Product datasheet

Specifications





Easy TeSys contactor 3P(3 NO) -AC-3 - <= 440 V 38A - 415 V AC coil

LC1E3810N5

Main

Range	Easy TeSys	
Range of product	Easy TeSys Control	
Product or component type	Contactor	
Device short name	LC1E	
contactor application	Resistive load Motor control	
Utilisation category	AC-1 AC-3	
poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz	
[le] rated operational current	50 A (at <55 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
[Uc] control circuit voltage	415 V AC 50 Hz	

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	l 50 A (at 55 °C)	
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 Hz
Control circuit voltage limits	0.851.1 Uc (-555 °C):operational 50 Hz 0.30.6 Uc (-555 °C):drop-out 50 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	23 W for control circuit
Operating time	1222 ms on closing 419 ms on opening
Maximum operating rate	1800 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 12.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1.56 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 16 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 14 mm ² - 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

Environment

Standards	IEC 60947-1 IEC 60947-4-1 IEC 60947-5-1	
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	-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	Vibrations contactor open (1.5 Gn, 5300 Hz) Vibrations contactor closed (3 Gn, 5300 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	5.700 cm
Package 1 Width	8.600 cm
Package 1 Length	9.200 cm
Package 1 Weight	450.000 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	11.302 kg

Contractual warranty

Warranty

18 months

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

Reach Free Of Svhc
 Toxic Heavy Metal Free
 Mercury Free
 Rohs Exemption Information Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
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

Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features



Time delay auxiliary contact block

Terminal block

Suppressor module

Offer Marketing Illustration

Product benefits / Features



Technical Illustration

Assembly's dimensions



