Product datasheet

Specifications

Green Premium™

TeSys D contactor 3P 40A AC-3 up to 440V coil 48-130V AC/DC ring-lugs

LC1D40A6EHE

EAN Code: 3606489493363

Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-1 AC-3e
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] Rated Operational Current	60 A (at <60 °C) at <= 440 V AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] Control Circuit Voltage	48...130 V AC 50/60 Hz 48...130 V DC

Complementary

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

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

Irms Rated Making Capacity	800 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	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	72 A 40 °C - 10 min for power circuit 165 A 40 °C - 1 min for power circuit 320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s 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	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average Impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power Dissipation Per Pole	5.4 W AC-1 2.4 W AC-3 2.4 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
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	2 Mcycles 35 A AC-3 at Ue <= 440 V 0.7 Mcycles 60 A AC-1 at Ue <= 440 V 2 Mcycles 35 A AC-3e at Ue <= 440 V
Control Circuit Type	AC/DC at 50/60 Hz AC/DC electronic
Coil Technology	Built-in bidirectional peak limiting
Control Circuit Voltage Limits	<= 0.1 Uc (-40…70 °C):drop-out AC/DC 0.85...1.1 Uc (-40…60 °C):operational AC/DC 1...1.1 Uc (60…70 °C):operational AC/DC
Inrush Power In Va	23 VA 50/60 Hz (at 20 °C)
Inrush Power In W	19 W (at 20 °C)
Hold-In Power Consumption In Va	1.4 VA 50/60 Hz (at 20 °C)
Hold-In Power Consumption In W	0.9 W at 20 °C
Heat Dissipation	0.9 W at 50/60 Hz
Operating Time	55...65 ms closing 20...80 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Power circuit: lugs-ring terminals - external diameter: 16.5 mm Control circuit: lugs-ring terminals - external diameter: 8 mm
Tightening Torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 6 N.m - on lugs-ring terminals hexagonal screw head 10 mm M6 Power circuit: 6 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M4 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M3.5
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	Plate Rail

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
Product Certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) UKCA
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
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	-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) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
Height	122 mm
Width	55 mm
Depth	120 mm
Net Weight	0.992 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	13.7 cm
Package 1 Length	15.2 cm
Package 1 Weight	905.0 g

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

Mercury Free	
Rohs Exemption Information	Yes
Halogen Free Plastic Parts & Cables Product	

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
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