

Supersedes Bulletin 725 Published August, 1963
And All Subsequent Reprintings

The Types PBO-R and PBO-R-1 are compact, easily installed disconnect switches used to by-pass a voltage regulator. Their design makes multiple mounting of single pole disconnect switches and complicated conductor paths unnecessary.

These switches combine two conventional disconnects mounted side-by-side on a common base, with a third arranged on the live parts. They will allow uninterrupted – and unregulated – current flow while the regulator is out of service.

The PBO-R (600 amp. models) is designed to the original NEMA 30⁰ temperature rise standards. The PBO-R-1 (1200 amp. models) is designed to the current NEMA/ANSI standards. For further details on both of these switches, refer to catalog bulletin No. 600.

Jaw Contacts – Self-cleaning and adjustment-free, the jaw contacts are multiple line, high pressure types, with pressure supplied by Belleville spring washers. Copper-to-copper contacts are standard; silver-to-silver jaw contacts are extra-cost options.

Hinge Contacts – The limited area, high pressure contacts are also self-cleaning and adjustment-free. Constant pressure is supplied by Belleville spring washers. Copper-to-copper is standard, silver-to-silver is an extra-cost option. Both hinge and jaw are one-piece, cast bronze.

Blade Construction – The switch blades are trussed for maximum rigidity, and are formed from hard drawn, bus copper. The switch blades are unusually resistant to side thrusts, and will close in precise alignment, regardless of the operator position.

Blade Pry-out – The blades are easily opened with a hookstick through powerful lever action on the operating eye. The hookstick eyes and latching components are cast bronze, and the latch springs are stainless steel. No maintenance or lubrication is required.

Terminal Pads – NEMA standard hole spacing for 1/2" bolts. Terminal pad tinning is an extra-cost option.

Bases – The standard base is shown on page 2, and will be supplied with the mounting hole spacing shown, unless otherwise specified. For special bases and drilling, refer to the factory.

Blade Stop – A 90 degree open position blade stop is standard, unless otherwise specified. However, the blade may be easily reset in the field to stop fully open at 130⁰ or 180⁰.

Southern States, Inc.

PBO-R and PBO-R-1

REGULATOR BY-PASS SWITCHES

7.2-34.5 kV

600-1200 AMPS

CONFORM TO NEMA/ANSI STANDARDS

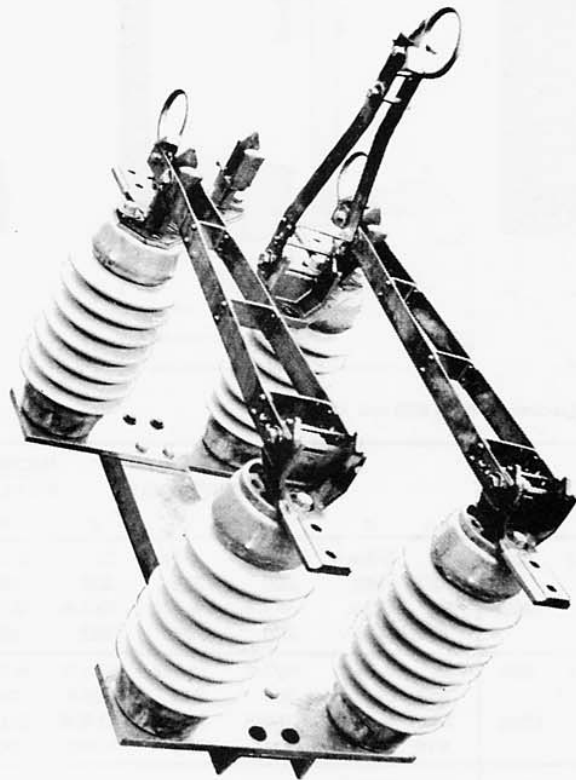
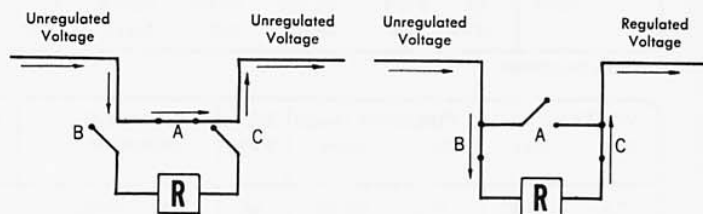


FIGURE 1 - Type PBO-R 23 kV, 600 Amp



TO BY-PASS REGULATOR

1. Set regulator in neutral position.
2. Close switch "A".
3. Open switches "B" and "C".

TO RESTORE REGULATOR TO SERVICE

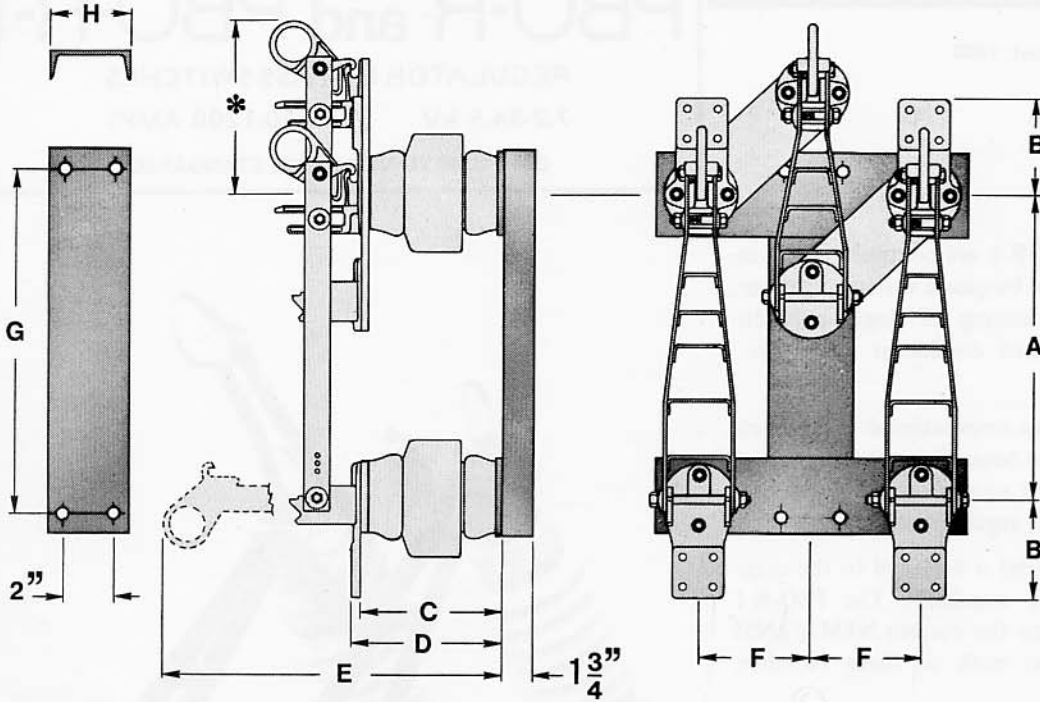
1. Set regulator in neutral position.
2. Close switches "B" and "C".
3. Open switch "A".
4. Set regulator to desired position.



Southern
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The Quality Name In High Voltage Products

Types PBO-R and PBO-R-1



*10-1/4 inches, both 600 and 1200 amp.

kV	AMP.	DIMENSIONS**							
		A	B	C	D	E	F	G	H
7.2	600	18	5-3/4	7-7/8	8-3/4	33	6-1/2	21	6-1/2
	1200	.457	.146	.200	.222	.838	.165	.533	.165
14.4	600	18	5-3/4	7-7/8	8-7/8	33-1/8	6-1/2	18	6-1/2
	1200	.457	.146	.200	.225	.842	.165	.457	.165
23	600	24	5-3/4	10-3/8	11-1/4	41-1/2	6-1/2	21	6-1/2
	1200	.610	.146	.264	.286	1.054	.165	.533	.165
34.5	600	24	5-3/4	10-3/8	11-3/8	41-5/8	6-1/2	21	6-1/2
	1200	.610	.146	.264	.289	1.058	.165	.533	.165
7.2	600	24	5-3/4	14-3/8	15-1/4	45-1/2	6-1/2	21	6-1/2
	1200	.610	.146	.364	.387	1.156	.165	.533	.165
14.4	600	24	5-3/4	14-3/8	15-3/8	45-5/8	6-1/2	21	6-1/2
	1200	.610	.146	.364	.390	1.159	.165	.533	.165
34.5	600	30	5-3/4	18-3/8	19-1/4	55-1/2	7	27	7
	1200	.764	.146	.467	.489	1.410	.178	.686	.178
34.5	600	30	5-3/4	18-1/2	19-1/2	55-5/8	7	27	7
	1200	.764	.146	.470	.495	1.413	.178	.686	.178

**Post Insulators

VOLTAGE (kV)	CURRENT (Amp)	BIL (kV)	CATALOG NUMBER	INSULATOR		NET WEIGHT
				T. R. No.	Post Cap & Pin	
7.2	8.25	95	PBOR75600	202	1	134 60.8
7.2	8.25	95	PBOR-1-751200	202	1	152 68.9
14.4	15.5	110	PBOR15600	205	4	164 73.4
14.4	15.5	110	PBOR-1-151200	205	4	178 80.7
23	25.8	150	PBOR23600	208	7	196 88.9
23	25.8	150	PBOR-1-231200	208	7	210 95.2
34.5	38	200	PBOR34600	210	10	284 128.8
34.5	38	200	PBOR-1-341200	210	10	301 136.5

Southern States, Inc.
A Gulton Company