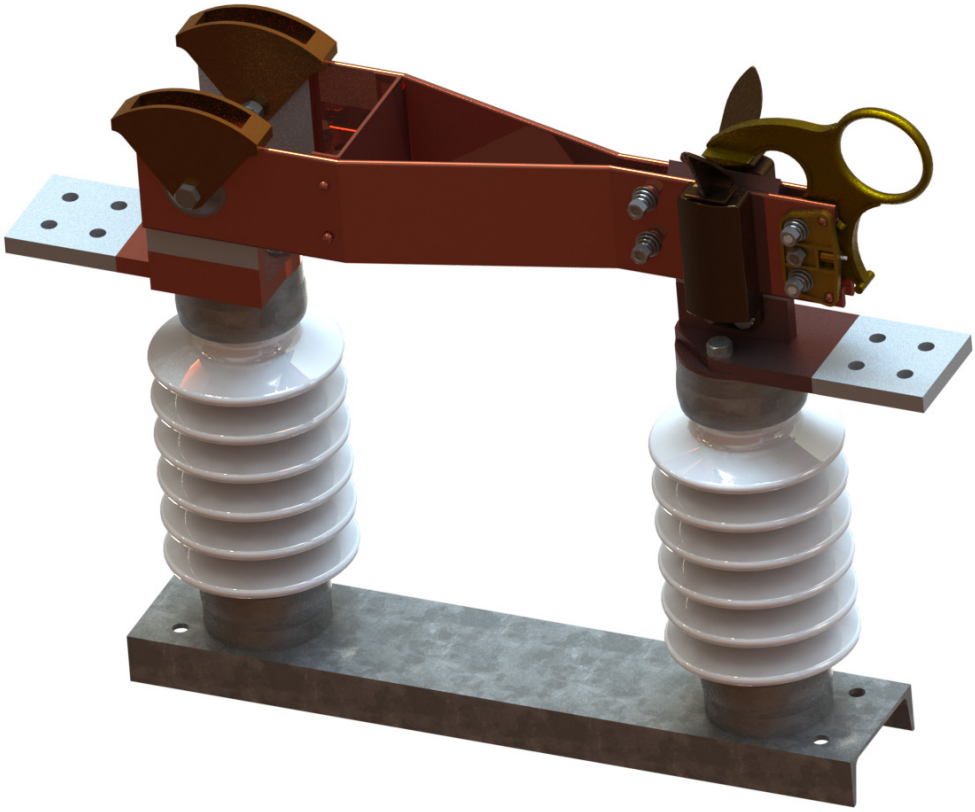
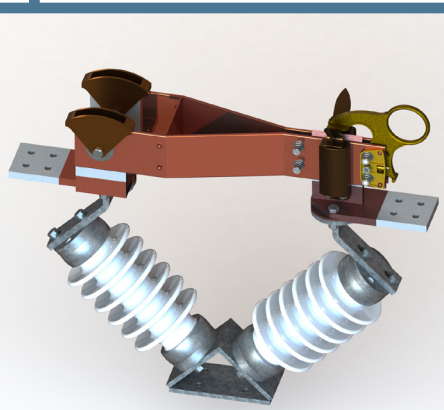
TYPE BT
DISCONNECT SWITCHES

OUTDOOR HOOKSTICK OPERATED (SUBSTATION APPLICATIONS)





- **Vertical or underhung mounting**
- **7.5kV through 69kV**
- **2000A through 4000A**
- **Conventional and low-profile styles**
- **Contact pressure relieving mechanism**

MANUFACTURER OF HIGH VOLTAGE PRODUCTS SINCE 1914

1.800.426.4380

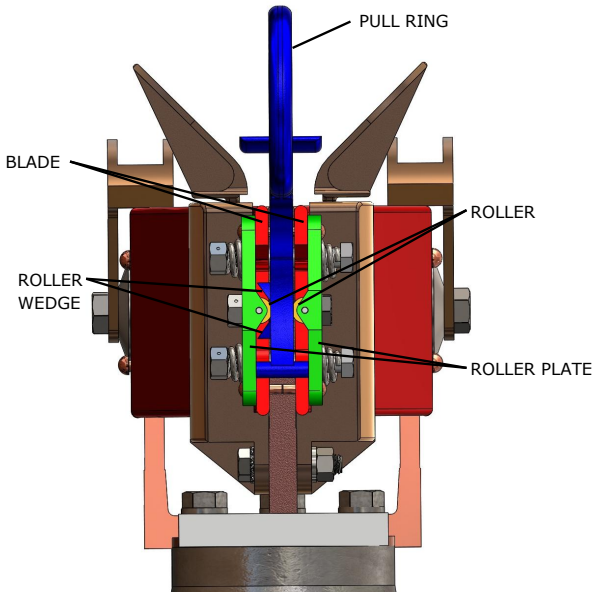
FEATURES OF TYPE BT DISCONNECT SWITCH

- Truss-type blade for extra strength.
- Wide, sturdy blade guide.
- Large pull ring - easy to hook.
- Sturdy blade pryout opens switch easily.
- Tongue-type contact provides double contact surfaces.
- All contact surfaces are silver plated.
- All current carrying parts are hard-drawn copper, cast copper, or high conductivity bronze.
- Available in conventional and low-profile styles.
- Ratings for 7.5kV to 69kV - from 2000A to 4000A.
- Switches are available with either 30°C or 53°C maximum temperature rise design.
- Wood crate packaging.
- Contact pressure relieving mechanism.

Design principles incorporated in Royal's type BT disconnect switch have an established field-service record of more than 30 years.

The blade is of truss-type construction providing an exceptionally sturdy blade. The latch tips are flared to form a wide guide for closing the blade. The pull ring is large for easy hook-stick operation.

Integral with the pull ring is an effective latch release and blade pry-out. This makes opening the switch easy, even when coated with ice or after years of exposure to contaminated or corrosive atmospheres.



CONTACT PRESSURE RELIEVING DETAIL

Contacts

Contacts of the type BT are tongue type. The latch tips are flared to provide the wide blade guide. The guide fingers overlap the blade in the closed position to insure a positive latch. In opening, the pull ring separates the latch fingers and acts as pryout for the blade. All current carrying parts are made of hard-drawn copper, cast copper, or high-conductivity bronze. All contacts are silver plated. Silver inserts are available.

Pressure Relieving Mechanism

The contact pressure relieving mechanism is designed to provide ease of operation throughout the life of the switch. As the pull ring is moved to operate the switch, the roller wedge engages the roller to lightly separate the contacts during the opening and closing of the switch. The wiping action of the contacts is not diminished with the addition of the pressure relieving mechanism.

Blades

The blade of the BT switch is of a truss type construction. This gives the blade unusual lateral strength. The two blade members straddle the contact tongue to provide two contact surfaces. The blades are of hard-drawn copper. 90 degree blade stops will be furnished without charge on your order.

Bases

Switch bases are fabricated from structural steel and hot-dip galvanized per ASTM A123 after fabrication. Custom mounting is available on all catalog items.

Insulators

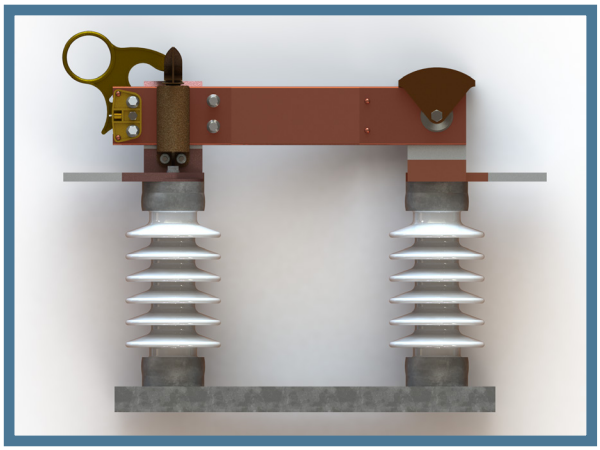
Type BT switches are mounted on ANSI standard porcelain station-post insulators. Non-standard porcelain as well as epoxy insulators are also available.

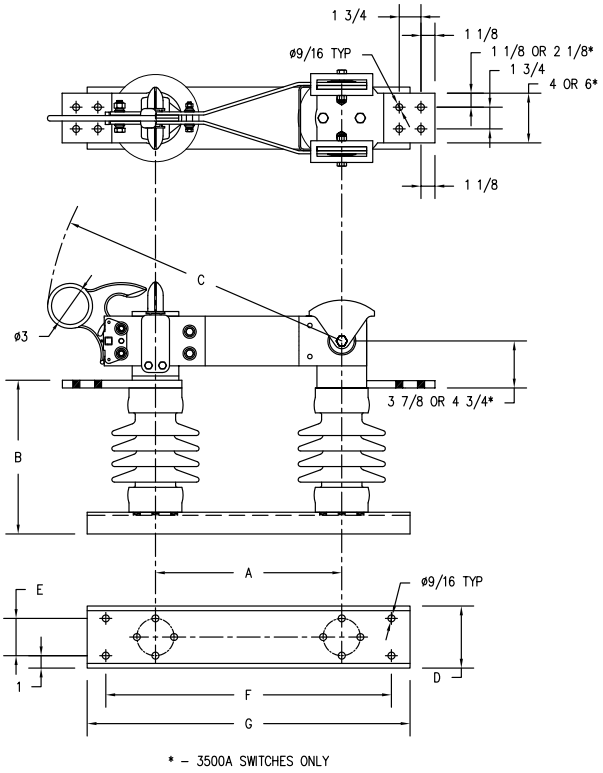
Rating Standards

Type BT switches will carry full rated load continuously in accordance with latest IEEE standards. These switches have also been tested in accordance with and will meet short-time current ratings for outdoor switches, per IEEE standards.

TYPE BT DISCONNECT SWITCH OUTDOOR HOOK-OPERATED SINGLE POLE, SINGLE THROW

- Terminal pads are drilled 9/16” on standard 1 3/4” centers unless otherwise requested.
- Terminal connectors can be supplied at an additional cost.
- Channel bases are furnished thru 69kV. Holes sizes and locations are provided as required.
- Certified construction drawings are furnished.
- Contact pressure relieving mechanism is furnished.
- 90 degree blade stops supplied as standard.

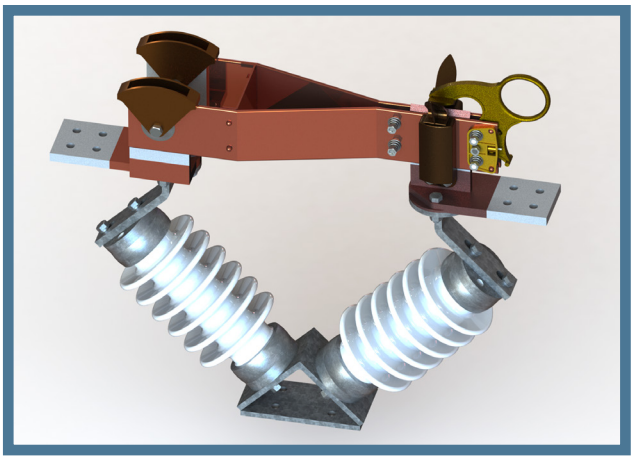


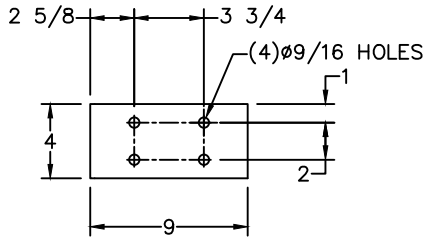


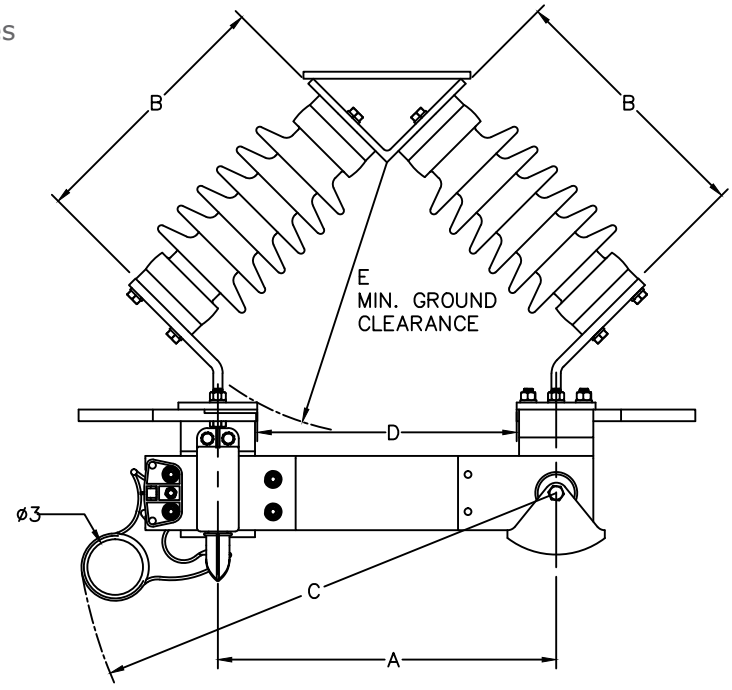
Catalog	RATINGS				INSULATOR		DIMENSIONS (IN)							Single Pole Weight (Lbs.)
	RISE ABOVE AMBIENT	KV NOM. (MAX.)	CURRENT CONT. (A)	kA MOM.	T.R.	B.I.L.	A	B	C	D	E	F	G	
38221	30°C	7.5 (8.3)	2000	100	202	95	12	9 7/8	19 7/8	5	3	20	23	86
30214	53°C		3000	100				9 7/8						86
30214	30°C		3000	120				10						99
30405	53°C		4000	120				10						99
38223	30°C	15 (15.5)	2000	100	205	110	15	12 3/8	22 7/8	5	3	23	26	92
30223	53°C		3000	100				12 3/8						92
30223	30°C		3000	120				12 1/2						107
38260	30°C		3500	120				12 7/8						123
30409	53°C		4000	120				12 1/2						107
38225	30°C	23 (27)	2000	100	208	150	18	16 3/8	25 7/8	5	3	24	27	118
30224	53°C		3000	100				16 3/8						118
30224	30°C		3000	120				16 1/2						135
38261	30°C		3500	120				16 7/8						151
30408	53°C		4000	120				16 1/2						135
38227	30°C	34.5 (38)	2000	100	210	200	24	20 3/8	31 7/8	5	3	30	33	142
30225	53°C		3000	100				20 3/8						142
30225	30°C		3000	120				20 1/2						163
38262	30°C		3500	120				20 7/8						179
30407	53°C		4000	120				20 1/2						163
38229	30°C	46 (48.3)	2000	100	214	250	30	24 3/8	37 7/8	5	3	38	41	166
30014	53°C		3000	100				24 3/8						166
38231	30°C	69 (72.5)	2000	120	216	350	42	32 9/16	49 7/8	6	4	50	53	249
30227	53°C		3000	120				32 9/16						249

TYPE BT LOW-PROFILE SWITCH OUTDOOR HOOK-OPERATED SINGLE POLE, SINGLE THROW

- Terminal pads are drilled 9/16" on standard 1 3/4" centers unless otherwise requested.
- Terminal connectors can be supplied at an additional cost.
- Certified construction drawings are furnished.
- Contact pressure relieving mechanism is furnished.
- 90 degree blade stops supplied as standard.
- Insulators at 90 degrees as standard. 60 degrees available upon request.







CATALOG NO.	RATINGS			INSULATOR		DIMENSIONS (IN)					Single Pole Weight (Lbs.)
	KV NOM. (MAX.)	CURRENT CONT. (A)	kA MOM.	T.R.	B.I.L.	A	B	C	D	E	
39814	7.5 (8.3)	2000	100	202	95	12	7 1/2	19 7/8	7 3/4	8	88
30303		3000	120								88
39815	15 (15.5)	2000	100	205	110	15	10	22 7/8	10 3/4	10 1/2	92
30304		3000	120								92
39816	23 (27)	2000	100	208	150	18	14	25 7/8	13 3/4	14	118
30305		3000	120								118
39817	34.5 (38)	2000	100	210	200	24	18	31 7/8	19 3/4	17 7/8	138
30306		3000	120								138
30299	46 (48.3)	2000	100	214	250	30	22	37 7/8	25 3/4	22	158
30307		3000	120								158
30302	69 (72.5)	2000	100	216	350	42	30	49 7/8	37 1/2	29	234
30308		3000	120								234