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## Main

|   |   |
|---|---|
| Range                                       | TeSys   |
| Product name                                | TeSys D   |
| Product or component type                   | Contacteur  |
| Device short name                           | LC1D  |
| Contacteur application                      | Resistive load  |
| Utilisation category                        | AC-1  |
| Poles description                           | 4P  |
| Power pole contact composition              | 4 NO  |
| [Ue] rated operational voltage              | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC  |
| [Ie] rated operational current              | 40 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit  |
| Control circuit type                        | DC low consumption  |
| [Uc] control circuit voltage                | 24 V DC   |
| Auxiliary contact composition               | 1 NO + 1 NC   |
| [Uimp] rated impulse withstand voltage      | 6 kV IEC 60947  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit<br>40 A 140 °F (60 °C) power circuit   |
| Irms rated making capacity                  | 140 A AC signalling circuit IEC 60947-5-1<br>250 A DC signalling circuit IEC 60947-5-1<br>450 A 440 V power circuit IEC 60947   |
| Rated breaking capacity                     | 450 A 440 V power circuit IEC 60947   |
| [Icw] rated short-time withstand current    | 50 A 104 °F (40 °C) - 10 min power circuit<br>120 A 104 °F (40 °C) - 1 min power circuit<br>240 A 104 °F (40 °C) - 10 s power circuit<br>380 A 104 °F (40 °C) - 1 s power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit<br>140 A - 100 ms signalling circuit |
| Associated fuse rating                      | 10 A gG signalling circuit IEC 60947-5-1<br>63 A gG <= 690 V type 1 power circuit<br>40 A gG <= 690 V type 2 power circuit  |
| Average impedance                           | 2 mOhm - Ith 40 A 50 Hz power circuit   |
| [Ui] rated insulation voltage               | Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL<br>Power circuit 690 V IEC 60947-4-1   |
| Electrical durability                       | 1.4 Mcycles 40 A AC-1 <= 440 V  |
| Power dissipation per pole                  | 3.2 W AC-1  |
| Front 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>DNV<br>UL<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>GOST<br>CSA<br>CCC  |
| Connections - terminals  | Control circuit screw clamp terminals 2 0.00...<br>0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...<br>0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...<br>0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...<br>0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...<br>0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Control circuit screw clamp terminals 2 0.00...<br>0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5...<br>10 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...<br>10 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5...<br>10 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...<br>10 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5...<br>16 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...<br>16 mm <sup>2</sup> )solid without cable end |
| Tightening torque        | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp<br>terminals flat Ø 6 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp<br>terminals Philips No 2<br>Power circuit 15.05 lbf.in (1.7 N.m) connector flat Ø<br>6 mm<br>Power circuit 15.05 lbf.in (1.7 N.m) connector Philips<br>No 2   |
| Operating time           | 65.45...88.55 ms closing<br>20...30 ms opening   |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load<br>EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical<br>load EN/ISO 13849-1   |
| Mechanical durability    | 30 Mcycles   |
| Maximum operating rate   | 3600 cyc/h 140 °F (60 °C)  |

## Complementary

|                                |  |
|--------------------------------|--|
| Coil technology                | Built-in bidirectional peak limiting diode suppressor  |
| Control circuit voltage limits | 0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC<br>0.8...1.25 Uc -40...140 °F (-40...60 °C) operational DC<br>1...1.25 Uc 140...158 °F (60...70 °C) operational DC |
| Time constant                  | 40 ms  |
| Inrush power in W              | 2.4 W 68 °F (20 °C))   |
| Hold-in power consumption in W | 2.4 W 68 °F (20 °C)  |
| 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 current      | 5 mA signalling circuit  |
| Minimum switching voltage      | 17 V 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 signalling circuit   |
| Contact compatibility          | M5   |
| Compatibility code             | LC1D   |

## Environment

|                                       |   |
|---------------------------------------|---|
| IP degree of protection               | IP20 front face IEC 60529   |
| Protective treatment                  | TH IEC 60068-2-30   |
| Pollution degree                      | 3   |
| Ambient air temperature for operation | -40...140 °F (-40...60 °C)<br>140...158 °F (60...70 °C) with derating   |
| Ambient air temperature for storage   | -76...176 °F (-60...80 °C)  |
| Operating altitude                    | 0...9842.52 ft (0...3000 m)   |
| Fire resistance                       | 1562 °F (850 °C) IEC 60695-2-1  |
| Flame retardance                      | V1 UL 94  |
| Mechanical robustness                 | Vibrations contactor open2 Gn, 5...300 Hz<br>Vibrations contactor closed4 Gn, 5...300 Hz<br>Shocks contactor closed15 Gn for 11 ms<br>Shocks contactor open8 Gn for 11 ms |
| Height                                | 3.58 in (91 mm)   |
| Maximum Width                         | 1.77 in (45 mm)   |
| Depth                                 | 4.21 in (107 mm)  |
| Net Weight                            | 0.94 lb(US) (0.425 kg)  |



## Ordering and shipping details

|                       |                                      |
|-----------------------|--------------------------------------|
| Category              | 22354 - CTR, TESYS D, OPEN, 9-38A AC |
| Discount Schedule     | I12                                  |
| GTIN                  | 00785901610670                       |
| Nbr. of units in pkg. | 1                                    |
| Package weight(Lbs)   | 1.41 lb(US) (0.64 kg)                |
| Returnability         | No                                   |
| Country of origin     | ID                                   |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Package 1 Height             | 1.89 in (4.8 cm)         |
| Package 1 width              | 6.54 in (16.6 cm)        |
| Package 1 Length             | 5.35 in (13.6 cm)        |
| Unit Type of Package 2       | S02                      |
| Number of Units in Package 2 | 15                       |
| Package 2 Weight             | 22.27 lb(US) (10.1 kg)   |
| Package 2 Height             | 5.91 in (15 cm)          |
| Package 2 width              | 11.81 in (30 cm)         |
| Package 2 Length             | 15.75 in (40 cm)         |
| Unit Type of Package 3       | P06                      |
| Number of Units in Package 3 | 240                      |
| Package 3 Weight             | 375.01 lb(US) (170.1 kg) |
| Package 3 Height             | 30.31 in (77 cm)         |
| Package 3 width              | 31.50 in (80 cm)         |
| Package 3 Length             | 23.62 in (60 cm)         |

## 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>   |
| Toxic heavy metal free    | Yes   |

|                             |  |
|-----------------------------|--|
| 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  |
| <b>Contractual warranty</b> |  |
| Warranty                    | 18 months  |