

# Product datasheet

Specifications



contactor - EasyPact TVS - 3P (3 NO) - AC-3 - <= 440 V 500 A - 415 V AC coil

LC1E500N7

Discontinued on: 19 January 2022

Discontinued

## 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	500 A (at <=55 °C) at <= 440 V AC AC-3 for power circuit 700 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	147 kW at 220...230 V AC 50/60 Hz 250 kW at 380...400 V 280 kW at 415 V 295 kW at 440 V 335 kW at 500 V 355 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	700 A (at 40 °C) for power circuit
Irms rated making capacity	5000 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	4000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	4200 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	0.18 mOhm - Ith 700 A 50 Hz for power circuit
Power dissipation per pole	45 W AC-3 88 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3

<b>[Uimp] rated impulse withstand voltage</b>	8 kV coil not connected to the power circuit conforming to IEC 60947
<b>Mechanical durability</b>	4000000 cycles
<b>Electrical durability</b>	250000 cycles AC-1 600000 cycles AC-3
<b>Control circuit type</b>	AC at 50/60 Hz
<b>Control circuit voltage limits</b>	0.85...1.1 Uc (55 °C):operational 50/60 Hz 0.35...0.5 Uc (55 °C):drop-out 50/60 Hz
<b>Inrush power in VA</b>	1100 VA 50 Hz cos phi 0.9 (at 20 °C) 1100 VA 60 Hz cos phi 0.9 (at 20 °C)
<b>Hold-in power consumption in VA</b>	18 VA 50 Hz cos phi 0.9 (at 20 °C) 18 VA 60 Hz cos phi 0.9 (at 20 °C)
<b>Heat dissipation</b>	18 W for control circuit 18 W
<b>Operating time</b>	100...170 ms on opening 40...75 ms on closing
<b>Maximum operating rate</b>	2400 cyc/h 55 °C
<b>Connections - terminals</b>	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 - external diameter: 240 mm Power circuit: bars 2 - busbar cross section: 40 x 5 mm
<b>Tightening torque</b>	Control circuit: 1.2 N.m Power circuit: 35 N.m
<b>Minimum switching voltage</b>	17 V for control circuit
<b>Minimum switching current</b>	5 mA for control circuit
<b>Insulation resistance</b>	> 10 MOhm for control circuit
<b>Non-overlap time</b>	1.5 ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
<b>Mounting support</b>	Plate

## Environment

<b>Standards</b>	IEC 60947-5-1 IEC 60947-1 IEC 60947-4-1
<b>Product certifications</b>	EAC CE
<b>IP degree of protection</b>	IP00 conforming to IEC 60529
<b>Permissible ambient air temperature around the device</b>	-20...70 °C at Uc -60...80 °C storage -5...55 °C operation
<b>Operating altitude</b>	3000 m without derating
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Mechanical robustness</b>	Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (9 Gn for 11 ms)
<b>Height</b>	400 mm
<b>Width</b>	233 mm
<b>Depth</b>	232 mm
<b>Net weight</b>	11.35 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
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Number of Units in Package 1	1
Package 1 Height	24.5 cm
Package 1 Width	28.5 cm
Package 1 Length	28.5 cm
Package 1 Weight	11.35 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)