# LC1DT40ED

TeSys; TeSys Deca, Contactor, 4P(4 NO), AC-1, 0 to 440V, 40A, 48VDC standard coil





### Main

| Range                          | TeSys<br>TeSys Deca   |
|--------------------------------|---|
| Range of product               | TeSys Deca  |
| Product or component type      | Contactor   |
| Device short name              | LC1D  |
| Contactor application          | Resistive load  |
| Utilisation category           | AC-1<br>AC-3<br>AC-3e<br>AC-4                                     |
| Poles description              | 4P  |
| [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            |
| [Uc] control circuit voltage   | 48 V DC   |

#### Complementary

| Complementary                               |   |
|---|---|
| Compatibility code                          | LC1D  |
| Pole contact composition                    | 4 NO  |
| Protective cover                            | With  |
| [Ith] conventional free air 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<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  |
| [lcw] 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   |
| Power dissipation per pole                  | 3.2 W AC-1  |
| [Ui] rated insulation voltage               | 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 Power circuit: 690 V conforming to IEC 60947-4-1            |
| Overvoltage category                        | III   |
| Pollution degree                            | 3   |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947  |
| 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/ISC 13849-1   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not interested for a set of for determining suitability or intelability of these products for specific user applications. It is the documentation is not integrator to perform the appropriate and complete risk analysis, evaluating of the products with respect to the relevant specific application or use thereof. Neither Schmeider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| Mechanical durability          | 30 Mcycles   |
|--------------------------------|--|
| Electrical durability          | 1.4 Mcycles 40 A AC-1 at Ue <= 440 V   |
| Control circuit type           | DC standard  |
| Coil technology                | Built-in bidirectional peak limiting diode suppressor  |
| Control circuit voltage limits | 0.10.25 Uc (-4070 °C):drop-out DC<br>0.71.25 Uc (-4060 °C):operational DC<br>11.25 Uc (6070 °C):operational DC   |
| Inrush power in W              | 5.4 W (at 20 °C)   |
| Hold-in power consumption in W | 5.4 W at 20 °C   |
| Operating time                 | 20 ±20 % ms opening<br>63 ±15 % ms closing   |
| Time constant                  | 28 ms  |
| Maximum operating rate         | 3600 cyc/h 60 °C   |
| Connections - terminals        | Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end   |
|                                | Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.510 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.516 mm² - cable stiffness: solid |
| Tightening torque              | without cable end Power circuit: screw clamp terminals 2 2.516 mm² - cable stiffness: solid without cable end  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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver flat Ø 6 mm Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2   |
| Auxiliary contact composition  | 1 NO + 1 NC  |
| 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 voltage      | 17 V for signalling circuit  |
| Minimum switching current      | 5 mA for signalling circuit  |
| Insulation resistance          | > 10 MOhm for signalling circuit   |
| Non-overlap time               | <ul><li>1.5 Ms on de-energisation between NC and NO contact</li><li>1.5 ms on energisation between NC and NO contact</li></ul>   |
| Mounting support               | Rail<br>Plate  |
|                                |  |

## Environment

| 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   |
| CSA[RETURN]UL[RETURN]GL[RETURN]DNV[RETURN]LROS (Lloyds register of shipping)[RETURN]CCC[RETURN]RINA[RETURN]GOST[RETURN]BV |
| IP20 front face conforming to IEC 60529   |
| TH conforming to IEC 60068-2-30   |
| Conforming to IACS E10 exposure to damp heat  |
| Conforming to IEC 60947-1 Annex Q category D exposure to damp heat  |
| -4060 °C  |
| 6070 °C with derating   |
| 03000 m   |
| 850 °C conforming to IEC 60695-2-1  |
| V1 conforming to UL 94  |
| Vibrations contactor open (2 Gn, 5300 Hz)   |
| Vibrations contactor closed (4 Gn, 5300 Hz)   |
| Shocks contactor closed (15 Gn for 11 ms)   |
| Shocks contactor open (8 Gn for 11 ms)  |
| 91 mm   |
| 45 mm   |
| 107 mm  |
| 0.425 kg  |
|   |

## Packing Units

| Unit Type of Package 1       | PCE       |  |
|------------------------------|-----------|--|
| Number of Units in Package 1 | 1         |  |
| Package 1 Height             | 12.300 cm |  |
| Package 1 Width              | 10.700 cm |  |
| Package 1 Length             | 5.400 cm  |  |
| Package 1 Weight             | 633.000 g |  |

## Offer Sustainability

| Sustainable offer status   | Green Premium product   |
|----------------------------|---|
| REACh Regulation           | ☑ REACh Declaration   |
| REACh free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant EEU RoHS Declaration  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | ☐ China RoHS Declaration  |
| RoHS exemption information | ₫Yes  |
| Environmental Disclosure   | Product Environmental Profile   |
| 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 |
| PVC free                   | Yes   |

### Contractual warranty

| Contraction Warranty |           |  |
|----------------------|-----------|--|
| Warranty             | 18 months |  |