

# DPE12U7

IEC contactor, Easy TeSys  
DPE, nonreversing, 12A, 3P, 5HP at 480V  
AC, 240V 50/60Hz coil



## Main

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	12 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	240 V AC 50/60 Hz
Motor power kW	3 kW 220...230 V AC 50/60 Hz 5.5 kW 380...400 V AC 50/60 Hz 5.5 kW 415 V AC 50/60 Hz 5.5 kW 440 V AC 50/60 Hz 7.5 kW 500 V AC 50/60 Hz 7.5 kW 660...690 V AC 50/60 Hz
Maximum Horse Power Rating	0.33 Hp at 115 V AC 50/60 Hz for 1 phase motors 1 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 2 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 5 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 7.5 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 Power circuit <= 300 V DC
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 25 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 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 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 25 A 50 Hz for power circuit
Power dissipation per pole	1.56 W AC-1 0.2 W AC-3
Electrical durability	0.6 Mcycles 25 A AC-1 <= 440 V 1 Mcycles 12 A AC-3 <= 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 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))
Inrush power in VA	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))
Hold-in power consumption in VA	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))
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 for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Insulation resistance	> 10 MOhm for 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 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible 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: flexible without cable end 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
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	1.8 in (45 mm)
Depth	3.4 in (86 mm)
Net Weight	0.71 lb(US) (0.32 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[RETURN]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...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) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)







## Ordering and shipping details

Category	US10I1322362
Discount Schedule	0I13
GTIN	3606481063199
Returnability	Yes
Country of origin	ID

## 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	0.77 lb(US) (0.35 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>
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>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	 <a href="#">End Of Life Information</a>