

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 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	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 115 V AC 50/60 Hz 1 phase 1 hp 230/240 V AC 50/60 Hz 1 phase 2 hp 200/208 V AC 50/60 Hz 3 phases 2 hp 230/240 V AC 50/60 Hz 3 phases 5 hp 460/480 V AC 50/60 Hz 3 phases 7.5 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	25 A 140 °F (60 °C) power circuit 10 A 140 °F (60 °C) signalling 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 25 A gG <= 690 V type 1 power circuit 20 A gG <= 690 V type 2 power circuit

Average impedance	2.5 mOhm - lth 25 A 50 Hz 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 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 in² (1...4 mm²) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) 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)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes

Mercury free	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
PVC free	Yes

Recommended replacement(s)