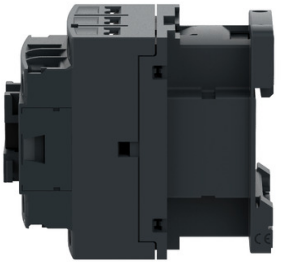
Product data sheet

Specifications



IEC contactor,Easy TeSys DPE,nonreversing,12A,3P,5HP at 480V AC,24V 50/60Hz coil

DPE12B7

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	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	24 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
Motor Power Hp	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 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors

Complementary

Maximum Operational Voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ith] Conventional Free Air Thermal Current	25 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 Uc at 50/60 Hz (at <158 °F (70 °C)) Operational: 0.8...1.1 Uc at 50 Hz (at <140 °F (60 °C)) Operational: 0.85...1.1 Uc at 60 Hz (at <140 °F (60 °C)) Operational: 1...1.1 Uc 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 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - 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	1.77 in (45 mm)
Depth	3.39 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 Signalling circuit 600 V CSA Signalling circuit 600 V UL
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	2.20 in (5.590 cm)
Package 1 Width	3.80 in (9.650 cm)
Package 1 Length	4.70 in (11.940 cm)
Package 1 Weight	12.70 oz (360.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	30
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	24.38 lb(US) (11.060 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	480
Package 3 Height	29.53 in (75.000 cm)

Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	407.77 lb(US) (184.960 kg)

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_2 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
Pvc Free	

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