

Product datasheet

Specifications



Easy TeSys contactor 3P(3 NO) - AC-3 - ≤ 440 V 80A - 48 V AC coil

LC1E80E7

Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contactors
Device short name	LC1E
contactor application	Resistive load Motor control
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	80 A (at ≤ 55 °C) at ≤ 440 V AC AC-3 for power circuit 110 A (at ≤ 55 °C) at ≤ 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

Complementary

Motor power kW	22 kW at 220...230 V AC 50/60 Hz 37 kW at 380...400 V 45 kW at 415 V 45 kW at 440 V 45 kW at 500 V 45 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	100 A (at 60 °C) for power circuit
Irms rated making capacity	800 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	640 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 320 A 40 °C - 60 s for power circuit 135 A 40 °C - 600 s for power circuit
Associated fuse rating	10 A gG at ≤ 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 160 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	0.8 mOhm - Ith 110 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3 9.7 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 coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	3000000 cycles
Electrical durability	350000 cycles AC-1 900000 cycles AC-3
Control circuit type	AC at 50/60 Hz
Control circuit voltage limits	0.85...1.1 U _c (-5...55 °C):operational 50/60 Hz 0.3...0.6 U _c (-5...55 °C):drop-out 50/60 Hz
Inrush power in VA	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	22 VA 60 Hz cos phi 0.3 (at 20 °C) 20 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	6...10 W for control circuit
Operating time	20...35 ms on closing 6...30 ms on opening
Maximum operating rate	1200 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 4...16 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 4...50 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 12 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	DIN rail Plate

Environment

Standards	IEC 60947-4-1 IEC 60947-5-1 IEC 60947-1
product certifications	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 (6 Gn for 11 ms) Shocks contactor closed (7 Gn for 11 ms)
Height	127 mm
Width	85 mm
Depth	121 mm
Net weight	1.52 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.1 cm
Package 1 Width	8.5 cm
Package 1 Length	12.7 cm
Package 1 Weight	1.52 g

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-CO₂ 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

Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Compliant
[EU RoHS Declaration](#)

China Rohs Regulation [China RoHS declaration](#)

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](#)

Offer Marketing Illustration

Product benefits / Features

Easy TeSys Contactors



Designed for the essential

Deliver the best balance between performance and budget without any compromise on quality



Easy to use

Easier to install and operate with multi-standard screws



Cost-effective

Provides a cost-effective solution to a simple application



Offer Marketing Illustration

Product benefits / Features



Easy TeSys Contactors
Technical Benefits

- 9 sizes cover common applications from 6 to 630A.
- Designed to meet the requirements of Electro-domestic and HVAC applications.
- Various Relay Coil Voltages: A.C.
- It can cover -5°C to 55°C working temperature and mounted by DIN-rail, No derating up to 3000m altitude.
- 2.2kW to 335kW (AC3/400V)
- Multi-standards certified (IEC, CCC, EAC) and Green Premium compliant (RoHs/Reach).

Offer Marketing Illustration

Product benefits / Features



Easy TeSys Contactors
Range Accessories

Mechanical interlock

Auxiliary contact block

Time delay auxiliary contact block

Terminal block

Suppressor module

The image displays a collection of electrical accessories for Easy TeSys contactors. At the top left, a large contactor is shown against a green circular background. Below it, six different accessories are arranged in two rows. The first row includes a mechanical interlock (two black plastic pieces) and an auxiliary contact block (two grey modules with orange handles). The second row includes a time delay auxiliary contact block (a grey module with a circular dial), a terminal block (a black plastic component with multiple terminals), and a suppressor module (a tan-colored component with two terminals).

Technical Illustration

Assembly's dimensions

mm
[in]

