

# Product datasheet

Specifications



## Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3/AC-3e, <=440V, 18A, 48V AC coil, 50Hz, 1NC auxiliary contact

LC1E1801E5

⚠ Discontinued on: 1 Nov 2020

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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	48 V AC 50 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

Excluding VAT, FCA Jabal Ali & amp; are subject to change – check with your local distributor.

<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV coil not connected to the power circuit conforming to IEC 60947
<b>Mechanical durability</b>	10000000 cycles
<b>Electrical durability</b>	300000 cycles AC-1 1200000 cycles AC-3
<b>Control circuit type</b>	AC at 50 Hz
<b>Control circuit voltage limits</b>	0.85...1.1 U <sub>c</sub> (-5...55 °C):operational 50 Hz 0.3...0.6 U <sub>c</sub> (-5...55 °C):drop-out 50 Hz
<b>Inrush power in VA</b>	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	2...3 W for control circuit
<b>Operating time</b>	12...22 ms on closing 4...19 ms on opening
<b>Maximum operating rate</b>	1800 cyc/h 60 °C
<b>Connections - terminals</b>	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening torque</b>	Power circuit: 1.2 N.m Control circuit: 1.2 N.m
<b>Auxiliary contact composition</b>	1 NC
<b>Minimum switching voltage</b>	17 V for control circuit
<b>Minimum switching current</b>	5 mA for control circuit
<b>Insulation resistance</b>	> 10 MOhm for control circuit
<b>Non-overlap time</b>	1.5 ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
<b>Mounting support</b>	Plate DIN rail

## Environment

<b>Standards</b>	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
<b>Product certifications</b>	CB Scheme CCC CE EAC
<b>IP degree of protection</b>	IP2X conforming to IEC 60529
<b>Protective treatment</b>	TH (pollution degree 3) conforming to IEC 60068-2-30 test Db
<b>Permissible ambient air temperature around the device</b>	-20...70 °C at Uc -60...80 °C storage -5...55 °C operation
<b>Operating altitude</b>	3000 m without derating
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Mechanical robustness</b>	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)
<b>Height</b>	74 mm
<b>Width</b>	45 mm
<b>Depth</b>	80 mm
<b>Net weight</b>	0.3 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	8.31 cm
<b>Package 1 Width</b>	7.4 cm
<b>Package 1 Length</b>	4.82 cm
<b>Package 1 Weight</b>	349 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	36
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	12.972 kg

## Contractual warranty

<b>Warranty (in months)</b>	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.
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.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better



### Materials and Substances

EU RoHS Directive	<a href="#">Compliant</a>
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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	Nej
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins