

# LC1D386BL

IEC contactor, TeSys Deca, nonreversing, 38A, 20HP at 480VAC, 3 phase, 3 pole, 3 NO, low consumption, 24VDC coil, open



## Main

|                                |   |
|--------------------------------|---|
| Range                          | TeSys<br>TeSys Deca   |
| Range of Product               | TeSys Deca  |
| Product or Component Type      | Contacteur  |
| Device short name              | LC1D  |
| Contacteur application         | Motor control<br>Resistive load   |
| Utilisation category           | AC-4<br>AC-1<br>AC-3<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 | 50 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit<br>38 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit<br>38 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit |
| [Uc] control circuit voltage   | 24 V DC   |

## Complementary

|   |   |
|---|---|
| Motor power kW                              | 18.5 KW 500 V AC 50/60 Hz AC-3)<br>18.5 KW 660...690 V AC 50/60 Hz AC-3)<br>7.5 KW 400 V AC 50/60 Hz AC-4)<br>18.5 KW 380...400 V AC 50/60 Hz AC-3)<br>9 KW 220...230 V AC 50/60 Hz AC-3)<br>18.5 KW 415...440 V AC 50/60 Hz AC-3)<br>18.5 KW 500 V AC 50/60 Hz AC-3e)<br>18.5 KW 660...690 V AC 50/60 Hz AC-3e)<br>18.5 KW 380...400 V AC 50/60 Hz AC-3e)<br>9 KW 220...230 V AC 50/60 Hz AC-3e)<br>18.5 kW 415...440 V AC 50/60 Hz AC-3e) |
| Maximum Horse Power Rating                  | 10 Hp 230/240 V at AC 50/60 Hz for 3 phase<br>10 Hp 200/208 V at AC 50/60 Hz for 3 phase<br>5 Hp 240 V at AC 50/60 Hz for 1 phase<br>20 Hp 480 V at AC 50/60 Hz for 3 phase<br>25 hp 600 V at AC 50/60 Hz for 3 phase   |
| Compatibility code                          | LC1D  |
| Pole contact composition                    | 3 NO  |
| Contact compatibility                       | M5  |
| Protective cover                            | With  |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit<br>50 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>550 A 440 V power circuit IEC 60947   |
| Rated breaking capacity                     | 550 A 440 V power circuit IEC 60947   |

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|  |  |
|--|--|
| [Icw] rated short-time withstand current | 60 A 104 °F (40 °C) - 10 min power circuit<br>430 A 104 °F (40 °C) - 1 s power circuit<br>150 A 104 °F (40 °C) - 1 min power circuit<br>310 A 104 °F (40 °C) - 10 s power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit<br>140 A - 100 ms signalling circuit  |
| Associated fuse rating                   | 10 A gG signalling circuit IEC 60947-5-1<br>63 A gG <= 690 V type 1 power circuit<br>63 A gG <= 690 V type 2 power circuit   |
| Average impedance                        | 2 mOhm - lth 50 A 50 Hz power circuit  |
| Power dissipation per pole               | 5 W AC-1<br>3 W AC-3<br>3 W AC-3e  |
| [Ui] rated insulation voltage            | Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL<br>Power circuit 690 V IEC 60947-4-1  |
| 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 = 20000000 cycles contactor with mechanical load EN/ISO 13849-1   |
| Mechanical durability                    | 30 Mcycles   |
| Electrical durability                    | 1.4 Mcycles 50 A AC-1 <= 440 V<br>1.4 Mcycles 38 A AC-3 <= 440 V<br>1.4 Mcycles 38 A AC-3e <= 440 V  |
| Control circuit type                     | DC low consumption   |
| Coil technology                          | Built-in bidirectional peak limiting diode suppressor  |
| Control circuit voltage limits           | 0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC<br>0.8...1.25 Uc -40...140 °F (-40...60 °C) operational DC<br>1...1.25 Uc 140...158 °F (60...70 °C) operational DC   |
| Inrush power in W                        | 2.4 W 68 °F (20 °C))   |
| Hold-in power consumption in W           | 2.4 W 68 °F (20 °C)  |
| Operating time                           | 65.45...88.55 ms closing<br>20...30 ms opening   |
| Time constant                            | 40 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                                | RINA<br>LROS (Lloyds register of shipping)<br>CSA<br>GL<br>DNV<br>UL<br>CCC<br>GOST<br>BV   |
| 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)  |
| Product Weight  | 1.19 lb(US) (0.54 kg)   |

## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22354-CTR, TESYS D, OPEN, 9-38A AC |
| Discount Schedule | I12                                |
| GTIN              | 3389110809329                      |
| Returnability     | No                                 |
| Country of origin | FR                                 |

## Packing Units

|                              |                     |
|------------------------------|---------------------|
| Unit Type of Package 1       | PCE                 |
| Number of Units in Package 1 | 1                   |
| Package 1 Height             | 4.29 in (10.9 cm)   |
| Package 1 Width              | 2.13 in (5.4 cm)    |
| Package 1 Length             | 3.54 in (9.0 cm)    |
| Package 1 Weight             | 19.61 oz (556.0 g)  |
| Unit Type of Package 2       | S02                 |
| Number of Units in Package 2 | 16                  |
| 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             | 19.84 lb(US) (9 kg) |
| Unit Type of Package 3       | P06                 |
| Number of Units in Package 3 | 256                 |
| Package 3 Height             | 29.53 in (75 cm)    |
| Package 3 Width              | 15.75 in (40 cm)    |

|                  |                           |
|------------------|---------------------------|
| Package 3 Length | 31.50 in (80 cm)          |
| Package 3 Weight | 368.92 lb(US) (167.34 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>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Toxic heavy metal free     | Yes   |
| 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>   |
| 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 |
|----------|-----------|