



### Main

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
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 110 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	22 kW at 220...230 V AC 50/60 Hz 37 kW at 380...400 V 45 kW at 415 V 45 kW at 440 V 45 kW at 500 V 45 kW at 660...690 V
Control circuit type	AC at 50 Hz
[Uc] control circuit voltage	240 V AC 50 Hz
Height	127 mm
Width	85 mm
Depth	121 mm
Net weight	1.52 kg
Colour	Grey (RAL 7011)

### Complementary

Auxiliary contact composition	1 NO + 1 NC
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[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overtoltage category	III
Irms rated making capacity	800 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	640 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	640 A 40 °C - 10 s for power circuit 320 A 40 °C - 60 s for power circuit 135 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 60947-5-1 160 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.8 mOhm - Ith 110 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3 9.7 W AC-1
Control circuit voltage limits	Operational: 0.85...1.1 Uc at 50 Hz (at <55 °C) Drop-out: 0.3...0.6 Uc at 50 Hz (at <55 °C)
Operating time	20...35 ms on closing 6...30 ms on opening
Mechanical durability	300000 cycles
Maximum operating rate	1200 cyc/h 60 °C
Inrush power in VA	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	22 VA 60 Hz cos phi 0.3 (at 20 °C) 20 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	6...10 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	350000 cycles AC-1 900000 cycles AC-3
Mounting support	DIN rail Plate
Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 4...50 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 4...16 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 4...50 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 4...50 mm <sup>2</sup> - cable stiffness: solid without cable end
Recommended tightening torque	Control circuit: 1.2 N.m Power circuit: 12 N.m
Max tightening torque	Control circuit: 1.4 N.m Power circuit: 13.5 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	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-20...70 °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, 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

### Packing Units

Package 1 Weight	1.520 kg
Package 1 Height	1.480 dm
Package 1 width	0.950 dm
Package 1 Length	1.350 dm

### Offer Sustainability

Sustainable offer status	Green Premium product
RECh Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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
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