



## Main

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| Range                                       | TeSys                                                                                                                                                                                                                                                                                      |
| Product name                                | TeSys D                                                                                                                                                                                                                                                                                    |
| Product or component type                   | Contacteur                                                                                                                                                                                                                                                                                 |
| Device short name                           | LC1D                                                                                                                                                                                                                                                                                       |
| Contacteur application                      | Resistive load<br>Motor control                                                                                                                                                                                                                                                            |
| Utilisation category                        | AC-3<br>AC-4<br>AC-1                                                                                                                                                                                                                                                                       |
| Poles description                           | 3P                                                                                                                                                                                                                                                                                         |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                                                       |
| [Ue] rated operational voltage              | Power circuit: ≤ 1000 V AC 25...400 Hz<br>Power circuit: ≤ 300 V DC                                                                                                                                                                                                                        |
| [Ie] rated operational current              | 200 A (at ≤60 °C) at ≤ 440 V AC AC-1 for power circuit<br>115 A (at ≤60 °C) at ≤ 440 V AC AC-3 for power circuit                                                                                                                                                                           |
| Motor power kW                              | 30 kW at 220...230 V AC 50/60 Hz (AC-3)<br>55 kW at 380...400 V AC 50/60 Hz (AC-3)<br>59 kW at 415...440 V AC 50/60 Hz (AC-3)<br>75 kW at 500 V AC 50/60 Hz (AC-3)<br>80 kW at 660...690 V AC 50/60 Hz (AC-3)<br>65 kW at 1000 V AC 50/60 Hz (AC-3)<br>18.5 kW at 400 V AC 50/60 Hz (AC-4) |
| Motor power hp                              | 30 Hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>40 Hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>75 Hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>100 Hp at 575/600 V AC 50/60 Hz for 3 phases motors                                                                      |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                             |
| [Uc] control circuit voltage                | 110 V AC 50/60 Hz                                                                                                                                                                                                                                                                          |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                                                                |
| [Uimp] rated impulse withstand voltage      | 8 kV conforming to IEC 60947                                                                                                                                                                                                                                                               |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                        |
| [Ith] conventional free air thermal current | 200 A (at 60 °C) for power circuit                                                                                                                                                                                                                                                         |
| Irms rated making capacity                  | 1260 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                     | 1100 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                                                                  |
| [Icw] rated short-time withstand current    | 250 A 40 °C - 10 min for power circuit<br>550 A 40 °C - 1 min for power circuit<br>950 A 40 °C - 10 s for power circuit<br>1100 A 40 °C - 1 s for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit    |

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 intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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| Associated fuse rating        | 250 A gG at ≤ 690 V coordination type 1 for power circuit<br>200 A gG at ≤ 690 V coordination type 2 for power circuit<br>10 A gG for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Average impedance             | 0.6 MOhm - lth 200 A 50 Hz for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [Ui] rated insulation voltage | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 1000 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Electrical durability         | 0.8 Mcycles 200 A AC-1 at Ue ≤ 440 V<br>0.95 Mcycles 115 A AC-3 at Ue ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Power dissipation per pole    | 24 W AC-1<br>7.9 W AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Protective cover              | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting support              | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Standards                     | 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>UL<br>GL<br>DNV<br>LROS (Lloyds register of shipping)<br>RINA<br>CSA<br>CCC<br>GOST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Connections - terminals       | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end<br>Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> flexible without cable end<br>Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> flexible without cable end<br>Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> flexible with cable end<br>Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> flexible with cable end<br>Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> solid without cable end<br>Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> solid without cable end |
| Tightening torque             | Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 12 N.m - on connector hexagonal screw head 4 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating time                | 6...20 ms opening<br>20...50 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Safety reliability level      | B10d = 1369863 cycles contactor with nominal load conforming-<br>to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming-<br>to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Mechanical durability         | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Maximum operating rate        | 2400 Cyc/H 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Complementary

|                                 |                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Coil technology                 | Built-in bidirectional peak limiting diode suppressor                                                                    |
| Inrush power in VA              | 280...350 VA 60 Hz cos phi 0.8 (at 20 °C)<br>280...350 VA 50 Hz cos phi 0.8 (at 20 °C)                                   |
| Hold-in power consumption in VA | 2...18 VA 60 Hz cos phi 0.3 (at 20 °C)<br>2...18 VA 50 Hz cos phi 0.3 (at 20 °C)                                         |
| Heat dissipation                | 3...8 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 | 25...400 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                                                                                 |
| Contact compatibility        | M13                                                                                                              |
| Compatibility code           | LC1D                                                                                                             |
| Power range                  | 30...50 KW at 200...240 V 3 phases<br>55...100 KW at 380...440 V 3 phases<br>55...100 KW at 480...500 V 3 phases |
| Motor starter type           | Direct on-line contactor                                                                                         |
| Contactor coil voltage       | 110 V AC standard                                                                                                |

## 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 storage | -60...80 °C                                                                                                                                                                       |
| 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               | 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: 6 Gn for 11 ms |
| Height                              | 158 Mm                                                                                                                                                                            |
| Width                               | 120 Mm                                                                                                                                                                            |
| Depth                               | 136 Mm                                                                                                                                                                            |
| Net weight                          | 2.5 Kg                                                                                                                                                                            |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 2.493 Kg |
| Package 1 Height             | 17.2 Cm  |
| Package 1 width              | 19 Cm    |
| Package 1 Length             | 20.8 Cm  |
| Unit Type of Package 2       | CAR      |
| Number of Units in Package 2 | 1        |
| Package 2 Weight             | 2.493 Kg |
| Package 2 Height             | 19.5 Cm  |
| Package 2 width              | 17.5 Cm  |
| Package 2 Length             | 21.5 Cm  |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 27       |
| Package 3 Weight             | 80.31 Kg |
| Package 3 Height             | 80 Cm    |
| Package 3 width              | 80 Cm    |
| Package 3 Length             | 60 Cm    |

### Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                               |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                     |
| 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

|          |           |
|----------|-----------|
| Warranty | 18 months |
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| Product Life Status : <b>Commercialised</b> |
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