opening (date code >= 17221)
	2080 ms opening (date code >= 18011)
Maximum operating rate	3600 cyc/h 60 °C
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Connections - terminals	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 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: solid	
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid	
	Power circuit: EverLink BTR screw connectors 1 135 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 1 135 mm <sup>2</sup> - cable stiffness: solid	
	Power circuit: EverLink BTR screw connectors 2 125 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	
	with cable end	
	Power circuit: EverLink BTR screw connectors 2 125 mm <sup>2</sup> - cable stiffness: solid	
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	
	Power circuit: 5 N.m - with screwdriver pozidriv No 2	
	Control circuit: 1.7 N.m - 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	

### Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1	
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) UKCA	
IP degree of protection	IP20 front face conforming to IEC 60529	
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 open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)	
Height	122 mm	
Width	55 mm	
Depth	120 mm	
net weight	0.992 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	13.8 cm
Package 1 Length	15.5 cm
Package 1 Weight	1.054 kg
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	9.793 kg

# Contractual warranty

Warranty

18 months

### Sustainability Screen Premium

**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
Rohs Exemption Information Yes
Halogen Free Plastic Parts & Cables Product

#### **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