# Product data sheet

Specifications



## TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 12 A - 400 V AC coil

LC2D129V7

#### (!) Discontinued

### Main

| Range  | TeSys   |
|--|---|
| Product Name                                   | TeSys D   |
| 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 25400 Hz<br>Power circuit: <= 300 V DC   |
| [le] Rated Operational Current                 | 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit  |
| Motor Power Kw                                 | 3 kW at 220230 V AC 50 Hz<br>5.5 kW at 380400 V AC 50 Hz<br>5.5 kW at 415440 V AC 50 Hz<br>7.5 kW at 500 V AC 50 Hz<br>7.5 kW at 660690 V AC 50 Hz  |
| Motor Power Hp (UI / Csa)                      | 1 hp at 115 V AC 60 Hz for 1 phase motors<br>2 hp at 230/240 V AC 60 Hz for 1 phase motors<br>3 hp at 200/208 V AC 60 Hz for 3 phases motors<br>3 hp at 230/240 V AC 60 Hz for 3 phases motors<br>7.5 hp at 460/480 V AC 60 Hz for 3 phases motors<br>10 hp at 575/600 V AC 60 Hz for 3 phases motors |
| Control Circuit Type                           | AC at 50/60 Hz  |
| [Uc] Control Circuit Voltage                   | 400 V AC 50/60 Hz   |
| Auxiliary Contact Composition                  | 1 NO + 1 NC   |
| [Uimp] Rated Impulse Withstand<br>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>25 A (at 60 °C) for power circuit   |
| Irms Rated Making Capacity                     | 250 A at 440 V for power circuit conforming to IEC 60947<br>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  |
| Rated Breaking Capacity                        | 250 A at 440 V for power circuit conforming to IEC 60947  |

| [Icw] Rated Short-Time Withstand  | 30 A 40 °C - 10 min for power circuit  |
|---|--|
| Current   | 61 A 40 °C - 1 min for power circuit   |
|   | 105 A 40 °C - 10 s for power circuit   |
|   | 210 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                         |
|   | 40 A gG at <= 690 V coordination type 1 for power circuit                          |
|   | 25 A gG at <= 690 V coordination type 2 for power circuit                          |
| Average Impedance   | 2.5 mOhm - Ith 25 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   | 2 Mcycles 12 A AC-3 at Ue <= 440 V   |
|   | 0.8 Mcycles 25 A AC-1 at Ue <= 440 V   |
| Power Dissipation Per Pole  | 1.56 W AC-1  |
|   | 0.36 W AC-3  |
| Front Cover   | With   |
| Interlocking Type   | Mechanical   |
| Mounting Support  | Rail   |
|   | 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   |
| Product Certifications  | BV   |
|   | UL   |
|   | DNV  |
|   |  |
|   | GOST   |
|   | CCC  |
|   | GL   |
|   | LROS (Lloyds register of shipping)   |
|   | RINA   |
|   | CSA  |
| Connections - Terminals   | Power circuit: Faston terminals 2 cable(s)   |
|   | Control circuit: Faston terminals 1 cable(s)                                       |
| Operating Time  | 1222 ms closing  |
|   | 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   |
| the second se |  |

# Complementary

| Coil Technology                 | Without built-in suppressor module  |  |
|---------------------------------|---|--|
| Control Circuit Voltage Limits  | 0.30.6 Uc (-4070 °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<br>11.1 Uc (6070 °C):operational AC 50/60 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 60 Hz cos phi 0.3 (at 20 °C)<br>7 VA 50 Hz cos phi 0.3 (at 20 °C)  |  |

| Heat Dissipation             | 23 W at 50/60 Hz   |  |
|------------------------------|--|--|
| Auxiliary Contacts Type      | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>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<br>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  |
|--|--|
| Protective Treatment                     | TH conforming to IEC 60068-2-30  |
| Pollution Degree                         | 3  |
| Ambient Air Temperature For<br>Operation | -4060 °C<br>6070 °C with derating  |
| Ambient Air Temperature For<br>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 open: 10 Gn for 11 ms<br>Shocks contactor closed: 15 Gn for 11 ms |
| Height                                   | 77 mm  |
| Width                                    | 90 mm  |
| Depth                                    | 86 mm  |
| Net Weight                               | 0.697 kg   |
|  |  |

# **Contractual warranty**

Warranty

18 months

### 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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RoHS/REACh

### Well-being performance

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

### **Certifications & Standards**

| Eu Rohs Directive     | Compliant   |
|-----------------------|---|
|                       | EU RoHS Declaration   |
|                       |   |
| China Rohs Regulation | China RoHS declaration  |
|                       | 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 |