

HPS Imperator®

Encapsulated Industrial Control Transformer



GROUP G

Primary Voltage:120 x 240
Secondary Voltage:12 x 24

115 x 230
11.5 x 23

110 x 220
11 x 22

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
				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
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
100	PH100PG	A	8.33/4.17	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.44	5.63	4.50	PFK1
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
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
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
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
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
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

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. Please refer to page 11 for dimensional drawings. Special voltages and VA sizes available upon request.

All dimensions in inches

GROUP H

Primary Voltage:600/480/240
Secondary Voltage:120/100

575/460/230
115/95

550/440/220
110/90

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
				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
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
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
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
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
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
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
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
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
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

Secondary fuse clips, fuse clip mounting screws and primary and secondary voltage links/jumpers supplied standard with transformers. Please refer to page 11 for dimensional drawings. Special voltages and VA sizes available upon request.

All dimensions in inches

GROUP I

Primary Voltage:480/240
Secondary Voltage:120/25

460/230/208
115/24

440/220/200
110/23

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
				A	B	C	D	E					
50	PH50MLI	A	0.43/2.08	3.25	4.06	3.56	2.63	2.50	0.22 x 0.44	4.37	5.50	4.00	PFK5
75	PH75MLI	A	0.65/3.13	3.25	4.25	3.56	2.63	2.50	0.22 x 0.44	4.37	5.69	4.60	PFK5
100	PH100MLI	A	0.87/4.17	3.25	4.69	3.63	2.63	2.63	0.22 x 0.44	4.50	6.25	5.20	PFK5
150	PH150MLI	B	1.30/6.25	4.00	5.44	3.81	3.38	2.75	0.22 x 0.75	4.50	6.94	7.60	PFK6
250	PH250MLI	B	2.17/10.42	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK6
350	PH350MLI	B	3.04/14.58	4.50	5.56	4.44	3.75	3.75	0.22 x 0.75	5.18	7.06	11.0	PFK7
500	PH500MLI	B	4.35/20.83	4.75	6.69	4.31	4.06	4.50	0.31 x 0.94	5.13	8.19	16.3	PFK7
750	PH750MLI	C	6.52/31.25	5.25	6.50	4.94	4.50	4.13	0.31 x 0.81	5.56	8.31	21.0	PFK7
1000	PH1000MLI	C	8.70/41.67	5.25	8.19	4.94	4.50	5.81	0.31 x 0.81	5.56	9.69	31.2	PFK7

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. Please refer to page 11 for dimensional drawings. Special voltages and VA sizes available upon request.

All dimensions in inches

GROUP J

Primary Voltage:415/400/380
Secondary Voltage:110 x 220

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
				A	B	C	D	E					
50	PH50MEMX	A	0.45/0.23	3.00	4.38	3.19	2.50	2.25	0.22 x 0.44	4.00	5.82	3.50	PFK4
75	PH75MEMX	A	0.68/0.34	3.25	4.06	3.63	2.63	2.63	0.22 x 0.44	4.44	5.50	4.10	PFK5
100	PH100MEMX	A	0.91/0.45	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.44	5.63	4.50	PFK5
150	PH150MEMX	B	1.36/0.68	4.00	4.94	3.81	3.38	2.75	0.22 x 0.75	4.50	6.44	5.70	PFK6
250	PH250MEMX	B	2.27/1.14	4.50	5.44	3.81	3.75	3.13	0.22 x 0.75	4.50	6.94	7.50	PFK6
350	PH350MEMX	B	3.18/1.59	4.50	5.19	4.44	3.75	3.75	0.22 x 0.75	5.18	6.69	10.1	PFK7
500	PH500MEMX	B	4.55/2.27	4.75	5.94	4.31	4.06	3.81	0.31 x 0.94	5.13	7.44	14.2	PFK7
750	PH750MEMX	B	6.82/3.41	5.25	6.50	4.94	4.50	4.13	0.31 x 0.81	5.56	8.00	21.0	PFK7
1000	PH1000MEMX	B	9.09/4.55	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK7

Secondary fuse clips, fuse clip mounting screws and primary and secondary voltage links/jumpers supplied with transformers. Please refer to page 11 for dimensional drawings. Special voltages and VA sizes available upon request.

All dimensions in inches

GROUP K

Primary Voltage:380/277/208
Secondary Voltage:120 x 240

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
				A	B	C	D	E					
50	PH50MGJ	A	0.42/0.21	3.25	3.88	3.56	2.63	2.50	0.22 x 0.44	4.37	5.32	3.54	PFK5
75	PH75MGJ	A	0.63/0.31	3.25	4.19	3.63	2.63	2.63	0.22 x 0.44	4.44	5.63	4.50	PFK5
100	PH100MGJ	A	0.83/0.42	3.25	4.69	3.63	2.63	2.63	0.22 x 0.44	4.50	6.13	5.20	PFK5
150	PH150MGJ	B	1.25/0.63	4.00	5.44	3.81	3.38	2.75	0.22 x 0.75	4.50	6.94	7.60	PFK6
250	PH250MGJ	B	2.08/1.04	4.50	4.88	4.44	3.75	3.75	0.22 x 0.75	5.18	6.38	8.30	PFK6
350	PH350MGJ	B	2.92/1.46	4.50	5.56	4.44	3.75	3.75	0.22 x 0.75	5.18	7.06	11.0	PFK7
500	PH500MGJ	B	4.17/2.08	4.75	6.69	4.31	4.06	4.50	0.31 x 0.94	5.13	8.19	16.3	PFK7
750	PH750MGJ	B	6.25/3.13	5.25	6.81	4.94	4.50	4.44	0.31 x 0.81	5.56	8.31	23.6	PFK7
1000	PH1000MGJ	B	8.33/4.17	5.25	7.25	4.94	4.50	4.83	0.31 x 0.81	5.44	8.75	25.5	PFK7

Secondary fuse clips, fuse clip mounting screws and primary and secondary voltage links/jumpers supplied with transformers. Please refer to page 11 for dimensional drawings. Special voltages and VA sizes available upon request.

All dimensions in inches

ACCESSORY KITS AVAILABLE

Standard Secondary Fuse Kits

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 not supplied on the PH750PG, PH1000PG, PH750MLI and PH1000MLI). Please consult the HPS Transformer Products catalog for additional details.

Optional Primary Fuse Kits

Kit Part Number	Transformer Part Number Suffix's	VA Sizes	Parts Included in Kit
PFK1	Refer to Specification Tables on pages 4 to 7	Refer to Specification Tables on pages 4 to 7	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.

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. Volt	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

DIMENSIONAL DRAWINGS

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

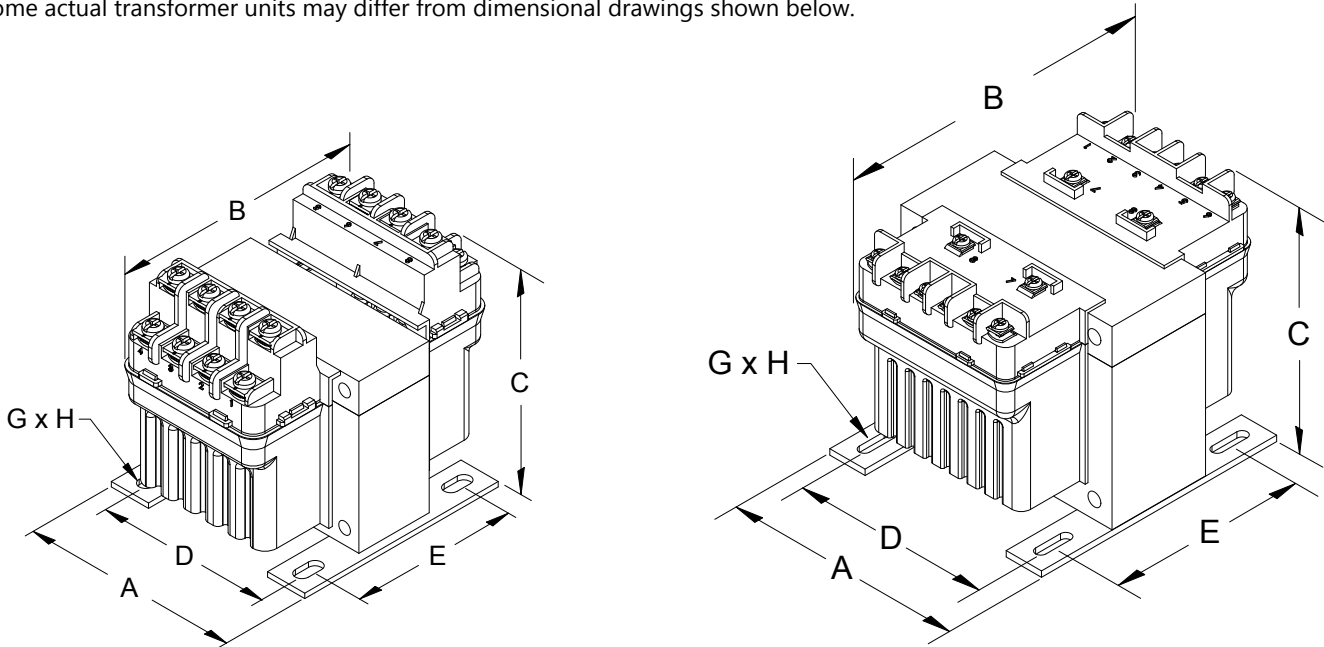


FIGURE A (100 VA and less)

FIGURE B (150 VA to 1500 VA)

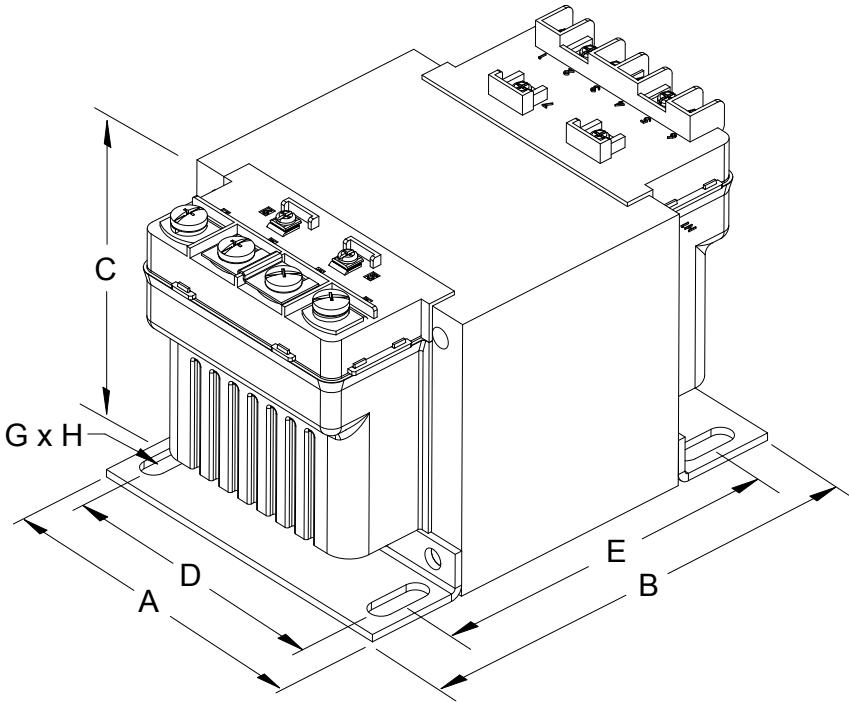


FIGURE C (For PH750PG, PH1000PG, PH750MLI & PH1000MLI)