# Product datasheet

Specifications



## EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 80A - 220 V AC coil

LC1E80M5

## Main

| | |
|---|---|
| **Range** | Easy TeSys |
| **Range of product** | Easy TeSys Control |
| **Product or component type** | Contactor |
| **Device short name** | LC1E |
| **Contactor application** | Motor control<br>Resistive load |
| **Utilisation category** | AC-3<br>AC-3e<br>AC-1 |
| **Poles description** | 3P |
| **[Ue] rated operational voltage** | Power circuit: <= 690 V AC 50/60 Hz |
| **[Ie] rated operational current** | 80 A (at <55 °C) at <= 440 V AC AC-3 for power circuit<br>80 A (at <55 °C) at <= 440 V AC AC-3e for power circuit<br>110 A (at <55 °C) at <= 440 V AC AC-1 for power circuit |
| **[Uc] control circuit voltage** | 220 V AC 50 Hz |

## Complementary

| | |
|---|---|
| **Motor power kW** | 22 kW at 220/230 V AC 50/60 Hz<br>37 kW at 380/400 V AC<br>45 kW at 415/440 V AC<br>45 kW at 500 V AC<br>45 kW at 660/690 V AC<br>45 kW at 660...690 V |
| **Pole contact composition** | 3 NO |
| **[Ith] conventional free air thermal current** | 130 A (at 55 °C) for power circuit |
| **Irms rated making capacity** | 960 A at 440 V AC for power circuit conforming to IEC 60947-4-1 |
| **Rated breaking capacity** | 680 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<br>320 A 40 °C - 60 s for power circuit<br>135 A 40 °C - 600 s for power circuit |
| **Associated fuse rating** | 160 A gG at <= 690 V coordination type 1 for power circuit<br>10 A gG at <= 690 V for auxiliary contact circuit conforming to IEC 60947-5-1 |
| **Average impedance** | 0.8 mOhm - Ith 130 A 50 Hz for power circuit |
| **Power dissipation per pole** | 5.1 W AC-3<br>9.7 W AC-1 |
| **[Ui] rated insulation voltage** | 690 V conforming to IEC 60947-4-1 |
| **Overvoltage category** | III |
| **Pollution degree** | 3 |

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

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

| | |
|---|---|
| **[Uimp] rated impulse withstand voltage** | 6 kV coil not connected to the power circuit conforming to IEC 60947 |
| **Mechanical durability** | 3000000 cycles |
| **Electrical durability** | 350000 cycles AC-1<br>900000 cycles AC-3 |
| **Control circuit type** | AC at 50 Hz |
| **Control circuit voltage limits** | 0.85...1.1 Uc (-5…55 °C):operational 50 Hz<br>0.3...0.6 Uc (-5…55 °C):drop-out 50 Hz |
| **Inrush power in VA** | 200 VA 50 Hz cos phi 0.75 (at 20 °C)<br>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)<br>20 VA 50 Hz cos phi 0.3 (at 20 °C) |
| **Heat dissipation** | 6…10 W for control circuit |
| **Operating time** | 20...35 ms on closing<br>6...30 ms on opening |
| **Maximum operating rate** | 1200 cyc/h 60 °C |
| **Connections - terminals** | Power circuit: screw clamp terminals 1 4…50 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 4…16 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 4…25 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 4…50 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 4…25 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 4…50 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end |
| **Tightening torque** | Control circuit: 1.2 N.m<br>Power circuit: 12 N.m |
| **Auxiliary contact composition** | 1 NO + 1 NC |
| **Minimum switching voltage** | 17 V for auxiliary contact circuit |
| **Minimum switching current** | 5 mA for auxiliary contact circuit |
| **Insulation resistance** | > 10 MOhm for auxiliary contact 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 |
| **Mounting support** | Plate<br>DIN rail |

# Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-1<br>EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>GB/T 14048.1<br>GB/T 14048.4<br>GB/T 14048.5<br>EN/IEC 60335-1:Clause 30.2<br>EN/IEC 60335-2-40:Annex JJ |

| | |
|---|---|
| **Product certifications** | CB Scheme<br>CCC<br>CE<br>EAC |
| **IP degree of protection** | IP2X conforming to IEC 60529 |
| **Protective treatment** | TH (pollution degree 3) conforming to IEC 60068-2-30 |
| **Permissible ambient air temperature around the device** | -20…70 °C at Uc<br>-60…80 °C storage<br>-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)<br>Vibrations contactor closed (3 Gn, 5...300 Hz)<br>Shocks contactor open (6 Gn for 11 ms)<br>Shocks contactor closed (7 Gn for 11 ms) |
| **Height** | 127 mm |
| **Width** | 85 mm |
| **Depth** | 121 mm |
| **Net weight** | 1.52 kg |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 11.000 cm |
| **Package 1 Width** | 15.000 cm |
| **Package 1 Length** | 15.500 cm |
| **Package 1 Weight** | 1.537 kg |
| **Unit Type of Package 2** | S03 |
| **Number of Units in Package 2** | 5 |
| **Package 2 Height** | 30.000 cm |
| **Package 2 Width** | 30.000 cm |
| **Package 2 Length** | 40.000 cm |
| **Package 2 Weight** | 8.190 kg |
| **Unit Type of Package 3** | P06 |
| **Number of Units in Package 3** | 40 |
| **Package 3 Height** | 75.000 cm |
| **Package 3 Width** | 60.000 cm |
| **Package 3 Length** | 80.000 cm |
| **Package 3 Weight** | 75.000 kg |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **1 015 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **10 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **2 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **1 001 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **2 kg CO2 eq.** |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| SCIP Number | **D35ed203-a299-4dcd-95fe-2a4557618485** |
| EU RoHS Directive | Compliant |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **64** |
| End of life manual availability | End of Life Information |
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |