



## Main

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|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                           |
| Product name                                | TeSys D                                                                                                                                                         |
| Product or component type                   | Contactor                                                                                                                                                       |
| Device short name                           | LC1D                                                                                                                                                            |
| Contactor application                       | Resistive load                                                                                                                                                  |
| Utilisation category                        | AC-1                                                                                                                                                            |
| Poles description                           | 4P                                                                                                                                                              |
| Power pole contact composition              | 4 NO                                                                                                                                                            |
| [Ue] rated operational voltage              | Power circuit: $\leq 1000$ V AC 25...400 Hz<br>Power circuit: $\leq 460$ V DC                                                                                   |
| [Ie] rated operational current              | 200 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit                                                                                               |
| Control circuit type                        | AC at 50 Hz                                                                                                                                                     |
| [Uc] control circuit voltage                | 110 V AC 50 Hz                                                                                                                                                  |
| [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                                                                                                       |
| 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 |
| Associated fuse rating                      | 250 A gG at $\leq 690$ V coordination type 1 for power circuit<br>200 A gG at $\leq 690$ V coordination type 2 for power circuit                                |
| Average impedance                           | 0.6 mOhm - Ith 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                                    |
| Electrical durability                       | 0.8 Mcycles 200 A AC-1 at Ue $\leq 440$ V                                                                                                                       |

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| Power dissipation per pole | 24 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Safety cover               | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting support           | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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     | UL<br>LROS (Lloyds register of shipping)<br>CSA<br>BV<br>GL<br>DNV<br>CCC<br>GOST<br>RINA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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 to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mechanical durability      | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Maximum operating rate     | 2400 cyc/h 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Complementary

|                                 |                                                                                                                      |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Coil technology                 | Without built-in suppressor module                                                                                   |
| Control circuit voltage limits  | Drop-out: 0.3...0.6 U <sub>c</sub> AC 50 Hz (at 55 °C)<br>Operational: 0.85...1.1 U <sub>c</sub> AC 50 Hz (at 55 °C) |
| Inrush power in VA              | 300 VA 50 Hz cos phi 0.8 (at 20 °C)                                                                                  |
| Hold-in power consumption in VA | 22 VA 50 Hz cos phi 0.3 (at 20 °C)                                                                                   |
| Heat dissipation                | 3...8 W at 50 Hz                                                                                                     |

## 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 operation                 | -5...60 °C                                                                                   |
| Ambient air temperature for storage                   | -60...80 °C                                                                                  |
| Permissible ambient air temperature around the device | -40...70 °C at U <sub>c</sub>                                                                |
| Operating altitude                                    | 3000 m without                                                                               |
| 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 |

Shocks contactor closed: 15 Gn for 11 ms  
Shocks contactor open: 6 Gn for 11 ms

|            |         |
|------------|---------|
| Height     | 158 mm  |
| Width      | 150 mm  |
| Depth      | 132 mm  |
| Net weight | 2.86 kg |

### Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Compliant<br><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><br>Product out of China RoHS scope. Substance declaration for your information       |
| 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 |

### Contractual warranty

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