

# Product data sheet

Specifications



IEC contactor, TeSys D,  
nonreversing, 125A resistive, 4 pole,  
2 NO and 2 NC, 120VAC 60Hz coil,  
open style

LC1D80008G6

Product availability : Stock - Normally stocked in distribution facility

## Main

|                                             |                                                                                                                                                                                    |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                              |
| Product name                                | TeSys D<br>TeSys Deca                                                                                                                                                              |
| Product or Component Type                   | Contactors                                                                                                                                                                         |
| Device short name                           | LC1D                                                                                                                                                                               |
| Contactors application                      | Resistive load                                                                                                                                                                     |
| Utilisation category                        | AC-1                                                                                                                                                                               |
| Poles description                           | 4P                                                                                                                                                                                 |
| Power pole contact composition              | 2 NO + 2 NC                                                                                                                                                                        |
| [Ue] rated operational voltage              | Power circuit <= 300 V DC 25...400 Hz<br>Power circuit <= 690 V AC                                                                                                                 |
| [Ie] rated operational current              | 125 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit                                                                                                                               |
| Control circuit type                        | AC 60 Hz                                                                                                                                                                           |
| [Uc] control circuit voltage                | 120 V AC 60 Hz                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage      | 8 kV IEC 60947                                                                                                                                                                     |
| Overvoltage category                        | III                                                                                                                                                                                |
| [Ith] conventional free air thermal current | 125 A 140 °F (60 °C) power circuit                                                                                                                                                 |
| Irms rated making capacity                  | 1100 A 440 V power circuit IEC 60947                                                                                                                                               |
| Rated breaking capacity                     | 1100 A 440 V power circuit IEC 60947                                                                                                                                               |
| [Icw] rated short-time withstand current    | 640 A 104 °F (40 °C) - 10 s power circuit<br>990 A 104 °F (40 °C) - 1 s power circuit<br>135 A 104 °F (40 °C) - 10 min power circuit<br>320 A 104 °F (40 °C) - 1 min power circuit |
| Associated fuse rating                      | 200 A gG <= 690 V type 1 power circuit<br>160 A gG <= 690 V type 2 power circuit                                                                                                   |
| Average impedance                           | 0.8 mOhm - Ith 125 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                                                                                            |
| Electrical durability                       | 0.8 Mcycles 125 A AC-1 <= 440 V                                                                                                                                                    |

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|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power dissipation per pole | 12.5 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Front cover                | Without                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Mounting Support           | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 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     | BV<br>CSA<br>GOST<br>LROS (Lloyds register of shipping)<br>GL<br>RINA<br>UL<br>DNV<br>CCC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 1 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 2 0.01...0.04 in <sup>2</sup> (4...25 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 1 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 2 0.01...0.02 in <sup>2</sup> (4...16 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 1 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 2 0.01...0.04 in <sup>2</sup> (4...25 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 flat Ø 6 to Ø 8 mm<br>Power circuit 106.21 lbf.in (12 N.m) connector hexagonal 0.16 in (4 mm)<br>Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating time             | 20...35 ms closing<br>6...20 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      | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Maximum operating rate     | 3600 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Complementary

|                                 |                                                                                                                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coil technology                 | Without built-in suppressor module                                                                                                                                                      |
| Control circuit voltage limits  | 0.85...1.1 Uc -40...131 °F (-40...55 °C) operational AC 60 Hz<br>0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 60 Hz<br>1...1.1 Uc 131...158 °F (55...70 °C) operational AC 60 Hz |
| Inrush power in VA              | 220 VA 60 Hz 0.75 68 °F (20 °C))                                                                                                                                                        |
| Hold-in power consumption in VA | 22 VA 60 Hz 0.3 68 °F (20 °C))                                                                                                                                                          |
| Heat dissipation                | 6...10 W 60 Hz                                                                                                                                                                          |

## 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 | -40...140 °F (-40...60 °C)<br>140...158 °F (60...70 °C) with derating |
| Ambient Air Temperature for Storage   | -76...176 °F (-60...80 °C)                                            |
| Operating altitude                    | 0...9842.52 ft (0...3000 m)                                           |
| Fire resistance                       | 1562 °F (850 °C) IEC 60695-2-1                                        |

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|                       |                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical robustness | Vibrations contactor open2 Gn, 5...300 Hz<br>Shocks contactor open8 Gn for 11 ms<br>Vibrations contactor closed3 Gn, 5...300 Hz<br>Shocks contactor closed10 Gn for 11 ms |
| Height                | 5.00 in (127 mm)                                                                                                                                                          |
| Width                 | 3.78 in (96 mm)                                                                                                                                                           |
| Depth                 | 5.51 in (140 mm)                                                                                                                                                          |
| Net weight            | 4.06 lb(US) (1.84 kg)                                                                                                                                                     |

### Ordering and shipping details

|                       |                                           |
|-----------------------|-------------------------------------------|
| Category              | 22359 - CTR, TESYS D, OPEN, 80-150A AC&DC |
| Discount Schedule     | I12                                       |
| GTIN                  | 3389110075151                             |
| Nbr. of units in pkg. | 1                                         |
| Package weight(Lbs)   | 3.97 lb(US) (1.8 kg)                      |
| Returnability         | Yes                                       |
| Country of origin     | CZ                                        |

### Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Package 1 Height       | 4.33 in (11 cm)   |
| Package 1 width        | 6.30 in (16 cm)   |
| Package 1 Length       | 6.42 in (16.3 cm) |

### Offer Sustainability

|                            |                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                      |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to P65Warnings website |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                          |
| REACH free of SVHC         | Yes                                                                                                                                                                                                        |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                           |
| Toxic heavy metal free     | Yes                                                                                                                                                                                                        |
| Mercury free               | Yes                                                                                                                                                                                                        |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                        |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)                                                                                                |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</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 |
|----------|-----------|