Product datasheet

Specifications





TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 9 A - 110 V DC coil

LC1D09FD

Main

Range of product	TeSys Deca	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-4 AC-3 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	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	110 V DC	

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
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
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947

[Icw] rated short-time withstand	105 A 40 °C - 10 s for power circuit
current	210 A 40 °C - 1 s for power circuit
	$30 \text{ A } 40 ^{\circ}\text{C} - 10 \text{ min for power circuit}$
	61 A 40 °C - 1 min for power circuit
	100 A - 1 s for signalling circuit
	120 A - 500 ms for signalling circuit
	5 5
	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
rower dissipation per pole	
	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	Ш
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	30 Mcycles
Electrical durability	0.6 Mcycles 25 A AC-1 at Ue <= 440 V
Lioothoar durability	2 Mcycles 9 A AC-3 at Ue <= 440 V
	•
	2 Mcycles 9 A AC-3e at Ue <= 440 V
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.10.25 Uc (-4070 °C):drop-out DC
-	0.71.25 Uc (-4060 °C):operational DC
	11.25 Uc (6070 °C):operational DC
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W at 20 °C
Operating time	63 ±15 % ms closing
	20 ±20 % ms opening
Time constant	28 ms
Maximum operating rate	3600 cyc/h 60 °C
	· · ·
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	Power circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible without
	cable end
	Power circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 12.5 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 14 mm ² - cable stiffness: solid without cable end
	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
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 Philips 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

Environment

CSA C22.2 No 14
EN 60947-4-1
EN 60947-5-1
IEC 60947-4-1
IEC 60947-5-1
UL 60947-4-1
IEC 60335-1:Clause 30.2
IEC 60335-2-40:Annex JJ
UL 60335-2-40:Annex JJ
CSA C22.2 No 60947-4-1
UL
CCC
CSA
Marine
UKCA
EAC
CB Scheme
IP20 front face conforming to IEC 60529
TH conforming to IEC 60068-2-30
conforming to IACS E10 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 open (10 Gn for 11 ms)
	Shocks contactor closed (15 Gn for 11 ms)
Height	77 mm
Width	45 mm
Depth	95 mm
Product weight	0.48 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.200 cm
Package 1 Length	11.100 cm
Package 1 Weight	515.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.049 kg

Contractual warranty

Warranty

18 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 >



Yes

Sustainable Packaging Transparency RoHS/REACh

Resource performance

Sustainable Packaging

Well-being performance

Mercury Free

Rohs Exemption Information

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
Circularity Profile	End of Life Information

Product datasheet

Image of product / Alternate images

Alternative





Product datasheet

