Product datasheet Characteristics

LC1E50M5

EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 50A - 220 V AC coil





Range	EasyPact
Product name	EasyPact TVS
Product or component type	Contactor
Device short name	LC1E
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[le] rated operational current	50 A (at <60 °C) at <= 440 V AC AC-3for power circuit 70 A (at <55 °C) at <= 440 V AC AC-1for power circuit
Motor power kW	15 kW at 220230 V AC 50/60 Hz (AC-3) 22 kW at 380400 V AC 50/60 Hz (AC-3) 25 kW at 415 V AC 50/60 Hz (AC-3) 30 kW at 440 V AC 50/60 Hz (AC-3) 30 kW at 500 V AC 50/60 Hz (AC-3) 33 kW at 660690 V AC 50/60 Hz (AC-3)
Control circuit type	AC at 50 Hz
[Uc] control circuit voltage	220 V AC 50 Hz
Height	127 mm
Width	75 mm
Depth	114 mm
Product weight	0.98 kg
Colour	Grey (RAL 7011)

Complementary

- Compression of		_
Auxiliary contact composition	1 NO + 1 NC	mer:
[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947	scla

[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Irms rated making capacity	500 A at 440 V ACfor power circuit conforming to IEC 60947-4-1
Rated breaking capacity	400 A at 440 Vfor power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	400 A 40 °C - 10 sfor power circuit 208 A 40 °C - 60 sfor power circuit 84 A 40 °C - 600 sfor power circuit
Associated fuse rating	10 A gG at <= 690 V coordination type 1for control circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1for power circuit
Average impedance	1.5 mOhm - Ith 70 A 50 Hzfor power circuit
Power dissipation per pole	3.8 W AC-3 7.4 W AC-1
Control circuit voltage limits	Operational: 0.851.1 Uc at 50 Hz (at <55 °C) Drop-out: 0.30.6 Uc at 50 Hz (at <55 °C)
Operating time	2026 ms on closing 812 ms on opening
Mechanical durability	5000000 cycles
Maximum operating rate	1200 cyc/h 60 °C
Inrush power in VA	160 VA 50 Hz cos phi 0.75 (at 20 °C) 140 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 20 °C) 13 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	610 Wfor control circuit
Minimum switching current	5 mAfor control circuit
Minimum switching voltage	17 Vfor 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
Insulation resistance	> 10 MOhmfor control circuit
Electrical durability	350000 cycles AC-1 900000 cycles AC-3
Mounting support	Plate DIN rail
Connections - terminals	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.525 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.525 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 5 N.m

Environment

Standards	IEC 60947-1 IEC 60947-5-1 IEC 60947-4-1
Product certifications	EAC
IP degree of protection	IP2x conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Pollution degree	3
Ambient air temperature for operation	-555 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-2070 °C at Uc
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Vibrations contactor open: 1.5 Gn, 5300 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

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) Legal scope)	
Environmental Disclosure	Product Environmental Profile	

Contractual warranty

Warranty	18 months