# **Product datasheet**

Specifications





# TeSys D contactor - 4P(4 NO) -AC-1 - <= 440 V 80 A - 230 V AC 50/60 Hz coil

LC1DT80AP7

#### Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load
Utilisation Category	AC-1
Poles Description	4P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	230 V AC 50/60 Hz

### Complementary

Compatibility Code	LC1D
Pole Contact Composition	4 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 80 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 1000 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	640 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 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 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.6 mOhm - Ith 80 A 50 Hz for power circuit
Power Dissipation Per Pole	10.2 W AC-1

[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	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	1.4 Mcycles 80 A AC-1 at Ue <= 440 V
Control Circuit Type	AC at 50/60 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz
	0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz
	11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush Power In Va	140 VA 60 Hz cos phi 0.75 (at 20 °C)
	160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	45 W at 50/60 Hz
Operating Time	419 ms opening 1226 ms closing
Maximum Operating Rate	3600 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 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
	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
	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 screw clamp terminals - cable 2535 mm <sup>2</sup> hexagonal
	screw head 4 mm
	Power circuit: 5 N.m - on screw clamp terminals - 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
Maximary Contact Composition	

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	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
Product Certifications	DNV
	GL
	UL
	CSA
	BV
	GOST
	CCC
	LROS (Lloyds register of shipping)
	RINA
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
	conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air	-4060 °C
Temperature Around The Device	
	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 (10 Gn for 11 ms)
Height	122 mm
Width	70 mm
Depth	120 mm
Net Weight	1.15 kg
	1.10 kg

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	14.0 cm
Package 1 Length	15.0 cm

Package 1 Weight	1.086 kg
Unit Type Of Package 2	S02
Number Of Units In Package 2	7
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.226 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.

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Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance

Reach Free Of Svhc
Toxic Heavy Metal Free
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