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## Main

|   |  |
|---|--|
| Range                                       | TeSys  |
| Product name                                | TeSys D  |
| Product or component type                   | Contacteur   |
| Device short name                           | LC1D   |
| Contacteur application                      | Motor control<br>Resistive load  |
| Utilisation category                        | AC-3<br>AC-1<br>AC-4   |
| Poles description                           | 3P   |
| Power pole contact composition              | 3 NO   |
| [Ue] rated operational voltage              | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC   |
| [Ie] rated operational current              | 9 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit<br>25 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit  |
| Motor power kW                              | 2.2 KW 220...230 V AC 50/60 Hz AC-3)<br>4 KW 380...400 V AC 50/60 Hz AC-3)<br>4 KW 415...440 V AC 50/60 Hz AC-3)<br>5.5 KW 500 V AC 50/60 Hz AC-3)<br>5.5 KW 660...690 V AC 50/60 Hz AC-3)<br>2.2 kW 400 V AC 50/60 Hz AC-4)   |
| Motor power HP (UL / CSA)                   | 1 Hp 230/240 V AC 50/60 Hz 1 phase<br>2 Hp 200/208 V AC 50/60 Hz 3 phase<br>2 Hp 230/240 V AC 50/60 Hz 3 phase<br>5 Hp 460/480 V AC 50/60 Hz 3 phase<br>7.5 Hp 575/600 V AC 50/60 Hz 3 phase<br>0.33 hp 115 V AC 50/60 Hz 1 phase  |
| Control circuit type                        | AC 50/60 Hz  |
| [Uc] control circuit voltage                | 230 V AC 50/60 Hz  |
| 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>16 A 140 °F (60 °C) power circuit  |
| Irms rated making capacity                  | 250 A 440 V power circuit IEC 60947<br>140 A AC signalling circuit IEC 60947-5-1<br>250 A DC signalling circuit IEC 60947-5-1  |
| Rated breaking capacity                     | 250 A 440 V power circuit IEC 60947  |
| [Icw] rated short-time withstand current    | 105 A 104 °F (40 °C) - 10 s power circuit<br>210 A 104 °F (40 °C) - 1 s power circuit<br>30 A 104 °F (40 °C) - 10 min power circuit<br>61 A 104 °F (40 °C) - 1 min 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>25 A gG <= 690 V type 1 power circuit<br>20 A gG <= 690 V type 2 power circuit   |
| Average impedance                           | 2.5 mOhm - Ith 16 A 50 Hz power circuit  |
| [Ui] rated insulation voltage               | Power circuit 690 V IEC 60947-4-1<br>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  |
| Electrical durability                       | 0.6 Mcycles 25 A AC-1 <= 440 V<br>2 Mcycles 9 A AC-3 <= 440 V  |
| Power dissipation per pole                  | 1.56 W AC-1<br>0.2 W AC-3  |
| Safety cover                                | With   |

|                          |  |
|--------------------------|--|
| Mounting support         | Rail 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   | UL<br>BV<br>RINA<br>GOST<br>CCC<br>LROS (Lloyds register of shipping)<br>DNV<br>GL<br>CSA  |
| Connections - terminals  | Power circuit spring terminals 1 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> )flexible without cable end<br>Power circuit spring terminals 2 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> )flexible without cable end<br>Control circuit spring terminals 1 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> )flexible without cable end<br>Control circuit spring terminals 2 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> )flexible without cable end |
| Operating time           | 12...22 ms closing<br>4...19 ms opening  |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 2000000 cycles contactor with mechanical load EN/ISO 13849-1  |
| Mechanical durability    | 15 Mcycles   |
| Maximum operating rate   | 3600 cyc/h 140 °F (60 °C)  |

## Complementary

|                                 |   |
|---------------------------------|---|
| Coil technology                 | Without built-in suppressor module  |
| Control circuit voltage limits  | Drop-out 0.3...0.6 Uc AC 50/60 Hz 140 °F (60 °C)<br>Operational 0.8...1.1 Uc AC 50 Hz 140 °F (60 °C)<br>Operational 0.85...1.1 Uc AC 60 Hz 140 °F (60 °C) |
| Inrush power in VA              | 70 VA 60 Hz 0.75 68 °F (20 °C)<br>70 VA 50 Hz 0.75 68 °F (20 °C)  |
| Hold-in power consumption in VA | 7.5 VA 60 Hz 0.3 68 °F (20 °C)<br>7 VA 50 Hz 0.3 68 °F (20 °C)  |
| Heat dissipation                | 2...3 W 50/60 Hz  |
| 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  |

## 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                 | 23...140 °F (-5...60 °C)         |
| Ambient air temperature for storage                   | -76...176 °F (-60...80 °C)       |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc |
| Operating altitude                                    | 9842.52 ft (3000 m) without      |
| 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 open10 Gn for 11 ms<br>Shocks contactor closed15 Gn for 11 ms |
| Height                | 3.15 in (80 mm)  |
| Width                 | 1.77 in (45 mm)  |
| Depth                 | 3.39 in (86 mm)  |
| Product weight        | 0.71 lb(US) (0.32 kg)  |

### Ordering and shipping details

|                     |                                      |
|---------------------|--------------------------------------|
| Category            | 22354 - CTR, TESYS D, OPEN, 9-38A AC |
| Discount Schedule   | I12                                  |
| GTIN                | 03389110802351                       |
| Package weight(Lbs) | 0.37 kg (0.82 lb(US))                |
| Returnability       | No                                   |
| Country of origin   | ID                                   |

### Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| 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. |

### Contractual warranty

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