hammond
POWER SOLUTIONS

CONTROL TRANSFORMERS

Molded Style, Open Style, Enclosed Style

HPS Control Transformers

Why Choose HPS Control Transformers

HPS Control Transformers are built to keep your systems running safely and efficiently. Designed for industrial panels, motor control, and automation systems, they offer unique features such as a first-of-its-kind single-point ground connection, along with optional finger-safe terminal guards and industry-standard fuse holders for added safety. With one of the industry's most comprehensive product ranges, HPS delivers stable, isolated power to control circuits, protecting sensitive equipment and keeping your operations reliable in even the toughest environments.

Industry-Leading Warranty Coverage – We stand behind our control transformers with some of the strongest warranties in the industry, including a lifetime warranty on our molded-style control transformers and a 15-year warranty on our general purpose enclosed and open style control transformers.

Space-Saving Innovation – Our open-style control transformers are up to 20% smaller than competing designs, maximizing panel space and making them ideal for tight enclosures and modular layouts.

Safety Redefined – The patent-pending single-point grounding system simplifies grounding and bonding, enhances safety, reduces installation time, and ensures compliance with electrical codes and standards.

Three Styles to Suit Your Application

HPS offers three control transformer styles to meet the unique needs of different environments and installation types:

Molded Style –Durable and built for high inrush applications, encapsulated coils protect from moisture and airborne contaminants.

Open Style – Compact and versatile, perfect for panel builders, OEMs, or tight enclosures.

Enclosed Style – Ready-to-install in a metal enclosure for light-duty industrial and commercial applications.

Feature/Application	Molded Style	Open Style	Enclosed Style
Industrial and light duty loads (HVAC, signal & alarm systems, lighting, and circuit isolation)	✔	✔	✔
High inrush applications (relays, solenoids, magnetic starters)	Best	Good	Good
Coil protected from debris, dust and damage	✔	✘	✔
Secondary fusing options	✔	✔	✔
Primary fusing options	✔	✔	✘
Integrated ground screw	✔	✔	✔
Compact design for tight spaces	✘	✔	✘

Applications

Process Controls

Panel Shops & Control Boards

Machine Automation

HVAC Panels

Power Timers, Solenoids & Controllers

Battery Storage

Features & Benefits

Built for Reliability and Performance

- **25 standard voltage combinations** support diverse applications, from automation to battery storage.
- **High inrush and continuous operation design** handles relays, solenoids, contactors, and timers.
- **Copper-wound coils, durable insulation**, and silicon steel laminations deliver stable, consistent voltage and long life.
- **Welded core and base construction** ensure mechanical strength and easy installation.
- **Vacuum-impregnated coils** improve thermal performance and protection.

Simplified Installation & Compliance

- **Patent-pending single-point grounding system** (molded & open styles) ensures safe, code-compliant connections
- **Standard fuse block mounting plate** (molded & open styles) supports primary and secondary fusing, saving space and installation time.
- **Optional fuse kits and finger-safe accessories** available for added protection.
- **Meets top industry safety standards** with CSA certification, UL listing, CE marking*, RoHS compliance, and NEMA construction standards.

**The general purpose enclosed transformer is not CE marked.*

Sustainable & Local Manufacturing

- **Foam-free, recyclable cardboard** packaging supports environmentally conscious operations.
- **Proudly built in North America** for faster lead times and responsive service

Long-Term Warranty Coverage

- **Lifetime Warranty** on molded style control transformers.
- **15-year Warranty** on open and enclosed style control transformers.

Part Numbering Structure

Family	Generation	Type	VA				Primary & Secondary Voltages							Fuse Block	Options*		
C	2	M	0	1	0	0	M	Q	M	J				-1	-	-	-

Family

C - Control

Generation

2 - Generation 2nd

Type

M - Molded Style
G - Open Style
E - Enclosed Style

VA Code	VA
0050	50
0075	75
0100	100
0150	150
0250	250
0350	350
0500	500
0750	750
1000	1000
1500	1500
2000	2000
3000	3000
5000	5000

Volt. Code	Primary	Secondary	Max VA	Type G	Type M	Type E
ACP	600/480	120 X 240		✔		✔
AJ	600	120 X 240		✔	✔	
AR	600	24	500VA	✔	✔	✔
DJ	277/208	120 X 240			✔	
KHP	380/347	120 X 240		✔		✔
KHR	380/347	24	500VA	✔		✔
MBMH	575/460/230	115/95	3000VA	✔	✔	
MEI	415/400/380	120/24	500VA	✔		
MEMX	415/400/380	110 X 220			✔	
MER	415/400/380	24	500VA	✔		
MGJ	380/277/208	120 X 240			✔	
MLI	460/230/208	115/24	1000VA		✔	
MQM	230 X 460	115	3000VA	✔		
MQMJ	240 X 480	120 X 240		✔	✔	✔
NJ	277	120	1500VA	✔		✔
PP	120 X 240	120 X 240			✔	
PR	120 X 240	24	1000VA	✔	✔	✔
QR	240 X 480	24	500VA	✔	✔	✔
SP	208 X 416	120 X 240		✔	✔	✔
SR	208 X 416	24	500VA	✔		✔
TI	347/277/240/208	120/24	500VA	✔		
XI	575/460/400/230	115/24	500VA		✔	
XMH	575/460/400/230	115/95	3000VA	✔		
YJ	800	120 X 240		✔		
ZJ	690	120 X 240		✔		

Fuse Block

-1- Primary CC Fuse Block*

**This character should be blank if all the following characters are default values or not selected.*

G = Open
M = Molded
E = Enclosed

For Selection Tables:

Molded (C2M) Open (C2G) Enclosed (C2E)

Overcurrent Protection

Secondary

The overcurrent protection listed below, in amperes, is 125% of the rated current of the transformer. Choose the next higher fuse rating if these numbers do not correspond with standard fuse selections.

Sec. Voltage	VA Rating															
	25	50	75	100	150	200	250	300	350	500	750	1000	1500	2000	3000	5000
12	2.7	5.3	7.9	11	16	21	27	-	-	-	-	-	-	-	-	-
24	1.4	2.7	4.0	5.3	7.9	11	14	16	19	27	-	-	-	-	-	-
90	0.4	0.7	1.1	1.4	2.1	2.8	3.5	4.2	4.9	7.0	11	14	21	28	-	-
95	0.4	0.7	1.0	1.4	2.0	2.7	3.3	4.0	4.7	6.6	9.9	14	20	27	-	-
100	0.4	0.7	1.0	1.3	1.9	2.5	3.2	3.8	4.4	6.3	9.4	13	19	25	-	-
110	0.3	0.6	0.9	1.2	1.8	2.3	2.9	3.5	4.0	5.7	8.6	12	18	23	-	-
115	0.3	0.6	0.9	1.1	1.7	2.2	2.8	3.3	3.9	5.5	8.2	11	17	22	-	-
120	0.3	0.6	0.8	1.1	1.6	2.1	2.7	3.2	3.7	5.3	7.9	11	16	21	-	-
220	0.15	0.3	0.5	0.6	0.9	1.2	1.5	1.8	2.0	2.9	4.3	5.7	8.6	12	18	29
230	0.14	0.3	0.5	0.6	0.9	1.1	1.4	1.7	2.0	2.8	4.1	5.5	8.2	11	17	28
240	0.14	0.3	0.4	0.6	0.8	1.1	1.4	1.6	1.9	2.7	4.0	5.3	7.9	11	16	27

Primary

To assist in the selection of fuses, the following chart suggests the maximum primary fuse rating in amperes. The number shown is the maximum overcurrent protection when the primary current is less than 2 amps and the overcurrent protection device is rated for 300%. Choose the next higher fuse rating if these numbers do not correspond with standard fuse selections.

Pri. Voltage	VA Rating																
	25	50	75	100	150	200	250	300	350	500	750	1000	1500	2000	3000	5000	7500
115	0.6	1.25	1.8	2.5	3.5	5	4	5	5	8	10	15	20	25	-	-	-
120	0.6	1.25	1.8	2.25	3.5	5	4	5	5	8	10	15	15	20	-	-	-
200	0.3	0.75	1.125	1.5	2.25	3	3.5	4.5	5	4.5	7	9	15	15	20	-	-
208	0.3	0.6	1	1.4	2	2.8	3.5	4	5	4	6	8	12	15	20	30	-
220	0.3	0.6	1	1.25	2	2.5	3.2	4	4.5	4	6	8	12	15	20	30	-
230	0.3	0.6	0.8	1.25	1.8	2.5	3.2	3.5	4.5	4	6	8	10	15	20	30	-
240	0.3	0.6	0.8	1.25	1.8	2.25	3	3.5	4	3.5	5	7	10	15	15	30	-
277	0.25	0.5	0.8	1	1.6	2	2.5	3.2	3.5	5	5	6	9	12	15	25	-
347	0.25	0.5	0.8	1	1.6	2	2.5	3.2	3.5	5	6.25	5	7.5	10	15	20	30
380	0.1875	0.3	0.5	0.75	1.125	1.5	1.8	2.25	2.5	3.5	5.6	4.5	6.25	9	15	20	25
400	0.1875	0.3	0.5	0.75	1.125	1.5	1.8	2.25	2.5	3.5	5.6	4.5	6.25	9	12	15	20
416	0.15	0.3	0.5	0.6	1	1.4	1.8	2	2.5	3.5	5	4	6	8	12	15	20
440	0.15	0.3	0.5	0.6	1	1.25	1.6	2	2.25	3.2	5	4	6	8	12	15	20
460	0.15	0.3	0.4	0.6	0.8	1.25	1.6	1.8	2.25	3.2	4.5	3.5	6	8	12	15	20
480	0.15	0.3	0.4	0.6	0.8	1.25	1.5	1.8	2	3	4.5	3.5	5	7	10	15	20
550	0.125	0.25	0.4	0.5	0.8	1	1.25	1.6	1.8	2.5	4	5	4.5	6	9	15	15
575	0.125	0.25	0.3	0.5	0.75	1	1.25	1.5	1.8	2.5	3.5	5	4.5	6	9	15	15
600	0.125	0.2	0.3	0.5	0.75	0.8	1.25	1.5	1.6	2.25	3.5	5	4	6	9	15	15

Standard and Optional Accessory Kits Available

The HPS series of industrial control transformers are available with several accessory kit options such as secondary and primary fuse kits and optional finger guard kits.

If you have any questions regarding what accessories are available or are having any difficulty correctly installing these accessories, please contact HPS customer service or technical support in the U.S. at 1-866-705-4684, Canada at 1-888-798-8882, or in Mexico at 1-819-690-8000.

Standard Secondary Fuse Kits

Supplied with each HPS Molded transformer up to 2000VA (excluding all 50VA-100VA and C2M0150AJ)

Kit Part Number	Parts Included in Kit
SJGK2	2 fuse clips, 2 mtg. screws, 6 voltage links, 1 GND screw

Optional Secondary Fuse Kits

Kit Part Number	Applicable Parts	Parts Included in Kit
SFCK1	*C2G ≥ 250VA (max 30A secondary)	2 fuse clips, 2 mtg. screws, 1 voltage link
SFBK10	All C2G, C2M (max 30A secondary)	1 single-pole non-rej. fuse block, 1 lead wire, 1 mtg. screw
FSFH1	All C2E (max 20A secondary)	Fuse holder kit for ¼" x1 ¼" fuses

Optional Primary Fuse Kits

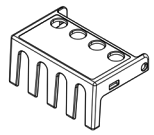
Kit Part Number	Applicable Parts	Parts Included in Kit
PFBK8	All C2G, C2M	1 two-pole rej. fuse block, 2 lead wires, 2 mtg. screws

Optional Finger Guard Kits

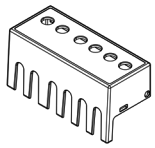
Kit Part Number	Applicable Parts	Parts Included in Kit
FGTK4	*C2M ≤ 100VA, C2G ≤ 150VA	2 four terminal finger guards
FGTK6	*C2M ≥ 150VA, C2G ≥ 250VA	1 four term. finger guard, 1 six terminal finger guard
FGTK8	C2M – XI; C2G - TI, XMH	1 four term. finger guard, 1 six terminal finger guard, 1 five terminal finger guard
FSFBC11	SFBK10, PFBK8	1 single-pole fuse block finger guard

**Some exceptions apply*

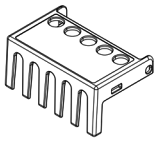
Sample Accessory Drawings



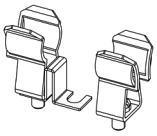
4 Terminal Finger Guard



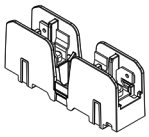
6 Terminal Finger Guard



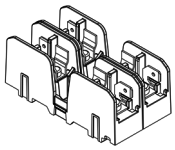
5 Terminal Finger Guard



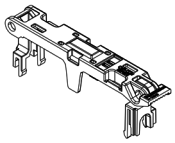
Secondary Fuse Clips



1P Non-Rejection Fuse Block

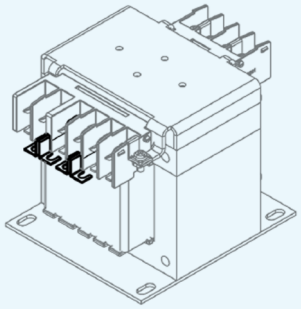


2P Rejection Fuse Block

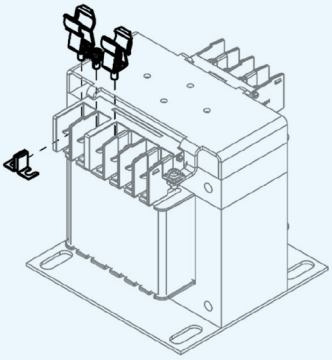


1P Fuse Block Finger Guard

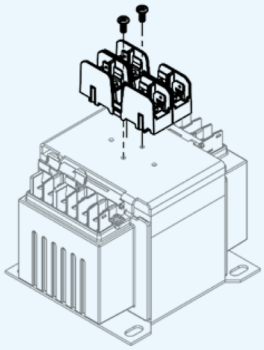
Sample Accessory Assembly Drawings



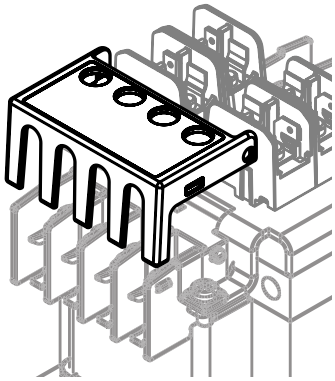
Sample Assembly Drawing for Electrical Connections



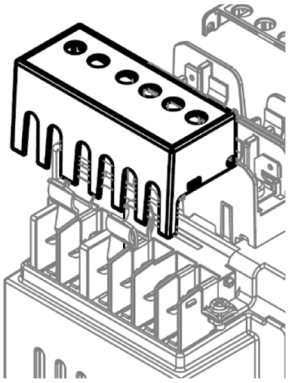
Sample Assembly Drawing for Secondary Fuse Clip Installation (For 150VA to 1500VA)



Sample Assembly Drawing for Primary Fuse Block Installation



Sample Assembly Drawing for Finger Guard Installation
(4 Terminal Finger Guard)



Sample Assembly Drawing for Finger Guard Installation
(6 Terminal Finger Guard)

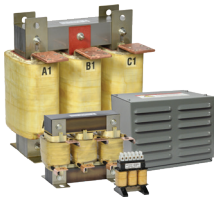
Other Drive Solutions

HPS TruWave™ Active Harmonic Filters

HPS TruWave™ Active Harmonic Filter (AHF) is a comprehensive and flexible solution for harmonic mitigation. It provides advanced control and proven reliability that your facility needs to solve harmonic problems generated by non-linear loads such as variable frequency drives.

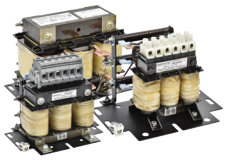
HPS Passive Harmonic Filters

HPS Passive Harmonic Filters are specifically engineered to mitigate harmonic currents created by non-linear loads. It is currently available from 5 to 500 horsepower and it improves power quality by simultaneously reducing harmonics and improving true power factor.



HPS Reactors

HPS Reactors provides a U.L. listed solution to many common drive issues. When coordinated with a HPS TruWave Active Harmonic Filter, the system can reduce harmonics from variable frequency drives to under 5% THD.



dV/dT Filters

The HPS dV/dT filter provides protection for motors by slowing the rate of voltage increase and minimizing the peak voltage that occurs at the motor's terminals and along the cables feeding the motor.

Energy Efficient Drive Isolation Transformers

HPS energy efficient drive isolation transformers are suitable for both AC and DC variable speed drives. They are sized to match standard motor horsepower and voltage ratings.

HPS Multi-Pulse Transformers

Multi-Pulse transformers are designed specifically for harmonics, voltage distortion and other unique characteristics associated with individual manufacturer's drive systems. They provide the required supply voltage with the desired phase angle between secondary voltages for VFD systems/converters.

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