

*The PBO-T and the PBO-T-1 are tandem transfer switches that will transfer loads to alternate circuits without interrupting service. They are as easily installed and safe to use as conventional hookstick operated disconnect switches.*

The PBO-T (600 amperes) is designed to the original NEMA 30<sup>0</sup> temperature rise standards, and has electrical and mechanical characteristics identical to Southern States' well-known type PBO disconnect switch.

The PBO-T-1 conforms to the current NEMA/ANSI standards, and is available in 1200 ampere ratings. It is derived from the type PBO-1 hookstick disconnect switch of conventional design. For further information on the types PBO and PBO-1 switches, see Southern States catalog bulletin No. 600.

### CONSTRUCTION

**Jaw Contacts** — Multiple line type, maintenance and adjustment-free. The jaw contacts are self-cleaning, copper-to-copper, with high pressure maintained by Belleville spring washers. Silver-to-silver contacts are extra cost options.

**Hinge Contacts** — Constant engagement type, also maintenance and adjustment-free. The hinge contacts are copper-to-copper, and self-cleaning. Silver-to-silver is an extra-cost option. Constant, high contact pressure is supplied by Belleville spring washers.

**Switch Blades** — Hard drawn, bus copper. All switch models have trussed blades with widely-spaced hinge pivots for maximum resistance to deflection from side thrusts. The operator can slam these switches closed from positions well to either side of the switch, and make perfect contact every time.

**Latch** — The switch blade is positively latched into the closed position, and cannot open from fault current blowout or vibration. Only a pull on the operating eye can open it.

**Blade Pryout** — The operating eye is cast bronze. The lineman's pull is multiplied through leverage on a cam-action mechanism that prys the blade out of the jaw contacts with low effort. Stainless steel springs control the latch components, and the entire assembly is maintenance-free and never needs adjustment.

**Terminal Pads** — NEMA standard drillings for 1/2" bolts. Special drillings and/or terminal pad tinning for aluminum conductors are extra-cost options. The center terminal pad on the 600 ampere PBO-T can be mounted on either side of the switch, and is easily swapped in the field. The center terminal pad on the PBO-T-1 (1200 ampere) models is located on the centerline of the switch, and is accessible from either side.

**Base** — The standard base is a hot dip galvanized, 5-inch steel channel on switches rated 7.2–23 kV, a 6-inch channel on 34.5 kV ratings. Refer to the factory for non-standard bases, or for mounting holes different from those listed on page 2.

**Blade Stops** — The blade is set to stop fully open at 90°. However, the blades can be reset in the field to stop fully open at 135° or 180°.

**Insulators** — NEMA standard post, unless otherwise specified.

**Hinge and Jaw Construction** — One piece, cast bronze.

# Southern States, Inc.

## PBO-T and PBO-T-1

TANDEM TRANSFER SWITCHES

7.2 — 34.5 kV 600–1200 AMPS

CONFORM TO NEMA/ANSI STANDARDS

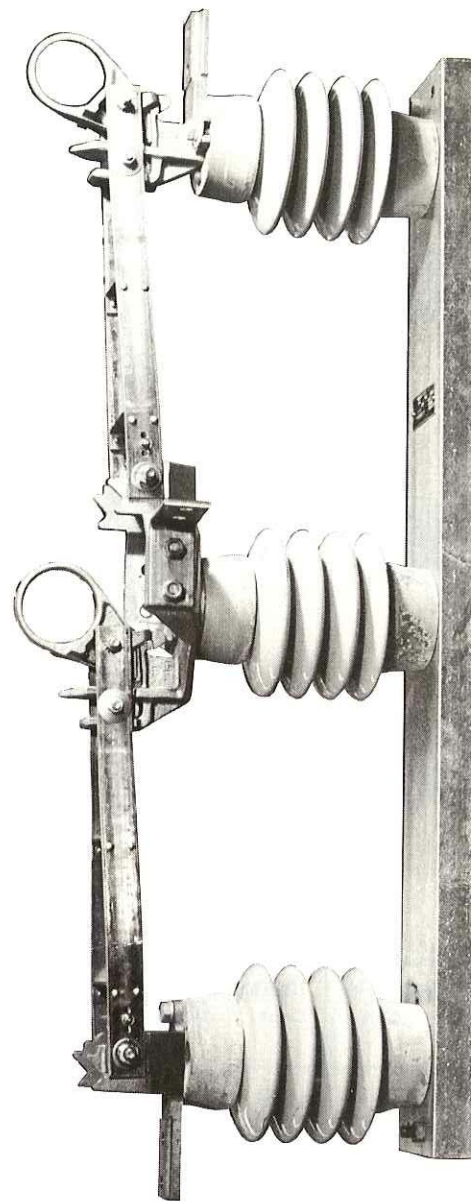


Figure 1 — PBO-T 14.4 kV, 600 amp.

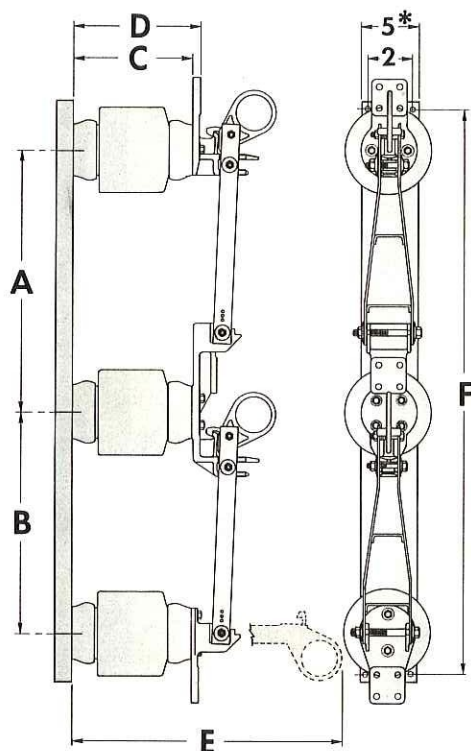
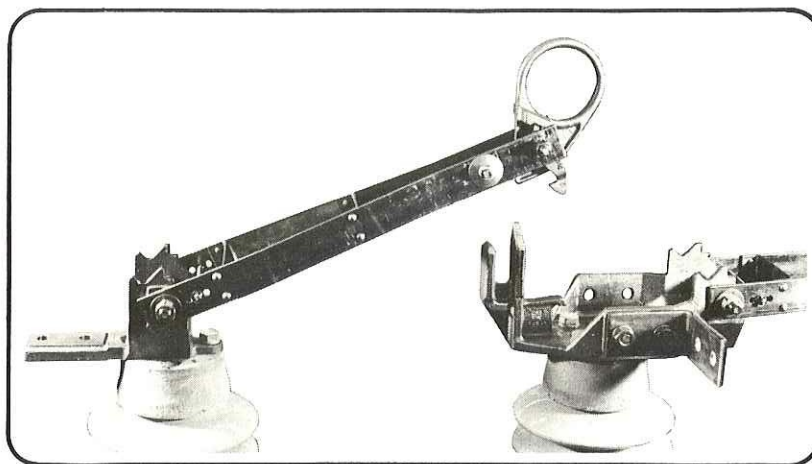


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The Quality Name In High Voltage Products

# Types PBO-T and PBO-T-1

Figure 2 — Detail of 600 amp. switch construction. Note the heavy duty bronze hookstick eye, latch components, and hinge and jaw castings. The center terminal pad can be mounted on either side. On 1200 amp. models, the center pad is on the centerline of the switch (see drawing).



kV	AMP	DIMENSIONS**			INCHES METERS		
		A	B	C	D	E	F
7.2	600	17	15	7-1/2	8-1/16	26-1/4	38
		.432	.381	.191	.205	.669	.967
		18-1/2	15	7-1/2	8-1/8	26-1/4	39-1/2
14.4	600	.470	.381	.191	.206	.669	1.003
		20	18	10	10-9/16	31-3/4	44
		.508	.457	.254	.268	.883	1.118
23	600	21-1/2	18	10	10-5/8	31-3/4	45-1/2
		.546	.457	.254	.269	.883	1.156
		23	21	14	14-9/16	38-3/4	50
34.5	600	.584	.533	.356	.370	.986	1.270
		24-1/2	21	14	14-5/8	38-3/4	51-1/2
		.622	.533	.356	.371	.986	1.308
34.5	600	29	27	18	18-9/16	48-3/4	62
		.737	.686	.457	.471	1.238	1.575
		30-1/2	27	18	18-5/8	48-3/4	63-1/2
34.5	600	.775	.686	.457	.472	1.238	1.613

\*\*post insulators

VOLTAGE (kV)		CURRENT (Amp.)		BIL (kV)	CATALOG NUMBER	INSULATOR T. R. NO.		NET WEIGHT	
Nom.	Max.	Cont.	Mom.			Post	Cap & Pin	Lb.	Kg.
7.2	8.25	600	40,000	95	PBOT75600	202	1	86	37.0
7.2	8.25	1200	61,000	95	PBOT-1-751200	202	1	103	46.8
14.4	15.5	600	40,000	110	PBOT15600	205	4	101	45.8
14.4	15.5	1200	61,000	110	PBOT-1-151200	205	4	129	58.5
23	25.8	600	40,000	150	PBOT23600	208	7	140	63.5
23	25.8	1200	61,000	150	PBOT-1-231200	208	7	158	71.7
34.5	38	600	40,000	200	PBOT34600	210	10	190	86.2
34.5	38	1200	61,000	200	PBOT-1-341200	210	10	232	105.2

\*6" channel with 3" hole spacing is standard on 34.5 kV switches. Refer to the factory for special bases.

**Southern States, Inc.**  
A Gulton Company