Product datasheet

Specifications

Green Premium™

Contactor, TeSys Deca, 4P(2NO+2NC), AC-1, <=440V, 125A, 42V AC 50/60Hz coil, screw clamp terminal

LC1D80008D7

Discontinued

Discontinued on: 9 Feb 2023

Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load
Utilisation Category	AC-1
Poles Description	4P
[Ue] Rated Operational Voltage	Power circuit: <= 300 V DC Power circuit: <= 690 V AC 25...400 Hz
[Ie] Rated Operational Current	125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	42 V AC 50/60 Hz

Complementary

Compatibility Code	LC1D
Pole Contact Composition	2 NO + 2 NC
Protective Cover	Without
[Ith] Conventional Free Air Thermal Current	125 A (at 60 °C) for power circuit
Irms Rated Making Capacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	640 A 40 °C - 10 s for power circuit 990 A 40 °C - 1 s for power circuit 135 A 40 °C - 10 min for power circuit 320 A 40 °C - 1 min for power circuit
Associated Fuse Rating	200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power Dissipation Per Pole	12.5 W AC-1
[Ui] Rated Insulation Voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	8 kV conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	4 Mcycles
Electrical Durability	0.8 Mcycles 125 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	0.85...1.1 Uc (-40…55 °C):operational AC 60 Hz 0.3...0.6 Uc (-40…55 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…55 °C):operational AC 50 Hz
Inrush Power In Va	245 VA 60 Hz cos phi 0.75 (at 20 °C) 245 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	26 VA 60 Hz cos phi 0.3 (at 20 °C) 26 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	6…10 W at 50/60 Hz
Operating Time	20...35 ms closing 6...20 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: flexible without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible with cable end Power circuit: connector 2 4…16 mm² - cable stiffness: flexible with cable end Power circuit: connector 1 4…50 mm² - cable stiffness: solid without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: solid without cable end
Tightening Torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Mounting Support	Plate Rail

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
Permissible Ambient Air Temperature Around The Device	-40…60 °C 60…70 °C with derating
Operating Altitude	0...3000 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, 5...300 Hz) Shocks contactor open (8 Gn for 11 ms) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor closed (10 Gn for 11 ms)
Height	127 mm
Width	96 mm
Depth	140 mm
Net Weight	1.84 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	15.5 cm
Package 1 Width	11.0 cm
Package 1 Length	13.5 cm
Package 1 Weight	1.842 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 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	No need of specific recycling operations