

Product data sheet

Specifications



Contactor, EasyPact TVS, 3P(3NO), AC-3, <=440V, 38A, 220V AC coil, 50Hz, 1NC auxiliary contact

LC1E3801M5

Main

| | |
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| Range | EasyPact |
| Product or component type | Contactor |
| Device short name | LC1E |
| Contactor application | Resistive load Motor control |
| 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 | 50 A (at <55 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit |
| [Uc] control circuit voltage | 220 V AC 50 Hz |

Complementary

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| Motor power kW | 18.5 kW at 500 V 18.5 kW at 660...690 V 9 kW at 220...230 V AC 50/60 Hz 18.5 kW at 380...400 V 18.5 kW at 415 V 18.5 kW at 440 V |
| Pole contact composition | 3 NO |
| [I _{th}] conventional free air thermal current | 50 A (at 55 °C) |
| I _{rms} rated making capacity | 380 A at 440 V AC for power circuit conforming to IEC 60947-4-1 |
| Rated breaking capacity | 304 A at 440 V for power circuit conforming to IEC 60947 |
| [I _{cw}] rated short-time withstand current | 60 A 40 °C - 600 s for power circuit 310 A 40 °C - 10 s for power circuit 150 A 40 °C - 60 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 63 A gG at <= 690 V coordination type 1 for power circuit |
| Average impedance | 2.5 mOhm - I _{th} 50 A 50 Hz for power circuit |
| Power dissipation per pole | 2.9 W AC-3 5 W AC-1 |
| [U _i] rated insulation voltage | 690 V conforming to IEC 60947-4-1 |
| Overtoltage category | III |
| Pollution degree | 3 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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| [Uimp] rated impulse withstand voltage | 6 kV coil not connected to the power circuit conforming to IEC 60947 |
| Mechanical durability | 8000000 cycles |
| Electrical durability | 350000 cycles AC-1 900000 cycles AC-3 |
| Control circuit type | AC at 50 Hz |
| Control circuit voltage limits | 0.85...1.1 U _c (55 °C):operational 50 Hz 0.3...0.6 U _c (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: 2.1 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 | Plate DIN rail |
| Environment | |
| Standards | IEC 60947-1 IEC 60947-5-1 IEC 60947-4-1 |
| 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 U _c -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 | 84 mm |
| Width | 56 mm |
| Depth | 86 mm |

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| Net weight | 0.45 kg |
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Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.1 cm |
| Package 1 Width | 5.8 cm |
| Package 1 Length | 8.5 cm |
| Package 1 Weight | 450.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 24 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 11.255 kg |

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 |
| 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

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| Warranty | 18 months |
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Recommended replacement(s)