

Product datasheet

Specifications



Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3/ AC-3e, <=440V, 38A, 380V AC coil, 50/60Hz, 1NC auxiliary contact

LC1E3801Q7

⚠ Discontinued on: May 19, 2023

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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-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	38 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 38 A (at <55 °C) at <= 440 V AC AC-3e for power circuit 50 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	380 V AC 50/60 Hz

Complementary

Motor power kW	9 kW at 220/230 V AC 18.5 kW at 380/400 V AC 18.5 kW at 415/440 V AC 50/60 Hz 18.5 kW at 500 V AC 18.5 kW at 660/690 V AC 18.5 kW at 440 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	50 A (at 55 °C) for power circuit
Irms rated making capacity	494 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	323 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	310 A 40 °C - 10 s for power circuit 150 A 40 °C - 60 s for power circuit 60 A 40 °C - 600 s for power circuit
Associated fuse rating	63 A gG at <= 690 V coordination type 1 for power circuit 10 A gG at <= 690 V for auxiliary contact circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm - Ith 50 A 50 Hz for power circuit
Power dissipation per pole	2.9 W AC-3 5 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III

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

Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	8000000 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 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...6 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...10 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...10 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 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: 2.1 N.m
Auxiliary contact composition	1 NC
Minimum switching voltage	17 V for auxiliary contact circuit
Minimum switching current	5 mA for auxiliary contact circuit
Insulation resistance	> 10 MOhm for auxiliary contact 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 IS/IEC 60947-1 IS/IEC 60947-4-1 IS/IEC 60947-5-1
Product certifications	CB Scheme CCC CE EAC BIS
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 closed (10 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)
Height	84 mm
Width	56 mm
Depth	86 mm
Product weight	0.45 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.6 cm
Package 1 Width	8.4 cm
Package 1 Length	5.6 cm
Package 1 Weight	449 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	11.184 kg

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

Total lifecycle Carbon footprint	380 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	4 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	375 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.6 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	Free of Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	55
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins