

# LC1D256BD

IEC contactor, TeSys Deca, nonreversing, 25A, 15HP at 480VAC, 3 phase, 3 pole, 3 NO, 24VDC coil, open style



## Main

|                                |                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of Product               | TeSys Deca                                                                                                                                                      |
| Product or Component Type      | Contactor                                                                                                                                                       |
| Device short name              | LC1D                                                                                                                                                            |
| Contactor application          | Motor control<br>Resistive load                                                                                                                                 |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3e                                                                                                                                   |
| Poles description              | 3P                                                                                                                                                              |
| [Ue] rated operational voltage | Power circuit ≤ 690 V AC 25...400 Hz<br>Power circuit ≤ 300 V DC                                                                                                |
| [Ie] 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<br>25 A 140 °F (60 °C)) ≤ 440 V AC AC-3e power circuit |
| [Uc] control circuit voltage   | 24 V DC                                                                                                                                                         |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                              | 5.5 KW 220...230 V AC 50/60 Hz AC-3)<br>11 KW 380...400 V AC 50/60 Hz AC-3)<br>11 KW 415...440 V AC 50/60 Hz AC-3)<br>15 KW 500 V AC 50/60 Hz AC-3)<br>15 KW 660...690 V AC 50/60 Hz AC-3)<br>5.5 KW 400 V AC 50/60 Hz AC-4)<br>5.5 KW 220...230 V AC 50/60 Hz AC-3e)<br>11 KW 380...400 V AC 50/60 Hz AC-3e)<br>11 KW 415...440 V AC 50/60 Hz AC-3e)<br>15 KW 500 V AC 50/60 Hz AC-3e)<br>15 kW 660...690 V AC 50/60 Hz AC-3e) |
| Maximum Horse Power Rating                  | 3 Hp 230/240 V at AC 50/60 Hz for 1 phase<br>2 Hp 115 V at AC 50/60 Hz for 1 phase<br>7.5 Hp 230/240 V at AC 50/60 Hz for 3 phase<br>15 Hp 460/480 V at AC 50/60 Hz for 3 phase<br>20 Hp 575/600 V at AC 50/60 Hz for 3 phase<br>7.5 hp 200/208 V at AC 50/60 Hz for 3 phase                                                                                                                                                    |
| Compatibility code                          | LC1D                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Contact compatibility                       | M4                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protective cover                            | With                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [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                                                                                                                                                                                                                                                                                                                                                                                             |

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.

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Icw] rated short-time withstand current | 240 A 104 °F (40 °C) - 10 s power circuit<br>380 A 104 °F (40 °C) - 1 s power circuit<br>50 A 104 °F (40 °C) - 10 min power circuit<br>120 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>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                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power dissipation per pole               | 3.2 W AC-1<br>1.25 W AC-3<br>1.25 W AC-3e                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [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                                                                                                                                                                                                                                                                                |
| 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 = 2000000 cycles contactor with mechanical load EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                      |
| Mechanical durability                    | 30 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Electrical durability                    | 1.65 Mcycles 25 A AC-3 ≤ 440 V<br>1.4 Mcycles 40 A AC-1 ≤ 440 V<br>1.65 Mcycles 25 A AC-3e ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                           |
| Control circuit type                     | DC standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Coil technology                          | Built-in bidirectional peak limiting diode suppressor                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Control circuit voltage limits           | 0.1...0.25 Uc -40...158 °F (-40...70 °C) drop-out DC<br>0.7...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                        | 5.4 W 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Hold-in power consumption in W           | 5.4 W 68 °F (20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Operating time                           | 53.55...72.45 ms closing<br>16...24 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Time constant                            | 28 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum operating rate                   | 3600 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connections - terminals                  | Control circuit lugs-ring terminals 0.31 in (8 mm)<br>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<br>Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5<br>Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4<br>Power circuit 22.13 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4<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 signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Minimum switching current                | 5 mA signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Insulation resistance                    | > 10 MOhm 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                         | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Environment

|                                                       |                                                                                                                                                                                   |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                | BV<br>UL<br>DNV<br>CSA<br>GL<br>GOST<br>LROS (Lloyds register of shipping)<br>CCC<br>RINA<br>UKCA                                                                                 |
| 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                                                                                                             |
| 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 8 Gn for 11 ms) |
| Height                                                | 3.35 in (85 mm)                                                                                                                                                                   |
| Width                                                 | 1.77 in (45 mm)                                                                                                                                                                   |
| Depth                                                 | 3.98 in (101 mm)                                                                                                                                                                  |
| Net Weight                                            | 1.17 lb(US) (0.53 kg)                                                                                                                                                             |

## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22355-CTR, TESYS D, OPEN, 9-38A DC |
| Discount Schedule | I12                                |
| GTIN              | 3389110807592                      |
| Returnability     | Yes                                |
| Country of origin | ID                                 |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 4.41 in (11.2 cm)       |
| Package 1 Width              | 3.66 in (9.3 cm)        |
| Package 1 Length             | 2.13 in (5.4 cm)        |
| Package 1 Weight             | 21.23 oz (602 g)        |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 15                      |
| Package 2 Height             | 5.91 in (15 cm)         |
| Package 2 Width              | 11.81 in (30 cm)        |
| Package 2 Length             | 15.75 in (40 cm)        |
| Package 2 Weight             | 20.47 lb(US) (9.285 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>                                                                                                                                                                                                                         |
| 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>                                                                                                                                                                                                                   |
| PVC free                   | Yes                                                                                                                                                                                                                                                       |

## Contractual warranty

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