

# Product data sheet

Specifications



IEC contactor, Easy TeSys  
DPE, nonreversing, 38A, 3P, 20HP  
at 480V AC, 24V 50/60Hz coil

DPE38B7

## Main

Range	Easy TeSys
Product name	Easy TeSys DPE
product or component type	Contactors
Device short name	DPE
contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3
poles description	3P
Pole contact composition	3 NO
Auxiliary contact composition	Without
[Ie] rated operational current	38 A (at <math>\le 140\text{ }^{\circ}\text{F}</math> (60 °C)) at <math>\le 440\text{ V AC}</math> AC-3 for power circuit 52 A (at <math>\le 140\text{ }^{\circ}\text{F}</math> (60 °C)) at <math>\le 440\text{ V AC}</math> AC-1 for power circuit
[Uc] control circuit voltage	24 V AC 50/60 Hz
Motor power kW	9 kW 220...230 V AC 50/60 Hz 18.5 kW 380...400 V AC 50/60 Hz 18.5 kW 415 V AC 50/60 Hz 18.5 kW 440 V AC 50/60 Hz 18.5 kW 500 V AC 50/60 Hz 18.5 kW 660...690 V AC 50/60 Hz
Motor power hp	2 hp at 115 V AC 50/60 Hz for 1 phase motors 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 20 hp at 460/480 V AC 50/60 Hz for 3 phases motors 25 hp at 575/600 V AC 50/60 Hz for 3 phases motors

## Complementary

Maximum Operational Voltage	Power circuit <math>\le 690\text{ V AC}</math> 25...400 Hz Power circuit <math>\le 300\text{ V DC}</math>
[Ith] conventional free air thermal current	10 A (at <math>140\text{ }^{\circ}\text{F}</math> (60 °C)) for signalling circuit 50 A (at <math>140\text{ }^{\circ}\text{F}</math> (60 °C)) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <math>\le 690\text{ V}</math> coordination type 1 for power circuit 63 A gG at <math>\le 690\text{ V}</math> coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz for power circuit

<b>Power dissipation per pole</b>	2 W AC-3 5 W AC-1
<b>Electrical durability</b>	1 Mcycles 38 A AC-3 <= 440 V 0.6 Mcycles 52 A AC-1 <= 440 V
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Control circuit type</b>	AC 50/60 Hz
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	Drop-out: 0.3...0.6 U <sub>c</sub> at 50/60 Hz (at <158 °F (70 °C)) Operational: 0.8...1.1 U <sub>c</sub> at 50 Hz (at <140 °F (60 °C)) Operational: 0.85...1.1 U <sub>c</sub> at 60 Hz (at <140 °F (60 °C)) Operational: 1...1.1 U <sub>c</sub> at 50/60 Hz (at <158 °F (70 °C))
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	2...3 W 50/60 Hz
<b>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Mechanical durability</b>	10 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO IEC 60947-5-1
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Connections - terminals</b>	Power circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end
<b>Tightening torque</b>	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 22.1 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals Philips No 2
<b>mounting support</b>	Rail Plate
<b>Height</b>	3.3 in (85 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.6 in (92 mm)

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net weight	0.827 lb(US) (0.375 kg)
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## Environment

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[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 Signalling circuit 600 V CSA Signalling circuit 600 V UL
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Overvoltage category	III
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Pollution degree	3
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[Uimp] rated impulse withstand voltage	6 kV IEC 60947
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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
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Product certifications	UL CSA
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IP degree of protection	IP20 front face IEC 60529
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Ambient air temperature for storage	-76...176 °F (-60...80 °C)
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Ambient air temperature for operation	-40...140 °F (-40...60 °C)
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Operating altitude	0...2000 m
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Fire resistance	1562 °F (850 °C) IEC 60695-2-1
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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)
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	2.20 in (5.59 cm)
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Package 1 Width	3.80 in (9.65 cm)
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Package 1 Length	4.70 in (11.94 cm)
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Package 1 Weight	0.93 lb(US) (0.42 kg)
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Unit Type of Package 2	S02
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Number of Units in Package 2	16
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Package 2 Height	5.9 in (15 cm)
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Package 2 Width	11.8 in (30 cm)
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Package 2 Length	15.7 in (40 cm)
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Package 2 Weight	15.59 lb(US) (7.072 kg)
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Reach Free Of Svhc

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information Yes

## Certifications & Standards

**Reach Regulation** [REACH Declaration](#)

**Eu Rohs Directive** Compliant  
[EU RoHS Declaration](#)

**China Rohs Regulation** [China RoHS declaration](#)  
Pro-active China RoHS declaration (out of China RoHS legal scope)

**Environmental Disclosure** [Product Environmental Profile](#)

**Circularity Profile** [End of Life Information](#)