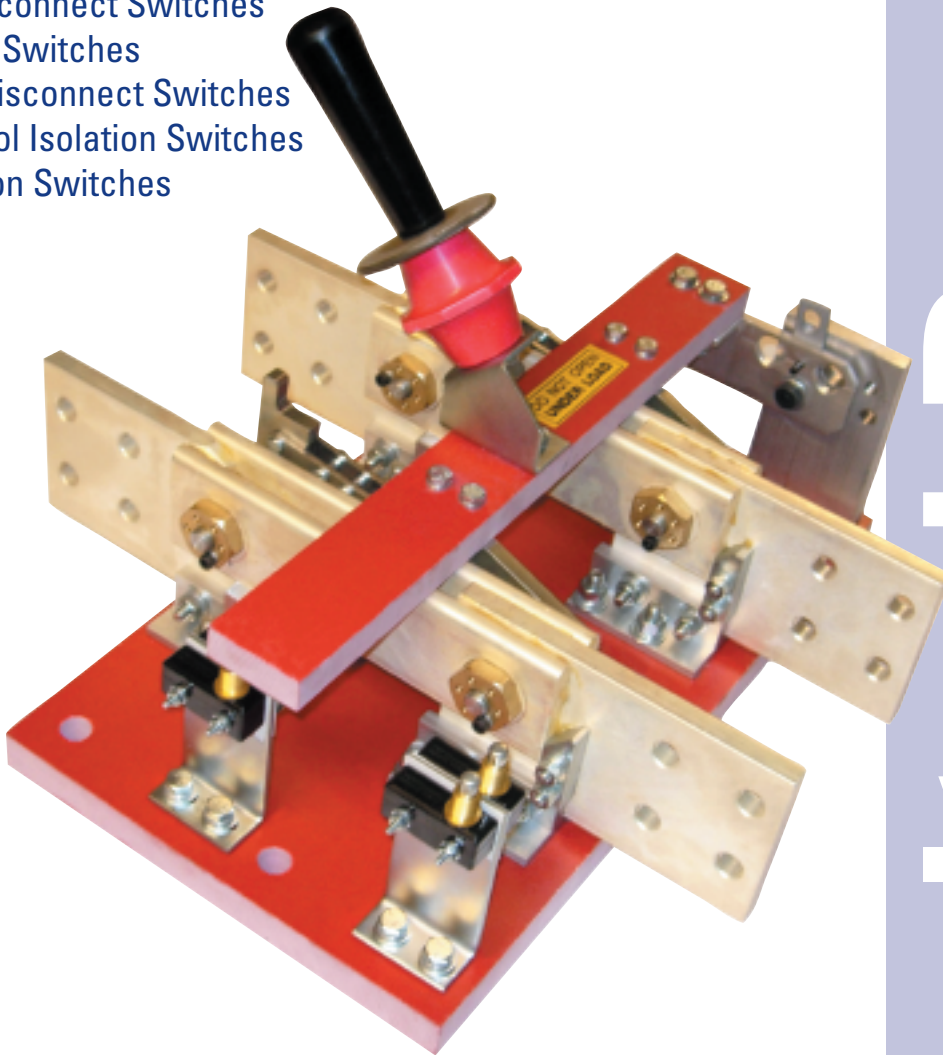




Bolted Pressure Contact Switches Type BM

Applications Include

- AC/DC Switchboards
- Rectifier Disconnect Switches
- Contact Rail Switches
- Trolleyline Disconnect Switches
- Motor Control Isolation Switches
- DC Substation Switches



ISO 9001
Quality System Certified

**Bolted Pressure
Contact Switches**

BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Applications

Filnor BM Bolted Pressure Contact Switches are designed for non-load break applications. Typical application is for circuit isolation in many types of systems, including industrial motor controls, AC/DC distribution panels, and power distribution for transit systems.

What is a Type BM Bolted Pressure Switch

The Filnor Type BM is an open style switch utilizing the proven Filnor Inc. bolted pressure contact design.

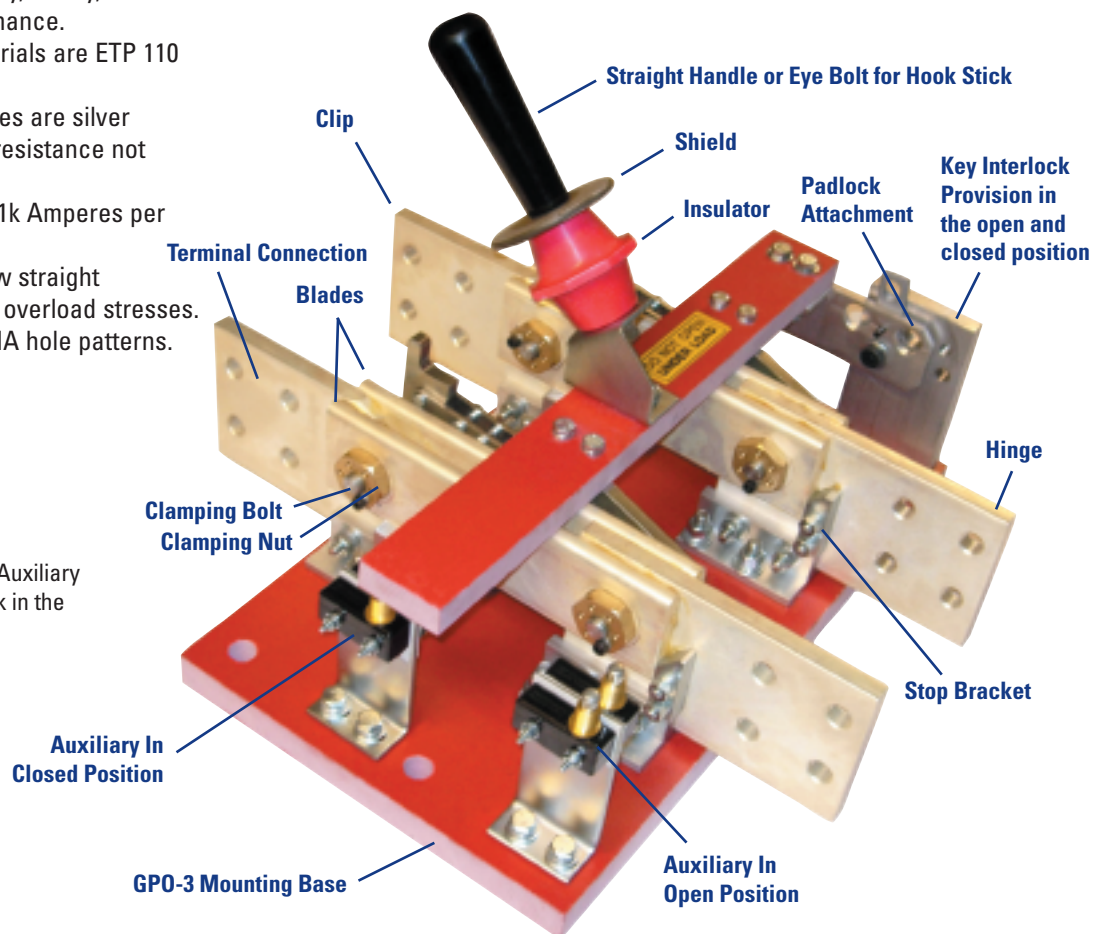
The Filnor bolted pressure switch is a visible blade disconnect incorporating movable blades with a fixed hinged contact. At each contact interface, a clamping bolt is utilized to ensure high contact force and low contact resistance in a joint. The design features a double acting mechanism that closes the movable blades into the clip contacts, it then rotates the clamping bolt through an actuator linkage, effectively tightening both the clip and hinge contact joints. The result is a joint with current carrying capacity similar to that of a bolted busbar.

Design Features

- Engineered to ensure reliability, safety, ease of operation, and low maintenance.
- Switch current carrying materials are ETP 110 Copper Bar.
- Terminals and contact surfaces are silver plated ensuring low contact resistance not affected by oxidation.
- Current density designed for 1k Amperes per square inch minimum.
- Switch design for current flow straight through the switch to reduce overload stresses.
- Terminals with standard NEMA hole patterns.
- GPO-3 insulating base.

Switch Shown: BM 2010-2P-2X-K3

2000 A, 1000 V, 2-Pole, 2 NO, 2 NC, Auxiliary Contact Provision for Key Interlock in the open and closed position

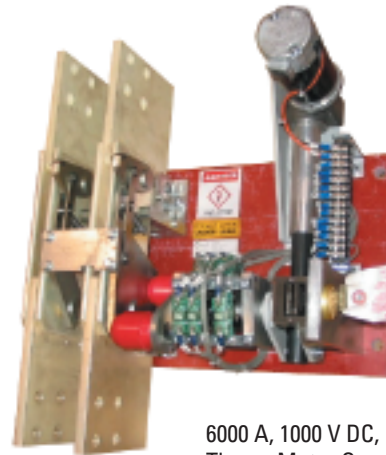


BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Design Criteria & Testing

- Individual units are factory tested prior to shipment for:
 - Dielectric Withstand
 - Contact resistance
 - Dimensional Outline
 - Build Configuration
- A copy of the factory test report is included with each switch.
- Switches are designed and tested in strict accordance with the following standards as applicable, UL, CUI, Nema, ANSI, IEEE.
- Each switch unit is date coded on a label for tracing purposes.
- Applicable warning signs applied.



6000 A, 1000 V DC, 1-Pole, Single Throw, Motor Operated, With Auxiliary Contacts, Special Design

Typical Switch Ratings

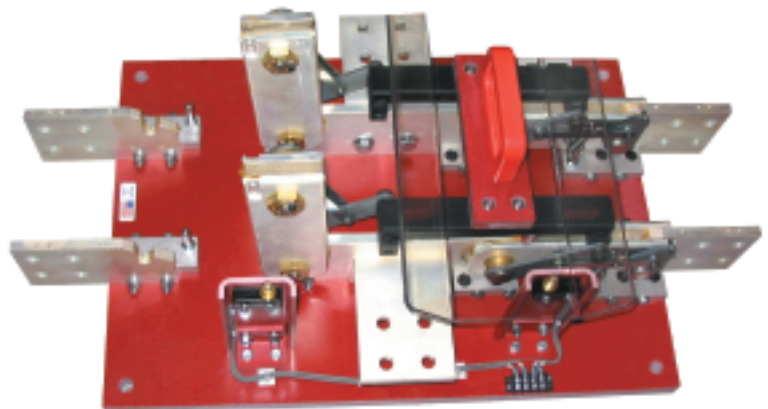
- Continuous Current Ratings (Amperes): **800-12,000**
- Fault Current Rating: **160 kA DC @ 100 ms**
- Voltage Rating: **Up to 2,000 VAC/DC**
- * **40 degrees C ambient with 60 degrees C rise.**

Benefits Include

- Clean Compact Design
- Rugged Construction
- Proven Performance
- High Current Capacity
- Large Isolation Air Gap and Creepage Paths
- Standard NEMA Drilling on Terminal Paths
- Extensive Options List to adapt Switch to the Application

Available Switch Configurations

- Single Throw
- Double Throw
- 1 thru 4 Poles
- Front & Side Hand Operated
- Hook Stick Operated
- Motor Operated
- Pole Mounted
- Floor & Pad Mounted
- Wall Mounted
- Fusible & Non-Fusible



2000 A, 1000 V, 2-Pole, Double Throw, Special Design Type BM

BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Switch Operator

The TYPE BM switch utilizes a straight type handle, or hook stick eye, attached through an insulator to the hinge actuator assembly to manually open and close the switch. Insulating material and a shield are provided to prevent contact with electrically live components. The switch is not to be operated under load conditions.

Terminal Arrangements

The TYPE BM switch terminals are drilled to NEMA standards.

Switch Stop and Padlock Attachment

The TYPE BM switch is provided with a rugged positive stop in the open position. Provisions for padlocking the switch in the open and closed positions are provided.

Switch Enclosures

Enclosures for the TYPE BM switch are to be designed for vertical switch mounting. Switch supporting structure must be flat and parallel where the switch is mounted.

Available Options

- Cable connectors
- Auxiliary contacts
- Key interlock provisions
- Key interlocks
- Hook stick operator
- Fusible
- Motor operated
- Front operated handle assembly (for operating outside enclosure)
- Higher currents and voltages
- Special designs application



4000 A, 5kV, Outdoor, Pole Mounted,
Trolley Line Disconnect Switch

Common Switches

1,000 VOLT DC 1,000 VOLT AC		
AMP	1 Pole	2 Pole
800	BM-08-10-1P	BM-08-10-2P
1200	BM-12-10-1P	BM-12-10-2P
1600	BM-16-10-1P	BM-16-10-2P
2000	BM-20-10-1P	BM-20-10-2P
2500	BM-25-10-1P	BM-25-10-2P
3000	BM-30-10-1P	BM-30-10-2P
4000	BM-40-10-1P	BM-40-10-2P
5000	BM-50-10-1P	BM-50-10-2P
6000	BM-60-10-1P	BM-60-10-2P
8000	BM-80-10-1P	-
10,000	BM-100-10-1P	-
12,000	BM-120-10-1P	-

Refer to attached drawings for single throw switch dimensions and options.

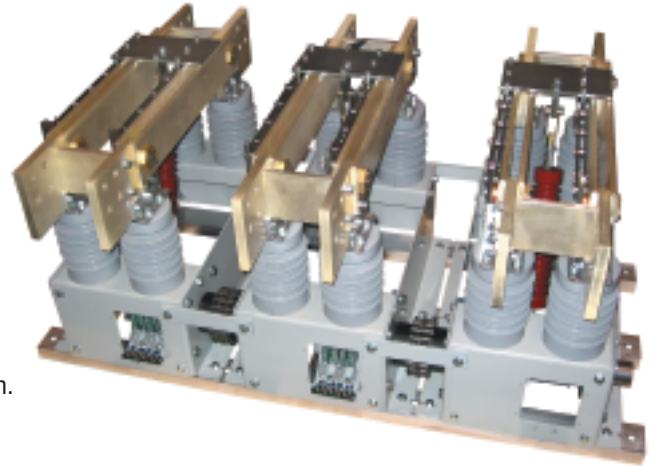
BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Ordering Data

- 1) Switch Rating
- 2) Voltage Insulation Rating
- 3) Number of Poles
- 4) Auxiliary Switch Position (If Required)
- 5) Key Interlock Position (If Required)
- 6) Hook Stick Operator (If Required)
- 7) Additional Specifications

- Handle Operator Provided as Standard.
- Refer to the proper switch data sheet for ordering information.



Other Filnor Switch Products Available

Type EBM Switches

Enclosed Bolted Pressure Switch with side operated manual handle, non-load break.

Type BPI Switches

Enclosed Bolted Pressure Switch with side operated Quick Brake Mechanism and Arc Breaking capability.

Type DB Switches

High Current Switch applications.

Medium Voltage Switches

Isolation and grounding applications. 200 - 12,000 Ampere, 5 kV - 38 kV.

Knife Switches

Transfer Switches

Open or enclosed.

Custom Designed Switches

Switches designed to suit your exact specifications.

Special Design Medium Voltage Switch

6300 A, 15 kV, 3-Pole, Single Throw, Motor Operated, Medium Voltage Bolted Pressure Switch

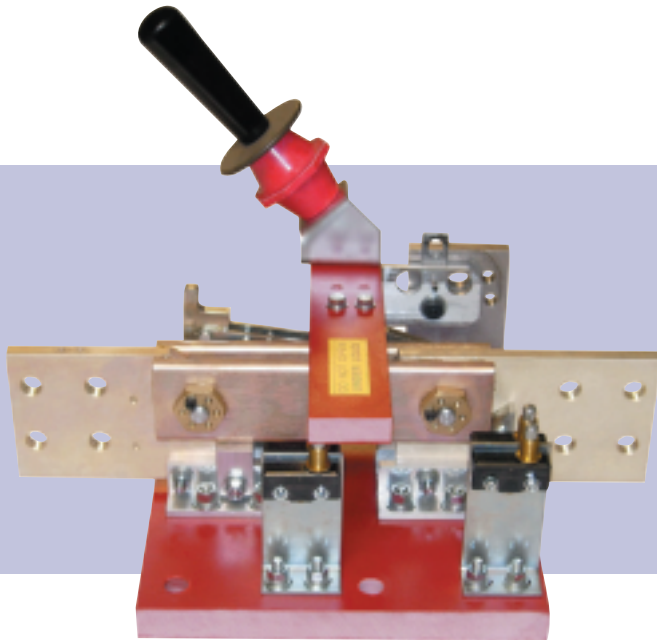


3000 A, 250 V DC, 2-Pole, Single Throw, Fusible, Type BPI Switch Crane Rail Disconnect

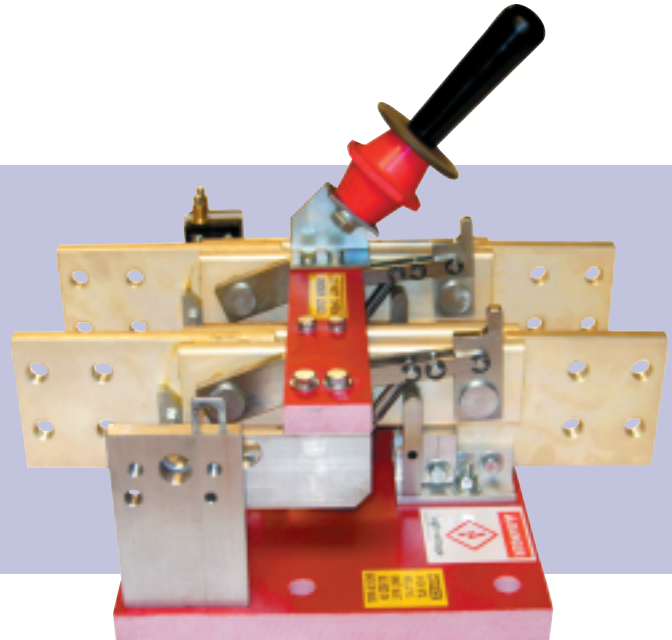
Please contact Filnor, Inc. for complete information on the above products, as well as additional Resistor and Control Units not listed.

BOLTED PRESSURE CONTACT SWITCH

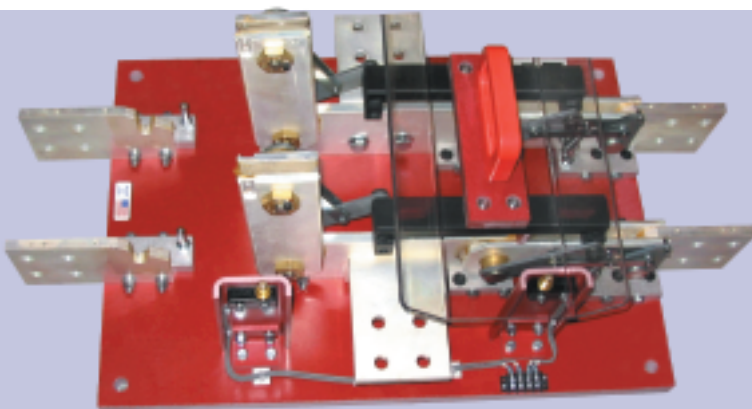
BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM



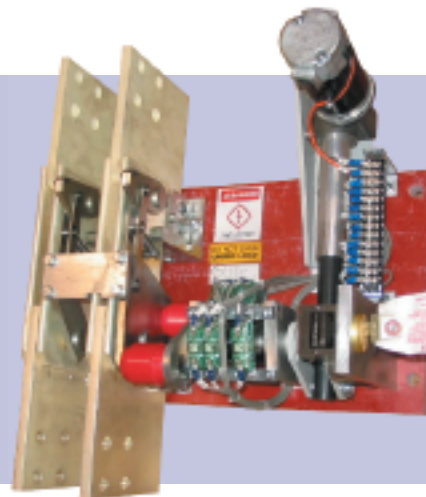
1600 A, 1000 V, 1-Pole,
Single Throw, Type BM



2000 A, 1000 V, 2-Pole,
Single Throw, Type BM



2000 A, 1000 V, 2-Pole, Double
Throw, Special Design Type BM



6000 A, 1000 V DC, 1-Pole, Single Throw,
Motor Operated, With Auxiliary Contacts,
Special Design

Receive Quotes Online

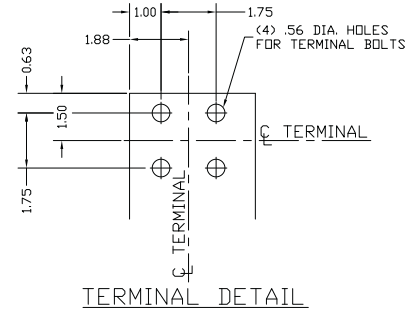
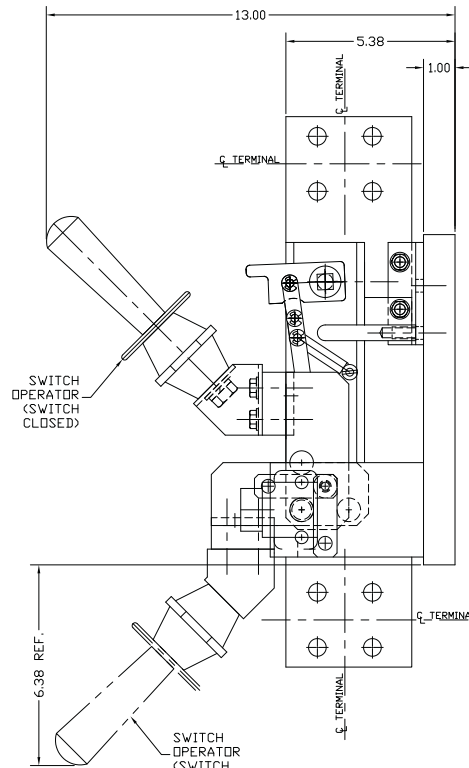
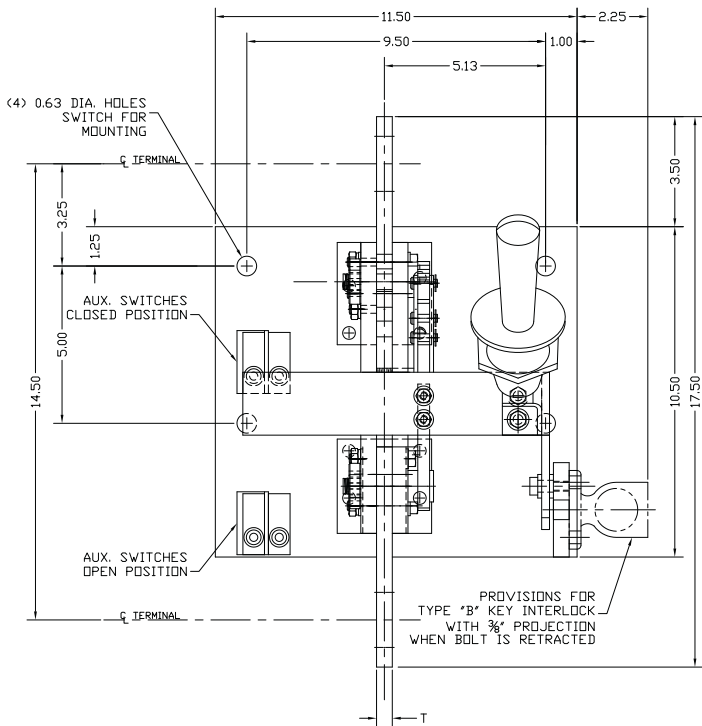
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www.filnor.com • sales@filnor.com • info@filnor.com

BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Common Switches 800 - 2000 Ampere, 1-Pole, Single Throw



SWITCH FEATURES:

- AMP RATING - SEE TABLE BELOW
- 1000 VOLT INSULATION CLASS
- DOUBLE POLE
- SINGLE THROW
- MANUAL OPERATOR
- OPEN PANEL MOUNT
- NON-LOAD BREAK OPERATION

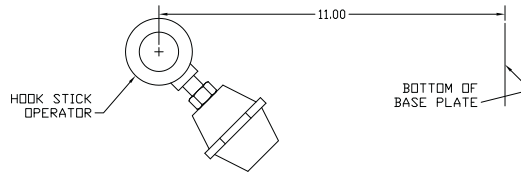
SWITCH OPTIONS:

- 1X = TWO (2) AUXILIARY SWITCHES; FORM "C" CONTACTS WITH DIRECT CONNECTION TO SWITCH TERMINALS AS STANDARD. SWITCHES WIRED TO A TERMINAL BOARD IS AN AVAILABLE OPTION.
- 2X = FOUR (4) AUXILIARY SWITCHES; FORM "C" CONTACTS WITH DIRECT CONNECTION TO SWITCH TERMINALS AS STANDARD. SWITCHES WIRED TO A TERMINAL BOARD IS AN AVAILABLE OPTION.
- K1 = PROVISION FOR KEY INTERLOCK IN OPEN POSITION
- K2 = PROVISION FOR KEY INTERLOCK IN CLOSED POSITION
- K3 = PROVISION FOR KEY INTERLOCK IN OPEN & CLOSED POSITION (COMMON INTERLOCK UNIT)

SWITCH RATING (AMPS)	MODEL NUMBER	"T" INCHES
800	BM0810-1P	0.38
1200	BM1210-1P	0.38
1600	BM1610-1P	0.44
2000	BM2010-1P	0.50

MODEL NUMBER LEGEND:
BMXXXX-1P-XX-XX

- SWITCH RATING
- VOLTAGE INSULATION RATING
- NUMBER OF POLES
- KEY INTERLOCK ENTER- DO IF NOT REQUIRED
- AUXILIARY SWITCHES ENTER- DO IF NOT REQUIRED

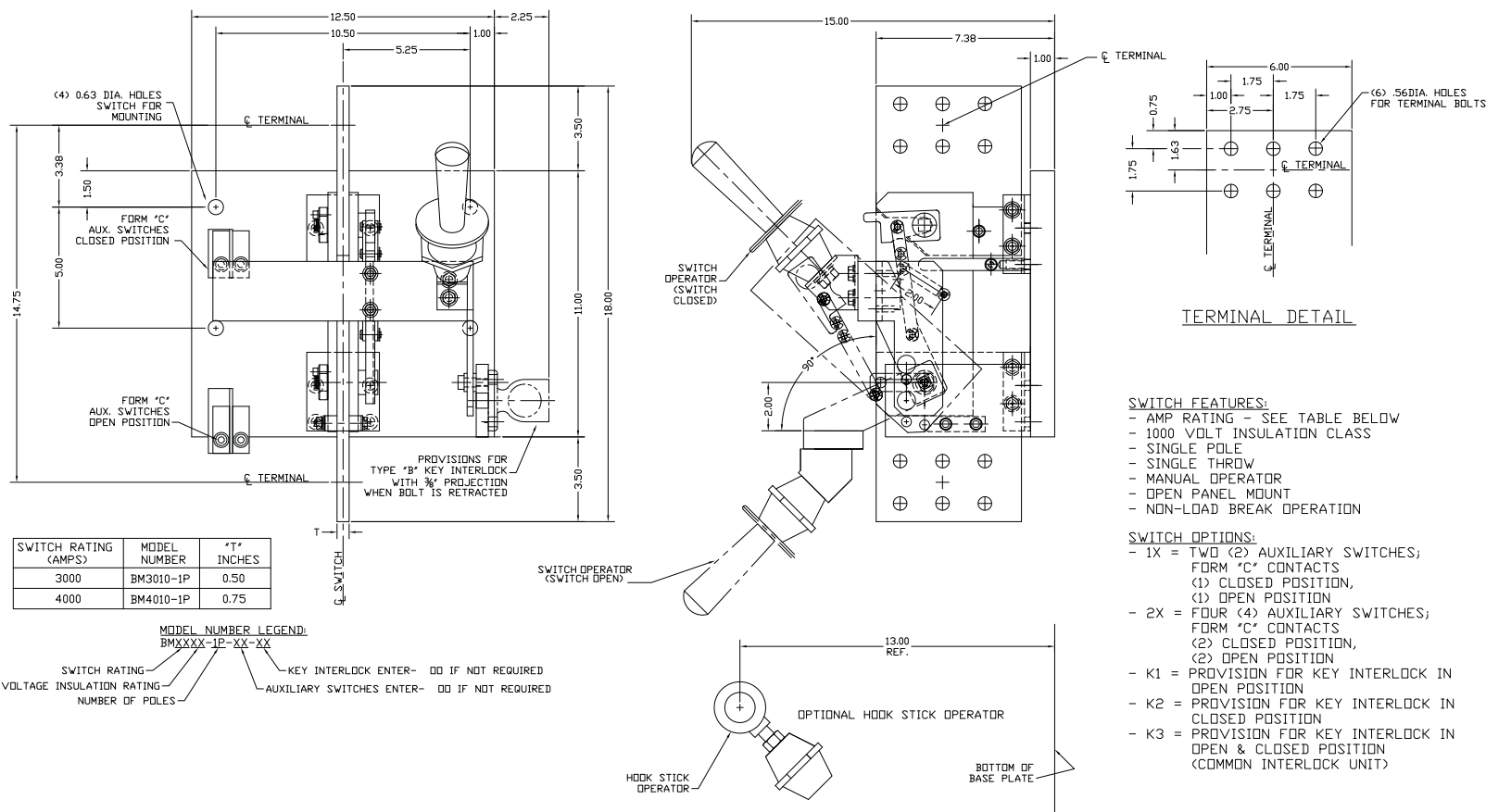


OPTIONAL HOOK STICK OPERATOR—ADD HS SUFFIX TO MODEL NUMBER

BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

Common Switches 3000 & 4000 Ampere, 1-Pole, Single Throw



SWITCH RATING (AMPS)	MODEL NUMBER	'T' INCHES
3000	BM3010-1P	0.50
4000	BM4010-1P	0.75

MODEL NUMBER LEGEND:
BMXXXX-1P-XX-XX

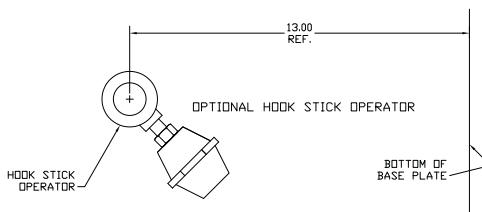
SWITCH RATING - KEY INTERLOCK ENTER- DD IF NOT REQUIRED
 VOLTAGE INSULATION RATING - AUXILIARY SWITCHES ENTER- DD IF NOT REQUIRED
 NUMBER OF POLES

SWITCH FEATURES:

- AMP RATING - SEE TABLE BELOW
- 1000 VOLT INSULATION CLASS
- SINGLE POLE
- SINGLE THROW
- MANUAL OPERATOR
- OPEN PANEL MOUNT
- NON-LOAD BREAK OPERATION

SWITCH OPTIONS:

- 1X = TWO (2) AUXILIARY SWITCHES;
FORM 'C' CONTACTS
(1) CLOSED POSITION,
(1) OPEN POSITION
- 2X = FOUR (4) AUXILIARY SWITCHES;
FORM 'C' CONTACTS
(2) CLOSED POSITION,
(2) OPEN POSITION
- K1 = PROVISION FOR KEY INTERLOCK IN
OPEN POSITION
- K2 = PROVISION FOR KEY INTERLOCK IN
CLOSED POSITION
- K3 = PROVISION FOR KEY INTERLOCK IN
OPEN & CLOSED POSITION
(COMMON INTERLOCK UNIT)



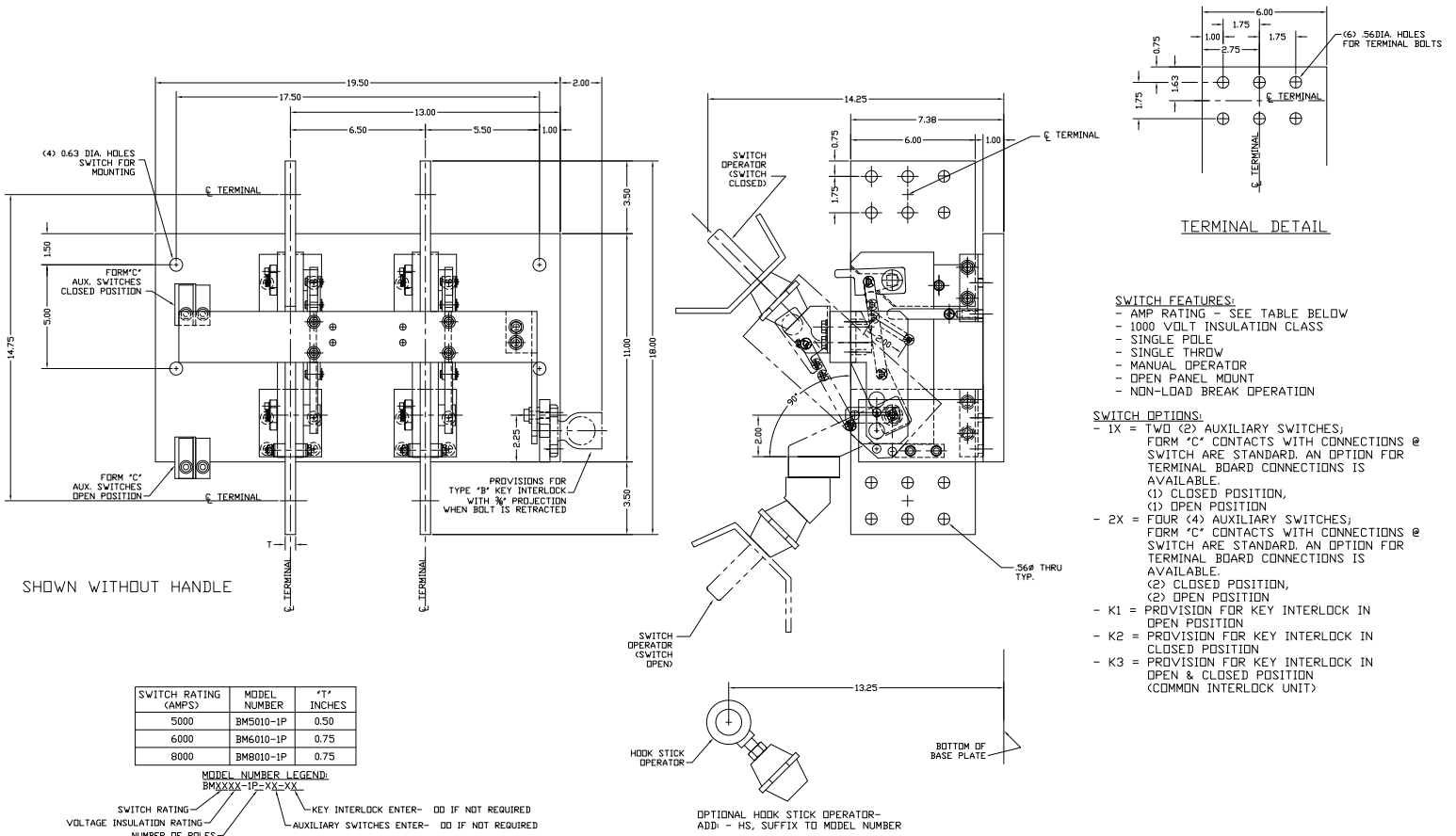
HOOK STICK OPERATOR

BOTTOM OF BASE PLATE

BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

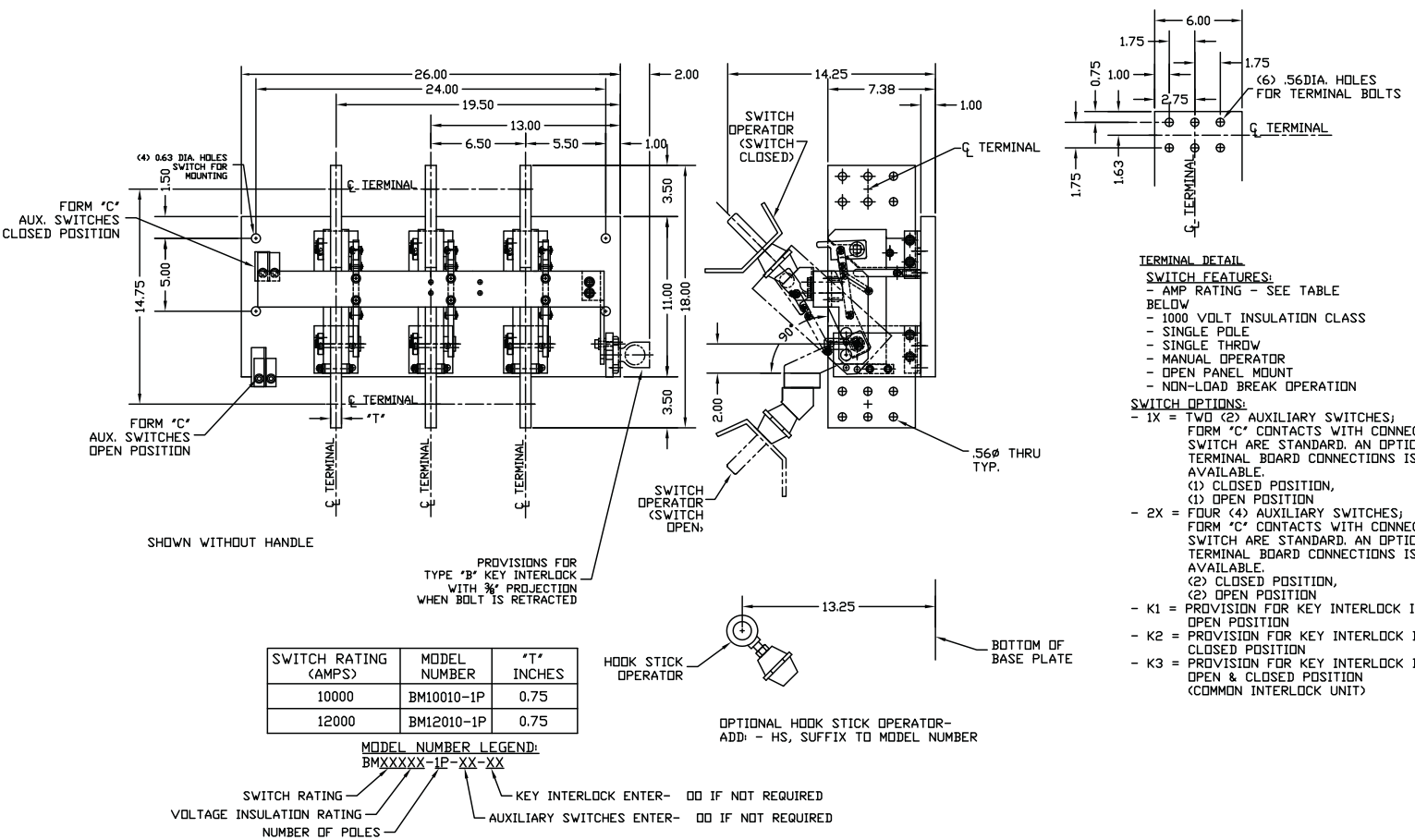
Common Switches 5000 - 8000 Ampere, 1-Pole, Single Throw



BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

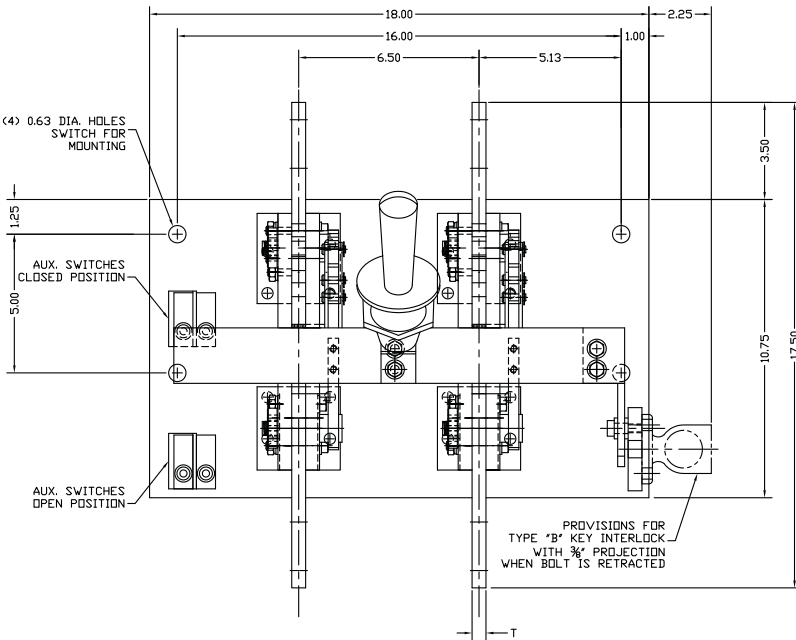
Common Switches 10,000 & 12,000 Ampere, 1-Pole, Single Throw



BOLTED PRESSURE CONTACT SWITCH

BM BOLTED PRESSURE CONTACT SWITCHES TYPE BM

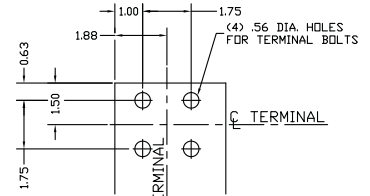
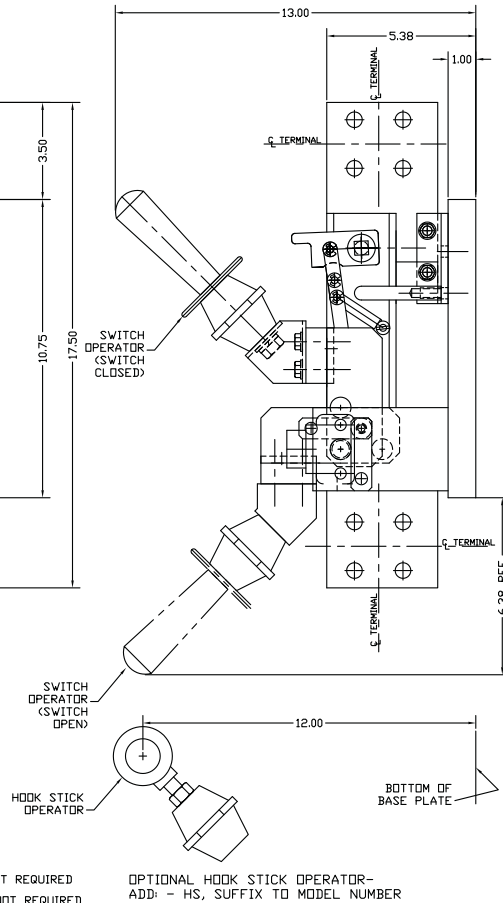
Common Switches 800 - 2000 Ampere, 2-Pole, Single Throw



SWITCH RATING (AMPS)	MODEL NUMBER	"T" INCHES
800	BM0810-2P	0.38
1200	BM1210-2P	0.38
1600	BM1610-2P	0.44
2000	BM2010-2P	0.50

MODEL NUMBER LEGEND:

BMXXX-2P-XX-XX
 SWITCH RATING -
 VOLTAGE INSULATION RATING -
 NUMBER OF POLES -
 KEY INTERLOCK ENTER-
 AUXILIARY SWITCHES ENTER-
 OO IF NOT REQUIRED
 OO IF NOT REQUIRED



TERMINAL DETAIL

SWITCH FEATURES:

- AMP RATING - SEE TABLE BELOW
- 1000 VOLT INSULATION CLASS
- DOUBLE POLE
- SINGLE THROW
- MANUAL OPERATOR
- OPEN PANEL MOUNT
- NON-LOAD BREAK OPERATION

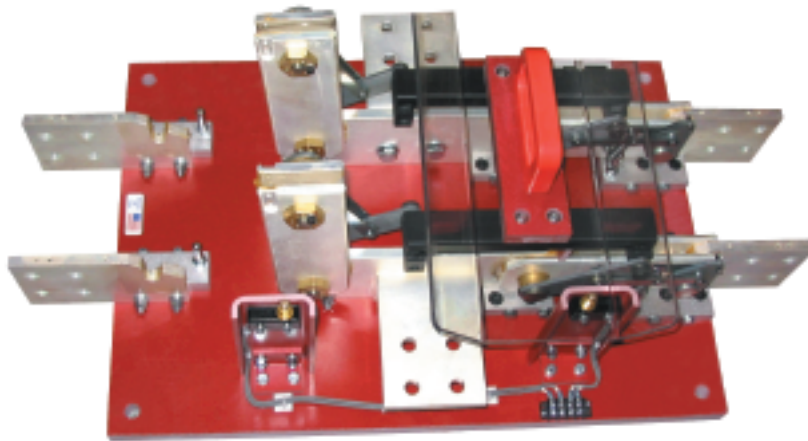
SWITCH OPTIONS:

- XC1 = ONE (1) AUXILIARY SWITCH IN CLOSED POSITION
- X01 = ONE (1) AUXILIARY SWITCH IN OPEN POSITION
- 1X = TWO (2) AUXILIARY SWITCHES; FORM 'C' CONTACTS WITH DIRECT CONNECTION TO SWITCH TERMINALS AS STANDARD. SWITCHES WIRED TO A TERMINAL BOARD IS AN AVAILABLE OPTION. (1) CLOSED POSITION, (1) OPEN POSITION
- 2X = FOUR (4) AUXILIARY SWITCHES; FORM 'C' CONTACTS WITH DIRECT CONNECTION TO SWITCH TERMINALS AS STANDARD. SWITCHES WIRED TO A TERMINAL BOARD IS AN AVAILABLE OPTION. (2) CLOSED POSITION, (2) OPEN POSITION
- K1 = PROVISION FOR KEY INTERLOCK IN OPEN POSITION
- K2 = PROVISION FOR KEY INTERLOCK IN CLOSED POSITION
- K3 = PROVISION FOR KEY INTERLOCK IN OPEN & CLOSED POSITION (COMMON INTERLOCK UNIT)



Please contact Filnor, Inc. for more information regarding our Bolted Pressure Contact Switches

Bolted Pressure Contact Switches Type BM



Bolted Pressure Contact Switches