

# Product data sheet

Specifications



IEC contactor, Easy TeSys  
DPE, nonreversing, 18A, 3P, 7.5HP at  
480V AC, 240V 50/60Hz coil

DPE18U7

## Main

Range	Easy TeSys
Product name	Easy TeSys DPE
Product or component type	Contactor
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	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	240 V AC 50/60 Hz
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

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

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	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)) Operational 0.8...1.1 Uc 50 Hz 140 °F (60 °C)) Operational 0.85...1.1 Uc 60 Hz 140 °F (60 °C)) 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)) 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)) 7 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	2...3 W 50/60 Hz
Operating time	12...22 ms closing 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 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 <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) 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)
Net 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
[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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.30 in (5.84 cm)
Package 1 Width	3.70 in (9.4 cm)
Package 1 Length	4.60 in (11.68 cm)
Package 1 Weight	0.77 lb(US) (0.35 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 <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

### Recommended replacement(s)