

# DPE50U7

IEC contactor, Easy TeSys  
DPE, nonreversing, 50A, 3P, 30HP at 480V  
AC, 240V AC 50/60Hz coil



## Main

|                                |  |
|--------------------------------|--|
| Range                          | Easy TeSys   |
| Product name                   | Easy TeSys DPE   |
| Product or Component Type      | Contactors   |
| Device short name              | DPE  |
| Contactors application         | Motor control<br>Resistive load  |
| Utilisation category           | AC-1<br>AC-3   |
| Poles description              | 3P   |
| Pole contact composition       | 3 NO   |
| Auxiliary contact composition  | 1 NO   |
| [Ie] rated operational current | 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit<br>50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit   |
| [Uc] control circuit voltage   | 240 V AC 50/60 Hz  |
| Motor power kW                 | 15 kW 220...230 V AC 50/60 Hz<br>22 kW 380...400 V AC 50/60 Hz<br>25 kW 415 V AC 50/60 Hz<br>30 kW 440 V AC 50/60 Hz<br>30 kW 500 V AC 50/60 Hz<br>33 kW 660...690 V AC 50/60 Hz   |
| Maximum Horse Power Rating     | 3 Hp at 115 V AC 50/60 Hz for 1 phase motors<br>5 Hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>10 Hp at 200/208 V AC 50/60 Hz for 3 phase motors<br>10 Hp at 230/240 V AC 50/60 Hz for 3 phase motors<br>30 Hp at 460/480 V AC 50/60 Hz for 3 phase motors<br>30 hp at 575/600 V AC 50/60 Hz for 3 phase motors |

## Complementary

|   |   |
|---|---|
| Maximum Operational Voltage                 | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC  |
| [Ith] conventional free air thermal current | 10 A (at 140 °F (60 °C)) for signalling circuit<br>60 A (at 140 °F (60 °C)) for power circuit   |
| Irms rated making capacity                  | 140 A AC for signalling circuit conforming to IEC 60947-5-1<br>250 A DC for signalling circuit conforming to IEC 60947-5-1<br>800 A at 440 V for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 800 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 400 A 104 °F (40 °C) - 10 s for power circuit<br>810 A 104 °F (40 °C) - 1 s for power circuit<br>84 A 104 °F (40 °C) - 10 min for power circuit<br>208 A 104 °F (40 °C) - 1 min for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit |
| Associated fuse rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>100 A gG at <= 690 V coordination type 1 for power circuit<br>100 A gG at <= 690 V coordination type 2 for power circuit  |
| Average impedance                           | 1.5 mOhm - Ith 80 A 50 Hz for power circuit   |

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|                                 |  |
|---------------------------------|--|
| Power dissipation per pole      | 3.7 W AC-3<br>9.6 W AC-1   |
| Electrical durability           | 0.6 Mcycles 60 A AC-1 <= 440 V<br>1 Mcycles 40 A AC-3 <= 440 V   |
| 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   |
| Control circuit type            | AC 50/60 Hz  |
| Coil technology                 | Without built-in suppressor module   |
| Control circuit voltage limits  | Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <158 °F (70 °C))<br>Operational: 0.8...1.1 Uc at 50 Hz (at <140 °F (60 °C))<br>Operational: 0.85...1.1 Uc at 60 Hz (at <140 °F (60 °C))<br>Operational: 1...1.1 Uc at 50/60 Hz (at <158 °F (70 °C))   |
| Inrush power in VA              | 140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))   |
| Hold-in power consumption in VA | 13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))   |
| Heat dissipation                | 4...5 W 50/60 Hz   |
| Operating time                  | 4...19 ms opening<br>12...26 ms closing  |
| Mechanical durability           | 5 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 for signalling circuit  |
| Minimum switching voltage       | 17 V for signalling circuit  |
| Insulation resistance           | > 10 MOhm for signalling circuit   |
| Signalling circuit frequency    | 25...400 Hz  |
| Connections - terminals         | Power circuit: screw connection 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Power circuit: screw connection 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: flexible without cable end<br>Power circuit: screw connection 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Power circuit: screw connection 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible with cable end<br>Power circuit: screw connection 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> ) - cable stiffness: solid without cable end<br>Power circuit: screw connection 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: 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> ) - cable stiffness: 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> ) - cable stiffness: 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> ) - cable stiffness: 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> ) - cable stiffness: 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> ) - cable stiffness: solid without cable end |
| Tightening torque               | Power circuit 61.96 lbf.in (7 N.m) screw connectors 0.02...0.04 in <sup>2</sup> (16...25 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm)<br>Power circuit 44.25 lbf.in (5 N.m) screw connectors 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm)<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2   |
| Mounting Support                | Rail<br>Plate  |
| Height                          | 4.80 in (122 mm)   |
| Width                           | 2.17 in (55 mm)  |
| Depth                           | 4.80 in (122 mm)   |

## Environment

|  |  |
|--|--|
| [Ui] rated insulation voltage          | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V cUL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V cUL   |
| Overvoltage category                   | III  |
| Pollution degree                       | 3  |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947   |
| 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 60947-4-1  |
| Product Certifications                 | cULus  |
| IP degree of protection                | IP20 front face IEC 60529  |
| Climatic withstand                     | IACS E10<br>IEC 60947-1 Annex Q category D   |
| 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...6561.68 ft (0...2000 m)  |
| Fire resistance                        | 1562 °F (850 °C) IEC 60695-2-1   |
| Mechanical robustness                  | Vibrations contactor open 2 Gn, 5...300 Hz)<br>Vibrations contactor closed 4 Gn, 5...300 Hz)<br>Shocks contactor open 10 Gn for 11 ms)<br>Shocks contactor closed 15 Gn for 11 ms) |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US10I1222329  |
| Discount Schedule | 0I12          |
| GTIN              | 3606482465336 |
| Returnability     | Yes           |
| Country of origin | ID            |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Number of Units in Package 1 | 1                        |
| Package 1 Height             | 4.45 in (11.3 cm)        |
| Package 1 Width              | 2.05 in (5.2 cm)         |
| Package 1 Length             | 3.62 in (9.2 cm)         |
| Package 1 Weight             | 33.16 oz (940 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             | 21.83 lb(US) (9.9 kg)    |
| Unit Type of Package 3       | P06                      |
| Number of Units in Package 3 | 160                      |
| Package 3 Height             | 41.34 in (105 cm)        |
| Package 3 Width              | 23.62 in (60 cm)         |
| Package 3 Length             | 31.50 in (80 cm)         |
| Package 3 Weight             | 369.27 lb(US) (167.5 kg) |

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |