Product datasheet

Specifications

Green Premium™

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 12 V AC 50 Hz coil

LC1D40A3J5

Discontinued on: 1 Nov 2020

Discontinued

EAN Code: 3389118326767

Main

Range	TeSys
Range Of Product	TeSys D
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-4 AC-3 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] Rated Operational Current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] Control Circuit Voltage	12 V AC 50 Hz

Complementary

Motor Power Kw	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 415...440 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4)
Motor Power Hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 30 hp at 575/600 V AC 50/60 Hz for 3 phases motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 115 V AC 50/60 Hz for 1 phase motors 30 hp at 460/480 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M2
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 60 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 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	800 A at 440 V for power circuit 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

[Icw] Rated Short-Time Withstand Current	320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit 72 A 40 °C - 10 min for power circuit 165 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 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power Dissipation Per Pole	2.4 W AC-3 5.4 W AC-1
[Ui] Rated Insulation Voltage	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 Power circuit: 690 V conforming to IEC 60947-4-1
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	6 Mcycles
Electrical Durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V 1.5 Mcycles 40 A AC-3 at Ue <= 440 V
Control Circuit Type	AC at 50 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.8...1.1 Uc (-40…60 °C):operational AC 50 Hz 0.3...0.6 Uc (-40…70 °C):drop-out AC 50 Hz 1...1.1 Uc (60…70 °C):operational AC 50 Hz
Inrush Power In Va	160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	4…5 W at 50 Hz
Operating Time	4...19 ms opening 12...26 ms closing
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Power circuit: EverLink BTR screw connectors 1 1…35 mm² - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 1…25 mm² - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 1…35 mm² - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 1…25 mm² - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 1…35 mm² - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 1…25 mm² - cable stiffness: solid without cable end Control circuit: spring terminals 1 0.75…2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 0.75…2.5 mm² - cable stiffness: flexible without cable end
Tightening Torque	Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25…35 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1…25 mm² hexagonal screw head 4 mm

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	25...400 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

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product Certifications	GOST CSA CCC UL
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	-60…80 °C storage -40…60 °C operation 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) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)
Height	122 mm
Width	55 mm
Depth	120 mm
Net Weight	0.85 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

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

Certifications & Standards

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information