# Product data sheet

Specifications



## IEC contactor, TeSys D, nonreversing, 65A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 240VAC 50/60Hz coil, open

LC1D65U7

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Range of Product** | TeSys Deca |
| **Product or Component Type** | Contactor |
| **Device short name** | LC1D |
| **Contactor application** | Resistive load |
| **Utilisation category** | AC-4<br>AC-1<br>AC-2<br>AC-3e<br>AC-3 |
| **Poles description** | 3P |
| **[Ue] rated operational voltage** | Power circuit <= 690 V AC 25...400 Hz |
| **[Ie] rated operational current** | 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit<br>65 A (at <140 °F (60 °C)) at 240 V AC AC-3 for power circuit<br>80 A (at <140 °F (60 °C)) at 240 V AC AC-1 for power circuit |
| **[Uc] control circuit voltage** | 240 V AC 50/60 Hz |

## Complementary

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|---|---|
| **Motor power kW** | 11 kW at 400 V AC 50 Hz (AC-4)<br>30 kW at 380...400 V AC 50 Hz (AC-3)<br>37 kW at 660...690 V AC 50 Hz (AC-3)<br>18.5 kW at 220...230 V AC 50 Hz (AC-3)<br>37 kW at 1000 V AC 50 Hz (AC-3)<br>30 kW at 440 V AC 50 Hz (AC-3e)<br>30 kW at 380...400 V AC 50 Hz (AC-3e)<br>37 kW at 500 V AC 50 Hz (AC-3e)<br>37 kW at 660...690 V AC 50 Hz (AC-3e)<br>18.5 kW at 220...230 V AC 50 Hz (AC-3e)<br>30 kW at 415 V AC 50 Hz (AC-3e)<br>37 kW at 1000 V AC 50 Hz (AC-3e)<br>37 kW at 500 V AC 50 Hz<br>30 kW at 380...400 V AC 50 Hz |
| **Maximum Horse Power Rating** | 10 hp at 230/240 V AC 60 Hz for 1 phase motors<br>20 hp at 200/208 V AC 60 Hz for 3 phase motors<br>20 hp at 230/240 V AC 60 Hz for 3 phase motors<br>40 hp at 460/480 V AC 60 Hz for 3 phase motors<br>50 hp at 575/600 V AC 60 Hz for 3 phase motors<br>5 hp at 115 V AC 60 Hz for 1 phase motors |
| **Compatibility code** | LC1D |
| **Pole contact composition** | 3 NO |
| **Protective cover** | With |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

| | |
|---|---|
| **[Ith] conventional free air thermal current** | 80 A (at 140 °F (60 °C)) for power circuit<br>10 A (at 140 °F (60 °C)) for control circuit |
| **Irms rated making capacity** | 140 A at 440 V AC for control circuit conforming to IEC 60947-5-1<br>140 A AC for control circuit conforming to IEC 60947-5-1<br>1000 A at 440 V for power circuit conforming to IEC 60947 |
| **Rated breaking capacity** | 1000 kA at 440 V for power circuit conforming to IEC 60947 |
| **[Icw] rated short-time withstand current** | 520 A 104 °F (40 °C) - 10 s for power circuit<br>900 A 104 °F (40 °C) - 1 s for power circuit |
| **Associated fuse rating** | 125 A gG at <= 690 V coordination type 2 for power circuit<br>160 A gG at <= 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1<br>125 A gG at <= 690 V coordination type 1 for power circuit<br>10 A gG for control circuit conforming to IEC 60947-5-1 |
| **Average impedance** | 1.5 Ohm - Ith 80 A 50 Hz for power circuit |
| **Power dissipation per pole** | 6.4 W AC-4<br>4.2 W AC-3e<br>6.3 W AC-3<br>9.6 W AC-1 |
| **[Ui] rated insulation voltage** | Control circuit 600 V UL<br>Power circuit 600 V CSA<br>Power circuit 600 V UL IEC 60947-1<br>Control circuit 690 V IEC 60947-1<br>Power circuit 690 V CSA IEC 60947-1<br>Control circuit 600 V CSA |
| **Overvoltage category** | III |
| **[Uimp] rated impulse withstand voltage** | 6 kV IEC 60947 |
| **Safety reliability level** | B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| **Mechanical durability** | 6 Mcycles |
| **Control circuit type** | AC 50/60 Hz |
| **Coil technology** | Without built-in |
| **Control circuit voltage limits** | 0.8...1.1 Uc (-40…140 °F (-40…60 °C)):operational AC 50 Hz<br>0.85...1.1 Uc (-40…140 °F (-40…60 °C)):operational AC 60 Hz<br>1...1.1 Uc (140…158 °F (60…70 °C)):operational AC 50/60 Hz<br>0.3...0.6 Uc (-40…158 °F (-40…70 °C)):drop-out AC 50/60 Hz |
| **Inrush power in VA** | 160 VA cos phi 0.75 (at 68 °F (20 °C))<br>140 VA cos phi 0.75 (at 68 °F (20 °C)) |
| **Hold-in power consumption in VA** | 15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))<br>13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) |
| **Heat dissipation** | 4…5 W at 50/60 Hz for control circuit |
| **Operating time** | 12...26 ms closing<br>4...19 ms opening |
| **Maximum operating rate** | 3600 cyc/mn at 60 °C |

| | |
|---|---|
| **Connections - terminals** | Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid without cable end<br>Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: rigid<br>Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²) - cable stiffness: rigid without cable end<br>Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²) - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…10 mm²) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid<br>Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid |
| **Tightening torque** | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2<br>Power circuit 44.3 lbf.in (5 N.m) screw terminal flat Ø 6 to Ø 8 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm |
| **Auxiliary contact composition** | 1 NO + 1 NC |
| **Auxiliary contacts type** | Mirror contact 1 NC IEC 60947-4-1<br>Mechanically linked 1 NO + 1 NC IEC 60947-5-1 |
| **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 between NC and NO contacts<br>1.5 ms on de-energisation between NC and NO contacts |
| **Mounting Support** | Plate<br>Rail |

## Environment

| | |
|---|---|
| **Standards** | EN 60947-4-1<br>CSA C22.2 No 14<br>IEC 60947-4-1<br>EN 60947-5-1<br>UL 60947-4-1 |
| **Product Certifications** | DNV<br>UL<br>RINA<br>CCC<br>CSA<br>LROS (Lloyds register of shipping)<br>BV<br>GL<br>UKCA |
| **IP degree of protection** | IP2X VDE 0106<br>IP2X IEC 60529 |
| **Protective treatment** | TH 3)IEC 60068-2-30 |
| **Climatic withstand** | IACS E10 exposure to damp heat |
| **Operating altitude** | 0...9842.52 ft (0...3000 m) |
| **Fire resistance** | 1562 °F (850 °C) IEC 60695-2-1 |

| | |
|---|---|
| **Flame retardance** | V1 conforming to UL 94 |
| **Mechanical robustness** | Shocks contactor closed 15 Gn for 11 ms)<br>Vibrations contactor opened 2 Gn, 5...300 Hz)<br>Vibrations contactor closed 4 Gn, 5...300 Hz)<br>Shocks contactor opened 10 Gn for 11 ms) |
| **Height** | 4.8 in (122 mm) |
| **Width** | 2.8 in (70 mm) |
| **Depth** | 4.6 in (118 mm) |
| **Product Weight** | 4.817 lb(US) (2.185 kg) |
| **Quantity per Set** | Set of 10 |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US10I1222357 |
| **Discount Schedule** | 0I12 |
| **GTIN** | 3389110437836 |
| **Returnability** | Yes |
| **Country of origin** | CZ |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 5.512 in (14.000 cm) |
| **Package 1 Width** | 5.197 in (13.200 cm) |
| **Package 1 Length** | 3.740 in (9.500 cm) |
| **Package weight(Lbs)** | 3.159 lb(US) (1.433 kg) |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 5 |
| **Package 2 Height** | 5.906 in (15.000 cm) |
| **Package 2 Width** | 11.811 in (30.000 cm) |
| **Package 2 Length** | 15.748 in (40.000 cm) |
| **Package 2 Weight** | 16.444 lb(US) (7.459 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 | **77 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **14 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.3 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0.4 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **57 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **5 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** |
| EU RoHS Directive | **Compliant** |
| REACh Regulation | **Free of Substances of Very High Concern above the threshold** |
| California proposition 65 | **WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov** |
| PVC free | **Yes** |

## Use Longer

### Lifetime extension

| | |
|---|---|
| Repair | **No** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **76** |
| Circularity Profile | **No need of specific recycling operations** |
| 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.** |

Offer Marketing Illustration

**Product benefits / Features**



Offer Marketing Illustration

**Product benefits / Features**



Offer Marketing Illustration

**Product benefits / Features**

