# Product data sheet

Specifications

Green Premium™



## TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 110 V AC coil

LC2D186F7

Discontinued on: May 19, 2023

Discontinued

## Main

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|---|---|
| **Range** | TeSys |
| **Product Name** | TeSys Deca |
| **Product Or Component Type** | Reversing contactor |
| **Device Short Name** | LC2D |
| **Contactor Application** | Resistive load<br>Motor control |
| **Utilisation Category** | AC-1<br>AC-3 |
| **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** | 18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit |
| **Motor Power Kw** | 4 kW at 220...230 V AC 50 Hz<br>7.5 kW at 380...400 V AC 50 Hz<br>9 kW at 415...440 V AC 50 Hz<br>10 kW at 500 V AC 50 Hz<br>10 kW at 660...690 V AC 50 Hz |
| **Motor Power Hp (Ul / Csa)** | 1 hp at 115 V AC 60 Hz for 1 phase motors<br>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>5 hp at 230/240 V AC 60 Hz for 3 phase motors<br>10 hp at 460/480 V AC 60 Hz for 3 phase motors<br>15 hp at 575/600 V AC 60 Hz for 3 phase motors |
| **Control Circuit Type** | AC 50/60 Hz |
| **[Uc] Control Circuit Voltage** | 110 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>32 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>300 A at 440 V for power circuit conforming to IEC 60947 |
| **Rated Breaking Capacity** | 300 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** | 40 A 104 °F (40 °C) - 10 min for power circuit<br>84 A 104 °F (40 °C) - 1 min for power circuit<br>145 A 104 °F (40 °C) - 10 s for power circuit<br>240 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>50 A gG at <= 690 V coordination type 1 for power circuit<br>35 A gG at <= 690 V coordination type 2 for power circuit |
| **Average Impedance** | 2.5 mOhm - Ith 32 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 18 A AC-3 <= 440 V<br>1 Mcycles 32 A AC-1 <= 440 V |
| **Power Dissipation Per Pole** | 0.8 W AC-3<br>2.5 W AC-1 |
| **Front Cover** | With |
| **Interlocking Type** | Mechanical |
| **Mounting Support** | Plate<br>Rail |
| **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 508 |
| **Product Certifications** | GL<br>CCC<br>RINA<br>DNV<br>BV<br>GOST<br>CSA<br>LROS (Lloyds register of shipping)<br>UL |
| **Connections - Terminals** | Control circuit lugs-ring terminals 0.31 in (8 mm))<br>Power circuit lugs-ring terminals 0.31 in (8 mm)) |
| **Tightening Torque** | Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5<br>Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5<br>Power circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 8 mm M3.5<br>Power circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 |
| **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 |

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| **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 open10 Gn for 11 ms<br>Shocks contactor closed15 Gn for 11 ms |
| **Height** | 3.03 in (77 mm) |
| **Width** | 3.54 in (90 mm) |
| **Depth** | 3.39 in (86 mm) |
| **Net Weight** | 1.56 lb(US) (0.707 kg) |

## Ordering and shipping details

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|---|---|
| **Category** | 22354-CTR,TESYS D,OPEN,9-38A AC |
| **Discount Schedule** | I12 |
| **Gtin** | 3389110682076 |
| **Returnability** | No |
| **Country Of Origin** | FR |

## Packing Units

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|---|---|
| **Unit Type Of Package 1** | PCE |
| **Number Of Units In Package 1** | 1 |
| **Package 1 Height** | 3.70 in (9.4 cm) |

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| **Package 1 Width** | 4.49 in (11.4 cm) |
| **Package 1 Length** | 4.33 in (11 cm) |
| **Package 1 Weight** | 25.75 oz (730 g) |

## Contractual warranty

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| **Warranty** | 18 months |

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

RoHS/REACh

## Well-being performance

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| Reach Free Of Svhc | |
| Toxic Heavy Metal Free | |
| Mercury Free | |
| Rohs Exemption Information | Yes |
| Pvc Free | |

## Certifications & Standards

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|---|---|
| **Eu Rohs Directive** | Compliant<br>EU RoHS Declaration |
| **China Rohs Regulation** | China RoHS declaration<br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| **Weee** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| **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 |