

# Product datasheet

Specifications



## Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3/AC-3e, <=440V, 25A, 24V DC coil, 1 NC auxiliary contact

LC1E2501BD

### 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	25 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 25 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	24 V DC

### Complementary

Motor power kW	5.5 kW at 220/230 V AC 50/60 Hz 11 kW at 380/400 V AC 50/60 Hz 11 kW at 415/440 V AC 50/60 Hz 11 kW at 500 V AC 50/60 Hz 11 kW at 660/690 V AC 50/60 Hz 15 kW at 660...690 V AC 50/60 Hz
Pole contact composition	3 NO
[Ith] conventional free air thermal current	32 A (at 55 °C) for power circuit
Irms rated making capacity	325 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	212.5 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	240 A 40 °C - 10 s for power circuit 120 A 40 °C - 60 s for power circuit 50 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 40 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	1.6 W AC-3 3.2 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3

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

<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>	1400000 cycles AC-3 at $U_e \leq 440$ V 350000 cycles AC-1 at $U_e \leq 440$ V
<b>Control circuit type</b>	DC
<b>Control circuit voltage limits</b>	0.85...1.1 $U_c$ (-5...55 °C):operational DC 0.1...0.25 $U_c$ (-5...55 °C):drop-out DC
<b>Inrush power in W</b>	6 W (at 20 °C)
<b>Hold-in power consumption in W</b>	6 W at 20 °C
<b>Operating time</b>	53...72 ms on closing 16...24 ms on opening
<b>Time constant</b>	28 ms
<b>Maximum operating rate</b>	1800 cyc/h 60 °C
<b>Connections - terminals</b>	Power circuit: screw clamp terminals 1 1...6 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...10 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...10 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: 1.7 N.m Control circuit: 1.7 N.m
<b>Auxiliary contact composition</b>	1 NC
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<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
<b>Product certifications</b>	CB Scheme CCC CE EAC
<b>IP degree of protection</b>	IP20 conforming to IEC 60529

<b>Protective treatment</b>	TH 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>	Shocks contactor open (5 Gn for 11 ms) conforming to IEC 60068-2-7 Shocks contactor closed (10 Gn for 11 ms) conforming to IEC 60068-2-7 Vibrations contactor open (1.5 Gn, 5...300 Hz) conforming to IEC 60068-2-6 Vibrations contactor closed (3 Gn, 5...300 Hz) conforming to IEC 60068-2-6
<b>Height</b>	77 mm
<b>Width</b>	45 mm
<b>Depth</b>	93 mm
<b>Net weight</b>	0.48 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>	5.000 cm
<b>Package 1 Width</b>	9.400 cm
<b>Package 1 Length</b>	11.300 cm
<b>Package 1 Weight</b>	490.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	7.648 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	555 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Carbon footprint of the manufacturing phase [A1 to A3]	3 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]	551 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	66d8b16b-4ee4-4193-a748-b691b2425131
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

## Use Longer




### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Recyclability potential, in %	73
End of life manual availability	<a href="#">End of Life Information</a>
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

Technical Illustration

Assembly's dimensions

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