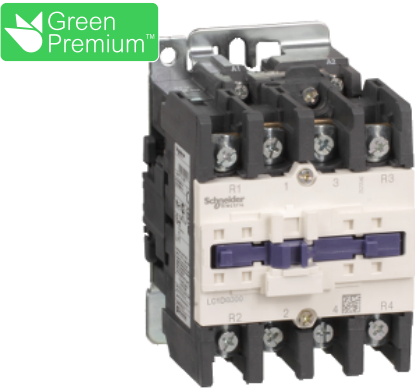


# Product datasheet

Specifications



## TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 125 A - 110 V AC 50/60 Hz coil

Local distributor code: 386102606    LC1D80004F7

### Main

|                                             |                                                                                                                                                                |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                          |
| Product name                                | TeSys D<br>TeSys Deca                                                                                                                                          |
| 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: <= 300 V DC 25...400 Hz<br>Power circuit: <= 690 V AC                                                                                           |
| [Ie] rated operational current              | 125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit                                                                                                        |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                 |
| [Uc] control circuit voltage                | 110 V AC 50/60 Hz                                                                                                                                              |
| [Uimp] rated impulse withstand voltage      | 8 kV conforming to IEC 60947                                                                                                                                   |
| Overvoltage category                        | III                                                                                                                                                            |
| [Ith] conventional free air thermal current | 125 A (at 60 °C) for power circuit                                                                                                                             |
| Irms rated making capacity                  | 1100 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    | 640 A 40 °C - 10 s for power circuit<br>990 A 40 °C - 1 s for power circuit<br>135 A 40 °C - 10 min for power circuit<br>320 A 40 °C - 1 min for power circuit |
| Associated fuse rating                      | 200 A gG at <= 690 V coordination type 1 for power circuit<br>160 A gG at <= 690 V coordination type 2 for power circuit                                       |
| Average impedance                           | 0.8 mOhm - Ith 125 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 125 A AC-1 at Ue <= 440 V                                                                                                                          |
| Power dissipation per pole                  | 12.5 W AC-1                                                                                                                                                    |
| Front cover                                 | Without                                                                                                                                                        |

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                | GL<br>LROS (Lloyds register of shipping)<br>CSA<br>RINA<br>UL<br>DNV<br>BV<br>GOST<br>CCC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Connections - terminals               | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²solid without cable end<br>Power circuit: connector 1 cable(s) 4...50 mm²flexible without cable end<br>Power circuit: connector 2 cable(s) 4...25 mm²flexible without cable end<br>Power circuit: connector 1 cable(s) 4...50 mm²flexible with cable end<br>Power circuit: connector 2 cable(s) 4...16 mm²flexible with cable end<br>Power circuit: connector 1 cable(s) 4...50 mm²solid without cable end<br>Power circuit: connector 2 cable(s) 4...25 mm²solid 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 - with screwdriver flat Ø 6 to Ø 8 mm<br>Power circuit: 12 N.m - on connector hexagonal screw head 4 mm<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Operating time                        | 20...35 ms closing<br>6...20 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 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                 | 4 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Maximum operating rate                | 3600 cyc/h 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Complementary                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Coil technology                       | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Control circuit voltage limits        | 0.85...1.1 Uc (-40...55 °C):operational AC 60 Hz<br>0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...55 °C):operational AC 50 Hz<br>1...1.1 Uc (55...70 °C):operational AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Inrush power in VA                    | 245 VA 60 Hz cos phi 0.75 (at 20 °C)<br>245 VA 50 Hz cos phi 0.75 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Hold-in power consumption in VA       | 26 VA 60 Hz cos phi 0.3 (at 20 °C)<br>26 VA 50 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Heat dissipation                      | 6...10 W at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Environment                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| IP degree of protection               | IP20 front face conforming to IEC 60529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Climatic withstand                    | conforming to IACS E10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protective treatment                  | TH conforming to IEC 60068-2-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pollution degree                      | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ambient air temperature for operation | -40...60 °C<br>60...70 °C with derating                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ambient air temperature for storage   | -60...80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Operating altitude                    | 0...3000 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Fire resistance                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                       |                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical robustness | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Shocks contactor open: 8 Gn for 11 ms<br>Vibrations contactor closed: 3 Gn, 5...300 Hz<br>Shocks contactor closed: 10 Gn for 11 ms |
| Height                | 127 mm                                                                                                                                                                            |
| Width                 | 96 mm                                                                                                                                                                             |
| Depth                 | 125 mm                                                                                                                                                                            |
| Net weight            | 1.76 kg                                                                                                                                                                           |

Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 1.697 kg |
| Package 1 Height             | 11 cm    |
| Package 1 width              | 13.5 cm  |
| Package 1 Length             | 15.5 cm  |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 5        |
| Package 2 Weight             | 8.811 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| REACH free of SVHC         | Yes                                                                                                                         |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| Toxic heavy metal free     | Yes                                                                                                                         |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)                 |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</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 |
|----------|-----------|