Product datasheet

Specifications





TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 18 A - 380 V AC coil

LC1D18Q7

Main

Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load Motor control	
Utilisation Category	AC-3 AC-4 AC-1 AC-3e	
Poles Description	ЗР	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 18 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	4 kW at 220230 V AC 50/60 Hz (AC-3)	
	7.5 kW at 380400 V AC 50/60 Hz (AC-3)	
	9 kW at 415440 V AC 50/60 Hz (AC-3)	
	10 kW at 500 V AC 50/60 Hz (AC-3)	
	10 kW at 660690 V AC 50/60 Hz (AC-3)	
	4 kW at 400 V AC 50/60 Hz (AC-4)	
	4 kW at 220230 V AC 50/60 Hz (AC-3e)	
	7.5 kW at 380400 V AC 50/60 Hz (AC-3e)	
	9 kW at 415440 V AC 50/60 Hz (AC-3e)	
	10 kW at 500 V AC 50/60 Hz (AC-3e)	
	10 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	1 hp at 115 V AC 50/60 Hz for 1 phase motors	
	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	5 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	5 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	10 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	15 hp at 575/600 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	32 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	
	300 A at 440 V for power circuit conforming to IEC 60947	
Rated Breaking Capacity	300 A at 440 V for power circuit conforming to IEC 60947	

[Icw] Rated Short-Time Withstand	145 A 40 °C - 10 s for power circuit
Current	240 A 40 °C - 1 s for power circuit
	40 A 40 °C - 10 min for power circuit
	84 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
	50 A gG at <= 690 V coordination type 1 for power circuit
	35 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power Dissipation Per Pole	2.5 W AC-1
	0.8 W AC-3
	0.8 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 18 A AC-3 at Ue <= 440 V
,	1 Mcycles 32 A AC-1 at Ue <= 440 V
	1.65 Mcycles 18 A AC-3e 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	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	$7.5 \times 60 \text{ Hz} \cos 20 \text{ (at 20 °C)}$
	7.5 VA 60 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
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Connections - Terminals	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible without
	cable end
	Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible with cable
	end
	Control circuit: screw clamp terminals 2 12.5 mm ² - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 1 1.56 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 16 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.56 mm ² - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: solid without cable end
Tightening Torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 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

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 open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
Height	77 mm
Width	45 mm
Depth	86 mm
Net Weight	0.33 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	9.4 cm
Package 1 Length	11.4 cm
Package 1 Weight	349 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	7.269 kg

Contractual warranty

Warranty

12 months

Sustainability Screen Premium

Green PremiumTM 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-CO₂ 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
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