





## Main

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|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                                                                        |
| Product name                                | TeSys D                                                                                                                                                                                                                                                                                      |
| Product or component type                   | Contactor                                                                                                                                                                                                                                                                                    |
| Device short name                           | LC1D                                                                                                                                                                                                                                                                                         |
| Contactor application                       | Resistive load<br>Motor control                                                                                                                                                                                                                                                              |
| Utilisation category                        | AC-4<br>AC-1<br>AC-3                                                                                                                                                                                                                                                                         |
| 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                | 24 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 | 25 A 140 °F (60 °C) power circuit<br>10 A 140 °F (60 °C) signalling 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 25 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                                                                                                                                                                                                                                                                    |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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   | GL<br>CSA<br>GOST<br>RINA<br>LROS (Lloyds register of shipping)<br>UL<br>DNV<br>BV<br>CCC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Connections - terminals  | Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end<br>Power circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end<br>Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Control circuit screw clamp terminals 1 0.00...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...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...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 2 0.00...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...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...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end |
| Tightening torque        | Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm<br>Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2<br>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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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 = 20000000 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                                                 |
| 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                                                                                                     |
| Contact compatibility  | M2                                                                                                                               |
| Compatibility code     | LC1D                                                                                                                             |
| Motor power range      | 1.1...2 KW 200...240 V 3 phase<br>2.2...3 KW 380...440 V 3 phase<br>4...6 KW 380...440 V 3 phase<br>4...6 kW 480...500 V 3 phase |
| Motor starter type     | Direct on-line contactor                                                                                                         |
| Contactor coil voltage | 24 V AC standard                                                                                                                 |

## Environment

|                                     |                                                                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection             | IP20 front face IEC 60529                                                                                                                                                  |
| Protective treatment                | TH IEC 60068-2-30                                                                                                                                                          |
| Pollution degree                    | 3                                                                                                                                                                          |
| Ambient air temperature for storage | -76...176 °F (-60...80 °C)                                                                                                                                                 |
| Operating altitude                  | 9842.52 ft (3000 m) without derating                                                                                                                                       |
| 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 |
| Maximum Height                      | 3.03 in (77 mm)                                                                                                                                                            |
| Maximum Width                       | 1.77 in (45 mm)                                                                                                                                                            |
| Maximum Depth                       | 3.39 in (86 mm)                                                                                                                                                            |
| Net 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                  | 00785901206927                       |
| Nbr. of units in pkg. | 1                                    |
| Package weight(Lbs)   | 0.77 lb(US) (0.35 kg)                |
| Returnability         | Yes                                  |
| Country of origin     | ID                                   |

## Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Package 1 Height             | 2.05 in (5.2 cm)          |
| Package 1 width              | 3.62 in (9.2 cm)          |
| Package 1 Length             | 4.45 in (11.3 cm)         |
| Unit Type of Package 2       | S02                       |
| Number of Units in Package 2 | 20                        |
| Package 2 Weight             | 16.57 lb(US) (7.515 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 | 320                       |
| Package 3 Weight             | 283.82 lb(US) (128.74 kg) |
| Package 3 Height             | 31.50 in (80 cm)          |
| Package 3 width              | 31.50 in (80 cm)          |
| Package 3 Length             | 23.62 in (60 cm)          |

## Offer Sustainability

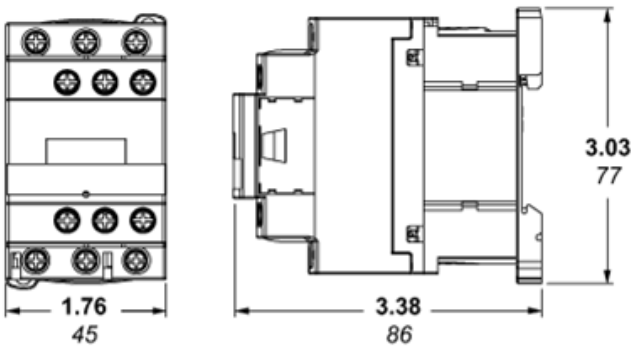
|                            |                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Carcinogen harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</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                                                                                                                                                                                                                                                               |

## Contractual warranty

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

Approximate Dimensions

CONTACTOR WITH AC COIL



CONTACTOR WITH DC COIL

