



### Main

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|--------------------------------|--|
| Range                          | EasyPact   |
| Product name                   | EasyPact TVS   |
| Product or component type      | Contactor  |
| Device short name              | LC1E   |
| Contactor application          | Motor control<br>Resistive load  |
| Utilisation category           | AC-3<br>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 | 6 A (at <55 °C) at <= 440 V AC AC-3 for power circuit<br>20 A (at <55 °C) at <= 440 V AC AC-1 for power circuit  |
| Motor power kW                 | 1.1 kW at 220...230 V AC 50/60 Hz (AC-3)<br>2.2 kW at 380...400 V AC 50/60 Hz (AC-3)<br>2.2 kW at 415 V AC 50/60 Hz (AC-3)<br>2.2 kW at 440 V AC 50/60 Hz (AC-3)<br>3 kW at 500 V AC 50/60 Hz (AC-3)<br>3 kW at 660...690 V AC 50/60 Hz (AC-3) |
| Control circuit type           | AC at 50 Hz  |
| [Uc] control circuit voltage   | 110 V AC 50 Hz   |
| Height                         | 74 mm  |
| Width                          | 45 mm  |
| Depth                          | 80 mm  |
| Net weight                     | 0.3 kg   |
| Colour                         | Grey (RAL 7011)  |

### Complementary

|                               |      |
|-------------------------------|------|
| Auxiliary contact composition | 1 NO |
|-------------------------------|------|

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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               | 60 A at 440 V AC for power circuit conforming to IEC 60947-4-1   |
| Rated breaking capacity                  | 48 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current | 80 A 40 °C - 10 s for power circuit<br>45 A 40 °C - 60 s for power circuit<br>20 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<br>12 A gG at <= 690 V coordination type 1 for power circuit   |
| Average impedance                        | 2.5 mOhm - Ith 20 A 50 Hz for power circuit  |
| Power dissipation per pole               | 0.09 W AC-3<br>1 W AC-1  |
| Control circuit voltage limits           | Operational: 0.85...1.1 Uc at 50 Hz (at <55 °C)<br>Drop-out: 0.3...0.6 Uc at 50 Hz (at <55 °C)   |
| Operating time                           | 12...22 ms on closing<br>4...19 ms on opening  |
| Mechanical durability                    | 10000000 cycles  |
| Maximum operating rate                   | 1800 cyc/h 60 °C   |
| Inrush power in VA                       | 95 VA 50 Hz cos phi 0.75 (at 20 °C)<br>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)<br>8.5 VA 60 Hz cos phi 0.3 (at 20 °C)   |
| Heat dissipation                         | 2...3 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<br>1.5 ms on de-energisation guaranteed between NC and NO contact  |
| Insulation resistance                    | > 10 MOhm for control circuit  |
| Electrical durability                    | 1400000 cycles AC-3<br>150000 cycles AC-1  |
| Mounting support                         | Plate<br>DIN rail  |
| Connections - terminals                  | Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end |
| Recommended tightening torque            | Power circuit: 1.2 N.m<br>Control circuit: 1.2 N.m   |
| Max tightening torque                    | Power circuit: 1.4 N.m<br>Control circuit: 1.4 N.m   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | IEC 60947-1<br>IEC 60947-5-1<br>IEC 60947-4-1        |
| Product certifications                | CE<br>EAC  |
| IP degree of protection               | IP2x conforming to IEC 60529                         |
| Protective treatment                  | TH (pollution degree 3) conforming to IEC 60068-2-30 |
| 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<br>Vibrations contactor closed: 3 Gn, 5...300 Hz<br>Shocks contactor open: 7 Gn for 11 ms<br>Shocks contactor closed: 10 Gn for 11 ms |

### Packing Units

|                  |          |
|------------------|----------|
| Package 1 Weight | 0.302 kg |
| Package 1 Height | 0.500 dm |
| Package 1 width  | 0.750 dm |
| Package 1 Length | 0.870 dm |

### Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| RECh Regulation            | <a href="#">REACH Declaration</a>   |
| RECh free of SVHC          | Yes   |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| 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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