Product data sheet
Characteristics

LC1E50M5
EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 50A - 220 V 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	50 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 70 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	220 V AC 50 Hz

Complementary

Motor power kW	15 KW at 220...230 V AC 50/60 Hz (AC-3) 22 KW at 380...400 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 660...690 V AC 50/60 Hz (AC-3)
Pole contact composition	3 NO
[Ith] conventional free air thermal current	70 A (at 55 °C)
Irms rated making capacity	500 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	400 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	400 A 40 °C - 10 s for power circuit 208 A 40 °C - 60 s for power circuit 84 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 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	1.5 MOhm - Ith 70 A 50 Hz for power circuit
Power dissipation per pole	3.8 W AC-3 7.4 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	5000000 Cycles

Electrical durability	350000 Cycles AC-1 900000 Cycles AC-3
Control circuit type	AC at 50 Hz
Control circuit voltage limits	0.85...1.1 Uc (55 °C):operational 50 Hz 0.3...0.6 Uc (55 °C):drop-out 50 Hz
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	6…10 W for control circuit
Operating time	20...26 ms on closing 8...12 ms on opening
Maximum operating rate	1200 Cyc/H 60 °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: screw clamp terminals 1 2.5…25 mm² - cable stiffness: flexible- with cable end Power circuit: screw clamp terminals 2 2.5…10 mm² - cable stiffness: flexible- with cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5…16 mm² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 5 N.m
Auxiliary contact composition	1 NO + 1 NC
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 DIN rail

Environment

Standards	IEC 60947-1 IEC 60947-5-1 IEC 60947-4-1
Product certifications	EAC CE
IP degree of protection	IP2x conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30 test Db
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	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	75 Mm
Depth	114 Mm
Product weight	0.98 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.2 Cm
Package 1 Width	8.2 Cm
Package 1 Length	13.3 Cm
Package 1 Weight	985.0 G
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	9.248 Kg
Package 3 Height	115 Cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
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

Contractual warranty

Warranty	18 months

Product Life Status : Commercialised