Product datasheet

Specifications





Contactor, TeSys Deca, 4P(2NO+2NC), AC-1, <=440V, 40A, 220VDC coil, screw clamp terminal

LC1D258MD

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
[le] Rated Operational Current	40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	220 V DC

Complementary

Compatibility Code	LC1D
Pole Contact Composition	2 NO + 2 NC
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 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 Current	240 A 40 °C - 10 s for power circuit 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
[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	30 Mcycles
Electrical Durability	1.4 Mcycles 40 A AC-1 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 (-4060 °C):drop-out DC 0.71.25 Uc (-4060 °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
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 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 2.510 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm ² - 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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver flat Ø 6 mm Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver 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 contact1.5 ms on energisation between NC and NO contact

Environment

Environment	
Standards	EN 60947-4-1
	EN 60947-5-1
	IEC 60947-4-1
	IEC 60947-5-1
	UL 60947-4-1
	UL 60947-5-1
	CSA C22.2 No 60947-4-1
	CSA C22.2 No 60947-5-1
	GB/T 14048.4
Product Certifications	UL
	CSA
	CCC
	EAC
	UKCA
	CB
	EU-RO-MR by DNV-GL
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	-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 closed (15 Gn for 11 ms)
	Shocks contactor open (8 Gn for 11 ms)
Height	91 mm
Width	45 mm
Depth	107 mm
Net Weight	0.585 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	9.5 cm
Package 1 Length	12.0 cm
Package 1 Weight	627.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.055 kg

Unit Type Of Package 3	P06
Number Of Units In Package 3	240
Package 3 Height	77.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	153.6 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 >



Transparency RoHS/REACh

Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

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