



## HPS Spartan®

Industrial Open Core &  
Coil Control Transformer

power to perform



Hammond  
Power Solutions

Hammond Power Solutions Inc. (HPS) is the North American leader for the design and manufacture of high quality standard and custom electrical dry-type transformers and related engineered magnetic devices. Our global footprint has expanded with the addition of facilities in Europe & India. HPS excels at designing products that have very specific application constraints. Having an extensive engineering resource, HPS offers the broadest range of electrical products in the industry and as a result, the company has grown in many diverse markets and provides services to many global leaders.

Hammond Power Solutions Inc., with its headquarters in Guelph, Ontario, Canada, operates out of ten facilities:

Guelph, Ontario	Walkerton, Ontario	Monterrey, Mexico
Baraboo, Wisconsin	Compton, California	Granby, Quebec
Vicenza, Italy	Marnate, Italy	Hyderabad, India

### QUALITY

HPS has been highly regarded for quality products and service since inception. Customers have come to rely on our products and services. Extensive testing programs and an exemplary field service record ensures that HPS products not only meet all the standards necessary, but more importantly, fulfill customers expectations and requirements.

### DESIGN CAPABILITIES

HPS engineering services are located throughout our manufacturing facilities. Our designs are cost effective and our transformers are built with modern manufacturing techniques. We particularly emphasize our Value Added Engineering whereby our design staff will interface with your team to produce the optimum transformer. Our 3-D modelling design and CAD facilities permits quick and effective communication when time is vital.

### CUSTOMERS

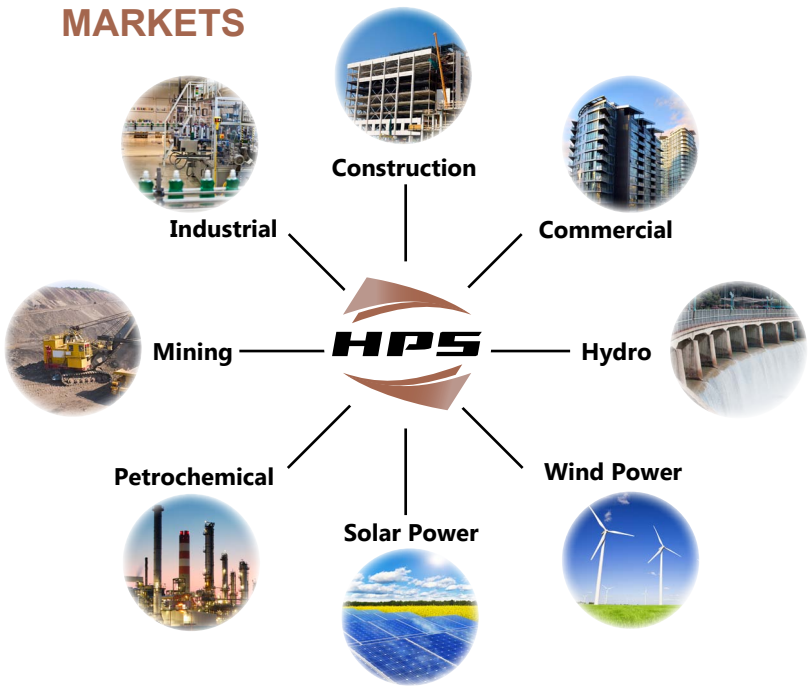
Through our extensive standard and custom product offering, HPS is able to provide a convenient one source solution for a wide variety of markets

Our engineering design staff work directly with you to produce the most optimum and cost effective solution for your application. We will design to your specification requirements and all transformers are built with modern manufacturing techniques.

Our innovative products are used in the most demanding applications requiring performance, reliability, and energy efficiency.



### MARKETS



### VALUE

The HPS Spartan® series of industrial control transformers are ideally suited for general purpose, industrial and light duty loads.

Designed for applications where high inrush or machine tool duty are not necessary, the HPS Spartan control transformer offers an efficient and economical solution.



### APPLICATIONS

The HPS Spartan® is the perfect solution for HVAC applications, signal and alarm systems, motor control circuits, lighting and circuit isolation.

### INDUSTRIES

- Commercial
- Agriculture
- Security
- Automation
- Solar

### FEATURES AND BENEFITS

- Molded terminal blocks for primary and secondary connections up to 3000 VA or 30 amps. Coil face termination over 3000 VA or 30 amps.
- All terminal blocks utilize a combination slot/Phillips #6 screw with a SEMS washer (Suitable for 18 AWG to 14 AWG for solid wire and 18 AWG to 12 AWG for stranded wire). Coil face terminations utilize a ¼-20 UNC X 0.50" combination slot/Phillips screw and a spring lock washer.
- 50/60 Hz (60 Hz on SP\*\*\*ACP and SP\*\*\*AR).
- Copper wound coils with high dielectric strength insulation.
- CSA Certified (file LR 3902), UL Listed (file E50394), CE Marked and RoHS Compliant.
- Meets NEMA standards.
- Superior insulating materials. The HPS Spartan offers the following insulation systems:
  - Up to 1500 VA: 80°C rise, 130°C temperature class (B)
  - 2000 VA to 5000 VA: 115°C rise, 180°C temperature class (F)
- Most HPS Spartan units incorporate "Premium Packaging" which feature:
  - Premium fluted cartons
  - Custom molded foam inserts
  - Easy removal and repacking
  - Industry's best box label
- All HPS Spartan units are supplied with trilingual installation and wiring instruction sheets.
- All units supplied with primary and secondary voltage links/jumpers.
- All HPS Spartan® transformers are Vacuum Impregnated with Polyester Resin and oven cured.
- Bolted core construction.
- Bolt-on mounting brackets.
- 15 year warranty.



# HPS Spartan

Industrial Open Core & Coil Control Transformer



GROUP E

Primary Voltage:

Secondary Voltage:

380/347

120 x 240



50/60 Hertz

VA Rating	CE VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Height with Fuse Block Adapter	Approx. Ship Weight Lbs.
					A	B	C	D	E				
50	50	SP50KHP	A	0.42/0.21	2.60	3.35	2.60	2.13	2.17	0.22 x 0.44	2.98	2.79	1.7
100	100	SP100KHP	A	0.83/0.42	2.99	3.74	2.85	2.52	2.60	0.22 x 0.44	3.23	3.04	3.4
150	150	SP150KHP	A	1.25/0.63	2.99	4.29	2.85	2.52	3.15	0.22 x 0.44	3.23	3.04	4.4
250	160	SP250KHP	A	2.08/1.04	3.78	4.09	3.40	3.31	2.99	0.22 x 0.44	3.78	3.59	6.7
350	250	SP350KHP	A	2.92/1.46	3.78	4.69	3.40	3.31	3.58	0.22 x 0.44	3.78	3.59	8.4
500	300	SP500KHP	A	4.17/2.08	4.49	4.69	3.78	3.78	3.66	0.31 x 0.81	4.16	3.97	12
750	500	SP750KHP	A	6.25/3.13	5.25	4.69 <sup>1</sup>	4.37	4.50	3.66	0.31 x 0.81	4.75	4.56	17
1000	650	SP1000KHP	A	8.33/4.17	5.25	5.47 <sup>1</sup>	4.37	4.50	4.45	0.31 x 0.81	4.75	4.56	21
1500	1000	SP1500KHP	A	12.5/6.25	6.38	4.88 <sup>1</sup>	5.31	5.75	3.86	0.31 x 0.81	5.50	5.31	29

Primary and Secondary voltage links/jumpers supplied standard with all transformers.  
Special voltages and VA sizes available upon request.

All dimensions in inches

<sup>1</sup> Note: For 750 through 1500 VA units actual overall depth is 0.24” plus the value in column B.

\* See page 10 for dimensional drawings.

GROUP G

Primary Voltage:

Secondary Voltage:

277

120



50/60 Hertz

VA Rating	CE VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Height with Fuse Block Adapter	Approx. Ship Weight Lbs.
					A	B	C	D	E				
50	50	SP50NJ	A	0.42	2.60	3.35	2.60	2.13	2.17	0.22 x 0.44	2.98	2.79	1.6
100	100	SP100NJ	A	0.83	2.99	3.54	2.85	2.52	2.40	0.22 x 0.44	3.23	3.04	3.2
150	150	SP150NJ	A	1.25	2.99	4.29	2.85	2.52	3.15	0.22 x 0.44	3.23	3.04	4.3
250	160	SP250NJ	A	2.08	3.78	4.09	3.40	3.31	2.99	0.22 x 0.44	3.78	3.59	6.4
350	250	SP350NJ	A	2.92	3.78	4.69	3.40	3.31	3.58	0.22 x 0.44	3.78	3.59	8.1
500	300	SP500NJ	A	4.17	4.49	4.69	3.78	3.78	3.66	0.31 x 0.81	4.16	3.97	11
750	500	SP750NJ	A	6.25	5.25	5.08 <sup>1</sup>	4.37	4.50	4.06	0.31 x 0.81	4.75	4.56	18
1000	650	SP1000NJ	A	8.33	5.25	5.47 <sup>1</sup>	4.37	4.50	4.45	0.31 x 0.81	4.75	4.56	20
1500	1000	SP1500NJ	A	12.50	5.25	6.85 <sup>1</sup>	4.37	4.50	5.83	0.31 x 0.81	4.75	4.56	29

Primary and Secondary voltage links/jumpers supplied standard with all transformers.  
Special voltages and VA sizes available upon request.

All dimensions in inches

<sup>1</sup> Note: For 750 through 1500 VA units actual overall depth is 0.24” plus the value in column B.

\* See page 10 for dimensional drawings.

GROUP F

Primary Voltage:

Secondary Voltage:

380/347

12 x 24



50/60 Hertz

VA Rating	CE VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Height with Fuse Block Adapter	Approx. Ship Weight Lbs.
					A	B	C	D	E				
50	50	SP50KHR	A	4.17/2.08	2.60	3.35	2.60	2.13	2.17	0.22 x 0.44	2.98	2.79	1.7
100	100	SP100KHR	A	8.33/4.17	2.99	3.74	2.85	2.52	2.60	0.22 x 0.44	3.23	3.04	3.3
150	150	SP150KHR	A	12.5/6.25	2.99	4.29	2.85	2.52	3.15	0.22 x 0.44	3.23	3.04	4.4
250	160	SP250KHR	A	20.8/10.4	3.78	4.09	3.40	3.31	2.99	0.22 x 0.44	3.78	3.59	6.4
350	250	SP350KHR	A	29.2/14.6	3.78	4.69	3.40	3.31	3.58	0.22 x 0.44	3.78	3.59	8.1
500	300	SP500KHR	B	41.7/20.8	4.49	5.47	3.78	3.78	3.66	0.31 x 0.81	4.16	3.97	11

Primary and Secondary voltage links/jumpers supplied standard with all transformers.  
Special voltages and VA sizes available upon request.

All dimensions in inches

\* See page 10 for dimensional drawings.

GROUP H

Primary Voltage:

Secondary Voltage:

120 x 240




12 x 24

115 x 230

11.5 x 23

110 x 220

11 x 22



50/60 Hertz

VA Rating	CE VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Height with Fuse Block Adapter	Approx. Ship Weight Lbs.
					A	B	C	D	E				
50	50	SP50PR	A	4.17/2.08	2.60	3.35	2.60	2.13	2.17	0.22 x 0.44	2.98	2.79	1.7
100	100	SP100PR	A	8.33/4.17	2.99	3.74	2.85	2.52	2.60	0.22 x 0.44	3.23	3.04	3
150	150	SP150PR	A	12.5/6.25	2.99	4.29	2.85	2.52	3.15	0.22 x 0.44	3.23	3.04	4.3
250	160	SP250PR	A	20.8/10.4	3.78	3.90	3.40	3.31	2.80	0.22 x 0.44	3.78	3.59	5.9
350	250	SP350PR	A	29.2/14.6	3.78	4.69	3.40	3.31	3.58	0.22 x 0.44	3.78	3.59	8.2
500	300	SP500PR	B	41.7/20.8	4.49	5.47	3.78	3.78	3.66	0.31 x 0.81	4.16	3.97	11

Primary and Secondary voltage links/jumpers supplied standard with all transformers.  
Special voltages and VA sizes available upon request.

All dimensions in inches

\* See page 10 for dimensional drawings.