Product data sheet

Specifications



IEC contactor,Easy TeSys DPE,nonreversing,18A,3P,7.5HP at 480V AC,24V 50/60Hz coil

DPE18B7

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	25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	24 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 at 115 V AC 50/60 Hz for 1 phase motors 2 hp at 230/240 V AC 50/60 Hz for 1 phase motors 3 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 230/240 V AC 50/60 Hz for 3 phases motors 7.5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 10 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 40 A gG at <= 690 V coordination type 1 for power circuit 25 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	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 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 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002…0.006 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	1.8 in (45 mm)
Depth	3.4 in (86 mm)
Net weight	0.717 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 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	2.1 in (5.4 cm)
Package 1 Width	3.3 in (8.3 cm)
Package 1 Length	3.8 in (9.6 cm)
Package 1 Weight	11.8 oz (334.8 g)
Unit Type of Package 2	S02
Number of Units in Package 2	16
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	12.910 lb(US) (5.856 kg)

Sustainability

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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

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
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information