

Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 80A, 60HP at 480VAC, 3 phase, 3 pole, 3 NO, 230VAC 50/60Hz coil, open style

LC1D80AP7

Product availability : Stock - Normally stocked in distribution facility

Price* : 426.00 USD

Main

| | |
|---------------------------------------|--|
| Range | TeSys TeSys Deca |
| Range of Product | TeSys Deca |
| Product or Component Type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Resistive load Motor control |
| Utilisation category | AC-1 AC-4 AC-3 AC-3e |
| Poles description | 3P |
| [Ue] rated operational voltage | Power circuit 690 V AC 25...400 Hz Power circuit 300 V DC |
| [Ie] rated operational current | 80 A 140 °F (60 °C) <= 440 V AC-1 power circuit 66 A 140 °F (60 °C) <= 440 V AC-3 power circuit 66 A 140 °F (60 °C) <= 440 V AC-3e power circuit |
| [Uc] control circuit voltage | 230 V AC 50/60 Hz |

Complementary

| | |
|--|---|
| Motor power kW | 18.5 kW 220...230 V AC 50 Hz AC-3) 37 kW 380...400 V AC 50 Hz AC-3) 37 kW 415 V AC 50 Hz AC-3) 37 kW 440 V AC 50 Hz AC-3) 37 kW 500 V AC 50 Hz AC-3) 37 kW 660...690 V AC 50 Hz AC-3) |
| Maximum Horse Power Rating | 5 hp 115 V at AC 60 Hz for 1 phase 10 hp 230/240 V at AC 60 Hz for 1 phase 20 hp 200/208 V at AC 60 Hz for 3 phase 20 hp 230/240 V at AC 60 Hz for 3 phase 40 hp 460/480 V at AC 60 Hz for 3 phase 50 hp 575/600 V at AC 60 Hz for 3 phase |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Contact compatibility | M2 |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit 80 A 140 °F (60 °C) power circuit |

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

| | |
|---|--|
| Irms rated making capacity | 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 1000 A 440 V AC power circuit IEC 60947 |
| Rated breaking capacity | 1000 A 440 V power circuit IEC 60947 |
| [Icw] rated short-time withstand current | 520 A 104 °F (40 °C) - 10 s power circuit 900 A 104 °F (40 °C) - 1 s power circuit 110 A 104 °F (40 °C) - 10 min power circuit 260 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit |
| Associated fuse rating | 10 A gG signalling circuit IEC 60947-5-1 125 A gG <= 690 V type 1 power circuit 125 A gG <= 690 V type 2 power circuit |
| Average impedance | 1.5 mOhm - lth 80 A 50 Hz power circuit |
| Power dissipation per pole | 9.6 W AC-1 6.5 W AC-3 6.5 W AC-3e |
| [Ui] rated insulation voltage | Signalling circuit 690 V IEC 60947-1 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 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| Mechanical durability | 6 Mcycles |
| Electrical durability | 0.7 Mcycles 80 A AC-1 <= 440 V 1 Mcycles 66 A AC-3 <= 440 V 1 Mcycles 66 A AC-3e <= 440 V |
| Control circuit type | AC 50/60 Hz standard |
| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | 0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz |
| Inrush power in VA | 140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C)) |
| Hold-in power consumption in VA | 13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C)) |
| Heat dissipation | 4...5 W 50/60 Hz |
| Operating time | 4...19 ms opening 12...26 ms closing |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |
| Connections - terminals | Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) solid Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) solid Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) solid Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) flexible Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) flexible |
| Tightening torque | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 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 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 1.5 ms on energisation between NC and NO contact |
| Mounting Support | Plate Rail |

Environment

| | |
|--|--|
| Standards | EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1 |
| Product Certifications | CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) |
| IP degree of protection | IP20 front face IEC 60529 |
| Protective treatment | THIEC 60068-2-30 |
| Climatic withstand | IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat |
| Permissible ambient air temperature around the device | -40...140 °F (-40...60 °C) 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) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms) |
| Height | 4.80 in (122 mm) |
| Width | 2.17 in (55 mm) |
| Depth | 4.72 in (120 mm) |
| Net Weight | 1.90 lb(US) (0.86 kg) |

Ordering and shipping details

| | |
|--------------------------|-------------------------------------|
| Category | 22357-CTR, TESYS D, OPEN, 40-65A AC |
| Discount Schedule | I12 |
| GTIN | 3606481312174 |
| Returnability | No |

Packing Units

| | |
|-------------------------------------|-------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.44 in (6.2 cm) |
| Package 1 Width | 5.31 in (13.5 cm) |

| | |
|------------------------------|-------------------------|
| Package 1 Length | 6.10 in (15.5 cm) |
| Package 1 Weight | 32.59 oz (924 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 10 |
| 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 | 21.56 lb(US) (9.781 kg) |

Offer Sustainability

| | |
|----------------------------|--|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope) |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| 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 |
|----------|-----------|

Recommended replacement(s)