

FIGURE A

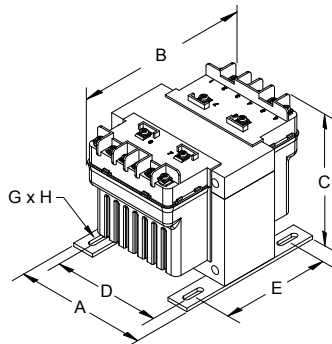


FIGURE B

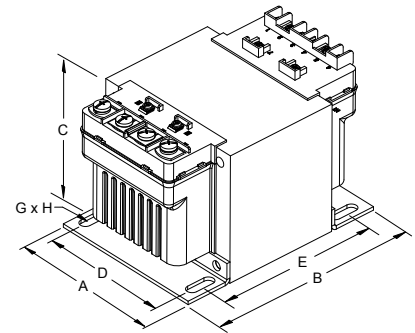


FIGURE C

## Group G

Primary Voltage: 120 X 240 || 115 X 230 || 110 X 220  
Secondary Voltage: 12 X 24 || 11.5 X 23 || 11 X 22

cULus CE 50/60 Hertz

VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Depth with Finger Guard	Approx. Ship Weight Lbs.	Optional Primary Fuse Kit P/N	Optional Unfused and Fused Finger Guard Kit P/N
				A	B	C	D	E						
50	PH50PG	A	4.17/2.08	3.00	4.38	3.19	2.50	2.25	0.22 x 0.44	4.00	5.82	3.50	PFK1	FG1*/FGF1
75	PH75PG	A	6.25/3.13	3.25	3.88	3.56	2.63	2.50	0.22 x 0.44	4.37	5.32	3.54	PFK1	FG2*/FGF2
100	PH100PG	A	8.33/4.17	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.50	5.63	4.50	PFK1	FG2*/FGF2
150	PH150PG	B	12.5/6.25	4.00	4.94	3.81	3.38	2.75	0.22 x 0.75	4.50	6.44	5.70	PFK2	FG3
250	PH250PG	B	20.8/10.4	4.50	5.44	3.81	3.75	3.13	0.22 x 0.75	4.50	6.94	7.50	PFK2	FG3
350	PH350PG	B	29.2/14.6	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK3	FG4
500	PH500PG	B	41.7/20.8	4.75	5.94	4.31	4.06	3.81	0.31 x 0.94	5.13	7.44	14.2	PFK3	FG4
750	PH750PG	C	62.5/31.3	5.25	6.25	4.94	4.38	4.31	0.31 x 0.81	5.56	7.88	16.6	PFK3	FG5
1000	PH1000PG	C	83.3/41.7	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK3	FG5

Secondary fuse clips and fuse clip mounting screws supplied standard with transformers up to and including 500VA. Primary and Secondary voltage links/jumpers supplied standard with transformers.

All dimensions in inches

\*Note: Unfused finger guard kits are marked with an asterisk, for more information refer to page 43.

Refer to page 69 for wiring schematic drawing. Custom voltages and VA sizes available upon request.

\*\*\* Available with FACTORY INSTALLED Primary and Secondary Fuse Kits up to 1000VA. To order, add the suffix "-FK" to the above part number. Refer to page 42 for details. \*\*\*

## Group H

Primary Voltage: 600/480/240 || 575/460/230 || 550/440/220  
Secondary Voltage: 120/100 || 115/95 || 110/90

cULus CE 50/60 Hertz

VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Depth with Finger Guard	Approx. Ship Weight Lbs.	Optional Primary Fuse Kit P/N	Optional Unfused and Fused Finger Guard Kit P/N
				A	B	C	D	E						
50	PH50MBMH	A	0.43	3.25	4.06	3.63	2.63	2.63	0.22 x 0.44	4.50	5.50	4.10	PFK5	FG2*/FGF2
75	PH75MBMH	A	0.65	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.50	5.63	4.50	PFK5	FG2*/FGF2
100	PH100MBMH	B	0.87	4.00	4.63	3.81	3.38	2.75	0.22 x 0.75	4.50	6.25	4.90	PFK6	FG3
150	PH150MBMH	B	1.30	4.00	5.44	3.81	3.38	2.75	0.22 x 0.75	4.50	6.94	7.60	PFK6	FG3
250	PH250MBMH	B	2.17	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK6	FG4
350	PH350MBMH	B	3.04	4.50	5.56	4.44	3.75	3.75	0.22 x 0.75	5.18	7.06	11.0	PFK7	FG4
500	PH500MBMH	B	4.35	4.75	6.69	4.31	4.06	4.50	0.31 x 0.94	5.13	8.19	16.3	PFK7	FG4
750	PH750MBMH	B	6.52	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK7	FG5
1000	PH1000MBMH	B	8.70	5.25	8.19	4.94	4.50	5.81	0.31 x 0.81	5.56	9.69	31.2	PFK7	FG5
1500	PH1500MBMH	B	13.0	5.25	8.19	4.94	4.50	6.06	0.38 x 1.0	5.56	9.69	32.0	PFK7	FG5

Secondary fuse clips, fuse clip mounting screws and primary and secondary voltage links/jumpers supplied standard with transformers.

All dimensions in inches

\*Note: Unfused finger guard kits are marked with an asterisk, for more information refer to page 43.

Refer to page 70 for wiring schematic drawing. Custom voltage and VA sizes available upon request.

## Field Installed Fuse Kits

### Standard Secondary Fuse Kits (Field Installed)

All HPS Imperator control transformers are supplied with standard secondary fuse kits which include: 13/32" x 1 1/2" midget/ type CC fuse clips, fuse clip mounting screws, primary and secondary voltage links and the PHAK1 instruction sheet (note: secondary fuse clips and fuse clip mounting screws are not supplied on the PH750PG, PH1000PG, PH750MLI, and PH1000MLI).

### Optional Primary Fuse Kits (Field Installed)

All HPS Imperator series machine tool industrial control transformers up to and including 1500VA are available with the following optional primary fuse kits:

Kit Part Number	Applicable Transformer Part Number Suffix's	Applicable VA Sizes	Parts Included in Kit
PFK1	Refer to Specification Tables on Pages 36 to 41 for Optional Primary Fuse Kit P/N		4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK2			4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK3			4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK4			4 fuse clips, 4 mtg. screws, 1 jumper, 1 finger guard, PHAK1 instruction sheet
PFK5			4 fuse clips, 4 mtg. screws, 1 jumper, 1 finger guard, PHAK1 instruction sheet
PFK6			4 fuse clips, 4 mtg. screws, 1 jumper wire, PHAK1 instruction sheet
PFK7			4 fuse clips, 4 mtg. screws, 1 jumper wire, PHAK1 instruction sheet

**Note:** Maximum allowable current rating on all primary and secondary fuse kits is 30 amps.

## Factory Installed Fuse Kits

### Factory Installed Primary and Secondary Fuse Kits

HPS now stocks some HPS Imperator series voltage groups with FACTORY INSTALLED primary and secondary fuse clips. To order, just add the suffix "-FK" to the end of the standard part number.

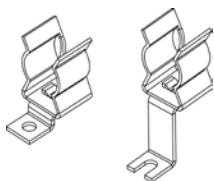
Factory installed fusing only available on units up to 1500VA. The voltage groups that are stocked are:

**Group C (p/n: PH\*\*\*MQMJ-FK) | Group G (p/n: PH\*\*\*PG-FK) | Group I (p/n: PH\*\*\*MLI-FK)**

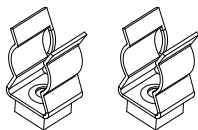
On PH750PG-FK, PH1000PG-FK, PH750MLI-FK, and PH1000MLI-FK, only primary fuse clips are included on factory installed units. Secondary fuse clips are not included or available on these units.

Other voltage groups available with factory installed fuse kits. Please contact your HPS sales or customer service representative for details.

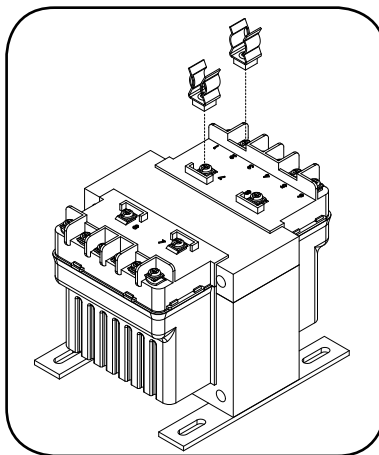
**Note:** All factory installed fuse kits are pre-wired at the transformers highest primary voltage and the lowest secondary voltage. To hook up at a different primary or secondary voltage, please refer to the wiring instruction sheet included with the transformer.



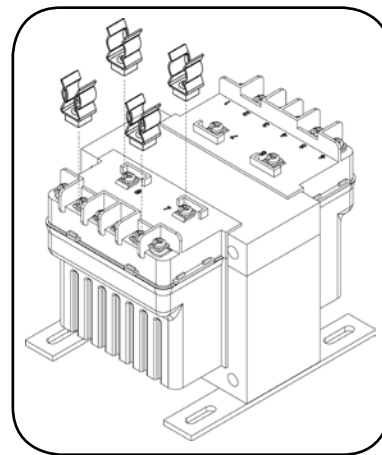
**Sample Accessory Drawing  
for Fuse Clips**  
(for 50, 75 and 100VA)



**Sample Accessory Drawing  
for Fuse Clips**  
(for 150VA to 1500VA)



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

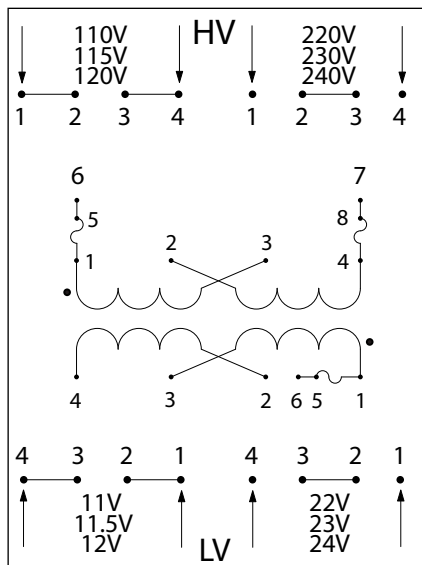


**Sample Assembly Drawing  
for Primary Fuse Clip  
Installation**  
(For 150VA to 1500VA)

**Note:** HPS Imperator primary and secondary fuse kits are not suitable for branch circuit applications!

## HPS Imperator - Wiring Schematic Drawings continued

### Group G



### PH\*\*\*PG Schematic for 50, 75 and 100VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

1-2, 3-4
2-3
1-2, 3-4
2-3

#### Supply Lines Connect To

1, 4
1, 4
6, 7
6, 7

#### Install Fuse Clips To

Unfused
Unfused
1-5, 4-8
1-5, 4-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22
12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

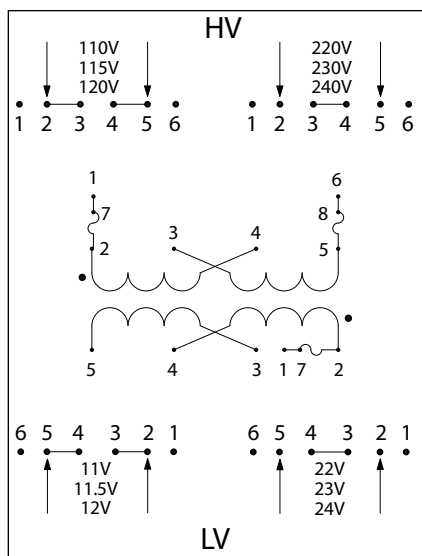
3-4, 1-2
2-3
3-4, 1-2
2-3

#### Load Lines Connect To

1, 4
1, 4
4, 6
4, 6

#### Install Fuse Clips To

Unfused
Unfused
1-5
1-5



### PH\*\*\*PG Schematic for 150VA to 500VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

2-3, 4-5
3-4
2-3, 4-5
3-4

#### Supply Lines Connect To

2, 5
2, 5
1, 6
1, 6

#### Install Fuse Clips To

Unfused
Unfused
2-7, 5-8
2-7, 5-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22
12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

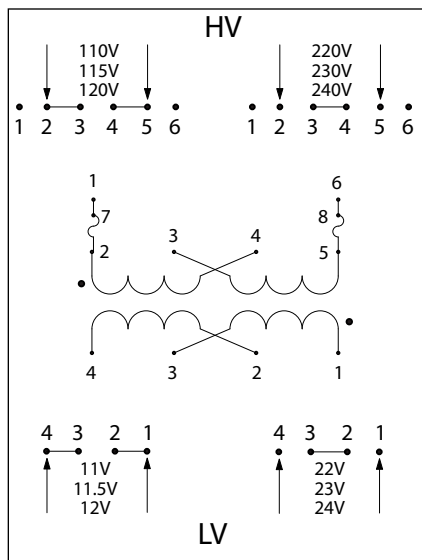
4-5, 2-3
3-4
4-5, 2-3
3-4

#### Load Lines Connect To

2, 5
2, 5
1, 5
1, 5

#### Install Fuse Clips To

Unfused
Unfused
2-7
2-7



### PH\*\*\*PG Schematic for 750VA and 1000VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

2-3, 4-5
3-4
2-3, 4-5
3-4

#### Supply Lines Connect To

2, 5
2, 5
1, 6
1, 6

#### Install Fuse Clips To

Unfused
Unfused
2-7, 5-8
2-7, 5-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

3-4, 1-2
2-3

#### Load Lines Connect To

1, 4
1, 4

#### Install Fuse Clips To

Unfused
Unfused

Note: secondary fuse clips not available on PH750PG or PH1000PG.

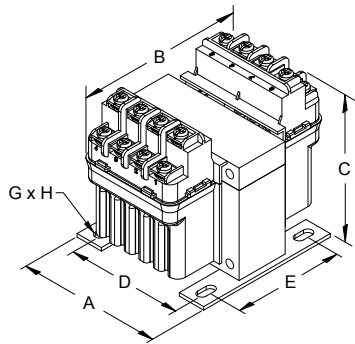


FIGURE A

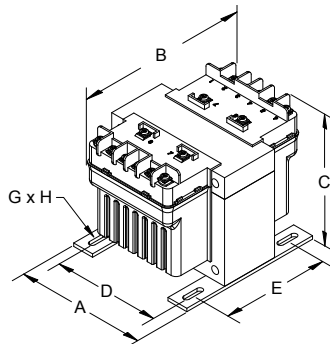


FIGURE B

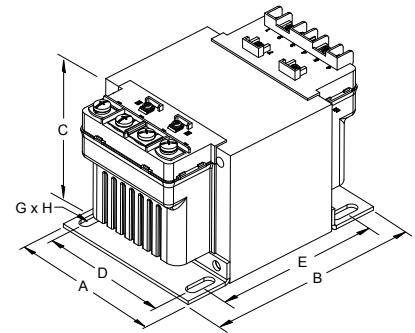


FIGURE C

## Group G

Primary Voltage: 120 X 240 || 115 X 230 || 110 X 220  
Secondary Voltage: 12 X 24 || 11.5 X 23 || 11 X 22

cULus CE 50/60 Hertz

VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Depth with Finger Guard	Approx. Ship Weight Lbs.	Optional Primary Fuse Kit P/N	Optional Unfused and Fused Finger Guard Kit P/N
				A	B	C	D	E						
50	PH50PG	A	4.17/2.08	3.00	4.38	3.19	2.50	2.25	0.22 x 0.44	4.00	5.82	3.50	PFK1	FG1*/FGF1
75	PH75PG	A	6.25/3.13	3.25	3.88	3.56	2.63	2.50	0.22 x 0.44	4.37	5.32	3.54	PFK1	FG2*/FGF2
100	PH100PG	A	8.33/4.17	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.50	5.63	4.50	PFK1	FG2*/FGF2
150	PH150PG	B	12.5/6.25	4.00	4.94	3.81	3.38	2.75	0.22 x 0.75	4.50	6.44	5.70	PFK2	FG3
250	PH250PG	B	20.8/10.4	4.50	5.44	3.81	3.75	3.13	0.22 x 0.75	4.50	6.94	7.50	PFK2	FG3
350	PH350PG	B	29.2/14.6	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK3	FG4
500	PH500PG	B	41.7/20.8	4.75	5.94	4.31	4.06	3.81	0.31 x 0.94	5.13	7.44	14.2	PFK3	FG4
750	PH750PG	C	62.5/31.3	5.25	6.25	4.94	4.38	4.31	0.31 x 0.81	5.56	7.88	16.6	PFK3	FG5
1000	PH1000PG	C	83.3/41.7	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK3	FG5

Secondary fuse clips and fuse clip mounting screws supplied standard with transformers up to and including 500VA. Primary and Secondary voltage links/jumpers supplied standard with transformers.

All dimensions in inches

\*Note: Unfused finger guard kits are marked with an asterisk, for more information refer to page 43.

Refer to page 69 for wiring schematic drawing. Custom voltages and VA sizes available upon request.

\*\*\* Available with FACTORY INSTALLED Primary and Secondary Fuse Kits up to 1000VA. To order, add the suffix "-FK" to the above part number. Refer to page 42 for details. \*\*\*

## Group H

Primary Voltage: 600/480/240 || 575/460/230 || 550/440/220  
Secondary Voltage: 120/100 || 115/95 || 110/90

cULus CE 50/60 Hertz

VA Rating	Catalog Number	Mtg. Fig.	Output Amps	Overall Dimensions			Mounting Centers		Mounting Slot G X H	Height with Finger Guard	Depth with Finger Guard	Approx. Ship Weight Lbs.	Optional Primary Fuse Kit P/N	Optional Unfused and Fused Finger Guard Kit P/N
				A	B	C	D	E						
50	PH50MBMH	A	0.43	3.25	4.06	3.63	2.63	2.63	0.22 x 0.44	4.50	5.50	4.10	PFK5	FG2*/FGF2
75	PH75MBMH	A	0.65	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.50	5.63	4.50	PFK5	FG2*/FGF2
100	PH100MBMH	B	0.87	4.00	4.63	3.81	3.38	2.75	0.22 x 0.75	4.50	6.25	4.90	PFK6	FG3
150	PH150MBMH	B	1.30	4.00	5.44	3.81	3.38	2.75	0.22 x 0.75	4.50	6.94	7.60	PFK6	FG3
250	PH250MBMH	B	2.17	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK6	FG4
350	PH350MBMH	B	3.04	4.50	5.56	4.44	3.75	3.75	0.22 x 0.75	5.18	7.06	11.0	PFK7	FG4
500	PH500MBMH	B	4.35	4.75	6.69	4.31	4.06	4.50	0.31 x 0.94	5.13	8.19	16.3	PFK7	FG4
750	PH750MBMH	B	6.52	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK7	FG5
1000	PH1000MBMH	B	8.70	5.25	8.19	4.94	4.50	5.81	0.31 x 0.81	5.56	9.69	31.2	PFK7	FG5
1500	PH1500MBMH	B	13.0	5.25	8.19	4.94	4.50	6.06	0.38 x 1.0	5.56	9.69	32.0	PFK7	FG5

Secondary fuse clips, fuse clip mounting screws and primary and secondary voltage links/jumpers supplied standard with transformers.

All dimensions in inches

\*Note: Unfused finger guard kits are marked with an asterisk, for more information refer to page 43.

Refer to page 70 for wiring schematic drawing. Custom voltage and VA sizes available upon request.



## Field Installed Fuse Kits

### Standard Secondary Fuse Kits (Field Installed)

All HPS Imperator control transformers are supplied with standard secondary fuse kits which include: 13/32" x 1 1/2" midget/ type CC fuse clips, fuse clip mounting screws, primary and secondary voltage links and the PHAK1 instruction sheet (note: secondary fuse clips and fuse clip mounting screws are not supplied on the PH750PG, PH1000PG, PH750MLI, and PH1000MLI).

### Optional Primary Fuse Kits (Field Installed)

All HPS Imperator series machine tool industrial control transformers up to and including 1500VA are available with the following optional primary fuse kits:

Kit Part Number	Applicable Transformer Part Number Suffix's	Applicable VA Sizes	Parts Included in Kit
PFK1	Refer to Specification Tables on Pages 36 to 41 for Optional Primary Fuse Kit P/N		4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK2			4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK3			4 fuse clips, 4 mtg. screws, PHAK1 instruction sheet
PFK4			4 fuse clips, 4 mtg. screws, 1 jumper, 1 finger guard, PHAK1 instruction sheet
PFK5			4 fuse clips, 4 mtg. screws, 1 jumper, 1 finger guard, PHAK1 instruction sheet
PFK6			4 fuse clips, 4 mtg. screws, 1 jumper wire, PHAK1 instruction sheet
PFK7			4 fuse clips, 4 mtg. screws, 1 jumper wire, PHAK1 instruction sheet

**Note:** Maximum allowable current rating on all primary and secondary fuse kits is 30 amps.

## Factory Installed Fuse Kits

### Factory Installed Primary and Secondary Fuse Kits

HPS now stocks some HPS Imperator series voltage groups with FACTORY INSTALLED primary and secondary fuse clips. To order, just add the suffix "-FK" to the end of the standard part number.

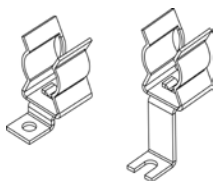
Factory installed fusing only available on units up to 1500VA. The voltage groups that are stocked are:

**Group C (p/n: PH\*\*\*MQMJ-FK) | Group G (p/n: PH\*\*\*PG-FK) | Group I (p/n: PH\*\*\*MLI-FK)**

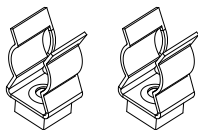
On PH750PG-FK, PH1000PG-FK, PH750MLI-FK, and PH1000MLI-FK, only primary fuse clips are included on factory installed units. Secondary fuse clips are not included or available on these units.

Other voltage groups available with factory installed fuse kits. Please contact your HPS sales or customer service representative for details.

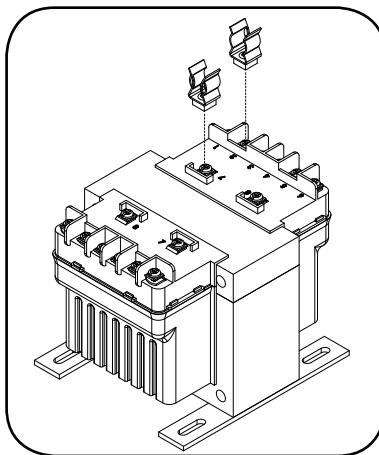
**Note:** All factory installed fuse kits are pre-wired at the transformers highest primary voltage and the lowest secondary voltage. To hook up at a different primary or secondary voltage, please refer to the wiring instruction sheet included with the transformer.



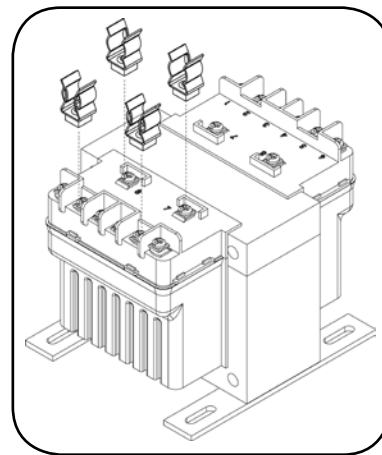
**Sample Accessory Drawing  
for Fuse Clips**  
(for 50, 75 and 100VA)



**Sample Accessory Drawing  
for Fuse Clips**  
(for 150VA to 1500VA)



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

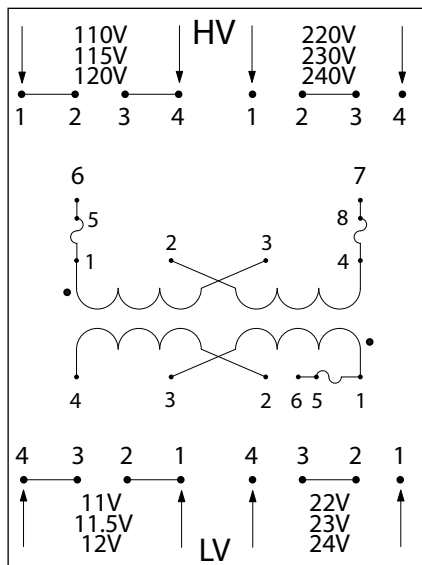


**Sample Assembly Drawing  
for Primary Fuse Clip  
Installation**  
(For 150VA to 1500VA)

**Note:** HPS Imperator primary and secondary fuse kits are not suitable for branch circuit applications!

## HPS Imperator - Wiring Schematic Drawings continued

### Group G



### PH\*\*\*PG Schematic for 50, 75 and 100VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

1-2, 3-4
2-3
1-2, 3-4
2-3

#### Supply Lines Connect To

1, 4
1, 4
6, 7
6, 7

#### Install Fuse Clips To

Unfused
Unfused
1-5, 4-8
1-5, 4-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22
12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

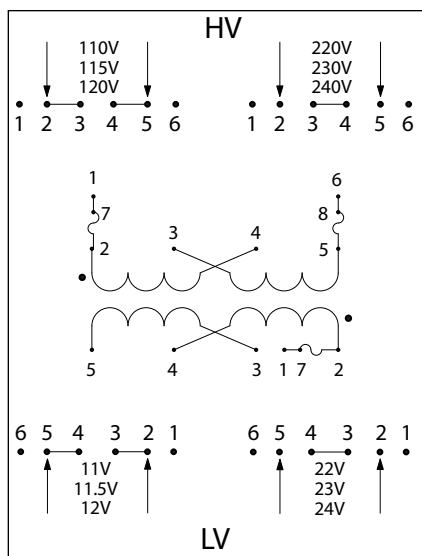
3-4, 1-2
2-3
3-4, 1-2
2-3

#### Load Lines Connect To

1, 4
1, 4
4, 6
4, 6

#### Install Fuse Clips To

Unfused
Unfused
1-5
1-5



### PH\*\*\*PG Schematic for 150VA to 500VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

2-3, 4-5
3-4
2-3, 4-5
3-4

#### Supply Lines Connect To

2, 5
2, 5
1, 6
1, 6

#### Install Fuse Clips To

Unfused
Unfused
2-7, 5-8
2-7, 5-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22
12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

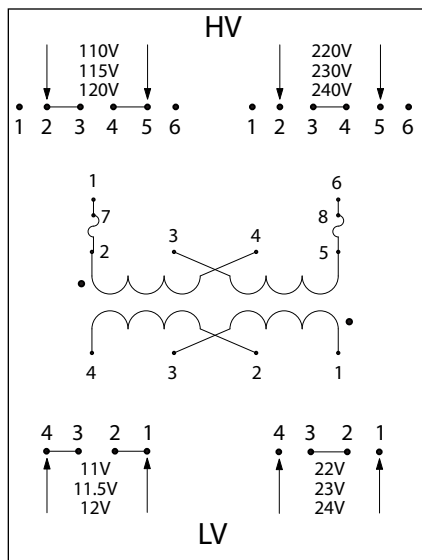
4-5, 2-3
3-4
4-5, 2-3
3-4

#### Load Lines Connect To

2, 5
2, 5
1, 5
1, 5

#### Install Fuse Clips To

Unfused
Unfused
2-7
2-7



### PH\*\*\*PG Schematic for 750VA and 1000VA Units

#### High Voltage (HV) (Primary Volts)

120	115	110
240	230	220
120	115	110
240	230	220

#### Install Supplied Links Between Terminals

2-3, 4-5
3-4
2-3, 4-5
3-4

#### Supply Lines Connect To

2, 5
2, 5
1, 6
1, 6

#### Install Fuse Clips To

Unfused
Unfused
2-7, 5-8
2-7, 5-8

#### Low Voltage (LV) (Secondary Volts)

12	11.5	11
24	23	22

#### Install Supplied Links Between Terminals

3-4, 1-2
2-3

#### Load Lines Connect To

1, 4
1, 4

#### Install Fuse Clips To

Unfused
Unfused

Note: secondary fuse clips not available on PH750PG or PH1000PG.