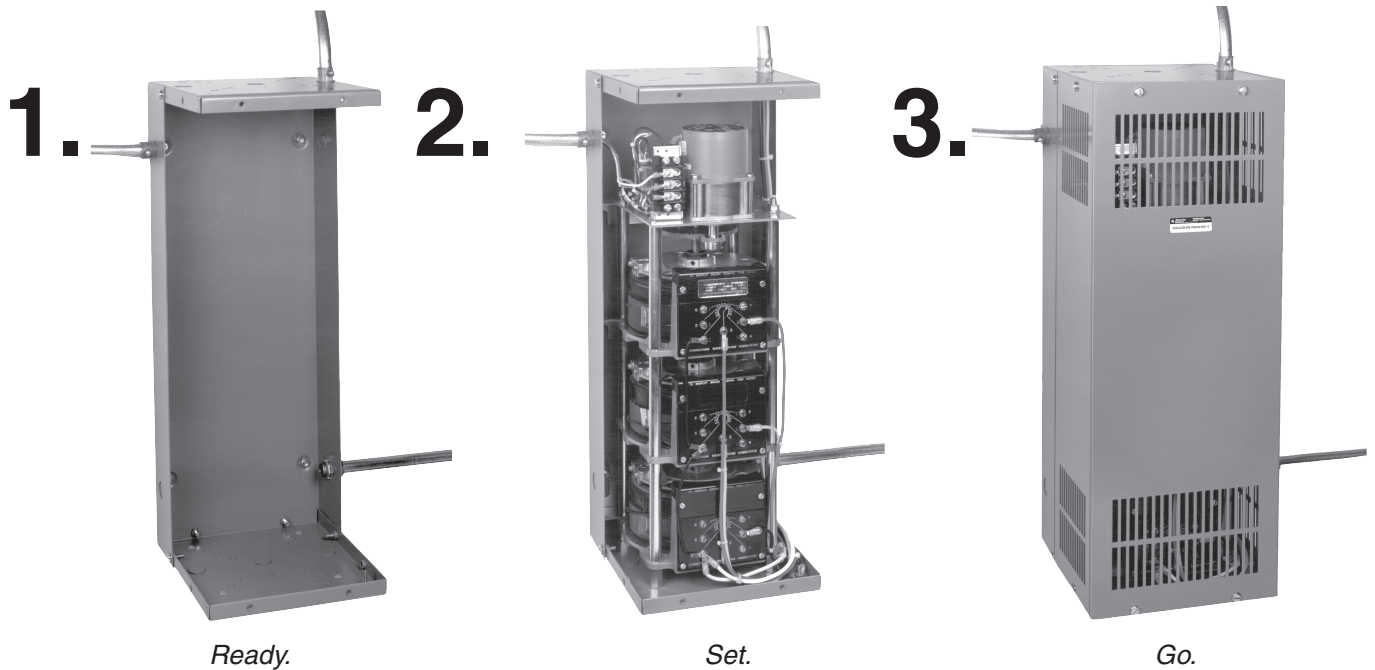


**Installation  
Instructions  
for  
PBA40 Series  
POWERSTAT® Variable Transformer  
Enclosures  
for  
Bench or Wall Mounting,  
Manual and Motorized 146U and  
246U Models**

**Installation is easy as 1-2-3 . . .**



## INSPECTION

Examine the Enclosure carefully for shipping damage or for missing parts. The “Damage and Shortage” instructions packed with the unit outline the procedures to follow if any parts are damaged or missing. In addition to the POWERSTAT Enclosure, a hardware pack which contains all hardware needed to mount the POWERSTAT Variable Transformer inside the Enclosure is supplied.

<u>Enclosure</u>	<u>Hardware Pack Number</u>
PBA40-N01-1	218654-001
PBA40-N01-2	218654-002
PBA40-N01-3	218654-004
PBA40-N01-4	218654-004

**Hardware Pack 218654-001** contains the following items:

<u>Quantity</u>	<u>Description</u>	<u>Part Number</u>
4	Screw, 1/4"-28 x 3/4" Long	203505-208-AB
4	Screw, 3/8"-24 x 1" Long	203505-310-AB
2	Nut, 1/4"-20	203600-110-AB
4	Nut, 1/4"-28	203600-111-AB
4	Nut, 3/8"-24	203600-115-AB
4	Washer, Flat, 1/4"	203601-112-AB
4	Washer, Flat, 3/8"	203601-114-AB
4	Lock Washer, 1/4"	203604-112-AC
4	Lock Washer, 3/8"	203604-114-AC
1	Lock Washer, Internal Tooth, #10	203603-110-AC
1	Lock Washer, #10	203604-110-AC
1	Washer, Flat, #10	203601-110-AB
1	Nut, #10-32	203600-108-AB

**Hardware Pack 218654-002** contains the following items:

<u>Quantity</u>	<u>Description</u>	<u>Part Number</u>
4	Screw, Hex Head, 1/4"-28 x 1/2" Long	203505-206-AB
4	Screw, 3/8"-24 X 3/4" Long	203505-308-AB
2	Nut, 1/4"-20	203600-110-AB
4	Washer, Flat, 1/4"	203601-112-AB
4	Washer, Flat, 3/8"	203601-114-AB
4	Lock Washer, 1/4"	203604-112-AC
4	Lock Washer, 3/8"	203604-114-AC
1	Lock Washer, Internal Tooth, #10	203603-110-AC
1	Lock Washer, #10	203604-110-AC
1	Washer, Flat, #10	203601-110-AB
1	Nut, #10-32	203600-108-AB

**Hardware Pack 218654-004** contains the following items:

<u>Quantity</u>	<u>Description</u>	<u>Part Number</u>
4	Screw, 3/8"-24 x 3/4" Long	203505-308-AB
2	Screw, 3/8"-24 x 1" Long	203505-310-AB
6	Washer, Flat, 1/4"	203601-112-AB
6	Washer, Flat, 3/8"	203601-114-AB
6	Lock Washer, 1/4"	203604-112-AC
6	Lock Washer, 3/8"	203604-114-AC
2	Nut, 1/4"-20	203600-110-AB
2	Nut, 3/8"-24	203600-115-AB

## DESCRIPTION

PBA40 Series Enclosures are for use with manual and motor driven, single-, two- and three-gang POWERSTAT Variable Transformers of the 146U and 246U Series. Four Enclosures are available for use as indicated in the following charts.

### MANUALLY OPERATED MODELS

Series	Ganged Assemblies	POWERSTAT Variable Transformer Type	Enclosure Type
146 & 246	1	146U, 246U	PBA40-N01-1
	2	146U-2, 246U-2	PBA40-N01-2
	3	146U-3, 246U-3	PBA40-N01-3

### MOTOR-DRIVEN MODELS

Series	Ganged Assemblies	POWERSTAT Variable Transformer Type	Enclosure Type
146 & 246	1	M/ME146U, M/ME246U, DM146U, DM246U	PBA40-N01-2
	2	M/ME146U-2, M/ME246U-2, DM146U-2, DM246U-2	PBA40-N01-3
	3	M/ME146U-3, M/ME246U-3, DM146U-3, DM246U-3	PBA40-N01-4

PBA40 Series Enclosures are designed for use with open construction (suffix U) POWERSTAT Variable Transformers. They are constructed of heavy gauge sheet metal and are supplied completely assembled. The Enclosures have a full range of knockouts for wire entry and exit and are supplied with all necessary mounting hardware for mounting the POWERSTAT assembly in the Enclosure.

A PBA40 Enclosure is a NEMA Type 1 Enclosure as defined in NEMA Standard 250. It is designed to protect personnel from accidental contact with the enclosed POWERSTAT Variable Transformer.

Enclosures of the PBA40 Series are intended for use indoors in areas where unusual service conditions do not exist. They are designed for bench or wall mounting and provide the ventilation needed to allow operating the enclosed POWERSTAT Variable Transformer at its maximum rating.

**CAUTION:**

**These Enclosures have been designed and tested to provide the ventilation needed to permit operation of the POWERSTAT Variable Transformer at its full rating in ambient temperature to 40°C. When ambient temperature exceeds 40°C, the current rating of the POWERSTAT unit must be reduced as shown in the curve found in the instruction manual for your POWERSTAT model.**

## MOUNTING

The Enclosures have mounting pads on the rear for mounting against a flat surface. Follow these steps to mount the Enclosure.

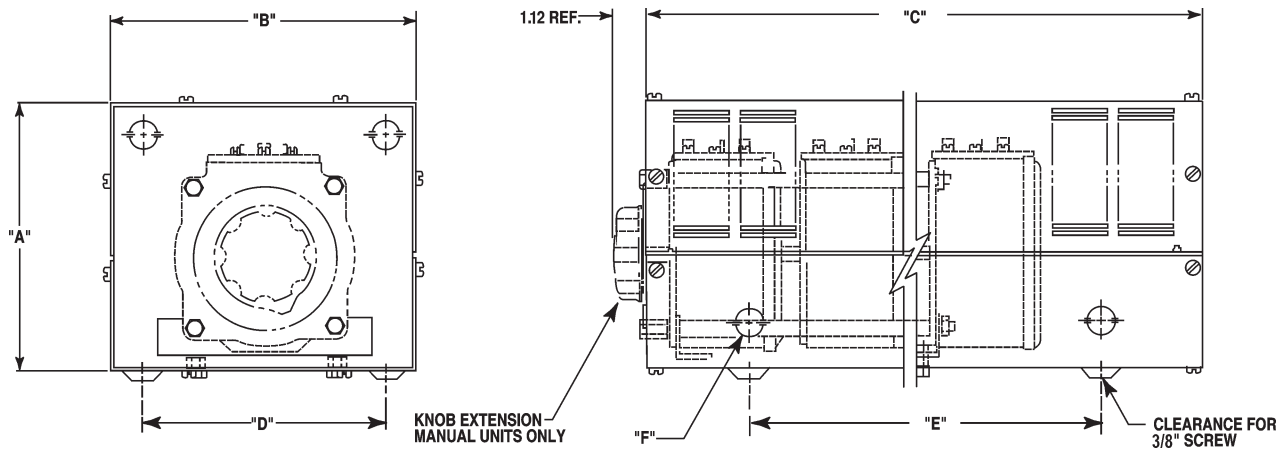
### **Bench Or Wall Mounting, Manually Operated Single-, Two- and Three-Gang Models**

1. Remove the four screws that hold the front cover in place and remove the cover.
2. Hold the Enclosure in position and mark the locations of the mounting holes located in the drawn pads.
3. The holes in the base of the Enclosure provide clearance for 3/8" diameter bolts. Depending on the mounting method to be used, either drill clearance holes for 1/4" diameter bolts in the mounting surface or drill and tap 1/4" diameter mounting screws.
4. Punch out the appropriate set of mounting holes and the shaft clearance hole in the end cover of the Enclosure. Select the mounting holes which match the locations of the four hex standoffs on the base end of the POWERSTAT unit. Note that the end covers supplied with the Enclosure allow the unit to be mounted on either end with the same option for shaft exit.
5. Remove the knob and the dial from the Variable Transformer. Mount the dial on the appropriate end cover using the same screws. Be sure the dial indications will be aligned with the Variable Transformer brushes after the unit is installed in the Enclosure.
6. Loosen the Variable Transformer shaft setscrews and position the shaft so that it will extend from the base end of the assembly approximately 1-1/8" (28.6mm) beyond the outer surface of the cover. Be sure all of the Variable Transformer brushes are properly aligned before tightening the shaft setscrews.
7. Place the POWERSTAT Variable Transformer in position inside the Enclosure with the shaft extending through the center hole in the Enclosure end cover. Bolt the POWERSTAT assembly to the end cover using the four 3/8"-24 x 3/4" long screws supplied. When installing a three-deck unit, make sure the holes in the Variable Transformer side bracket furthest from the mounting base are aligned with a set of holes in the side of the Enclosure. Bolt this bracket to the Enclosure with the two 3/8"-24 x 1" long screws, nuts and washers provided. Insert these bolts from the rear of the Enclosure so that they extend into the Enclosure.
8. Place the knob on the shaft and position it correctly with regard to the dial indications and the brushes. Tighten the knob setscrews.
9. Fasten the Enclosure to the bench or wall using the holes prepared in steps 2 and 3. Hardware for mounting the Enclosure to the bench or wall is not provided.
10. Complete all wiring to the POWERSTAT Variable Transformer before replacing the front cover. A ground stud is provided in the Enclosure and hardware for this stud is supplied. Several knockouts are provided in the Enclosure for wire entry and exit.

### **Bench or Wall Mounting, Motorized Single-, Two- and Three-Gang Models**

1. Remove the four screws that hold the front cover in place and remove the cover.
2. Hold the base of the Enclosure in position against the mounting surface and mark the locations of the holes provided in the drawn pads on the base.
3. The holes in the mounting pads provide clearance for 3/8" diameter bolts. Depending on the mounting method to be used, either drill through holes in the mounting surface to provide clearance for 3/8" diameter bolts or drill and tap for 3/8" mounting screws.
4. Punch out the appropriate set of mounting holes in the end cover of the Enclosure. Select the holes that match the four hex standoffs on the base of the unit.
5. Place the POWERSTAT assembly in position inside the Enclosure with the side mounting brackets towards the back of the Enclosure. Bolt the base of the POWERSTAT unit to the end cover using four 3/8"-24 x 3/4" long screws (supplied). Be sure that the holes in the side bracket of the variable transformer furthest from the mounting surface are lined up with a set of holes in the rear panel of the Enclosure. Bolt this bracket to the rear of the Enclosure using the two 3/8"-24 x 1" long screws, washers and nuts provided. Insert the bolts from the rear of the Enclosure so that they extend into the Enclosure.
6. Mount the Enclosure to the bench or wall using the mounting holes previously prepared in steps 2 and 3. Hardware for mounting the Enclosure is not supplied.
7. Complete all wiring to the POWERSTAT Variable Transformer before replacing the front cover. A grounding stud is provided inside the Enclosure and hardware for this stud is supplied. Several knockouts are provided in the Enclosure for wire entry and exit.

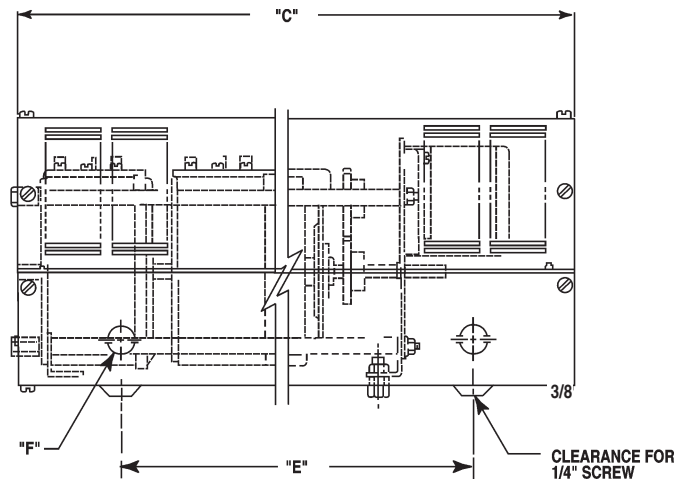
# Dimensions



## Manually Operated

Connectric Knockouts "F"

Type	Quantity	Diameter: Inches (Millimeters)
PBA40-N01-1	6	.88 (22.3) & 1.12 (28.5)
PBA40-N01-2	8	
PBA40-N01-3	8	
PBA40-N01-4	8	



## Motor Driven

Type	Dimensions				
	"A"	"B"	"C"	"D"	"E"
PBA40-N01-1	12.88 (327.15)	11.88 (301.75)	6.25 (158.75)	10.25 (260.35)	4.25 (107.95)
PBA40-N01-2	12.88 (327.15)	11.88 (301.75)	14.00 (355.60)	10.25 (260.35)	7.00 (177.80)
PBA40-N01-3	12.88 (327.15)	11.88 (301.75)	19.00 (482.60)	10.25 (260.35)	12.00 (304.80)
PBA40-N01-4	12.88 (327.15)	11.88 (301.75)	25.00 (635.00)	10.25 (260.35)	18.00 (457.20)



# Available Coast-to-Coast and Internationally

## Voltage Control Components

- VOLT-PAC®** Variable Transformers
- POWERSTAT®** Variable Transformers
- LUXTROL®** Lighting Controls
- 5-WAY®** Binding Posts
- SUPERCON®** Electrical Connectors

Voltage Control Components are available worldwide through an extensive Authorized Stocking Distributor network. These Distributors offer literature, technical assistance and a wide range of models off-the-shelf for fastest possible delivery and service.

## Power Quality Products

- STABILINE®** Automatic Voltage Regulators
- STABILINE®** Transient Voltage Surge Suppressors
- STABILINE®** Uninterruptible Power Supplies
- STABILINE®** Power Conditioners

STABILINE Power Quality Solutions are available worldwide through an extensive Authorized Distributor and Reseller network which offer literature, technical assistance and a select range of models off-the-shelf for fastest possible delivery and service.

In addition, Superior Electric Manufacturer's Representatives are available to provide prompt attention to customer needs. Call or fax for ordering and application information or for the address of the closest Manufacturer's Representative, Authorized Distributor or Reseller.



The right to make engineering refinements on all products is reserved. Dimensions and other details are subject to change.

### Telephone and Fax Numbers

Telephone 860-507-2025  
Fax 860-507-2050  
Customer Service 860-507-2025, Ext. 70782  
Product Application 860-507-2025, Ext. 72058

### Toll-Free (in USA and Canada only)

Telephone 1-800-787-3532  
Fax 1-800-821-1369  
Customer Service 1-800-787-3532, Ext. 70782  
Product Application 1-800-787-3532, Ext. 72058

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