Product data sheet Characteristics

LC1E120U5

EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 120A - 240 V AC coil





Main

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Range	EasyPact	
Product name	EasyPact TVS	
Product or component type	Contactor	
Device short name	LC1E	±
Contactor application	Motor control Resistive load	
Utilisation category	AC-3 AC-1	oility or reliability
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	120 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 150 A (at <40 °C) at <= 440 V AC AC-1 for power circuit	for of
Motor power kW	37 kW at 220230 V AC 50/60 Hz (AC-3) 55 kW at 380400 V AC 50/60 Hz (AC-3) 59 kW at 415 V AC 50/60 Hz (AC-3) 59 kW at 440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660690 V AC 50/60 Hz (AC-3)	le for and is not to be us
Control circuit type	AC at 50 Hz	a comparing
[Uc] control circuit voltage	240 V AC 50 Hz	
Height	158 mm	
Width	120 mm	
Depth	132 mm	<u>.</u>
Net weight	2.3 kg	
		<u>.</u>

Complementary

Auxiliary contact composition	1 NO + 1 NC	- Pie
[Uimp] rated impulse withstand voltage	8 kV coil not connected to the power circuit conforming to IEC 60947	 G

[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1	
Overvoltage category	III	
Irms rated making capacity	1200 A at 440 V AC for power circuit conforming to IEC 60947-4-1	
Rated breaking capacity	960 A at 440 V for power circuit conforming to IEC 60947	
[lcw] rated short-time withstand current	1100 A 40 °C - 10 s for power circuit	
Associated fuse rating	250 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 10 A gG at <= 690 V coordination type 1 for power circuit	
Average impedance	0.6 mOhm - Ith 150 A 50 Hz for power circuit	
Power dissipation per pole	8.6 W AC-3 14 W AC-1	
Control circuit voltage limits	Operational: 0.851.1 Uc at 50 Hz (at <55 °C) Drop-out: 0.350.55 Uc at 50 Hz (at <55 °C)	
Operating time	2050 ms on closing 620 ms on opening	
Mechanical durability	400000 cycles	
Maximum operating rate	1200 cyc/h 55 °C	
Inrush power in VA	300 VA 50 Hz cos phi 0.8 (at 20 °C) 300 VA 60 Hz cos phi 0.8 (at 20 °C)	
Hold-in power consumption in VA	22 VA 50 Hz cos phi 0.3 (at 20 °C) 22 VA 60 Hz cos phi 0.3 (at 20 °C)	
Heat dissipation	38 W for control circuit	
Minimum switching current	5 mA for control circuit	
Minimum switching voltage	17 V 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	
Insulation resistance	> 10 MOhm for control circuit	
Electrical durability	800000 cycles AC-3 250000 cycles AC-1	
Mounting support	DIN rail Plate	
Connections - terminals	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 10120 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 20170 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 10120 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 20170 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: solid without cable end	
Recommended tightening torque	Power circuit: 12 N.m Control circuit: 1.2 N.m	
Max tightening torque	Power circuit: 13.5 N.m Control circuit: 1.4 N.m	

Environment

Standards	IEC 60947-1	
	IEC 60947-4-1	
	IEC 60947-5-1	
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	-2070 °C at Uc	
around the device		
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, 5300 Hz
	Shocks contactor open: 6 Gn for 11 ms Shocks contactor closed: 7 Gn for 11 ms

Packing Units

Package 1 Weight	2.300 kg	
Package 1 Height	1.900 dm	
Package 1 width	1.750 dm	
Package 1 Length	2.100 dm	

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	
/EEE The product must be disposed on European Union markets following specific waste coll never end up in rubbish bins		

Contractual warranty

Warranty	18 months	