POWER TRANSFORMERS — PLATE AND FILAMENT TYPE

Electrical tolerances, dielectric strength, temperature rise and construction are per U.L. Class A materials (maximum 105 degree C. operating temperature) are used in all transformers.

Transformers are designed for full-wave C.T. rectification with capacitor input filter. If choke input filter is used, allow for a DC current increase of 30%.

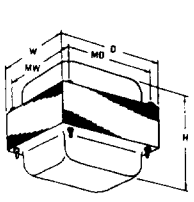
Transformers are listed in ascending order of plate-supply voltages.

FOR CAPACITOR INPUT SYSTEMS:

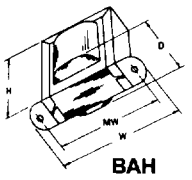
Primaries 117 Volts, 50/60 Hz. except • which are 60 Hz. only. Terminations - Leads.

SECT	Part Number	Plate Winding		Rectifier Filament		Other Windings		Style	Dimensions-Inches					Wt. Lbs.
									Case			Mounting		
		A.C. Volts	DCMA	Volts	Amps.	Volts	Amps.		H	W	D	MW	MD	
A	26R37	125◑	15	---	---	6.3	.6	BAV	2	2⅜	1¾	2	---	.7
	24R165	125◑	15	---	---	12.6	.3	BAV	2	2⅜	1¾	2	---	.7
	22R39	125-0-125	25	---	---	6.3	1.0	BAV	2⅜	2⅞	1⅞	2⅜	---	1.0
	24R166	125-0-125	25	---	---	12.6	.6	BAV	2⅜	2⅞	1⅞	2⅜	---	1.0
	26R38	125◑	50	---	---	6.3	2.0	BAH	2¼	3 11/16	2⅛	3⅛	---	1.5
B	26R60•	150◑	25	---	---	6.3CT	.5	BGV	2	2⅜	1 13/16	2	---	.7
	24R168•	150◑	25	---	---	12.6CT	.3	BGV	2	2⅜	1 13/16	2	---	.8
C	22R94	190-160-0 160-190	70	6.3	0.6	6.3CT 6.3	3.0 .6	GGV	3⅛	2½	2¾	2	1¾	2.8
	26R164	200-0-200	110	---	---	6.3 6.3CT	2.0 4.0	GGV	3⅛	2½	3¼	2	2¼	3.0
	24R10	220-0-220	50	---	---	6.3 25.2	.6 .5	GGV	3⅛	2½	2⅝	2	1⅝	2.2
D	24R11U	230-0-230	50	---	---	6.3	2.5	GGV	3⅛	2½	2⅝	2	1⅝	2.2
E	24R00U	240-0-240	40	5.0	2.0	6.3CT	2.0	GGV	3⅛	2½	2⅝	2	1⅝	3.3
	24R19U	240-0-240	55	5.0	2.0	6.3CT	2.0	GGV	3⅛	2½	2¾	2	1¾	2.5
	24R12U	240-0-240	70	---	---	6.3	3.0	GGV	3⅛	2½	2⅞	2	1⅞	2.6
F	24R89	250-0-250	10	---	---	6.3 6.3	.6 1.2	BGV	2⅜	2⅞	2⅛	2⅜	---	1.0
	24R90	250-0-250	20	---	---	6.3 6.3	.6 1.2	BGV	2¾	3⅛	2½	2 13/16	---	1.5
	24R09U	250-0-250	70	5.0	2.0	6.3CT	2.5	GGV	3⅛	2½	3⅛	2	2⅛	3.2
G	24R13	260-0-260	90	5.0	2.0	6.3CT	3.0	AGF	3⅝	2⅞	3⅜	2¼	2 13/16	4.0
	24R13U	260-0-260	90	5.0	2.0	6.3CT	3.0	GGV	3½	2⅞	3⅝	2¼	2¼	4.0
	26R31	260-0-260	90	---	---	6.3	4.0	AGF	3½	2⅞	3½	2¼	2 13/16	3.5
	26R31U	260-0-260	90	---	---	6.3	4.0	GGV	3⅛	2½	3¼	2	2¼	4.0

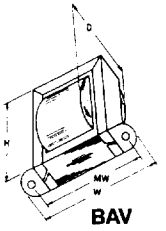
◑ For use in Half Wave Circuit • 60 hz. only. All secondary A.C. voltages ±3%



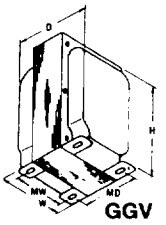
AGF



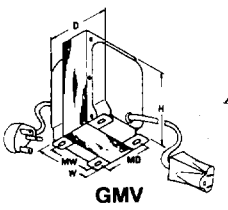
BAH



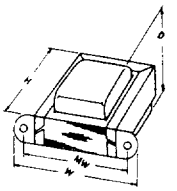
BAV



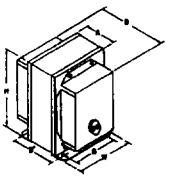
GGV



GMV



BGV



JMV

DID YOU KNOW

Thordarson's nearby stocking distributor can give instant delivery of most Thordarson products. Also of utmost importance, our distributors can be competitive in very large quantities. Contact factory for name of your closest distributor.

THORDARSON

POWER TRANSFORMERS — PLATE AND FILAMENT TYPE (continued)

FOR CAPACITOR INPUT SYSTEMS:

Primaries 117 Volts, 50/60 Hz. except for "•" -Lead Terminations (Cont'd)

SECT	Part Number	Plate Winding A.C. Volts	Plate Winding DCMA	Rectifier Filament Volts	Rectifier Filament Amps.	Other Windings Volts	Other Windings Amps.	Style	Dimensions-Inches Case H	Case W	Case D	Mounting MW	Mounting MD	Wt. Lbs.
A	24R20U	270-0-270	120	5.0	3.0	6.3CT	3.5	GGV	3 7/8	3 1/8	3 1/2	2 1/2	2 3/16	5.0
	26R160•	270-0-270	260	5.0	3.0	6.3	8.8	GGV	3 7/8	3 1/8	3 1/2	2 1/2	2 1/4	5.5
	26R161•	280-0-280	300	5.0/3.0	4.5	6.3	10.0	GGV	3 7/8	3 1/8	4 5/8	2 1/2	3 1/4	7.9
		250-0-250	-	-	-	24.0	1.2	-	-	-	-	-	-	-
B	24R96	300-0-300	65	-	-	6.3CT	2.7	GGV	3 1/8	2 1/2	2 1/2	2	1 3/4	2.7
	24R01U	325-0-325	40	5.0	2.0	6.3CT	2.0	GGV	3 1/8	2 1/2	2 1/2	2	1 3/4	2.5
	24R01	325-0-325	40	5.0	2.0	6.3CT	2.0	AGF	2 3/4	2 1/2	3	2	2 1/2	2.4
	24R08U	325-0-325	55	5.0	2.0	6.3CT	2.0	GGV	3 1/8	2 1/2	2 7/8	2 1/2	2 1/8	5.7
	24R87	325-0-325	150	5.0	3.0	6.3CT	5.0	GGV	3 7/8	3 1/8	3 7/8	2 1/2	2 9/16	5.8
	26R45	328-0-328	270	5.0	3.0	12.6CT	5.25	GGV	4 5/8	4 3/8	4 13/16	3 1/8	3 25/32	8.0
C	24R02U	350-0-350	70	5.0	2.0	6.3CT	2.5	GGV	3 1/2	2 7/8	3 1/2	2 1/4	2 1/8	3.8
	24R40U	350-0-350	90	5.0	2.0	6.3CT	3.0	GGV	3 1/2	2 7/8	3 5/8	2 1/4	2 3/8	4.5
	24R40	350-0-350	90	5.0	2.0	6.3CT	3.0	AGF	3 3/4	2 13/16	3 3/8	2 1/4	2 13/16	4.5
	24R22U	360-0-360	120	5.0	3.0	6.3CT	3.5	GGV	3 7/8	3 1/8	3 3/4	2 1/2	2 7/16	5.4
	24R06U	375-0-375	150	5.0	3.0	6.3CT	4.7	GGV	4 1/4	3 7/16	4	2 3/4	2 7/8	6.2
D	24R07U	400-0-400	200	5.0	3.0	6.3CT	5.0	GGV	4 1/2	3 3/4	4 1/2	3	3 5/16	9.2
	24R27	600-0-600	200	5.0	3.0	6.3	3.0	GGV	4 1/2	3 3/4	4 1/4	3	3 1/16	8.5
		-	-	-	-	6.3	3.0	-	-	-	-	-	-	-

FOR CATHODE RAY TUBES:

Primaries 117 Volts 50/60 Hz.
Lead Terminations Except 24R77 with lugs.

E	24R91◑	1800	4.0	2.5	1.75	-	-	GGV	3 1/8	2 1/2	3	2	1 15/16	1.8
	24R77◑	1600	3.0	-	-	6.3/5/2.5	1.0	HKF	3 1/2	2 9/16	3 1/16	2	2 1/2	3.5
		-	-	-	-	6.3/5/2.5	3.0	-	-	-	-	-	-	
	24R30	2400	5.0	2.5	2.0	2.5	2.0	GGV	4 1/4	3 7/16	3 7/8	2 3/4	2 11/16	5.5

FOR 100 WS ELECTRONIC PHOTOFLASH:

Primaries 105/115/125 Volts 60 Hz.

F	24R107•	400	20	-	-	-	-	BAV	2 3/8	2 7/8	2	2 3/8	-	1.4
		PHOTOFLASH — Charges 1050 mfd. to 450 V.D.C.						-	-	-	-	-	-	
	22R115	Trigger Coil for use with 24R107 Ratio 1 to 35					-	A	-	3/4	9/16	-	-	-

POWER SUPPLY TRANSFORMERS:

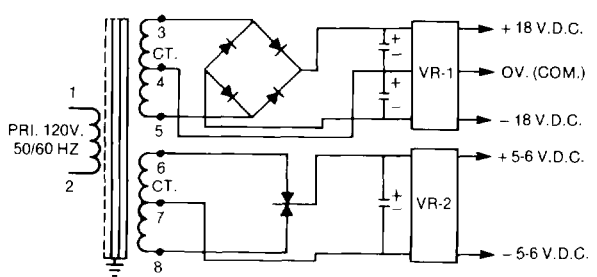
for peripheral computer accessories. For ratings, see Page 15.

For use in power supplies delivering regulated positive and negative D.C. voltage for Op-Amps and separate 5 to 6 Volt regulated D.C. voltage for Logic circuits. Capable of continuous duty at operating temperatures up to 105 Degree C. Primaries are 120 volts, 50-60 Hertz. All transformers have electrostatic shield grounded to core internally. Terminations-lugs.

SECT	Part Number	(RMS) Sec. #1 A.C. Volts	(RMS) Sec. #1 A.C. Amps.	(RMS) Sec. #1 A.C. Volts	(RMS) Sec. #1 A.C. Amps.	Output Ratings	Style	Dimensions-Inches Case H	Case W	Case D	Mounting MW	Mounting MD	Wt. Lbs.
G	23V506	35.0CT	.21	-	-	see chart page 15	BHV	2 3/8	2 7/8	1 5/8	2 3/8	---	1.0
	23V507	33.0CT	.35	-	-	see chart page 15	BHV	2 3/4	3 1/8	1 7/8	2 13/16	---	1.4
	23V508	33.0CT	.21	18CT	1.25	see chart page 15	LHV	3 1/8	2 1/2	2 5/8	2	2 3/8	3.0
	23V509	34.0CT	.35	19CT	2.50	see chart page 15	LHV	3 7/16	2 13/16	2 7/8	2 1/4	2 3/8	3.9

◑ For use in Half-Wave Circuits. • 60 Hz. only. All secondary A.C. voltages ±3%.

TYPICAL CIRCUIT USED WITH 23V508&509 POWER TRANSFORMERS



VR-1 & VR-2 ARE SOLID STATE VOLTAGE REGULATORS

POWER SUPPLY/RECTIFIER TRANSFORMERS (continued)

RECTIFIER TRANSFORMER

117V 50/60 Hz. Primary - Lug Terminations.

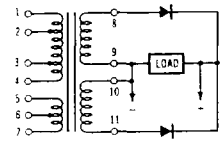
Each Selenium Rectifier Transformer listed in this section has terminal numbering and winding arrangement as shown in schematics. Primary connections are made to terminals 1, 2, 3, 4, 5, 6, and 7. The winding connected to terminals 5, 6, and 7 is a separate isolated primary winding, designed for the purpose of extending the voltage range of the transformer. This is accomplished by connecting the winding in series aiding or in series bucking with terminals 2, 3, or 4. Two identical secondary windings are connected to terminals 8 and 9 and to terminals 10 and 11. Complete connection data supplied with each unit. Rectifier not included.

SECT	Part Number	Fullwave Rectifier Circuits	Under Load Secondary AC Volts (approx)	Res. and Ind. Load		Capacitive Load		Recommend Capacitor	Style	Dimensions-Inches					Wt. Lbs.
										Case			Mounting		
				DC Volts	DC Amps.	DC Volts	DC Amp.			H	W	D	MW	MD	
A	23V60	CT	11.7 to 29.4	3.3 to 11.2	2.0	3.5 to 13.8	2.0	1000 µF	LHV	3 1/8	2 5/8	2 7/8	2	2 1/8	2.5
		Bridge	11.1 to 28.5	7.4 to 23.0	1.25	8.7 to 30.0	1.25	500 µF							
	23V61	CT	12.2 to 29.7	3.7 to 11.1	4.0	4.0 to 14.7	4.0	2000 µF	LHV	3 7/16	2 7/8	3 1/8	2 1/4	2 1/2	3.8
		Bridge	12.2 to 29.7	8.9 to 24.3	2.0	10.8 to 33.0	2.0	1000 µF							
	23V503	CT	12.2 to 29.7	3.7 to 11.1	4.0	4.0 to 14.7	4.0	2000 µF	LHV	3 7/16	2 7/8	2 7/8	2 1/4	2 3/8	3.9
		Bridge	12.2 to 29.7	8.9 to 24.3	2.0	10.8 to 33.0	2.0	1000 µF							
	23V62	CT	11.7 to 29.2	4.3 to 12.0	8.0	4.5 to 14.5	8.0	4000 µF	LHV	3 13/16	3 3/16	4 1/8	2 1/2	3 3/8	7.8
		Bridge	11.8 to 29.2	8.8 to 24.0	4.0	11.4 to 32.4	4.0	2000 µF							
	23V504	CT	11.7 to 29.2	4.3 to 12.0	8.0	4.5 to 14.5	8.0	4000 µF	LHV	3 13/16	3 3/16	3 5/8	2 1/2	2 7/8	6.3
		Bridge	11.8 to 29.2	8.8 to 24.0	4.0	11.4 to 32.4	4.0	2000 µF							
	23V63	CT	12.0 to 29.8	3.4 to 11.5	12.0	3.9 to 14.4	12.0	6000 µF	LHV	4 1/4	3 3/16	4 1/4	2 3/4	3 1/4	8.0
		Bridge	12.0 to 29.6	8.4 to 24.0	6.0	10.0 to 32.0	6.0	3000 µF							
	23V64	CT	12.2 to 29.7	3.9 to 11.4	15.0	4.4 to 14.5	15.0	7500 µF	LHV	4 9/16	3 7/8	5 3/8	3	4 3/8	13.5
		Bridge	12.1 to 29.2	8.7 to 23.7	8.0	10.4 to 32.5	8.0	4000 µF							
	23V431	CT	12.2 to 29.2	3.9 to 11.4	15.0	4.4 to 14.8	15.0	7500 µF	LHV	4 9/16	3 3/4	5	3	3 3/4	12.6
		Bridge	12.1 to 29.2	8.7 to 23.7	8.0	10.4 to 32.5	8.0	4000 µF							
B	23V66	CT	12.2 to 29.1	3.9 to 11.4	22.5	4.0 to 14.3	22.5	11250 µF	LHV	5 3/8	4 7/16	5	3 1/2	3 5/8	14.0
		Bridge	12.2 to 29.1	8.6 to 23.5	12.0	10.4 to 32.5	12.0	6000 µF							
	23V434	CT	12.2 to 29.0	3.9 to 11.4	22.5	4.0 to 14.3	22.5	11250 µF	LHV	5 5/16	4 3/8	5 7/8	3 1/2	4 1/4	20.5
		Bridge	12.2 to 29.0	8.6 to 23.5	12.0	10.8 to 33.0	12.0	6000 µF							
	23V406	CT	23.5 to 60.0	9.0 to 25.0	1.0	11.0 to 34.0	1.0	1500 µF	LHH	3 1/8	2 9/16	3 3/8	2	2 1/4	2.7
		Bridge	23.5 to 60.0	20.5 to 53.0	0.5	27.0 to 74.0	0.5	600 µF							
	23V407	CT	24.0 to 59.0	9.0 to 25.0	2.0	11.5 to 34.0	2.0	2500 µF	LHV	3 7/16	2 13/16	3 11/16	2 1/4	2 1/2	4.1
		Bridge	24.5 to 59.5	20.5 to 52.5	1.0	28.5 to 73.5	1.0	1500 µF							
	23V408	CT	23.0 to 58.0	9.0 to 25.0	4.0	11.0 to 33.5	4.0	3000 µF	LHV	3 13/16	3 1/8	4 1/2	2 1/2	3 1/8	6.9
		Bridge	23.5 to 58.0	20.0 to 51.5	2.0	27.0 to 72.5	2.0	15000 µF							
	23V65	Bridge	25.0 to 53.0	18.0 to 44.0	8.0	25.0 to 63.0	8.0	4300 µF	CHV	5 3/8	4 7/16	6 3/4	3 1/2	5 1/8	25.0
	23V67	Bridge	25.0 to 53.0	18.0 to 43.5	12.0	24.0 to 60.0	12.0	4300 µF	CHV	6 5/8	5 3/8	6 1/2	4 1/4	4 1/2	34.0

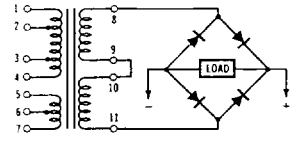
D.C. OUTPUT RATINGS

REFERENCE	Part Number	Secondary No. 1 FWB Rectifier	Input Filter Cap.	Secondary No. FWCT Rectifier	Input Filter Cap.
	23V506	Pos. 21V. D.C. at 150MA. D.C. Neg. 21V. D.C. at 150MA. D.C.	500MF 500MF	- -	- -
	23V507	Pos. 21V. D.C. at 250MA. D.C. Neg. 21V. D.C. at 250MA. D.C.	500MF 500MF	- -	- -
	23V508	Pos. 21V. D.C. at 150MA. D.C. Neg. 21V. D.C. at 150MA. D.C.	500MF 500MF	8.5V DC @ 2.0 AMPS DC	1000µF -
	23V509	Pos. 21V. D.C. at 250MA. D.C. Neg. 21V. D.C. at 250MA. D.C.	500MF 500MF	8.0V DC @ 4.0 AMPS DC	3000µF -

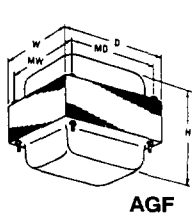
RECTIFIER SCHEMATICS



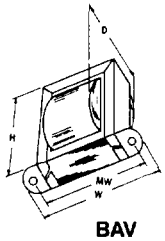
FULL WAVE CENTER TAP



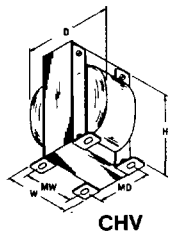
FULL WAVE BRIDGE



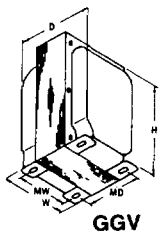
AGF



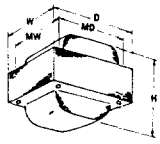
BAV
BHV



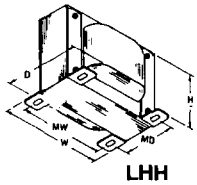
CHV
LHV



GGV



HKF



LHH