

Product datasheet

Specifications



EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 18A - 220 V AC coil

LC1E1801M7

Main

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| Range | EasyPact |
| Product name | EasyPact TVS |
| Product or component type | Contactors |
| Device short name | LC1E |
| Contactors application | Motor control Resistive load |
| Utilisation category | AC-1 AC-3 |
| 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 | 32 A (at <55 °C) at <= 415 V AC AC-1 for power circuit 18 A (at <55 °C) at <= 440 V AC AC-3 for power circuit |
| Motor power kW | 4 kW at 220...230 V AC 50/60 Hz 7.5 kW at 380...400 V 9 kW at 415 V 9 kW at 440 V 10 kW at 500 V 10 kW at 660...690 V |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 220 V AC 50/60 Hz |
| Height | 74 mm |
| Width | 45 mm |
| Depth | 80 mm |
| Product weight | 0.3 kg |
| Colour | Grey (RAL 7011) |

Complementary

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| Auxiliary contact composition | 1 NC |
| [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 |
| Overvoltage category | III |

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| [lth] conventional free air thermal current | 32 A (at 55 °C) |
| Irms rated making capacity | 180 A at 440 V AC for power circuit conforming to IEC 60947-4-1 |
| Rated breaking capacity | 144 A at 440 V for power circuit conforming to IEC 60947 |
| [lcw] rated short-time withstand current | 145 A 40 °C - 10 s for power circuit 84 A 40 °C - 60 s for power circuit 40 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 35 A gG at ≤ 690 V coordination type 1 for power circuit |
| Average impedance | 2.5 mOhm - lth 32 A 50 Hz for power circuit |
| Power dissipation per pole | 0.81 W AC-3 2.6 W AC-1 |
| Control circuit voltage limits | Operational: 0.85...1.1 Uc at 50/60 Hz (at <55 °C) Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <55 °C) |
| Operating time | 12...22 ms on closing 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) 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 |
| 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 | 300000 cycles AC-1 1200000 cycles AC-3 |
| Mounting support | Plate DIN rail |
| Connections - terminals | Power circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Power 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: 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 |
| Recommended tightening torque | Power circuit: 1.2 N.m Control circuit: 1.2 N.m |
| Max tightening torque | Power circuit: 1.4 N.m Control circuit: 1.4 N.m |

Environment

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| Standards | IEC 60947-5-1 IEC 60947-4-1 IEC 60947-1 |
| 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 |
| Pollution degree | 3 |
| Ambient air temperature for operation | -5...55 °C |

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| 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: 7 Gn for 11 ms Shocks contactor closed: 10 Gn for 11 ms |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 346.0 g |
| Package 1 Height | 8.5 cm |
| Package 1 width | 5 cm |
| Package 1 Length | 7.5 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 36 |
| Package 2 Weight | 12.966 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |

Offer Sustainability

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| 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 |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |