Product datasheet

Specifications

Green Premium™

Contactor,Easy TeSys Control,LC1E, 3P(3NO),AC-3,<=440V,120A,440V AC coil,50Hz

LC1E120R5

Discontinued

Discontinued on: Oct 10, 2020 AD

Main

Range	Easy TeSys
Range Of Product	Easy TeSys Control
Product Or Component Type	Contactor
Device Short Name	LC1E
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] Rated Operational Current	120 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 150 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	440 V AC 50 Hz

Complementary

Motor Power Kw	37 kW at 220...230 V AC 50/60 Hz 55 kW at 380...400 V 59 kW at 415 V 59 kW at 440 V 75 kW at 500 V 80 kW at 660...690 V
Pole Contact Composition	3 NO
[Ith] Conventional Free Air Thermal Current	150 A (at 40 °C)
Irms Rated Making Capacity	1200 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated Breaking Capacity	960 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	1100 A 40 °C - 10 s for power circuit
Associated Fuse Rating	250 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 10 A gG at <= 690 V coordination type 1 for power circuit
Average Impedance	0.6 mOhm - Ith 150 A 50 Hz for power circuit
Power Dissipation Per Pole	8.6 W AC-3 14 W AC-1
[Ui] Rated Insulation Voltage	690 V conforming to IEC 60947-4-1
Overvoltage Category	III
Pollution Degree	3

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

[Uimp] Rated Impulse Withstand Voltage	8 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical Durability	4000000 cycles
Electrical Durability	800000 cycles AC-3 250000 cycles AC-1
Control Circuit Type	AC at 50 Hz
Control Circuit Voltage Limits	0.85...1.1 Uc (55 °C):operational 50 Hz 0.35...0.55 Uc (55 °C):drop-out 50 Hz
Inrush Power In Va	300 VA 50 Hz cos phi 0.8 (at 20 °C) 300 VA 60 Hz cos phi 0.8 (at 20 °C)
Hold-In Power Consumption In Va	22 VA 50 Hz cos phi 0.3 (at 20 °C) 22 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	3…8 W for control circuit
Operating Time	20...50 ms on closing 6...20 ms on opening
Maximum Operating Rate	1200 cyc/h 55 °C
Connections - Terminals	Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 10…120 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 20…170 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 10…120 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 20…170 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible without 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…2.5 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: solid without cable end
Tightening Torque	Power circuit: 12 N.m Control circuit: 1.2 N.m
Auxiliary Contact Composition	1 NO + 1 NC
Minimum Switching Voltage	17 V for control circuit
Minimum Switching Current	5 mA for control circuit
Insulation Resistance	> 10 MOhm for control circuit
Non-Overlap Time	1.5 ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
Mounting Support	Plate DIN rail

Environment

Standards	IEC 60947-5-1 IEC 60947-4-1 IEC 60947-1
Product Certifications	EAC CE
Ip Degree Of Protection	IP2X conforming to IEC 60529
Protective Treatment	TH (pollution degree 3) conforming to IEC 60068-2-30 test Db

Permissible Ambient Air Temperature Around The Device	-20…70 °C at Uc -60…80 °C storage -5…55 °C operation
Operating Altitude	3000 m without derating
Fire Resistance	850 °C conforming to IEC 60695-2-1
Mechanical Robustness	Vibrations contactor open (1.5 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor open (6 Gn for 11 ms) Shocks contactor closed (7 Gn for 11 ms)
Height	158 mm
Width	120 mm
Depth	132 mm
Net Weight	2.3 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	18 cm
Package 1 Width	17 cm
Package 1 Length	20.7 cm
Package 1 Weight	2.4 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 >

RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

Certifications & Standards

Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins