

# LC1D150BD

TeSys D contactor - 3P(3 NO) - AC-3 -  $\leq 440$  V  
150 A - 24 V DC standard coil

Product availability : Stock - Normally stocked in distribution facility



Price\*\* : 696.00 USD



## Main

|                                        |                                                                                                                                                                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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-3<br>AC-4<br>AC-1                                                                                                                                                                                                                                          |
| Poles description                      | 3P                                                                                                                                                                                                                                                            |
| Power pole contact composition         | 3 NO                                                                                                                                                                                                                                                          |
| [Ue] rated operational voltage         | Power circuit $\leq 1000$ V AC 25...400 Hz<br>Power circuit $\leq 300$ V DC                                                                                                                                                                                   |
| [Ie] rated operational current         | 200 A 140 °F (60 °C) $\leq 440$ V AC AC-1 power circuit<br>150 A 140 °F (60 °C) $\leq 440$ V AC AC-3 power circuit                                                                                                                                            |
| Motor power kW                         | 40 kW 220...230 V AC 50/60 Hz AC-3)<br>75 kW 380...400 V AC 50/60 Hz AC-3)<br>80 kW 415...440 V AC 50/60 Hz AC-3)<br>90 kW 500 V AC 50/60 Hz AC-3)<br>100 kW 660...690 V AC 50/60 Hz AC-3)<br>75 kW 1000 V AC 50/60 Hz AC-3)<br>22 kW 400 V AC 50/60 Hz AC-4) |
| Motor power HP (UL / CSA)              | 40 hp 200/208 V AC 50/60 Hz 3 phase<br>50 hp 230/240 V AC 50/60 Hz 3 phase<br>100 hp 460/480 V AC 50/60 Hz 3 phase<br>125 hp 575/600 V AC 50/60 Hz 3 phase                                                                                                    |
| Control circuit type                   | DC standard                                                                                                                                                                                                                                                   |
| [Uc] control circuit voltage           | 24 V DC                                                                                                                                                                                                                                                       |
| Auxiliary contact composition          | 1 NO + 1 NC                                                                                                                                                                                                                                                   |
| [Uimp] rated impulse withstand voltage | 8 kV IEC 60947                                                                                                                                                                                                                                                |

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Ith] conventional free air thermal current | 200 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>1660 A 440 V power circuit IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Rated breaking capacity                     | 1400 A 440 V power circuit IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Icw] rated short-time withstand current    | 250 A 104 °F (40 °C) - 10 min power circuit<br>580 A 104 °F (40 °C) - 1 min power circuit<br>1200 A 104 °F (40 °C) - 10 s power circuit<br>1400 A 104 °F (40 °C) - 1 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>315 A gG <= 690 V type 1 power circuit<br>250 A gG <= 690 V type 2 power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Average impedance                           | 0.6 mOhm - Ith 200 A 50 Hz power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [Ui] rated insulation voltage               | Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Power circuit 1000 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electrical durability                       | 0.85 Mcycles 150 A AC-3 <= 440 V<br>1 Mcycles 200 A AC-1 <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Power dissipation per pole                  | 24 W AC-1<br>13.5 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                      | UL<br>BV<br>GL<br>GOST<br>CSA<br>CCC<br>LROS (Lloyds register of shipping)<br>RINA<br>DNV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Connections - terminals                     | 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...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible without 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 without cable end<br>Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 1 0.02...0.19 in <sup>2</sup> (10...120 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 1 0.02...0.19 in <sup>2</sup> (10...120 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 1 0.02...0.19 in <sup>2</sup> (10...120 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> )solid without cable end |
| Tightening torque                           | Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm<br>Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals Philips No 2<br>Power circuit 106.21 lbf.in (12 N.m) connector hexagonal 0.16 in (4 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating time                              | 20...35 ms closing<br>40...75 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                       | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Maximum operating rate                      | 1200 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Complementary

|                                |                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| Coil technology                | With integral suppression device                                                                        |
| Time constant                  | 25 ms                                                                                                   |
| Inrush power in W              | 270...365 W 68 °F (20 °C))                                                                              |
| Hold-in power consumption in W | 2.4...5.1 W 68 °F (20 °C)                                                                               |
| 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          | M10                                                                                                     |
| Compatibility code             | LC1D                                                                                                    |
| Motor power range              | 30...50 kW 200...240 V 3 phase<br>55...100 kW 380...440 V 3 phase<br>55...100 kW 480...500 V 3 phase    |
| Motor starter type             | Direct on-line contactor                                                                                |
| Contactor coil voltage         | 24 V DC 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 closed15 Gn for 11 ms<br>Shocks contactor open6 Gn for 11 ms |
| Maximum Height                      | 6.22 in (158 mm)                                                                                                                                                          |
| Width                               | 4.72 in (120 mm)                                                                                                                                                          |
| Depth                               | 5.35 in (136 mm)                                                                                                                                                          |
| Net weight                          | 5.51 lb(US) (2.5 kg)                                                                                                                                                      |

## Ordering and shipping details

|                       |                                           |
|-----------------------|-------------------------------------------|
| Category              | 22359 - CTR, TESYS D, OPEN, 80-150A AC&DC |
| Discount Schedule     | I12                                       |
| GTIN                  | 00785901696445                            |
| Nbr. of units in pkg. | 1                                         |
| Package weight(Lbs)   | 5.32 lb(US) (2.41 kg)                     |
| Returnability         | Yes                                       |
| Country of origin     | CZ                                        |

## Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Package 1 Height       | 6.89 in (17.5 cm) |
| Package 1 width        | 7.48 in (19 cm)   |
| Package 1 Length       | 8.46 in (21.5 cm) |

Offer Sustainability

|                            |                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                        |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                             |
| Mercury free               | Yes                                                                                                                          |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                          |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information.       |
| 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 |
|----------|-----------|