Product datasheet

Specifications





TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 380 V AC coil

LC1D09Q7

Main

Range Of Produc	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	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 9 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	2.2 kW at 220230 V AC 50/60 Hz (AC-3) 4 kW at 380400 V AC 50/60 Hz (AC-3) 4 kW at 415440 V AC 50/60 Hz (AC-3) 5.5 kW at 500 V AC 50/60 Hz (AC-3) 5.5 kW at 660690 V AC 50/60 Hz (AC-3) 2.2 kW at 400 V AC 50/60 Hz (AC-4) 2.2 kW at 220230 V AC 50/60 Hz (AC-3e) 4 kW at 380400 V AC 50/60 Hz (AC-3e) 4 kW at 415440 V AC 50/60 Hz (AC-3e) 5.5 kW at 500 V AC 50/60 Hz (AC-3e) 5.5 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors	
Compatibility Code	LC1D	
Pole Contact Composition	3 NO	
Contact Compatibility	M2	
Protective Cover	With	
[Ith] Conventional Free Air Thermal Current	25 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit	
Irms Rated Making Capacity	250 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	

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



Rated Breaking Capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 30 A 40 °C - 10 min for power circuit 61 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 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 25 A 50 Hz for power circuit
Power Dissipation Per Pole	1.56 W AC-1 0.2 W AC-3 0.2 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	0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V 2 Mcycles 9 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 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

Connections - Terminals	Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with	
	cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable	
	end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable	
	end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without	
	cable end Control circuit: screw clamp terminals 2 14 mm² - 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 mm² - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end	
	Control circuit: screw clamp terminals 2 14 mm² - 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	
Auxiliary Contact Composition	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 1 NO + 1 NC	
uxiliary 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 contact1.5 ms on energisation between NC and NO contact	
Mounting Support	Plate	
	Rail	
Environment		
Standards	CSA C22.2 No 14	
Standardo	EN 60947-4-1	
	EN 60947-5-1 IEC 60947-4-1	
	IEC 60947-5-1	
	UL 508 IEC 60335-1	
Product Certifications	UL	
	CSA	
	DNV GL	
	RINA	
	CCC BV	
	GOST	
	LROS (Lloyds register of shipping) UKCA	
p 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	
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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	0.32 kg	

Packing Units

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Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5 cm
Package 1 Width	9.2 cm
Package 1 Length	11.2 cm
Package 1 Weight	348 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	7.455 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	160
Package 3 Height	77 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	68.3 kg

Contractual warranty

Warranty 18 months



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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

②	Reach Free Of Svhc		
⊘	Toxic Heavy Metal Free		
⊘	Mercury Free		
⊘	Rohs Exemption Information	Yes	
9	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

