

# Product data sheet

Specifications



IEC contactor, Easy TeSys  
DPE, nonreversing, 38A, 3P, 20HP at  
480V AC, 120V 50/60Hz coil

DPE38G7

## Main

|                                |                                                                                                                                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | Easy TeSys                                                                                                                                                                                                                           |
| Product name                   | Easy TeSys DPE                                                                                                                                                                                                                       |
| Product or component type      | Contactor                                                                                                                                                                                                                            |
| Device short name              | DPE                                                                                                                                                                                                                                  |
| Contactor application          | Resistive load<br>Motor control                                                                                                                                                                                                      |
| Utilisation category           | AC-4<br>AC-1<br>AC-3                                                                                                                                                                                                                 |
| Poles description              | 3P                                                                                                                                                                                                                                   |
| Pole contact composition       | 3 NO                                                                                                                                                                                                                                 |
| Auxiliary contact composition  | 1 NO                                                                                                                                                                                                                                 |
| [Ie] rated operational current | 38 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit<br>52 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit                                                                                                                           |
| [Uc] control circuit voltage   | 120 V AC 50/60 Hz                                                                                                                                                                                                                    |
| Motor power kW                 | 9 kW 220...230 V AC 50/60 Hz<br>18.5 kW 380...400 V AC 50/60 Hz<br>18.5 kW 415 V AC 50/60 Hz<br>18.5 kW 440 V AC 50/60 Hz<br>18.5 kW 500 V AC 50/60 Hz<br>18.5 kW 660...690 V AC 50/60 Hz                                            |
| Motor power hp                 | 2 hp 115 V AC 50/60 Hz 1 phase<br>5 hp 230/240 V AC 50/60 Hz 1 phase<br>10 hp 200/208 V AC 50/60 Hz 3 phases<br>10 hp 230/240 V AC 50/60 Hz 3 phases<br>20 hp 460/480 V AC 50/60 Hz 3 phases<br>25 hp 575/600 V AC 50/60 Hz 3 phases |

## 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 140 °F (60 °C) signalling circuit<br>50 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>550 A 440 V power circuit IEC 60947 |
| Rated breaking capacity                     | 550 A 440 V power circuit IEC 60947                                                                                           |
| Associated fuse rating                      | 10 A gG signalling circuit IEC 60947-5-1<br>63 A gG <= 690 V type 1 power circuit<br>63 A gG <= 690 V type 2 power circuit    |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Average impedance               | 2 mOhm - lth 50 A 50 Hz power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Power dissipation per pole      | 2 W AC-3<br>5 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Electrical durability           | 1 Mcycles 38 A AC-3 <= 440 V<br>0.6 Mcycles 52 A AC-1 <= 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 50/60 Hz 158 °F (70 °C))<br>Operational 0.8...1.1 Uc 50 Hz 140 °F (60 °C))<br>Operational 0.85...1.1 Uc 60 Hz 140 °F (60 °C))<br>Operational 1...1.1 Uc 50/60 Hz 158 °F (70 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Inrush power in VA              | 70 VA 60 Hz 0.75 68 °F (20 °C))<br>70 VA 50 Hz 0.75 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Hold-in power consumption in VA | 7.5 VA 60 Hz 0.3 68 °F (20 °C))<br>7 VA 50 Hz 0.3 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Heat dissipation                | 2...3 W 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Operating time                  | 12...22 ms closing<br>4...19 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<br>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 in² (1...4 mm²) flexible without cable end<br>Power circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) flexible without cable end<br>Power circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible with cable end<br>Power circuit screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) flexible with cable end<br>Power circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) solid without cable end<br>Power circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) solid without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible with cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) solid without cable end |
| Tightening torque               | 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<br>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm<br>Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mounting support                | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Height                          | 3.35 in (85 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Width                           | 1.77 in (45 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Depth                           | 3.62 in (92 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Product weight                  | 0.83 lb(US) (0.375 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Environment                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ui] rated insulation voltage   | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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                 | UL<br>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)<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) |

### Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Number of Units in Package 1 | 1                         |
| Package 1 Height             | 2.20 in (5.59 cm)         |
| Package 1 Width              | 3.80 in (9.65 cm)         |
| Package 1 Length             | 4.70 in (11.94 cm)        |
| Package 1 Weight             | 0.90 lb(US) (0.41 kg)     |
| Unit Type of Package 2       | S02                       |
| Number of Units in Package 2 | 16                        |
| 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             | 14.80 lb(US) (6.715 kg)   |
| Unit Type of Package 3       | P06                       |
| Number of Units in Package 3 | 256                       |
| Package 3 Height             | 303.15 in (770 cm)        |
| Package 3 Width              | 23.62 in (60 cm)          |
| Package 3 Length             | 31.50 in (80 cm)          |
| Package 3 Weight             | 255.60 lb(US) (115.94 kg) |

### Offer Sustainability

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| Sustainable offer status | Green Premium product                            |
| REACH Regulation         | <a href="#">REACH Declaration</a>                |
| REACH free of SVHC       | Yes                                              |
| EU RoHS Directive        | Compliant<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free   | Yes                                              |

|                            |                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------|
| Mercury free               | Yes                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| RoHS exemption information | Yes                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                     |

Recommended replacement(s)