



Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contactor
Device short name	LC1N
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 50/60 Hz
[Ie] rated operational current	80 A (at ≤60 °C) at ≤ 440 V AC AC-3 for power circuit 100 A (at ≤60 °C) at ≤ 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

Complementary

Pole contact composition	4 NO
[Ith] conventional free air thermal current	100 A (at 60 °C) for power circuit
Irms rated making capacity	800 A at 380 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	640 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	640 A 40 °C - 10 s for power circuit 320 A 40 °C - 60 s for power circuit 135 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 60947-5-1 160 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	0.8 mΩ - Ith 100 A 50 Hz for power circuit
Power dissipation per pole	9.7 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	3000000 cycles
Electrical durability	350000 cycles AC-1
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	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	22 VA 60 Hz cos phi 0.3 (at 20 °C) 20 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	6...10 W for control circuit
Operating time	20...35 ms on closing 6...30 ms on opening
Maximum operating rate	1200 cyc/h 60 °C

Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...2.5 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 4...16 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 4...25 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 12 N.m
Mounting support	DIN rail Plate

Environment

Standards	GB 14048.4 IEC 60947-4-1 EN 60947-1 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 _c
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 (6 Gn for 11 ms) Shocks contactor closed (7 Gn for 11 ms)
Height	127 mm
Width	95 mm
Depth	120 mm
Net weight	1.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15 cm
Package 1 Width	10.7 cm
Package 1 Length	13.5 cm
Package 1 Weight	1620.42 g
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	10.28 kg
Unit Type of Package 3	P06
Number of Units in Package 3	48
Package 3 Height	75 cm

Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	92.24 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
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