



TRANSFORMERS

C-Core Hermetically Sealed Complying with RCS 215 5VA-1600VA

DESCRIPTION

Designed and constructed to comply with Inter-Service specifications RCS 214 and RCL 215, these C-Core transformers and chokes are hermetically sealed in two-part canisters after filling with dry air and oil. When requested, the units can be supplied filled with dry air only or other suitable media with consequential effects on sizes and ratings.

COILS

Coils are wound on to bobbins or central tubes with end cheeks which are fabricated or moulded from appropriate insulating materials. The insulating materials are selected to withstand continuously and without distortion the maximum temperatures prescribed for service and remain undamaged by the vacuum/pressure impregnation process which precedes hermetic sealing.

CORES

The cores are multiple loops of grain-orientated silicon iron strip cut to form C-Cores. To obtain and retain maximum contact at the magnetic faces, the two half loops, after insertion into the coil bobbins, are banded with steel strip in tension.

TERMINALS

Formed from inorganic insulating materials, sealed terminals are selected and fitted according to specified peak working voltages in relation to operating conditions. The current ratings are based on the size of the largest flexible wire conductor which could be inserted into the terminal holes.

CASES

Cases are constructed by the assembly of half cans made from hot tinned deep drawn steel. The internal fittings which support the cores and coils also secure the half cans firmly and the overlapping joint is soldered. This arrangement ensures the provision of a robust unit suitable for either upright or inverted mounting.

Four steel fixing screws with slotted hexagon heads and pin and tab washers are supplied with each unit. A secure metal data plate detailing ratings and terminal positions is fixed to each case. Cases are normally finished matt black.

SPECIFICATIONS

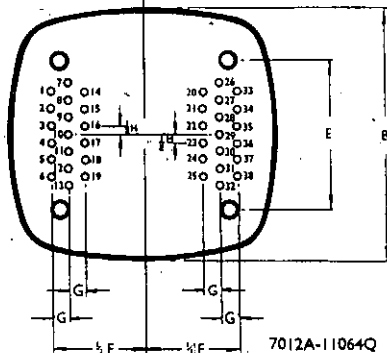
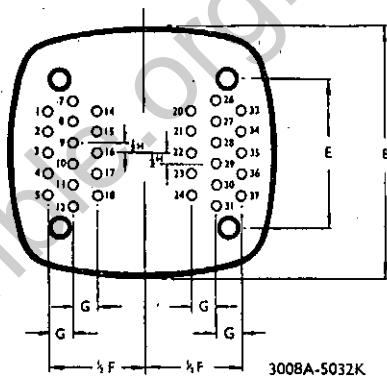
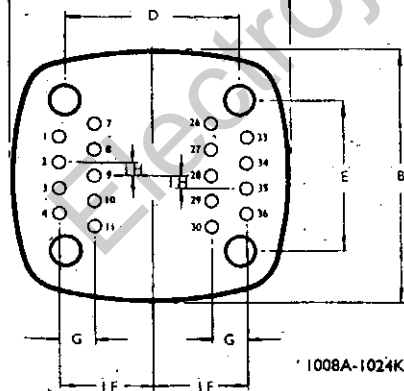
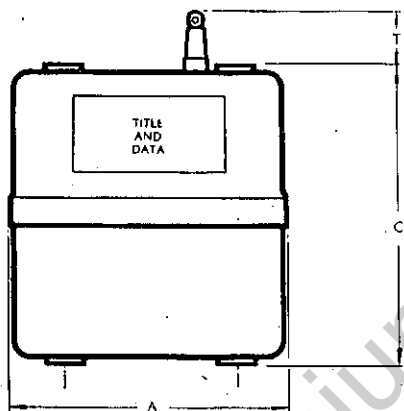
This range of STC transformers and chokes complies with the Joint Service Standards for Radio Components:

- RCS 214 Specification for Transformers and Chokes.
- RCS 331 Specification for Terminals, Sealed.
- RCL 193 List of Standard Cores, Magnetic, Strip Wound.
- RCL 215 List of Standard Transformer and Choke Assemblies, Hermetically Sealed.
- RCL 331 List of Standard Terminals, Sealed.

TRANSFORMERS



C-Core Hermetically Sealed Complying with RCL 215 5VA-1600VA





TRANSFORMERS

C-Core Hermetically Sealed
Complying with RCL 215
5VA-1600VA

APPX. RATING at 50 c/s VA	ASSEMBLY Transformer or Choke Style Ref. TCA	DIMENSIONS (inches)							TERMINALS		
		Max. Plan		Max. Height	Fixing Centres ±0.01		Fixing Screws		Spacing and Location		
		A	B		C	D	E	Size	Length	F	G
5 to 25	1008A	3 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
	1008D	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
	1012E	3 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
	1012G	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
	1016H	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
	1024K	3 $\frac{1}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	1.938	1.813	4BA	0.375	2	0.350	0.350
15 to 45	3008A	3 $\frac{1}{2}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
	3008D	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
	3012E	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
	3012G	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
	3016H	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
	3020K	3 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	2.438	2.313	4BA	0.375	2 $\frac{1}{2}$	0.350	0.350
35 to 70	4012A	4 $\frac{1}{4}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
	4012D	4 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
	4016E	4 $\frac{1}{4}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
	4016G	4 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
	4020H	4 $\frac{1}{4}$	3 $\frac{3}{4}$	4	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
	4024K	4 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{1}{2}$	2.625	2.563	2BA	0.437	2 $\frac{1}{2}$	0.300	0.350
65 to 175	5014A	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
	5014D	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
	5018E	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
	5018G	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
	5024H	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
	5032K	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5	3.188	2.875	2BA	0.437	3 $\frac{1}{2}$	0.300	0.350
135 to 325	7012A	5 $\frac{1}{2}$	5 $\frac{1}{4}$	3 $\frac{1}{2}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
	7012D	5 $\frac{1}{2}$	5 $\frac{1}{4}$	5 $\frac{1}{4}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
	7018E	5 $\frac{1}{2}$	5 $\frac{1}{4}$	4 $\frac{1}{2}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
	7018G	5 $\frac{1}{2}$	5 $\frac{1}{4}$	5 $\frac{1}{4}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
	7024H	5 $\frac{1}{2}$	5 $\frac{1}{4}$	4 $\frac{1}{2}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
	7032K	5 $\frac{1}{2}$	5 $\frac{1}{4}$	5 $\frac{1}{4}$	4.000	3.437	1BSF	0.500	4 $\frac{1}{2}$	0.350	0.350
300 to 675	9016A	6 $\frac{1}{2}$	5 $\frac{1}{4}$	4 $\frac{1}{2}$	4.875	4.062	1BSF	0.562	5 $\frac{1}{2}$	0.375	0.350
	9016D	6 $\frac{1}{2}$	5 $\frac{1}{4}$	6 $\frac{1}{2}$	4.875	4.062	1BSF	0.562	5 $\frac{1}{2}$	0.375	0.350
	9024E	6 $\frac{1}{2}$	5 $\frac{1}{4}$	5 $\frac{1}{2}$	4.875	4.062	1BSF	0.562	5 $\frac{1}{2}$	0.375	0.350
	9032H	6 $\frac{1}{2}$	5 $\frac{1}{4}$	5 $\frac{1}{2}$	4.875	4.062	1BSF	0.562	5 $\frac{1}{2}$	0.375	0.350
	9044K	6 $\frac{1}{2}$	5 $\frac{1}{4}$	6 $\frac{1}{2}$	4.875	4.062	1BSF	0.562	5 $\frac{1}{2}$	0.375	0.350
650 to 1600	11020A	9	7 $\frac{1}{2}$	6 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350
	11020E	9	7 $\frac{1}{2}$	9 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350
	11032F	9	7 $\frac{1}{2}$	7 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350
	11040M	9	7 $\frac{1}{2}$	9 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350
	11052P	9	7 $\frac{1}{2}$	9 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350
	11064Q	9	7 $\frac{1}{2}$	9 $\frac{1}{2}$	6.500	5.250	1BSF	0.562	7 $\frac{1}{2}$	0.375	0.350

TRANSFORMERS



**C-Core Hermetically Sealed
Complying with RCL 215
5VA-1600VA**

TERMINALS							
Size	T Max.	Peak Wkg. kV	Max. r.m.s. Amp.	Size	T Max.	Peak Wkg. kV	Max. r.m.s. Amp.
EE	1-1	6.5	10	AA	1-1	1.0	3
DD	1-1	4.5	10	G	1-1	1.0	2
CC	1-1	3.0	5	X	1-1	8.0	10
BB	1-1	1.5	5	Y	1-1	11.0	5



Standard Telephones and Cables Limited

Registered Office: Connaught House, Aldwych, W.C.2

TRANSFORMER SALES DEPARTMENT, HARLOW, ESSEX

Telephone: Harlow 26811



TRANSFORMERS

Single Phase—Hermetically Sealed

Type HLA 15VA—1250VA

INPUT

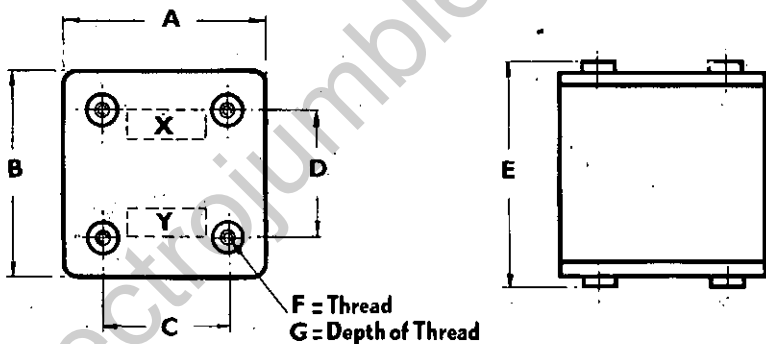
Single-phase 50 c/s medium voltage.

OUTPUT

15–1250 VA. Terminal seals govern maximum current output.

TERMINAL POSITIONS

Input and output terminals are located on the tops of the transformers. (Positions "X" and "Y" on the drawing below). Current rating and variety of connections govern the number and arrangement of terminals.



Type and Output (VA)	Dimensions (inches)					F	G	Weights lb. (approx.)
	A	B	C	D	E*			
HLA/15 ...	3 $\frac{3}{8}$	2 $\frac{7}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2BA	$\frac{1}{8}$	2 $\frac{1}{2}$
HLA/25 ...	3 $\frac{3}{8}$	2 $\frac{7}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2BA	$\frac{1}{8}$	3
HLA/75 ...	4 $\frac{1}{2}$	3 $\frac{3}{8}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{3}{8}$	2BA	$\frac{1}{8}$	5
HLA/100 ...	4 $\frac{1}{2}$	4 $\frac{1}{8}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{3}{8}$	2BA	$\frac{1}{8}$	7 $\frac{1}{2}$
HLA/175 ...	5 $\frac{3}{8}$	4 $\frac{1}{2}$	3 $\frac{3}{8}$	3 $\frac{3}{8}$	5 $\frac{1}{2}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	11 $\frac{1}{2}$
HLA/300 ...	5 $\frac{3}{8}$	5 $\frac{1}{2}$	4 $\frac{1}{8}$	4	5 $\frac{1}{2}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	15
HLA/500 ...	7	6 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$	6 $\frac{3}{8}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	25
HLA/750 ...	7	7 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{3}{8}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	37
HLA/1000 ...	7 $\frac{1}{2}$	6 $\frac{3}{8}$	5 $\frac{3}{8}$	5 $\frac{3}{8}$	8 $\frac{1}{2}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	45
HLA/1250 ...	7 $\frac{1}{2}$	7 $\frac{1}{8}$	5 $\frac{3}{8}$	6 $\frac{3}{8}$	8 $\frac{1}{2}$	$\frac{1}{8}$ BSF	$\frac{1}{8}$	62 $\frac{1}{2}$

* E = height excluding terminals.

The ratings given in the above table are for natural air-cooled conditions. Ratings may be increased approximately 20 per cent with oil cooling.



TRANSFORMERS

Single Phase-Bracket Type

Type OBA 15VA-1250VA

INPUT

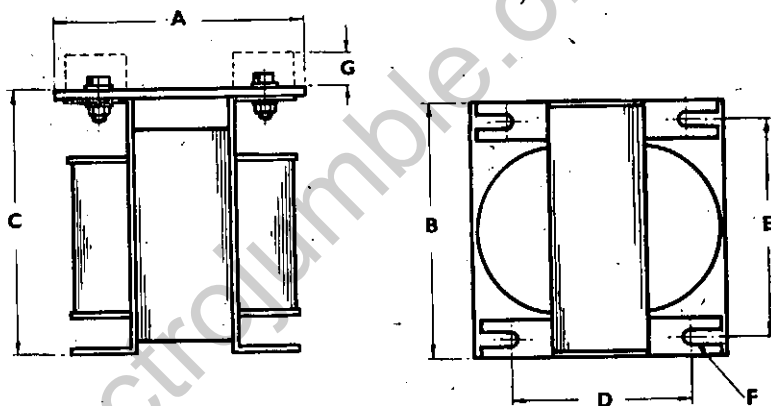
Single-phase 50 c/s medium voltage.

OUTPUT

0-1000 volts r.m.s. 15-1250 VA.

TERMINAL POSITIONS

Input and output terminals are normally on terminal blocks at the top of the transformers



Type and Output (VA)	Dimensions (Inches)					F	G* ¹	Weights lb. (approx.)	Output amperes
	A	B	C	D	E				
OBA/15 ...	2½	2½	3½	2.062	2.468	4BA	½	1½	0-10
OBA/25 ...	2½	3½	3½	2.062	2.812	4BA	½	2½	0-10
OBA/75 ...	3½	3½	3½	2.250	3.125	4BA	½	5	0-10
OBA/100 ...	3½	3½	3½	2.750	3.125	4BA	½	6½	0-10
OBA/175 ...	3½	4½	4½	2.937	3.875	2BA	½	8½	0-20
OBA/300 ...	4½	5	5	3.687	4.375	2BA	½	12	0-30
OBA/500 ...	6	6½	6½	4.625	5.500	OBA	1½	18	0-40
OBA/750 ...	6½	6½	6½	5.625	5.500	OBA	1½	32	0-40
OBA/1000 ...	6½	6½	8	5.250	5.875	OBA	1½	40	0-40
OBA/1250 ...	7½	6½	8	6.250	5.875	OBA	1½	42	0-40

* Terminal clearance.

The ratings given in the above table are for natural air-cooled conditions. Ratings may be increased approximately 20 per cent with oil cooling.



TRANSFORMERS

Single Phase—Open Core

Type OCA 3kVA—20kVA

INPUT

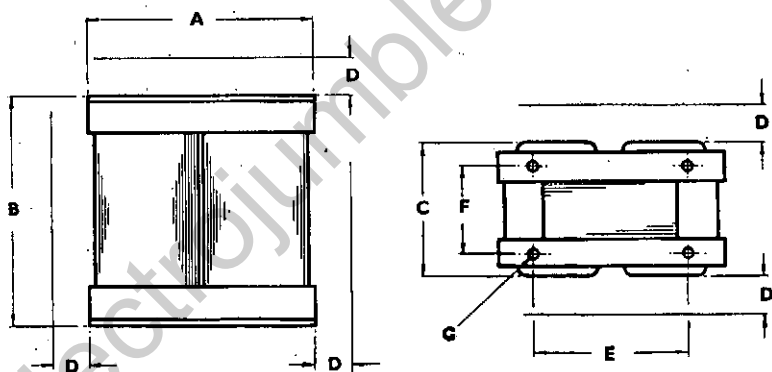
Single-phase 50 c/s r.m.s. volts to be specified when ordering.

OUTPUT

3KVA—20kVA.

TERMINAL POSITIONS

The positions of input and output terminals or terminal panels will necessarily depend upon the respective voltages and currents. In some instances it is possible to arrange primary and secondary terminals at one position. Dimension "D" is the nominal distance from the bracket face to the tops of the terminals.



Type and Output (kVA)	A	B	Dimensions (Inches)				Weights lb. (approx.)	
			C	D*	E	F	G	
OCA/3 ...	12	11½	7	4	8½	4½	11½	
OCA/4 ...	12	13½	7	4	8½	4½		
OCA/5 ...	12	13½	7½	4	8½	5½		
OCA/6 ...	12	13½	8½	4	8½	6½		
OCA/8 ...	15	16½	8½	4	10½	5½		
OCA/10 ...	15	16½	9½	4	10½	6½		
OCA/12.5 ...	15	17½	9½	4	10½	6½		
OCA/15 ...	15	18½	10	4	10½	7½		
								123
								143
							170	
							185	
							231	
							280	
							330	
							485	

* Terminal clearance.

The ratings given in the above table are for natural air-cooled conditions. Ratings may be increased approximately 20 per cent with oil cooling.



TRANSFORMERS

Single Phase—Open Shell

Type OSA 25VA—2.5kVA

INPUT

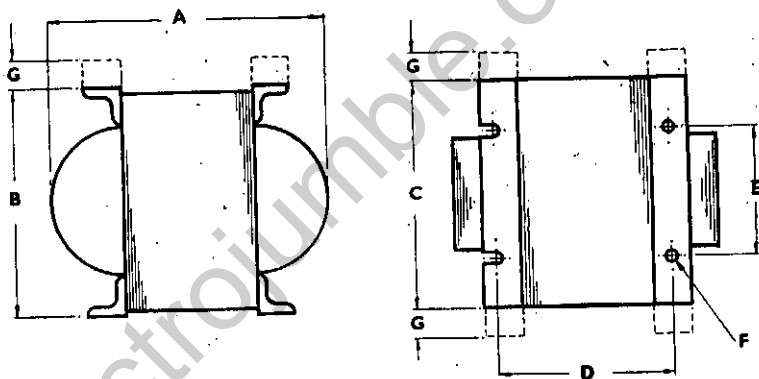
Single-phase 50 c/s medium voltage.

OUTPUT

0—1000 volts r.m.s. 25—2500 VA.

TERMINAL POSITIONS

The positions of input and output terminals or terminal panels will necessary depend upon the respective voltages and currents. In some instances it is possible to arrange primary and secondary terminals at one position. Dimension "G" is the nominal distance from the bracket face to the tops of the terminals.



Type and Output (VA)	Dimensions (inches)							Weights lb. (approx.)	Output Amperes
	A	B	C	D	E	F	G*		
OSA/25 ...	3½	3½	2	2	1	½	½	2	0-10
OSA/75 ...	3 7/8	3 7/8	3 1/4	2	1 1/2	¾	¾	5 1/2	0-10
OSA/100 ...	3 7/8	3 7/8	3 1/4	2 1/2	1 1/2	¾	¾	6 1/2	0-10
OSA/150 ...	3 7/8	4 1/2	4 1/2	2 1/2	1 1/2	¾	¾	8 1/2	0-20
OSA/200 ...	4 1/2	4 1/2	4 1/2	2 1/2	1 1/2	¾	¾	10	0-20
OSA/250 ...	4 1/2	4 1/2	4 1/2	3	1 1/2	¾	¾	12	0-30
OSA/300 ...	4 1/2	5 1/2	4 1/2	2 1/2	1 1/2	¾	¾	13	0-30
OSA/400 ...	5 1/2	6 1/2	5 1/2	2 1/2	2 1/2	¾	¾	23	0-40
OSA/500 ...	6	6 1/2	5 1/2	3 1/2	2 1/2	¾	¾	26	0-40
OSA/600 ...	6 1/2	7	5 1/2	3 1/2	2 1/2	¾	¾	30	0-40
OSA/700 ...	6	7	6 1/2	3	4	¾	¾	38	0-40
OSA/900 ...	6 1/2	7	6 1/2	3 1/2	4	¾	¾	38	0-40
OSA/1250 ...	7 1/2	7	6 1/2	4 1/2	4	¾	¾	42	0-40
OSA/1500 ...	8	8 1/2	7 1/2	5	4	¾	¾	58	0-40
OSA/1800 ...	8 1/2	8 1/2	7 1/2	5 1/2	4	¾	¾	65	0-40
OSA/2000 ...	9	9 1/2	9 1/2	5	4	¾	¾	85	0-40
OSA/2500 ...	10	9 1/2	9 1/2	6	4	¾	¾	110	0-40

* Terminal clearance.

The ratings given in the above table are for natural air-cooled conditions. Ratings may be increased approximately 20 per cent with oil cooling.



TRANSFORMERS

Three Phase—Open Core

Type O3A Up to 75kVA

INPUT

Three-phase 50 c/s r.m.s. volts to be specified when ordering.

OUTPUT

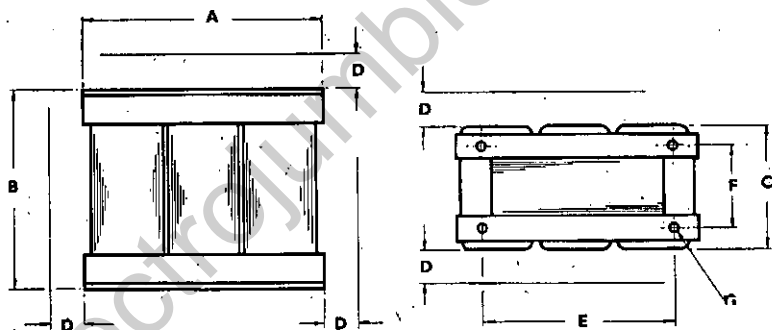
Up to 75kVA.

WINDINGS

Connections (e.g., delta/star, earthed, neutral) to be specified when ordering.

TERMINAL POSITIONS

The positions of Input and output terminals or terminal panels will necessary depend upon the respective voltages and currents. In some instances it is possible to arrange primary and secondary terminals at one position. Dimension "D" is the nominal distance from the bracket face to the tops of the terminals.



Type and Output (kVA)	Dimensions (inches)							Weights lb. (approx.)
	A	B	C	D*	E	F	G	
O3A/1.5 ...	15	9½	5½	4	11½	3½	±	68
O3A/2.25 ...	15	9½	6½	4	11½	4½	±	98
O3A/3.75 ...	18	11½	6½	4	14½	4½	±	144
O3A/5 ...	18	11½	7	4	14½	4½	±	165
O3A/7.5 ...	21½	15½	7	4½	17	4½	±	200
O3A/10 ...	23	18½	7½	4½	18½	6½	±	280
O3A/12.5 ...	26	19½	8½	4½	21½	5½	±	345
O3A/15 ...	26	21½	8½	4½	21½	5½	±	390
O3A/17.5 ...	27	21½	9	4½	22½	6½	±	465
O3A/20 ...	27	23½	9	4½	22½	6½	±	520
O3A/25 ...	28½	23½	9½	4½	24	6½	±	610
O3A/30 ...	28½	26½	9½	5	24	6½	±	695
O3A/37.5 ...	30	28½	10	5	25	6½	±	820

* Terminal clearance.

The ratings given in the above table are for natural air-cooled conditions. Ratings may be increased approximately 20 per cent with oil cooling.



TRANSFORMERS

Single Phase—Potted Type

Type PA 15VA—750 VA

INPUT

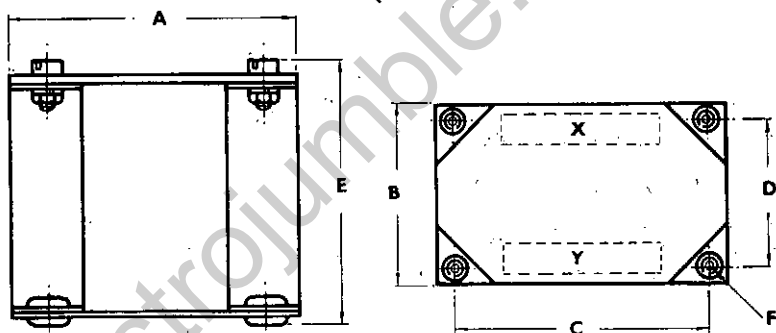
Single-phase 50 c/s medium voltage.

OUTPUT

0-1000 volts r.m.s. 15-750 VA.

TERMINAL POSITIONS

Input and output terminals are located on the tops of the transformers. (Positions "X" and "Y" on the drawing below).



Type and Output (VA)	Dimensions (inches)					Weights lb. (approx.)	Output (Amperes)	
	A	B	C	D	E*			
PA/15 ...	3½	2½	2½	2½	3½	2BA	2½	0-10
PA/25 ...	3½	2½	2½	2½	4	2BA	3½	0-10
PA/75 ...	4½	3½	3½	2½	4½	2BA	5½	0-10
PA/100 ...	4½	3½	3½	3½	4½	2BA	7½	0-10
PA/175 ...	4½	4½	4½	3½	5½	2BA	11½	0-20
PA/300 ...	5½	5½	4½	4½	6	OBA	15½	0-30
PA/500 ...	6½	6	6½	5½	6	½BSF	25½	0-40
PA/750 ...	6½	6½	6½	6½	6	½BSF	37½	0-40

* E = height excluding terminals.