## Product data sheet Characteristics

# LC1D256E7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 48 V AC coil

Product availability: Non-Stock - Not normally stocked in distribution facility





#### Main

| Range                                  | TeSys   |
|--|---|
| Product name                           | TeSys D   |
| Product or component type              | Contactor   |
| Device short name                      | LC1D Motor control  |
| Contactor application                  | Notor Control   |
| Utilisation category                   | AC-1<br>AC-4<br>AC-3  |
| Poles description                      | 3P  |
| Power pole contact composition         |   |
| [Ue] rated operational voltage         | 3 NO  Power circuit <= 690 V AC 25400 Hz  Power circuit <= 300 V DC   |
| [le] rated operational current         | 25 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit<br>40 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit  |
| Motor power kW                         | 5.5 kW 220230 V AC 50/60 Hz AC-3)<br>11 kW 380400 V AC 50/60 Hz AC-3)<br>11 kW 415440 V AC 50/60 Hz AC-3)<br>15 kW 500 V AC 50/60 Hz AC-3)<br>15 kW 660690 V AC 50/60 Hz AC-3)<br>5.5 kW 400 V AC 50/60 Hz AC-4)                                  |
| Motor power HP (UL / CSA)              | 3 hp 230/240 V AC 50/60 Hz 1 phase<br>2 hp 115 V AC 50/60 Hz 1 phase<br>7.5 hp 230/240 V AC 50/60 Hz 3 phase<br>15 hp 460/480 V AC 50/60 Hz 3 phase<br>20 hp 575/600 V AC 50/60 Hz 3 phase<br>7.5 hp 200/208 V AC 50/60 Hz 3 phase<br>AC 50/60 Hz |
| Control circuit type                   | AC 50/60 Hz   |
| [Uc] control circuit voltage           | 48 V AC 50/60 Hz  |
| Auxiliary contact composition          | 1 NO + 1 NC   |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947  |

| Overotidage category         III           If this conventional free air themal current         10 A 140 °F (60 °C) signalling circuit at conventional free air themal current         140 A AC signalling circuit EC 60947-5-1 (250 ACC signalling circuit EC 60947-5-1 (450 A 440 V power circuit IEC 60947 (450 A 440 V power circuit IEC 60947)           Rated breaking capacity         450 A 440 V power circuit IEC 80947           Rated breaking capacity         450 A 440 V power circuit IEC 80947           Rated breaking capacity         450 A 400 V power circuit IEC 80947-7           Rated breaking capacity         450 A 400 V F (40 °C) - 10 s power circuit 120 A 100 A °C signalling circuit 120 A °C so ma signalling circuit 120 A °C so m   |  |   |
|--|--|---|
| current         40 A 140 °F (60 °C) power circuit           Imms rated making capacity         140 A AG (spinaling circuit IEC 60947-5-1 250 A IDC signaling circuit IEC 60947           Rated breaking capacity         450 A 440 V power circuit IEC 60947           [Itow] rated short-time withstand current         240 A 104 °F (40 °C) - 10 s power circuit IEC 60947           [Itow] rated short-time withstand current         240 A 104 °F (40 °C) - 10 s power circuit IEC 60947           300 A 14 °F (40 °C) - 10 s power circuit IEC 60947-3         300 A 14 °F (40 °C) - 10 min power circuit IEC 60947-3           300 A 14 °F (40 °C) - 10 min power circuit IEC 60947-3-1 (a) A 90 °F (500 °F (5   | Overvoltage category                     | III   |
| 250 A DC signalling circuit IEC 60947 -5-1   |  |   |
| Icw  rated short-time withstand current   240 A 104 °F (40 °C) - 10 s power circuit   380 A 104 °F (40 °C) - 10 min power circuit   120 A 104 °F (40 °C) - 10 min power circuit   120 A - 10 min signalling circuit   120 A - 100 min signalling circuit   140 A - 100 min s | Irms rated making capacity               | 250 A DC signalling circuit IEC 60947-5-1   |
| 380 A 104 °F (40 °C) - 1 s power circuit   50 A 104 °F (40 °C) - 10 min power circuit   120 A 104 °F (40 °C) - 10 min power circuit   120 A - 104 °F (40 °C) - 10 min power circuit   120 A - 100 ms signalling circuit   140 A - 500 ms signalling circuit   140 A - 100 ms signalling circuit   140 A - 100 ms signalling circuit   140 A 100 ms signalling circuit   140 Ms constant circuit   1  | Rated breaking capacity                  | 450 A 440 V power circuit IEC 60947   |
| 83 A gi C = 690 V type 1 power circuit   40 A gi C = 690 V type 2 power circuit   40 A gi C = 690 V type 2 power circuit   40 A gi C = 690 V type 2 power circuit   40 A gi C = 690 V type 2 power circuit   40 A so Hz power circuit 600 V text     40 A so Hz power circuit 600 V text     40 A so Hz power circuit 600 V text     40 A power circuit 10 A  | [lcw] rated short-time withstand current | 380 A 104 °F (40 °C) - 1 s power circuit 50 A 104 °F (40 °C) - 10 min power circuit 120 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit |
| [Ui] rated insulation voltage  | Associated fuse rating                   | 63 A gG <= 690 V type 1 power circuit   |
| Power circuit 600 V CSA  | Average impedance                        | 2 mOhm - Ith 40 A 50 Hz power circuit   |
| 1.4 Mcycles 40 A AC-1 <= 440 V   | [Ui] rated insulation voltage            | Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA  |
| 1.25 W AC-3  | Electrical durability                    | ,   |
| Mounting support  Plate Rail  Standards  CSA C22.2 No 14 EN 60947-4-1 EN 60947-4-1 IEC 60947-5-1 IUL 508  Product certifications  RINA LROS (Lloyds register of shipping) DNV UL CCC CSA BV GL GOST  Connections - terminals  Control circuit lugs-ring terminals 0.31 in (8 mm)) Power circuit lugs-ring terminals 0.39 in (10 mm))  Tightening torque  Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.2 las closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with mechanical load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  | Power dissipation per pole               |   |
| Standards  CSA C22.2 No 14 EN 60947-4-1 EN 60947-4-1 IEC 60947-4-1 IEC 60947-5-1 UL 508  Product certifications  RINA LROS (Lloyds register of shipping) DNV UL CCC CSA BV GL GOST  Connections - terminals  Control circuit lugs-ring terminals 0.31 in (8 mm)) Power circuit lugs-ring terminals 0.39 in (10 mm)) Tightening torque  Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4  Operating time  1222 ms closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1   | Safety cover                             | With  |
| EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508  Product certifications  RINA LROS (Lloyds register of shipping) DNV UL CCC CSA BV GL GOST  Connections - terminals  Control circuit lugs-ring terminals 0.31 in (8 mm)) Power circuit lugs-ring terminals 0.39 in (10 mm))  Tightening torque  Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4  Operating time  1222 ms closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 Mechanical durability  15 Mcycles  | Mounting support                         |   |
| LROS (Lloyds register of shipping) DNV UL CCC CSA BV GL GOST  Connections - terminals  Control circuit lugs-ring terminals 0.31 in (8 mm)) Power circuit lugs-ring terminals 0.39 in (10 mm))  Tightening torque  Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4  Operating time  1222 ms closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability  15 Mcycles  | Standards                                | EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1  |
| Power circuit lugs-ring terminals 0.39 in (10 mm))  Tightening torque  Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4  Operating time  1222 ms closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability  15 Mcycles   | Product certifications                   | LROS (Lloyds register of shipping) DNV UL CCC CSA BV GL   |
| Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4  Operating time  1222 ms closing 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability  15 Mcycles  | Connections - terminals                  |   |
| 419 ms opening  Safety reliability level  B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1  B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability  15 Mcycles  | Tightening torque                        | Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4  |
| B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability 15 Mcycles   | Operating time                           | · · · · · · · · · · · · · · · · · · ·   |
|  | Safety reliability level                 |   |
| Maximum operating rate 3600 cyc/h 140 °F (60 °C)   | 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 0.30.6 Uc AC 50/60 Hz 140 °F (60 °C)) Operational 0.81.1 Uc AC 50 Hz 140 °F (60 °C)) Operational 0.851.1 Uc AC 60 Hz 140 °F (60 °C)) |
| Inrush power in VA             | 70 VA 60 Hz 0.75 68 °F (20 °C))   |

#### 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                | 23 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    | 25400 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                 | 23140 °F (-560 °C)  |
| Ambient air temperature for storage                   | -76176 °F (-6080 °C)  |
| Permissible ambient air temperature around the device | -40158 °F (-4070 °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, 5300 Hz<br>Vibrations contactor closed4 Gn, 5300 Hz<br>Shocks contactor closed15 Gn for 11 ms<br>Shocks contactor open8 Gn for 11 ms |
| Height  | 3.35 in (85 mm)   |
| Width   | 1.77 in (45 mm)   |
| Depth   | 3.62 in (92 mm)   |
| Net weight  | 0.82 lb(US) (0.37 kg)   |
|   |   |

## Ordering and shipping details

| Category          | 22354 - CTR,TESYS D,OPEN,9-38A AC |
|-------------------|-----------------------------------|
| Discount Schedule | 112                               |
| GTIN              | 03389110804478                    |
| Returnability     | No                                |
| Country of origin | FR                                |

## 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 www.p65warnings.ca.gov |
| REACh Regulation           | REACh Declaration   |
| REACh free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant EU RoHS Declaration   |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | Yes   |
| China RoHS Regulation      | China RoHS declaration  |
| Environmental Disclosure   | Product Environmental Profile   |
| Circularity Profile        | End of Life Information   |
|                            |   |

| 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  |