# **Product datasheet**

Specifications





## TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 25 A - 380 V AC coil

LC1D25Q7

#### Main

Range Of Product	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: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	25 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
[Uc] Control Circuit Voltage	380 V AC 50/60 Hz	

### Complementary

Motor Power Kw	5.5 kW at 220230 V AC 50/60 Hz (AC-3)
	11 kW at 380400 V AC 50/60 Hz (AC-3)
	11 kW at 415440 V AC 50/60 Hz (AC-3)
	15 kW at 500 V AC 50/60 Hz (AC-3)
	15 kW at 660690 V AC 50/60 Hz (AC-3)
	5.5 kW at 400 V AC 50/60 Hz (AC-4)
	5.5 kW at 220230 V AC 50/60 Hz (AC-3e)
	11 kW at 380400 V AC 50/60 Hz (AC-3e)
	11 kW at 415440 V AC 50/60 Hz (AC-3e)
	15 kW at 500 V AC 50/60 Hz (AC-3e)
	15 kW at 660690 V AC 50/60 Hz (AC-3e)
Motor Power Hp	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	2 hp at 115 V AC 50/60 Hz for 1 phase motors
	7.5 hp at 230/240 V AC 50/60 Hz for 3 phases motors
	15 hp at 460/480 V AC 50/60 Hz for 3 phases motors
	20 hp at 575/600 V AC 50/60 Hz for 3 phases motors
	7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	40 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
	450 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	450 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand	240 A 40 °C - 10 s for power circuit
Current	380 A 40 °C - 1 s for power circuit
	50 A 40 °C - 10 min for power circuit
	120 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
_	63 A gG at <= 690 V coordination type 1 for power circuit
	40 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
Power Dissipation Per Pole	3.2 W AC-1
	1.25 W AC-3
	1.25 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1
	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
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	15 Mcycles
Electrical Durability	1.65 Mcycles 25 A AC-3 at Ue <= 440 V
2	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
	1.65 Mcycles 25 A AC-3e at Ue <= 440 V
Control Circuit Type	AC at 50/60 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltago Limita	
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	70 VA 60 Hz cos phi 0.75 (at 20 °C)
	70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 20 °C)
	7 VA 50 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	23 W at 50/60 Hz
Operating Time	1222 ms closing
	419 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C

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 without cable end	
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 1 110 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 2 1.56 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 1 1.510 mm <sup>2</sup> - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 2 2.510 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: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2 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	
	> 10 MOhm for signalling circuit	
Insulation Resistance	> 10 MOnm for signalling circuit	
Insulation Resistance Non-Overlap Time	<ul> <li>10 MOnm for signalling circuit</li> <li>1.5 ms on de-energisation between NC and NO contact</li> <li>1.5 ms on energisation between NC and NO contact</li> </ul>	

### 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	GL BV DNV LROS (Lloyds register of shipping) RINA UL CCC CSA GOST UKCA CB
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Protective Treatment	TH conforming to IEC 60068-2-30

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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 (8 Gn for 11 ms)	
Height	85 mm	
Width	45 mm	
Depth	92 mm	
Net Weight	0.37 kg	

# **Packing Units**

-	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5 cm
Package 1 Width	9.3 cm
Package 1 Length	11.5 cm
Package 1 Weight	411 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	8.695 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	80 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	147.3 kg

### **Contractual warranty**

Warranty

12 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

Reach Free Of Svhc
 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