Product datasheet

Specifications

Contactor,Easy TeSys Control,LC1E, 3P(3NO),AC-3,<=440V,18A,24V DC coil,1 NO auxiliary contact

LC1E1810BD

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	24 V DC

Complementary

Motor power kW	4 kW at 220...230 V AC 50/60 Hz (AC-3) 7.5 kW at 380...400 V AC 50/60 Hz (AC-3) 9 kW at 415 V AC 50/60 Hz (AC-3) 9 kW at 440 V AC 50/60 Hz (AC-3) 10 kW at 500 V AC 50/60 Hz (AC-3) 10 kW at 660...690 V AC 50/60 Hz (AC-3)
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
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	1400000 cycles AC-3 at Ue <= 440 V 300000 cycles AC-1 at Ue <= 440 V
Control circuit type	DC
Control circuit voltage limits	0.85...1.1 Uc (-5…55 °C):operational DC 0.1...0.25 Uc (-5…55 °C):drop-out DC
Inrush power in W	6 W (at 20 °C)
Hold-in power consumption in W	6 W at 20 °C
Operating time	53...72 ms on closing 16...24 ms on opening
Time constant	28 ms
Maximum operating rate	1800 cyc/h 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5…4 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1.5…4 mm² - cable stiffness: flexible without 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…4 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…2.5 mm² - cable stiffness: flexible with cable end Control circuit: 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: 2 1…4 mm² - cable stiffness: solid without cable end
Tightening torque	Power circuit: 1.7 N.m Control circuit: 1.7 N.m
Auxiliary contact composition	1 NO
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
mounting support	DIN rail Plate

Environment

Standards	IEC 60947-4-1 IEC 60947-5-1
product certifications	EAC CE
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TH 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	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
Height	77 mm
Width	45 mm
Depth	93 mm
net weight	0.48 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.200 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	488.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.642 kg

Sustainability

Green Premium^{TM} 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_2 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	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Technical Illustration

Dimensions