

Product datasheet

Specifications



Contactor, Easy TeSys Control, LC1E, 4P(4NO), AC-1 20A, 110V

LC1E09004F7

⚠ Discontinued on: 1 Nov 2020

⚠ Discontinued

Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contactor
Device short name	LC1E
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	20 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

Complementary

Pole contact composition	4 NO
[Ith] conventional free air thermal current	20 A (at 55 °C) for power circuit
Irms rated making capacity	90 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	72 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	105 A 40 °C - 10 s for power circuit 61 A 40 °C - 60 s for power circuit 30 A 40 °C - 600 s for power circuit
Associated fuse rating	12 A gG at <= 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm - Ith 20 A 50 Hz for power circuit
Power dissipation per pole	0.2 W AC-3 1.6 W AC-1
[Ui] rated insulation voltage	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
Mechanical durability	10000000 cycles
Electrical durability	1400000 cycles AC-3 150000 cycles AC-1
Control circuit type	AC at 50/60 Hz

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

Control circuit voltage limits	0.85...1.1 Uc (-5...55 °C):operational 50/60 Hz 0.3...0.6 Uc (-5...55 °C):drop-out 50/60 Hz
Inrush power in VA	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2...3 W for control circuit
Operating time	12...22 ms on closing 4...19 ms on opening
Maximum operating rate	1800 cyc/h 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: solid without 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: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with 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
Tightening torque	Power circuit: 1.2 N.m Control circuit: 1.2 N.m
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	EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-5-1 GB/T 14048.1 GB/T 14048.4 GB/T 14048.5
Product certifications	CB Scheme CCC CE EAC
IP degree of protection	IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30
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 (7 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms)
Height	74 mm
Width	45 mm
Depth	80 mm
Net weight	0.34 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18
----------------------	----



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins