

# 1156D-1256D series

POWERSTAT Variable Transformers of the 1156D-1256D Series are available in single and three phase, manually operated and motor-driven assemblies. The 1156D Series operates from 120 volt lines and the 1256D Series from 240 volt lines. The rated output for the 1156D Series is 50 amperes for constant current loads and 55 amperes for constant impedance loads. The 1256D Series is rated at 28 amperes for both constant current and constant impedance loads.

POWERSTAT Variable Transformers of the 1256D Series can be operated at any frequency between 50 and 500 hertz while 1156D Series units operate at 50/60 hertz only. Screens must be removed when operating at frequencies above 60 hertz. Figure A shows the reduction in allowable output current when operated at higher than rated frequency. The regulation curves for types of the 1156D-1256D Series operating at full load current are shown in Figure B. The curves show the voltage drop at any brush setting when full load is applied. For less than full load the voltage drop is proportional to the load. Driving torque, d-c resistance per coil and maximum core and brush loss when operating under no load are given in the chart. 1156D-1256D Series units may be bench or back-of-panel mounted. Manually operated types have standard dials graduated 0-100. The angle of rotation is 318° from zero to maximum output voltage. All units are provided with fuses in the output brush leads. POWERKOTE coils are featured in all 1156D-1256D Series models.

Except for models with chokes, all single units, 2- and 3-gang manually-operated and motor-driven assemblies are available with the terminal board enclosed in a metal terminal box. Knock-outs in the terminal enclosure permit wiring with cable or conduit. If a terminal enclosed unit is desired, include the letter T in the type number following the Series designation. For example: 1256DT-2S.

Open construction models have the letter U suffix in the type number and the same electrical ratings and coil-to-terminal wiring as their corresponding enclosed construction types but have no protective screening.

POWERSTAT Variable Transformers of the 1156D-1256D Series are available in 2-, 3-, 4-, 5-, 6-, 7-, 8- and 9-gang assemblies for manually-operated or motor-driven duty and in 10-, 12-, 14-, 15-, 16-, 18-, 21-, 24- and 27-gang assemblies in motor-driven types only. All can be bench or floor mounted. Single units, 2- and 3-gang manually-operated assemblies can be wall or back-of-panel mounted but additional support should be provided for ganged assemblies.



TYPE 1156D



MOTOR-DRIVEN  
SCREENED TYPES



U TYPES

All POWERSTAT Variable Transformers of the 1156D-1256D Series are available as motor-driven assemblies. Motor-driven units have MB prefix in the type number and the identical electrical ratings of their corresponding manually-operated models. Standard speeds for full range travel are: 5, 15, 30 or 60 seconds for single units, 2- and 3-gang assemblies; 15, 30 or 60 seconds for 4-, 5- and 6-gang assemblies; 30 or 60 seconds for 7-, 8-, 9-, 10- and 12-gang assemblies; and 60 seconds for 14-gang and larger. The motor is rated for an input of 120 volts, 50/60 hertz, single phase with a current requirement of approximately 0.4 ampere. When ordering, motor-driven types should be prefixed with the desired speed in seconds. For example: 5MB1156D.

NUMBER OF GANGED UNITS	Approximate Driving Torque		No-Load Loss at 60 Hertz (Watts)	D-C Resistance Per Coil (Ohms)*	
	Oz-In	KpCm		1156D Series	1256D Series
Single	200-250	14.4-18	40	0.11	0.43
2	400-500	28.8-36	80	0.11	0.43
3	600-750	43.2-54	120	0.11	0.43
4	800-1000	57.6-72	160	0.11	0.43
5	1000-1250	72 -90	200	0.11	0.43
6	1200-1500	86.4-108	240	0.11	0.43
7	1400-1750	100.8-126	280	0.11	0.43
8	1600-2000	115.2-144	320	0.11	0.43
9	1800-2250	129.6-162	360	0.11	0.43
10	Motor-driven		400	0.11	0.43
12	Motor-driven		480	0.11	0.43
14	Motor-driven		560	0.11	0.43
15	Motor-driven		600	0.11	0.43
16	Motor-driven		640	0.11	0.43
18	Motor-driven		720	0.11	0.43
21	Motor-driven		840	0.11	0.43
24	Motor-driven		960	0.11	0.43
27	Motor-driven		1080	0.11	0.43

\*Measured from start to end of winding.

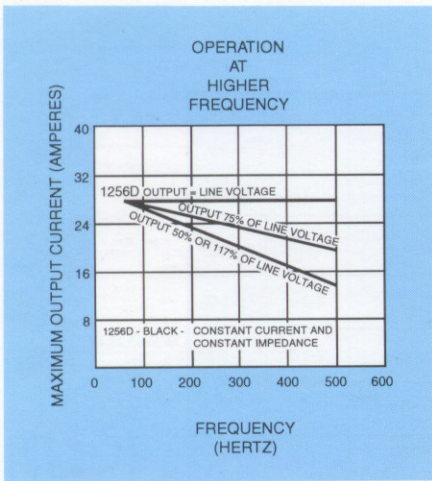
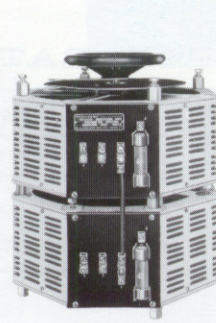
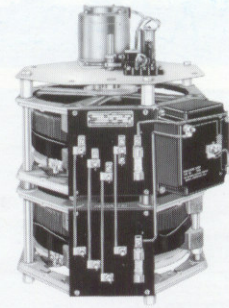


FIGURE A



TYPE 1156D-2S



TYPE MB1256DU-2P

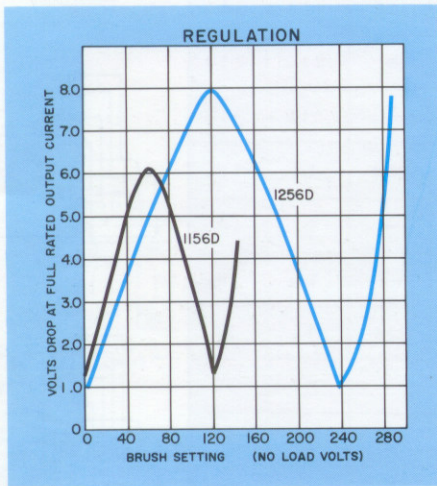
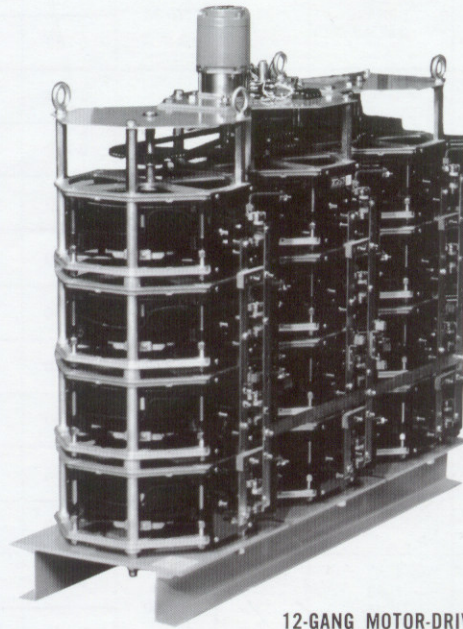


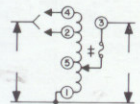
FIGURE B



12-GANG MOTOR-DRIVEN ASSEMBLY

### CONNECTIONS AND RATINGS

TYPE		INPUT		OUTPUT				TERMINALS		
		VOLTS	HERTZ	VOLTS	CONSTANT CURRENT LOAD		CONSTANT IMPEDANCE LOAD			
MANUALLY OPERATED	MOTOR DRIVEN				MAX. AMP.	MAX. KVA	MAX. AMP.	MAX. KVA	INPUT	OUTPUT
1156D 1156DT 1156DU	MB1156D MB1156DT MB1156DU	120	50/60	0-120	50	6.0	55	6.6	1-4	1-3
				0-140	50	7.0	—	—	1-2	1-3
1256D 1256DT 1256DU	MB1256D MB1256DT MB1256DU	240	50/60	0-240	28	6.7	28	6.7	1-4	1-3
				0-280	28	7.8	—	—	1-2	1-3
		120	50/60	0-280	28*	3.4†	—	—	1-5	1-3

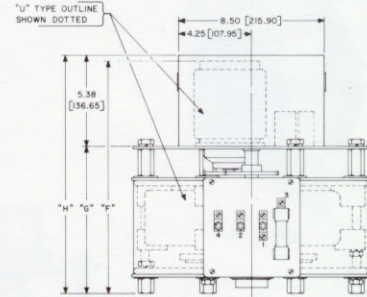
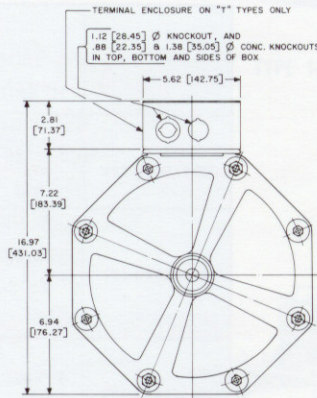
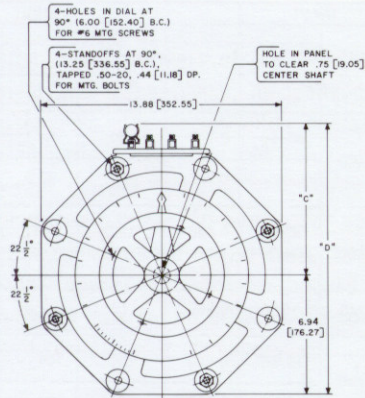
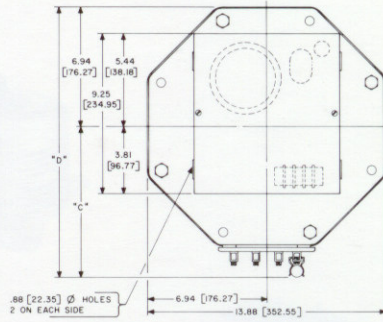
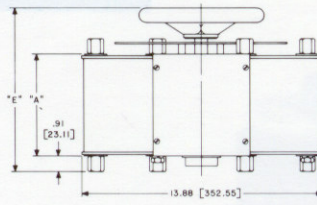
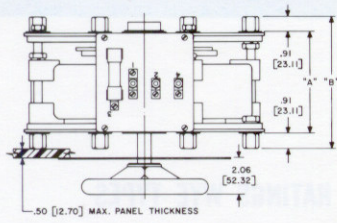


1156D TYPES DO NOT HAVE TERMINAL 5.

\*Maximum output current in output voltage range up to 150 volts. At higher output voltages, output current must be reduced according to rating curve Figure B on page 4.

†Maximum KVA at maximum output voltage. Maximum KVA at lower output voltages may be calculated from rating curve Figure B on page 4.

‡Fuse supplied: 50 ampere on 1156D types, 30 ampere on 1256D types.

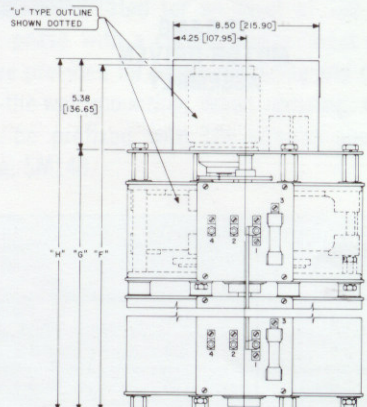
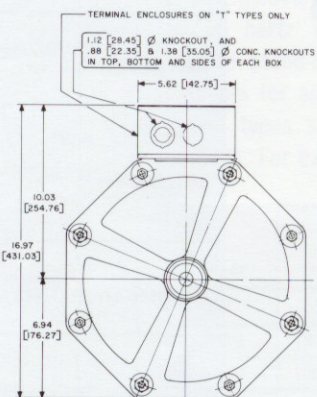
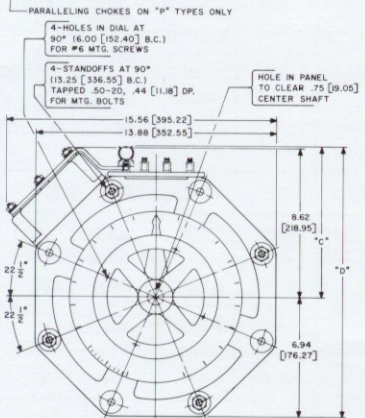
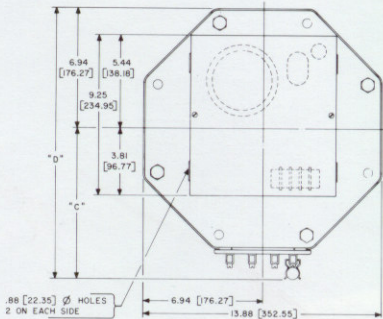
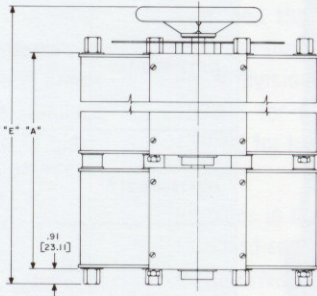
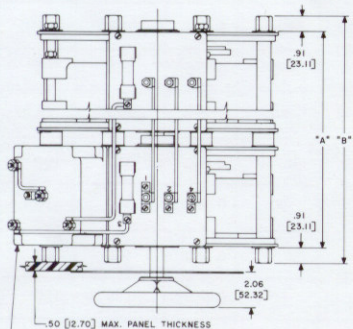


PANEL MOUNTED

BENCH OR WALL MOUNTED

MOTOR DRIVEN

	TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
1156D-1256D SERIES	SINGLE UNIT	5.88 [149.35]	7.69 [195.32]			9.47 [240.54]	15.44 [392.18]	8.50 [215.90]	15.76 [400.30]
	2-GANG	12.50 [317.50]	14.31 [363.47]	8.72 [221.49]	15.66 [397.76]	16.09 [408.69]	22.06 [560.32]	15.12 [384.05]	22.38 [568.45]
	3-GANG	19.12 [485.65]	20.94 [531.87]			22.72 [577.09]	28.69 [728.73]	21.75 [552.45]	29.00 [736.60]



PANEL MOUNTED

BENCH OR WALL MOUNTED

MOTOR DRIVEN