

Product data sheet

Characteristics

LC1E400F7

Contactor, EasyPact

TVS, 3P(3NO), AC-3, ≤440V, 400A, 110V AC coil



Main

Range	EasyPact
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
[Ie] rated operational current	400 A (at ≤55 °C) at ≤ 440 V AC AC-3 for power circuit 500 A (at ≤40 °C) at ≤ 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

Complementary

Motor power kW	110 kW at 220...230 V AC 50/60 Hz 200 kW at 380...400 V 220 kW at 415 V 250 kW at 440 V 257 kW at 500 V 280 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	500 A (at 40 °C) for power circuit
Irms rated making capacity	4000 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	3200 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	3600 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 60947-5-1 630 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	0.26 mOhm - Ith 500 A 50 Hz for power circuit
Power dissipation per pole	42 W AC-3 65 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	4000000 cycles
Electrical durability	250000 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 0.35...0.5 Uc (55 °C):drop-out 50/60 Hz
Inrush power in VA	1075 VA 50 Hz cos phi 0.9 (at 20 °C) 1075 VA 60 Hz cos phi 0.9 (at 20 °C)

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Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.9 (at 20 °C) 15 VA 60 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	14 W for control circuit
Operating time	100...170 ms on opening 40...75 ms on closing
Maximum operating rate	2400 cyc/h 55 °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 1 1...4 mm ² - cable stiffness: flexible with 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 Power circuit: cable with lug 2 - external diameter: 150 mm Power circuit: bars 2 - busbar cross section: 30 x 5 mm
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 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 60947-5-1 IEC 60947-4-1 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 U _c -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	Vibrations contactor open (1.5 Gn, 5...300 Hz) Shocks contactor open (6 Gn for 11 ms) Vibrations contactor closed (5 Gn, 5...300 Hz) Shocks contactor closed (15 Gn for 11 ms)
Height	375 mm
Width	213 mm
Depth	219 mm
Product weight	9.1 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	30.8 cm
Package 1 Width	23.0 cm
Package 1 Length	23.0 cm
Package 1 Weight	9.9 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
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