

HAMMOND

TRANSFORMERS

*Electronic
Equipment*

CATALOGUE 65

HAMMOND MANUFACTURING COMPANY LIMITED

GUELPH ONTARIO CANADA

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Guarantee

We guarantee Hammond products to be free from defects in workmanship or material, and will, without charge, replace or repair within one year from date of shipment from our factory any product that may be found defective upon inspection at our factory. This guarantee does not obligate us where products have been subjected to careless handling, improper application or faulty installation, and we expressly disclaim any obligation, guarantee or liability whatsoever except as above stated.

C.S. A. APPROVAL

The requirements of The Canadian Standards Association
are incorporated in Hammond Transformers.

Approval No. 3902.

IN this catalogue, we are presenting our standard line of transformers for broadcast, amateur, laboratory, sound and replacement purposes. We have also shown our line of racks, cabinets, panels, chassis, etc. Each of the Hammond lines described here are distinguished by individual characteristics ideally suited to the specific application intended. Power transformer ratings that precisely fit the requirements of today's most-used tubes — Audio transformers designed to meet today's modern circuits—Sheet metal items exemplifying a fusion of careful workmanship and mechanical efficiency with steel.

IT is a fact that a large percentage of Hammond production is on special types not found in our catalogue. During our twenty-five years serving industry, we have designed over 33,000 different transformers in sizes from sub-miniature, weighing one-third ounce, to 45KVA weighing over 1,000 pounds — Single phase and three phase — From 25 cycle to 200KC. Our laboratory and production facilities not only enable us to meet the requirements of standard types, but also the exacting specifications for military components. For over ten years, Hammond hermetically sealed units have been powering a large portion of the telecommunications and radar equipment in Canada.

OUR staff of engineers would be more than pleased to discuss with you any problem related to special components. With our engineering "know-how", our laboratory facilities and our unexcelled production facilities, we are able to serve you promptly and economically whether your requirements are one unit or several thousand.

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GUELPH

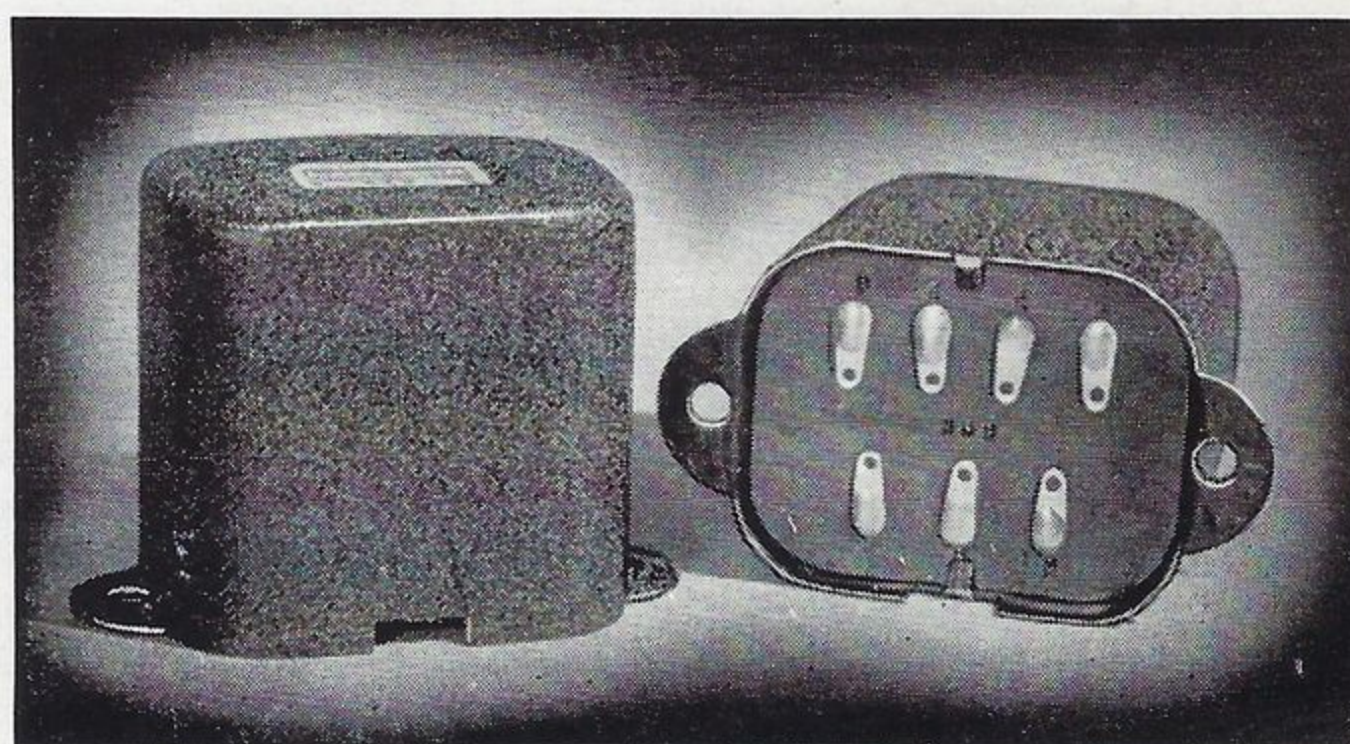
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CANADA

300 SERIES AUDIO TRANSFORMERS

A most popular and useful type of audio transformer for equipment requiring long trouble-free life. Sealed in drawn steel housing with attractive black wrinkle finish. Recessed terminal plate with plainly marked terminal lugs. For chassis or base mounting.

Height $2\frac{3}{8}$ " Width $1\frac{15}{16}$ " Length $2\frac{3}{8}$ "
Mounting Centers $2\frac{3}{4}$ " Net Weight $1\frac{1}{4}$ lbs.

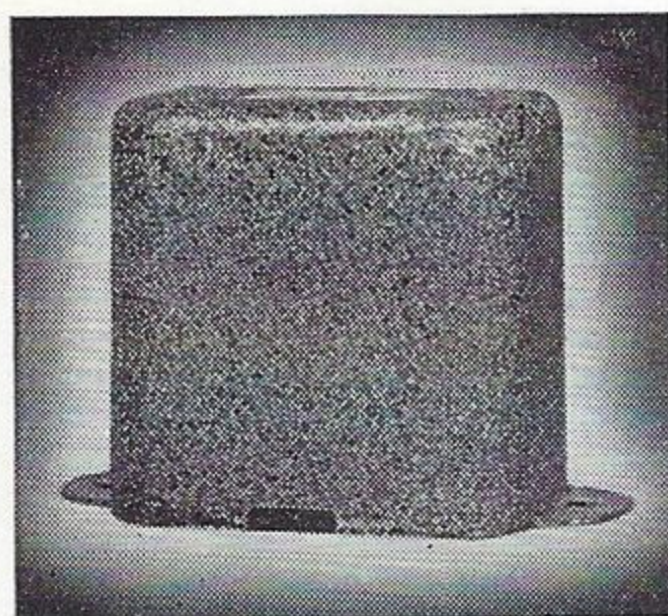


Type	Use	Pri. Imp.	Sec. Imp.	Over-all Ratio	Max. Pri. D.C.*	Code Word
306	Mic to Mixer	50/200	200 ct	1:1	100 ma	Dally
307	Line to Line	500/125	500 ct	1:1	100 ma	Daine
308	Mic to Line	50/200	500 ct	1:1.58	100 ma	Daisy
310	Mic to Grid	50/200	80000	1:20	100 ma	Dairy
312	Mic to PP Grids	50/200	100000 ct	1:22.4	100 ma	Daily
322	Line to Mixer	500 ct	50/250/500	1:1	60 ma	Dance
324	Line to Grid	500 ct	50000	1:10	40 ma	Darky
326	Line to PP Grid	500 ct	65000 ct	1:11.4	40 ma	Darnel
330	Plate to Grid	10000	90000	1:3	8 ma	Dative
331	Plate to PP Grid	10000	120000 ct	1:3½	8 ma	Datov
332	Plate to PP Grid	20000	80000 ct	1:2	8 ma	Datum
333	PP Plate to PP Grid	20000 ct	20000/5000	1:1	10 ma	Datus
334	Plate to PP Grid, Class B	20000	10500 ct	1.37:1	10 ma	Datob
335	PP Plate to PP Grid	20000 ct	9000/2250	1.5:1	10 ma	Dauber
337	PP Plate to PP Grid	20000 ct	3200/800	2.5:1	10 ma	Dauby
340	Plate to Line	15000	500 ct	5.75:1	10 ma	Daunt
342	PP Plate to Line	20000 ct	500 ct	6.3:1	10 ma	David
344	Single Triode to Line	4000	500 ct	2.8:1	35 ma	Davit
346	PP Triode to Line	8000 ct	500 ct	4:1	35 ma	Dealt
347	Single Pent. to Line	7000	500 ct	3.75:1	35 ma	Deari
348	PP Pentode to Line	14000 ct	500 ct	5.3:1	35 ma	Deaso
351	2000 Plate to V.C.	2000	0-3.2-6.4		60 ma	Deaxi
353	5000 Plate to V.C.	5000	0-3.2-6.4		40 ma	Deban
354	Pentode to V.C.	7000	0-3.2-6.4		40 ma	Debut
365	PP Plates to V.C.	5000 ct	0-3.2-6.4		50 ma	Decal
367	PP Plates to V.C.	8000 ct	0-3.2-6.4		50 ma	Decar
368	PP Plates to V.C.	10000 ct	0-3.2-6.4		40 ma	Decat
369	PP Plates to V.C.	14000 ct	0-3.2-6.4		35 ma	Decay
372	Plate Imp.	700 henrys ct	4350 ohms		10 ma	Decry
374	Choke or Reactor	10 henrys	235 ohms		65 ma	Decum
375	Choke or Reactor	25 henrys	600 ohms		40 ma	Decov
382	Line to V.C.	500/1000	0-3.2-6.4		8 watts	Defer
383	Line to V.C.	1500/2000/3000	0-3.2-6.4		6 watts	Defie

* Max. Pri. D.C. per leg.

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

400 SERIES AUDIOS



A heavy duty type of audio transformer employing a 1 x 1 core of extra high grade silicon steel. Design is similar to 300 Series but larger core and coil provides excellent response from 80 to 7000 cy. in most types. Permanently sealed in black wrinkle finished steel housing with recessed bakelite terminal plate. Marked terminal lugs are provided for chassis or base mounting.

Height 3 1/8" Width 2 1/4" Length 3 1/8"
Mounting Centers 3 5/8" Net Weight 2.9 lbs.

Type	Use	Pri. Imp.	Sec. Imp.	Over-all Ratio	Max. Pri. D.C.*	Code Word
422	Line to Mixer	500 ct	50/250/500	1:1	100 ma	Delve
424	Line to Grid	500 ct	50000	1:10	100 ma	Demon
426	Line to PP Grids	500 ct	20000/80000	1:12.6	100 ma	Demur
427	Line to PP Power Tubes	500 ct	7500/30000	1:7.7	130 ma	Denim
430	Plate to Grid	20000	80000	1:2	8 ma	Depot
432	Plate to PP Grids	20000	20000/80000	1:2	8 ma	Depth
434	PP Plates to PP Grids	7500/30000	30000/120000	1:2	10 ma	Derby
435	PP Plates to PP Grids	10000/40000	10000/40000	1:1	10 ma	Derma
436	Plate to PP Grids	20000	8400/33600	1:1.3	10 ma	Devil
437	PP Plates to PP Grids	40000 ct	2500/10000	2:1	10 ma	Diana
438	Plate to PP Grids	20000	800/3200	2.5:1	10 ma	Dibel
439	PP Plates to PP Grids	40000 ct	400/1600	5:1	10 ma	Difer
440	Plate to Line	20000	50/125/250/500	6.3:1	10 ma	Diner
442	PP Plates to Line	7500/30000	50/125/250/500	7.7:1	10 ma	Dingo
444	Plate to Line	4000	50/125/250/500	2.8:1	40 ma	Dirge
445	Plate to Line	7000	50/125/250/500	3.7:1	40 ma	Ditty
446	PP Plates to Line	8000 ct	50/125/250/500	4:1	40 ma	Divan
447	Plate to PP Grids	6000	660/2640	1.5:1	40 ma	Diver
448	Plate to PP Grids	6000	2400/9600	1:1.25	40 ma	Dives
449	PP Plates to PP Grids	10000 ct	1500/6000	1.25:1	40 ma	Divot
453	Single Plate to V.C.	2500	3.2, 6.4, 10		60 ma	Dobad
454	Single Plate to V.C.	4000	3.2, 6.4, 10		60 ma	Dober
457	Single Plate to V.C.	7000	3.2, 6.4, 10		60 ma	Dodge
463	PP Plates to V.C.	3000 ct	3.2, 6.4, 10		70 ma	Donna
465	PP Plates to V.C.	5000 ct	3.2, 6.4, 10		70 ma	Dolly
467	PP Plates to V.C.	8000 ct	3.2, 6.4, 10		60 ma	Doric
468	PP Plates to V.C.	10000 ct	3.2, 6.4, 10		50 ma	Dorog
469	PP Plates to V.C.	14000 ct	3.2, 6.4, 10		50 ma	Dogma
470	Plate Imp.	175/700 H, 10/5 ma	300/1200 H, 0 ma		1600/6400 ohms	Dormy
472	Plate Imp.	25/100 H, 70/35 ma	45/180 H, 0 ma		250/1000 ohms	Doubt
477	Filter Choke	25 H, 75 ma	70 H, 0 ma		400 ohms	Douci
478	Filter Choke	10 H, 125 ma	37 H, 0 ma		157 ohms	Douda
481	M. Line to M.V.C.	50, 125, 200, 250, 500	1 1/2, 3 3/4, 6, 7 1/2, 10, 15		15 watts	Douet
482	Line to V.C.	500/1000	3.2, 6.4, 10		15 watts	Dough
483	Line to V.C.	1500/2000/3000	3.2, 6.4, 10		15 watts	Douty

* Max Pri. D.C. per leg.

"PRODUCTION FACILITIES FOR ONE OR THOUSANDS"

Modern Design

In step with the latest trends, Hammond is now using drawn steel cases for the 800 and 900 series. Sealed-in-steel construction gives you many outstanding features.

- Protection against atmospheric moisture.
- Strength and rigidity — unsurpassed for shock and vibration.
- Mounting studs for convenience of mounting.
- Efficient shielding — magnetic and electrostatic.
- Compact.
- Neat, streamlined appearance.
- Multi-terminal headers.
- Finished in gray enamel.

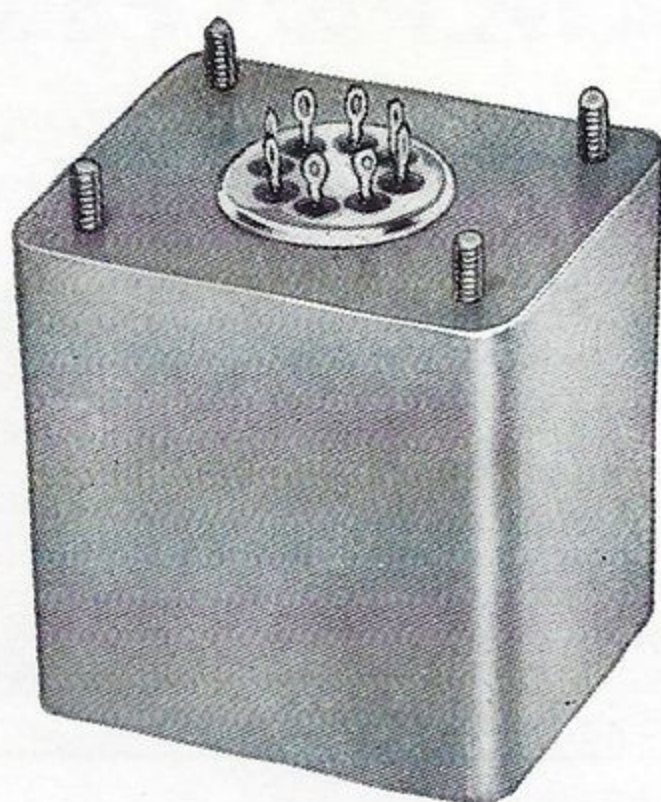


800 SERIES AUDIOS

This series of Audio Transformers meets the requirements of Communications Engineers and Sound Men where coupling units operating at levels of -80 to $+25$ DBM are called for. They have balanced coil and core construction to provide low hum pickup and perfect push-pull or balanced line operation. The Special Mu-metal Alloy Core material makes it necessary to use a blocking condenser and resistor or choke, when coupling a single tube. In push-pull stages it is merely necessary to see that the plate current to each tube is identical (within 1 ma). Low distortion, 30 to 15,000 CPS frequency range, and hum-bucking construction make this series very popular. Six hundred ohm loads may be connected to 500 ohm terminals without loss of range, but the other windings will be increased 20 per cent in impedance.

Type	Use	Pri. Imp.	Sec. Imp.	Max. Pri. Unbalance	Max. Level	Code Word
801	Line to Line	50/200	50/200	0 ma	+15 DBM	Dravi
802	Mic to Line	50/200	125/500	0 ma	+15 DBM	Drawl
804	Line to Line	125/500	125/500	0 ma	+15 DBM	Drazo
806	Mic to S or PP Grids	7.5/30	10000/40000	0 ma	+15 DBM	Dreab
803	Mic to S or PP Grids	50/200	10000/40000	0 ma	+15 DBM	Dread
812	Line to S or PP Grids	125/500	10000/40000	0 ma	+15 DBM	Dream
818	Crystal Mic Pick. to Line	20000/80000	50/200	0 ma	+15 DBM	Drex
832	S or PP Plates to S or PP Grids	5000/20000	20000/80000	0 ma	+15 DBM	Dried
834	S or PP Plates to PP Grids	5000/20000	10000/40000	0 ma	+15 DBM	Drier
835	S or PP Plates to S or PP Grids	10000/40000	10000/40000	0 ma	+15 DBM	Driff
841	S or PP Plates to Line	5000/20000	50/200	0 ma	+25 DBM	Drift
842	S or PP Plates to Line	5000/20000	125/500	0 ma	+25 DBM	Drill
843	S or PP Plates to Line	10000/40000	50/200	0 ma	+25 DBM	Deily
844	S or PP Plates to Line	10000/40000	125/500	0 ma	+25 DBM	Drink
870	Plate Reactor	130 H, 3 ma	250 H, 0 ma	6000 ohms		Drive
872	Plate Reactor	24 H, 15 ma	45 H, 0 ma	1000 ohms		Drone

900 SERIES AUDIOS



This series of Audio Transformers features practically all of the finest construction details employed in modern audio transformer design. Incorporated in each transformer is the correct type of alloy core, balanced coil construction to give identical voltage, capacity, resistance, etc., each side of centre. Hum-bucking core is used to reduce inductive pickup in the input and intermediate stages and stray field in the output stage. There is a complete range of types, most with multi-tap connections, and mounting studs are provided. The use of alloy cores makes it necessary to keep direct current out of the windings or arrange for very close balance of plate current in the case of push-pull stages.

Dimensions $2\frac{5}{16}" \times 2\frac{13}{16}" \times 3\frac{1}{2}"$ high

Type	Use	Pri. Imp.	Sec. Imp.	Max. Pri. Unbalance	Elec. Shield	DC Per Leg	Max. Level	Code Word
903	Mic or Line to Line	*M-Line	*M-Line	2	S	125	+20DBM	Drool
905	Mix or Mixer to Line	†A-Line	*M-Line	5	S	200	+20DBM	Droop
906	Three 200 ohm Lines to M-Line	200-200-200	*M-Line	0	S	65	+20 DBM	Dross
909	Crystal Pickup to M-Line	25000/100000	*M-Line	0		5	+15 DBM	Druid
910	Mic or Line to S or PP Grids	*M-Line	25000/100000	0	S	100	+15 DBM	Drupe
912	Line to S or PP Grids	*M-Line	12500/50000	0	S	130	+30 DBM	Dryad
917	Bridging Line to Line	2500/10000	*M-Line	0	S	100	#	Duber
918	Bridging Line to 1 or 2 Grids	2500/10000	25000/100000	0	S	60	#	Duchy
930	Interstage	2500/10000	22500/90000	0		10	+20 DBM	Dulce
932	Interstage	5000/20000	20000/80000	0.5 ma		10	+20 DBM	Dumpy
933	Interstage	5000/20000	5000/20000	1 ma		13	+25 DBM	Dunce
934	Interstage	5000/20000	2250/9000	1 ma		13	+25 DBM	Durst
935	Interstage	5000/20000	1250/5000	1 ma		13	+25 DBM	Dusty
936	Interstage	2500/10000	2500/10000	3 ma		40	+35 DBM	Dutch
937	Interstage	2500/10000	1100/4400	3 ma		40	+35 DBM	Dwarf
938	Interstage	2500/10000	625/2500	3 ma		40	+35 DBM	Dwelt
940	Tube to Line	2500/10000	*M-Line	1 ma		13	+20 DBM	Dying
942	Tube to Line	5000/20000	*M-Line	1 ma		13	+20 DBM	Eager
943	Tube to Line	750/3000	*M-Line	2 ma		60	+35 DBM	Eagest
944	Tube to Line	1000/4000	*M-Line	2 ma		60	+35 DBM	Eagle
945	Tube to Line	1250/5000	*M-Line	2 ma		60	+35 DBM	Eagmi
946	Tube to Line	2000/8000	*M-Line	2 ma		60	+35 DBM	Eagro
947	Tube to Line	2500/10000	*M-Line	2 ma		50	+35 DBM	Early
948	Tube to Line	3500/14000	*M-Line	2 ma		50	+35DBM	Earth
953	PP Plates to V.C.	750/3000	‡M-V.C.	3 ma		60	10 Watts	Easle
954	PP Plates to V.C.	1000/4000	‡M-V.C.	3 ma		60	10 Watts	Eaves
955	PP Plates to V.C.	1250/5000	‡M-V.C.	3 ma		60	10 Watts	Ebony
956	PP Plates to V.C.	1500/6000	‡M-V.C.	3 ma		40	10 Watts	Edict
957	PP Plates to V.C.	1750/7000	‡M-V.C.	3 ma		40	10 Watts	Edify
958	PP Plates to V.C.	2000/8000	‡M-V.C.	3 ma		40	10 Watts	Educe
959	PP Plates to V.C.	2500/10000	‡M-V.C.	3 ma		40	10 Watts	Egrie
960	PP Plates to V.C.	3500/14000	‡M-V.C.	3 ma		40	10 Watts	Egret
982	Line to Voice Coil	*M-Line	‡M-V.C.	0		200	10 Watts	Easby

NOTES: †A-Line matches 10, 25, 40, 50, 67, 100 ohm lines. Exact balance on 25, 40 and 100 ohm taps.

*M-Line matches 50, 125, 200, 250, 333, 500 ohm lines. Exact balance on 125, 200 and 500 ohm taps.

‡M-V.C. matches 1.5, 3.75, 6, 7.5, 10, 15 ohm voice coils. Exact electrical balance on 3.75, 6 and 15 ohm taps.

#For use in bridging additional amplifier equipment across 500, 250, or 200 ohm lines operating at +30DBM max.

600 ohm terminations may be used in connection with transformers having 500 ohm rating without loss of range. The impedance of the other windings will, however, be increased by 20 per cent.

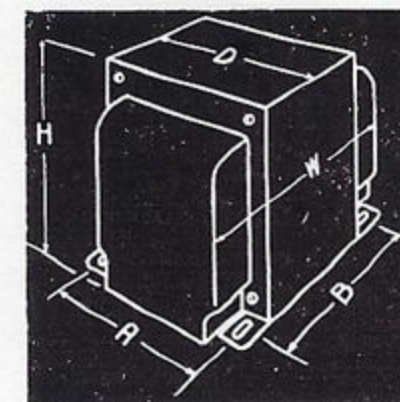
Interstage Transformers, type 930 to 938, may be used where higher or lower primary impedances are called for. When used to couple a lower plate impedance, the reflected secondary impedance will be proportionately lower. Likewise when used to couple a higher impedance plate, the secondary will be correspondingly higher. However, if the recommended impedances are departed from to a considerable degree, the frequency range of the transformer will be affected.

"HAMMOND, FOR OVER TWENTY-FIVE YEARS"

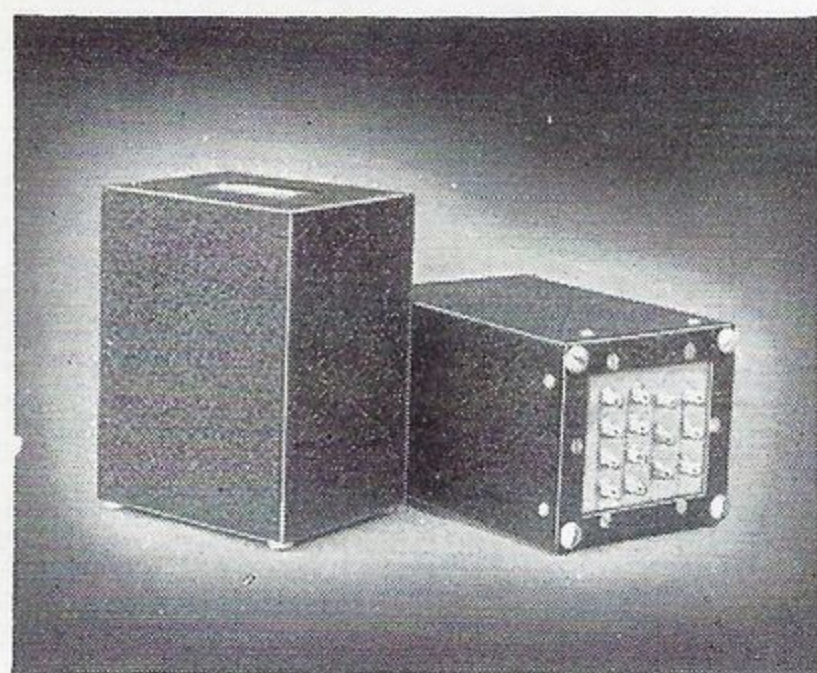
PUBLIC ADDRESS and AMPLIFIER OUTPUT TRANSFORMERS



The importance of using a properly designed output transformer is becoming well known by sound men. Correct construction to give low leakage loss, freedom from saturation on peaks as well as low copper losses is essential for quality at the higher audio powers. The following outputs are the result of long experience, careful design and rigorous testing and will be found highly efficient for all regular sound work.



Type	Output Tubes	Watts	Primary	Output Taps	A	B	D	H	W	Wt.	Code Word
1615	PP 2A3, 6A3, 6L6, 6V6	15	5000 ct	3.2, 6.4, 10	2 1/8	2 1/4	2 1/2	3	3	3	Elamz
1618	PP 6F6, 6A6, 6V6, 6AQ5	15	10000 ct	3.2, 6.4, 10	2 1/8	2 1/4	2 1/2	3	3	3	Eland
1633	PP 2A3, 6A3	30	3000 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elder
1634	PP 45, PPP 42	30	4000 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elegy
1635	PP 6L6, 6V6, PPP 6A6	30	5000 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elims
1636	PP 46, 59, 6L6	30	6000 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elate
1637	PP 6L6	30	6600 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elide
1639	PP 6F6, 6A6, 6B5	30	10000 ct	4, 8, 15, 250, 500	2 1/2	2 1/4	3 1/8	3 3/4	3 1/4	5	Elite
1651	PPP 2A3, 6A3, etc.	50	1500 ct	4, 8, 15, 250, 500	2 1/2	3	3 1/8	3 3/4	4	7	Elect
1664	PP 6L6, 807	60	3800 ct	4, 8, 15, 30, 250, 500	2 1/2	3 1/4	3 1/8	3 3/4	4 1/4	8	Elude
1668	PP 807	75	4500 ct	4, 8, 15, 30, 250, 500	3	3	3 3/4	4 1/2	4 1/4	10	Eluge
1678	PP 809, 807 etc.	90	8000 ct	4, 8, 15, 30, 250, 500	3	3 3/8	3 3/4	4 1/2	4 1/2	11	Eluza
1682	PPP 6L6, 807	120	1900 ct	4, 8, 15, 30, 250, 500	3	4	3 3/4	4 1/2	5 1/2	15	Embue
1684	PP 807, TZ 40, 838	120	7000 ct	4, 8, 15, 30, 250, 500	3	4	3 3/4	4 1/2	5 1/2	15	Emcar



HIGH-FIDELITY OUTPUTS

The 1700 series output transformers will give you finer quality reproduction. They have extremely low leakage reactance and are free of core saturation at full rated output down to 30 cycles. Other refinements in design reduce wave form distortion to negligible values. Frequency range is 30 to 12000 C.P.S. plus or minus 1 db. at full rated output. Low insertion loss of less than 1 db. means maximum power transfer.

Type	Watts	Pri. Imp.	Output Taps	Dimensions	Mtg. Cts.	Wt., Lbs.	Code
1713	15	3000 ct	4, 8, 15, 30, 125, 250, 500	3 9/16 x 4 3/16 x 4	3 x 3 5/8	6 1/2	Drelt
1715	15	5000 ct	4, 8, 15, 30, 125, 250, 500	3 9/16 x 4 3/16 x 4	3 x 3 5/8	6 1/2	Drend
1731	30	1500 ct	4, 8, 15, 30, 125, 250, 500	3 9/16 x 4 3/16 x 4 3/4	3 x 3 5/8	8 1/2	Drenf
1736	30	6600 ct	4, 8, 15, 30, 125, 250, 500	3 9/16 x 4 3/16 x 4 3/4	3 x 3 5/8	8 1/2	Dresi
1739	30	9000 ct	4, 8, 15, 30, 125, 250, 500	3 9/16 x 4 3/16 x 4 3/4	3 x 3 5/8	8 1/2	Drexo
1764	60	3800 ct	4, 8, 15, 30, 125, 250, 500	4 3/16 x 5 1/16 x 5 1/2	3 5/8 x 4 1/2	15	Dreza

"WILLIAMSON" OUTPUT TRANSFORMERS

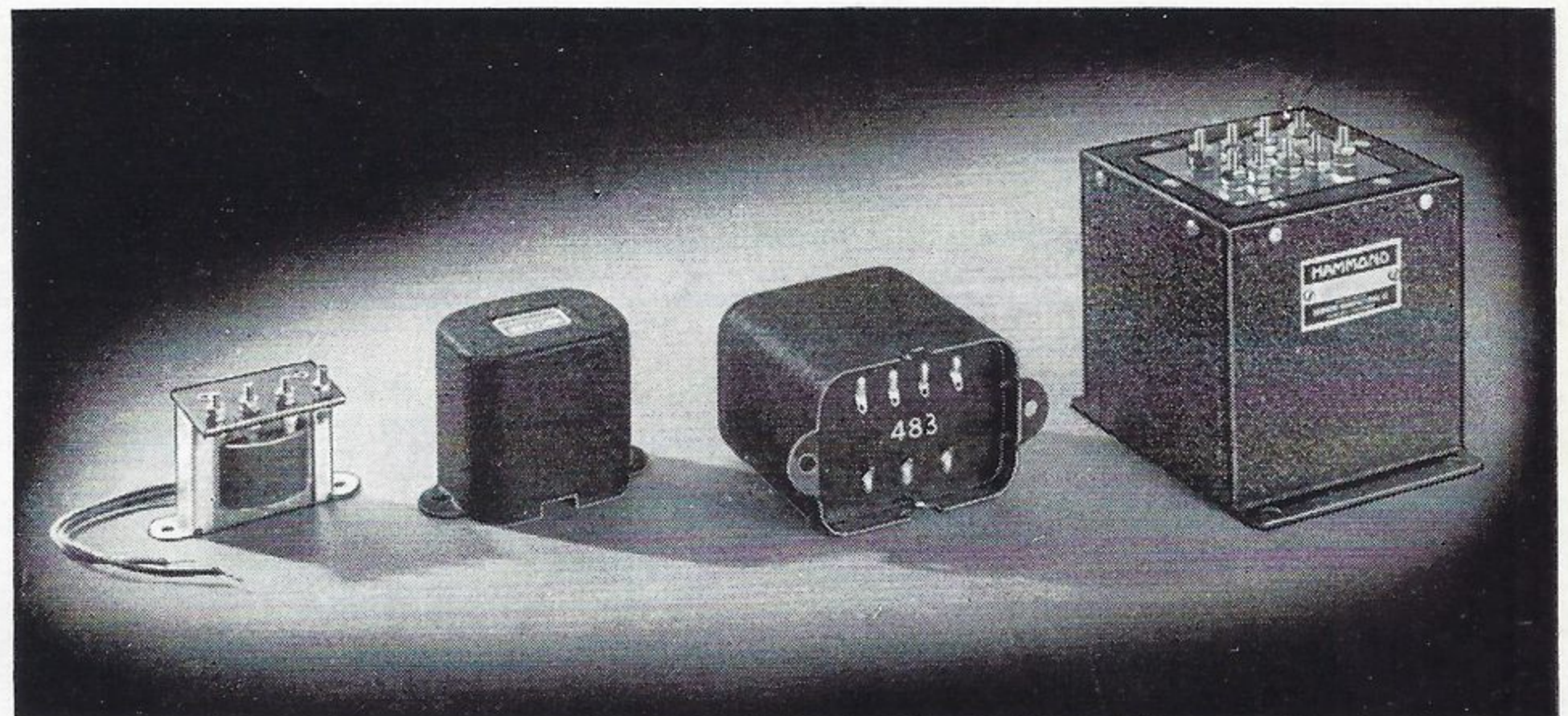
The outputs listed below are designed specifically for the famous Williamson amplifier. It will be noted from the specifications that a new high in performance has been reached in Canadian and American design in the new type 1770. The primary inductance of 155 henrys and the leakage inductance of only 12.8 mh. assures you of wider frequency range and complete freedom from distortion due to core saturation.

	Code
1770—Pri. 10,000 ct Sec. 4, 8, 16 ohms; Pri. Ind. at 5v. 50cy. 155 H. Leakage Ind. 12.8 mh. Dimensions: 4 5/16" x 5 3/16" x 6" H.	Dreab
1772—Pri. 10,000 ct Sec. 4, 8, 16 ohms; Pri. Ind. at 5v. 50cy., 100 H. Leakage Ind. 29.4 mh. Dimensions: 4 5/16" x 5 3/16" x 5 1/4" H.	Drebe
1774—Pri. 12,000 ct Sec. 4, 8, 16 ohms; Pri. Ind. at 5v. 50cy., 115 H. Leakage Ind. 33 mh. Dimensions: 4 5/16" x 5 3/16" x 5 1/4" H.	Dreci

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

LINE TO SPEAKER (VOICE COIL) TRANSFORMERS

Here is a complete line-up of matching transformers for any sound distribution arrangement. Each is carefully designed to give maximum power transfer and widest frequency response. The type 119B and 119C have bracket mounting with solderless terminals for selection of impedances. Types 382, 383, 482 and 483 have formed steel cases, humidity sealed construction and terminal lugs on bakelite terminal plate. Type 1782 and 1786 have solderless terminals, humidity sealed cases with flange mountings and frequency range is 40 to 12000 C.P.S.



Type	Watts	Pri. Taps	Sec. Taps	Mtg. Cts.	Wgt.	Code
119B	3	500, 1000, 1500	3.2	2"	$\frac{3}{8}$ lb.	Feigr
119C	5	500, 1000, 1500	3.2	$2\frac{3}{8}$	$\frac{1}{2}$ lb.	Feigs
382	6	500, 1000	3.2, 6.4	$2\frac{3}{4}$	$1\frac{1}{4}$ lb.	Defer
383	8	1500, 2000, 3000	3.2, 6.4	$2\frac{3}{4}$	$1\frac{1}{4}$ lb.	Defie
481	15	50, 125, 200, 250, 500	$1\frac{1}{2}$, $3\frac{3}{4}$, 6, $7\frac{1}{2}$, 10, 15	$3\frac{1}{2}$	3 lb.	Douet
482	15	500, 1000	3.2, 6.4, 10	$3\frac{1}{2}$	3 lb.	Dough
483	15	1500, 2000, 3000	3.2, 6.4, 10	$3\frac{1}{2}$	3 lb.	Douty
1782	30	500, 1000, 1500	4, 8, 15, 30	GKF400	8 lb.	Doure
1786	60	500, 1000, 1500	4, 8, 15, 30	GMF525	16 lb.	Dousa

MATCHING AUTO TRANSFORMERS

With "Power-Rated" Taps for Sound Distribution Systems

This new development by Hammond enables you to select eight values of audio power from each type covering a range of $\frac{1}{4}$ watt to 4 watts in the smaller, $\frac{1}{2}$ to 8 watts in the medium and 1 to 16 watts in the largest. Taps have been placed to give a very uniform variation of power output over the range of each type. Low insertion losses (under 1.2 db for most taps) are obtained over the range of 100 to 9000 cps. Liberally designed for ample safety factor, low exciting current and long life. May be used on 500 ohm or other lines providing peak voltage does not exceed 200. Open horizontal bracket, solder lug terminals.

Type	Code
119F 4 watts maximum, tapped to give 4, 3, 2, $1\frac{1}{2}$, 1, $\frac{3}{4}$, $\frac{1}{2}$ or $\frac{1}{4}$ watts into 8 ohm speaker from standard 70 volt distribution system. $\frac{1}{2}$ " x $\frac{1}{2}$ " core, mounting centres 2", wt. $\frac{1}{2}$ lb.	Feihk
119H 8 watts max., tapped to give 8, 6, 4, 3, 2, $1\frac{1}{2}$, 1 or $\frac{1}{2}$ watts into 8 ohm speaker from standard 70 volt distribution system. $\frac{3}{4}$ " x $\frac{3}{4}$ " core, mounting cts. $2\frac{3}{4}$ ", wt. 1 lb.	Feija
119K 16 watts max., tapped to give 16, 12, 8, 6, 4, 3, 2 or 1 watt into 8 ohm speaker from standard 70 volt distribution system. 1" x 1" core, mounting cts. $3\frac{5}{8}$ ", wt. $2\frac{1}{4}$ lbs.	Feile

AMPLIFIER-TO-DISTRIBUTION SYSTEM MATCHING AUTO TRANSFORMER

Type	Code
1789 To match 500 ohm output of 30, 60, 100 or 120 watt amplifier to 70 volt distribution system. GKF-550 case. Weight 11 lbs.	Feigr

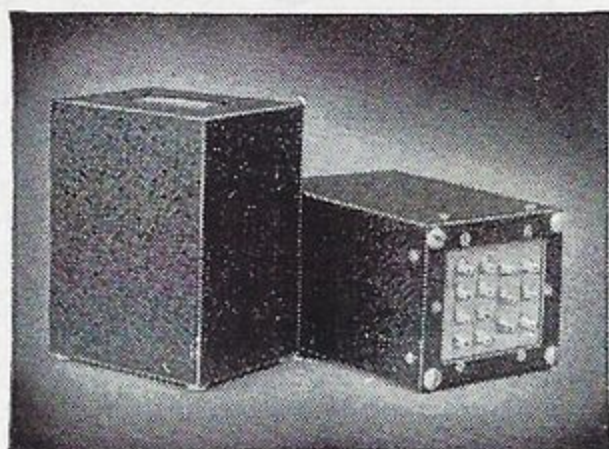
CLIPPER and TONE CHOKES

Type	Code
118C Clipper Choke, 0.8 henry, open bracket, $\frac{1}{2}$ x $\frac{1}{2}$ core, 2" mtg. cts., wt. $\frac{1}{2}$ lb.	Ffacd
118F Clipper Choke, 3.75 henries, open bracket, $\frac{1}{2}$ x $\frac{1}{2}$ core, 2" mtg. cts., wt. $\frac{1}{2}$ lb.	Ffbef
118H Tone Choke, 6.1 henries, 0 D.C., 1000 C.P.S., 800 series case, 8" insulated leads.	Ffcg

"HAMMOND TRANSFORMERS ARE CANADA'S STANDARD"

DRIVER TRANSFORMERS

To obtain proper performance in Class "B," Class AB1 and Class AB2 Amplifiers, it is necessary to carefully select the proper DRIVER TRANSFORMER, together with the driver tubes. This stage should have adequate power capabilities with good regulation. This latter requirement can be obtained by using triodes of low plate resistance or beam pentodes with suitable feedback connections and a good driver transformer. Such a transformer should have low leakage reactance, low insertion loss, excellent coupling between both halves of secondary and primary, together with low resistance windings, freedom from core saturation and proper ratio. Listed on this page is a complete range of Hammond Driver Transformers for all combinations of tubes and types of Amplifier or Radio Equipment. Each is designed to give the utmost in quality of reproduction, power output, frequency range, reliability and ease of installation.



UNIVERSAL DRIVER TRANSFORMERS

These entirely new Universal Driver Transformers incorporate the many features necessary to get the maximum out of a Class B Amplifier or Modulator. Ten ratios are available as follows: 1.25:1, 1.57:1, 1.97:1, 2.04:1, 2.55:1, 2.66:1, 3.2:1, 4.1:1, 5.1:1 and 6.3:1. All total primary to half-secondary (primary c.t. for P.P. Drivers in each case). This allows close matching for practically all combinations of tubes. Frequency range at half power 30-10000 cps., at full power 50-10000.

Type	Max. Watts	Max. D.C. Per Winding	Dimensions	Mtg. Cts.	Wt., Lbs.	Code
1703	15	70 ma	3" x 3 1/2" x 4 1/4"	2 1/2" x 3"	6	Mibia
1705	30	100 ma	3 9/16" x 4 3/16" x 4 3/4"	3" x 3 5/8"	10	Mibos
1707	60	140 ma	4 3/16" x 5 1/16" x 5 1/2"	3 5/8" x 4 1/2"	16	Mibur

BROADCAST AND RECORDING TYPES (Alloy Core, Saturation to be Avoided)

Type	Driver Tubes	Output Tubes	Ratio*	Pri. D.C.	Dimensions	Code Word
933	PP 6C4, 6C5	PP 6L6, 2A3, 6A3, 6AS7G	2:1	13 ma	See Page 5	Dunce
934	PP 6C4, 6C5	PP 6L6, 2A3, 6A3, 6AS7G	3:1	13 ma	" 5	Durst
935	PP 6C4, 6C5	PPP 6L6, 2A3, 6A3, 6AS7G	4:1	13 ma	" 5	Dusty
936	PP 6F6, 6V6, 2A3, 6AQ5	PP 6L6, 845	2:1	50 ma	" 5	Dutch
937	PP 6F6, 6V6, 2A3, 6AQ5	PP 805	3:1	50 ma	" 5	Dwarf
938	PP 6F6, 6V6, 2A3, 6AQ5	PP 838, 100TH	4:1	50 ma	" 5	Dwelt

PUBLIC ADDRESS TYPES (High-Silicon Core. 80 to 7000 C.P.S.) Weatherproof

Type	Driver Tubes	Output Tubes	Ratio*	Pri. D.C.	Dimensions	Code Word
332	6C4, 6C5, etc.	PP 6F6, 6L6, 6V6, 6AQ5	1:1	13 ma	See Page 2	Datum
333	6C4, 6C5, PP 6C5	PP 6A3, 6F6, 6L6, 6V6, 6AQ5	2:1	13 ma	" 2	Datus
334	1G4, 30, 6C5	1G6, 1J6, 19	2.75:1	13 ma	" 2	Dati
335	6C5, PP 6C5	PP 6A3, 6L6	3:1	13 ma	" 2	Dauber
337	6N7	6N7	5:1	15 ma	" 2	Dauby
432	6C4, 6C5	PP 6C5, 6F6	1:1	8 ma	" 3	Depth
434	6C4, PP 6C5	PP 6V6, 6F6	1:1	10 ma	" 3	Derby
435	6C4, PP 6C5	PP 6F6, 6V6	2:1	10 ma	" 3	Derma
436	6C4, 6C5	PP 6L6	1.55:1	10 ma	" 3	Devil
437	6C4, PP 6C5	PP 6L6	4:1	10 ma	" 3	Diana
438	6C4, 6C5, 6N7	PP 6A6, 6N7	5:1	10 ma	" 3	Dibel
439	PP 6C5, 6N7	PPP 6N7, 6A6	10:1	10 ma	" 3	Diter
447	6F6	PP 6L6	3:1	40 ma	" 3	Diver
448	6F6, 6V6	PP 6L6, PPP 6V6	1.6:1	40 ma	" 3	Dives
449	PP 6F6	PP 807, PPP 6L6, 6V6	2.5:1	40 ma	" 3	Divot

*Total Primary to Half-Secondary

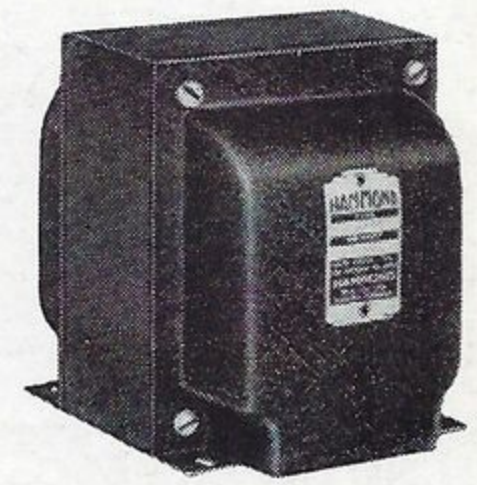
HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

MODULATION TRANSFORMERS

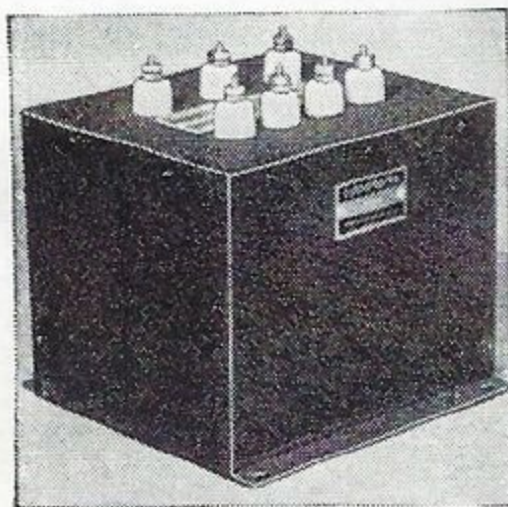
The three series of Hammond Modulation Transformers listed below cover practically every modulation transformer requirement. Each one is specially engineered and thoroughly tested to stand up under severe peaks and overloads. Properly designed coil and cores with sealed gaps give wide frequency range and quiet operation. Modulation Transformers may be operated at lower or higher impedances than listed below, but ratio will be the same.

AMATEUR TYPES — WITH INSULATED LEADS

This series provides an efficient, yet economical range of Modulation Transformers for all tubes from 2 to 175 watts. Good response from 150 to 7000 cps. Easy installation, attractive appearance and complete range of types features this series. Black wrinkle finish.



Type	Audio Watts Output*	Modulator Tubes	Plate to Plate Impedance	Secondary Impedance	Sec. Ma.	Type Mtg.	Weight	Code
2002	2	1J6, 19, 1H4, 1Q5, 1S4, 1G6	10000 ct	5000, 8000	20	Brkt.	0.4	Moert
2004	3.5	6E6, 49, 19, 38, 41, etc.	10000 ct	4000, 6000	40	300	1.2	Moent
2010	10	12AU7, 6AQ5, 6N7, 53, 6F6, 6V6, etc.	10000 ct	4000, 6000	80	400	3.0	Moeny
2018	18	6F6, 6L6, etc.	5000 ct	3500, 5500	120	"X"	3.2	Moeot
2030	30	6L6, etc.	6000 ct	5000, 7000	135	"X"	5.5	Moeak
2035	30	6L6, etc.	6000 ct	4000 & sc. wdg.	135	"X"	5.5	Moeed
2060	60	6L6, 807, RK39, etc.	3800 ct	5000, 7000	150	"X"	8.8	Moark
2065	60	6L6, 807 RK39	3800 ct	3000 & sc. wdg.	200	"X"	8.8	Moick
2067	60	815, 2E26	6200 ct	2660 & sc. wdg.	150	"X"	8.8	Moita
2100	100	809, 807, etc.	8000 ct	5000, 7000	200	"X"	13	Moitg
2180	175	811, 812, 809, etc.	15000 ct	5000, 7000	250	"X"	23	Moiab
2182	175	811, 812, 809, etc.	15000 ct	10000 & sc. wdg.	185	"X"	23	Moiot
2183	175	811, 812, 809 etc.	15000 ct	5000 & sc. wdg.	265	"X"	23	Moiax



SEALED PROFESSIONAL TYPES

This series is sealed in rugged black wrinkle Finish steel cases, using special compound, having a wide temperature range. Ample primary inductance, low leakage reactance and freedom from core saturation, together with mica insulation, high quality core and properly designed coils provide a high standard of performance.

Type	Audio Watt Output*	Modulator Tubes	Plate to Plate Impedance	Secondary Impedance	Sec. Ma.	Weight	Code
2205	50	801, 210, 6L6, 807, RK39, etc.	6600 ct	3000, 5000, 7000	150	8.5	Moboy
2210	100	809, TZ20, 800, T20, etc.	8500 ct	3000, 5000, 7000	200	17.0	Mobak
2220	175	811, 812, etc.	15000 ct	3000, 5000, 7000	250	28	Mobbo
2230	300	805, 838, 8005, etc.	8000 ct	3000, 5000, 7000	350	42	Mobit
2250	500	810, 8000, etc.	11000 ct	3000, 4000, 5000, 7000	500	60	Mobor

UNIVERSAL, OIL-FILLED TYPES

VACUUM-TIGHT WITH GLASS INSULATED TERMINALS

It is now possible for engineers and amateurs to install equipment incorporating the very latest in Transformer construction. This series uses rugged brazed steel housing, black wrinkle finish, perfected solder-sealed glass-insulated terminals, reversible mountings, multi-tapped windings, high silicon core and oil-filled vacuum-tight construction. High electrical performance is also had in this series due to the correct proportioning of primary inductance, leakage reactance, winding resistance, etc. Frequency range is from 120 to 7000 cps. over most impedance combinations.



Type	Audio Watts Output*	Primary Ma Per Side	Secondary Ma Series	Par.	Weight Lbs.	Code
2310	100	150	150	300	17	Modia
2320	175	200	200	400	28	Modab
2330	300	350	350	700	42	Modak
2350	500	500	500	1000	60	Modot

For Cathode and Constant Modulation Transformers See Page 17

"TRANSFORMERS FOR THE EXPERIMENTERS"

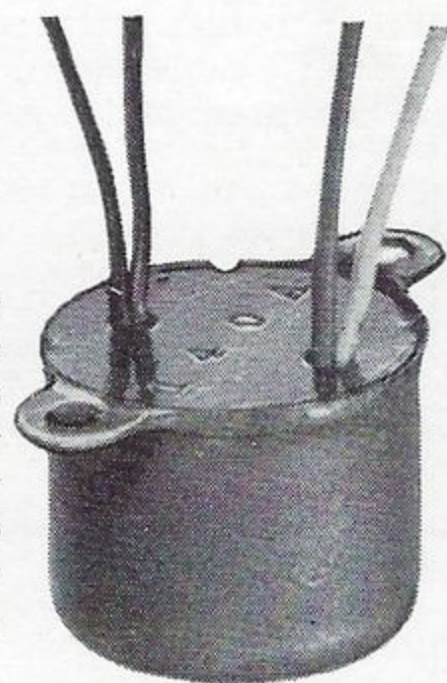
MINIATURE SHIELDED INPUTS

ALLOY CORE—

DRAWN CASE—

LOW HUM PICKUP—

These new Low-level Input Audios will be found ideal for Intercoms., Portable Amplifiers, etc. Special construction gives low hum pickup, frequency range of 70-11,000 cps $\pm$ 1 db. Good step-up ratio—60,000 ohm secondary—Insulated Leads—Vacuum Impregnated, Sealed Case—Mumetal Core. Dimensions: $1\frac{1}{8}$ " High, $1\frac{1}{2}$ " Mtg. Cts.



FOR SINGLE GRID INPUT

140A	4 ohms or 3.2 ohms to Single Grid.....	Fbeba
140B	30 ohms to Single Grid.....	Fbeec
140C	50 ohms to Single Grid.....	Fbegf

FOR PUSH-PULL GRID INPUT

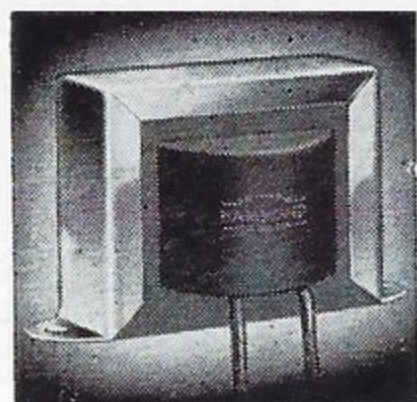
140D	4 ohms to P.P. Grids.....	Fbfad
140E	30 ohms to P.P. Grids.....	Fbfec
140F	50 ohms to P.P. Grids.....	Fbfio
140H	10,000 ohms to 40,000 ct.....	Fbfog

NEW SUB-MINIATURE AUDIO TRANSFORMERS

Dimensions only $\frac{7}{16}$ " x $\frac{3}{4}$ " x $\frac{9}{16}$ " and weighing only $\frac{1}{3}$ oz. (.02 lb.). Range input 150 to 10,000 cps., output 300-10,000 cps. Max. operating level input 10 dbm, output 15 dbm.

Type		Code
142D	50 ohms to 80,000 ohms, 0 D.C.....	Fbfpa
142F	25,000 to 50 ohms, 1.5 MA. D.C.....	Fbfqe
142J	25,000 to 500 ohms, 1.5 MA. D.C.....	Fbfri

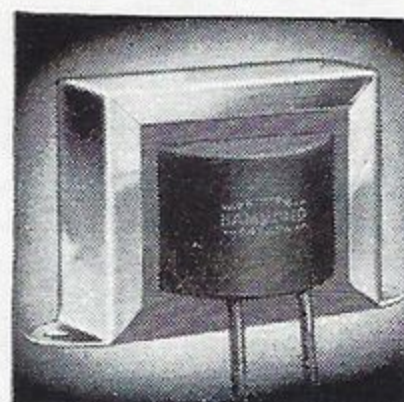
130 SERIES AUDIOS



This 130 line has become very popular for installations in portable equipment, talk-back systems, replacement work, etc. They all have $\frac{5}{8}$ x $\frac{5}{8}$ " core and strap bracket mounting with $2\frac{3}{8}$ " centres. Coils are specially made and treated for long dependable service. Weight, $\frac{1}{2}$ lb. Cadmium finish.

Type		Code
130	4 ohms to Grid.....	Fazam
131	Single or DB Mic or Line to Grid.....	Fazap
132	500 ohm Line ct to Grid.....	Fazar
134	Plate to PP Grids, ratio 1:2.....	Fazat
135	Class B Input for 19, 1J6, 1C6, etc.....	Fazav
137	Output 7000 ohms to 2 and 4 ohms.....	Fazoz
138	Output 7000 ohms to 6 ohms.....	Fazeb
139	Output 7000 ohms to 500 ohms ct.....	Fazef

REPLACEMENT AUDIO INPUT TRANSFORMERS



Hammond Input Audio Transformers are designed to give the utmost in quality, performance and reliability. Extensive laboratory testing with new materials and processes incorporated in these transformers assure you of maximum dependability at all times. A wide range of types in various sizes for different installations are listed below.

Type 51: A midget push-pull input for use where space is limited; $\frac{1}{2}$ " x $\frac{1}{2}$ " core; total ratio 1:2 ct; 2" mounting centres. Weight, $\frac{3}{8}$ lb. Code, FARSU.

Type 134: This is a small P.P. input with a ratio of 1:2 ct. Has $\frac{5}{8}$ x $\frac{5}{8}$ core, $2\frac{3}{8}$ " mounting centres. May be used to couple any regular triode such as 6C5, 6Q7, etc., into PP driver or PP output tubes. Weight, $\frac{1}{2}$ lb. Code, FAZAT.

Type 135: A small battery set Class B Driver Transformer to couple 30, 1H4, etc., to 1G6, 1J6, PP30, etc. Has $\frac{5}{8}$ x $\frac{5}{8}$ core; $2\frac{3}{8}$ " centres. Weight, $\frac{1}{2}$ lb. Code, FAZAV.

Type 111: A popular 1:3 ratio single input—has $\frac{3}{4}$ x $\frac{3}{4}$ core. Mounting centres, $2\frac{3}{4}$ ". Weight, 1 lb. Code, FAUGH.

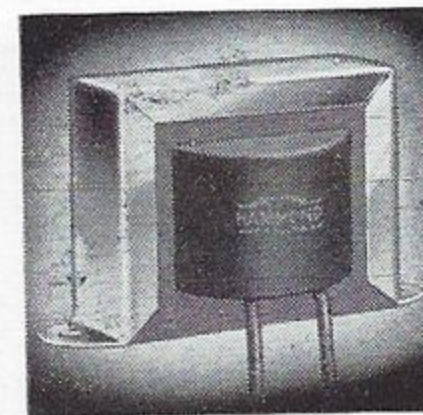
Type 112: A 1:3½ ratio PP input with vertical mounting bracket; $2\frac{3}{8}$ " centres; $\frac{3}{4}$ " x $\frac{3}{4}$ " core. Is a very popular type and can be used for all coupling purposes using triode to PP grids. Weight, 1 lb. Code, FAULT.

Type 113: This Transformer has the same coil and core as the 112 but has a horizontal bracket with $2\frac{3}{4}$ " mounting centres. Also a very popular type. $\frac{3}{4}$ x $\frac{3}{4}$ core. Weight, 1 lb. Code, FAUNA.

Type 116: This is a high quality PP input which may be used to couple a high impedance plate such as a power detector, or regular triode to PP grids. Over-all ratio 1 to 2 ct. Large $\frac{3}{4}$ x 1 core, vertical bracket with $2\frac{3}{8}$ " mounting centres. Weight, $1\frac{1}{4}$ lbs. Code, FAVOR.

HAMMOND REPLACEMENT OUTPUTS

This complete line of Output Transformers will look after all of your replacement needs. You will find a type listed which will give maximum performance for all of the various power tubes in use from a 1T5 to P.P. 6V6 or 6L6. The newest types of materials and latest manufacturing processes give you the ultimate in performance and dependability.



Single Tube Output TRANSFORMERS

Hammond Type No.	Primary Impedance	Tubes	Secondary Impedance	Core Size	Mtg. Cts.	Wgt.	Code
53	2500	7A5, 6A3, 25L6, 35L6, 50L6	3.2	1/2 x 1/2	2 "	3/8	Ephit
57	7000	6F6, 42, 6K6, 7B5	3.2	1/2 x 1/2	2 "	3/8	Ephar
63	2500	7A5, 6A3, 25L6, 35L6, 50L6	3.2	5/8 x 5/8	2 3/8"	1/2	Ephes
64	4500	6AS5, 6V6, 7C5, 25A6	3.2	5/8 x 5/8	2 3/8"	1/2	Ephet
67	7000	6F6, 42, 6K6, 7B5	3.2	5/8 x 5/8	2 3/8"	1/2	Ephow
69	18000	1F4, 1A5	3.2	5/8 x 5/8	2 3/8"	1/2	Ephum
74	4500	45, 6V6, 7C5, 25A6	3.2	3/4 x 3/4	2 3/4"	1	Ephyt
77	7000	6F6, 42, 6K6, 7B5	3.2	3/4 x 3/4	2 3/4"	1	Ephyb

Filter Tapped Output TRANSFORMER

Primary has 3 per cent Humbucking Tap, secondary 3.2 ohms.

52	2500	{ 7A5, 25L6, 35A5, 35B5, 35L6, 50B5, 50L6	3.2	1/2 x 1/2	2 "	3/8	Epdkr
62	2500		3.2	5/8 x 5/8	2 3/8"	1/2	Eplst

Push-Pull Output TRANSFORMERS

Hammond Type No.	Primary Impedance	Tubes	Secondary Impedance	Core Size	Mtg. Cts.	Wgt.	Code
58	14000 ct	P.P. 6F6, 7B5, 42, 6K6	3.2 ohms	1/2 x 1/2	2 "	3/8	Ekech
68	14000 ct	P.P. 6F6, 7B5, 42, 6K6	3.2 ohms	5/8 x 5/8	2 3/8"	1/2	Ekart
78	8000 ct	6N7, 6A6, P.P. 45, 6A4	3.2 ohms	3/4 x 3/4	2 3/4"	1	Ekiou
79	10000 ct	6N7, 6A6, 19, 1J6	3.2 ohms	3/4 x 3/4	2 3/4"	1	Ekome
80	14000 ct	P.P. 6F6, 7B5, 42, 6K6	3.2 ohms	3/4 x 3/4	2 3/4"	1	Ekure

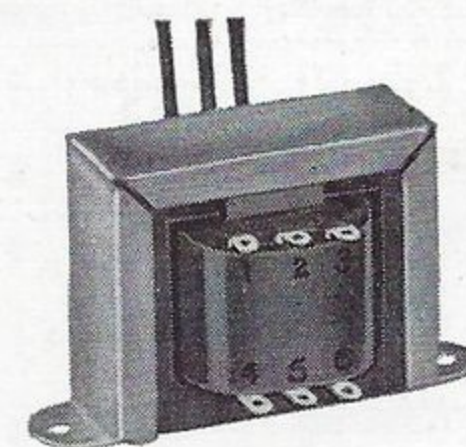
Popular Heavy Duty Output TRANSFORMER

Designed for Higher Power Sets. For 6V6, 6L6 Tubes, Etc.

Type 126—8000 ohms ct to 3.2 ohms; 3/4 x 1 core; weight, 1 1/4 lbs.; mtg. cts., 2 3/8. Code, FETCH.

New Universal Output TRANSFORMERS

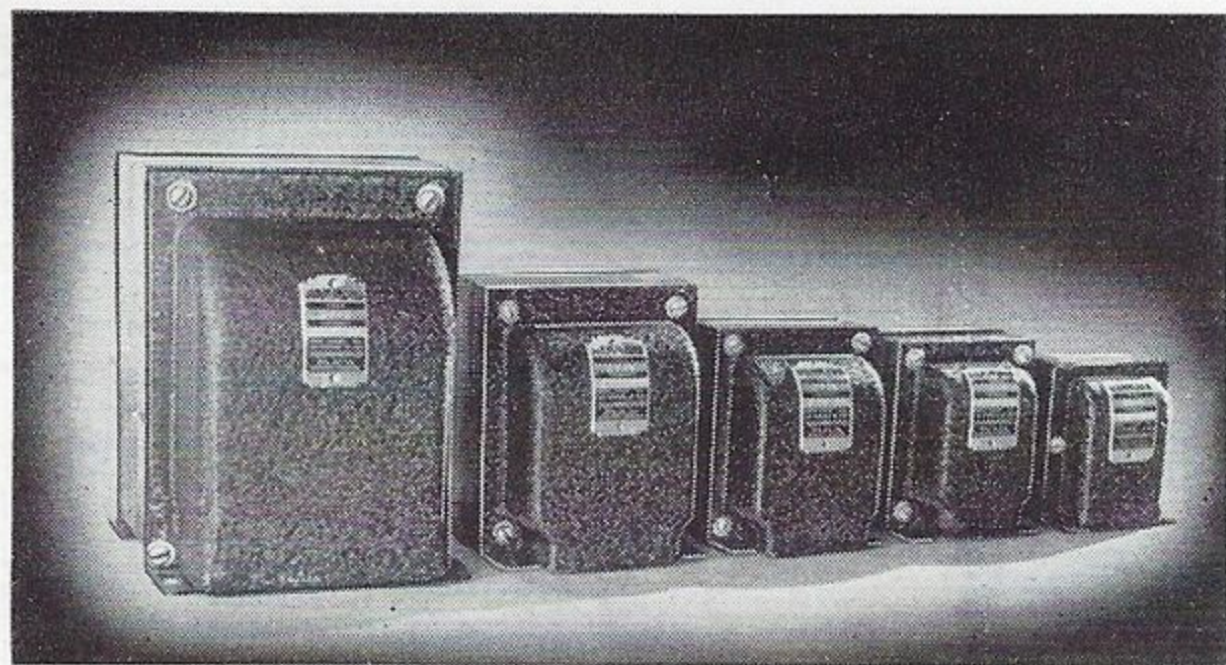
This new line of Hammond Universal Output Transformers will efficiently match a wide range of voice coil impedances ranging from 1.5 ohm to 15 ohms to any single or push-pull output stage, impedance range 1200 to 25000 ohms. Three popular sizes produced to give long satisfactory service.



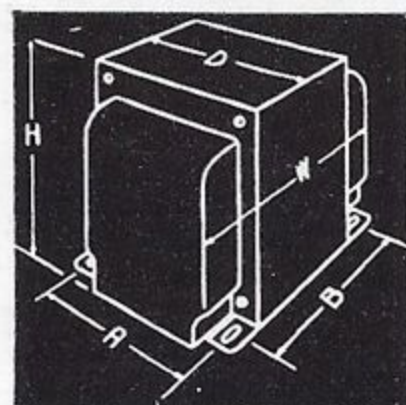
Type No.	Core Size	Mtg. Cts.	Code
125B	1/2 x 1/2	2 "	Fetga
125C	5/8 x 5/8	2 3/8"	Fethe
125D	3/4 x 3/4	2 3/4"	Fetgi

"HAMMOND TRANSFORMERS FOR RELIABILITY"

POWER TRANSFORMERS



"X" TYPE
MOUNTING



C.S.A.
Approval
No. 3902

THE power transformers listed here will be found ideal for a wide range of applications in modern electronic circuits.

They have cores of high grade transformer steel, operated at moderate flux density for low temperature rise and high efficiency. The coils are multiple-machine wound for maximum copper cross-section and uniformity. They are then processed in the latest methods of vacuum drying and pressure varnish impregnation for long period reliability. Complete mechanical and electrical checking assure you of perfect performance. Standard finish black wrinkle. Insulated leads 9" to 12" to R M A standard color code.

PRIMARY 115 VOLTS

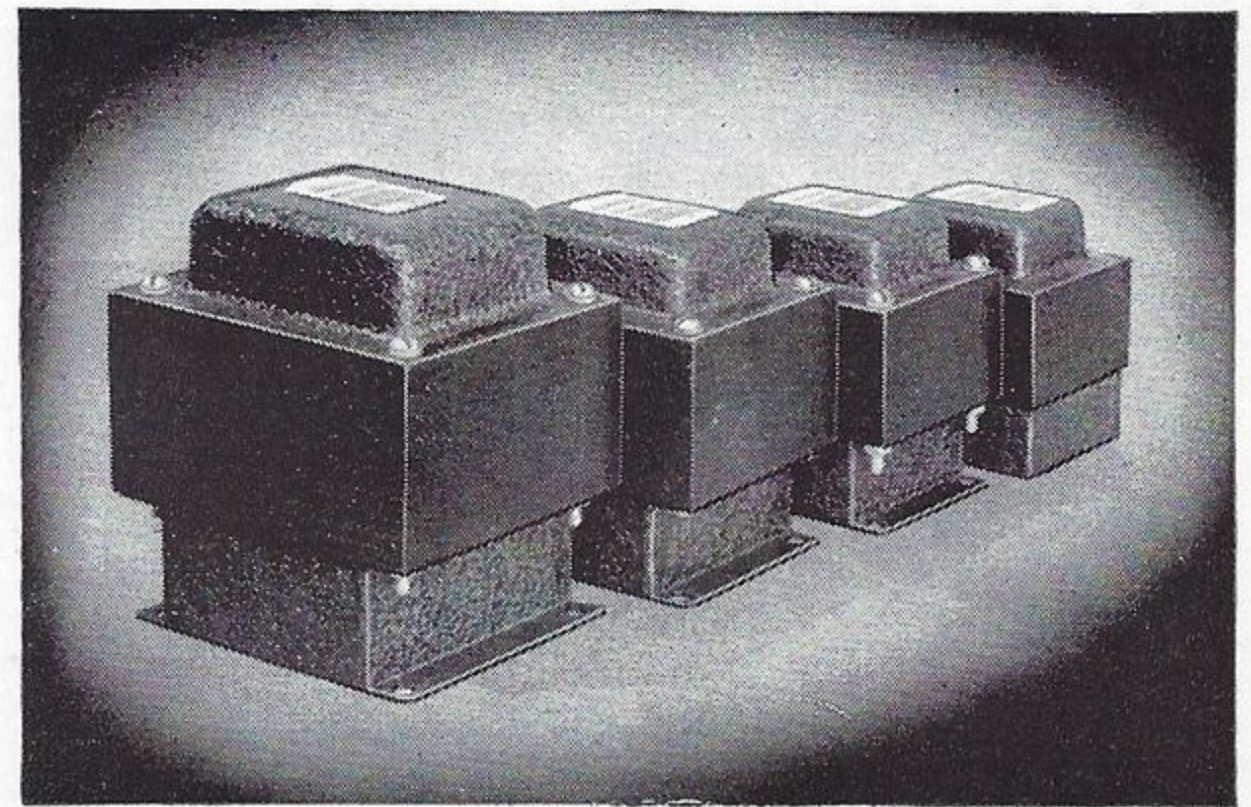
Type	Primary Cy	Secondary Va	Secondary Volts	D.C. Ma	Fil. # 1 (Rectifier)	Fil. #2	A	B	D	H	W	Wt.	Code
269BX60	60	40	150-150	75		6.3 v. 2 a.	2 $\frac{1}{8}$	1 $\frac{3}{4}$	2 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	Fidab
269BX25	25	40	150-150	75		6.3 v. 2 a.	2 $\frac{1}{8}$	2 $\frac{3}{4}$	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	3 $\frac{1}{4}$	Fidca
270X60	60	42	240-240	40	5.0 v. 2 a.	6.3 v. 1.5 a.	2 $\frac{1}{8}$	1 $\frac{3}{4}$	2 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	Fidde
270X25	25	42	240-240	40	5.0 v. 2 a.	6.3 v. 1.5 a.	2 $\frac{1}{8}$	2 $\frac{3}{4}$	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	3 $\frac{1}{4}$	Fideg
270BX60	60	51	275-275	40	5.0 v. 2 a.	6.3 v. 2.0 a.	2 $\frac{1}{8}$	2 $\frac{1}{4}$	2 $\frac{1}{2}$	3	3	3 $\frac{1}{4}$	Fidfi
270BX25	25	51	275-275	40	5.0 v. 2 a.	6.3 v. 2.0 a.	2 $\frac{1}{8}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3	4	5 $\frac{1}{4}$	Fidgo
271X60	60	55	280-280	50	5.0 v. 2 a.	6.3 v. 2.0 a.	2 $\frac{3}{8}$	2 $\frac{1}{4}$	2 $\frac{7}{8}$	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	Fidhp
271X25	25	55	280-280	50	5.0 v. 2 a.	6.3 v. 2.0 a.	2 $\frac{3}{8}$	3 $\frac{1}{4}$	2 $\frac{7}{8}$	3 $\frac{1}{2}$	4 $\frac{1}{4}$	5 $\frac{1}{2}$	Fidiq
272X60	60	70	310-310	70	5.0 v. 2 a.	6.3 v. 2.4 a.	2 $\frac{1}{2}$	2 $\frac{1}{4}$	3 $\frac{1}{8}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	Fidlr
272X25	25	70	310-310	70	5.0 v. 2 a.	6.3 v. 2.4 a.	2 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	7 $\frac{1}{2}$	Fidms
272BX60	60	86	300-300	100	5.0 v. 2 a.	6.3 v. 3.0 a.	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{8}$	3 $\frac{3}{4}$	3 $\frac{3}{4}$	5 $\frac{1}{2}$	Fidnt
272BX25	25	86	300-300	100	5.0 v. 2 a.	6.3 v. 3.0 a.	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{8}$	3 $\frac{3}{4}$	4 $\frac{7}{8}$	8 $\frac{1}{2}$	Fidov
273X60	60	95	350-350	110	5.0 v. 2 a.	6.3 v. 4.0 a. ct.	2 $\frac{1}{2}$	3	3 $\frac{1}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{4}$	6 $\frac{1}{2}$	Fidpv
273X25	25	95	350-350	110	5.0 v. 2 a.	6.3 v. 4.0 a. ct.	3	3	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	10	Fidqw
274X60	60	115	375-375	110	5.0 v. 3 a.	6.3 v. 5.0 a. ct.	3	2 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{7}{8}$	7	Fidry
274X25	25	115	375-375	110	5.0 v. 3 a.	6.3 v. 5.0 a. ct.	3	3 $\frac{3}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{7}{8}$	11 $\frac{1}{2}$	Fidsy
275X60	60	135	400-400	135	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3	2 $\frac{3}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{4}$	8 $\frac{3}{4}$	Fidtz
275X25	25	135	400-400	135	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3	4	3 $\frac{3}{4}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$	14	Fidua
276X60	60	120	300-300	150	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3	2 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	3 $\frac{3}{4}$	7	Fidwb
276X25	25	120	300-300	150	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3	3 $\frac{3}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{7}{8}$	14	Fidxc
278X60	60	185	400-400	200	5.0 v. 3 a. ct.	6.3 v. 6.0 a. ct.	3	3	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	10 $\frac{1}{2}$	Fidyd
278X25	25	185	400-400	200	5.0 v. 3 a. ct.	6.3 v. 6.0 a. ct.	3	4 $\frac{3}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	6 $\frac{1}{4}$	17	Fidze
*279X60	60	131	425-425	150	5.0 v. 3 a.	6.3 v. 4 a. ct.	3	2 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	4	7	Fieaf
*279X25	25	131	425-425	150	5.0 v. 3 a.	6.3 v. 4 a. ct.	3	3 $\frac{3}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	5 $\frac{1}{8}$	11 $\frac{1}{2}$	Fiebg

*Internal Shield Between Primary and Secondary.

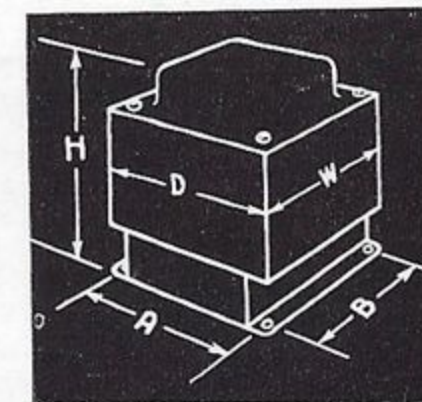
HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

POWER TRANSFORMERS

THE 'Z' Type of mounting has been found very desirable by Servicemen throughout Canada due to the ease of installation. A minimum of mounting area is required and the same fine constructional details are incorporated as in other Hammond Transformers. They have numerous applications, not only for replacement work but for use in Electronic Equipment for Industry, Amplifiers, etc. Standard finish black wrinkle; insulated leads 9" to 12" to RMA standard color code.



"Z" TYPE
MOUNTING



C.S.A.
Approval
No. 3902

PRIMARY 115 VOLTS

Type	Primary Cy	Va	Secondary Volts	D.C. Ma	Fil. # 1 (Rectifier)	Fil. #2	A	B	D	H	W	Wt.	Code
268Z60	60	25	200-200	35		6.3 v. 2 a.	1 ⁷ / ₈	2 ⁵ / ₈	3	2 ³ / ₁₆	13 ¹ / ₄	13 ¹ / ₄	Fiado
268Z25	25	25	200-200	35		6.3 v. 2 a.	1 ⁷ / ₈	2 ⁵ / ₈	3 ¹ / ₂	2 ³ / ₁₆	21 ¹ / ₂	21 ¹ / ₂	Fiafa
269BZ60	60	40	150-150	75		6.3 v. 2 a.	2 ¹ / ₄	3	3	2 ¹ / ₂	21 ¹ / ₂	21 ¹ / ₂	Fialt
269BZ25	25	40	150-150	75		6.3 v. 2 a.	2 ¹ / ₄	3	3 ⁷ / ₈	2 ¹ / ₂	31 ¹ / ₄	31 ¹ / ₄	Fiemi
270Z60	60	42	240-240	40	5.0 v. 2 a.	6.3 v. 1.5 a.	2 ¹ / ₄	3	2 ³ / ₄	2 ¹ / ₂	21 ¹ / ₂	21 ¹ / ₂	Fight
270Z25	25	42	240-240	40	5.0 v. 2 a.	6.3 v. 1.5 a.	2 ¹ / ₄	3	3 ³ / ₄	2 ¹ / ₂	31 ¹ / ₄	31 ¹ / ₄	Filch
270BZ60	60	51	275-275	40	5.0 v. 2 a.	6.3 v. 2.0 a.	2 ¹ / ₄	3	3 ¹ / ₄	2 ¹ / ₂	31 ¹ / ₄	31 ¹ / ₄	Filer
270BZ25	25	51	275-275	40	5.0 v. 2 a.	6.3 v. 2.0 a.	2 ¹ / ₄	3	4 ¹ / ₄	2 ¹ / ₂	51 ¹ / ₄	51 ¹ / ₄	Files
271Z60	60	55	280-280	50	5.0 v. 2 a.	6.3 v. 2.0 a.	2 ⁷ / ₈	2 ¹ / ₄	3 ³ / ₈	3 ¹ / ₄	2 ¹³ / ₁₆	31 ¹ / ₂	Filly
271Z25	25	55	280-280	50	5.0 v. 2 a.	6.3 v. 2.0 a.	2 ⁷ / ₈	2 ¹ / ₄	3 ³ / ₈	4 ¹ / ₄	2 ¹³ / ₁₆	51 ¹ / ₂	Final
272Z60	60	70	310-310	70	5.0 v. 2 a.	6.3 v. 2.4 a.	3 ¹ / ₈	2 ¹ / ₂	3 ³ / ₄	3 ⁵ / ₈	3 ¹ / ₈	41 ¹ / ₂	Finch
272Z25	25	70	310-310	70	5.0 v. 2 a.	6.3 v. 2.4 a.	3 ¹ / ₈	2 ¹ / ₂	3 ³ / ₄	4 ³ / ₄	3 ¹ / ₈	71 ¹ / ₂	Finis
272BZ60	60	86	300-300	100	5.0 v. 2 a.	6.3 v. 3.0 a.	3 ¹ / ₈	2 ¹ / ₂	3 ³ / ₄	4	3 ¹ / ₈	51 ¹ / ₂	Finod
272BZ25	25	86	300-300	100	5.0 v. 2 a.	6.3 v. 3.0 a.	3 ¹ / ₈	2 ¹ / ₂	3 ³ / ₄	5 ¹ / ₈	3 ¹ / ₈	81 ¹ / ₂	Finup
273Z60	60	95	350-350	110	5.0 v. 2 a.	6.3 v. 4.0 a. ct.	3 ¹ / ₈	2 ¹ / ₂	3 ³ / ₄	4 ³ / ₈	3 ¹ / ₈	61 ¹ / ₂	First
273Z25	25	95	350-350	110	5.0 v. 2 a.	6.3 v. 4.0 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4 ¹ / ₂	3 ³ / ₄	10	Firth
274Z60	60	115	375-375	110	5.0 v. 3 a.	6.3 v. 5.0 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	3 ³ / ₄	3 ³ / ₄	7	Fishy
274Z25	25	115	375-375	110	5.0 v. 3 a.	6.3 v. 5.0 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4 ⁷ / ₈	3 ³ / ₄	11 ¹ / ₂	Fitch
275Z60	60	135	400-400	135	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4 ¹ / ₄	3 ³ / ₄	8 ³ / ₄	Fixed
275Z25	25	135	400-400	135	5.0 v. 3 a. ct.	6.3 v. 5.0 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	5 ¹ / ₂	3 ³ / ₄	14	Fiord
276Z60	60	120	300-300	150	5.0 v. 3 a. ct.	6.3 v. 5 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	3 ³ / ₄	3 ³ / ₄	7	Flail
276Z25	25	120	300-300	150	5.0 v. 3 a. ct.	6.3 v. 5 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4 ¹ / ₈	3 ³ / ₄	14	Flake
278Z60	60	185	400-400	200	5.0 v. 3 a. ct.	6.3 v. 6 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4 ¹ / ₂	3 ³ / ₄	10 ¹ / ₄	Flach
278Z25	25	185	400-400	200	5.0 v. 3 a. ct.	6.3 v. 6 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	6 ¹ / ₄	3 ³ / ₄	17	Flupe
*279Z60	60	131	425-425	150	5.0 v. 3 a.	6.3 v. 4 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	4	3 ³ / ₄	7	Flusa
*279Z25	25	131	425-425	150	5.0 v. 3 a.	6.3 v. 4 a. ct.	3 ³ / ₄	3	4 ¹ / ₂	5 ¹ / ₈	3 ³ / ₄	11 ¹ / ₂	Fluti

*Internal Shield Between Primary and Secondary.

"SPECIAL TRANSFORMERS — TO YOUR SPECIFICATIONS"

POWER TRANSFORMERS

SELENIUM OR GERMANIUM RECTIFIER TYPES

A series of small Power Transformers that will be found quite useful in the construction or conversion of test equipment, bias supplies, T.V. boosters or other small electronic equipment. The secondary of the transformers listed below are designed for half-wave or bridge type selenium or germanium rectifiers. Primary 115 volts.

Type	Primary Cy.	Primary Va.	Secondary Volts	DC. MA.	Filament	Mtg. Cts.	Wt.	Code
262B25	25	4	120	15	6.3 v. 0.3 a.	2 $\frac{3}{4}$	1 lb.	Fodan
262B60	60	4	120	15	6.3 v. 0.3 a.	2 $\frac{3}{8}$	10 oz.	Fodef
262D25	25	8	120	30	6.3 v. 0.6 a.	2 $\frac{3}{4}$	1 $\frac{3}{4}$ lb.	Fodod
262D60	60	8	120	30	6.3 v. 0.6 a.	2 $\frac{3}{4}$	1 lb.	Fodux
262F25	25	16	120	75	6.3 v. 1.2 a.	1 $\frac{3}{4}$ x 2 $\frac{1}{8}$	2 $\frac{1}{2}$ lb.	Fodva
262F60	60	16	120	75	6.3 v. 1.2 a.	3 $\frac{1}{8}$	1 $\frac{3}{4}$ lb.	Fodxe

LOW VOLTAGE, HIGH CURRENT TRANSFORMERS "X" Mounting

Type	Primary Cy.	Primary Va.	Secondary Volts	DC. MA.	Filament	Mtg. Cts.	Wt.	Code
263A25	25	25	100-100	100	5.0 v. 2 a.	2 $\frac{7}{8}$ x 2 $\frac{1}{8}$	4 $\frac{1}{2}$ lb.	Foeac
263A60	60	25	100-100	100	5.0 v. 2 a.	1 $\frac{7}{8}$ x 2 $\frac{1}{8}$	2 $\frac{1}{2}$ lb.	Foebd
263C25	25	78	180-180	250	5.0 v. 3 a. c.t.	3 x 3	9 lb.	Foedi
263C60	60	78	180-180	250	5.0 v. 3 a. c.t.	2 $\frac{1}{2}$ x 2 $\frac{1}{2}$	5 $\frac{1}{2}$ lb.	Foefh

DUAL POWER TRANSFORMERS

Type 277 — Dual Power Transformer. Primary 115 V., Sec. 500-0-500 V. 200 Ma. D.C. Rectifier Fil. 5 V. 3 A. Ct. Sec. 300-0-300 V. 75 Ma. D.C. Rectifier Fil. 5 V. 2 A. Fil. 6.3 V. 6 A. CT. "X" mounting. Insulated leads. B.W. finish.

277-25	25 Cy.	Dimensions: 5 x 5 $\frac{1}{2}$ x 6 $\frac{1}{2}$ "	Wt.: 20 Lbs.	Code: Gamoz
277-60	50/60 "	" 3 $\frac{3}{4}$ x 5 $\frac{1}{2}$ x 4 $\frac{1}{2}$ "	" 15 "	" Gamex

A.C. - D.C. VIBRATOR POWER TRANSFORMERS

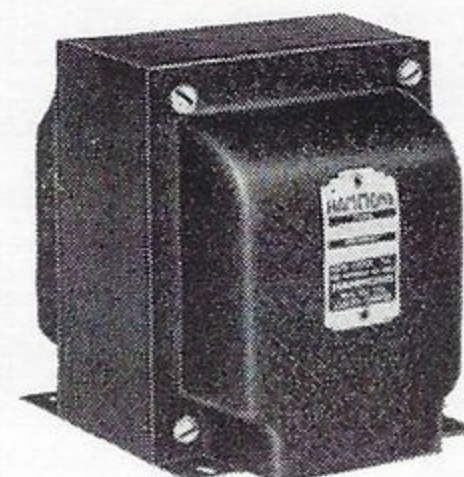
115v A.C. or 6v D.C.

Here are two specially designed Transformers for efficient use in conjunction with vibrator on 6 volts D.C. or on 115 volts 50- or 60-cycle power.

Each has four separate windings as follows: (a) 115 volts 50 or 60 cycle primary; (b) centre-tapped primary for vibrator; (c) centre-tapped high-voltage secondary; (d) centre-tapped filament winding.

Type 284 — Sec. 300-0-300 v. 75 ma. D.C., Fil. 6.3 v. 4 a. Dim., 3 $\frac{1}{8}$ x 4 x 3 $\frac{3}{4}$. Net wt., 6 $\frac{1}{4}$ lbs.
Code, Gabil.

Type 286 — Sec. 400-0-400 v. 150 ma. D.C., Fil. 6.3 v. 6 a. Dim., 3 $\frac{3}{4}$ x 4 $\frac{7}{8}$ x 4 $\frac{1}{2}$. Net wt., 11 $\frac{1}{2}$ lbs.
Code, Gacor.



THREE-PHASE TRANSFORMERS

Transformers of the Three Phase type have been designed and built for line voltages up to 750, secondary voltages to 6,000 and currents up to 3,000 amps.

Core materials are kept in stock for frequencies up to 500 cycles per second, and to complete the coverage, windings using Class A, Class B or Class H can be installed.

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

6 VOLT VIBRATOR or AUTO-B TRANSFORMERS

Below are listed five types of Transformers for use in auto-radios and vibrator power supplies for mobile and marine radio receiving and transmitting equipment. Each one employs electrostatic shield and is designed for most efficient operation for minimum battery drain. Special types available for 32 volt vibrators.

Type	D.C. Volts	Output Ma.	Mtg.	Dimensions	Core	Weight	Code
164A	200	45	Drawn Case	2 x 2 1/8 x 2 5/8	3/4 x 1	1 1/2 lbs.	Guagi
164B	200	45	Brkt.	3 cts	7/8 x 7/8	2 lbs.	Guars
164C	250	50	"X"	2 1/2 x 2 1/2 x 3	1 x 1	2 1/4 lbs.	Guess
164D	300	70	"X"	2 3/8 x 2 1/4 x 3 1/2	1 1/8 x 1 1/8	3 1/4 lbs.	Guery
164E	325	100	"X"	2 1/2 x 2 1/4 x 3 3/4	1 1/4 x 1 1/4	5 lbs.	Guelz
164F	400	150	"X"	2 1/2 x 3 1/4 x 3 3/4	1 1/4 x 2 1/4	7 7/8 lbs.	Guiph

SMALL FILAMENT TRANSFORMERS

The following Filament Transformers will be found useful in many kinds of radio, television, amplifier and electronic work. Their size has been kept to the minimum and for this reason the voltage output will be as specified only when the secondary current is as specified. Accurately wound and carefully vacuum impregnated coils assure you of long reliable service. All primaries are wound for 115 volts, A.C. Insulated leads are from 6" on small transformers to 11" on larger types.

2.5 or 5 VOLT FILAMENT TRANSFORMER

With two 2.5 volt, 3 amp. windings, will provide 2.5 volts, 6 amps. or 5 volts, 3 amps. ct., or two 2.5 v. 3 amp. outputs. Primary 115 v.

Type	Cycle	Dimensions	Weight	Code
165-60	60	2 1/2 x 2 1/2 x 3	2 1/4 lbs.	Guida
165-25	25	2 1/2 x 3 x 3	3 1/2 lbs.	Guide

2.5 or 5 VOLT FILAMENT TRANSFORMER

With two 2.5 volt, 6 amp. windings, giving 2.5 volts, 12 amps. or 5.0 v. 6 amp. c.t. Pri 115 volts, "X" mtg.

Type	Cycle	Dimensions	Weight	Code
166-60	60	2 1/2 x 3 x 3	3 1/2 lbs.	Guild
166-25	25	3 1/4 x 3 x 3	4 1/2 lbs.	Guile

Type	Cycles	Volts	Amps.	Mt. Type	Mtg. Cts.	Wt., Lbs.	Code
165B25	25 cy	5.0	2.0	Brkt.	3 1/8"	1.8	Guma
165B60	60 cy	5.0	2.0	Brkt.	2 3/8"	1.3	Gune
167B25	25 cy	6.3	0.3	Brkt.	2 3/8"	0.6	Guoba
167B60	60 cy	6.3	0.3	Brkt.	2"	0.35	Guobe
167C25	25 cy	6.3	1.0	Brkt.	3 1/8"	1.4	Guobi
167C60	60 cy	6.3	1.0	Brkt.	2 3/4"	1.0	Guobl
167D25	25 cy	6.3	2.0 ct	"X"	1 3/4 x 2 1/8	2.3	Guobm
167D60	60 cy	6.3	2.0 ct	Brkt.	2 3/8	1.3	Guobo
167E25	25 cy	6.3	4.0 ct	"X"	2 1/4 x 2 1/8	3.2	Guose
167E60	60 cy	6.3	4.0 ct	"X"	1 3/4 x 2 1/8	2.3	Guolt
167K25	25 cy	12.6	0.3 ct	Brkt.	2 3/8	1.3	Guoot
167K60	60 cy	12.6	0.3 ct	Brkt.	2 3/8	0.6	Guoos
167L25	25 cy	12.6	1.0 ct	"X"	1 3/4 x 2 1/8	2.3	Guora
167L60	60 cy	12.6	1.0 ct	Brkt.	2 3/8	1.3	Guore
167Q25	25 cy	25	3.0 ct	"X"	2 1/2 x 3 1/8	7.0	Guost
167Q60	60 cy	25	3.0 ct	"X"	2 1/2 x 2 1/8	4.4	Guotn

HEAVY-DUTY FILAMENT TRANSFORMERS

Type 267 — Primary 115 V. Fil. 5 V.3 A. Ct. Insulated for 750 V. D.C. operating and 6.3 V. 6 A. Ct. for heaters or filaments. "X" type mounting. Insulated leads. B.W. finish.

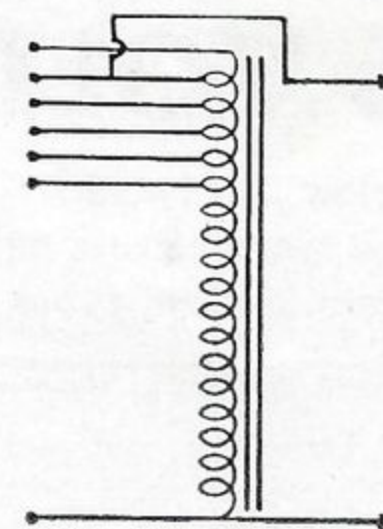
267-25	25 Cy.	Dimensions: 3 1/8 x 4 1/4 x 3 3/4"	Wt.: 6 3/4 Lbs.	Code: Gamin
267-60	50/60 "	" 3 1/8 x 3 1/2 x 3 3/4"	" 4 1/2 "	" Galop

FOR ADDITIONAL FILAMENT TRANSFORMERS, SEE PAGES 21 AND 22.

"A RELIABLE PRODUCT WITH A RELIABLE GUARANTEE"

LINE REGULATING

and Voltage-Changing Auto-Transformers



LINE VOLTAGE CHANGING AUTO TRANSFORMERS

The following units are ideal for correcting high or low line voltage. They have a single winding correctly proportioned and tapped for this type of work. Accurate voltage adjustment with good regulation is provided. "Knock-outs" enable easy installation to be made in special equipment. Finished in black wrinkle baked enamel.

LINE VOLTAGE ADJUSTING TYPES—Taps at 85, 95, 105, 110, 115, 125 volts. Allow output to be kept within $2\frac{1}{2}$ volts of 115.

Type	Output	Cycles	Dimensions	Weight	Code
168B60	200 Volt-amp. output	50-60 cy.	$3\frac{1}{8} \times 3\frac{1}{4} \times 3\frac{3}{4}$	4 $\frac{1}{4}$ lbs.	Gulch
168B25	200 Volt-amp. output	25 cy.	$3\frac{1}{8} \times 4 \times 3\frac{3}{4}$	6 $\frac{1}{2}$ lbs.	Gully
168D60	500 Volt-amp. output	50-60 cy.	$3\frac{3}{4} \times 4 \times 4\frac{1}{2}$	8 lbs.	Gumbo
168D25	500 Volt-amp. output	25 cy.	$3\frac{3}{4} \times 5 \times 4\frac{1}{2}$	11 $\frac{1}{2}$ lbs.	Gusty
168F60	1000 Volt-amp. output	50-60 cy.	$5 \times 5\frac{1}{4} \times 6\frac{1}{4}$	18 lbs.	Gusum
168F25	1000 Volt-amp. output	25 cy.	$5 \times 6\frac{1}{2} \times 6\frac{1}{4}$	26 $\frac{1}{2}$ lbs.	Gussor
168H60	1500 Volt-amp. output	50-60 cy.	$5 \times 6 \times 6\frac{1}{4}$	23 lbs.	Gustz
168H25	1500 Volt-amp. output	25 cy.	$5 \times 8 \times 6\frac{1}{4}$	38 lbs.	Guzie

230 to 115 VOLTAGE-CHANGING TYPES—Input for 220 to 250 volts A.C. Output tap gives half input voltage or 110 to 125 volts.

Type	Output	Cycles	Dimensions	Weight	Code
170A60	100 Volt-amp. output	50-60 cy.	$3\frac{1}{8} \times 3\frac{3}{4} \times 3\frac{3}{4}$	5 lbs.	Gynoc
170A25	100 Volt-amp. output	25 cy.	$3\frac{1}{8} \times 4\frac{1}{4} \times 3\frac{3}{4}$	7 $\frac{1}{4}$ lbs.	Gynal
170B60	200 Volt-amp. output	50-60 cy.	$3\frac{3}{4} \times 3\frac{3}{4} \times 4\frac{1}{2}$	7 lbs.	Gynar
170B25	200 Volt-amp. output	25 cy.	$3\frac{3}{4} \times 4\frac{1}{2} \times 4\frac{1}{2}$	10 lbs.	Gynat
170C60	300 Volt-amp. output	50-60 cy.	$3\frac{3}{4} \times 4\frac{1}{4} \times 4\frac{1}{2}$	9 lbs.	Gyxar
170C25	300 Volt-amp. output	25 cy.	$3\frac{3}{4} \times 5\frac{1}{2} \times 4\frac{1}{2}$	15 lbs.	Gyxad
170D60	500 Volt-amp. output	50-60 cy.	$3\frac{3}{4} \times 5\frac{1}{2} \times 4\frac{1}{2}$	15 lbs.	Gyxal
170D25	500 Volt-amp. output	25 cy.	$5 \times 6 \times 6\frac{1}{4}$	23 lbs.	Gyxar
170F60	1000 Volt-amp. output	50-60 cy.	$5 \times 6\frac{1}{2} \times 6\frac{1}{4}$	26 $\frac{1}{2}$ lbs.	Gyxat
170F25	1000 Volt-amp. output	25 cy.	$5 \times 8\frac{1}{2} \times 6\frac{1}{4}$	41 lbs.	Gyxaz

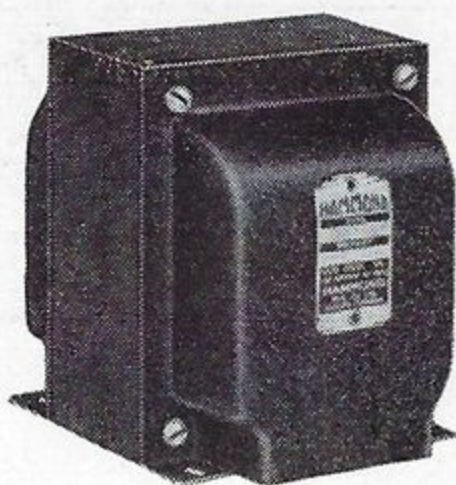
ISOLATING and Line Regulating Transformers

★ FOR SERVICING OF AC-DC RADIO AND TELEVISION

★ FOR TEST EQUIPMENT

★ FOR USE WITH FULL WAVE SELENIUM RECTIFIERS

This series of isolating transformers is designed for the service bench where line isolation as well as line regulation is required. They have a primary winding for 105 volt to 120 volt line and secondary winding tapped at 90, 100, 110, 115, 120 and 130 volts. Electrostatic shield between primary and secondary.

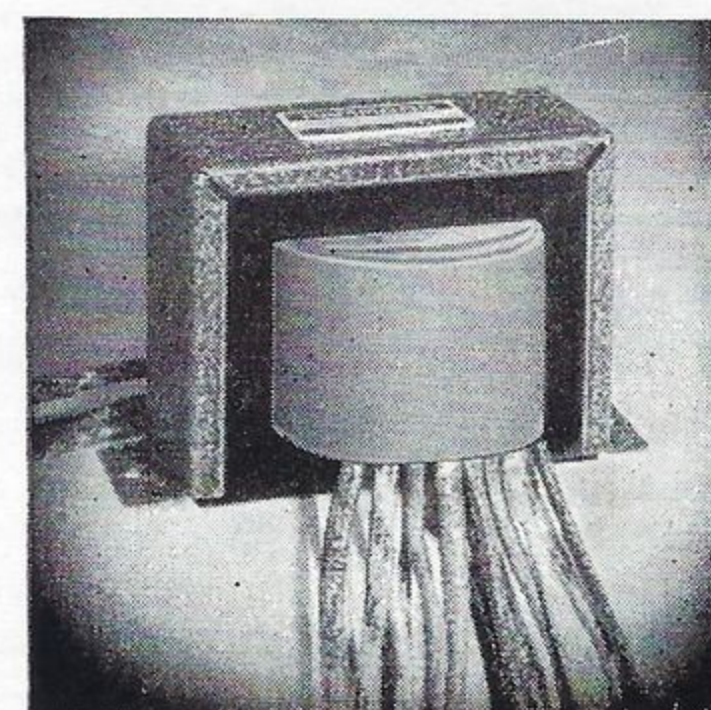


Type	Primary	Watts	Mtg. cts.	Weight
169C25	115 v. 25 cy.	100	3 x 3	9 lbs.
169C60	115 v. 60 cy.	100	$2\frac{1}{2} \times 2\frac{1}{2}$	6 lbs.
169E25	115 v. 25 cy.	250	$4\frac{9}{16} \times 3\frac{1}{2}$	20 lbs.
169E60	115 v. 60 cy.	250	3 x 4	12 lbs.
169G25	115 v. 25 cy.	500	$4\frac{9}{16} \times 5\frac{3}{4}$	38 lbs.
169G60	115 v. 60 cy.	500	$4\frac{9}{16} \times 3\frac{3}{4}$	22 lbs.

TUBE CHECKER TRANSFORMER

Primary 120 volts, tapped at 105 v. Secondary tapped at 1.4, 2, 2.5, 5, 6.3, 7.5, 12.6, 25, 30, 35, 50, 70, 117 volts, open mtg. 5" leads.

Type	Cycle	Dimensions	Weight	Code
163B60	60 cycle	$2\frac{1}{2} \times 3 \times 3$	3 lbs.	Gueba
163B25	25 cycle	$2\frac{1}{2} \times 3\frac{1}{2} \times 3$	4 lbs.	Guegs



HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

HAMMOND LINE VOLTAGE REGULATOR



For satisfactory operation of movie projectors, test equipment, sound installations and other types of electronic equipment, proper line voltage should be maintained. The Hammond One-Seventy-Four Series of Line Voltage Regulators is an economical way of controlling abnormal voltage fluctuation.

Attractive heavy steel cabinet, $8\frac{1}{2} \times 13\frac{1}{4} \times 8\frac{1}{2}$, gray Hammerlin finish. Accurate 0-150 voltmeter. Ten-point heavy duty type tap switch with silver contacts. Double outlet receptacle. Plastic carrying handle. Input voltages of 85 to 125 volts can be accommodated for a normal output of 110 or 115 volts.

Type	Cycles	Max. Output	Net Weight	Code
174D25	25	500 VA	23 lbs.	Jojbo
174D60	60	500 VA	19 lbs.	Jojiz
174F25	25	1000 VA	33 lbs.	Jojob
174F60	60	1000 VA	23 lbs.	Jojuc
174H25	25	1500 VA	42 lbs.	Jojwa
174H60	60	1500 VA	29 lbs.	Jujkm

TYPE 173 300 WATT LINE VOLTAGE REGULATOR

For Television or Small Electronic Units

The same fine workmanship that is incorporated in the 174 series is built into this new compact Line Voltage Regulator. Designed for continuous service with loads up to 300 watts. Ideal for the proper operation of television or other small electronic units where abnormal line voltage is encountered.



Type	Cycle	Size	Wgt., Lbs.	Code
173-25	25/60	$6\frac{1}{2} \times 5 \times 5\frac{3}{4}$	$11\frac{1}{4}$	Julae
173-60	60		$9\frac{1}{2}$	Julbo

CATHODE MODULATION TRANSFORMERS

For installations where space or finances do not permit Class "B" modulation. Multi-tap secondary for correct impedance match.

2069 60 Watt, Primary 7,000 ohms ct, secondary 0-500-1000-1500-2000-2500-3000 ohms 200 MA DC, Max. secondary current. "X" Mounting.

CONSTANT MODULATION TRANSFORMERS

(See April, November, 1950, QST)

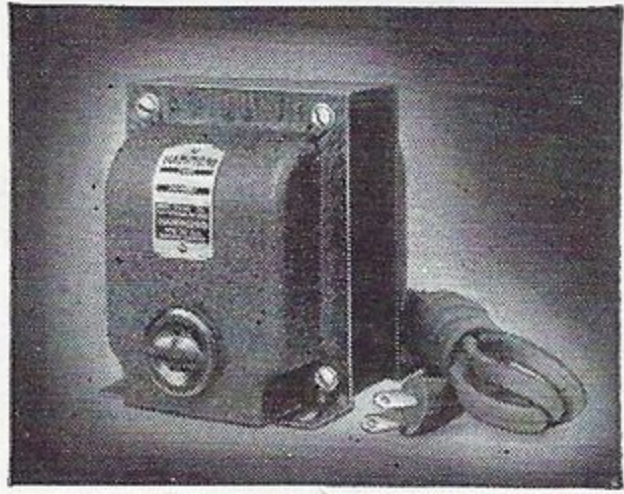
2012 10 Watt Primary 10,000 ohms ct, 60 MA DC, Rectifier 38,720 ohms ct 40 MA DC, Screen 8,000 ohms, 40 MA DC. For single 813.

2016 15 Watt Primary 7,000 ohms ct, 80 MA DC, Rectifier 28,000 ohms ct 15 MA DC, Screen 4,400 ohms 15 MA DC. For parallel 807's.

"CONSTANT RESEARCH KEEPS HAMMOND AHEAD"

HAMMOND ISOLATING TRANSFORMERS

115 TO 115 VOLT ISOLATING TRANSFORMERS



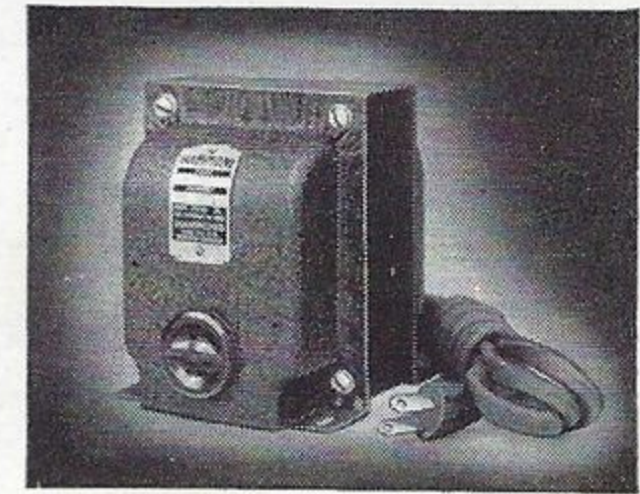
The electrostatic shield and isolation of primary and secondary windings, together with ample insulation, make these Transformers desirable where isolation of radio interference is required. May be used on 105-volt to 120-volt lines. Outlet receptacle and 5 foot cord.

Type	Cycles	Watts	Dimensions	Weight	Code
171A25	25	100	$3\frac{3}{4} \times 4\frac{3}{4} \times 4\frac{3}{4}$	11 lbs.	Joguz
171A60	50/60	100	$3\frac{3}{4} \times 4 \times 4\frac{3}{4}$	7½ lbs.	Jogat
171B25	25	200	$3\frac{3}{4} \times 6\frac{1}{2} \times 4\frac{3}{4}$	18 lbs.	Jogev
171B60	50/60	200	$3\frac{3}{4} \times 5\frac{1}{8} \times 4\frac{3}{4}$	12 lbs.	Jogta
171C60	50/60	300	$3\frac{3}{4} \times 6\frac{1}{2} \times 5$	18 lbs.	Joqvi
171E60	50/60	500	$5 \times 6 \times 6\frac{1}{2}$	24 lbs.	Joqua

230 TO 115 VOLT ISOLATING TRANSFORMERS

This series of Transformers has same features as the 171 Series, but is designed to operate on 210- to 240-volt lines. Secondary is shielded and isolated and provides 115 volts under rated load with 230 volts input.

Type	Cycles	Watts	Dimensions	Weight	Code
172A25	25	100	$3\frac{3}{4} \times 4\frac{3}{4} \times 4\frac{3}{4}$	11 lbs.	Johix
172A60	50/60	100	$3\frac{3}{4} \times 4 \times 4\frac{3}{4}$	7½ lbs.	Johoz
172B25	25	200	$3\frac{3}{4} \times 6\frac{1}{2} \times 4\frac{3}{4}$	18 lbs.	Johub
172B60	50/60	200	$3\frac{3}{4} \times 5\frac{1}{8} \times 4\frac{3}{4}$	12 lbs.	Johve



CATHODE-RAY TRANSFORMERS

Cathode-Ray Transformers of a great many types have been built by Hammond during the past fifteen years. These have included 30 KV types for use with electron microscopes, hundreds of types for Radar, including compact oil-filled types for high altitudes, as well as the low-priced types for 2", 3" and 5" scopes.

To provide a fairly complete range of dependable, yet low-priced Cathode-Ray Transformer equipment, Hammond offers the following new "Cathode-Ray Unit Transformers." They have a combination high-voltage and rectifier filament winding and a shielded filament winding for a 6.3 v. C. R. T., together with the 115 v. primary. Practically any type of Cathode-Ray Equipment using any number and types of vertical or horizontal amplifier tubes can be built by using a Radio Type Power Transformer with sufficient capacity, as listed on page 12, for the low voltage stages and one of these new "Cathode-Ray Unit Transformers" for the high voltage and C. R. T. filament. High and moderate values of voltage may be obtained by connecting the low end of the H. V. secondary to either the centre-tap or one end of H. V. winding of the Radio Type Power Transformer. Four stock types are listed below, giving rectified D.C. voltages of 1000, 1500, 2000, 2500, 4000, 4500, and 10,000.

Caution—Extreme care should be taken to enclose all high voltage connections. Bleeder resistors should be connected to let any charge on H. V. Condensers drain to chassis.

214-25 Cathode Ray Transformer, primary 115 v., 25 cycle, H. V. Sec. 800 v., R. M. S., with 2.5 v. 1.75 a. Fil. winding for 2 x 2 rectifier. 6.3 v. 0.6 a. for C. R. T. GHE425 case. Code—Impal.....

214-60 As above but for 50/60 cycles. GHE325 case*. Code—Impid.....

215-25 Cathode Ray Transformer, primary 115 v. 25 cycles, H. V. Sec. 1500 v., R. M. S. with 2.5 v., 1.75 a. Rectifier Fil. 6.3 v. 0.6 a. for C. R. T. GHE425 case. Code—Impof.....

215-60 As above but for 50/60 cycles. GHE325 case*. Code—Impor.....

216-25 Cathode Ray Transformer, primary 115 v., 25 cycles, H. V. Sec. 3000 v., R. M. S. with 2.5 v., 1.75 a. Rectifier Fil. 6.3 v., 0.6 a. for C. R. T. GKE550 case. Code—Impot.....

216-60 As above but for 50/60 cycles. GKE400 case*. Code—Impox.....

218-60 Cathode Ray Transformer, primary 115 v., 60 cycles, H. V. Sec. 7000 v. R. M. S. with 2.5 v. 5 a. Rectifier Fil. 6.3 v., 0.6 a. for C. R. T. GME450 case*. Code—Impoz.....

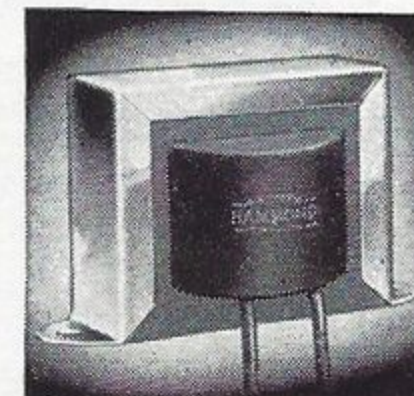
*For Case Dimensions See Page 26

CHOKES or REACTORS

The Hammond Chokes listed on these pages combine high inductance with lowest possible D.C. Resistance. They also have ample core of high silicon steel with accurately adjusted gap. All inductance ratings are for full rated current and are measured at 100 volts RMS 100 cycles, except heavy-current types which are measured at 10 volts 60 cycles. Manufacturing tolerance is held to 15 per cent on inductance and 10 per cent on resistance. "HiSeal" Vacuum impregnation gives high insulation resistance and assured freedom from breakdown.

FILTER or SMOOTHING CHOKES — Replacement Types

Bracket type mounting, insulated leads 6" to 8" long. For radio replacements, for sound equipment and for low voltage circuits in transmitters and electronic equipment. Cadmium finish.



Type	Henrys at Max.	Current Ma.	Henrys at 0 Ma.	Resistance Ohms	Max. Op. Peak Volts	Mtg. Cts.	Weight Lbs.	Core Size	Code
150	60	8	150	2750	400	2"	$\frac{3}{8}$	$\frac{1}{2} \times \frac{1}{2}$	Hapix
151	110	8	300	3700	400	$2\frac{3}{8}"$	$\frac{1}{2}$	$\frac{5}{8} \times \frac{5}{8}$	Haplo
152	7	40	21	340	400	2"	$\frac{3}{8}$	$\frac{1}{2} \times \frac{1}{2}$	Hapos
153	9	40	32	300	400	$2\frac{3}{8}"$	$\frac{1}{2}$	$\frac{5}{8} \times \frac{5}{8}$	Hindu
154	10	65	28	235	400	$2\frac{3}{4}"$	1	$\frac{3}{4} \times \frac{3}{4}$	Happy
155	30	40	70	595	400	$2\frac{3}{4}"$	1	$\frac{3}{4} \times \frac{3}{4}$	Hardy
156	50	30	120	950	400	$2\frac{3}{8}"$	$1\frac{1}{4}$	$\frac{3}{4} \times 1$	Harem
157	27	75	68	395	500	$3\frac{5}{8}"$	$2\frac{1}{4}$	1 x 1	Harpy
158	10	125	27	155	500	$3\frac{5}{8}"$	$2\frac{1}{4}$	1 x 1	Harry
159	4	225	8	65	500	$3\frac{5}{8}"$	$2\frac{1}{4}$	1 x 1	Harta

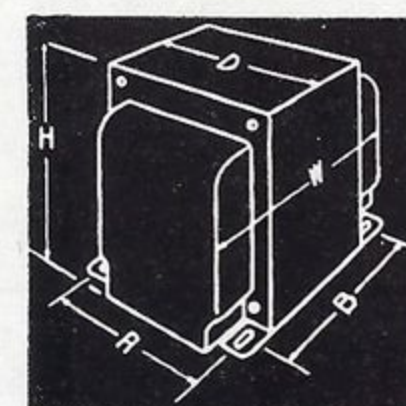
SEALED-TYPE FILTER CHOKES

374	10	65	28	235	400	$2\frac{3}{4}"$	$1\frac{1}{4}$	$\frac{3}{4} \times \frac{3}{4}$	Harve
375	25	40	70	600	400	$2\frac{3}{4}"$	$1\frac{1}{4}$	$\frac{3}{4} \times \frac{3}{4}$	Harub
477	25	75	70	400	500	$3\frac{5}{8}"$	$2\frac{3}{4}$	1 x 1	Harvi
478	10	125	37	157	500	$3\frac{5}{8}"$	$2\frac{3}{4}$	1 x 1	Harwo



FILTER or SMOOTHING CHOKE — Shielded Type

"X" type drawn steel cases make this series of chokes desirable for sound equipment, transmitters and electronic equipment. Insulated leads 8" to 10" long. Black wrinkle finish.



Type	Inductance Henrys	Current Ma.	Resistance Ohms	Max. Op. Peak Volts	A	B	D	H	W	Weight Lbs.	Core Size	Code
10-100X	15	100	155	500	$2\frac{1}{8}$	$1\frac{3}{4}$	$2\frac{1}{2}$	3	$2\frac{1}{2}$	$2\frac{1}{2}$	1 x 1	Helix
10-150X	10	150	102	600	$2\frac{1}{2}$	$1\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{3}{4}$	$3\frac{1}{4}$	$4\frac{1}{4}$	$1\frac{1}{4} \times 1$	Hello
5-200X	5	200	65	600	$2\frac{1}{8}$	$1\frac{3}{4}$	$2\frac{1}{2}$	3	$2\frac{1}{2}$	$2\frac{1}{2}$	1 x 1	Helid
10-200X	10	200	82	800	$2\frac{1}{2}$	$2\frac{1}{4}$	$3\frac{1}{8}$	$3\frac{3}{4}$	$3\frac{3}{4}$	$5\frac{1}{2}$	$1\frac{1}{4} \times 1\frac{1}{2}$	Helve
5-300X	5	300	57	1000	$2\frac{1}{2}$	$2\frac{1}{4}$	$3\frac{1}{8}$	$3\frac{3}{4}$	$3\frac{3}{4}$	$5\frac{1}{2}$	$1\frac{1}{4} \times 1\frac{1}{2}$	Hemab
10-300X	10	300	63	800	3	3	$3\frac{3}{4}$	$4\frac{1}{2}$	$4\frac{1}{2}$	$10\frac{1}{2}$	$1\frac{1}{2} \times 2$	Hence
10-500X	10	500	53	1000	$4\frac{9}{16}$	$3\frac{3}{4}$	5	$6\frac{3}{8}$	$5\frac{1}{2}$	21	2 x 2	Henna
30-65X	30	65	380	500	$2\frac{1}{8}$	$1\frac{3}{4}$	$2\frac{1}{2}$	3	$2\frac{1}{2}$	$2\frac{1}{4}$	1 x 1	Henni
30-100X	30	100	280	500	$2\frac{1}{2}$	$2\frac{1}{8}$	$3\frac{1}{8}$	$3\frac{3}{4}$	$3\frac{1}{4}$	$4\frac{3}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$	Henry
30-150X	25	150	190	800	3	$2\frac{1}{2}$	$3\frac{3}{4}$	$4\frac{1}{2}$	4	8	$1\frac{1}{2} \times 1\frac{1}{2}$	Heron
30-200X	26	200	152	800	3	$3\frac{3}{8}$	$3\frac{3}{4}$	$4\frac{1}{2}$	$4\frac{7}{8}$	$11\frac{1}{2}$	$1\frac{1}{2} \times 2\frac{1}{4}$	Hilly
30-300X	30	300	144	1000	$4\frac{9}{16}$	4	5	$6\frac{3}{8}$	$5\frac{3}{4}$	$21\frac{1}{2}$	$2 \times 2\frac{1}{4}$	Hiltz

"PRODUCTION FACILITIES FOR ONE OR THOUSANDS"



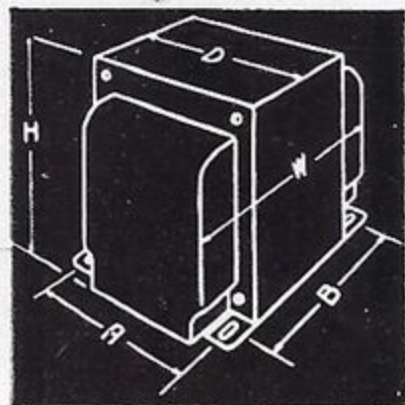
HIGH-VOLTAGE FILTER CHOKES

In the design and building of power supplies, which provide voltages of 1000 or over, it is necessary to pay particular attention to the insulation requirements. The Chokes listed below are the result of years of experience and will be found entirely reliable when operated within the ratings specified. While these Chokes are tested at much higher voltages, the maximum operating peak (which is the D.C. operating voltage plus the peak of any transients or ripple) should not be exceeded. Chokes for higher voltages can be provided to order. In the tables below actual inductance characteristics, within 15 per cent., and resistance values within 5 per cent. at 23° C. are shown. Porcelain insulators 1" diameter on 1½" centres are provided on all types. The height of the insulator and terminal bolt is 1¼".

Hammond Type	Current Ma.	Henrys At Rated Ma.	Henrys at 0 Ma.	Res. Ohms.	Max. Optg. Peak Volts	Case Type	Net Wgt. Lbs.	Code Word
10V200	200	10	15	82	4000	GKED400	7¾	Hatch
10V300	300	8.7	14	63	4000	GMED450	13½	Haunt
10V500	500	9.1	12	54	4000	GPED550	24	Havoc
10V750	750	9.6	16	29	5000	GPED850	35	Hawse
10V1000	1000	9.4	17	26	5000	GQED750	54	Hazel
5V1000	1000	5.0	10	16	5000	GPED750	36	Hazos
5V1500	1500	4.7	11	12	5000	GQED750	59	Hazzi
5V2000	2000	4.5	9	9	5000	GRED1000	114	Hazzo
30V150	150	23	38	193	4000	GMED450	11½	Heath
30V200	200	24	38	155	4000	GMED525	15	Heave
30V300	300	30	43	144	4000	GPED550	24	Heavy
20V500	500	17	23	87	4000	GPED850	40	Hedge
20V750	750	18	25	50	5000	GQED750	59	Hedgi

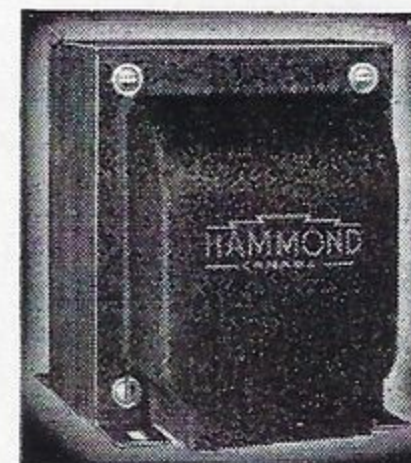
HIGH VOLTAGE INPUT OR SWINGING CHOKES

Hammond Type	Ave. D.C. Ma.*	Henrys At Rated Ma.	Henrys at 0 Ma.	Res. Ohms	Max. Optg. Peak Volts	Case Type	Net Wgt. Lbs.	Code Word
12S200	200*	4.6	21.4	82	5000	GKED400	7¾	Hedix
12S300	300*	4.15	23.4	63	5000	GMED450	13½	Hediz
12S500	500*	3.4	27	54	5000	GPED550	24	Hedos
12S750	750*	3.5	24	29	6000	GPED850	35	Hedov
12S1000	1000*	3.3	21	26	6000	GQED750	54	Hedra



HEAVY-CURRENT CHOKES—Shielded Type

Many requirements for chokes or reactors for exciter lamp supply units, floating battery chargers where ripple must be eliminated, machine control units, etc., can be met by the following types. They have maximum inductance and current ratings for their size and will operate continuously at full rated current with 35° C. rise or less.

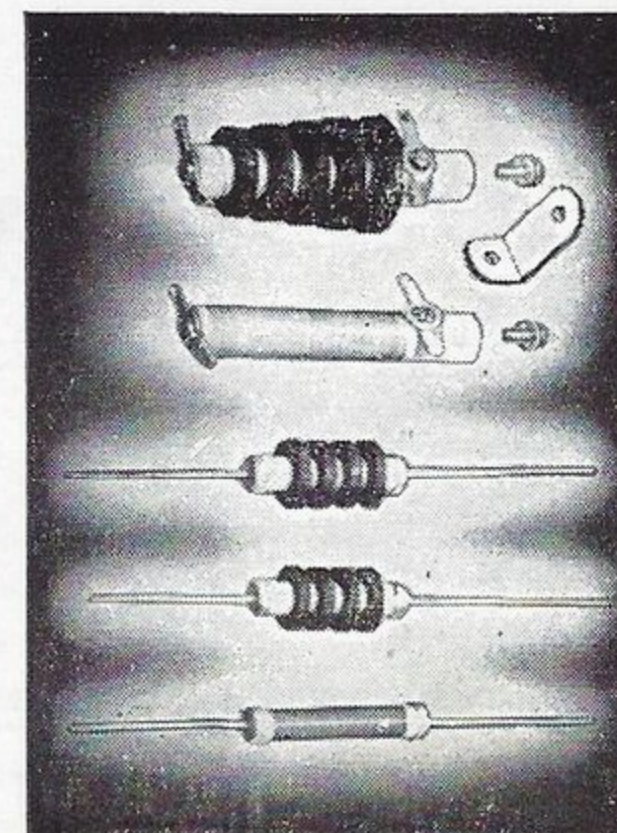


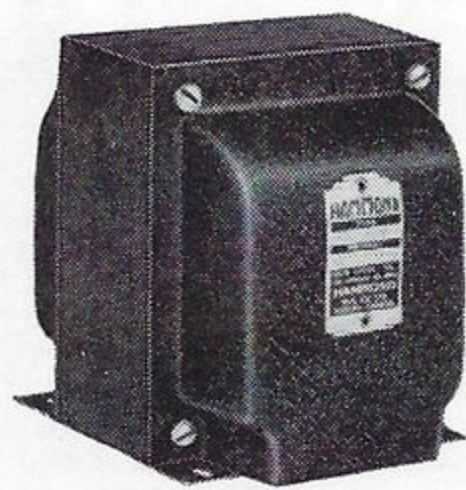
Type	Henrys at Max.	Current Amps.	Henrys D.C. At Oa.	Res. Ohms	Max. Op. Peak Volts	A	B	D	H	W	Wt. Lbs.	Code
192C	0.06	2	0.15	0.70	300	2⅛	2⅝	2½	3	2⅝	2½	Himba
192F	0.1	2	0.30	1.73	300	2½	2¼	3⅛	3¾	3½	5	Hinla
193F	0.1	3	0.35	0.99	300	3	2¾	3¾	4½	4¼	9	Hinno
195F	0.1	5	0.28	0.55	300	4⅞	3¾	5	6⅝	5½	19	Hinre
197D	0.05	10	0.18	0.18	300	4⅞	4¾	5	6⅝	6½	26	Hinso

R.F. CHOKES

This new line of R.F. Chokes covers the complete range of amateur requirements from 2 mc. to 60 mc. Latest low-loss construction is used, including treated Isolantite forms, coils impregnated with Amphenol 912 liquid. Larger sizes have threaded end for mounting directly on chassis and also angle bracket for horizontal mounting. Small types have tinned wire leads.

Type	D.C. Ma.	Inductance	Winding	D.C. Res.	Length	Weight	Code
1500	125	1 Mh.	1 pie	6. ohms	¾"	¼ oz.	Ibice
1501	75	10 Mh.	2 pies	35. ohms	1⅛"	½ oz.	Ibeda
1502	500	7 uh	Spaced	.1 ohm	2"	½ oz.	Idabe
1504	125	2.5 Mh.	4 pies	43. ohms	2"	1 oz.	Idaco
1506	250	1.6 Mh.	4 pies	13. ohms	2"	1 oz.	Idagi
1508	500	35 uh.	Spaced	.25 ohm	3¼"	1 oz.	Idalo
1510	400	4.4 Mh.	5 pies	12. ohms	3¼"	4 oz.	Idame
1512	1000	3.2 Mh.	5 pies	6. ohms	3¼"	5 oz.	Idasy





FILAMENT TRANSFORMERS

Hammond Filament Transformers are well known for their rugged, compact construction, their accurate voltage output and also the provision for low line voltage. Two types of mountings are available, the "X" for chassis construction, and the "R" which has bakelite terminal plate and substantial soldering lugs.



Type "X" Mounting

Type "R" Mounting

Hammond Number	Primary Taps	Cycles	Secondary Volts, Amps.	Secondary Ins. Test	Dimensions W D H	Weight	Code
1120R25	115	25	2.5 3	2000	2 1/2 x 3 1/2 x 3	3	Gorse
1120X25	115	25	2.5 3	2000	2 1/2 x 3 1/2 x 3	3	Gorly
1120R60	115	50/60	2.5 3	2000	2 1/2 x 3 x 3	2 1/4	Gorge
1120X60	115	50/60	2.5 3	2000	2 1/2 x 3 x 3	2 1/4	Goric
1122R25	100-115	25	2.5 6	2000	3 1/4 x 3 3/4 x 3 3/4	5	Gouro
1122X25	100-115	25	2.5 6	2000	3 1/4 x 3 3/4 x 3 3/4	5	Govey
1122R60	100-115	50/60	2.5 6	2000	2 1/2 x 3 1/2 x 3	3	Gouge
1122X60	100-115	50/60	2.5 6	2000	2 1/2 x 3 1/2 x 3	3	Goule
1123R25	100-115	25	5.0 ct 10	2500	3 1/4 x 4 3/4 x 3 3/4	7 1/4	Grany
1123X25	100-115	25	5.0 ct 10	2500	3 1/4 x 4 3/4 x 3 3/4	7 1/4	Grons
1123R60	100-115	50/60	5.0 ct 10	2500	3 1/4 x 4 x 3 3/4	5	Grand
1123X60	100-115	50/60	5.0 ct 10	2500	3 1/4 x 4 x 3 3/4	5	Grams
1124R25	100-115	25	5.0 ct 20	3000	3 3/4 x 5 1/2 x 4 1/2	10 1/2	Grain
1124X25	100-115	25	5.0 ct 20	3000	3 3/4 x 5 1/2 x 4 1/2	10 1/2	Grins
1124R60	100-115	50/60	5.0 ct 20	3000	3 3/4 x 4 3/4 x 4 1/2	7	Graft
1124X60	100-115	50/60	5.0 ct 20	3000	3 3/4 x 4 3/4 x 4 1/2	7	Gront
1125R25	100-115	25	5.0 ct 13	3000	3 3/4 x 6 1/4 x 4 1/2	14	Grait
1125X25	100-115	25	5.0 ct 13	3000	3 3/4 x 6 1/4 x 4 1/2	13	Granu
1125R60	100-115	50/60	5.0 ct 13	3000	3 3/4 x 5 x 4	9	Granz
1125X60	100-115	50/60	5.0 ct 13	3000	3 3/4 x 5 x 4	8	Gratz
1128R25	100-115	25	6.3 ct 5	2000	3 1/4 x 3 3/4 x 3 3/4	5	Graph
1128X25	100-115	25	6.3 ct 5	2000	3 1/4 x 3 3/4 x 3 3/4	5	Graly
1128R60	100-115	50/60	6.3 ct 5	2000	2 1/2 x 3 1/2 x 3	3	Grape
1128X60	100-115	50/60	6.3 ct 5	2000	2 1/2 x 3 1/2 x 3	3	Grags
1129R25	100-115	25	6.3 ct 10	3000	3 1/4 x 4 1/2 x 3 3/4	9	Graob
1129X25	100-115	25	6.3 ct 10	3000	3 1/4 x 4 1/2 x 3 3/4	9	Graof
1129R60	100-115	50/60	6.3 ct 10	3000	3 1/4 x 3 1/2 x 3 3/4	5 1/2	Graox
1129X60	100-115	50/60	6.3 ct 10	3000	3 1/4 x 3 1/2 x 3 3/4	5 1/2	Graoz
1130R25	100-115	25	7.5 ct 4	2500	3 1/4 x 3 3/4 x 3 3/4	5	Grass
1130X25	100-115	25	7.5 ct 4	2500	3 1/4 x 3 3/4 x 3 3/4	5	Gratz
1130R60	100-115	50/60	7.5 ct 4	2500	2 1/2 x 3 1/2 x 3	3	Grasp
1130X60	100-115	50/60	7.5 ct 4	2500	2 1/2 x 3 1/2 x 3	3	Gratf
1132R25	100-115	25	7.5 ct 6.5	2500	3 1/4 x 4 3/4 x 3 3/4	7 1/2	Grave
1132X25	100-115	25	7.5 ct 6.5	2500	3 1/4 x 4 3/4 x 3 3/4	7 1/2	Grawt
1132R60	100-115	50/60	7.5 ct 6.5	2500	3 1/4 x 4 x 3 3/4	5	Grate
1132X60	100-115	50/60	7.5 ct 6.5	2500	3 1/4 x 4 x 3 3/4	5	Grast
1134R25	100-115	25	5.0 ct 3 6.3 ct 5	2500	3 3/4 x 4 1/2 x 4 3/4	8 3/4	Graze
1134X25	100-115	25	7.5 ct 3.5	2500	3 3/4 x 4 1/2 x 4 3/4	8 3/4	Grexl
1134R60	100-115	50/60	5.0 ct 3 6.3 ct 5	2500	3 1/4 x 4 x 3 3/4	6 1/2	Gravy
1134X60	100-115	50/60	7.5 ct 3.5	2500	3 1/4 x 4 x 3 3/4	6 1/2	Gresy
1136R25	100-115	25	5.0 ct 3 6.3 ct 5	2500	3 3/4 x 4 3/4 x 4 3/4	9 1/4	Graax
1136X25	100-115	25	6.3 ct 5	2500	3 3/4 x 4 3/4 x 4 3/4	9 1/4	Gramn
1136R60	100-115	50/60	5.0 ct 3 6.3 ct 5	2500	3 1/4 x 4 x 3 3/4	5 1/2	Grait
1136X60	100-115	50/60	6.3 ct 5	2500	3 1/4 x 4 x 3 3/4	5 1/2	Grati
1140R25	100-115	25	10 ct 4	3000	3 1/4 x 3 3/4 x 3 3/4	5 3/4	Green
1140X25	100-115	25	10 ct 4	3000	3 1/4 x 3 3/4 x 3 3/4	5 3/4	Grema
1140R60	100-115	50/60	10 ct 4	3000	3 1/4 x 3 1/4 x 3 3/4	4 1/4	Greek
1140X60	100-115	50/60	10 ct 4	3000	3 1/4 x 3 1/4 x 3 3/4	4 1/4	Greba
1141R25	100-115	25	10 ct 5	3000	3 1/4 x 4 x 3 3/4	6 1/4	Grela
1141X25	100-115	25	10 ct 5	3000	3 1/4 x 4 x 3 3/4	6 1/4	Greli
1141R60	100-115	50/60	10 ct 5	3000	3 1/4 x 3 1/2 x 3 3/4	4 3/4	Gremo
1141X60	100-115	50/60	10 ct 5	3000	3 1/4 x 3 1/2 x 3 3/4	4 3/4	Gremis
1142R25	100-115	25	10 ct 8	3000	3 1/4 x 4 1/2 x 3 3/4	8	Gride
1142X25	100-115	25	10 ct 8	3000	3 1/4 x 4 1/2 x 3 3/4	8	Gribs
1142R60	100-115	50/60	10 ct 8	3000	3 1/4 x 3 3/4 x 3 3/4	6 1/4	Grite
1142X60	100-115	50/60	10 ct 8	3000	3 1/4 x 3 3/4 x 3 3/4	6 1/4	Grims
1143R25	100-115	25	10 ct 8	3000	3 3/4 x 6 1/4 x 4 3/4	15	Grill
1143X25	100-115	25	10 ct 8	3000	3 3/4 x 6 1/4 x 4 3/4	15	Grote
1143R60	100-115	50/60	10 ct 8	3000	3 3/4 x 4 3/4 x 4 3/4	9 3/4	Grief
1143X60	100-115	50/60	10 ct 8	3000	3 3/4 x 4 3/4 x 4 3/4	9 3/4	Groggy

FILAMENT TRANSFORMERS - Continued

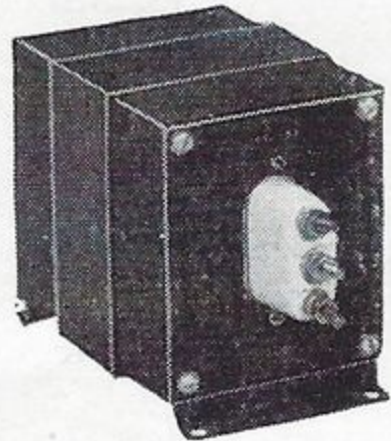
Hammond Number	Primary Taps	Cycles	Secondary Volts, Amps.	Secondary Ins. Test	Dimensions W D H	Weight	Code
1144R25	100-115	25	10 ct 10	3000	3 $\frac{3}{4}$ x6 x4 $\frac{3}{4}$	11	Grebt
1144X25	100-115	25		3000	3 $\frac{3}{4}$ x4 $\frac{1}{2}$ x4 $\frac{1}{2}$	11	Grebu
1144R60	100-115	50/60	10 ct 10	3000	3 $\frac{1}{8}$ x5 $\frac{1}{4}$ x4	7 $\frac{1}{2}$	Gredi
1144X60	100-115	50/60		3000	3 $\frac{1}{8}$ x4 $\frac{1}{2}$ x3 $\frac{3}{4}$	7 $\frac{1}{2}$	Greds
1150R25	100-115	25	11 ct 5	3000	3 $\frac{1}{8}$ x5 $\frac{1}{4}$ x4	8	Grind
1150X25	100-115	25		3000	3 $\frac{1}{8}$ x4 $\frac{1}{2}$ x3 $\frac{3}{4}$	7 $\frac{3}{4}$	Greel
1150R60	100-115	50/60	11 ct 5	3000	3 $\frac{1}{8}$ x4 $\frac{1}{4}$ x4	5 $\frac{1}{2}$	Grime
1150X60	100-115	50/60		3000	3 $\frac{1}{8}$ x3 $\frac{1}{2}$ x3 $\frac{3}{4}$	5 $\frac{1}{4}$	Greez
1152R25	100-115	25	11 ct 10	3000	3 $\frac{3}{4}$ x6 $\frac{3}{8}$ x4 $\frac{3}{4}$	11 $\frac{1}{2}$	Gripe
1152X25	100-115	25		3000	3 $\frac{3}{4}$ x4 $\frac{7}{8}$ x4 $\frac{1}{2}$	11 $\frac{1}{4}$	Grow
1152R60	100-115	50/60	11 ct 10	3000	3 $\frac{1}{8}$ x5 $\frac{1}{4}$ x4	8	Grimy
1152X60	100-115	50/60		3000	3 $\frac{1}{8}$ x4 $\frac{1}{2}$ x3 $\frac{3}{4}$	7 $\frac{3}{4}$	Groom
1153R25	100-115	25	11 ct 15	3000	3 $\frac{3}{4}$ x7 $\frac{1}{4}$ x4 $\frac{3}{4}$	15 $\frac{1}{2}$	Grito
1153X25	100-115	25		3000	3 $\frac{3}{4}$ x5 $\frac{3}{4}$ x4 $\frac{1}{2}$	14 $\frac{1}{2}$	Growl
1153R60	100-115	50/60	11 ct 15	3000	3 $\frac{3}{4}$ x5 $\frac{1}{2}$ x4 $\frac{3}{4}$	10	Grist
1153X60	100-115	50/60		3000	3 $\frac{3}{4}$ x4 $\frac{1}{2}$ x4 $\frac{1}{2}$	9 $\frac{1}{2}$	Gross
1155R25	100-115	25	14 ct 6	3000	3 $\frac{3}{4}$ x5 $\frac{3}{4}$ x4 $\frac{3}{4}$	10	Gruat
1155X25	100-115	25		3000	3 $\frac{3}{4}$ x4 $\frac{1}{4}$ x4 $\frac{1}{2}$	9 $\frac{1}{2}$	Guilt
1155R60	100-115	50/60	14 ct 6	3000	3 $\frac{1}{8}$ x4 $\frac{3}{4}$ x4	5 $\frac{3}{4}$	Groan
1155X60	100-115	50/60		3000	3 $\frac{1}{8}$ x4 x3 $\frac{3}{4}$	5 $\frac{1}{2}$	Grudg

UNIVERSAL FILAMENT TRANSFORMER

Primary is tapped to give 5.0 volts ct, 6.5 amps. or 6.3 volts ct, 6.5 amps. or 7.5 volts ct, 6.5 amps.

1109R25	115	25	3000	3 $\frac{1}{4}$ x4 $\frac{1}{2}$ x4	5 $\frac{1}{2}$	Goust
1109X25	115	25	3000	3 $\frac{1}{8}$ x4 x3 $\frac{3}{4}$	5 $\frac{1}{2}$	Grunt
1109R60	115	50/60	3000	3 $\frac{1}{4}$ x3 $\frac{3}{4}$ x4	4	Goums
1109X60	115	50/60	3000	3 $\frac{1}{8}$ x3 $\frac{1}{4}$ x3 $\frac{3}{4}$	4	Grubb

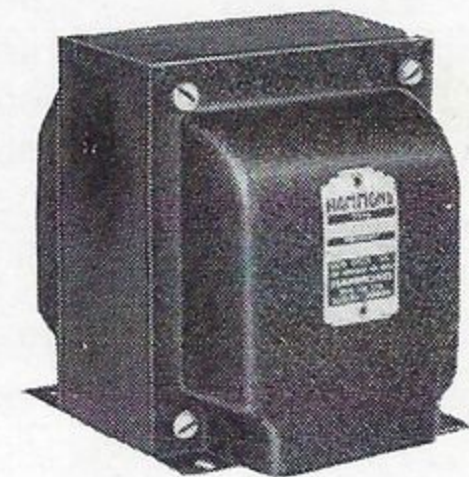
H. V. RECTIFIER FILAMENT TRANSFORMERS



"T" Mounting

Hammond Rectifier Filament Transformers are the result of years of continual development and are known throughout the country for their accuracy and freedom from breakdown. They will be found ideal for power supplies for all types of equipment, such as Commercial and Amateur Transmitters, Induction Heating Units, etc.

Special High-Voltage Filament Transformers for Voltages up to 50,000 can be built to order



"X" Mounting

Hammond Number	Primary Taps	Cycles	Secondary Volts, Amps.	Secondary Ins. Test	Maximum D.C. Volts	Dimensions W D H	Weight Lbs.	Code Word
1165T25	100-115	25	2.5 ct 5	10000	4000	3 $\frac{1}{8}$ x5 $\frac{1}{2}$ x3 $\frac{3}{4}$	4 $\frac{1}{2}$	Gloom
1165X25	100-115	25		8000	3000	2 $\frac{3}{4}$ x3 $\frac{1}{2}$ x3 $\frac{1}{2}$	4	Glout
1165T60	100-115	50/60	2.5 ct 5	10000	4000	3 $\frac{1}{8}$ x4 x3 $\frac{3}{4}$	4	Globe
1165X60	100-115	50/60		8000	3000	2 $\frac{3}{4}$ x3 $\frac{1}{4}$ x3 $\frac{1}{2}$	3	Glats
1166T25	100-115	25	2.5 ct 10	10000	4000	3 $\frac{1}{8}$ x6 x3 $\frac{3}{4}$	5 $\frac{3}{4}$	Glaze
1166X25	100-115	25		8000	3000	3 $\frac{1}{8}$ x4 x3 $\frac{3}{4}$	5 $\frac{3}{4}$	Gloms
1166T60	100-115	50/60	2.5 ct 10	10000	4000	3 $\frac{1}{8}$ x4 x3 $\frac{3}{4}$	4	Glove
1166X60	100-115	50/60		8000	3000	2 $\frac{3}{4}$ x3 $\frac{1}{4}$ x3 $\frac{1}{2}$	3	Glost
1167T25	100-115	25	2.5 ct 5	10000	4000	3 $\frac{3}{4}$ x6 $\frac{3}{4}$ x4 $\frac{1}{2}$	11 $\frac{3}{4}$	Gnarl
1167X25	100-115	25	2.5 ct 5	8000	3000	3 $\frac{3}{4}$ x4 $\frac{1}{2}$ x4 $\frac{1}{2}$	11 $\frac{3}{4}$	Goals
1167T60	100-115	50/60	2.5 ct 10	10000	4000	3 $\frac{3}{4}$ x5 $\frac{1}{2}$ x4 $\frac{3}{4}$	7 $\frac{3}{4}$	Glime
1167X60	100-115	50/60	2.5 ct 5	8000	3000	3 $\frac{3}{4}$ x4 x4 $\frac{1}{2}$	7 $\frac{3}{4}$	Gnaws
1168T25	100-115	25	2.5 ct 10	10000	4000	3 $\frac{1}{8}$ x6 $\frac{1}{4}$ x3 $\frac{3}{4}$	7 $\frac{1}{4}$	Gobel
1168X25	100-115	25		8000	3000	3 $\frac{1}{8}$ x4 $\frac{1}{4}$ x3 $\frac{3}{4}$	7	Goley
1168T60	100-115	50/60	2.5 ct 15	10000	4000	3 $\frac{1}{8}$ x4 $\frac{1}{4}$ x3 $\frac{3}{4}$	4 $\frac{3}{4}$	Goats
1168X60	100-115	50/60		8000	3000	3 $\frac{1}{8}$ x3 $\frac{1}{2}$ x3 $\frac{3}{4}$	4 $\frac{1}{2}$	Gobli
1171T25	100-115	25	5.0 ct 7.5	10000	4500	3 $\frac{3}{4}$ x6 $\frac{1}{4}$ x4 $\frac{1}{2}$	8	Gnome
1171X25	100-115	25		"	4000	3 $\frac{3}{4}$ x4 x4 $\frac{1}{2}$	8	Goner
1171T60	100-115	50/60	5.0 ct 7.5	10000	4500	3 $\frac{3}{4}$ x5 $\frac{3}{4}$ x4 $\frac{1}{2}$	6	Gnash
1171X60	100-115	50/60		"	4000	3 $\frac{3}{4}$ x3 $\frac{1}{2}$ x4 $\frac{1}{2}$	6	Golit
1172T25	100-115	25	5.0 ct 15	10000	4500	3 $\frac{3}{4}$ x7 $\frac{3}{4}$ x4 $\frac{1}{2}$	15	Golos
1172X25	100-115	25		"	4000	3 $\frac{3}{4}$ x5 $\frac{1}{2}$ x4 $\frac{1}{2}$	15	Goter
1172T60	100-115	50/60	5.0 ct 15	10000	4500	3 $\frac{3}{4}$ x6 $\frac{1}{2}$ x4 $\frac{1}{2}$	9	Going
1172X60	100-115	50/60		"	4000	3 $\frac{3}{4}$ x4 x4 $\frac{1}{2}$	9	Gossip
1173T25	100-115	25	5.0 ct 22.5	10000	4500	5 x7 x6 $\frac{1}{2}$	19 $\frac{1}{2}$	Goose
1173X25	100-115	25		"	4000	5 x5 $\frac{1}{2}$ x6 $\frac{1}{2}$	19 $\frac{1}{2}$	Gotam
1173T60	100-115	50/60	5.0 ct 22.5	10000	4500	3 $\frac{3}{4}$ x6 $\frac{7}{8}$ x4 $\frac{1}{2}$	11	Goody
1173X60	100-115	50/60		"	4000	3 $\frac{3}{4}$ x5 $\frac{1}{8}$ x4 $\frac{1}{2}$	11	Gosly

PLATE TRANSFORMERS

This line of Plate Transformers gives you all those desirable features you have been waiting for — dependability — taps, evenly spaced, for wide range of voltages — two-pie construction for exact voltage, resistance and capacity balance — ceramic insulated high Voltage terminals — scientifically correct proportioning and placing of insulation, copper and core — good regulation — high efficiency — Hammond "Hi-seal" vacuum impregnation — attractive, uniformly styled black-wrinkle enamelled cast mountings.

Each high-voltage winding is tapped at 70% of maximum and with the extended primary, which has three taps, six output voltages are available. All types designed for 115 volt lines. (120 volts max. on terminals 0 and 1.)



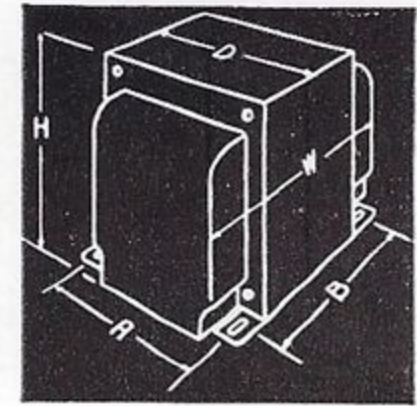
Type	Cycles	Max. Volts Per Side	Max. D.C. Ma.	D.C. Volts Output after Input Choke	Max. Pri. Amps.	Over-all Dimensions	Weight	Code
762-25	25	880	200	750, 675, 600, 525, 470, 420	2.0	5 x 8½ x 6	25	Kefka
762-60	50/60	880	200	750, 675, 600, 525, 470, 420	2.0	3¾ x 8½ x 4¾	16	Kefil
763-25	25	880	300	750, 675, 600, 525, 470, 420	2.8	5 x 10 x 6	33	Kensy
763-60	50/60	880	300	750, 675, 600, 525, 470, 420	2.8	5 x 8½ x 6	22	Kenip
764-25	25	1180	200	1000, 900, 800, 700, 630, 560	2.6	5 x 9½ x 6	34	Keoil
764-60	50/60	1180	200	1000, 900, 800, 700, 630, 560	2.6	5 x 8 x 6	20	Keovy
766-25	25	1180	300	1000, 900, 800, 700, 630, 560	3.2	5 x 11 x 6	43	Kepok
766-60	50/60	1180	300	1000, 900, 800, 700, 630, 560	3.2	5 x 9 x 6	27	Kepus
774-25	25	1740	200	1500, 1350, 1200, 1050, 945, 840	3.6	5 x 11 x 6	43	Kerto
774-60	50/60	1740	200	1500, 1350, 1200, 1050, 945, 840	3.6	5 x 9 x 6	27	Kerka
776-25	25	1740	300	1500, 1350, 1200, 1050, 945, 840	5.7	6¼ x 11¼ x 8	57	Kesak
776-60	50/60	1740	300	1500, 1350, 1200, 1050, 945, 840	5.7	5 x 10½ x 6	38	Kesop
777-25	25	1740	500	1500, 1350, 1200, 1050, 945, 840	8.7	7½ x 12¼ x 9½	80	Kejik
777-60	50/60	1740	500	1500, 1350, 1200, 1050, 945, 840	8.7	6¼ x 11¼ x 8	57	Kejir
779-25	25	1740	1000	1500, 1350, 1200, 1050, 945, 840	16	10 x 10 x 13	140	Kelka
779-60	50/60	1740	1000	1500, 1350, 1200, 1050, 945, 840	16	7½ x 12¾ x 9½	87	Kelno
783-25	25	2320	300	2000, 1800, 1600, 1400, 1260, 1120	7.7	6¼ x 12¼ x 8	68	Kekil
783-60	50/60	2320	300	2000, 1800, 1600, 1400, 1260, 1120	7.7	6¼ x 10½ x 8	48	Kekaj
784-25	25	2320	500	2000, 1800, 1600, 1400, 1260, 1120	12.0	7½ x 13¼ x 9½	93	Kegjo
784-60	50/60	2320	500	2000, 1800, 1600, 1400, 1260, 1120	12.0	7½ x 11¼ x 9½	65	Kegeg
787-25	25	2880	300	2500, 2250, 2000, 1750, 1570, 1400	8.0	7½ x 12¼ x 9½	80	Kalum
787-60	50/60	2880	300	2500, 2250, 2000, 1750, 1570, 1400	8.0	6¼ x 11¼ x 8	56	Kalia
788-25	25	2880	500	2500, 2250, 2000, 1750, 1570, 1400	15.0	7½ x 14¼ x 9½	110	Karop
788-60	50/60	2880	500	2500, 2250, 2000, 1750, 1570, 1400	15.0	7½ x 11¾ x 9½	72	Karla
793-25	25	3450	300	3000, 2700, 2400, 2100, 1880, 1680	10.8	7½ x 13 x 9½	90	Kilti
793-60	50/60	3450	300	3000, 2700, 2400, 2100, 1880, 1680	10.8	7½ x 11 x 9½	61	Kilek
795-25	25	3450	500	3000, 2700, 2400, 2100, 1880, 1680	18	10 x 10 x 13	140	Kolim
795-60	50/60	3450	500	3000, 2700, 2400, 2100, 1880, 1680	18	7½ x 12¼ x 9½	80	Kolix

"HAMMOND CONTROL TRANSFORMERS — 4VA TO 10,000VA"

PLATE TRANSFORMERS - "X" Mounting



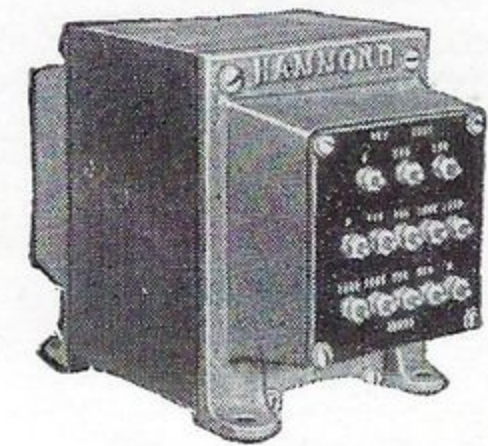
Here is a line of Plate Transformers that will be found ideal for transmitters, amplifiers and electronic equipment. They are housed in drawn steel cases, attractively finished in black wrinkle which matches most other equipment. Accurately wound coils with hi-seal vacuum impregnation assures maximum reliability. Insulated leads 10" long are provided and all ratings are for choke input. I.C.A.S. Primaries wound for 115 volts.



Type	Cycle	Sec. Volts	D.C. Volts	D.C. MA.	Pri. Va.	A	B	D	H	W	Weight lbs.	Code
710	60	375-0-375	300	300	125	3	2 1/2	3 3/4	4 1/2	3 3/4	7 1/4	Honey
	25	"	"	"	"	3	3 3/8	3 3/4	4 1/2	5 1/8	11 1/2	Honor
714	60	510-0-510	400	170	122	3	2 3/4	3 3/4	4 1/2	4 1/4	7 3/4	Honpo
	25	"	"	"	"	3	3 1/2	3 3/4	4 1/2	5	11 1/2	Honti
715	60	510-0-510	400	300	160	3	2 3/4	3 3/4	4 1/2	4 1/4	9	Hooch
	25	"	"	"	"	3	4	3 3/4	4 1/2	5 1/2	15	Horn
717	60	510-0-510	400	500	300	4 9/16	3 1/4	5	6 1/2	5 1/4	17 3/4	Hotel
	25	"	"	"	"	4 9/16	4 1/2	5	6 1/2	6 1/2	26 1/2	Hound
720	60	625-0-625	500	300	190	3	3 3/4	3 3/4	4 1/2	5 1/4	13	Horse
	25	"	"	"	"	4 9/16	3 1/4	5	6 1/2	5 1/4	17 3/4	Horsy
722	60	625-0-625	500	500	375	4 9/16	3 1/4	5	6 1/2	5 1/2	17 3/4	Hough
	25	"	"	"	"	4 9/16	5	5	6 1/2	7	30	House
724	60	750-0-750	625	200	200	3	3 1/2	3 3/4	4 1/2	5	12	Houxi
	25	"	"	"	"	4 9/16	3 1/2	5	6 1/2	5 1/2	20	Houxo
726	60	890-0-890	750	175	205	3	3 3/4	3 3/4	4 1/2	5 1/4	13	Horta
	25	"	"	"	"	4 9/16	3 1/4	5	6 1/2	5 1/4	17 3/4	Hortz
728	60	1000-0-1000	850	150	205	3	3 3/4	3 3/4	4 1/2	5 1/4	13	Hosea
	25	"	"	"	"	4 9/16	3 1/4	5	6 1/2	5 1/4	17 3/4	Hosie
732	60	1250-0-1250	1000	200	320	4 9/16	3 1/4	5	6 1/2	5 1/4	17 3/4	Hoxil
	25	"	"	"	"	4 9/16	5 1/4	5	6 1/2	7	30	Hoxud
733	60	1250-0-1250	1000	300	475	4 9/16	4 1/4	5	6 1/2	6	24	Hoxum
	25	"	"	"	"	4 9/16	6 3/4	5	6 1/2	8 1/2	41	Hoxva

UNIVERSAL PLATE TRANSFORMERS

Here are two transformers that are ideally suited for the amateur, experimenter, universities and research laboratories. The specifications below show that the transformers are very flexible, covering widely different voltage and current requirements. The 757 transformers are rated at 400 VA. and the 767's at 600 VA. The coils are accurately wound and "hi-seal" vacuum impregnated. These outputs are D.C. after 12-300 Input Choke using 866's. (Send for Data Sheets.) Heavy-duty construction throughout, Bakelite Terminal Plate with bolt type terminals. Black wrinkle finish. C.C.S. Rating.



Type 757

1000 volts	250 ma. D.C.
800 "	250 ma. D.C.
750 "	250 ma. D.C.
600 "	250 ma. D.C.
500 "	500 ma. D.C.
450 "	250 ma. D.C.
375 "	500 ma. D.C.
375 "	200 ma. and 500 volts 300 ma. D.C.
225 "	200 ma. and 375 volts 300 ma. D.C.

60 Cycle, Net Weight 22 lbs.....	Code Gliso
25 Cycle, Net Weight 31 lbs.....	Code Glora

Type 767

1500 volts	250 ma. D.C.
1200 "	250 ma. D.C.
1125 "	250 ma. D.C.
900 "	250 ma. D.C.
750 "	500 ma. D.C.
675 "	250 ma. D.C.
490 "	500 ma. D.C.
490 "	200 ma. and 750 volts 300 ma. D.C.
575 "	200 ma. and 375 volts 300 ma. D.C.

60 Cycle, Net Weight 31 lbs.....	Code Glite
25 Cycle, Net Weight 46 lbs.....	Code Gliza

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

Some Facts About Hammond

During the last quarter century, the Hammond Company has been called upon to make many varied and complicated types of transformers and reactors. In order to do this, we have built our organization into a well-knit group of specialists, many of whom have been with us since the beginning. We have also procured the finest test and production equipment in order to assure you of the best. Transformer users are invited to bring their special problems to the Hammond Manufacturing Company where the service of a qualified technical staff, plus a fully equipped research laboratory, are available.

Some of the test facilities are:

- Power at 25, 50, 60, 400 cycles, single and 3 phase.
- Power, variable single phase to 200KC.
- Measurement of voltage, AC and DC from 1 millivolt to 15,000 volts.
- Measurement of current, AC and DC from 1 ua to 300 amps.
- Measurement of inductance, capacity, resistance, to close tolerances.
- Humidity to 95 per cent.
- Measurement of Audio Distortion.
- Measurement of Insulation Resistance.
- Corona.
- Breakdown to 50KV.
- Salt Spray and Immersion.
- Vibration and Inclination.
- Pulse Generators.
- Oscilloscopes — to observe and measure pulse waveforms of a fraction of a micro-sec duration.

Our range of products is large and varied — from sub-miniatures weighing 1/3 ounce to types weighing over 1,000 pounds, and with our excellent production facilities, we are able to give you the best service no matter how specialized, and at a remarkably reasonable price.

- Hermetically sealed transformers to JAN — Mil-T-27 — JCNAAF-T-19.
- Filament transformers to 2,000 amps.
- Plate transformers to 50,000 volts.
- Chokes and reactors from 1 MH to 5,000 H DC to 500 amps.
- Hybrids.
- Magnetic Amplifiers.
- Filters.
- Three phase — 25 cycle to 400 cycle — up to 50KVA.
- Single phase 25 cycle to 200KC — up to 15KVA.
- Saturable Reactors.
- Miniature, sub-miniature audios.

SHEET METAL —

A modern and well-equipped Sheet Metal Department is maintained for fabrication of cases and mountings for transformers, our standard line of sheet-metal goods and special items made to your specifications.

FINISHING —

Complete facilities for Hammerlin, enamels and wrinkle finishes and also to JCNAAF-P-201 specifications (called for in Mil-T-27). Plating facilities — Cadmium — Nickel — Tin — Copper — Zinc Plating.

WHETHER YOU REQUIRE ONE OR SEVERAL THOUSAND — CONSULT HAMMOND

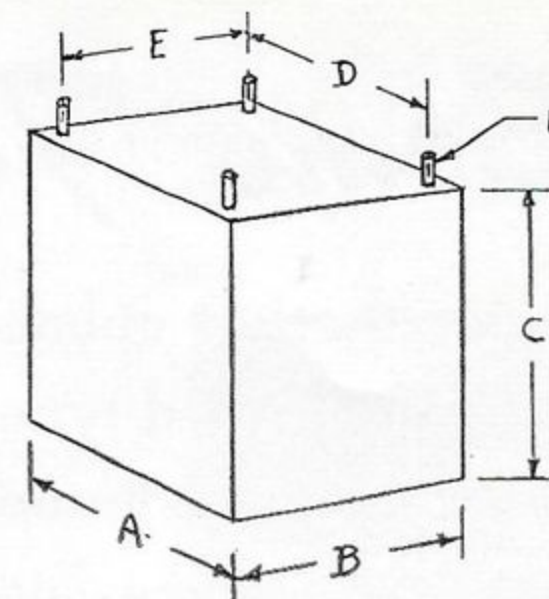
“CANADA'S FOREMOST AMATEUR PRODUCTS”

HAMMOND STANDARD CASES

• FOR COMPOUND OR OIL

• WITH STUDS OR INSERTS

In order to meet the requirements in mountings for transformers, Hammond carry a line of standard cases, which are ruggedly constructed. These are for use with standard E-1 type laminations, and are listed below. In addition to this type of case, a wide range of other mountings are carried.



DIMENSIONS FOR HAMMOND STANDARD CASES

TYPE	A	B	C	D	E	F
GD	$1\frac{7}{16}$	$1\frac{1}{2}$	TO BE DETERMINED	$\frac{7}{8}$	two studs on centre line	6-32 x $\frac{3}{8}$
GE	$1\frac{11}{16}$	$1\frac{13}{16}$		1	$1\frac{1}{4}$	8-32 x $\frac{3}{8}$
GF	$2\frac{3}{8}$	$2\frac{3}{4}$		$1\frac{13}{16}$	$2\frac{3}{16}$	8-32 x $\frac{3}{8}$
GG	$2\frac{11}{16}$	$3\frac{1}{8}$		2	$2\frac{7}{16}$	8-32 x $\frac{3}{8}$
GH	$3\frac{1}{8}$	$3\frac{5}{8}$		$2\frac{1}{2}$	3	10-32 x $\frac{1}{2}$
GJ	$3\frac{7}{16}$	$4\frac{1}{16}$		$2\frac{3}{4}$	$3\frac{3}{8}$	$\frac{1}{4}$ -20 x $\frac{5}{8}$
GK	$3\frac{11}{16}$	$4\frac{5}{16}$		3	$3\frac{5}{8}$	$\frac{1}{4}$ -20 x $\frac{5}{8}$
GL	4	$4\frac{11}{16}$		$3\frac{5}{16}$	4	$\frac{1}{4}$ -20 x $\frac{5}{8}$
GM	$4\frac{5}{16}$	$5\frac{3}{16}$		$3\frac{5}{8}$	$4\frac{1}{2}$	$\frac{1}{4}$ -20 x $\frac{5}{8}$
GO	5	$5\frac{7}{8}$		$4\frac{1}{8}$	5	$\frac{5}{16}$ -18 x $\frac{3}{4}$
GP	$5\frac{3}{4}$	$6\frac{3}{4}$		$4\frac{7}{8}$	$5\frac{7}{8}$	$\frac{5}{16}$ -18 x $\frac{3}{4}$
GQ	7	$8\frac{1}{4}$		$6\frac{1}{8}$	$7\frac{3}{8}$	$\frac{5}{16}$ -18 x $\frac{3}{4}$
GR	$8\frac{5}{8}$	$10\frac{1}{8}$		$7\frac{3}{4}$	$9\frac{1}{4}$	$\frac{3}{8}$ -16 x $\frac{3}{4}$

SUPERSEDES DATA ON PAGE 23 - CATALOGUE 57

NOTES:

- Dimensions other than screw threads are in inches.
- Screw stud lengths are measured from mounting surface.
- TOLERANCES
 - Outside dimensions — cases GD and GE $+0 -\frac{1}{16}$, all others $+0 -\frac{1}{8}$
 - Mounting centres — cases GD to GM $\pm 1/64$; cases GO to GR $\pm 1/32$
 - Stud lengths $\pm \frac{1}{16}$
- Location of mounting studs or inserts
 - For studs or inserts at terminal end add E to type number, viz. GF-E
 - For studs or inserts at end opposite terminals add D to type number, viz. GF-D
 - For studs or inserts at both ends add ED to type number, viz. GF-ED
- STUD MOUNTING WILL BE SUPPLIED UNLESS OTHERWISE SPECIFIED. Inserts can be supplied on all cases except types GD and GE

IN ADDITION TO THE ABOVE MOUNTINGS, WE HAVE THE FOLLOWING:

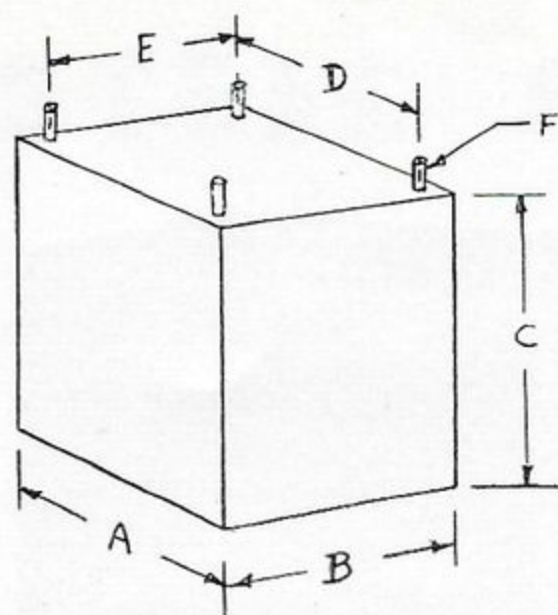
*Open Horizontal Frames
 *Open Vertical Frames
 *Three Phase
 *"R" Type

*"X" Type
 *"Z" Type
 *Bracket
 *Castings

*Dimension sheets available on request.

COMPLETE FACILITIES FOR MAKING ANY SPECIAL MOUNTINGS TO YOUR REQUIREMENTS

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA



HAMMOND STANDARD CASES

• JCNAAF - T - 19

• MIL - T - 27

Transformers to meet all the various tests required in JCNAAF-T-19 or MIL-T-27 specifications can be supplied promptly. For ready reference, standard military case sizes are listed below.

Large and varied stocks of vacuum tight terminals covering high and low voltages are kept on hand, also all types of core material.

Case Symbol	Case Dimensions (Maximum)			Mounting Dimensions		
	A	B	C	D	E	F
AF	$\frac{3}{4}$	$\frac{3}{4}$	$1\frac{1}{8}$			
AG	1	1	$1\frac{3}{8}$			
AH	$1\frac{5}{16}$	$1\frac{5}{16}$	$1\frac{3}{4}$			
AJ	$1\frac{5}{8}$	$1\frac{5}{8}$	$2\frac{3}{8}$			
EA	$1\frac{15}{16}$	$1\frac{13}{16}$	$2\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{4}$	6-32 x $\frac{3}{8}$
EB	$1\frac{15}{16}$	$1\frac{13}{16}$	$2\frac{7}{16}$	$1\frac{3}{8}$	$1\frac{1}{4}$	6-32 x $\frac{3}{8}$
FA	$2\frac{5}{16}$	$2\frac{1}{16}$	$3\frac{1}{8}$	$1\frac{11}{16}$	$1\frac{7}{16}$	6-32 x $\frac{3}{8}$
FB	$2\frac{5}{16}$	$2\frac{1}{16}$	$2\frac{1}{2}$	$1\frac{11}{16}$	$1\frac{7}{16}$	6-32 x $\frac{3}{8}$
GA	$2\frac{3}{4}$	$2\frac{3}{8}$	$3\frac{13}{16}$	$2\frac{1}{8}$	$1\frac{3}{4}$	6-32 x $\frac{3}{8}$
GB	$2\frac{3}{4}$	$2\frac{3}{8}$	$2\frac{13}{16}$	$2\frac{1}{8}$	$1\frac{3}{4}$	6-32 x $\frac{3}{8}$
HA	$3\frac{1}{16}$	$2\frac{5}{8}$	$4\frac{1}{4}$	$2\frac{19}{64}$	$1\frac{55}{64}$	8-32 x $\frac{3}{8}$
HB	$3\frac{1}{16}$	$2\frac{5}{8}$	$3\frac{3}{16}$	$2\frac{19}{64}$	$1\frac{55}{64}$	8-32 x $\frac{3}{8}$
JA	$3\frac{9}{16}$	$3\frac{1}{16}$	$4\frac{7}{8}$	$2\frac{5}{8}$	$2\frac{1}{8}$	8-32 x $\frac{3}{8}$
JB	$3\frac{9}{16}$	$3\frac{1}{16}$	$3\frac{7}{8}$	$2\frac{5}{8}$	$2\frac{1}{8}$	8-32 x $\frac{3}{8}$
KA	$3\frac{15}{16}$	$3\frac{3}{8}$	$5\frac{1}{4}$	3	$2\frac{7}{16}$	10-32 x $\frac{1}{2}$
KB	$3\frac{15}{16}$	$3\frac{3}{8}$	$4\frac{5}{16}$	3	$2\frac{7}{16}$	10-32 x $\frac{1}{2}$
LA	$4\frac{5}{16}$	$3\frac{11}{16}$	$5\frac{9}{16}$	$3\frac{5}{16}$	$2\frac{11}{16}$	10-32 x $\frac{1}{2}$
LB	$4\frac{5}{16}$	$3\frac{11}{16}$	$4\frac{1}{2}$	$3\frac{5}{16}$	$2\frac{11}{16}$	10-32 x $\frac{1}{2}$
MA	$4\frac{11}{16}$	4	6	$3\frac{11}{16}$	3	$\frac{1}{4}$ -20 x $\frac{5}{8}$
MB	$4\frac{11}{16}$	4	$4\frac{15}{16}$	$3\frac{11}{16}$	3	$\frac{1}{4}$ -20 x $\frac{5}{8}$
NA	$5\frac{1}{16}$	$4\frac{5}{16}$	$6\frac{13}{16}$	$4\frac{1}{16}$	$3\frac{5}{16}$	$\frac{1}{4}$ -20 x $\frac{5}{8}$
NB	$5\frac{1}{16}$	$4\frac{5}{16}$	$5\frac{1}{2}$	$4\frac{1}{16}$	$3\frac{5}{16}$	$\frac{1}{4}$ -20 x $\frac{5}{8}$

NOTES:

1. Dimensions other than screw threads are in inches.
2. Tolerances on dimensions A, B, and C are $+0$ to $-\frac{1}{16}$ for cases AF, AG, AH, and AJ and $+0$ to $-\frac{1}{8}$ for all other cases.
3. Tolerances on dimensions D and E are $\pm 1/64$.
4. Screw-stud lengths are measured from the mounting surface.

COMPLETE FACILITIES FOR MAKING NON-STANDARD CASES

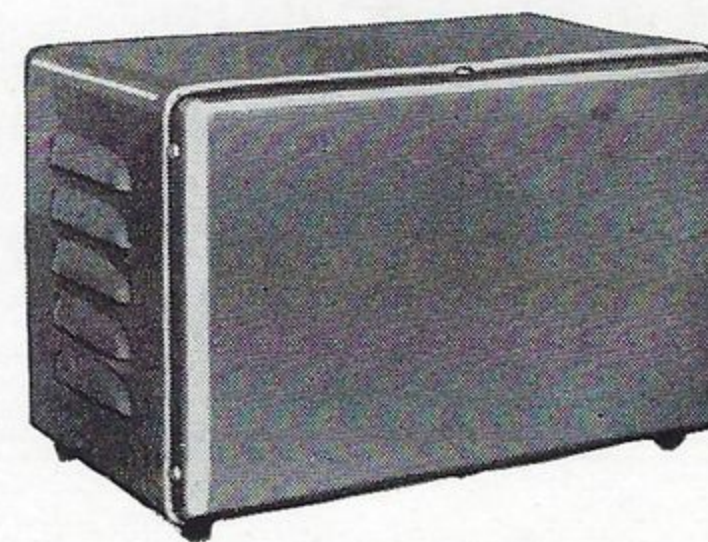
"TRANSFORMERS FROM ONE MILLIWATT TO 50,000 WATTS"

MULTI-USE METAL CABINETS

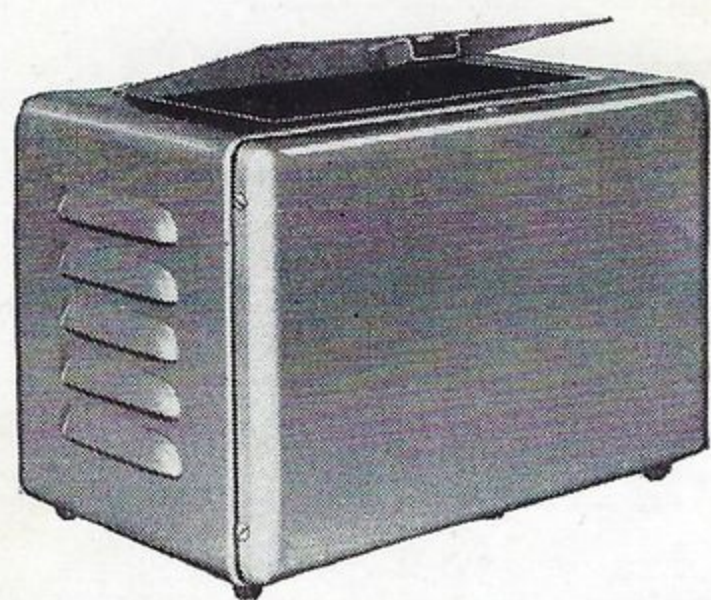
1402 SERIES

All-purpose cabinets of modern appearance with smooth rounded corners. Designed for use by studios, laboratories, amateurs, etc. Removable front panel, rubber feet, and ventilating louvres on the ends and back. Openings provided in rear for leads, etc. A range available for most standard chassis.

Standard Finish — Gray Hammerlin



Type	Dimensions	For Chassis	Shipping Wgt.	Code
1402-B	4 $\frac{1}{8}$ x 8 $\frac{3}{4}$ x 6	1440-10	4 lbs.	Luiba
1402-C	5 $\frac{1}{8}$ x 9 $\frac{3}{4}$ x 7	1440-14	5 $\frac{1}{2}$ "	Luibe
1402-D	6 $\frac{1}{8}$ x 10 $\frac{3}{4}$ x 7	1440-16	7 "	Luibs
1402-E	8 $\frac{1}{8}$ x 12 $\frac{3}{4}$ x 8	1440-22, 24	10 "	Luefa
1402-G	8 $\frac{1}{8}$ x 16 $\frac{3}{4}$ x 8	1440-26, 28	12 "	Lulof
1402-H	10 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 8	1440-30, 32	16 "	Lulta
1402-I	12 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 8	1440-34, 36	18 "	Lufts
1402-J	14 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 10	1440-38, 40	22 "	Lufor



1403 SERIES

This series is similar in construction to the 1402 series except it is provided with a hinged lid for accessibility to components.

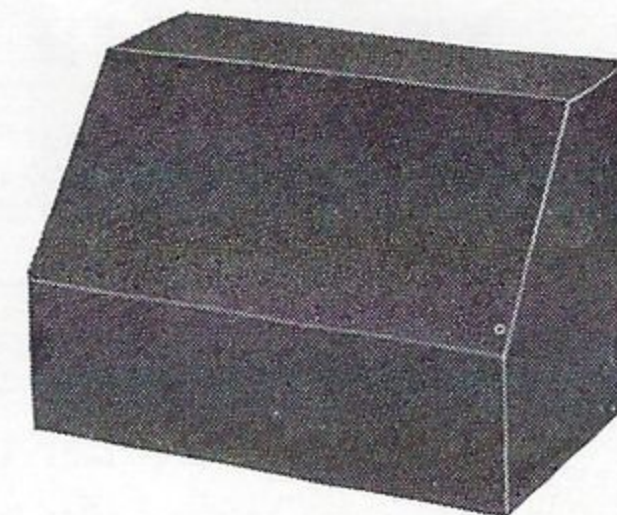
Standard Finish — Gray Hammerlin

Type	Dimensions	For Chassis	Shipping Wgt.	Code
1403C	5 $\frac{1}{8}$ x 9 $\frac{3}{4}$ x 7	1440-14	5 $\frac{1}{2}$ lbs.	Leebe
1403D	6 $\frac{1}{8}$ x 10 $\frac{3}{4}$ x 7	1440-16	7 "	Leeds
1403E	8 $\frac{1}{8}$ x 12 $\frac{3}{4}$ x 8	1440-22, 24	10 "	Leefr
1403G	8 $\frac{1}{8}$ x 16 $\frac{3}{4}$ x 8	1440-26, 28	12 "	Lelof
1403H	10 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 8	1440-30, 32	16 "	Lelta
1403I	12 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 8	1440-34, 36	18 "	Leftn
1403J	14 $\frac{1}{8}$ x 17 $\frac{3}{4}$ x 10	1440-38, 40	22 "	Lefor

SLOPING-FRONT CABINETS

May be rapidly adapted as instrument cases or other equipment for use in laboratories and commercial units. Front is removable, and an opening in back for chassis connections.

Standard Finish — Gray Hammerlin

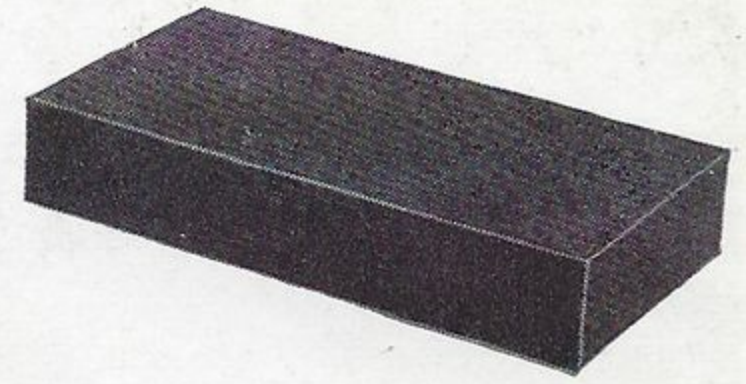


Type	Dimensions	For Chassis	Shipping Wgt.	Code
1404B	5 $\frac{1}{8}$ x 10 x 6 $\frac{1}{4}$	1440-14	3 lbs.	Lefot
1404D	6 $\frac{1}{8}$ x 11 x 7 $\frac{1}{4}$	1440-16	3 $\frac{3}{4}$ "	Lefil
1404F	8 $\frac{1}{8}$ x 13 x 9 $\frac{1}{4}$	1440-22	4 $\frac{3}{4}$ "	Lefim
1404H	8 $\frac{1}{8}$ x 17 x 9 $\frac{1}{4}$	1440-28	6 $\frac{1}{2}$ "	Lefjb

HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

STEEL CHASSIS

Substantially constructed for heavy-duty uses, with all corners reinforced and spotwelded. The bottom edges are flanged in on four sides for additional strength. Ideal for sound amplifiers, electronic, radio and other equipment. Standard finishes — Black Wrinkle, Gray Hammerlin, Bright Zinc.



Black W.	Gray H.	Bright Zinc	W	L	H	Gauge	Wgt. Lbs.
1440-10	1441-10	1442-10	4	8	2	22	1
1440-12	1441-12	1442-12	5	7	2	22	1 1/4
1440-14	1441-14	1442-14	5	9	2	22	1 1/2
1440-16	1441-16	1442-16	6	10	2	20	1 3/4
1440-18	1441-18	1442-18	5	13 1/2	2	20	1 3/4
1440-20	1441-20	1442-20	4	17	3	20	2 1/2
1440-22	1441-22	1442-22	8	12	2	20	2 1/2
1440-24	1441-24	1442-24	8	12	3	20	3
1440-26	1441-26	1442-26	8	16	2	20	3 1/4
1440-28	1441-28	1442-28	8	16	3	20	3 1/2
1440-30	1441-30	1442-30	10	17	2	20	3 3/4
1440-32	1441-32	1442-32	10	17	3	20	4
1440-34	1441-34	1442-34	12	17	2	18	4 1/2
1440-36	1441-36	1442-36	12	17	3	18	5
1440-38	1441-38	1442-38	14	17	3	18	6
1440-40	1441-40	1442-40	14	17	4	18	7
1440-42	1441-42	1442-42	14	17	5	16	7 1/2

CHASSIS BOTTOM PLATES



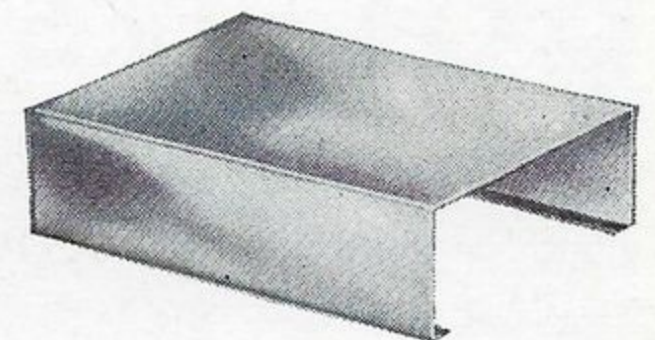
Made of cold-rolled steel. Protects parts under chassis from damage and dust. Each plate has four formed bosses near the corners and four screw holes.

Black	Gray	Zinc	Dimensions
1430-10	1431-10	1432-10	4 x 8
1430-12	1431-12	1432-12	5 x 7
1430-14	1431-14	1432-14	5 x 9
1430-16	1431-16	1432-16	6 x 10
1430-18	1431-18	1432-18	5 x 13 1/2
1430-20	1431-20	1432-20	4 x 17
1430-22	1431-22	1432-22	8 x 12
1430-26	1431-26	1432-26	8 x 16
1430-30	1431-30	1432-30	10 x 17
1430-34	1431-34	1432-34	12 x 17
1430-38	1431-38	1432-38	14 x 17

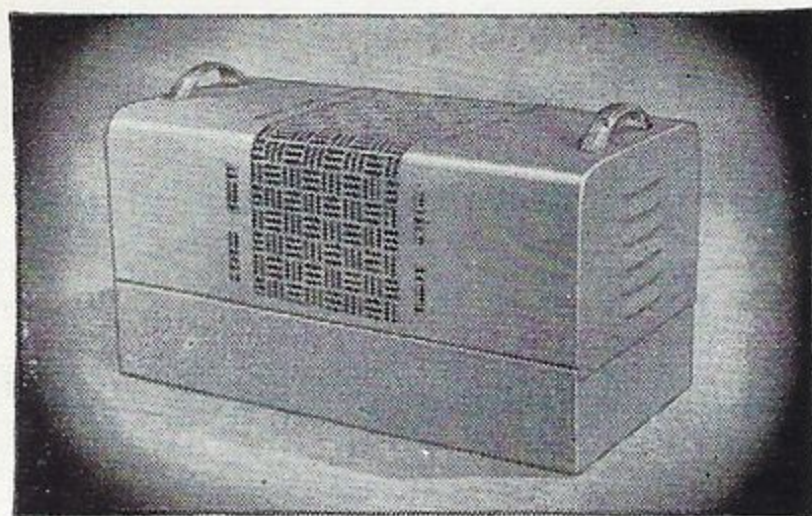
OPEN END ALUMINUM CHASSIS

"U"-shaped construction — an ideal and inexpensive aluminum chassis for proto-types. Made of half-hard aluminum — unfinished.

Type	W	L	H
1419-D	5	7	2
1419-F	5	13 1/2	2
1419-H	8	12	2
1419-J	8	16	3



"CANADA'S MOST COMPLETE TRANSFORMER LINE"



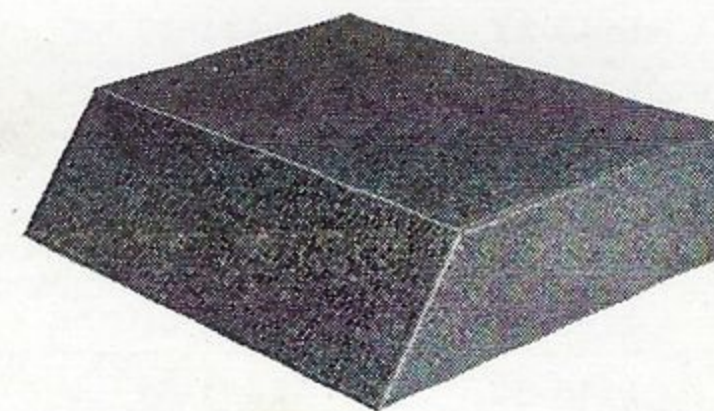
VENTILATED CHASSIS COVERS

These attractive chassis covers give you modern appearance with ample ventilation and protection. Rigidly constructed. Standard Finishes — Black Wrinkle (BW) and Gray Hammerlin (GH).

Type		Dimensions	For Chassis Size	Type		Dimensions	For Chassis Size
Black Wrinkle	Gray Hammerlin			Black Wrinkle	Gray Hammerlin		
1450-10	1451-10	4 x 8 x 5 1/4	10	1450-30	1451-30	10 x 17 x 5 1/4	30-32
1450-14	1451-14	5 x 9 x 5 1/4	14	1450-34	1451-34	12 x 17 x 5 1/4	34-36
1450-16	1451-16	6 x 10 x 5 1/4	16	1450-38	1451-38	14 x 17 x 5 1/4	38-40-42
1450-22	1451-22	8 x 12 x 5 1/4	22-24	1450-40	1451-40	14 x 17 x 7	38-40-42
1450-26	1451-26	8 x 16 x 5 1/4	26-28				

SLOPING FRONT CHASSIS

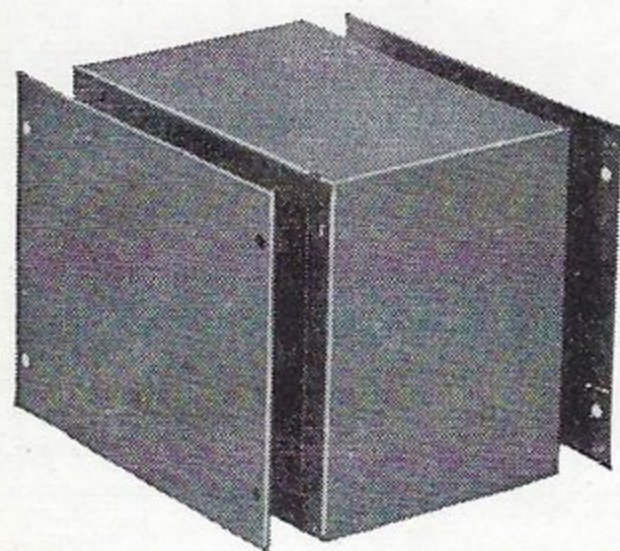
Similar to our 1440 Series, except with sloping front. Standard Finish — Black Wrinkle (BW), Gray Hammerlin (GH).



Type		Over-all Dimensions	Cover Equivalent	Wt. Lbs.
Black Wrinkle	Gray Hammerlin			
1440-16S	1441-16S	7 1/2 x 10 x 2	1450/1-16	2
1440-24S	1441-24S	10 1/2 x 12 x 3	1450/1-24	3 1/4
1440-32S	1441-32S	12 1/2 x 17 x 3	1450/1-32	4 1/2
1440-38S	1441-38S	16 1/2 x 17 x 3	1450/1-38	6 1/4

BASES FOR SLOPING FRONT CHASSIS

Type		Dimensions	Type		Dimensions
Black Wrinkle	Gray Hammerlin		Black Wrinkle	Gray Hammerlin	
1430-16S	1431-16S	7 1/2 x 10	1430-32S	1431-32S	12 1/2 x 17
1430-24S	1431-24S	10 1/2 x 12	1430-38S	1431-38S	16 1/2 x 17



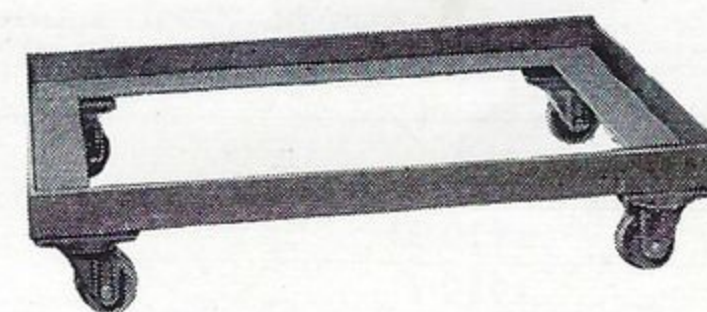
UTILITY CASES

A new line of metal Utility Cases designed for portable equipment, oscilloscopes, transceivers, T.V. Boosters, Test Equipment, etc. Spot-welded construction assures maximum strength and minimum weight. Made with front and back removable. Standard finish is Black Wrinkle or Gray Hammerlin.

Type No.	Depth	Width	Height	Ship. Wgt.	Type No.	Depth	Width	Height	Ship. Wgt.
1415 A	2	4	4	1	1415 F	7	8	10	5
1415 B	3	5	4	2	1415 G	6	7	12	5
1415 C	4	5	6	2 1/2	1415 H	8	10	10	7
1415 D	6	6	6	3	1415 I	8	11	12	8
1415 E	5	6	9	3 1/2	1415 J	7	9	15	9

DOLLIES

Roller Trucks (Dollies) for Cabinets. These trucks are especially designed for use on our 1460-2-3 Series of Cabinets. Rigidly constructed of 3/16" steel angle. Castors are ball-bearing swivel type with 2" hard rubber wheels. Standard Finish — Black Wrinkle (BW) or Gray Hammerlin (GH).



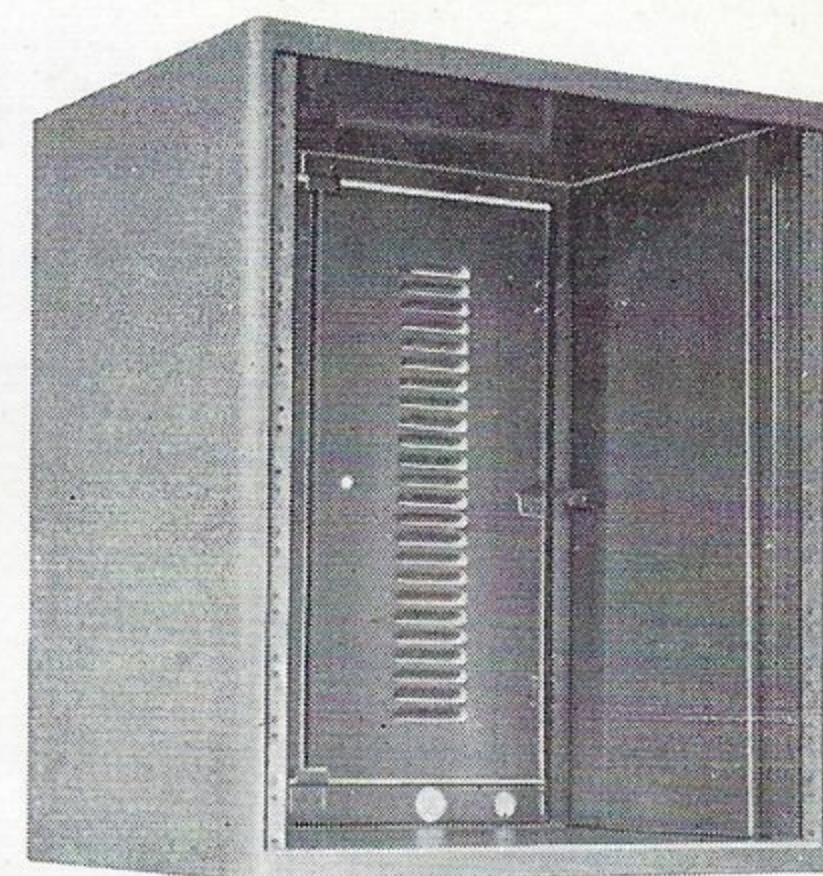
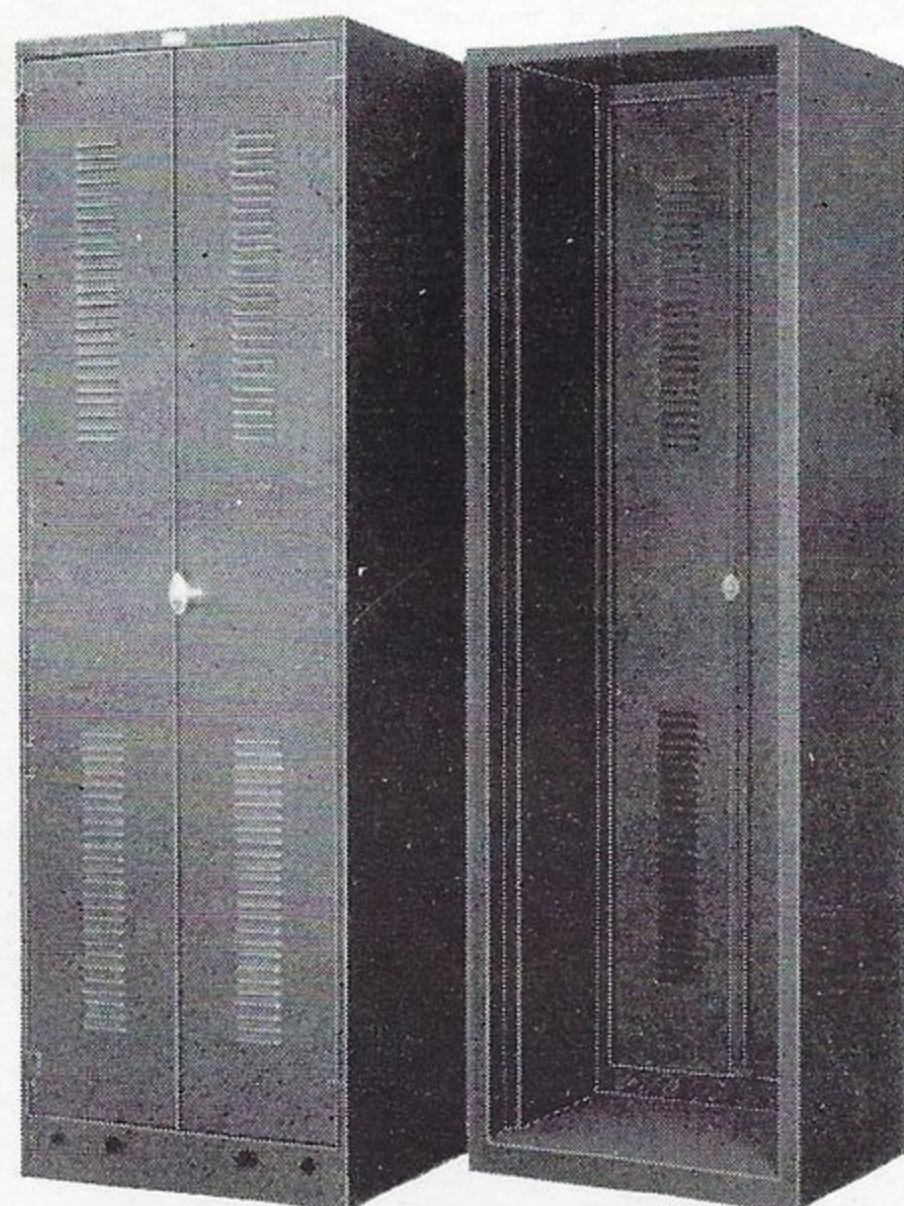
Type		Will Fit Cabinet	Inside Clearance
Black Wrinkle	Gray Hammerlin		
RB-15	RG-15	1460-2 Series	21 1/4 x 16 1/4
RB-17	RG-17	1463 Series	23 1/4 x 17 3/4

CABINET RACKS

1460 SERIES DESK-TYPE CABINET RACK

A modern, rugged, all-welded cabinet, ideal for public address systems, transmitters' test equipment, etc. Beautifully designed — hinged lid for accessibility — rounded front covers. Panels fitted into a recess. Removable connection panel for BX or cables — hinged rear door on all but B, C, D — chassis support brackets supplied. Over-all width 21" — depth, front to back, 16". Standard finish: Gray Hammerlin or Black Wrinkle.

Type	Panel Space	Over-all Height	Shipping Wt.	Code
1460B	8 $\frac{3}{4}$ "	10 $\frac{3}{4}$ "	16 lbs.	Lilab
1460C	10 $\frac{1}{2}$ "	12 $\frac{1}{2}$ "	18 lbs.	Lilam
1460D	14 "	16 "	25 lbs.	Lilaf
1460F	22 $\frac{3}{4}$ "	24 $\frac{3}{4}$ "	42 lbs.	Lilac
1460H	28 "	30 "	47 lbs.	Lilax
1460J	33 $\frac{1}{4}$ "	35 $\frac{1}{4}$ "	52 lbs.	Lilay
1460K	40 $\frac{1}{4}$ "	42 $\frac{1}{4}$ "	58 lbs.	Lilbc
1460M	47 $\frac{1}{4}$ "	49 $\frac{1}{4}$ "	67 lbs.	Lilcd
1460P	54 $\frac{1}{4}$ "	56 $\frac{1}{4}$ "	75 lbs.	Lildh



1462 SERIES FLOOR-TYPE CABINET RACK

Heavy duty, all-welded cabinets for commercial and industrial uses. Panels fitted into a recess. Panel holes are jig-drilled and tapped for 10/32 screws on standard 1 $\frac{1}{4}$ "-1 $\frac{1}{2}$ " spacing. Single louvred door on rear. Panel for cable connections. Integral walls for cable ways, and chassis support brackets. Brackets and necessary screws supplied. Standard finish — Gray Hammerlin or Black Wrinkle. Dimensions — 20 $\frac{1}{4}$ " wide, 16" front to back.

Type	Panel Space	Over-all Height	Shipping Wt.	Code
1462B	61 $\frac{1}{4}$ "	64 "	135 lbs.	Limbo
1462C	70 "	72 $\frac{3}{4}$ "	150 lbs.	Limga
1462E	80 $\frac{1}{2}$ "	83 $\frac{5}{16}$ "	165 lbs.	Limso

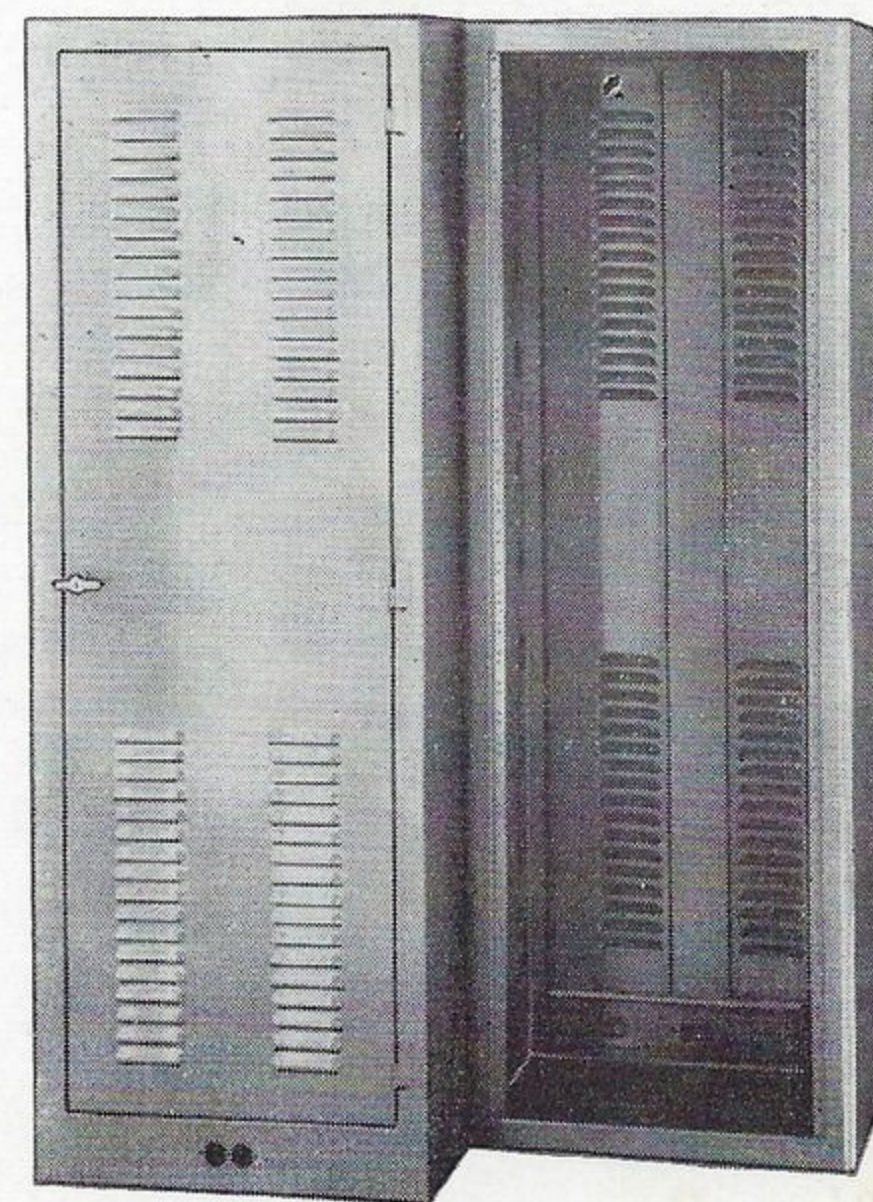
1463 SERIES FLOOR-TYPE CABINET RACK

This new streamlined cabinet rack will provide a welcome addition to our line. It combines the same rugged all-welded construction of our 1462 series with modern styling. Ideal for commercial installation and makes a de luxe job of any amateur or broadcast transmitter or Hi-power sound installation.

SPECIFICATIONS

- Over-all dimensions — width 22 $\frac{1}{2}$ " — depth 17 $\frac{1}{2}$ ".
 - Made of $\frac{1}{16}$ " steel, rigidly constructed and reinforced throughout. Bottom is 14 gauge steel.
 - Panel mounting angles are $\frac{1}{8}$ " thick, and mounting holes are accurately drilled and tapped 10/32" on multiple 1 $\frac{1}{4}$ "-1 $\frac{1}{2}$ " spacing.
 - Rear door provided with ventilating louvres top and bottom and hung on slip-pin hinges. Locked at top, bottom and side by three-way keyed lock.
 - Trim strips to cover panel mounting screws, and chrome trim at top and bottom.
 - Rectangular opening in the bottom for conduits, leads, etc., with removable cover plate.
 - Panel for cable connection and duplex receptacle on rear.
 - Standard finish, Gray Hammerlin.
- (Available in other finishes at slight extra cost.)

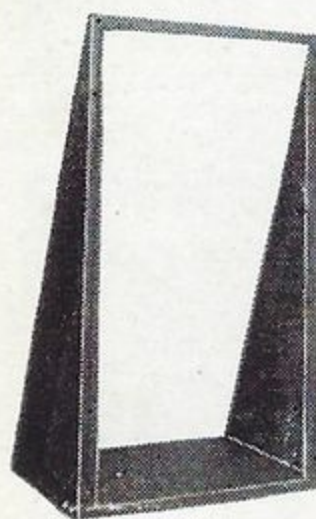
Type	Panel Space	Over-all Height	Shipping Wgt.	Code
1463B	61 $\frac{1}{4}$ "	64 $\frac{3}{4}$ "	135 lbs.	Limta
1463C	70 "	73 $\frac{1}{2}$ "	150 lbs.	Limub
1463E	80 $\frac{1}{2}$ "	84 "	165 lbs.	Limve



"IT PAYS TO BUY HAMMOND QUALITY PRODUCTS"

RELAY RACKS

1465 SERIES RELAY RACKS - DESK TYPE



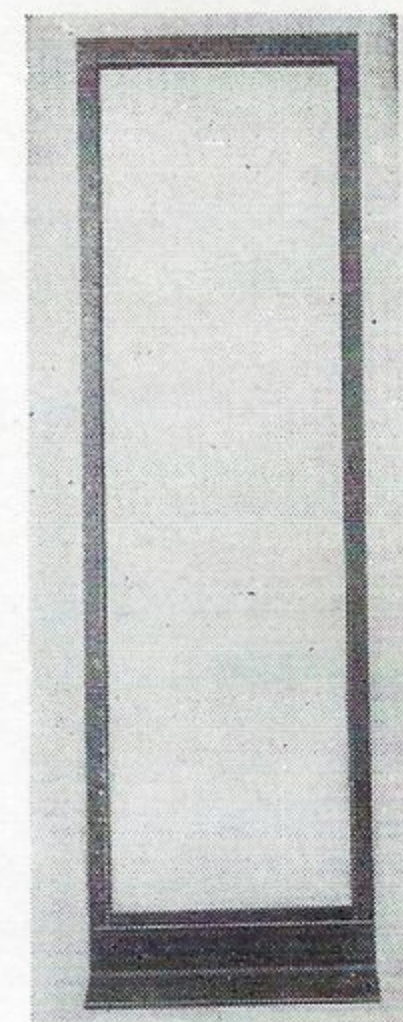
These low-priced Racks are ideal for small Transmitters, Test Equipment, Public Address Installations or any units mounted on standard panels. All welded construction. Drilled and tapped for standard panels. Black wrinkle. (BW)

Type	Panel Space	Over-all Height	Shipping Weight	Code
1465C	28"	30"	17	Llter
1465E	35"	37"	23	Lltfx
1465G	42"	44"	30	Llthe

1466 SERIES STANDARD RELAY RACKS - FLOOR TYPE

This Relay Rack is ideal for test equipment, transmitters, sound equipment and laboratory work. Rigidly arc-welded for permanent alignment, jig-drilled and tapped 10-32 for standard panels. (See page 30 for Panels.) Finished in durable black wrinkle enamel (BW). Over-all width, 20 $\frac{7}{8}$ ".

Type	Panel Space	Over-all Height	Shipping Weight	Code
1466D	63"	69 $\frac{1}{8}$ "	100	Liter
1466F	70"	76 $\frac{1}{8}$ "	105	Litix
1466H	77"	83 $\frac{1}{8}$ "	110	Lithe



UNIVERSAL CABINET PARTS



These Universal Cabinet Sections are 11" front to back, have rounded corners and make low cost construction of Cabinets for Electronic Equipment available. It is now possible to add to your equipment by simply adding these new Cabinet ends. Standard Finish — Black Wrinkle (BW) Gray Hammerlin (GH).

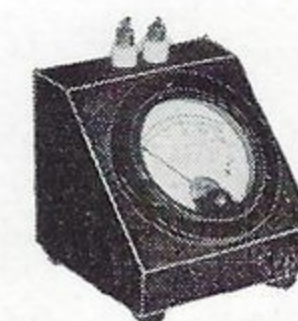
Type	Description	Height	Panel	Code
1490	Bottom Plate or Intersection Shield			Lfaba
1492	Hinged Top Assembly			Lfaff
1493	Cabinet End	5 $\frac{1}{4}$	Use 1473 or 1483	Lfagh
1494	Cabinet End	7	Use 1474 or 1484	Lfajk
1495	Cabinet End	8 $\frac{3}{4}$	Use 1475 or 1485	Lfalm
1496	Cabinet End	10 $\frac{1}{2}$	Use 1476 or 1486	Lfano
1497	Cabinet End	12 $\frac{1}{4}$	Use 1477 or 1487	Lfapq
1498	Cabinet End	14	Use 1478 or 1488	Lfars

11" Front to Back
For Standard 19" Panels
10 x 17 Chassis Recommended
Standard Finish — Black Wrinkle
Optional Finish — Gray Hammerlin
(Add "T" to Type No.)

METER CASES

BACK AND BOTTOM REMOVABLE
FOR EASE OF INSTALLATION

Type	Dimensions	Meter Size	Wt., Lbs.	Code
1412B	4x3 $\frac{3}{4}$ x3 $\frac{3}{4}$	3	1 $\frac{1}{4}$	Lfdet
1412D	5 $\frac{1}{2}$ x5 $\frac{1}{2}$ x5 $\frac{1}{2}$	4	2	Lfdex



Standard Finish
Black Wrinkle

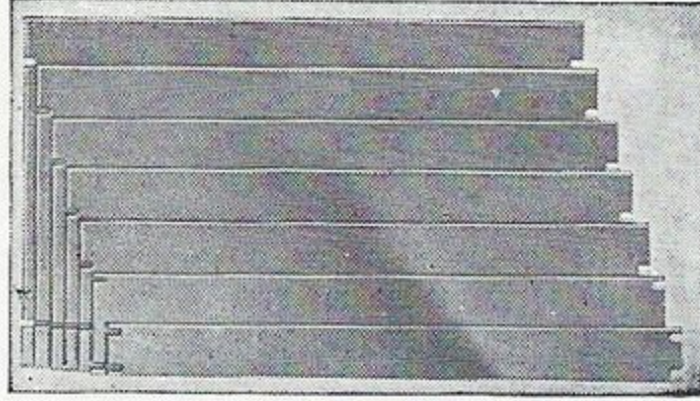
HAMMOND MANUFACTURING COMPANY LIMITED
GUELPH . CANADA

CABINET and RACK PANELS 19" WIDE

For Standard $1\frac{1}{4} \times \frac{1}{2}$ " spacing

STEEL PANELS

Made from $\frac{3}{32}$ Stress Relieved Steel, slotted for rack and cabinet equipment having multiple $1\frac{1}{4} \times \frac{1}{2}$ " spacing. There are twelve standard sizes available to fill almost every requirement. Standard finishes — Black Wrinkle (BW), Gray Hammerlin (GH).



Black Wrinkle	Gray Hammerlin	Width
4-175	5-175	1 $\frac{3}{4}$ "
4-350	5-350	3 $\frac{1}{2}$ "
4-525	5-525	5 $\frac{1}{4}$ "
4-700	5-700	7 "
4-875	5-875	8 $\frac{3}{4}$ "
4-1050	5-1050	10 $\frac{1}{2}$ "
4-1225	5-1225	12 $\frac{1}{4}$ "
4-1400	5-1400	14 "
4-1575	5-1575	15 $\frac{3}{4}$ "
4-1750	5-1750	17 $\frac{1}{2}$ "
4-1925	5-1925	19 $\frac{1}{4}$ "
4-2100	5-2100	21 "
4-2275		

ALUMINUM ALLOY PANELS

Made from $\frac{1}{8}$ Aluminum Alloy. Slotted for rack and cabinet equipment having multiple $1\frac{1}{4} \times \frac{1}{2}$ " spacing. There are twelve standard sizes available. Standard finishes — Black Wrinkle (BW), Gray Hammerlin (GH).

Black Wrinkle	Gray Hammerlin	Width
6-175	7-175	1 $\frac{3}{4}$ "
6-350	7-350	3 $\frac{1}{2}$ "
6-525	7-525	5 $\frac{1}{4}$ "
6-700	7-700	7 "
6-875	7-875	8 $\frac{3}{4}$ "
6-1050	7-1050	10 $\frac{1}{2}$ "
6-1225	7-1225	12 $\frac{1}{4}$ "
6-1400	7-1400	14 "
6-1575	7-1575	15 $\frac{3}{4}$ "
6-1750	7-1750	17 $\frac{1}{2}$ "
6-1925	7-1925	19 $\frac{1}{4}$ "
6-2100	7-2100	21 "
6-2275	7-2275	22 $\frac{3}{4}$ "



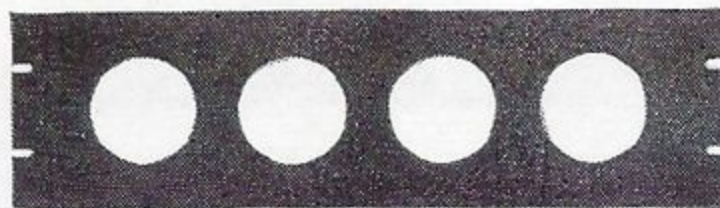
UTILITY ALUMINUM PANELS



made from $\frac{1}{16}$ " aluminum for use other than relay racks — not punched. Unfinished

Catalogue No.	Height	Length
8-690	6"	9"
8-710	7"	10"
8-812	8"	12"
8-1017	10"	17"

METER PANELS



Made from $\frac{3}{32}$ Stress Relieved Steel. Notched for standard racks and cabinets. Size 19 x 5 $\frac{1}{4}$ " high. Punched for 2" and 3" meters. Standard finishes — Black Wrinkle (BW), Gray Hammerlin (GH).

Black Wrinkle	Gray Hammerlin	No. Meters	Hole Size
4-525G	5-525G	Four 2" meters	2 $\frac{1}{8}$ "
4-525H	5-525H	Five 2" meters	2 $\frac{1}{8}$ "
4-525K	5-525K	Three 3" meters	2 $\frac{1}{16}$ "
4-525M	5-525M	Four 3" meters	2 $\frac{1}{16}$ "

SPEAKER PANELS

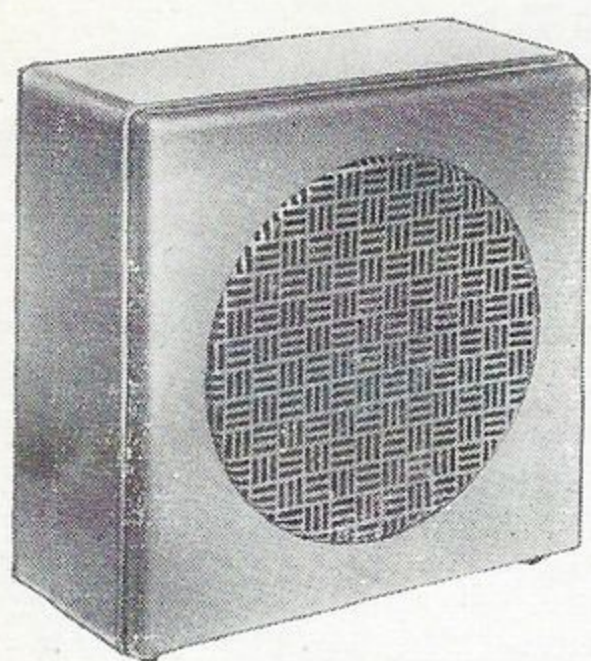
These $\frac{3}{32}$ Steel Speaker Panels are made for 5", 8" and 10" speakers, notched for standard racks and cabinets. Opening covered with steel grille. Speaker mounting holes not punched. Standard finishes — Black Wrinkle (BW), Gray Hammerlin (GH).

Black Wrinkle	Gray Hammerlin	Diam. Holes
4-700S	5-700S	4 $\frac{11}{16}$ "
4-1050S	5-1050S	7 $\frac{5}{8}$ "
4-1225S	5-1225S	9 $\frac{5}{8}$ "



"TRANSFORMERS FROM ONE OUNCE TO ONE THOUSAND POUNDS"

SPEAKER CABINETS



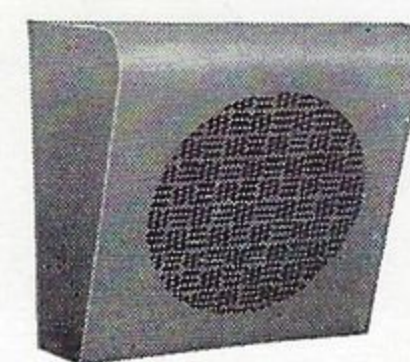
Standard Finish
Gray Hammerlin

A series of modern, streamlined Speaker Cabinets, ideal for sound installations, etc. They are made of 20-gauge steel, soundproofed, have all corners rounded and are equipped with rubber feet. Standard finish — Gray Hammerlin.

Type	Dimensions	Speaker Size	Wt., Lbs.	Code
1406C	6x6x3	4"	1 1/2	Lfbre
1406D	7 1/2 x 7 1/2 x 3 1/2	5"	2 1/4	Lfbstd
1406E	8x8x4	6"	2 3/4	Lfbtf
1406F	10x10x5	8"	4	Lfbug
1406G	12x12x6	10"	6	Lfbuh
1406H	14x14x8	12"	8	Lfbwi

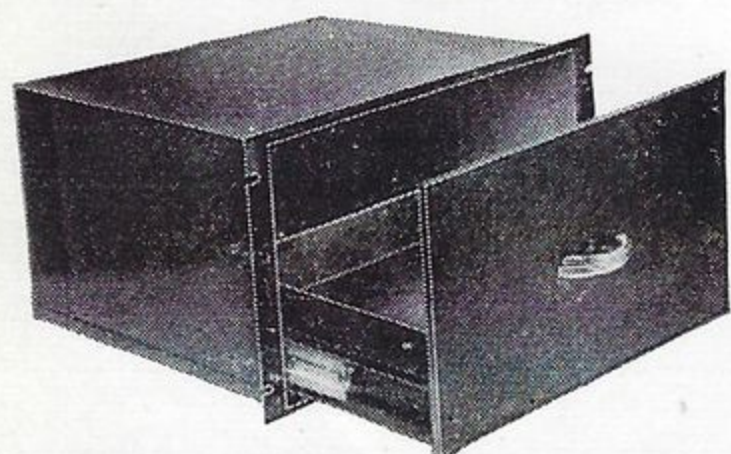
SLOPING FRONT SPEAKER CABINET

Type	Dimensions	Speaker	Wt., Lbs.	Code
1407E	8x8x7	6"	2 1/4	Lfcfe
1407F	10x10x8	8"	3 1/2	Lfcstd
1407G	12x12x9	10"	5	Lfcuf
1407H	14x14x11	12"	7 1/2	Lfcug



Standard Finish
Gray Hammerlin

TURNTABLE DRAWER FOR RACKS AND CABINETS

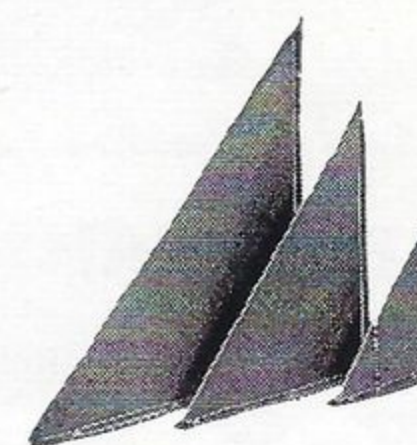


Designed for use where a turntable is required on a rack or cabinet. Dustproof and smooth sliding. A removable unpunched plate is supplied for mounting the turntable and controls. Complete with handle.

Type No.		D	Dimensions W	H	Code
40-13	Over-all	15	19	10 1/2	Lhcug
	Drawer	14 1/4	15 1/4	3	

TRIANGULAR BRACKETS

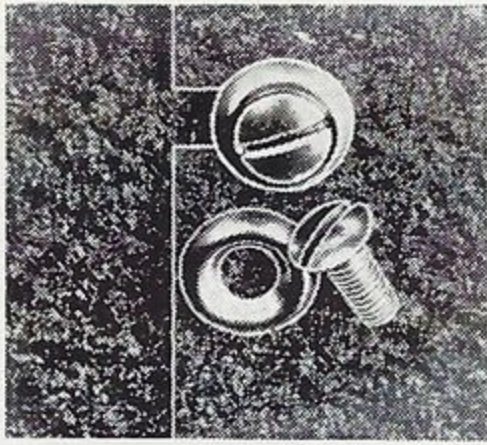
Type	Dimensions	Gauge	Wt., Lbs.	Code
1423B	5 1/2 x 4	20	1/2	Ligof
1423D	9 1/2 x 7 1/2	20	1	Ligol
1423F	12x10	18	1 1/2	Ligom



Standard Finish
Black Wrinkle

HANDLES

Type	Description	Code
1427	Chrome-finished, Heavy-duty Metal Handle	Lewit
1428	Heavy-duty, Black Leather Type Handle	Levoz
1429	Heavy-duty Black Plastic Handle	Leurt



CUP WASHERS AND OVAL HEAD SCREWS

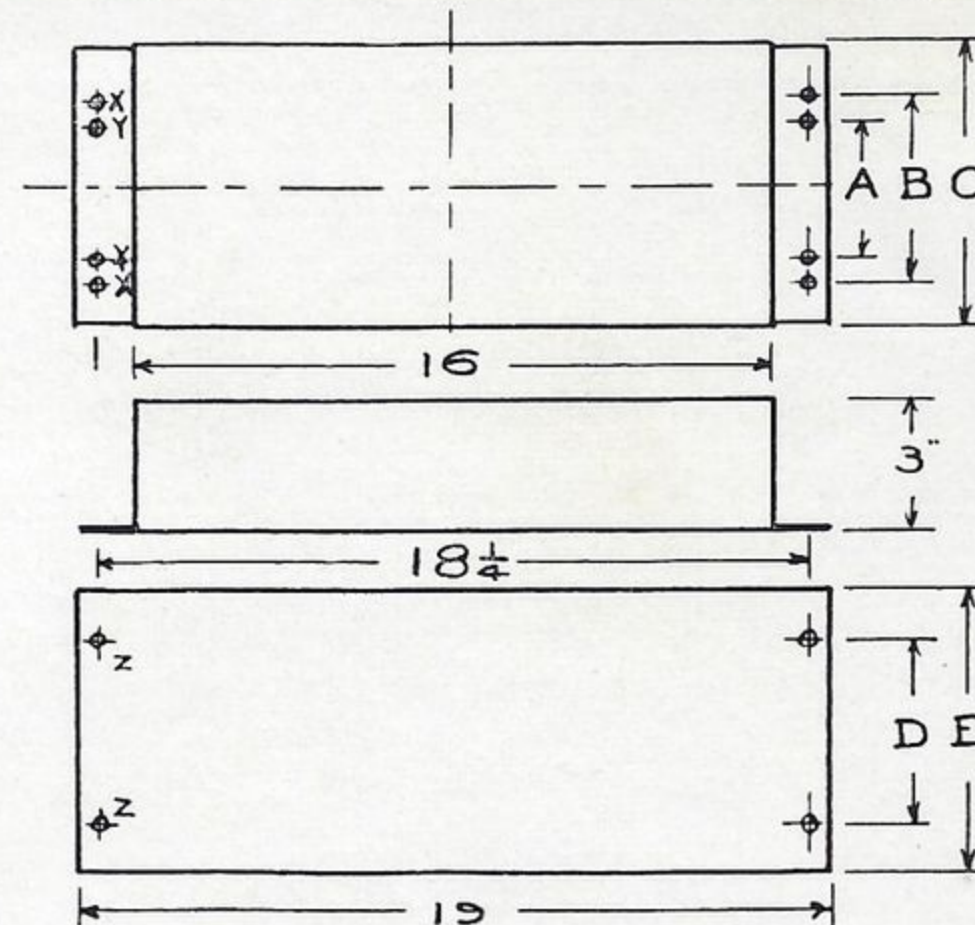
For mounting panels on racks or cabinets. Made of brass and bright nickel plated. A set of four supplied in an envelope — to mount one panel.

Type	Code
1421	Limuf

DEPRESSED CHASSIS PANELS

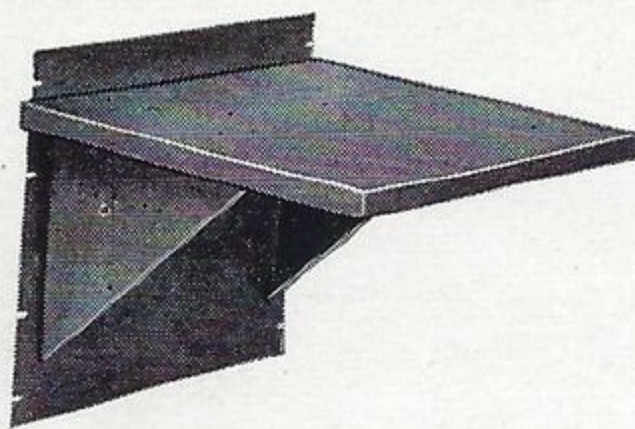
An ideal method of constructing panel units. Accurately made from $\frac{1}{16}$ " steel consisting of chassis unit and panel.

Black Wrinkle	Gray Hammerlin
4-350D	5-350D
4-525D	5-525D
4-700D	5-700D
4-875D	5-875D
4-1050D	5-1050D
4-1225D	5-1225D
4-1400D	5-1400D



TYPE	A	B	C	D	E
1482D	*	*	$3\frac{3}{16}$	*	$3\frac{15}{32}$
1483D	$1\frac{1}{4}$	$2\frac{1}{4}$	$4\frac{15}{16}$	$2\frac{1}{4}$	$5\frac{7}{32}$
1484D	3	4	$6\frac{11}{16}$	4	$6\frac{31}{32}$
1485D	$4\frac{3}{4}$	$5\frac{3}{4}$	$8\frac{7}{16}$	$5\frac{3}{4}$	$8\frac{23}{32}$
1486D	$6\frac{1}{2}$	$7\frac{1}{2}$	$10\frac{3}{16}$	$7\frac{1}{2}$	$10\frac{15}{32}$
1487D	$8\frac{1}{4}$	$9\frac{1}{4}$	$11\frac{15}{16}$	$9\frac{1}{4}$	$12\frac{7}{32}$
1488D	10	11	$13\frac{11}{16}$	11	$13\frac{31}{32}$

* ONLY ONE "X" AND ONE "Y" HOLE EA. END.
 "X" HOLES $\frac{7}{32}$ DIAMETER
 "Y" " $\frac{7}{32}$ " & C.S.
 "Z" " $\frac{1}{4}$ "
 TOLERANCE—A B D E = $\pm\frac{1}{64}$
 "C" $\pm\frac{1}{32}$.



RACK MOUNTING DESK TOPS

This unit is ideal if you require a work area in connection with your rack or cabinet. Built to carry 200 lbs. Height $17\frac{1}{2}$ " — Width 19" — Depth 12".

Black Wrinkle	Gray Hammerlin
1417 B	1417 G

GRILLE VENTILATING PANELS

A distinctive unit for ventilating equipment. Consisting of chrome-plated bars on front and an aluminum baffle in the rear. Bottom surface of baffle is bright aluminum for reflecting heat and top surface is dull black for absorbing. Made for 19" racks and cabinets.

Type	Width	Code
9-175	$1\frac{3}{4}$ "	Lecfp
9-350	$3\frac{1}{2}$ "	Lelgr



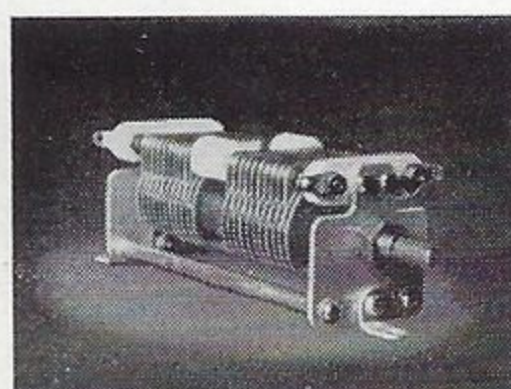
TOUCH-UP PAINT

Gray Hammerlin and Black Wrinkle are put up in $\frac{1}{4}$ pint cans for touch-up purposes. These are baking enamels and may be baked with a heat lamp or other source of heat.

Type		
1413-B	$\frac{1}{4}$ Pint	Black Wrinkle
1413-G	$\frac{1}{4}$ Pint	Gray Hammerlin

7000 SERIES

Single hole mounting, also feet for base mounting, $1\frac{1}{2}$ " rotor, $\frac{1}{4}$ " shaft, $1-11/16$ " wide, $1-15/16$ " high. Straight line capacity. Insulation is Isolantite which has been dehydrated and treated with Amphenol 912.



Type	Capacity — Mmfd.	Voltage Rating	Spacing	Depth*	Code
7105	52 Max.	$7\frac{1}{2}$ Min.	1500	$2\frac{1}{4}$	Ideal
7110	100 Max.	10 Min.	1500	3	Idler
7115	149 Max.	$11\frac{1}{2}$ Min.	1500	$3\frac{5}{8}$	Igloo
7120	198 Max.	13 Min.	1500	$4\frac{1}{4}$	Iglos
7705	52-52 Max.	$7\frac{1}{2}$ - $7\frac{1}{2}$ Min.	1500	$3\frac{5}{8}$	ImPLY
7710	100-100 Max.	10-10 Min.	1500	$4\frac{7}{8}$	Indue

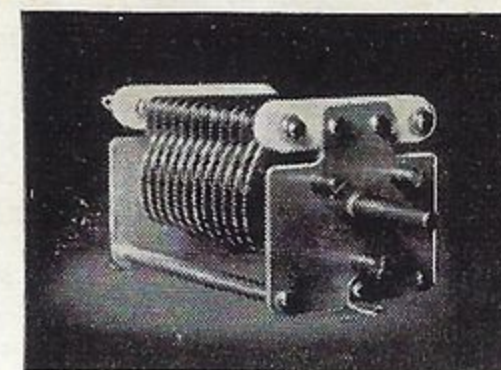
VARIABLE CONDENSERS

- Hammond Low Loss Construction.
- Alsimag 196, or Isolantite Insulation.
- High Maximum to Minimum Capacity Ratio.
- Uniform Design in Three Distinct Series.
- All Types Available.
- Maximum Capacity and Voltage Rating for Size.
- Both Panel and Base Mountings.
- Rounded and Polished Plates (3000 v. up).
- Voltage and Capacity Stamped on Condenser.
- Spacer Type Construction.
- Rigid Stator Suspension.
- Long Leakage Path.
- More Uniform Power Distribution in Plates.
- Ample Rotor Contact.
- Substantial Hot Tin-Dipped Lugs.
- Fully Guaranteed.
- Attractive Appearance.

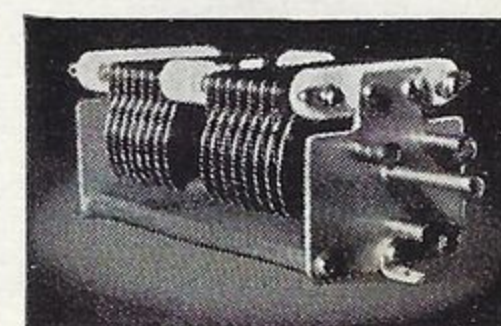
8000 SERIES

Three-point panel or sub-base mounting, $2\frac{1}{2}$ " rotor, $\frac{1}{4}$ " shaft, $2\frac{3}{4}$ " wide, $2\frac{3}{4}$ " high. Straight line capacity. Insulation is Isolantite which has been dehydrated and treated with Amphenol 912.

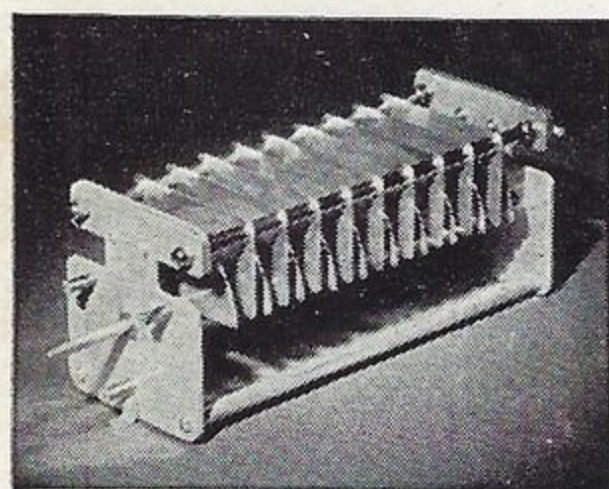
Type	Capacity—Mmfd.		Peak Volt. Rtg.	Spacing	Depth	Code
8115	151 Max.	10 Min.	2400	.0375	3 $\frac{1}{8}$	Inert
8125	240 Max.	11 Min.	2400	.0375	3 $\frac{7}{16}$	Infer
8135	341 Max.	13 Min.	2400	.0375	3 $\frac{13}{16}$	Inlet
8820	205-205 Max.	10-10 Min.	2400	.0375	4 $\frac{7}{8}$	Inter
8302	25 Max.	8 $\frac{1}{2}$ Min.	4600	.080	3 $\frac{1}{8}$	Ionic
8305	51 Max.	9 $\frac{1}{2}$ Min.	4600	.080	3 $\frac{1}{8}$	Irate
8307	78 Max.	11 Min.	4600	.080	3 $\frac{5}{8}$	Irelt
8310	108 Max.	12 $\frac{1}{2}$ Min.	4600	.080	4	Irish
8315	162 Max.	17 Min.	4600	.080	4 $\frac{7}{8}$	Islet
8805	49-49 Max.	8 $\frac{1}{2}$ -8 $\frac{1}{2}$ Min.	4600	.080	5	Issue
8810	106-106 Max.	11-11 Min.	4600	.080	6 $\frac{5}{8}$	Ivory
8815	165-165 Max.	14-14 Max.	4600	.080	8 $\frac{1}{8}$	Ivoxy



TYPE 8310



TYPE 8810



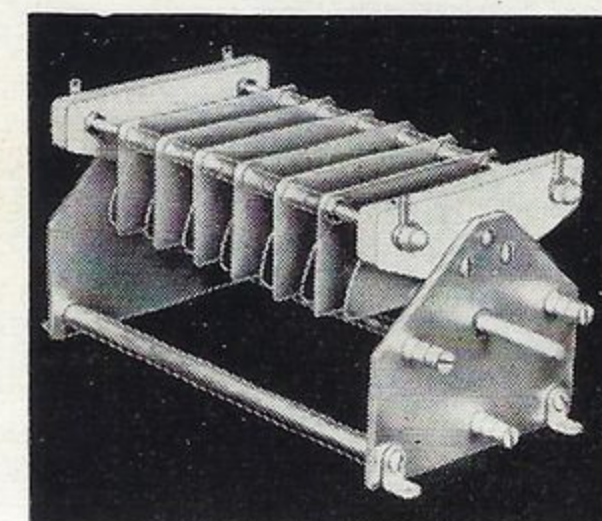
9000 SERIES CONDENSERS

A rugged high-voltage condenser giving the very maximum in capacity and peak voltage rating per cubic inch. Straight line capacity type $3\frac{7}{8}$ " wide, $3\frac{7}{8}$ " high (depth behind panel specified below). Standard $\frac{1}{4}$ " shaft, three-point panel mounting screws and three-point chassis mounting feet provided. Alsimag 196 ceramic insulation.

Type	Capacity—Mmfd.		Peak Voltage Rating	Spacing	Depth	Code Word
9315	155 Max.	11 Min.	4600	.080	4 $\frac{1}{4}$	James
9325	252 Max.	15 Min.	4600	.080	5 $\frac{1}{8}$	Janus
9335	355 Max.	18 $\frac{1}{2}$ Min.	4600	.080	6	Japan
9350	510 Max.	22 $\frac{1}{2}$ Min.	4600	.080	7 $\frac{1}{4}$	Jason
9522	225-225 Max.	13-13 Min.	4600	.080	11 $\frac{1}{2}$	Jasto
9602	28 Max.	10 Min.	7500	.185	4 $\frac{5}{8}$	Jaunt
9605	56 Max.	12 $\frac{1}{2}$ Min.	7500	.185	4 $\frac{5}{8}$	Jenny
9607	81 Max.	14 $\frac{1}{2}$ Min.	7500	.185	5 $\frac{9}{16}$	Jerky
9610	106 Max.	18 Min.	7500	.185	6 $\frac{3}{8}$	Jetty
9615	154 Max.	24 Min.	7500	.185	8 $\frac{3}{8}$	Jiffy
9905	56-56 Max.	12-12 Min.	7500	.185	8 $\frac{1}{4}$	Jingo
9910	103-103 Max.	18-18 Min.	7500	.185	11 $\frac{9}{16}$	Joint

12,000 VOLT CONDENSERS

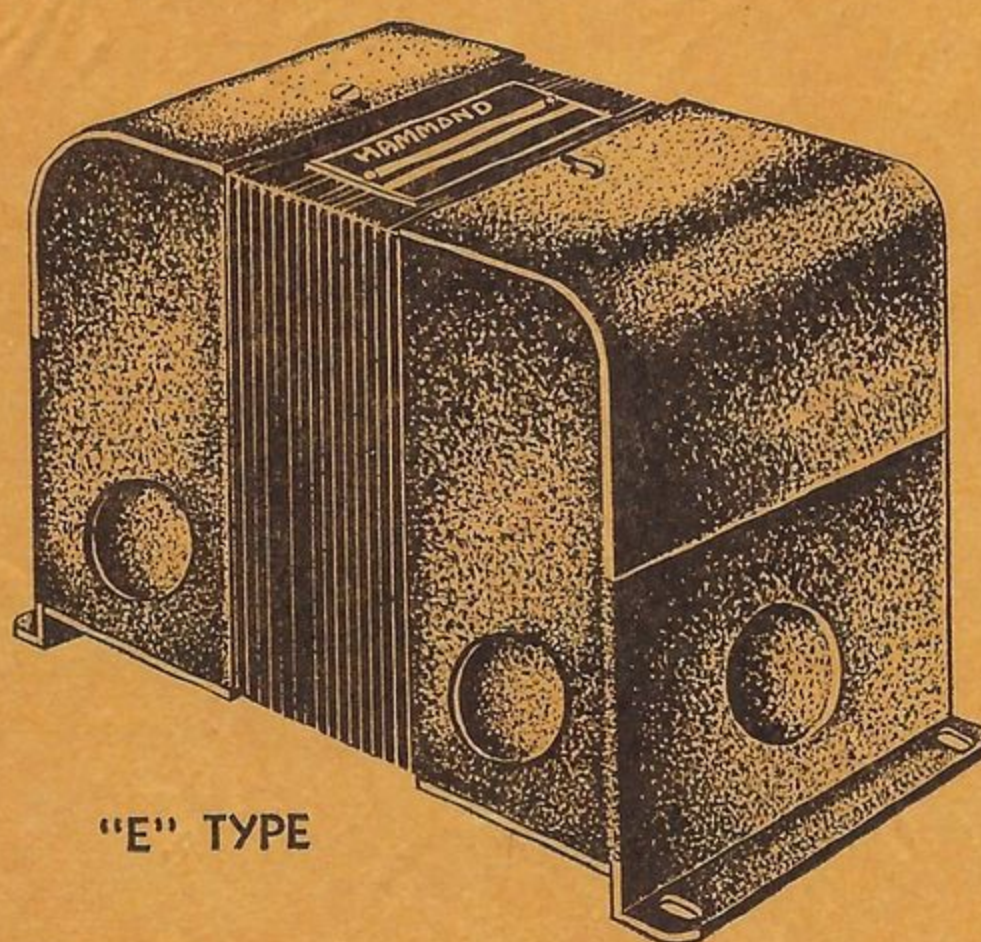
These new Hammond Condensers give you more plate spacing (.390") with smaller over-all dimensions than has so far been available in the various capacity ratings. They are rugged in construction, easy to mount on panel, standoffs or chassis, have Steatite insulation, rounded, polished plates and familiar Hammond low-loss construction. Their design and appearance matches the two smaller Hammond series, making co-ordinated-looking equipment possible.



Type	Capacity—Mmfd.		Peak Voltage Rating	Spacing	Depth	Code Word
9802	26 Max.	11-7 Min.	12000	.390	6	Joont
9805	50 Max.	18 Min.	12000	.390	7¾	Joupe
9807	78 Max.	24 Min.	12000	.390	10	Jousy
9810	96 Max.	33 Min.	12000	.390	12½	Joule
9906	44½-44½ Max.	17¼-17¼ Min.	12000	.390	14½	Joupo

Hammond

Industrial Transformers



"E" TYPE

FOR USE IN CONTROL CIRCUITS
FOR

- HEATING
- LIGHTING
- REFRIGERATION
- AIR CONDITIONING
- MOTOR CONTROLS
- WELDERS
- RECTIFIERS
- SOLENOID VALVES

etc.

Hammond manufactures a complete line of control circuit transformers in the following types and ranges:

Type "B" 15 VA, For Light Duty Control Circuits, etc.

Type "D" 25 VA to 100 VA, Space Saving Control Type.

Type "E" 25 VA to 1500 VA, For All Types of Installations. Enclosed Solderless Terminals, etc.

Type "F" 1000 VA to 10,000 VA, Dry-Air-Cooled Single Phase, Class "B" Insulation.

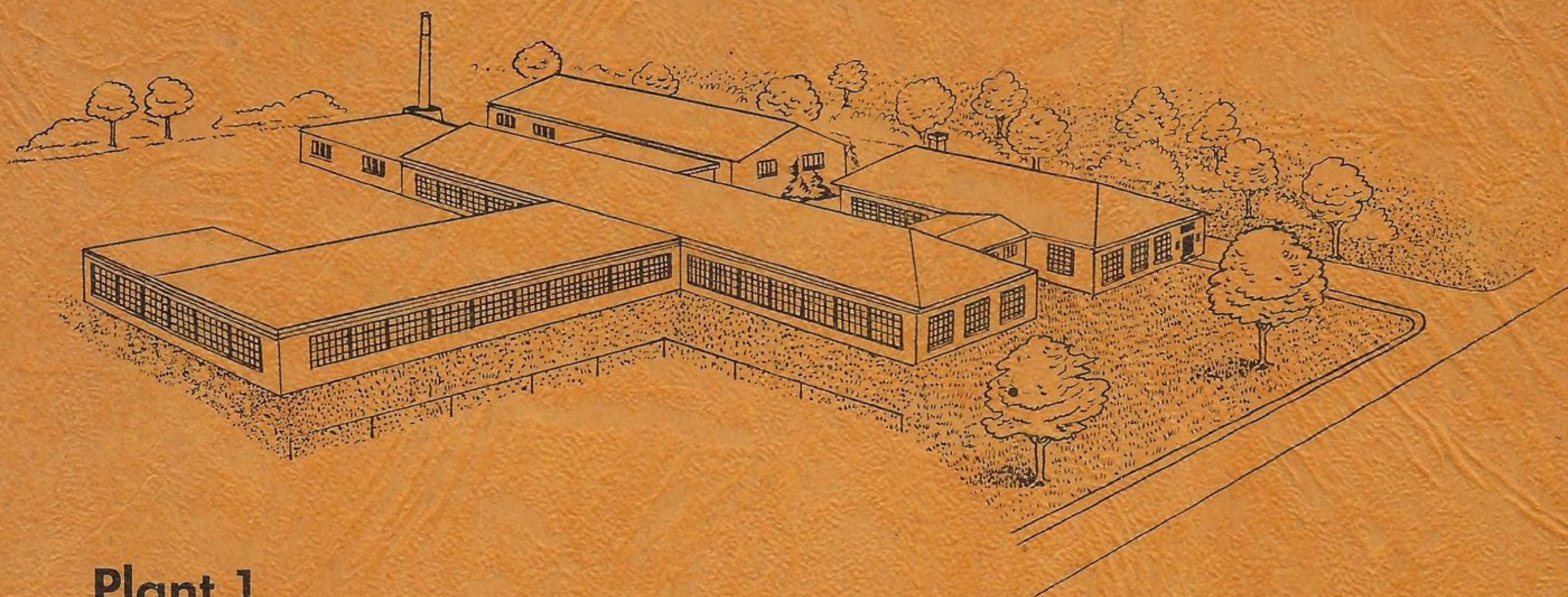
Type "J" 500 VA to 5000 VA, 3 Phase, Class "B" Insulation.

Hammond Industrial Transformers have proven their efficiency and dependability for many years. They have been used by a wide range of industries from coast to coast and are being incorporated in many different products.

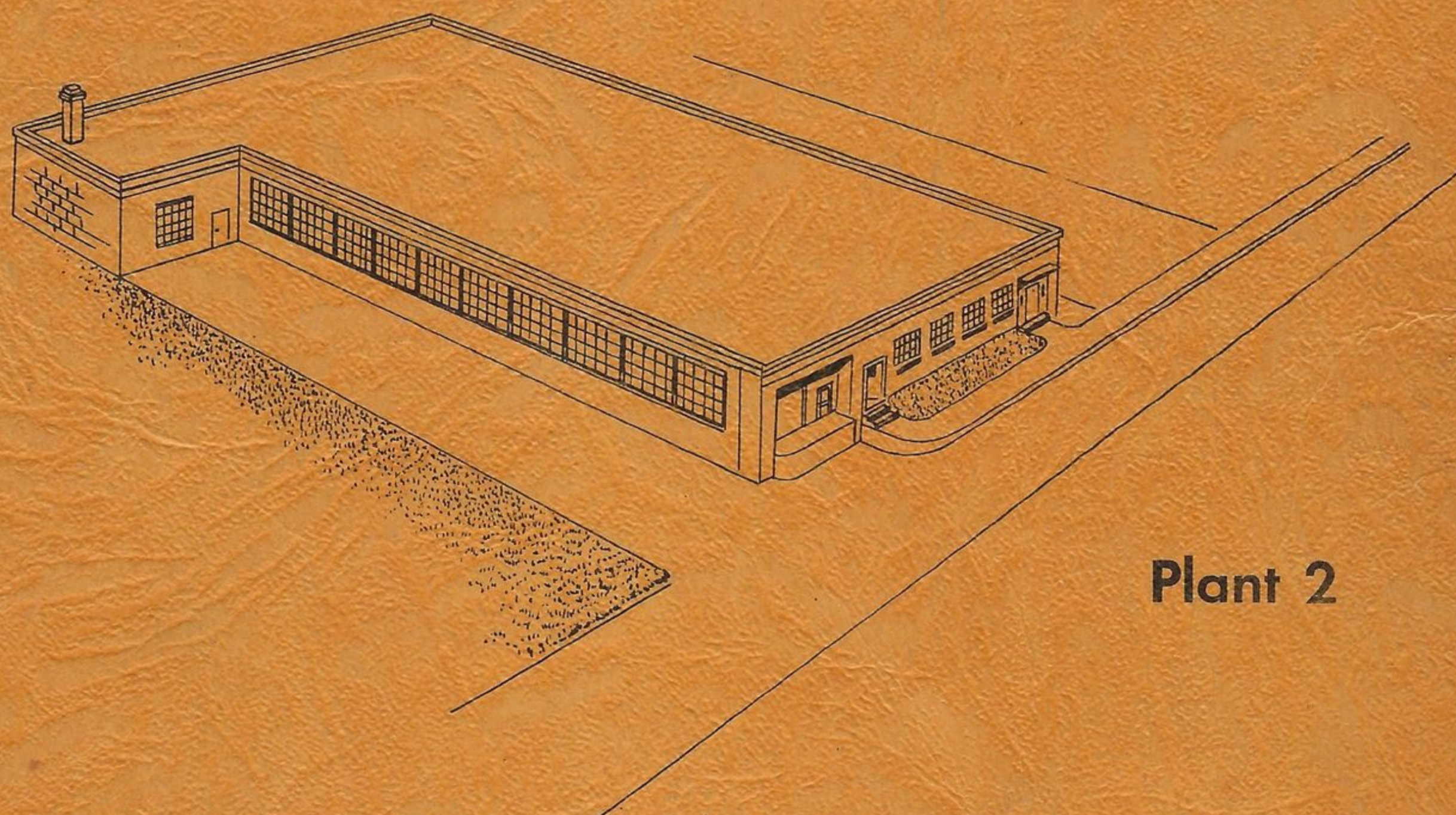
Continuous operation will not overheat Hammond Transformers, when used under normal conditions. Low core loss, low exciting current and good regulation are incorporated in their design.

Hammond Industrial Transformers can be produced for special requirements, different voltages or designs.

ASK FOR CATALOGUE ON HAMMOND INDUSTRIAL TRANSFORMERS



Plant 1



Plant 2

*Where Hammond Transformers
Are Made*