

# LC1N1801E5N

Contacteur, Easy TeSys

Control, LC1N, 3P(3NO), AC-3, <=440V, 18A, 48V

AC coil, 50Hz, 1NC auxiliary contact, China



## Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contacteur
Device short name	LC1N
Contacteur application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-4
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 7.7 A (at <60 °C) at <= 440 V AC AC-4 for power circuit
[Uc] control circuit voltage	48 V AC 50 Hz

## Complementary

Motor power kW	4 kW at 220...230 V AC 50/60 Hz 7.5 kW at 380...400 V AC 50/60 Hz 9 kW at 415...440 V AC 50/60 Hz 10 kW at 500 V AC 50/60 Hz 10 kW at 660...690 V AC 50/60 Hz
Pole contact composition	3 NO
[Ith] conventional free air thermal current	25 A (at 60 °C) for power circuit
Irms rated making capacity	180 A at 380 V AC for power circuit conforming to IEC 60947-4-1 140 A AC for auxiliary contact conforming to IEC 60947-5-1
Rated breaking capacity	144 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	300000 Cycles AC-1 1200000 Cycles AC-3 200000 cycles AC-4
Control circuit type	AC at 50 Hz

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Control circuit voltage limits	0.85...1.1 U <sub>c</sub> (-5...55 °C):operational 50 Hz 0.3...0.6 U <sub>c</sub> (-5...55 °C):drop-out 50 Hz
Inrush power in VA	95 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	8.5 VA 50 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	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with 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 Power circuit: screw clamp terminals 1 1.5...6 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 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end
Tightening torque	Power circuit: 1.2 N.m Control circuit: 1.2 N.m
Auxiliary contact composition	1 NC
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	Plate DIN rail

## Environment

Standards	GB 14048.4 EN 60947-1 IEC 60947-4-1 EN 60947-4-1 IEC 60947-1
Product certifications	CCC
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Permissible ambient air temperature around the device	-5...55 °C operation -60...80 °C storage -20...70 °C at U <sub>c</sub>
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 open (7 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms)
Height	74 mm
Width	45 mm
Depth	80 mm
Net weight	0.3 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	7.4 cm
Package 1 Length	8 cm
Package 1 Weight	320 g

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins