Product datasheet

Specifications

Easy TeSys contactor 3P(3 NO) - AC-3 - <= 440 V 38A - 24 V AC coil

LC1E3810B7

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	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 AC 50/60 Hz

Complementary

Motor power kW	18.5 kW at 500 V 18.5 kW at 660...690 V 9 kW at 220...230 V AC 50/60 Hz 18.5 kW at 380...400 V 18.5 kW at 415 V 18.5 kW at 440 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	50 A (at 55 °C) for power circuit
Irms rated making capacity	380 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	304 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	60 A 40 °C - 600 s for power circuit 310 A 40 °C - 10 s for power circuit 150 A 40 °C - 60 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	350000 cycles AC-1 900000 cycles AC-3
Control circuit type	AC at 50/60 Hz
Control circuit voltage limits	0.85...1.1 Uc (-5…55 °C):operational 50/60 Hz 0.3...0.6 Uc (-5…55 °C):drop-out 50/60 Hz
Inrush power in VA	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2…3 W for control circuit
Operating time	12...22 ms on closing 4...19 ms on opening
Maximum operating rate	1800 cyc/h 60 °C
Connections - terminals	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: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid 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 Power circuit: screw clamp terminals 1 1…6 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible with cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 2.1 N.m
Auxiliary contact composition	1 NO
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
Mounting support	DIN rail Plate

Environment

Standards	IEC 60947-5-1 IEC 60947-4-1 IEC 60947-1
Product certifications	EAC CE
IP degree of protection	IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) 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	Vibrations contactor open (1.5 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor closed (10 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)
Height	84 mm
width	56 mm
Depth	86 mm
Net weight	0.45 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.800 cm
Package 1 Width	8.800 cm
Package 1 Length	9.200 cm
Package 1 Weight	451.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	11.363 kg

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.

How this information helps you

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**400**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**REACh Declaration**
China RoHS Regulation	**China RoHS declaration**

Use Again

Repack and remanufacture

Circularity Profile	**End of Life Information**
WEEE	 **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Take-back	**No**

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Technical Illustration

Assembly's dimensions