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-3e AC-1	
poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz	
[le] 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 660690 V AC 50/60 Hz (AC-3) 9 kW at 220230 V AC 50/60 Hz (AC-3) 18.5 kW at 380400 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	
[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947	
Mechanical durability	8000000 cycles	
Electrical durability	900000 cycles AC-3 at Ue <= 440 V 350000 cycles AC-1 at Ue <= 440 V	
Control circuit type	DC	
Control circuit voltage limits	0.851.1 Uc (-555 °C):operational DC 0.10.25 Uc (-555 °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	5372 ms on closing 1624 ms on opening	
Time constant	28 ms	
Maximum operating rate	1800 cyc/h 60 °C	
Connections - terminals	Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.510 mm² - cable stiffness: flexible without	
Tightening torque	cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.510 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: 1 14 mm² - cable stiffness: solid without cable end Control circuit: 2 14 mm² - cable stiffness: solid without cable end Control circuit: 2 14 mm² - cable stiffness: solid without cable end	
rightening torque	Power circuit: 2.5 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	Plate DIN rail	

Standards	IEC 60947-4-1 IEC 60947-5-1	
product certifications	EAC	
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	-2070 °C at Uc -6080 °C storage -555 °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, 5300 Hz) conforming to IEC 60068-2-6 Vibrations contactor closed (3 Gn, 5300 Hz) conforming to IEC 60068-2-6	
Height	85 mm	
Width	56 mm	
Depth	99 mm	
net weight	0.55 kg	

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.400 cm
Package 1 Length	11.300 cm
Package 1 Weight	550.000 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	8.552 kg

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO2 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

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



