

# Product data sheet

Specifications



TeSys Deca contactor , 4P(2 NO + 2 NC) , AC-1 <= 440V, 60 A , 21V AC 50/60 Hz coil

LC1D40008Z7

❗ Discontinued

## Main

|                                |  |
|--------------------------------|--|
| Range                          | TeSys  |
| Range Of Product               | TeSys D  |
| Product Or Component Type      | Contactors   |
| Device Short Name              | LC1D   |
| Contactors Application         | Resistive load   |
| Utilisation Category           | AC-1   |
| Poles Description              | 4P   |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25...400 Hz<br>Power circuit: <= 300 V DC |
| [Ie] Rated Operational Current | 60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit               |
| [Uc] Control Circuit Voltage   | 21 V AC 50/60 Hz   |

## Complementary

|   |   |
|---|---|
| Compatibility Code                          | LC1D  |
| Pole Contact Composition                    | 2 NO + 2 NC   |
| Contact Compatibility                       | M1  |
| Protective Cover                            | Without   |
| [Ith] Conventional Free Air Thermal Current | 60 A (at 60 °C) for power circuit   |
| Irms Rated Making Capacity                  | 800 A at 440 V for power circuit conforming to IEC 60947  |
| Rated Breaking Capacity                     | 800 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] Rated Short-Time Withstand Current    | 320 A 40 °C - 10 s for power circuit<br>720 A 40 °C - 1 s for power circuit<br>72 A 40 °C - 10 min for power circuit<br>165 A 40 °C - 1 min for power circuit |
| Associated Fuse Rating                      | 80 A gG at <= 690 V coordination type 1 for power circuit<br>80 A gG at <= 690 V coordination type 2 for power circuit  |
| Average Impedance                           | 1.5 mOhm - Ith 60 A 50 Hz for power circuit   |
| Power Dissipation Per Pole                  | 5.4 W AC-1  |
| [Ui] Rated Insulation Voltage               | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 690 V conforming to IEC 60947-4-1                                   |
| Overvoltage Category                        | III   |
| Pollution Degree                            | 3   |

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

|   |  |
|---|--|
| <b>[Uimp] Rated Impulse Withstand Voltage</b> | 6 kV conforming to IEC 60947   |
| <b>Safety Reliability Level</b>               | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| <b>Mechanical Durability</b>                  | 6 Mcycles  |
| <b>Electrical Durability</b>                  | 1.4 Mcycles 60 A AC-1 at Ue <= 440 V   |
| <b>Control Circuit Type</b>                   | AC at 50/60 Hz   |
| <b>Coil Technology</b>                        | Without built-in suppressor module   |
| <b>Control Circuit Voltage Limits</b>         | 0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz<br>0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz<br>1...1.1 Uc (60...70 °C):operational AC 50/60 Hz  |
| <b>Inrush Power In Va</b>                     | 140 VA 60 Hz cos phi 0.75 (at 20 °C)<br>160 VA 50 Hz cos phi 0.75 (at 20 °C)   |
| <b>Hold-In Power Consumption In Va</b>        | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C)   |
| <b>Heat Dissipation</b>                       | 4...5 W at 50/60 Hz  |
| <b>Operating Time</b>                         | 4...19 ms opening<br>12...26 ms closing  |
| <b>Maximum Operating Rate</b>                 | 3600 cyc/h 60 °C   |
| <b>Connections - Terminals</b>                | Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 1 1...35 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 1...25 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 1...35 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 1...25 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 1...35 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 1...25 mm² - cable stiffness: solid without cable end |
| <b>Tightening Torque</b>                      | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm² hexagonal screw head 4 mm<br>Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm² hexagonal screw head 4 mm   |
| <b>Mounting Support</b>                       | Rail<br>Plate  |

## Environment

|                  |   |
|------------------|---|
| <b>Standards</b> | 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                                | BV<br>RINA<br>CSA<br>GOST<br>LROS (Lloyds register of shipping)<br>CCC<br>DNV<br>UL<br>GL  |
| Ip Degree Of Protection                               | IP20 front face conforming to IEC 60529  |
| Protective Treatment                                  | TH conforming to IEC 60068-2-30  |
| Climatic Withstand                                    | conforming to IACS E10 exposure to damp heat   |
| Permissible Ambient Air Temperature Around The Device | -60...80 °C storage<br>-40...60 °C operation<br>60...70 °C with derating   |
| Operating Altitude                                    | 0...3000 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, 5...300 Hz)<br>Vibrations contactor closed (4 Gn, 5...300 Hz)<br>Shocks contactor closed (15 Gn for 11 ms)<br>Shocks contactor open (10 Gn for 11 ms) |
| Height  | 127 mm   |
| Width   | 85 mm  |
| Depth   | 125 mm   |
| Net Weight  | 1.44 kg  |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type Of Package 1       | PCE |
| Number Of Units In Package 1 | 1   |

## Contractual warranty

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