

# HPS Spartan

## Transformateur de contrôle type ouvert

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  
Baraboo, Wisconsin  
Hyderabad, India

Walkerton, Ontario  
Compton, California

Monterrey, Mexico  
Granby, Quebec

### 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



Process Controls



Panel Shops



Machine Automation



Control Boards



HVAC Panels



Power Timers, Solenoids and Controllers

## INDUSTRIES



Commercial



Agriculture



Automation

## APPROVALS

- Meets NEMA standards
- CSA Certified
- UL Listed
- CE Marked



## FEATURES AND BENEFITS

- Multi-voltage primary and secondary models increase range of application per unit
- Standard molded terminal blocks or primary and secondary up to 3000VA (30A) units
- Solid terminal block with standard combination screw connection
- 50/60 Hz (60 Hz on SP\*\*\*ACP and SP\*\*\*AR)
- Copper wound coils with high dielectric strength insulation
- Bolted core construction
- Bolt-on mounting brackets
- Vacuum Impregnated with Polyester Resin and oven cured
- Seismically qualified according to International Building Code (IBC) 2018, and the American Society of Civil Engineers ASCE 7-10 specifications, with the following design parameters:  
Spectral acceleration:  $S_{DS} \leq 2.0g$   
Importance factor:  $I_p = 1.5$   
Attachment/height ratio:  $z/h = 1.0''$   
O.S.H.P.D California Certified
- Superior insulating materials. The HPS Spartan series transformer offers the following insulation systems:
  - 130°C (80°C rise) up to 1500 VA
  - 180°C (115°C rise) 2000 VA to 5000 VA
- All units supplied with primary and secondary voltage links/jumpers
- Optional finger guards available<sup>1</sup>
- Optional fuse block adapter kit available<sup>1</sup>
- Supplied with trilingual installation and wiring instruction sheets
- "Premium Packaging"<sup>1</sup> featuring:
  - Premium fluted cartons
  - Custom molded foam inserts
  - Easy removal and repacking
  - Industry's best box label
- 15 year warranty

<sup>1</sup> up to and including 3000VA or 30 amps

# HPS Spartan

Transformateur de contrôle type ouvert

## GROUP A

Primary Voltage: **600/480** || 575/460 || 550/440    60 Hertz  
 Secondary Voltage: **120 x 240** || 115 x 230 || 110 x 220

| VA Rating | CE VA Rating | Catalog Number | Mtg. Fig. | Output Amps | Overall Dimensions |                               |                  | Mounting Centers |                  | Mounting Slot                 | Height with Finger Guard | Height with Fuse Block Adapter | Approx. Ship Weight Lbs. |
|-----------|--------------|----------------|-----------|-------------|--------------------|-------------------------------|------------------|------------------|------------------|-------------------------------|--------------------------|--------------------------------|--------------------------|
|           |              |                |           |             | A                  | B                             | C                | D                | E                | G X H                         |                          |                                |                          |
| 50        | 50           | SP50ACP        | A         | 0.42/0.21   | 2.60<br>[66.04]    | 3.82<br>[97.03]               | 2.60<br>[66.04]  | 2.13<br>[54.11]  | 2.64<br>[67.06]  | 0.22 x 0.44<br>[5.59 x 11.18] | 2.98<br>[75.70]          | 2.79<br>[70.87]                | 2.2<br>[1.0]             |
| 100       | 100          | SP100ACP       | A         | 0.83/0.42   | 2.99<br>[75.95]    | 3.74<br>[95.00]               | 2.85<br>[72.39]  | 2.52<br>[64.01]  | 2.60<br>[66.04]  | 0.22 x 0.44<br>[5.59 x 11.18] | 3.23<br>[82.05]          | 3.04<br>[77.22]                | 3.3<br>[1.5]             |
| 150       | 150          | SP150ACP       | A         | 1.25/0.63   | 2.99<br>[75.95]    | 4.29<br>[108.97]              | 2.85<br>[72.39]  | 2.52<br>[64.01]  | 3.15<br>[80.01]  | 0.22 x 0.44<br>[5.59 x 11.18] | 3.23<br>[82.05]          | 3.04<br>[77.22]                | 4.4<br>[2.0]             |
| 250       | 160          | SP250ACP       | A         | 2.08/1.04   | 3.78<br>[96.02]    | 4.09<br>[103.89]              | 3.40<br>[86.36]  | 3.31<br>[84.08]  | 2.99<br>[75.95]  | 0.22 x 0.44<br>[5.59 x 11.18] | 3.78<br>[96.02]          | 3.59<br>[91.19]                | 6.4<br>[2.9]             |
| 350       | 250          | SP350ACP       | A         | 2.92/1.46   | 3.78<br>[96.02]    | 4.49<br>[114.05]              | 3.40<br>[86.36]  | 3.31<br>[84.08]  | 3.39<br>[86.11]  | 0.22 x 0.44<br>[5.59 x 11.18] | 3.78<br>[96.02]          | 3.59<br>[91.19]                | 7.5<br>[3.4]             |
| 500       | 300          | SP500ACP       | A         | 4.17/2.08   | 4.49<br>[114.05]   | 4.69<br>[119.13]              | 3.78<br>[96.02]  | 3.78<br>[96.02]  | 3.66<br>[92.97]  | 0.31 x 0.81<br>[7.88 x 20.58] | 4.16<br>[105.67]         | 3.97<br>[100.84]               | 11.0<br>[5.0]            |
| 750       | 500          | SP750ACP       | A         | 6.25/3.13   | 5.25<br>[133.35]   | 5.08 <sup>1</sup><br>[129.06] | 4.37<br>[111.00] | 4.50<br>[114.30] | 4.06<br>[103.13] | 0.31 x 0.81<br>[7.88 x 20.58] | 4.75<br>[120.65]         | 4.56<br>[115.83]               | 18.0<br>[8.1]            |
| 1000      | 650          | SP1000ACP      | A         | 8.33/4.17   | 5.25<br>[133.35]   | 5.47 <sup>1</sup><br>[138.97] | 4.37<br>[111.00] | 4.50<br>[114.30] | 4.45<br>[113.03] | 0.31 x 0.81<br>[7.88 x 20.58] | 4.75<br>[120.65]         | 4.56<br>[115.83]               | 21.0<br>[9.5]            |
| 1500      | 1000         | SP1500ACP      | A         | 12.5/6.25   | 5.25<br>[133.35]   | 6.85 <sup>1</sup><br>[174.02] | 4.37<br>[111.00] | 4.50<br>[114.30] | 5.83<br>[148.09] | 0.31 x 0.81<br>[7.88 x 20.58] | 4.56<br>[115.83]         | 4.37<br>[111.00]               | 28.0<br>[12.6]           |
| 2000      | 1300         | SP2000ACP      | A         | 16.7/8.33   | 6.38<br>[162.06]   | 5.87 <sup>1</sup><br>[149.13] | 5.31<br>[134.88] | 5.75<br>[146.05] | 4.84<br>[122.94] | 0.31 x 0.81<br>[7.88 x 20.58] | 5.69<br>[144.53]         | 5.50<br>[139.70]               | 34.0<br>[15.3]           |
| 3000      | 2000         | SP3000ACP      | A         | 25.0/12.5   | 7.50<br>[190.50]   | 7.50<br>[190.50]              | 6.50<br>[165.10] | 6.30<br>[160.02] | 6.85<br>[173.99] | 0.44 x 1.00<br>[11.18 x 25.4] | 6.50<br>[165.10]         | 6.50<br>[165.10]               | 60.0<br>[27.0]           |
| 5000      | 3000         | SP5000ACP      | C         | 41.7/20.8   | 8.98<br>[228.10]   | 9.88<br>[250.96]              | 7.76<br>[197.11] | 7.40<br>[187.96] | 7.13<br>[181.11] | 0.44 x 1.00<br>[11.18 x 25.4] | N/A                      | N/A                            | 93.0<br>[41.9]           |

Primary and Secondary voltage links/jumpers supplied standard with all transformers.

Please contact your HPS representative for other requests.

<sup>1</sup> Note: For 750 through 2000 VA units actual overall depth is 0.24" plus the value in column B.

\* See page 10 for dimensional drawings.

Dimensions in Inches [mm]

Weight in [kg]

## GROUP B

Primary Voltage: **600** || 575 || 550    50/60 Hertz  
 Secondary Voltage: **12 x 24** || 11.5 x 23 || 11 x 22

| VA Rating | CE VA Rating | Catalog Number | Mtg. Fig. | Output Amps | Overall Dimensions |                  |                 | Mounting Centers |                 | Mounting Slot                 | Height with Finger Guard | Height with Fuse Block Adapter | Approx. Ship Weight Lbs. |
|-----------|--------------|----------------|-----------|-------------|--------------------|------------------|-----------------|------------------|-----------------|-------------------------------|--------------------------|--------------------------------|--------------------------|
|           |              |                |           |             | A                  | B                | C               | D                | E               | G X H                         |                          |                                |                          |
| 50        | 50           | SP50AR         | A         | 4.17/2.08   | 2.60<br>[66.04]    | 3.23<br>[82.05]  | 2.60<br>[66.04] | 2.13<br>[54.11]  | 2.05<br>[52.07] | 0.22 x 0.44<br>[5.59 x 11.18] | 2.98<br>[75.70]          | 2.79<br>[70.87]                | 1.5<br>[0.7]             |
| 100       | 100          | SP100AR        | A         | 8.33/4.17   | 2.99<br>[75.95]    | 3.74<br>[95.00]  | 2.85<br>[72.39] | 2.52<br>[64.01]  | 2.60<br>[66.04] | 0.22 x 0.44<br>[5.59 x 11.18] | 3.23<br>[82.05]          | 3.04<br>[77.22]                | 3.3<br>[1.5]             |
| 150       | 150          | SP150AR        | A         | 12.5/6.25   | 2.99<br>[75.95]    | 4.09<br>[103.89] | 2.85<br>[72.39] | 2.52<br>[64.01]  | 2.95<br>[74.93] | 0.22 x 0.44<br>[5.59 x 11.18] | 3.23<br>[82.05]          | 3.04<br>[77.22]                | 3.9<br>[1.8]             |
| 250       | 160          | SP250AR        | A         | 20.8/10.4   | 3.78<br>[96.02]    | 3.70<br>[93.98]  | 3.40<br>[86.36] | 3.31<br>[84.08]  | 2.60<br>[66.04] | 0.22 x 0.44<br>[5.59 x 11.18] | 3.78<br>[96.02]          | 3.59<br>[91.19]                | 5.2<br>[2.4]             |
| 350       | 250          | SP350AR        | A         | 29.2/14.6   | 3.78<br>[96.02]    | 4.29<br>[108.97] | 3.40<br>[86.36] | 3.31<br>[84.08]  | 3.19<br>[81.03] | 0.22 x 0.44<br>[5.59 x 11.18] | 3.78<br>[96.02]          | 3.59<br>[91.19]                | 7.1<br>[3.2]             |
| 500       | 300          | SP500AR        | B         | 41.7/20.8   | 4.49<br>[114.05]   | 5.08<br>[129.04] | 3.78<br>[96.02] | 3.78<br>[96.02]  | 3.27<br>[83.06] | 0.31 x 0.81<br>[7.88 x 20.58] | 4.16<br>[105.67]         | 3.97<br>[100.84]               | 9.9<br>[4.5]             |

Primary and Secondary voltage links/jumpers supplied standard with all transformers.

Please contact your HPS representative for other requests.

\* See page 10 for dimensional drawings.

Dimensions in Inches [mm]

Weight in [kg]

# HPS Spartan

Transformateur de contrôle type ouvert

## DIMENSIONAL DRAWINGS

Some actual transformer units may differ from dimensional drawings shown below.

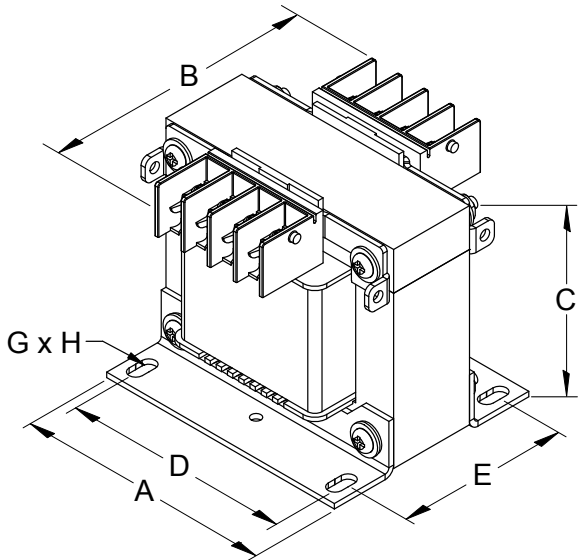


FIGURE A

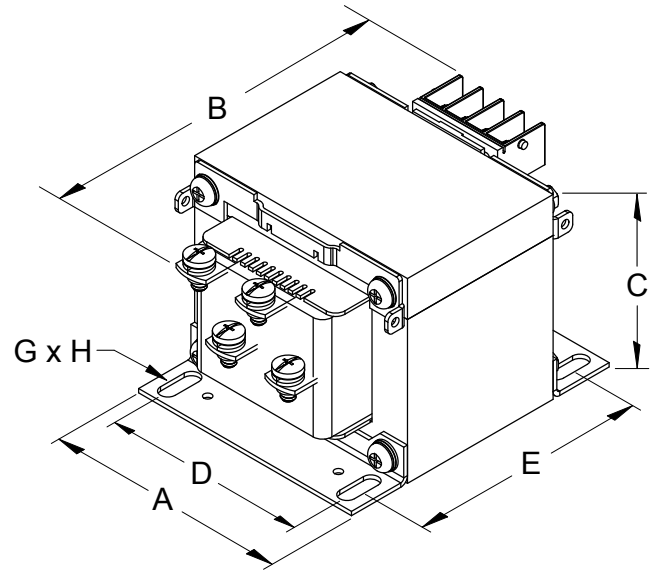


FIGURE B

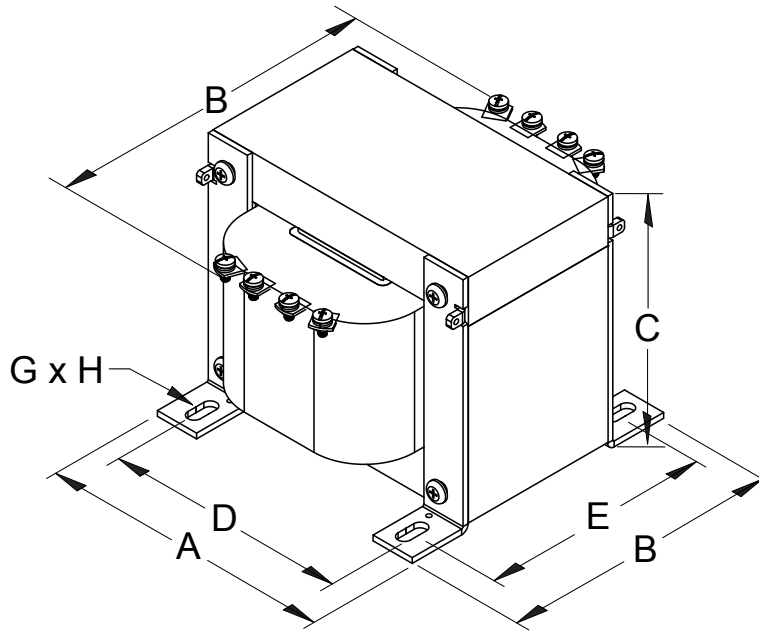


FIGURE C