

# Product datasheet

Specifications



## Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3, <=440V, 38A, 24V DC coil, 1 NO auxiliary contact

LC1E3810BD

### 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-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	24 V DC

### Complementary

Motor power kW	18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3) 9 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 18.5 kW at 415 V AC 50/60 Hz (AC-3) 18.5 kW at 440 V AC 50/60 Hz (AC-3)
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	10 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit
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
Pollution degree	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>	8000000 cycles
<b>Electrical durability</b>	900000 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 with cable end Power circuit: screw clamp terminals 2 1...4 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: flexible without cable end Power circuit: screw clamp terminals 2 1.5...6 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: 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...4 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...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening torque</b>	Power circuit: 2.5 N.m Control circuit: 1.7 N.m
<b>Auxiliary contact composition</b>	1 NO
<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>	IEC 60947-4-1 IEC 60947-5-1
<b>product certifications</b>	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 $U_c$ -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>	85 mm
<b>Width</b>	56 mm
<b>Depth</b>	99 mm
<b>Net weight</b>	0.55 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>	550.000 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>	8.552 kg

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Rohs Exemption Information Yes

## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>