

Product datasheet

Specifications



Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3/ AC-3e, <=440V, 18A, 110V AC coil, 60Hz, 1NC auxiliary contact

LC1E1801F6

⚠ Discontinued on: 23 Jan 2021

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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	18 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 18 A (at <55 °C) at <= 440 V AC AC-3e for power circuit 32 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	110 V AC 60 Hz

Complementary

Motor power kW	4 kW at 220/230 V AC 50/60 Hz 7.5 kW at 380/400 V AC 9 kW at 415/440 V AC 9 kW at 500 V AC 9 kW at 660/690 V AC 10 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	32 A (at 55 °C) for power circuit
Irms rated making capacity	234 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	153 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	145 A 40 °C - 10 s for power circuit 84 A 40 °C - 60 s for power circuit 40 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 35 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power dissipation per pole	0.81 W AC-3 2.6 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1

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

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	10000000 cycles
Electrical durability	300000 cycles AC-1 1200000 cycles AC-3
Control circuit type	AC at 60 Hz
Control circuit voltage limits	0.85...1.1 Uc (-5...55 °C):operational 60 Hz 0.3...0.6 Uc (-5...55 °C):drop-out 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 without cable end Power circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...6 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5...6 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...6 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 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...2.5 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...4 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
Auxiliary contact composition	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	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 (7 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms)
Height	74 mm
Width	45 mm
Depth	80 mm
Net weight	0.3 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.31 cm
Package 1 Width	7.4 cm
Package 1 Length	4.82 cm
Package 1 Weight	349 g
Unit Type of Package 2	S02
Number of Units in Package 2	36
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	12.972 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	263 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	261 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.

Use Better



Materials and Substances

EU RoHS Directive	Compliant
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Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	21
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