

# Product data sheet

Specifications



## IEC contactor, Easy TeSys DPE, nonreversing, 12A, 3P, 5HP at 480V AC, 24V DC coil

DPE12BL

### Main

Range	Easy TeSys
Product name	Easy TeSys DPE
Product or component type	Contactors
Device short name	DPE
Contactors 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 DC
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	10 A 140 °F (60 °C) signalling circuit 25 A 140 °F (60 °C) power 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

<b>Average impedance</b>	2.5 mOhm - lth 25 A 50 Hz power circuit
<b>Power dissipation per pole</b>	1.56 W AC-1 0.2 W AC-3
<b>Electrical durability</b>	0.6 Mcycles 25 A AC-1 <= 440 V 1 Mcycles 12 A AC-3 <= 440 V
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Control circuit type</b>	DC
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	Drop-out 0.1...0.3 Uc 158 °F (70 °C) Operational 0.8...1.25 Uc 140 °F (60 °C) Operational 1...1.25 Uc 158 °F (70 °C)
<b>Inrush power in W</b>	2.4 W 68 °F (20 °C))
<b>Hold-in power consumption in W</b>	2.4 W 68 °F (20 °C)
<b>Heat dissipation</b>	2...3 W 50/60 Hz
<b>Operating time</b>	65.45...88.55 ms closing 20...30 ms opening
<b>Mechanical durability</b>	10 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO IEC 60947-5-1
<b>Minimum switching current</b>	5 mA signalling circuit
<b>Minimum switching voltage</b>	17 V signalling circuit
<b>Insulation resistance</b>	> 10 MOhm signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Connections - terminals</b>	Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end
<b>Tightening torque</b>	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
<b>Mounting support</b>	Rail Plate
<b>Height</b>	3.03 in (77 mm)
<b>Width</b>	1.77 in (45 mm)
<b>Depth</b>	3.39 in (86 mm)
<b>Product weight</b>	0.71 lb(US) (0.32 kg)
<b>Environment</b>	
<b>[Ui] rated insulation voltage</b>	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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3

<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Standards</b>	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
<b>Product certifications</b>	UL CSA
<b>IP degree of protection</b>	IP20 front face IEC 60529
<b>Ambient air temperature for storage</b>	-76...176 °F (-60...80 °C)
<b>Ambient air temperature for operation</b>	-40...140 °F (-40...60 °C)
<b>Operating altitude</b>	0...2000 m
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Mechanical robustness</b>	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

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	3.74 in (9.5 cm)
<b>Package 1 Width</b>	1.77 in (4.5 cm)
<b>Package 1 Length</b>	3.03 in (7.7 cm)
<b>Package 1 Weight</b>	12.35 oz (350.0 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	16
<b>Package 2 Height</b>	5.91 in (15.0 cm)
<b>Package 2 Width</b>	11.81 in (30.0 cm)
<b>Package 2 Length</b>	15.75 in (40.0 cm)
<b>Package 2 Weight</b>	13.04 lb(US) (5.915 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	256
<b>Package 3 Height</b>	303.15 in (770.0 cm)
<b>Package 3 Width</b>	23.62 in (60.0 cm)
<b>Package 3 Length</b>	31.50 in (80.0 cm)
<b>Package 3 Weight</b>	227.38 lb(US) (103.14 kg)

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>

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<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

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**Recommended replacement(s)**