# Product data sheet
## Characteristics

# LC1D40A6JD
## TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 12 V DC standard coil

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

Green Premium™

Price* : 275.00 USD

## Main

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|---|---|
| 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-1<br>AC-3<br>AC-4 |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit: <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC |
| [Ie] rated operational current | 60 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit<br>40 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit |
| Motor power kW | 18.5 kW at 380...400 V AC 50/60 Hz (AC-3)<br>11 kW at 220...230 V AC 50/60 Hz (AC-3)<br>22 kW 415...440 V AC 50/60 Hz AC-3)<br>22 kW at 500 V AC 50/60 Hz (AC-3)<br>30 kW at 660...690 V AC 50/60 Hz (AC-3)<br>9 kW at 400 V AC 50/60 Hz (AC-4) |
| Motor power HP (UL / CSA) | 5 hp 230/240 V AC 50/60 Hz 1 phase<br>10 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>30 hp 575/600 V AC 50/60 Hz 3 phase<br>10 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>3 hp 115 V AC 50/60 Hz 1 phase<br>30 hp 460/480 V AC 50/60 Hz 3 phase |
| Control circuit type | DC standard |
| [Uc] control circuit voltage | 12 V DC |
| Auxiliary contact composition | 1 NO + 1 NC |

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

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|---|---|
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit<br>60 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>800 A 440 V power circuit IEC 60947 |
| Rated breaking capacity | 800 A 440 V power circuit IEC 60947 |
| [Icw] rated short-time withstand current | 320 A 104 °F (40 °C) - 10 s power circuit<br>720 A 104 °F (40 °C) - 1 s power circuit<br>72 A 104 °F (40 °C) - 10 min power circuit<br>165 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>80 A gG <= 690 V type 1 power circuit<br>80 A gG <= 690 V type 2 power circuit |
| Average impedance | 1.5 mOhm - Ith 60 A 50 Hz power circuit |
| [Ui] rated insulation voltage | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<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 |
| Electrical durability | 0.7 Mcycles 60 A AC-1 <= 440 V<br>1.5 Mcycles 40 A AC-3 <= 440 V |
| Power dissipation per pole | 2.4 W AC-3<br>5.4 W AC-1 |
| 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 | CCC<br>UL<br>GOST<br>CSA |
| Connections - terminals | Control circuit: lugs-ring terminals (external diameter: 8 mm)<br>Power circuit: lugs-ring terminals (external diameter: 16.5 mm) |
| Tightening torque | Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5<br>Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5<br>Power circuit: 6 N.m - on lugs-ring terminals hexagonal screw head 10 mm M6 |
| Operating time | 42.5...57.5 ms closing<br>16...24 ms opening |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 10 Mcycles |
| Maximum operating rate | 3600 cyc/h 60 °C |

## Complementary

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|---|---|
| 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>0.75...1.25 Uc -40…140 °F (-40…60 °C) operational DC<br>1...1.25 Uc 140…158 °F (60…70 °C) operational DC |
| Time constant | 34 ms |
| Inrush power in W | 19 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 7.4 W 68 °F (20 °C) |
| Auxiliary contacts type | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 |

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|---|---|
| | type mirror contact 1 NC conforming to 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 | M4 |
| Compatibility code | LC1D |

## Environment

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|---|---|
| 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 | 850 °C conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to 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 open10 Gn for 11 ms |
| Height | 4.80 in (122 mm) |
| Width | 2.17 in (55 mm) |
| Depth | 4.72 in (120 mm) |
| Net Weight | 2.04 lb(US) (0.925 kg) |

## Ordering and shipping details

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|---|---|
| Category | 22358 - CTR,TESYS D,OPEN,40-65A DC |
| Discount Schedule | I12 |
| GTIN | 03389118327368 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1.87 lb(US) (0.85 kg) |
| Returnability | No |
| Country of origin | FR |

## Packing Units

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|---|---|
| Package 1 Height | 0.600 dm |
| Package 1 width | 1.400 dm |
| Package 1 Length | 1.500 dm |

## Offer Sustainability

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| 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 www.P65Warnings.ca.gov |
| REACh Regulation | REACh Declaration |
| REACh free of SVHC | Yes |
| EU RoHS Directive | Compliant<br>EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |

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|---|---|
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration<br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free | Yes |

## Contractual warranty

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| Warranty | 18 months |