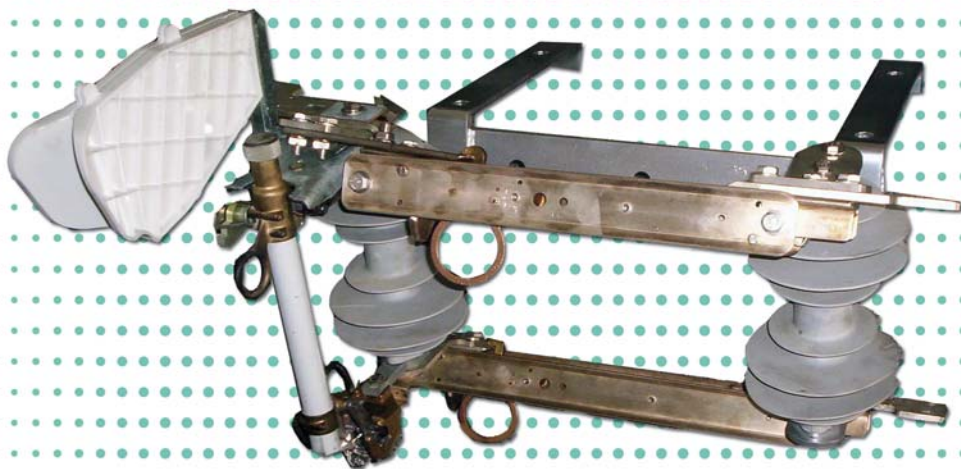


FBS Fused By-pass Disconnect Switch

15 kV Hookstick Switch

Product Bulletin 1VAG201802-DB



Design Features

Insulators

Lightweight, UV-stable, hydrophobic silicone insulators with enhanced creep distance

Protection

Utilizes standard expulsion fuse links for protection while in by-pass operation mode

Self-contained

The standard arc chute allows opening of the fuseholder under load without the need for a portable loadbreak tool. No additional equipment is required to provide fused protection and complete isolation of the recloser. Conventional fused by-pass installations require the fusible switch and an additional disconnect switch to isolate the equipment and provide visual indication of open circuits.

Application

The FBS fused by-pass switch is used to disconnect and isolate circuit reclosers while performing repair and maintenance functions. Utilizing conventional loadbreak cutout technology and two 600 A disconnect blades, the FBS provides circuit protection while the recloser is disconnected and isolated from the distribution system. The FBS provides a visual disconnect indication without the need for additional equipment.

Operation

In normal operation the fuse is in the open position while the two disconnect blades are closed, allowing the unit to be energized. During maintenance, testing, repair, or removal of equipment:

- 1) Close the fuse to provide a parallel current path.
- 2) Open both disconnect blades

Service continuity is maintained and the unit is isolated from the line. The process is reversed in order to bring equipment back into service.

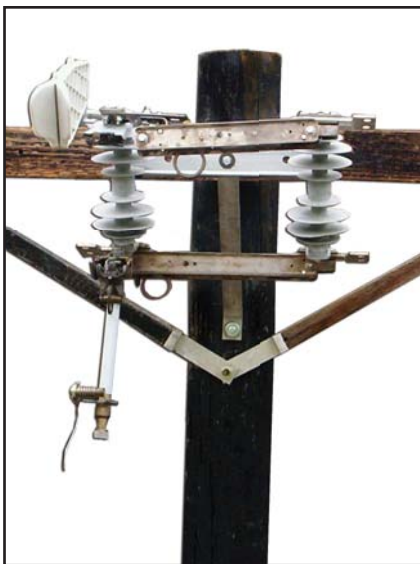
Blade Contact Design & Blade Stop

A proprietary attribute of the ABB single phase disconnect switches is the unique configuration of the blade contact. Traditional designs rely on the hinge support as the primary contact point and it is the primary location of physical stress. Over time this can degrade the electrical and mechanical integrity of the primary contact area and the switch blade. The ABB design extends the primary contact point further into the blade arm with an extension, removing the primary point of electrical contact from the bottom hinge support and reducing the physical stress incurred on the bottom hinge support by assisting in the opening and closing operations of the unit.

The blade latch holds the switch in the open position and can be utilized to stop the switch blade(s) at a 90° or 160° open position.

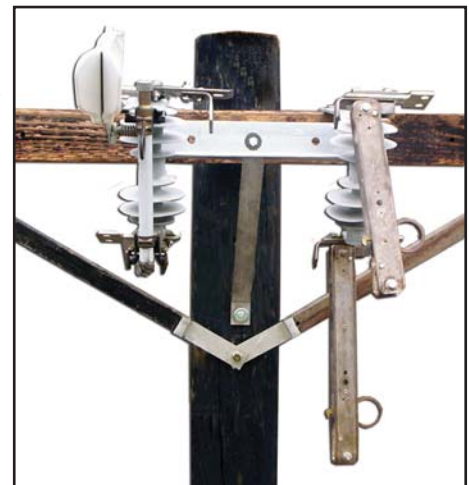
Mounting

The FBS is available with suitable hardware for standard crossarm mounting or extended crossarm mounting, which allows the device to be installed directly in front of a riser pole.

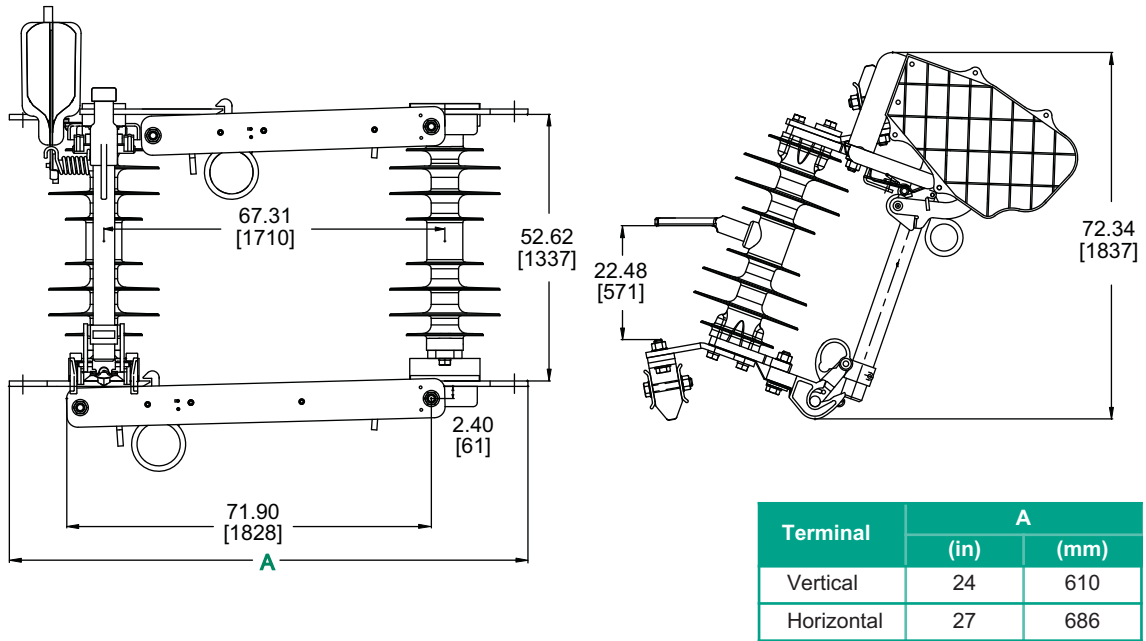


Normal Operation Mode

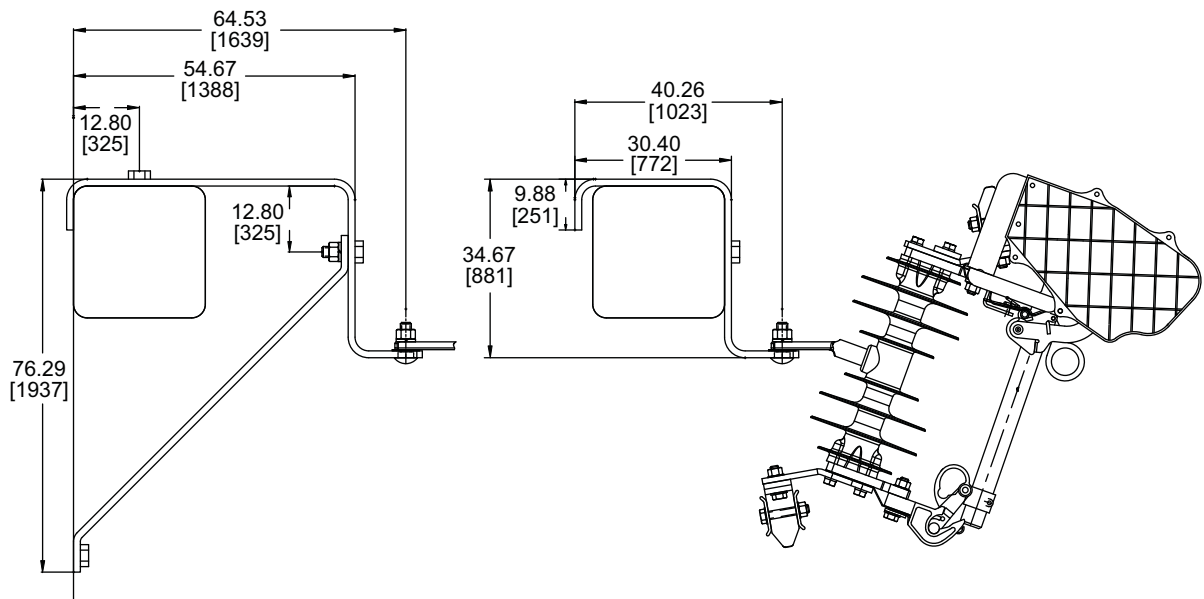
By-pass Mode



Unit Dimensions



Mounting Options



Note: Metric dimensions are displayed in [mm].

Ordering Instructions

Choose one character from each description. There should be a total of 11 characters.

Description	Code	Definition
SWITCH TYPE	H	Type FBS Switch
MAX kV, BIL	1	15 kV, 110 kV BIL
INSULATORS	J	Silicone
BLADE	A	600 A, 90° stop with latch
	B	600 A, 160° stop with latch
TERMINAL CONNECTORS	C	Two-piece tinned parallel groove clamshell (#2-500 MCM with horizontal pad)
	N	Horizontal two-hole NEMA pad - standard
	V	Vertical two-hole NEMA pad
	A	Two-piece tinned parallel groove clamshell (#2-500 MCM with vertical pad)
MOUNTING CONFIGURATIONS	N	No back bracket
	A	Standard 4" crossarm bracket with hardware
	B	Extended 4" crossarm bracket with hardware
	C	Standard 6" crossarm bracket with hardware
	D	Extended 6" crossarm bracket with hardware
	X	4" crossarm (3 FBS, two standard brackets, one extended bracket)
	Y	6" crossarm (3 FBS, two standard brackets, one extended bracket)
UN-USED	N	
CUTOUT TYPE	L	LBU
CONTINUOUS CURRENT CAP TYPE	0	None
	A	100 A solid cap 1"
	B	200 A solid cap
TUBE MATERIAL	0	None
	A	Standard
	M	Moisture proof
UN-USED	N	

Example: To purchase a standard FBS Fused By-pass Disconnect Switch, the catalog code would be: H1JAVANLAMN



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