

# 126-226 series

POWERSTAT Variable Transformers of the 126-226 Series are offered in single and three phase, manually-operated and motor-driven assemblies. The 126 Series types operate from 120 volt lines and the 226 Series types from 240 volt lines. The rated output for constant current loads is 15 amperes for the 126 Series and 7.5 amperes for the 226 Series. For a constant impedance load the maximum rated output current at line voltage is increased to 20 amperes for the 126 Series and 10 amperes for the 226 Series. All units in the 126-226 Series have POWERKOTE Coils.

POWERSTAT Variable Transformers of the 126-226 Series can be operated at any frequency between 50 and 2000 hertz. Figure A shows the allowable output current for operation at higher than rated frequency. Figure B shows the regulation curves for POWERSTAT Variable Transformers of the 126-226 Series operating at full load current. 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 ratings. The removable, solid-metal shaft can be adjusted for either general utility or back-of-panel mounting. All types have standard dials graduated 0-100. Terminal connections permit increasing output voltage with either clockwise or counterclockwise rotation of the knob. Rotation angle from zero to maximum output voltage is 320°.

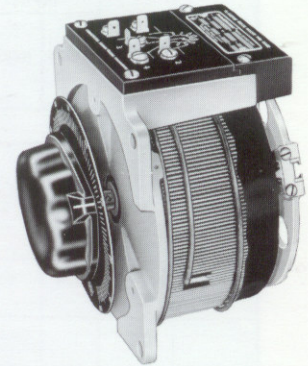
Plug-in units have the same ratings as types 126 and 226 but offer the convenience of input cord-plugs, fuses and output receptacles housed in cast aluminum terminal enclosures. They can be converted to limit the output voltage to line voltage. Plugs and receptacles are shown in the outline for cord and plug types on page 17. Fused models of the 126 Series have 15 ampere fuses and those of the 226 Series have 8 ampere fuses.

Open construction types have a letter (U) suffix in the type number and the same electrical ratings and coil to terminal wiring as their corresponding enclosed construction types. These POWERSTAT Variable Transformers have no protective screening and the shaft extends from the base end of the assembly for back-of-panel mounting. The shaft is removable permitting its extension from the radiator end of the assembly if desired without disturbing the brush or radiator.

POWERSTAT Variable Transformers of the 126-226 Series are available in two- and three-gang assemblies in either enclosed or open construction. Most are provided with jumpers in the standard common position that may be moved or removed as required.



TYPE 226



U TYPES



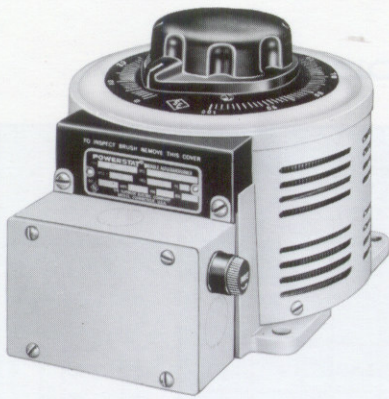
MOTOR-DRIVEN  
SCREENED TYPES

All except plug-in models in the 126-226 Series are available with motor drives in standard speeds of 5, 15, 30 or 60 seconds for full range travel. Motor-driven POWERSTAT Variable Transformers have an MC prefix in the type number and the identical electrical ratings of their corresponding manually-operated types. The motor is rated for an input of 120 volts, 50/60 hertz single phase with a current requirement of approximately 0.3 ampere. Standoffs are provided for bench mounting and slotted brackets for against-the-wall mounting. When ordering, motor-driven models should be prefixed with the desired speed in seconds. For example: 5MC126.

TYPE†	Approximate Driving Torque		No-Load Loss at 60 Hertz (Watts)	D-C Resistance per Coil* (Ohms)
	Oz-In	KpCm		
126	25-35	1.8-2.5	9	0.45
126-2	65-90	4.7-6.5	18	0.45
126-3	100-135	7.2-9.7	27	0.45
226	25-35	1.8-2.5	9	2.8
226-2	65-90	4.7-6.5	18	2.8
226-3	100-135	7.2-9.7	27	2.8

\*Measured from start to end of winding.

†Data also applies to units having applicable prefixes and suffixes.



F TYPES



CORD-PLUG TYPES



MOTOR-DRIVEN U TYPES

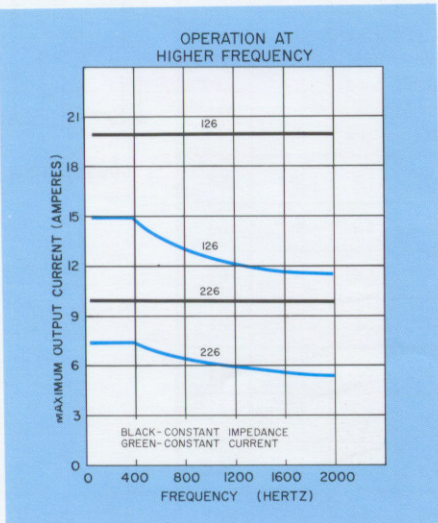


FIGURE A

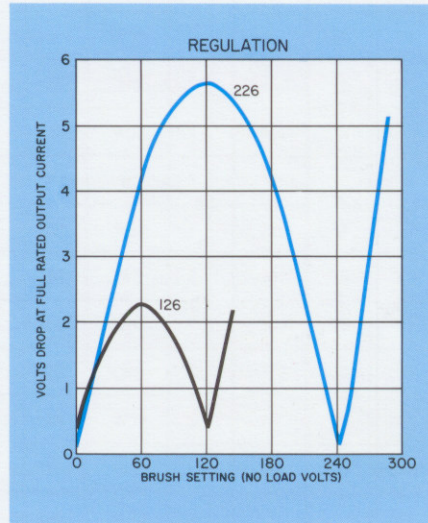
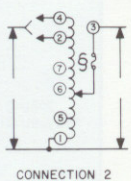
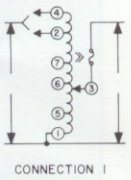


FIGURE B

CONNECTIONS AND RATINGS

TYPE	CONNECTION	INPUT		OUTPUT				KNOB ROTATION	TERMINALS				
		VOLTS	HERTZ	VOLTS	CONSTANT CURRENT LOAD		CONSTANT IMPEDANCE LOAD		KNOB ON RADIATOR END		KNOB ON BASE END		
					MAX. AMP.	MAX. KVA	MAX. AMP.		MAX. KVA	INPUT	OUTPUT	INPUT	OUTPUT
126 MC 126† 126T MC 126T‡ 126U MC 126U‡	#1	120	50/60	0-120	15	1.8	20	2.4	CW	1-4	1-3	1-4	3-4
				0-140	15	2.1	—	—	CCW	1-4	3-4	1-4	1-3
F126 MC F126‡ 3PN126	#2	120	50/60	0-120	15	1.8	20	2.4	CW	1-4	1-3	1-4	3-4
				0-140	15	2.1	—	—	CCW	1-4	3-4	1-4	1-3
226 MC 226‡ 226T MC 226T‡ 226U MC 226U‡	#1	240	50/60	0-240	7.5	1.8	10	2.4	CW	1-4	1-3	1-4	3-4
				0-280	7.5	2.1	—	—	CCW	1-4	3-4	1-4	1-3
		120	50/60	0-280	7.5*	0.91†	—	—	CW	1-2‡	1-3	4-5	3-4
				0-280	7.5*	0.91†	—	—	CCW	4-5	3-4	1-2	1-3
F226 MC F226‡ 3PN226	#2	240	50/60	0-240	7.5	1.8	10	2.4	CW	1-4	1-3	1-4	3-4
				0-280	7.5	2.1	—	—	CCW	1-4	3-4	1-4	1-3
		120	50/60	0-280	7.5*	0.91†	—	—	CW	1-2‡	1-3	4-5	3-4
				0-280	7.5*	0.91†	—	—	CCW	4-5	3-4	1-2	1-3



126 TYPES DO NOT HAVE TERMINALS 6 OR 7

CONNECTIONS SHOWN ARE FOR CW KNOB ROTATION, KNOB ON RADIATOR END (CCW ROTATION, KNOB ON BASE END)

\*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.

‡Motor-driven types use connections for CW rotation, knob on radiator end.

§Fuse supplied: 15 ampere on 126 types, 8 ampere on 226 types.

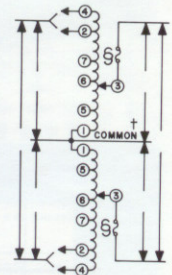
¶Cord-and-plug units wired this way when shipped.

□Not available on types F226 or MCF226.

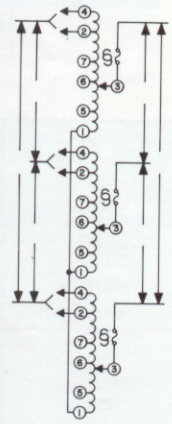
»Fuse recommended, not supplied.

# CONNECTIONS AND RATINGS

TYPE	CONNECTION	INPUT		OUTPUT				KNOB ROTATION	TERMINALS						
		VOLTS	HERTZ	VOLTS	CONSTANT CURRENT LOAD		CONSTANT IMPEDANCE LOAD		KNOB ON RADIATOR END			KNOB ON BASE END			
					MAX. AMP.	MAX. KVA	MAX. AMP.		MAX. KVA	INPUT	JUMPER†	OUTPUT	INPUT	JUMPER‡	OUTPUT
126U-2 MC126U-2□	#1 1-PHASE SERIES	240	50/60	0-240	15	3.6	20	4.8	CW	4-4	1-1	3-3	1-1	4-4	3-3
				0-280	15	4.2	—	—	CCW	1-1	4-4	3-3	4-4	1-1	3-3
		120	50/60	0-120	15	3.1	20	4.2	CW	4-1-4	1-1	3-1-3	1-4-1	4-4	3-4-3
				0-140	15	3.6	—	—	CCW	1-4-1	4-4	3-4-3	4-1-4	1-1	3-1-3
	#1 3-PHASE OPEN DELTA	240	50/60	0-240	7.5	3.1	10	4.2	CW	2-1-2	1-1	3-1-3	5-4-5	4-4	3-4-3
				0-280	7.5	3.6	—	—	CCW	5-4-5	4-4	3-4-3	2-1-2	1-1	3-1-3
226U-2 MC226U-2□	#1 1-PHASE SERIES	480	50/60	0-480	7.5	3.6	10	4.8	CW	4-4	1-1	3-3	1-1	4-4	3-3
				0-560	7.5	4.2	—	—	CCW	1-1	4-4	3-3	4-4	1-1	3-3
		240	50/60	0-560	7.5*	1.8‡	—	—	CW	2-2	1-1	3-3	5-5	4-4	3-3
				0-560	7.5*	1.8‡	—	—	CCW	5-5	4-4	3-3	2-2	1-1	3-3
	#1 3-PHASE OPEN DELTA	240	50/60	0-240	7.5	3.1	10	4.2	CW	4-1-4	1-1	3-1-3	1-4-1	4-4	3-4-3
				0-280	7.5	3.6	—	—	CCW	1-4-1	4-4	3-4-3	4-1-4	1-1	3-1-3
		120	50/60	0-240	7.5	3.1	10	4.2	CW	2-1-2	1-1	3-1-3	5-4-5	4-4	3-4-3
				0-280	7.5*	1.6‡	—	—	CCW	5-4-5	4-4	3-4-3	2-1-2	1-1	3-1-3
	#2 3-PHASE WYE	240	50/60	0-240	15	6.2	20	8.3	CW	4-4-4	1-1-1	3-3-3	1-1-1	4-4-4	3-3-3
				0-280	15	7.3	—	—	CCW	1-1-1	4-4-4	3-3-3	4-4-4	1-1-1	3-3-3
		60	50/60	0-240	15	6.2	20	8.3	CW	2-2-2	1-1-1	3-3-3	5-5-5	4-4-4	3-3-3
				0-280	15	7.3	—	—	CCW	5-5-5	4-4-4	3-3-3	2-2-2	1-1-1	3-3-3
226U-3 MC226U-3□	#2 3-PHASE WYE	480	50/60	0-480	7.5	6.2	10	8.3	CW	4-4-4	1-1-1	3-3-3	1-1-1	4-4-4	3-3-3
				0-560	7.5	7.3	—	—	CCW	1-1-1	4-4-4	3-3-3	4-4-4	1-1-1	3-3-3
		60	50/60	0-480	7.5	6.2	10	8.3	CW	2-2-2	1-1-1	3-3-3	5-5-5	4-4-4	3-3-3
				0-560	7.5	7.3	—	—	CCW	5-5-5	4-4-4	3-3-3	2-2-2	1-1-1	3-3-3
	240	60	50/60	0-560	7.5*	3.2‡	—	—	CW	6-6-6	1-1-1	3-3-3	7-7-7	4-4-4	3-3-3
				0-560	7.5*	3.2‡	—	—	CCW	7-7-7	4-4-4	3-3-3	6-6-6	1-1-1	3-3-3



CONNECTION 1



CONNECTION 2

126 TYPES  
DO NOT HAVE  
TERMINALS  
6 OR 7

CONNECTIONS  
SHOWN ARE FOR  
CW KNOB  
ROTATION,  
KNOB ON  
RADIATOR END  
(CCW ROTATION,  
KNOB ON BASE END)

\*Maximum output current in output voltage range from 0 to 25 percent above line voltage. At higher output voltages output current must be reduced according to rating curve Figure B on page 4

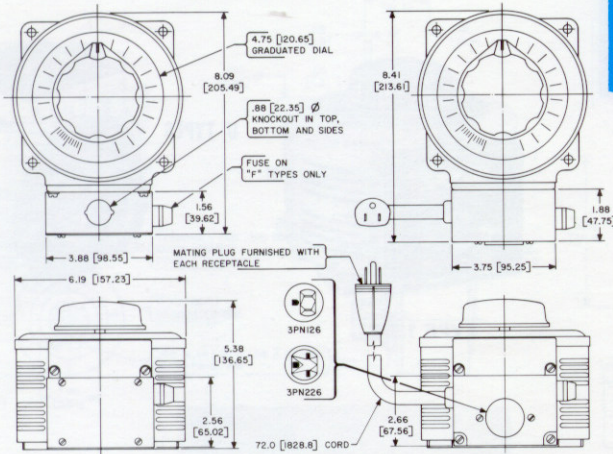
†Common used as third leg in 3-phase open delta or neutral in 3-wire single phase series and 4-wire 3-phase wye connections; not used in 2-wire series or 3-wire wye connections.

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

§Fuses recommended on all units. 15 ampere fuses supplied internally on F126 types, 8 ampere on F226 types.

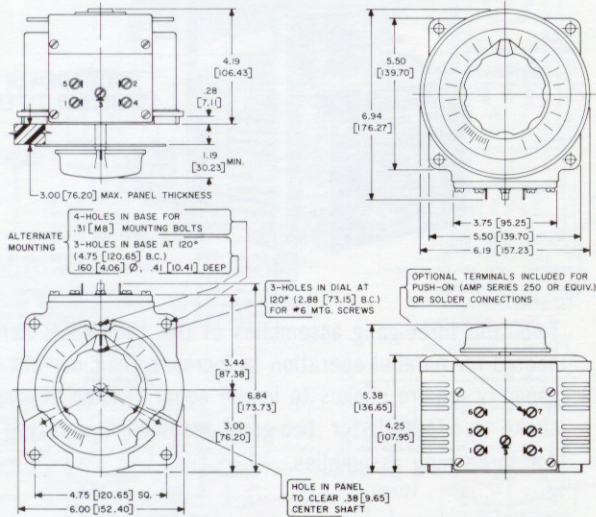
¶Jumper provided in standard common position should be moved or removed as required.

□Motor-driven types use connections for CW rotation, knob on radiator end.



"F" AND "T" TYPES

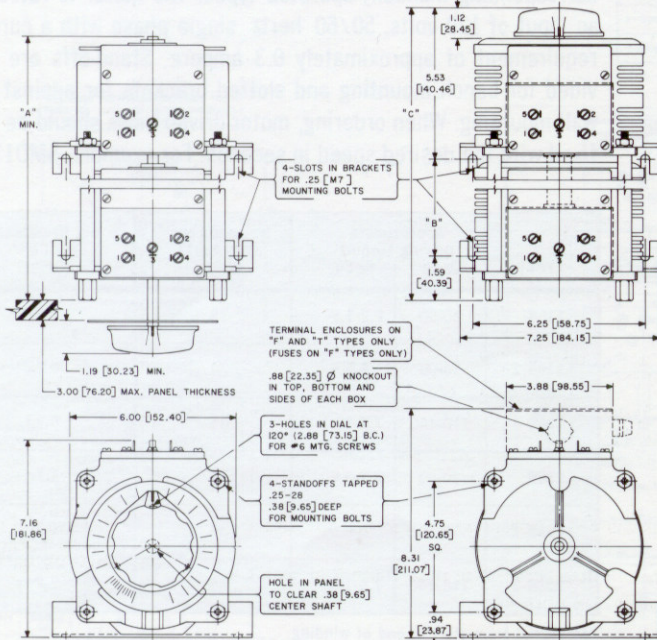
CORD AND PLUG TYPES



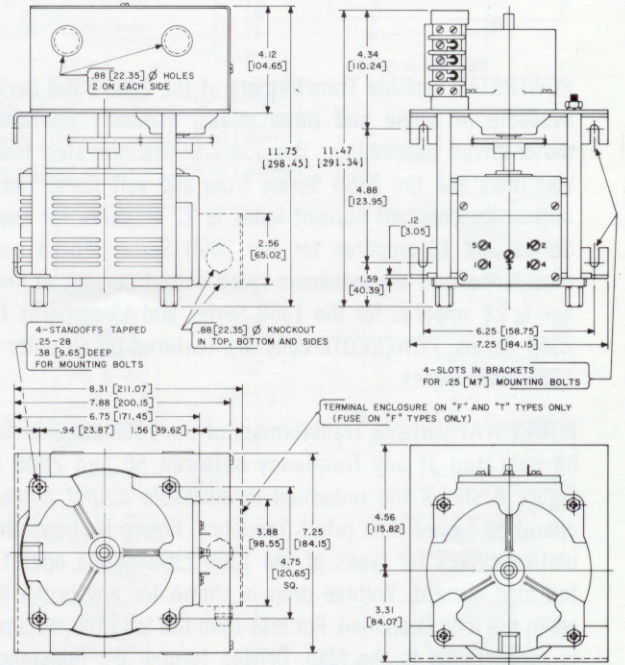
PANEL MOUNTED

BENCH OR WALL MOUNTED

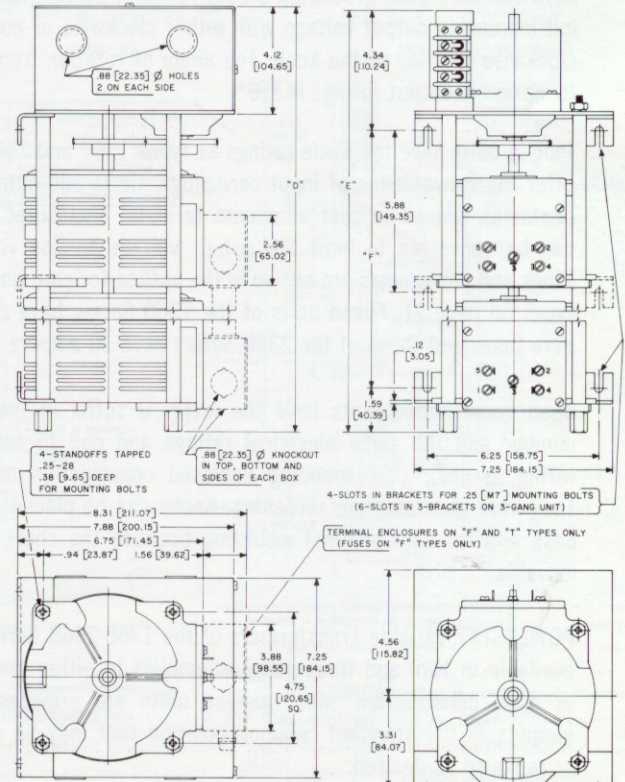
TYPE	"A"	"B"	"C"	"D"	"E"	"F"
2-GANG	9.44 [239.78]	3.50 [88.90]	10.62 [269.75]	16.25 [412.75]	15.97 [405.64]	9.38 [238.25]
3-GANG	13.94 [354.07]	8.00 [203.20]	15.12 [384.05]	20.75 [527.05]	20.47 [519.94]	13.88 [352.55]



MANUAL



MOTOR DRIVEN



MOTOR DRIVEN