

Changeover Contactor, TeSys Deca, 4P(4NO),AC-1, <=440V 40A, 48V AC 50/60Hz coil, screw clamp terminals

LC2DT40E7

#### Main

| Mani   |   |
|--|---|
| Range  | TeSys<br>TeSys Deca   |
| Product Name                                   | TeSys Deca  |
| Product Or Component Type                      | Changeover contactor  |
| Device Short Name                              | LC2D  |
| Contactor Application                          | Resistive load  |
| Utilisation Category                           | AC-1<br>AC-3<br>AC-3e<br>AC-4   |
| <b>Device Presentation</b>                     | Preassembled with reversing power busbar  |
| Poles Description                              | 4P  |
| Power Pole Contact Composition                 | 4 NO  |
| [Ue] Rated Operational Voltage                 | Power circuit: <= 690 V AC 25400 Hz<br>Power circuit: <= 300 V DC   |
| [le] Rated Operational Current                 | 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit  |
| Control Circuit Type                           | AC at 50/60 Hz  |
| [Uc] Control Circuit Voltage                   | 48 V AC 50/60 Hz  |
| Auxiliary Contact Composition                  | 1 NO + 1 NC   |
| [Uimp] Rated Impulse Withstand Voltage         | 6 kV conforming to IEC 60947  |
| Overvoltage Category                           | III   |
| [Ith] Conventional Free Air<br>Thermal Current | 10 A (at 60 °C) for signalling circuit<br>40 A (at 60 °C) for power circuit   |
| Irms Rated Making Capacity                     | 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 450 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  |
| [Icw] Rated Short-Time Withstand Current       | 50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min for power circuit 240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit |
| Associated Fuse Rating                         | 10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 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 conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified  |
|---------------------------------|---|
| Electrical Durability           | 1.4 Mcycles 40 A AC-1 at Ue <= 440 V  |
| Power Dissipation Per Pole      | 3.2 W AC-1  |
| Front Cover                     | With  |
| Interlocking Type               | Mechanical  |
| Mounting Support                | Rail<br>Plate   |
| Standards                       | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1  |
| Product Certifications          | UL CSA CCC EAC UKCA CB EU-RO-MR by DNV-GL   |
| Connections - Terminals         | Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.516 mm²solid without cable end Power circuit: connector 2 cable(s) 2.516 mm²solid without cable end |
| Tightening Torque               | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2   |
| Operating Time                  | 1222 ms closing<br>419 ms opening   |
| Safety Reliability Level        | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| Mechanical Durability           | 15 Mcycles  |
| Maximum Operating Rate          | 3600 cyc/h 60 °C  |
| Complementary                   |   |
| Coil Technology                 | Without built-in suppressor module  |
| Control Circuit Voltage Limits  | 0.30.6 Uc (-4060 °C):drop-out AC 50/60 Hz<br>0.81.1 Uc (-4060 °C):operational AC 50 Hz<br>0.851.1 Uc (-4060 °C):operational AC 60 Hz  |
| Inrush Power In Va              | 70 VA 60 Hz cos phi 0.75 (at 20 °C)<br>70 VA 50 Hz cos phi 0.75 (at 20 °C)  |
| Hold-In Power Consumption In Va | 7.5 VA (at 20 °C) cos phi 0.3 60 Hz<br>7 VA (at 20 °C) cos phi 0.3 50 Hz  |

| Heat Dissipation             | 23 W at 50/60 Hz  |  |
|------------------------------|---|--|
| Auxiliary Contacts Type      | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1 |  |
| Signalling Circuit Frequency | 25400 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 1.5 ms on energisation between NC and NO contact                  |  |
| Insulation Resistance        | > 10 MOhm for signalling circuit  |  |

### **Environment**

| Ip Degree Of Protection               | IP20 front face conforming to IEC 60529   |
|---------------------------------------|---|
| Climatic Withstand                    | conforming to IACS E10<br>conforming to IEC 60947-1 Annex Q category D  |
| Protective Treatment                  | TH conforming to IEC 60068-2-30   |
| Pollution Degree                      | 3   |
| Ambient Air Temperature For Operation | -4060 °C<br>6070 °C with derating   |
| Ambient Air Temperature For Storage   | -6080 °C  |
| Operating Altitude                    | 03000 m   |
| Fire Resistance                       | 850 °C conforming to IEC 60695-2-1  |
| Flame Retardance                      | V1 conforming to UL 94  |
| Mechanical Robustness                 | Vibrations contactor open: 2 Gn, 5300 Hz<br>Vibrations contactor closed: 4 Gn, 5300 Hz<br>Shocks contactor closed: 15 Gn for 11 ms<br>Shocks contactor open: 8 Gn for 11 ms |
| Height                                | 91 mm   |
| Width                                 | 90 mm   |
| Depth                                 | 98 mm   |
| Net Weight                            | 0.85 kg   |

## **Packing Units**

| Unit Type Of Package 1       | PCE       |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1         |
| Package 1 Height             | 11.500 cm |
| Package 1 Width              | 11.600 cm |
| Package 1 Length             | 14.200 cm |
| Package 1 Weight             | 1.024 kg  |
| Unit Type Of Package 2       | S02       |
| Number Of Units In Package 2 | 5         |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 5.416 kg  |

# **Contractual warranty**

Warranty

18 months

Apr 25, 2024

### **Sustainability**

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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Transparency RoHS/REACh

### Well-being performance



Reach Free Of Svhc



Pvc Free

#### **Certifications & Standards**

| Reach Regulation          | REACh Declaration   |
|---------------------------|---|
| Eu Rohs Directive         | Compliant EU RoHS Declaration   |
| China Rohs Regulation     | China RoHS declaration  Pro-active China RoHS declaration (out of China RoHS legal scope)   |
| Environmental Disclosure  | Product Environmental Profile   |
| Weee                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| Circularity Profile       | End of Life Information   |
| 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 |