# Product data sheet
## Characteristics

# LC1D65004U5
## contactor TeSys Deca - 4 poles - AC-1 440V 80 A - coil 240 V AC

## Main

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|---|---|
| Range of product | TeSys Deca |
| Product or component type | Contactor |
| Device short name | LC1D |
| Contactor application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 4P |
| [Ue] rated operational voltage | Power circuit: <= 690 V AC 25...400 Hz |
| [Ie] rated operational current | 80 A (at <60 °C) AC AC-1 for power circuit |
| [Uc] control circuit voltage | 240 V AC 50 Hz |

## Complementary

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| Motor power hp | 10 Hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA<br>10 Hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL<br>20 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA<br>20 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL<br>20 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA<br>20 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL<br>5 Hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA<br>5 Hp at 115 V AC 60 Hz for 1 phase motors conforming to UL<br>50 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA<br>50 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL<br>50 Hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA<br>50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL |
| Compatibility code | LC1D |
| Pole contact composition | 4 NO |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for control circuit<br>80 A (at 60 °C) for power circuit |
| Irms rated making capacity | 1000 A at 440 V for power circuit conforming to IEC 60947<br>140 A AC for control circuit conforming to IEC 60947-5-1 |
| Rated breaking capacity | 1000 A at 440 V for power circuit conforming to IEC 60947 |
| Associated fuse rating | 10 A gG for control circuit conforming to IEC 60947-5-1<br>125 A gG at <= 690 V coordination type 1 for power circuit<br>125 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 1 mOhm - Ith 80 A 50 Hz for power circuit |
| Power dissipation per pole | 6.4 W AC-1 |
| [Ui] rated insulation voltage | Control circuit: 600 V CSA certified[RETURN]Control circuit: 600 V UL certified[RETURN]Power circuit: 600 V CSA certified[RETURN]Power circuit: 600 V UL certified[RETURN]Control circuit: 690 V conforming to IEC 60947-1[RETURN]Power circuit: 690 V conforming to IEC 60947-1 |
| Overvoltage category | III |
| [Uimp] rated impulse withstand voltage | 8 kV conforming to IEC 60947 |
| 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 | 6000000 cycles |

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| Control circuit type | AC at 50 Hz standard |
| Coil technology | Without built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.3...0.6 Uc (60 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (60 °C):operational AC 50 Hz<br>0.85...1.1 Uc (60 °C):operational AC 60 Hz |
| Inrush power in VA | 140 VA cos phi 0.75 (at 20 °C)<br>160 VA cos phi 0.75 (at 20 °C) |
| Hold-in power consumption in VA | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 4…5 W at 50/60 Hz for control circuit |
| Operating time | 12...26 ms closing<br>4...19 ms opening |
| Maximum operating rate | 3600 cyc/h 60 °C |
| Connections - terminals | Control circuit: screw clamp terminal 1 1…4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminal 2 1…4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminal 2 1…4 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminal 1 1…35 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminal 2 1…35 mm² - cable stiffness: solid without cable end |
| Tightening torque | Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm<br>Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2<br>Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm<br>Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm<br>Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 |
| Auxiliary contacts type | Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>Type mirror contact 1 NC conforming to IEC 60947-4-1 |
| Minimum switching voltage | 17 V for control circuit |
| Minimum switching current | 5 mA for control circuit |
| Insulation resistance | > 10 MOhm for control circuit |
| Non-overlap time | 1.5 Ms on de-energisation between NC and NO contacts<br>1.5 ms on energisation between NC and NO contacts |
| Mounting support | Rail<br>Plate |

## Environment

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| Standards | CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60947-4-1<br>UL 508<br>EN 60947-4-1<br>EN 60947-5-1 |
| Product certifications | BV[RETURN]CCC[RETURN]GL[RETURN]DNV[RETURN]LROS (Lloyds register of shipping)[RETURN]RINA[RETURN]CSA[RETURN]GOST[RETURN]UL |
| IP degree of protection | IP2X conforming to IEC 60529<br>IP2X conforming to VDE 0106 |
| Protective treatment | TH (pollution degree 3) conforming to IEC 60068 |
| Permissible ambient air temperature around the device | -5…60 °C<br>-40…70 °C at Uc |
| Operating altitude | 3000 m without derating |
| Fire resistance | 850 °C conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Shocks contactor open (8 Gn for 11 ms)<br>Shocks contactor closed (10 Gn for 11 ms)<br>Vibrations contactor opened (2 Gn, 5...300 Hz)<br>Vibrations contactor closed (3 Gn, 5...300 Hz) |
| Height | 127 mm |
| Width | 85 mm |
| Depth | 130 mm |
| Net weight | 1.44 kg |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 13.5 cm |
| Package 1 Width | 13 cm |
| Package 1 Length | 9.5 cm |
| Package 1 Weight | 1.423 kg |

## Offer Sustainability

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|---|---|
| Sustainable offer status | Green Premium product |
| 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 |
| RoHS exemption information | Yes |
| 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 |