

# Product datasheet

Specifications



contactor - EasyPact TVS - 3P (3 NO) - AC-3 - <= 440 V 630 A - 415 V AC coil

LC1E630N7

## Main

Range	EasyPact
Product or component type	Contactor
Device short name	LC1E
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	630 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 1000 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	415 V AC 50/60 Hz

## Complementary

Motor power kW	185 kW at 220...230 V AC 50/60 Hz 335 kW at 380...400 V 375 kW at 415 V 400 kW at 440 V 400 kW at 500 V 450 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	1000 A (at 40 °C) for power circuit
Irms rated making capacity	6300 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	5040 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	5050 A 40 °C - 10 s for power circuit
Associated fuse rating	10 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 800 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.12 mOhm - Ith 1000 A 50 Hz for power circuit
Power dissipation per pole	48 W AC-3 120 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	8 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	400000 cycles
Electrical durability	200000 cycles AC-1 600000 cycles AC-3
Control circuit type	AC at 50/60 Hz
Control circuit voltage limits	0.85...1.1 Uc (55 °C):operational 50/60 Hz 0.25...0.5 Uc (55 °C):drop-out 50/60 Hz
Inrush power in VA	1650 VA 50 Hz cos phi 0.9 (at 20 °C) 1650 VA 60 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	22 VA 50 Hz cos phi 0.9 (at 20 °C) 22 VA 60 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	20 W for control circuit 20 W
Operating time	40...80 ms on closing 100...200 ms on opening
Maximum operating rate	1200 cyc/h 55 °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: cable with lug 2 Power circuit: bars 2 - busbar cross section: 60 x 5 mm
Tightening torque	Control circuit: 1.2 N.m Power circuit: 58 N.m
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

## Environment

Standards	IEC 60947-4-1 IEC 60947-5-1 IEC 60947-1
Product certifications	EAC CE
IP degree of protection	IP00 conforming to IEC 60529
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	Shocks contactor open (6 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	464 mm
Width	309 mm
Depth	255 mm
Net weight	18.6 kg

## Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
Package 1 Height	43.0 cm
Package 1 Width	36.0 cm
Package 1 Length	31.1 cm
Package 1 Weight	19.6 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Recommended replacement(s)