

Product data sheet

Specifications



IEC contactor, Easy TeSys DPE, nonreversing, 18A, 3P, 7.5HP at 480V AC, 24V DC coil

DPE18BL

Main

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|--------------------------------|---|
| Range | Easy TeSys |
| Product name | Easy TeSys DPE |
| Product or component type | Contactors |
| Device short name | DPE |
| Contactors application | Resistive load Motor control |
| Utilisation category | AC-4 AC-1 AC-3 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| Auxiliary contact composition | 1 NO |
| [Ie] rated operational current | 18 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 25 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit |
| [Uc] control circuit voltage | 24 V DC |
| Motor power kW | 4 kW 220...230 V AC 50/60 Hz 7.5 kW 380...400 V AC 50/60 Hz 9 kW 415 V AC 50/60 Hz 9 kW 440 V AC 50/60 Hz 10 kW 500 V AC 50/60 Hz 10 kW 660...690 V AC 50/60 Hz |
| Motor power hp | 0.5 hp 115 V AC 50/60 Hz 1 phase 2 hp 230/240 V AC 50/60 Hz 1 phase 3 hp 200/208 V AC 50/60 Hz 3 phases 3 hp 230/240 V AC 50/60 Hz 3 phases 7.5 hp 460/480 V AC 50/60 Hz 3 phases 10 hp 575/600 V AC 50/60 Hz 3 phases |

Complementary

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| Maximum Operational Voltage | Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit 25 A 140 °F (60 °C) power circuit |
| Irms rated making capacity | 250 A 440 V power circuit IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 |
| Rated breaking capacity | 250 A 440 V power circuit IEC 60947 |
| Associated fuse rating | 10 A gG signalling circuit IEC 60947-5-1 40 A gG <= 690 V type 1 power circuit 25 A gG <= 690 V type 2 power circuit |

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| Average impedance | 2.5 mOhm - lth 25 A 50 Hz power circuit |
| Power dissipation per pole | 0.36 W AC-3 1.56 W AC-1 |
| Electrical durability | 1 Mcycles 18 A AC-3 <= 440 V 0.6 Mcycles 25 A AC-1 <= 440 V |
| 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 |
| Control circuit type | DC |
| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | Drop-out 0.1...0.3 Uc 158 °F (70 °C) Operational 0.8...1.25 Uc 140 °F (60 °C) Operational 1...1.25 Uc 158 °F (70 °C) |
| Inrush power in W | 2.4 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 2.4 W 68 °F (20 °C) |
| Heat dissipation | 2...3 W 50/60 Hz |
| Operating time | 65.45...88.55 ms closing 20...30 ms opening |
| Mechanical durability | 10 Mcycles |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |
| Auxiliary contacts type | Mechanically linked 1 NO IEC 60947-5-1 |
| Minimum switching current | 5 mA signalling circuit |
| Minimum switching voltage | 17 V 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 |
| Signalling circuit frequency | 25...400 Hz |
| Connections - terminals | Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end 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) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid without cable end |
| Tightening torque | Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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 |
| Mounting support | Rail Plate |
| Height | 3.03 in (77 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 3.39 in (86 mm) |
| Product weight | 0.72 lb(US) (0.325 kg) |
| Environment | |
| [Ui] rated insulation voltage | Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 |
| Overvoltage category | III |
| Pollution degree | 3 |

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| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947 |
| Standards | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1 |
| Product certifications | UL CSA |
| IP degree of protection | IP20 front face IEC 60529 |
| Ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| Ambient air temperature for operation | -40...140 °F (-40...60 °C) |
| Operating altitude | 0...2000 m |
| Fire resistance | 1562 °F (850 °C) IEC 60695-2-1 |
| Mechanical robustness | Vibrations contactor open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms) |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 3.74 in (9.5 cm) |
| Package 1 Width | 1.77 in (4.5 cm) |
| Package 1 Length | 3.03 in (7.7 cm) |
| Package 1 Weight | 12.35 oz (350.0 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 16 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 11.81 in (30.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 13.04 lb(US) (5.915 kg) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 256 |
| Package 3 Height | 303.15 in (770.0 cm) |
| Package 3 Width | 23.62 in (60.0 cm) |
| Package 3 Length | 31.50 in (80.0 cm) |
| Package 3 Weight | 227.38 lb(US) (103.14 kg) |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |

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|-----------------------------------|---|
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

Recommended replacement(s)