

DPE50B7

IEC contactor, Easy TeSys

DPE, nonreversing, 50A, 3P, 30HP at 480V

AC, 24V AC 50/60Hz coil



Main

Range	Easy TeSys
Product name	Easy TeSys DPE
Product or Component Type	Contactor
Device short name	DPE
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
Auxiliary contact composition	1 NO
[Ie] rated operational current	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 50 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	15 kW 220...230 V AC 50/60 Hz 22 kW 380...400 V AC 50/60 Hz 25 kW 415 V AC 50/60 Hz 30 kW 440 V AC 50/60 Hz 30 kW 500 V AC 50/60 Hz 33 kW 660...690 V AC 50/60 Hz
Maximum Horse Power Rating	3 Hp at 115 V AC 50/60 Hz for 1 phase motors 5 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 10 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 30 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 30 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 60 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	400 A 104 °F (40 °C) - 10 s for power circuit 810 A 104 °F (40 °C) - 1 s for power circuit 84 A 104 °F (40 °C) - 10 min for power circuit 208 A 104 °F (40 °C) - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit

Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
Electrical durability	0.6 Mcycles 60 A AC-1 ≤ 440 V 1 Mcycles 40 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 _c at 50/60 Hz (at <158 °F (70 °C)) Operational: 0.8...1.1 U _c at 50 Hz (at <140 °F (60 °C)) Operational: 0.85...1.1 U _c at 60 Hz (at <140 °F (60 °C)) Operational: 1...1.1 U _c at 50/60 Hz (at <158 °F (70 °C))
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	4...5 W 50/60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Mechanical durability	5 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
Signalling circuit frequency	25...400 Hz
Connections - terminals	Power circuit: screw connection 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible without cable end Power circuit: screw connection 2 0.004...0.02 in ² (2.5...16 mm ²) - cable stiffness: flexible without cable end Power circuit: screw connection 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: flexible with cable end Power circuit: screw connection 2 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Power circuit: screw connection 1 0.004...0.04 in ² (2.5...25 mm ²) - cable stiffness: solid without cable end Power circuit: screw connection 2 0.004...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end
Tightening torque	Power circuit 62.0 lbf.in (7 N.m) screw connectors 0.02...0.04 in ² (16...25 mm ²) hexagonal 0.2 in (4 mm) Power circuit 44.3 lbf.in (5 N.m) screw connectors 0.004...0.02 in ² (2.5...16 mm ²) hexagonal 0.2 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv 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	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.8 in (122 mm)

Environment

[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V cUL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V cUL
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	cULus
IP degree of protection	IP20 front face IEC 60529
Climatic withstand	IACS E10 IEC 60947-1 Annex Q category D
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	US10I1222329
Discount Schedule	0I12
GTIN	3606482465312
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.4 in (11.3 cm)
Package 1 Width	2.05 in (5.2 cm)
Package 1 Length	3.6 in (9.2 cm)
Package 1 Weight	33.2 oz (940 g)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	5.9 in (15 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	21.8 lb(US) (9.9 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	41.3 in (105 cm)
Package 3 Width	23.6 in (60 cm)
Package 3 Length	31.5 in (80 cm)
Package 3 Weight	369.3 lb(US) (167.5 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 www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information