# Product datasheet

Specifications

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

LC1E80M5

Discontinued

## 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<br>45 kW at 415 V<br>45 kW at 440 V<br>45 kW at 500 V<br>45 kW at 660...690 V |
| **Pole contact composition** | 3 NO |
| **[Ith] conventional free air thermal current** | 110 A (at 55 °C) for power circuit |
| **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<br>320 A 40 °C - 60 s for power circuit<br>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<br>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<br>9.7 W AC-1 |
| **[Ui] rated insulation voltage** | 690 V conforming to IEC 60947-4-1 |

| | |
|---|---|
| **overvoltage category** | III |
| **pollution degree** | 3 |
| **[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** | Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1…4 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…2.5 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<br>Power circuit: screw clamp terminals 1 4…50 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 4…16 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 4…50 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 4…50 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 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<br>1.5 ms on de-energisation guaranteed between NC and NO contact |
| **Mounting support** | Plate<br>DIN rail |

# Environment

| | |
|---|---|
| **Standards** | IEC 60947-1<br>IEC 60947-4-1<br>IEC 60947-5-1 |
| **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 |
| **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

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|---|---|
| **Warranty** | 18 months |

# 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

| | |
|---|---|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | **1297** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| EU RoHS Directive | **Compliant** |
| SCIP Number | **D35ed203-a299-4dcd-95fe-2a4557618485** |
| REACh Regulation | **REACh Declaration** |
| China RoHS Regulation | **China RoHS declaration** |

## Use Again

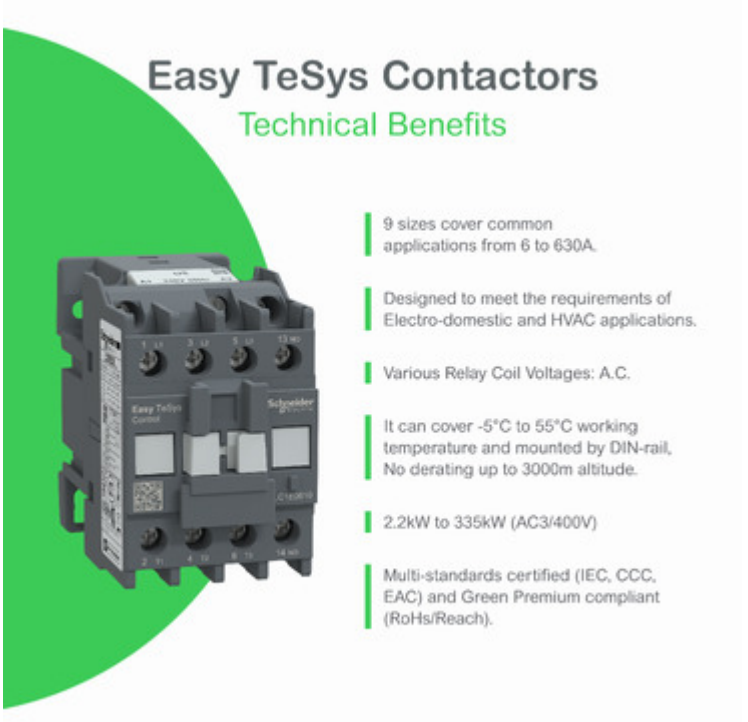
### Repack and remanufacture

| | |
|---|---|
| Circularity Profile | **End of Life Information** |

| | |
|---|---|
| WEEE |  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |
| Take-back | **No** |

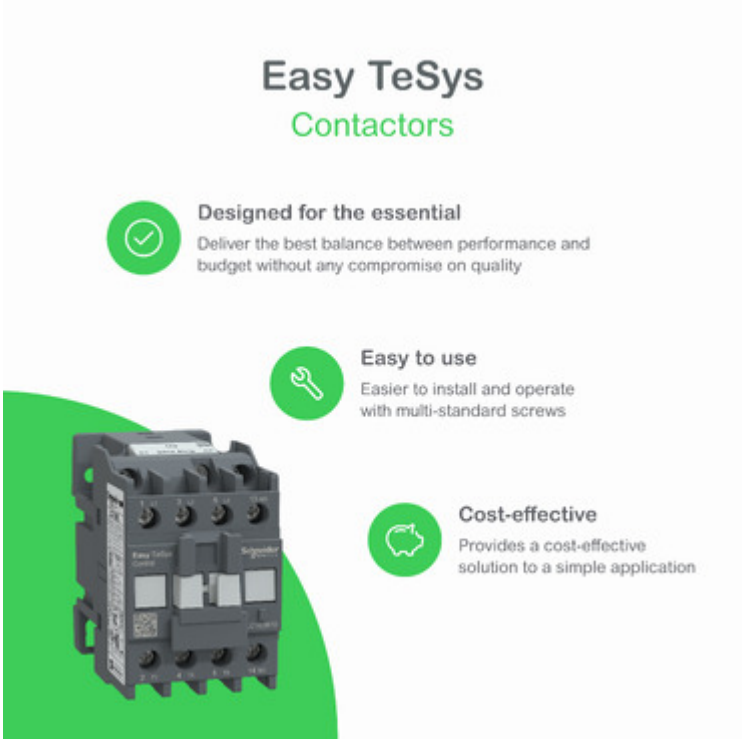
Offer Marketing Illustration

**Product benefits / Features**



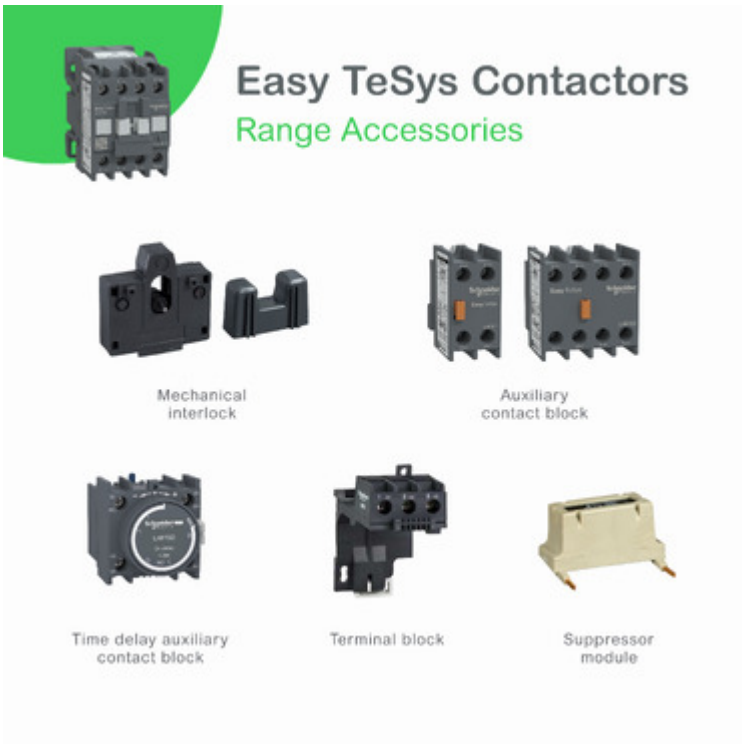
Offer Marketing Illustration

**Product benefits / Features**



Offer Marketing Illustration

**Product benefits / Features**



Technical Illustration

## Assembly's dimensions