# **Product datasheet**

Specification





### Contactor, TeSys Deca, 4P(4NO),AC-1 440V 60A,110V AC 50/60Hz coil, screw clamp terminal

LC1D40004F7

! Discontinued on: 24 Jul 2020

① Discontinued

EAN Code: 3389110231557

#### Main

| Range of product               | TeSys Deca                                    |  |
|--------------------------------|---|--|
| Product or component type      | Contactor                                     |  |
| Device short name              | LC1D  |  |
| contactor application          | ation 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           |  |
| [le] rated operational current | nt 60 A (at <60 °C) AC AC-1 for power circuit |  |
| [Uc] control circuit voltage   | 110 V AC 50/60 Hz                             |  |

### Complementary

| Compatibility code                          | LC1D  |
|---|---|
| Pole contact composition                    | 4 NO  |
| Protective cover                            | With  |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for control circuit<br>60 A (at 60 °C) for power circuit  |
| Irms rated making capacity                  | 140 A AC for control circuit conforming to IEC 60947-5-1<br>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  |
| Associated fuse rating                      | 10 A gG for control circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 for power circuit 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               | Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1 |
| Overvoltage category                        | III   |
| [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<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1  |  |
|---------------------------------|---|--|
| Mechanical durability           | 6000000 cycles  |  |
| Control circuit type            | AC at 50/60 Hz standard   |  |
| Coil technology                 | Without built-in bidirectional peak limiting diode suppressor   |  |
| Control circuit voltage limits  | 0.30.6 Uc (60 °C):drop-out AC 50/60 Hz<br>0.81.1 Uc (60 °C):operational AC 50 Hz<br>0.851.1 Uc (60 °C):operational AC 60 Hz   |  |
| Inrush power in VA              | 140 VA cos phi 0.75 (at 20 °C)<br>160 VA cos phi 0.75 (at 20 °C)  |  |
| Hold-in power consumption in VA | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C)  |  |
| Heat dissipation                | 45 W at 50/60 Hz for control circuit  |  |
| Operating time                  | 1226 ms closing<br>419 ms opening   |  |
| Maximum operating rate          | 3600 cyc/h 60 °C  |  |
| Connections - terminals         | Control circuit: screw clamp terminal 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 135 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 125 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 135 mm² - cable stiffness: solid without cable end |  |
| Tightening torque               | Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm  |  |
| 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   |  |
| Minimum switching voltage       | 17 V for control circuit  |  |
| Minimum switching current       | 5 mA for control circuit  |  |
| Insulation resistance           | > 10 MOhm for control circuit   |  |
| Non-overlap time                | 1.5 ms on de-energisation between NC and NO contacts     1.5 ms on energisation between NC and NO contacts  |  |
| Mounting support                | Plate<br>Rail   |  |

### **Environment**

Standards

EN 60947-4-1

UL 508

EN 60947-5-1

CSA C22.2 No 14

IEC 60947-5-1

IEC 60947-4-1

| Product certifications        | DNV   |  |
|-------------------------------|---|--|
|                               | GOST  |  |
|                               | RINA  |  |
|                               | CSA   |  |
|                               | UL  |  |
|                               | LROS (Lloyds register of shipping)              |  |
|                               | CCC   |  |
|                               | BV  |  |
|                               | GL  |  |
|                               | ~-  |  |
|                               | UKCA  |  |
| IP degree of protection       | IP2X conforming to IEC 60529                    |  |
|                               | IP2X conforming to VDE 0106                     |  |
|                               |   |  |
| Protective treatment          | TH (pollution degree 3) conforming to IEC 60068 |  |
| Permissible ambient air       | -560 °C   |  |
| temperature around the device | -4070 °C at Uc                                  |  |
|                               |   |  |
| Operating altitude            | 3000 m without derating                         |  |
| Fire resistance               | 850 °C conforming to IEC 60695-2-1              |  |
| Flame retardance              | V1 conforming to UL 94                          |  |
| Mechanical robustness         | Shocks contactor open (8 Gn for 11 ms)          |  |
|                               | Shocks contactor closed (10 Gn for 11 ms)       |  |
|                               | Vibrations contactor opened (2 Gn, 5300 Hz)     |  |
|                               | Vibrations contactor closed (4 Gn, 5300 Hz)     |  |
|                               |   |  |
| 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        |
| Package 1 Height             | 11.5 cm  |
| Package 1 Width              | 13.5 cm  |
| Package 1 Length             | 15.0 cm  |
| Package 1 Weight             | 1.473 kg |

## **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

#### Well-being performance

| <b>②</b> | Reach Free Of Svhc         |     |
|----------|----------------------------|-----|
| <b>9</b> | Toxic Heavy Metal Free     |     |
| <b>⊘</b> | Mercury Free               |     |
| <b>⊘</b> | Rohs Exemption Information | Yes |

#### **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      | No need of specific recycling operations  |