Product data sheet Characteristics

DPE12G7

Easy TeSys DPE IEC contactor, 12 A, 3 P, 5 HP at 480 VAC, nonreversing, 120 V 50/60 Hz coil



Main

Range	Easy TeSys
Product name	Easy TeSys DPE
Product or component type	Contactor
Device short name	DPE
Contactor application	Resistive load Motor control

Complementary

Complementary	
Utilisation category	AC-4 AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] rated operational current	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	2.2 KW 220230 V AC 50/60 Hz 4 KW 380400 V AC 50/60 Hz 4 KW at 415440 V AC 50/60 Hz 5.5 kW 500 V AC 50/60 Hz
Maximum Horse Power Rating	1 Hp 230/240 V AC 50/60 Hz 1 phase 2 Hp 200/208 V AC 50/60 Hz 3 phase 2 Hp 230/240 V AC 50/60 Hz 3 phase 5 hp 460/480 V AC 50/60 Hz 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	120 V AC 50/60 Hz
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[lth] 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 at 440 V for power circuit conforming to 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 at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG signalling circuit 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 power circuit
[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
Electrical durability	0.6 Mcycles 25 A AC-1 <= 440 V 1 Mcycles 12 A AC-3 <= 440 V

Power dissipation per pole	1.56 W AC-1 0.2 W AC-3
Mounting support	Rail Plate
Connections - terminals	Power circuit screw clamp terminals 1 flexible without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²) flexible without cable end
	Power circuit screw clamp terminals 2 flexible without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²) flexible without cable end
	Power circuit screw clamp terminals 1 flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²) flexible with cable end
	Power circuit screw clamp terminals 2 flexible with cable end Power circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²) flexible with
	cable end Power circuit screw clamp terminals 1 solid without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²) solid without cable end
	Power circuit screw clamp terminals 2 solid without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²) solid without cable end
	Control circuit screw clamp terminals 1 flexible without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²) flexible without cable end
	Control circuit screw clamp terminals 2 flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²) flexible without cable end
	Control circuit screw clamp terminals 1 flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²) flexible with cable end
	Control circuit screw clamp terminals 2 flexible with cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²) flexible with cable end
	Control circuit screw clamp terminals 1 solid without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²) solid without cable end
	Control circuit screw clamp terminals 2 solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²) solid without cable end
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver 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
Operating time	1222 ms closing 419 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Coil technology	Without built-in suppressor module
Control circuit voltage limits	Drop-out 0.30.6 Uc 50/60 Hz 158 °F (70 °C)) Operational: 0.81.1 Uc at 50 Hz (at <60 °C) Operational: 0.851.1 Uc at 60 Hz (at <60 °C) Operational 11.1 Uc 50/60 Hz 158 °F (70 °C))
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Auxiliary contacts type	Mechanically linked 1 NO IEC 60947-5-1
Signalling circuit frequency	25400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm signalling circuit
Mechanical robustness	Vibrations contactor open 2 Gn, 5300 Hz) Vibrations contactor closed 4 Gn, 5300 Hz) Shocks contactor open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)

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

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	
Heat dissipation	23 W at 50/60 Hz	
IP degree of protection	IP22 front face IEC 60529	
Pollution degree	3	
Protective treatment	TH IEC 60068-2-30	
Ambient air temperature for operation	-40140 °F (-4060 °C)	
Ambient air temperature for storage	-76176 °F (-6080 °C)	
Operating altitude	06561.68 ft (02000 m)	
Fire resistance	1566 °F (852 °C) IEC 60695-2-1	
Flame retardance	V1 UL 94	

Offer Sustainability

REACh free of SVHC	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₽¥Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information