

Product data sheet

Specifications



Contactor, EasyPact TVS, 3P(3NO), AC-3, <=440V, 25A, 240V AC coil, 50Hz, 1NC auxiliary contact

LC1E2501U5

Main

Range	EasyPact
Product or component type	Contactor
Device short name	LC1E
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	25 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 36 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	240 V AC 50 Hz

Complementary

Motor power kW	5.5 kW at 220...230 V AC 50/60 Hz 11 kW at 380...400 V 11 kW at 415 V 11 kW at 440 V 15 kW at 500 V 15 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	36 A (at 55 °C)
Irms rated making capacity	250 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	200 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	240 A 40 °C - 10 s for power circuit 120 A 40 °C - 60 s for power circuit 50 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 40 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	2.5 mOhm - Ith 36 A 50 Hz for power circuit
Power dissipation per pole	1.6 W AC-1 2.5 W AC-3
[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	1000000 cycles
Electrical durability	1200000 cycles AC-3 350000 cycles AC-1
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	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2...3 W for control circuit
Operating time	12...22 ms on closing 4...19 ms on opening
Maximum operating rate	1800 cyc/h 60 °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: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1...6 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible with cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 1.5 N.m
Auxiliary contact composition	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	DIN rail Plate

Environment

Standards	IEC 60947-1 IEC 60947-4-1 IEC 60947-5-1
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 closed (10 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)
Height	74 mm
Width	45 mm
Depth	85 mm

Net weight	0.36 kg
------------	---------

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.2 cm
Package 1 Width	5.8 cm
Package 1 Length	8.5 cm
Package 1 Weight	455.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	36
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	16.835 kg
Unit Type of Package 3	PAL
Number of Units in Package 3	576
Package 3 Height	60.0 cm
Package 3 Width	80.0 cm
Package 3 Length	576.0 cm
Package 3 Weight	262.08 kg

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
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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

Contractual warranty

Warranty	18 months
----------	-----------

Recommended replacement(s)