



## Main

|                                |  |
|--------------------------------|--|
| Range                          | TeSys<br>TeSys Deca  |
| Range of Product               | TeSys Deca   |
| Product or Component Type      | Contacteur   |
| Device short name              | LC1D   |
| Contacteur application         | Resistive load   |
| Utilisation category           | AC-1   |
| Poles description              | 4P   |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC |
| [Ie] rated operational current | 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit    |
| [Uc] control circuit voltage   | 12 V DC  |

## Complementary

|   |  |
|---|--|
| Compatibility code                          | LC1D   |
| Pole contact composition                    | 4 NO   |
| Contact compatibility                       | M7   |
| Protective cover                            | With   |
| [Ith] conventional free air thermal current | 10 A (at 140 °F (60 °C)) for signalling circuit<br>80 A (at 140 °F (60 °C)) for power circuit  |
| Irms rated making capacity                  | 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<br>1000 A at 440 V for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 1000 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 640 A 104 °F (40 °C) - 10 s for power circuit<br>900 A 104 °F (40 °C) - 1 s for power circuit<br>110 A 104 °F (40 °C) - 10 min for power circuit<br>260 A 104 °F (40 °C) - 1 min 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 |
| Associated fuse rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>125 A gG at <= 690 V coordination type 1 for power circuit<br>125 A gG at <= 690 V coordination type 2 for power circuit   |
| Average impedance                           | 1.6 mOhm - Ith 80 A 50 Hz for power circuit  |
| Power dissipation per pole                  | 10.2 W AC-1  |
| [Ui] rated insulation voltage               | Power circuit 600 V CSA[RETURN]Power circuit 600 V UL[RETURN]Signalling circuit 690 V IEC 60947-1[RETURN]Signalling circuit 600 V CSA[RETURN]Signalling circuit 600 V UL[RETURN]Power circuit 690 V IEC 60947-4-1  |
| Overvoltage category                        | III  |
| Pollution degree                            | 3  |
| [Uimp] rated impulse withstand voltage      | 6 kV IEC 60947   |
| Safety reliability level                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1   |
| Mechanical durability                       | 10 Mcycles   |
| Electrical durability                       | 0.5 Mcycles 80 A AC-1 <= 440 V   |
| Control circuit type                        | DC standard  |
| Coil technology                             | Built-in bidirectional peak limiting diode suppressor  |

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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| Control circuit voltage limits | 0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC<br>0.75...1.25 Uc -40...140 °F (-40...60 °C) operational DC<br>1...1.25 Uc 140...158 °F (60...70 °C) operational DC  |
| Inrush power in W              | 19 W 68 °F (20 °C))  |
| Hold-in power consumption in W | 7.4 W 68 °F (20 °C)  |
| Operating time                 | 42.5...57.5 ms closing<br>16...24 ms opening   |
| Time constant                  | 34 ms  |
| Maximum operating rate         | 3600 cyc/h 140 °F (60 °C)  |
| Connections - terminals        | Control circuit: screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end<br>Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: solid without cable end<br>Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: solid without cable end |
| Tightening torque              | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2<br>Power circuit 70.81 lbf.in (8 N.m) screw clamp terminals 0.04...0.05 in <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm)<br>Power circuit 44.25 lbf.in (5 N.m) screw clamp terminals 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm)<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2<br>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2   |
| Auxiliary contact composition  | 1 NO + 1 NC  |
| Auxiliary contacts type        | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1   |
| Signalling circuit frequency   | 25...400 Hz  |
| Minimum switching voltage      | 17 V for signalling circuit  |
| Minimum switching current      | 5 mA for signalling circuit  |
| Insulation resistance          | > 10 MOhm 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  |
| Mounting Support               | Plate<br>Rail  |

## Environment

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|---|--|
| 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<br>IEC 60335-1 |
| Product Certifications                                | CSA[RETURN]UL[RETURN]DNV[RETURN]CCC[RETURN]BV[RETURN]RINA[RETURN]GL[RET                                    |
| IP degree of protection                               | IP20 front face IEC 60529  |
| Protective treatment                                  | THIEC 60068-2-30   |
| Climatic withstand                                    | IACS E10 exposure to damp heat<br>IEC 60947-1 Annex Q category D exposure to damp heat                     |
| Permissible ambient air temperature around the device | -40...140 °F (-40...60 °C)<br>140...158 °F (60...70 °C) with derating                                      |

|                       |  |
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| Operating altitude    | 0...9842.52 ft (0...3000 m)  |
| Fire resistance       | 1562 °F (850 °C) 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 10 Gn for 11 ms) |
| Height                | 4.80 in (122 mm)   |
| Width                 | 2.76 in (70 mm)  |
| Depth                 | 4.72 in (120 mm)   |
| Net Weight            | 2.70 lb(US) (1.225 kg)   |

### Ordering and shipping details

|                   |                                     |
|-------------------|-------------------------------------|
| Category          | 22358-CTR, TESYS D, OPEN, 40-65A DC |
| Discount Schedule | I12                                 |
| GTIN              | 3389118330238                       |
| Returnability     | No                                  |
| Country of origin | FR                                  |

### Packing Units

|                              |                      |
|------------------------------|----------------------|
| Unit Type of Package 1       | PCE                  |
| Number of Units in Package 1 | 1                    |
| Package 1 Height             | 2.95 in (7.5 cm)     |
| Package 1 Width              | 5.51 in (14.0 cm)    |
| Package 1 Length             | 5.91 in (15.0 cm)    |
| Package 1 Weight             | 2.43 lb(US) (1.1 kg) |

### Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</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 |
|----------|-----------|