# Product data sheet

Specifications



## TeSys Deca IEC contactor, 25 A, 3 P, 15 HP at 480 VAC, reversing, 120 VAC 50/60 Hz coil

LC2D25G7

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

## Main

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|---|---|
| **Range** | TeSys<br>TeSys Deca |
| **Product name** | TeSys Deca<br>TeSys Deca |
| **Product or Component Type** | Reversing contactor |
| **Device short name** | LC2D |
| **Contactor application** | Motor control<br>Resistive load |
| **Utilisation category** | AC-1<br>AC-3<br>AC-3e |
| **Device presentation** | Preassembled with reversing power busbar |
| **Poles description** | 3P |
| **power pole contact composition** | 3 NO |
| **[Ue] rated operational voltage** | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC |
| **[Ie] rated operational current** | 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>40 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit |
| **Motor power kW** | 5.5 kW at 220...230 V AC 50-60 Hz<br>11 kW at 380...400 V AC 50-60 Hz<br>11 kW at 415 V AC 50-60 Hz<br>11 kW at 440 V AC 50-60 Hz<br>15 kW at 500 V AC 50-60 Hz<br>15 kW at 660...690 V AC 50-60 Hz |
| **Maximum Horse Power Rating** | 3 hp at 230/240 V AC 60 Hz for 1 phase motors<br>5 hp at 200/208 V AC 60 Hz for 3 phase motors<br>2 hp at 115 V AC 60 Hz for 1 phase motors<br>7.5 hp at 230/240 V AC 60 Hz for 3 phase motors<br>15 hp at 460/480 V AC 60 Hz for 3 phase motors<br>20 hp at 575/600 V AC 60 Hz for 3 phase motors |
| **Control circuit type** | AC 50/60 Hz |
| **[Uc] control circuit voltage** | 120 V AC 50/60 Hz |
| **Auxiliary contact composition** | 1 NO + 1 NC |
| **[Uimp] rated impulse withstand voltage** | 6 kV IEC 60947 |
| **Overvoltage category** | III |
| **[Ith] conventional free air thermal current** | 10 A (at 140 °F (60 °C)) for signalling circuit<br>40 A (at 140 °F (60 °C)) for power circuit |
| **Irms rated making capacity** | 140 A AC for signalling circuit conforming to IEC 60947-5-1<br>250 A DC for signalling circuit conforming to IEC 60947-5-1<br>450 A at 440 V for power circuit conforming to IEC 60947 |
| **Rated breaking capacity** | 450 A at 440 V for power circuit conforming to IEC 60947 |

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

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| **[Icw] rated short-time withstand current** | 50 A 104 °F (40 °C) - 10 min for power circuit<br>120 A 104 °F (40 °C) - 1 min for power circuit<br>240 A 104 °F (40 °C) - 10 s for power circuit<br>380 A 104 °F (40 °C) - 1 s for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit |
| **Associated fuse rating** | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>63 A gG at <= 690 V coordination type 1 for power circuit<br>40 A gG at <= 690 V coordination type 2 for power circuit |
| **Average impedance** | 2 mOhm - Ith 40 A 50 Hz for power circuit |
| **[Ui] rated insulation voltage** | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL |
| **Electrical durability** | 1.65 Mcycles 25 A AC-3 <= 440 V<br>1.4 Mcycles 40 A AC-1 <= 440 V<br>1.65 Mcycles 25 A AC-3e <= 440 V |
| **Power dissipation per pole** | 1.25 W AC-3<br>3.2 W AC-1<br>1.25 W AC-3e |
| **Front cover** | With |
| **Interlocking type** | Mechanical |
| **Mounting Support** | Rail<br>Plate |
| **Standards** | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 60335-2-40:Annex JJ<br>IEC 60335-1 |
| **Product Certifications** | DNV<br>CSA<br>CCC<br>UL<br>GL<br>LROS (Lloyds register of shipping)<br>BV<br>RINA<br>GOST<br>UKCA<br>CB |
| **Connections - terminals** | Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible without cable end<br>Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)flexible without cable end<br>Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible with cable end<br>Control circuit screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²)flexible with cable end<br>Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)solid<br>Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)solid<br>Power circuit screw clamp terminals 1 0.004…0.02 in² (2.5…10 mm²)flexible without cable end<br>Power circuit screw clamp terminals 2 0.004…0.02 in² (2.5…10 mm²)flexible without cable end<br>Power circuit screw clamp terminals 1 0.002…0.02 in² (1…10 mm²)flexible with cable end<br>Power circuit screw clamp terminals 2 0.002…0.009 in² (1.5…6 mm²)flexible with cable end<br>Power circuit screw clamp terminals 1 0.002…0.02 in² (1.5…10 mm²)solid<br>Power circuit screw clamp terminals 2 0.004…0.02 in² (2.5…10 mm²)solid |

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| **Tightening torque** | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2<br>Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm<br>Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals Philips No 2<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2<br>Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2 |
| **Operating time** | 12...22 ms closing<br>4...19 ms opening |
| **Safety reliability level** | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| **Mechanical durability** | 15 Mcycles |
| **Maximum operating rate** | 3600 cyc/h 140 °F (60 °C) |

## Complementary

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|---|---|
| **Coil technology** | Without built-in suppressor module |
| **Control circuit voltage limits** | 0.3...0.6 Uc (-40…158 °F (-40…70 °C)):drop-out AC 50/60 Hz<br>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 |
| **Inrush power in VA** | 70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))<br>70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C)) |
| **Hold-in power consumption in VA** | 7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))<br>7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) |
| **Heat dissipation** | 2…3 W 50/60 Hz |
| **Auxiliary contacts type** | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1 |
| **Signalling circuit frequency** | 25...400 Hz |
| **Minimum switching current** | 5 mA for signalling circuit |
| **Minimum switching voltage** | 17 V for signalling circuit |
| **Non-overlap time** | 1.5 ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
| **Insulation resistance** | > 10 MOhm for signalling circuit |

## Environment

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|---|---|
| **IP degree of protection** | IP20 front face IEC 60529 |
| **Climatic withstand** | IACS E10<br>IEC 60947-1 Annex Q category D |
| **Protective treatment** | TH IEC 60068-2-30 |
| **Pollution degree** | 3 |
| **Ambient air temperature for operation** | -40…140 °F (-40…60 °C)<br>140…158 °F (60…70 °C) with derating |
| **Ambient Air Temperature for Storage** | -76…176 °F (-60…80 °C) |
| **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** | Vibrations contactor open2 Gn, 5...300 Hz<br>Vibrations contactor closed4 Gn, 5...300 Hz<br>Shocks contactor closed15 Gn for 11 ms<br>Shocks contactor open8 Gn for 11 ms |
| **Height** | 3.3 in (85 mm) |

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|---|---|
| **Width** | 3.5 in (90 mm) |
| **Depth** | 3.6 in (92 mm) |
| **Net Weight** | 1.735 lb(US) (0.787 kg) |

## Ordering and shipping details

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|---|---|
| **Category** | US1CTR121251 |
| **Discount Schedule** | CTR1 |
| **GTIN** | 3389110386974 |
| **Returnability** | Yes |
| **Country of origin** | ID |

## Packing Units

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 4.528 in (11.500 cm) |
| **Package 1 Width** | 4.567 in (11.600 cm) |
| **Package 1 Length** | 5.591 in (14.200 cm) |
| **Package weight(Lbs)** | 33.157 oz (940.000 g) |
| **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** | 11.058 lb(US) (5.016 kg) |
| **Unit Type of Package 3** | P06 |
| **Number of Units in Package 3** | 80 |
| **Package 3 Height** | 30.315 in (77.000 cm) |
| **Package 3 Width** | 23.622 in (60.000 cm) |
| **Package 3 Length** | 31.496 in (80.000 cm) |
| **Package 3 Weight** | 200.224 lb(US) (90.820 kg) |

## Contractual warranty

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|---|---|
| **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

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|---|---|
| Total lifecycle Carbon footprint | **254 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **5 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.4 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **247 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** |
| 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 and/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.** |
| PVC free | **Yes** |

## Use Again

### Repack and remanufacture

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|---|---|
| Recyclability potential, in % | **66** |
| Circularity Profile | **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.** |