Product datasheet

Specifications





TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 25 A - 48 V AC coil

LC1D128E7

Main

Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load	
Utilisation Category	AC-1 AC-3 AC-3e AC-4	
Poles Description	4P	
[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-1 for power circuit	
[Uc] Control Circuit Voltage	48 V AC 50/60 Hz	

Complementary

Compatibility Code	LC1D
Pole Contact Composition	2 NO + 2 NC
Contact Compatibility	M6
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 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 40 A gG at <= 690 V coordination type 1 for power circuit 25 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



[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	6 kV conforming to IEC 60947		
Voltage 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	0.8 Mcycles 25 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	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 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 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 1 14 mm² - cable stiffness: solid without 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 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 Plate		

Environment

LIMITOTITIETIL		
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	CSA UL DNV CCC RINA LROS (Lloyds register of shipping) GL BV GOST UKCA	
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	
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	85 mm	
Width	45 mm	
Depth	92 mm	
Net Weight	0.365 kg	
Packing Units		
Unit Type Of Package 1	DOE	

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.800 cm
Package 1 Width	9.500 cm
Package 1 Length	12.000 cm
Package 1 Weight	392.000 g

Unit Type Of Package 2	S02	
Number Of Units In Package 2	16	
Package 2 Height	15.000 cm	
Package 2 Width	30.000 cm	\ /
Package 2 Length	40.000 cm	-
Package 2 Weight	6.803 kg	
Unit Type Of Package 3	P06	/
Number Of Units In Package 3	256	
Package 3 Height	75.000 cm	
Package 3 Width	60.000 cm	
Package 3 Length	80.000 cm	
Package 3 Weight	116.848 kg	

Contractual warranty

Warranty 18 months



Sustainability Green 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

