

Product datasheet

Specifications



Contactors, Easy TeSys Control, LC1E, 3P(3NO), AC-3/AC-3e, <=440V, 50A, 380V AC coil, 60Hz

LC1E50Q6

⚠ Discontinued on: 1 Nov 2020

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Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contactors
Device short name	LC1E
Contactors application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	50 A (at <=55 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <=55 °C) at <= 440 V AC AC-3e for power circuit 70 A (at <=55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	380 V AC 60 Hz

Complementary

Motor power kW	11 kW at 220/230 V AC 50/60 Hz 22 kW at 380/400 V AC 22 kW at 415/440 V AC 30 kW at 500 V AC 30 kW at 660/690 V AC 33 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	70 A (at 55 °C) for power circuit
Irms rated making capacity	650 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	425 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	400 A 40 °C - 10 s for power circuit 208 A 40 °C - 60 s for power circuit 84 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 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	1.5 mOhm - Ith 70 A 50 Hz for power circuit
Power dissipation per pole	3.8 W AC-3 7.4 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	5000000 cycles
Electrical durability	350000 cycles AC-1 900000 cycles AC-3
Control circuit type	AC at 60 Hz
Control circuit voltage limits	0.85...1.1 U _c (-5...55 °C):operational 60 Hz 0.3...0.6 U _c (-5...55 °C):drop-out 60 Hz
Inrush power in VA	160 VA 50 Hz cos phi 0.75 (at 20 °C) 140 VA 60 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) 13 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	6...10 W for control circuit
Operating time	20...26 ms on closing 8...12 ms on opening
Maximum operating rate	1200 cyc/h 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5...16 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5...25 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5...16 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 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...4 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
Tightening torque	Control circuit: 1.2 N.m Power circuit: 5 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	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 EN/IEC 60335-1:Clause 30.2 EN/IEC 60335-2-40:Annex JJ
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 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	127 mm
Width	75 mm
Depth	114 mm
Net weight	0.98 kg

Packing Units

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

Contractual warranty

Warranty (in months)	18
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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