



DISTRIBUTION SWITCHES

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LineBOSS™

15 kV - 38 kV SIDEBREAK TYPE, UNITIZED GOAB

DISTRIBUTION SWITCH

The **LineBOSS™** Sidebreak switch is the most robust, yet elegant sidebreak switch in the market today. Every **LineBOSS™** component brings meaningful operator benefits for years to come. Features such as 1/4 inch steel phase base, stainless steel to brass bearings, silver plated copper reverse loop contacts and busbar blades mean efficient and smooth operation over a long life even in hostile environments where dust, humidity corrosives and other industrial or natural contaminants play havoc with most. You'll be amazed with how much switch you can buy for the money. The LBS is RUS accepted.

Inertia: moving power with passion and innovation!

SPECIFICATIONS

Switch Ratings:

Voltage Class:	15.5 kV, 25.8 kV & 38 kV	
Continuous Current Class:	600, 900, 1200 Amps	
Fault Close:	15 kA rms-asym: 5 X manual operation 20 kA rms-asym: 3 X manual operation 30 kA rms-asym: 2 X manual operation	

Momentary current:	600 A:	40,000 A rms	10 cycles
		25,000 A rms	3 seconds
	900 A:	51,000 A rms	10 cycles
		32,000 A rms	3 seconds
	1200 A:	70,000 A rms	10 cycles
		44,000 A rms	3 seconds

Ice breaking:	3/4" (manual operation)
Mechanical:	5000 cycles (open/close)

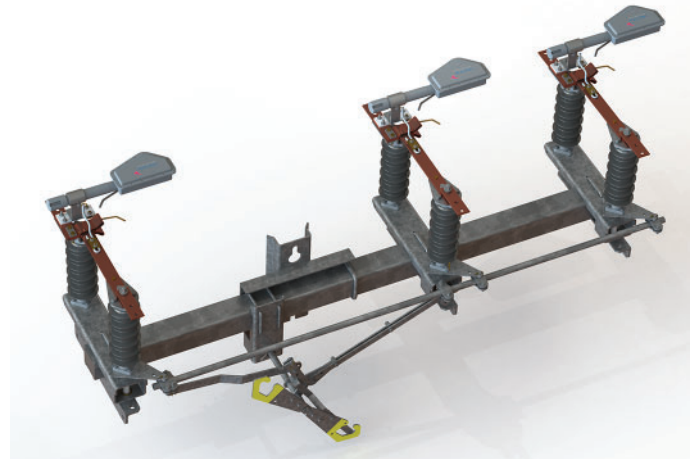
▮ ACCC Designation DO6 Loadability factor 1.22 at 25 Deg. C.

Meets or Exceeds All Applicable NEMA, IEEE, ANSI, and IEC Standards.

LOADBREAK DEVICES:

Arc Horns
ArcWhip Attachments
AmpRupter™ Load Break
AmpVac™ Load Break

*See data sheet "AIR-BREAK DISCONNECT SWITCH ATTACHMENT SELECTION INFORMATION" for loadbreak descriptions and specifications



CROSSARM RATINGS:

Crossarm	Material	Dead End Loading
Galvanized Steel	(standard duty)	2000 lbs/phase
Aluminum	(standard duty)	1500 lbs/phase
Fiberglass	(standard duty)	1000 lbs/phase

All materials: equal loading, each side of switch is 12,000 lbs. max. Ratings shown are for 25 kV switch

STANDARD FEATURES

- Resilient, higher BIL silicone rubber insulators
- Reverse loop silver plated copper jaw contacts
- Maintenance free stainless steel/brass bearings
- Unitized construction: aluminum, steel or fiberglass
- Factory adjusted, ready to mount
- Meets all applicable NEMA and ANSI standards
- All ferrous components are hot dip galvanized
- Tinned copper terminal pads
- ArmorGalv™ (Thermal Diffusion Galvanized) coated
- ferrous components available for increased corrosion resistance.

STANDARD CONFIGURATIONS

- | | |
|------------------------------|-------------------------------|
| • Horizontal (upright) | • Delta (pole top) |
| • Horizontal (underarm) | • Vertical (phase over phase) |
| • Horizontal (center mount) | • Tap Switch (1, 2, & 3 way) |
| • Riser | • Triangular (Delta) |
| • Vertical (tiered outboard) | • Twin Circuit |

See opposite side of this page for illustrations and selection guide.

LineBOSS™ Selection Guide (15 kV - 38 kV)

LineBOSS™ Unitized Sidebreak Switch

ARMORGALV® = LT

Voltage Class: 15.5 kV (110 kV BIL) = 1
25.8 kV (150 kV BIL) = 2
38.0 kV (200 kV BIL) = 3

Current Rating: 600 A = 6
900 A¹ = 6
900 A² = 9
1200 A = 1

Insulator Type: Polymeric Silicone (3.0" BC) = S
Porcelain (3.0" BC) = P

For Increase insulator creepage:
Add "1" for +1 voltage class
Add "2" for +2 voltage class

Interrupter Type: ArcWhip, Quick-break = Q
Amprupter, Loadbreak = L
AmpVac, Vacuum = V
NO Interrupter = X

Crossarm Type: Aluminum = A
Fiberglass = F
Galv. Steel = S
No Xarm = X
Customer specified loading (call factory)

¹ 900 A (Temp Rise: 30°C Momentary: 40 kA)
² 900 A (Temp Rise: 30°C Momentary: 51 kA ANSI)

³ Avian Protection.

⁴ Consult Factory for Unitized Switch.

L16SLSH1123

Mounting Configuration:

Vertical (Tiered Outboard) = B
Horizontal Center Mount = C
Delta (Pole Top) = D
Horizontal Upright = H
Vertical (Inline) = L
Riser = R
Twin Circuit = T
Underarm Horizontal³ = U
Vertical (Phase over Phase) = V
Tap Switch⁴: 1-way = 1W
2-way = 2W
3-way = 3W

Add "G" for 36" Climbing Space
Add "S" for Substation (H-Frame) See
Substation/H-Frame Chart.

Control Rod Length:

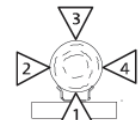
30 feet (standard) = 3
Specify (10' Sections) = ____
See Options Chart For Insulated Section.

Control Rod Type:

Reciprocating (↕↕)
1 3/4" square fiberglass = 1
1" round fiberglass = 2
3/4" galvanized pipe = 3
1" galvanized pipe = 4
Torsional (↻)
1 1/2" galvanized pipe = 6

Control Location:

Specify the quadrant by number, where the control is to be located.
See Control Options Chart.



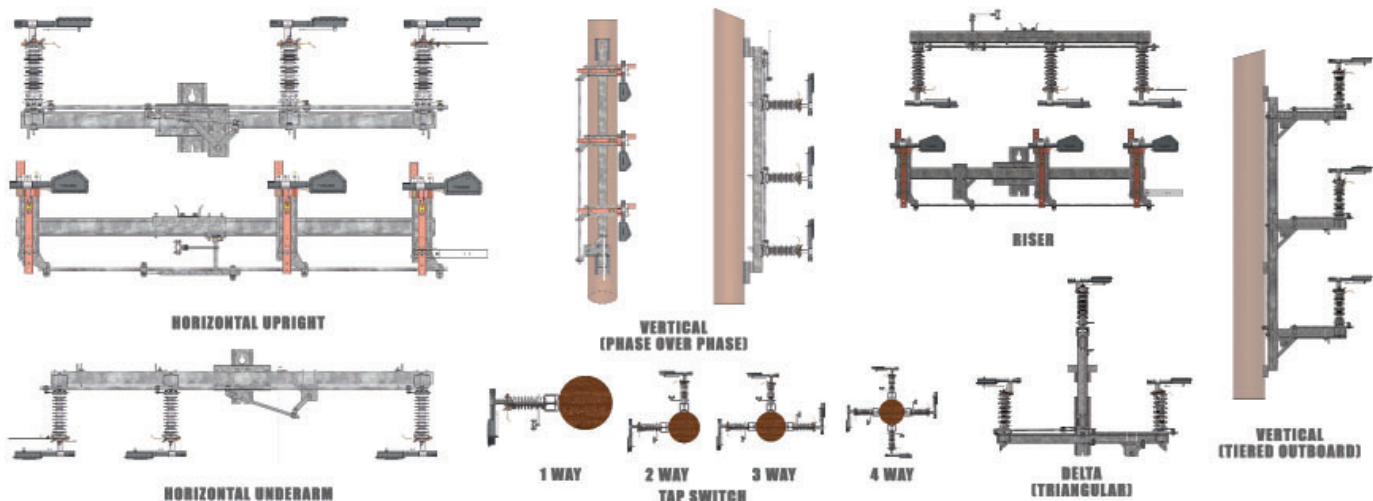
Control Mechanism:

Reciprocating handle (↕↕) = 1
Torsional handle (↻) = 2
Hookstick bellcrank = 3
Motorized Operator = M

*Note: Not all configurations are possible. Some design limitations may apply. Please contact us to see if your specific design configuration(s) is available.

ENG-2019 DISTRIBUTION SELECTION GUIDE REV 3 RELEASE DATE: 4/29/2020

LineBOSS™ Standard Configurations



Company Name _____
Address 1 _____
Address 2 _____
City _____ State _____ Zip code _____

Contact Name _____
Telephone Number _____
Facsimile Number _____
E-mail address _____

Make copies of this form to transmit your switch requirements. If you have a standard's drawing, please send it along with this fax form.

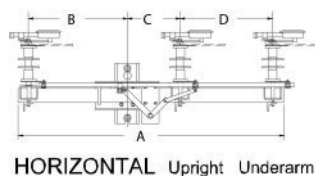
Step 1. Voltage Class _____ kV Continuous current rating¹: _____ A Momentary current _____ kA

Step 2. Insulator type: ☐ Silicone ☐ Porcelain ☐ One BIL class higher? _____

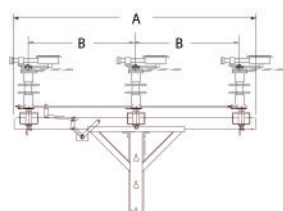
Step 3. Interrupter type: ☐ ArcHorn ☐ ArcWhip ☐ AmpRupter™ ☐ AmpVac™ 'V'

Step 4. Crossarm type: ☐ Galvanized steel ☐ Fiberglass ☐ Aluminum

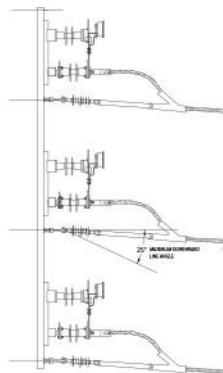
Step 5. Select the configuration (circle one):



HORIZONTAL Upright Underarm

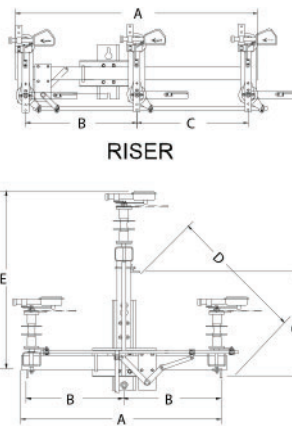


HORIZONTAL, Center mount

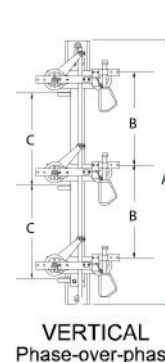


TAP SWITCH

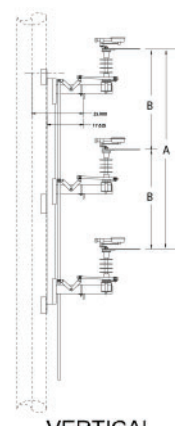
1-Way 2-Way 3-Way



DELTA, Triangular/Pole top



VERTICAL Phase-over-phase



VERTICAL Tiered outboard

Step 6. Select Spacing:

☐ Standard ☐ Custom (Fill in Spacing Dimensions below using configurations in Step 5.)

A" _____ "B" _____ "C" _____ "D" _____ "E" _____

Step 7. Select the control mechanism:

☐ Hookstick ☐ Reciprocating (↑↓) ☐ Torsional (↻) Clockwise or Counterclockwise to open; viewed looking down on the handle.

*Note: Torsional control mechanisms are not available in all configurations. Please contact us to see if your specific design configuration(s) is available.

Step 8. Select control mechanism quadrant (see fig. 1): _____



Figure 1: Control Quadrants

¹ **LineBOSS™** switches are ANSI rated switches. The **LineBOSS™** Lx6xxxx is rated 600 Amps continuous current per the ANSI C37.30 temperature rise test requirements, and for 900 Amp continuous current per the IEEE 1247 temperature rise test requirements. The **LineBOSS™** Lx9xxxx is rated 900 Amps continuous current per the ANSI C37.30 temperature rise test requirements. The **LineBOSS™** Lx1xxxx is rated 1200 Amps continuous current per the ANSI C37.30 temperature rise test requirements. Momentary current ratings (10 cycle) are: 600 A (ANSI C37.30) = 40 kA 900 A (ANSI C37.30) = 51 kA 1200 A (ANSI C37.30) = 70 kA

☐ Fiberglass: 1" round 1³/₄" square other _____

Step 11. Select additional accessories and modifications (check off and write in)

- ² Torsional control rods available in 1-1/2" Galvanized Pipe Only.

³ Torsional: N.T.E 50' max.

⁴ Ferrous components come Hot Dipped Galvanized (HDG) standard. Armorgalv AG3000 Thermal Diffusion Galvanizing (TDG) offers increased corrosion resistance.

A full-page view of a blank sheet of graph paper. The page is covered by a uniform grid of small squares, typical of standard graph paper used for mathematics or engineering. There are no margins, text, or other markings on the page.

AmpRupterTM



The Inertia AmpRupter utilizes expulsion tube interrupter technology to break current loads up to 900 amps at 27 kV. It is used for load-break, loop break, line charging and cable charging switching operations. The AmpRupter was tested to IEEE 1247 Standard for Interrupting Switches for Alternating Current Rated Above 1000 Volts. The mechanical life of the AmpRupter is 2,500 operations. The electrical life of the AmpRupter is dependent on the amount of load interrupted.

AmpRupter load interruption occurs as the switch blade leaves the contact clip; making contact with the catch arm. At this point, current is shunted through the actuator arm, through the contacts to the load side. As the blade continues towards its open position, the internal spring powered mechanism trips; breaking the internal contacts.

LineBOSSTM Selection Guide suffix “L”

This action evolves a pressurized non-conductive gas that extinguishes the arc. This process occurs within one half cycle (first zero crossing), and will not “chop” the current upon circuit interruption. The speed of the AmpRupter mechanism is not dependent on the switch operating speed, insuring that the load breaking capabilities are consistent regardless of switch opening speed. The AmpRupter automatically resets for the next operation. The AmpRupter is not in the current path during the switch closing operation, and has no fault closing capabilities. The AmpRupter is in the current path **during the switch opening operation only.**



AmpVacTM ‘V’

The AmpVac is an enclosed vacuum bottle interrupter where no gases are vented to the atmosphere. The AmpVac interrupter has much higher interruption capabilities than other load break devices. Single contact AmpVac interrupters break loads up to 1500 amps at 38 kV. Single vacuum bottle interrupters may be used at increased voltages for parallel or loop switching applications as long as the peak recovery voltage does not exceed 38 kV. The AmpVac is rated for 5000 operations. The AmpVac was tested to IEEE 1247.

LineBOSSTM Selection Guide suffix “V”



V4 & V7

The V4 and V7 vacuum interrupters are single-gap load-breaking devices that utilize vacuum bottle technology, where no gases are vented to the atmosphere. The new single vacuum bottle design can break loads up to 2000 Amps at 48.0 kV, and 72.5 kV; where it now replaces the original V2 and V3 multi-vacuum bottle designs. Vacuum bottle interrupters are not in the current path during the switch closing operation, and have no fault closing capabilities. The V4 and V7 vacuum interrupter is rated for 5000 operations.

LineBOSSTM 48.0 - 72.5 kV Selection Guide suffix “V4” and “V7”

ArcWhip

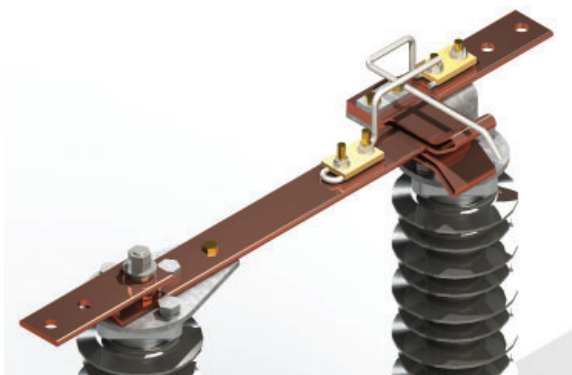


The ArcWhip has a small interrupting rating of between 10 and 20 amps. The ArcWhip can clear arcs from residual energy stored in capacitor banks, transformers or conductors. ArcWhips are only in the current path during switch opening operations, and have an average life of 150 open operations.

LineBOSS™ Selection Guide suffix “Q”

ArcHorn

(Not an interrupter)



The ArcHorn is not an interrupter and has no ratings. It is used as an arc deflecting mechanism to save the life of switch blades and contact clips. The ArcHorn, also known as “sacrificial arcing horn”, is the first point of contact during switch closing operations. The initial making current during a closing operation creates small arcs; pitting the arc horns. This “sacrificial” mechanism helps prevent degradation of the main contacts. The ArcHorn is used to redirect the arc resulting from residual or stored charge left after a down-line circuit is opened. ArcHorns will not prevent damage from the inadvertent opening of a loaded switch.

LineBOSS™ Selection Guide suffix “A”

Vacuum Bottle Interrupter Applications:

Type of Switching:	AmpVac™ ‘V’	V4	V7
Voltage Rating:	15.5 kV, 25 kV, 38 kV*	48.0 kV	72.5 kV
Loadbreak, 70% PF	2000 A	2000 A	2000 A
Parallel Break < 30% PF	1500 A	2000 A	2000 A
Cable Charging	40 A	10 A	10 A
Magnetizing	21 A	70 A	70 A
Capacitor Bank, (grnd. neut.)	N/A	N/A	N/A
* Recovery voltage between source and load must be less than 38 kV, immediately.			

Interrupter Attachment Device Application:

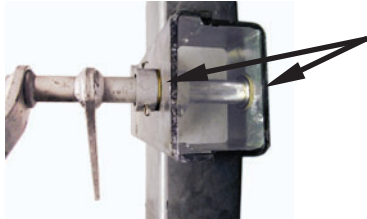
Type of Switching:	ArcHorn	ArcWhip	AmpRupter™
Loadbreak, 70% PF	N/A	N/A	15 kV : 900 A 23 kV : 900 A 34 kV : 600 A
Parallel Break < 30% PF	N/A	N/A	5 kV : 900 A
Cable Charging	N/A	≤ 72.5 kV : 15 A	27 kV : 26 A
Line Charging	N/A	≤ 72.5 kV : 3500kVA	23 kV : 6.2 A
Magnetizing	N/A	N/A	27 kV : 2.7 A

FEATURES AND BENEFITS

Inertia's switches are comprised of quality components to ensure longer service-life.

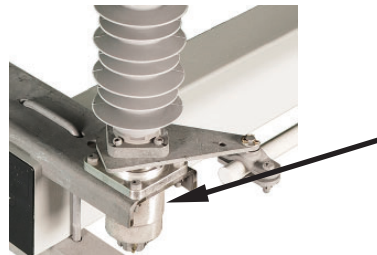
FEATURE

BENEFITS



**Stainless steel/
brass bearings in
the bellcrank**

Bearings in the bellcrank reduce the force required to operate the switch and eliminate corrosion due to plated metal-to-metal wear.



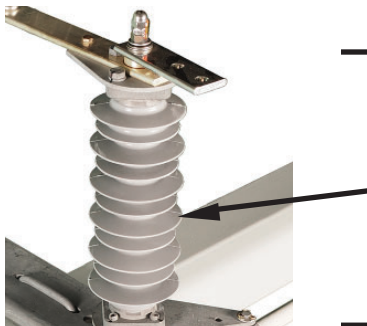
**Sealed stainless
steel ball bearings
on rotating stacks**

Many manufacturers use rotating insulator spindles and bearings that are supported solely on the 3/16" thick phase base surface that can flex during normal operation, causing blade-to-clip misalignment. The spindle and its bearing should be supported at both the phase base surface and the end of the spindle opposite the blade.

Rotating insulator spindles that are made of zinc chromate plated steel which can rust. Others use cast aluminum which is inexpensive, but has poor wear characteristics and does not have the strength of steel. Switches can come out of contact adjustment if a spindle bearing fails.

Inertia rotating insulators pivot on double sealed stainless steel ball bearings at both the top and bottom of the phase providing smooth maintenance-free operation of the switch throughout its life.

Benefit: Total operating cost of the switch is reduced as less site visits are required for maintenance.



**ANSI TR2xx series,
3" bolt circle station
post insulators are
provided in silicone
or porcelain.**

These insulators have superior mechanical characteristics over 2 1/4" BC insulators. Silicone insulators have additional BIL, leakage and weatherability ratings over either porcelain or epoxy insulators.

Insulator Type (25 kV example)	Load Ratings:		B.I.L. Rating Peak
	Can'tilever	Torsion	
3" BC silicone	1,200 lbs.	6,000 lbs	165 kV
3" BC porcelain	2,000 lbs.	7,000 lbs.	150 kV
2 1/4" BC porcelain	1,000 lbs.	3,000 lbs.	150 kV
2 1/4" BC epoxy	1,200 lbs.	5,000 lbs.	150 kV



**Busbar grade
copper contact
components.**

Busbar grade copper contact components are structurally superior with greater conductivity than cast contact material. Cast aluminum and copper bronze contact castings are 34-36% conductive and often contain unseen surface irregularities and voids that create 'hot spots'. Busbar grade C110 copper is 99% conductive and is many times smoother to provide better terminal connection surfaces and is not subject to unseen porosity. With this contact system, the **LineBOSS**TM has achieved the highest momentary and fault close ratings in the industry. Momentary: to 70 kA for 10 cycles and 44 kA for 3 seconds. Fault close: 30 kA (2X)



**Formed interphase
rod clamps with
two-bolt clamping.**

Often, switch manufacturers use cast clamps to connect the interphase rod to the rotating stacks. This clamping method has one fixed side and only one open side to pinch the interphase rod. The interphase rod clamp is the device that assures uniform operation of the three switch phases. Any slippage results in an improperly adjusted switch, with not all phases fully closed into the contacts. The **LineBOSS**TM uses formed two-piece clamps to compress the interphase rod surface with significantly more distributed pressure. This helps to maintain uniform operation of all three phases throughout the life of the switch.

SPECIFICATION ELEMENTS

Part Description:

15 kV (15.5 kV max.) to 35 kV (38 kV max.) GANG OPERATED LOADBREAK OVERHEAD SWITCHES
 Horizontal Upright | Horizontal Center Mount | Horizontal Underarm | Avian/Wildlife Protection | Riser | Triangle (Pole Top)
 Vertical (Phase-over-phase) | Vertical (Tiered Outboard) | Tap (1,2, 3 way) | Twin Tap Riser

Design Specifications:

- Nominal voltage: (15 kV, 25 kV or 38 kV)
- Insulators: Silicone rubber station post; BIL rating (15 kV: 130 kV, 25 kV: 175 kV, 38 kV: 240 kV)
- Switch bearings: Stainless steel to brass on all rotating insulators and switch operating shafts.
- Loadbreak shall be capable of: 900 A load breaking, 25 A cable charging, 900 A parallel switching.
- Contacts: Copper busbar blade and reverse loop contacts are to be silver-plated, N.E.M.A. terminal pads shall be tin-plated copper busbar with a surface finish of 32 minimum.
- The switch shall provide means to attach line current/voltage sensors.
- All ferrous components shall be hot dip galvanized.
- Loadbreak shall be self-resetting; where the trip ping speed of the loadbreak shall be independent of switch operating speed. No component of the loadbreak shall make contact with the closing switch blade prior to main switch contact engagement. All actuating mechanism components of the loadbreak device must be stainless steel or non-corrosive parts.
- Switch base (crossarm) is to be: (hot dip galvanized steel, fiberglass or aluminum) see **LineBOSSTM** switch selection guide for dead-end loading specifications. Specify pole clearance spacing i.e. 24", GO95.
- Operating rod: specify type and length of control rod, and if an insulated section is required (see **LineBOSSTM** selection guide).
- The gang operated sidebreak style switch shall be capable of seamless automation with a torsional or reciprocating motor operator as dictated by the switch type. It shall be available with the motorized switch operator replacing the manual handle.
- Meets or Exceeds All Applicable NEMA, IEEE, ANSI, and IEC Standards as applicable for 12 kV, 21 kV or 34.5 kV (system voltage).

Switch Ratings:

Voltage Class: 15.5 kV, 25.8 kV and 38.0 kV

Current Class: 600, 900 and 1200 A continuous

Fault Close: 15 kA rms-asym: 5 X Manual Operation
 20 kA rms-asym: 3 X Manual Operation
 30 kA rms-asym: 2 X Manual Operation

Momentary current: 600 A: 40,000 A-rms 10 cycles
 25,000 A-rms 3 seconds
 900 A: 51,000 A-rms 10 cycles
 32,000 A-rms 3 seconds
 1200 A: 70,000 A-rms 10 cycles
 44,000 A-rms 3 seconds

Ice breaking: ¾" (manual operation)

Mechanical: 5000 Open/Close cycles

ACCC Designation DO6
 Loadability factor 1.22 at 25 Deg. C.
 (Not applicable to loadbreak devices)

Loadbreak Device Ratings:

AmpVac Loadbreak: 12 kV through 38 kV

Load Current:	1500 A-rms
Parallel Current:	1500 A-rms
Cable Charging:	600 A-rms
Magnetizing Current:	600 A-rms

AmpRupter Loadbreak:

Load Current:	900 A-rms @ 23 kV
Parallel Current:	900 A-rms @ 5 kV
Cable Charging:	26 A-rms @ 27 kV
Magnetizing Current:	2.7 A-rms @ 27 kV

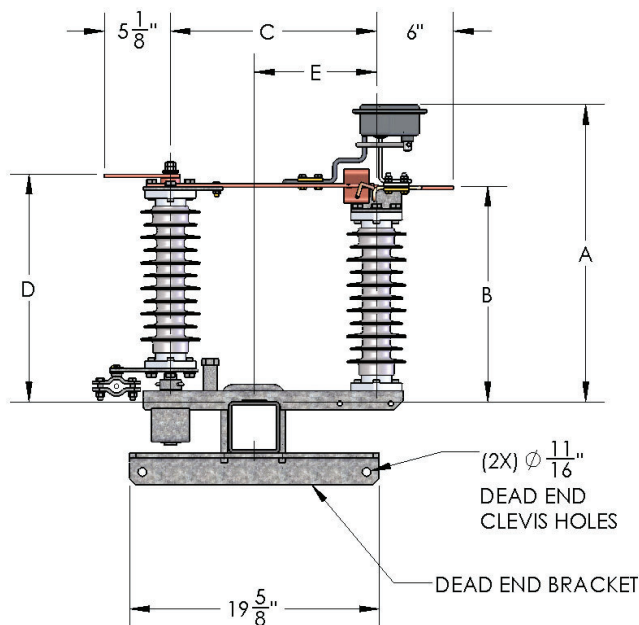
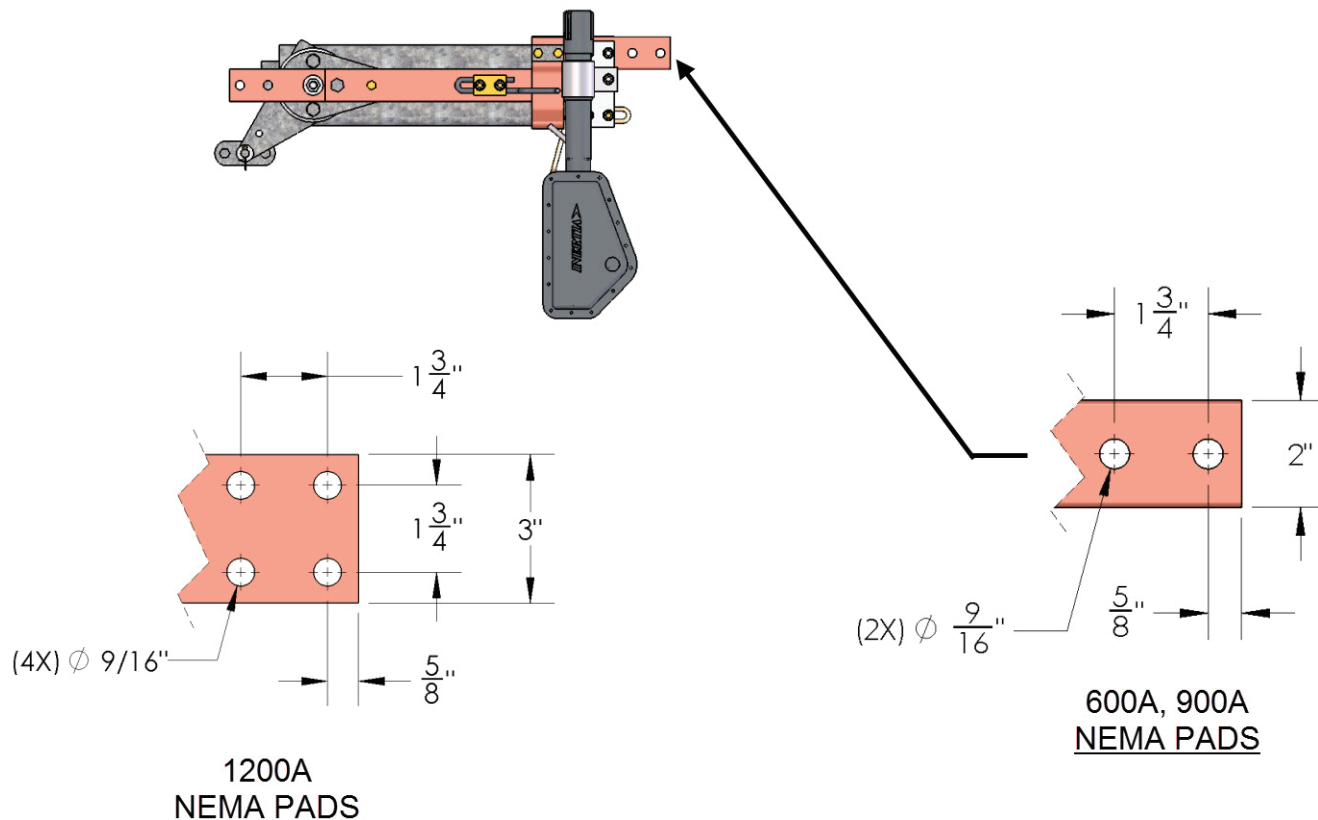
ArcWhip Ratings:

Voltage (nominal)	≤ 72.5 kV
Cable Charging:	15 A-rms
Line Charging:	3500 kVA

Quick Break Whip Ratings:

Voltage (nominal)	15 kV - 35 kV
Cable Charging	15 A-rms
Line Charging	3500 kVA

15 kV - 38 kV Single Phase Dimensions



Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	19.375"	23.375"	27.375"
B	13.500"	17.500"	21.500"
C	13.188"	16.188"	22.188"
D	14.250"	18.250"	22.250"
E	6.563"	9.563"	16.375"

This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



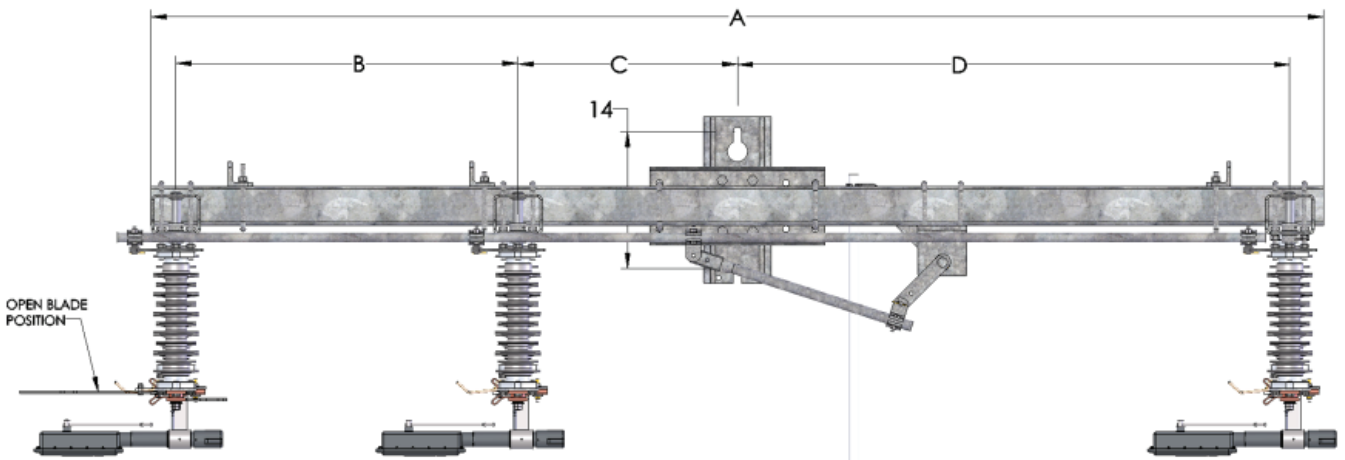
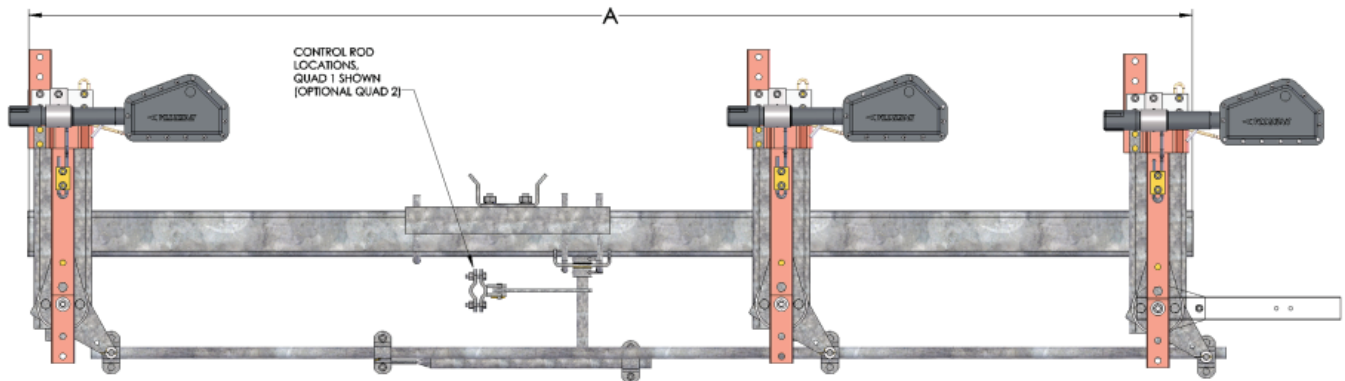
Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
LBS, 15 kV - 38 kV, SINGLE PHASE, Dimen-
sions

Drawing No.:
9225M

Revision:
00

15 kV - 38 kV Horizontal Dimensions



Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	76"	87"	120"
B	26"	30"	48"
C	18"	18"	21"
D	26"	33"	45"
E	13"	16"	22"
F	6.875"	13.875"	19.250"

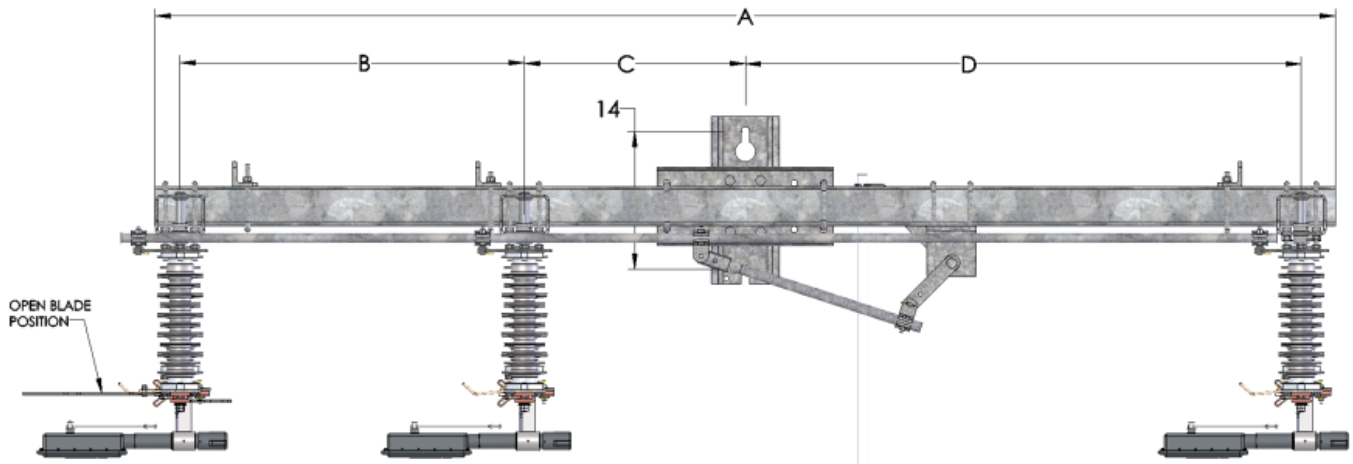
This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:	LBS, 15 kV - 38 kV HORIZONTAL, Dimensions	
Drawing No.:	9226M	Revision:
		01

15 kV - 38 kV Horizontal Underarm Dimensions



MINIMUM PHASE SPACING

Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	102" [2591 mm]	120" [3048 mm]	129" [3277 mm]
B	26" [660 mm]	33" [838 mm]	48" [1219 mm]
C	24" [610 mm]	24" [610 mm]	24" [610 mm]
D	46" [1168 mm]	57" [1448 mm]	51" [1295 mm]
E	10" [178 mm]	14" [356 mm]	23" [737 mm]

This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
LBS, 15 kV - 38 kV HORIZONTAL, underarm
Dimensions

Drawing No.:
9241M

Revision:
00

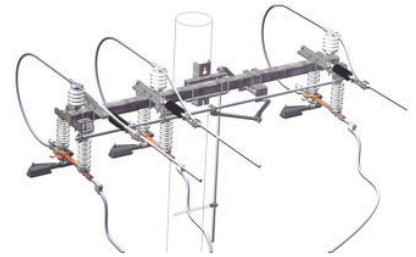
15 kV - 38 kV Horizontal Underarm Switch Construction Applications



3-WIRE ALLEY ARM



3-WIRE ANGLE



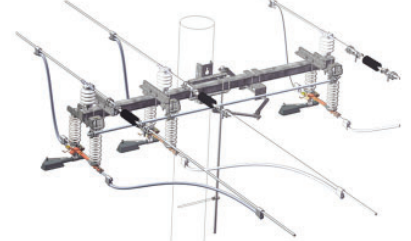
3-WIRE DEADEND RISER



3-WIRE TANGENT ALTERNATE



3-WIRE TANGENT RISER



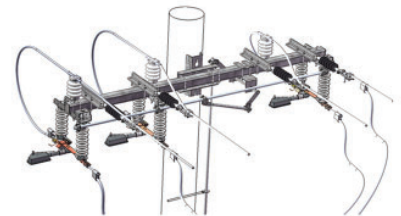
3-WIRE TANGENT



4-WIRE ALLEY ARM



4-WIRE ANGLE



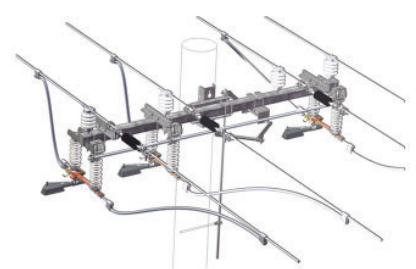
4-WIRE DEADEND RISER



4-WIRE TANGENT ALTERNATE



4-WIRE TANGENT RISER



4-WIRE TANGENT

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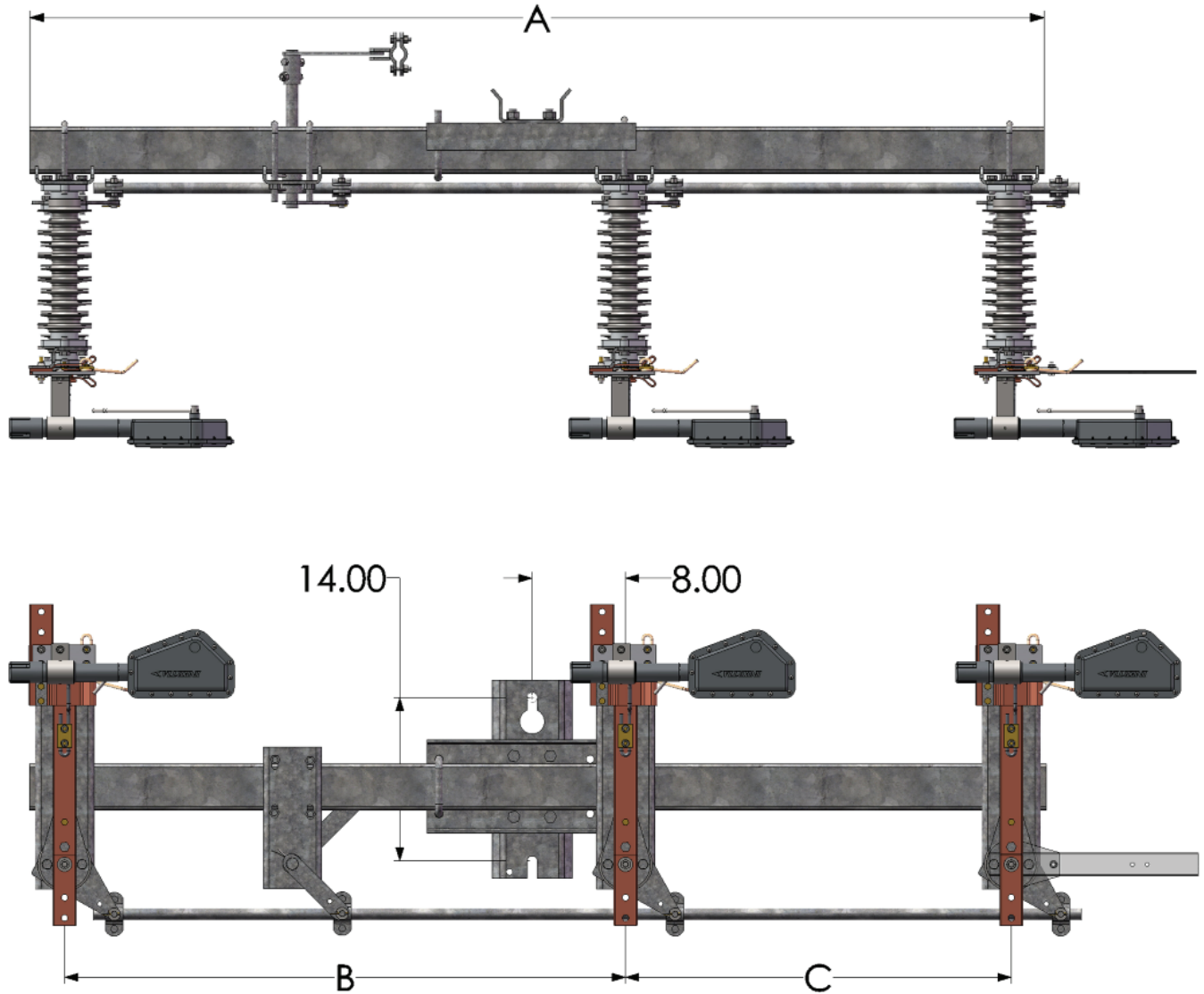
Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
LBS, 15 kV - 38 kV HORIZONTAL, Underarm
Construction Applications

Drawing No.:
9241-1M

Revision:
00

15 kV - 38 kV Riser Dimensions



Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	76"	87"	102"
B	44"	48"	48"
C	26"	33"	48"

This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



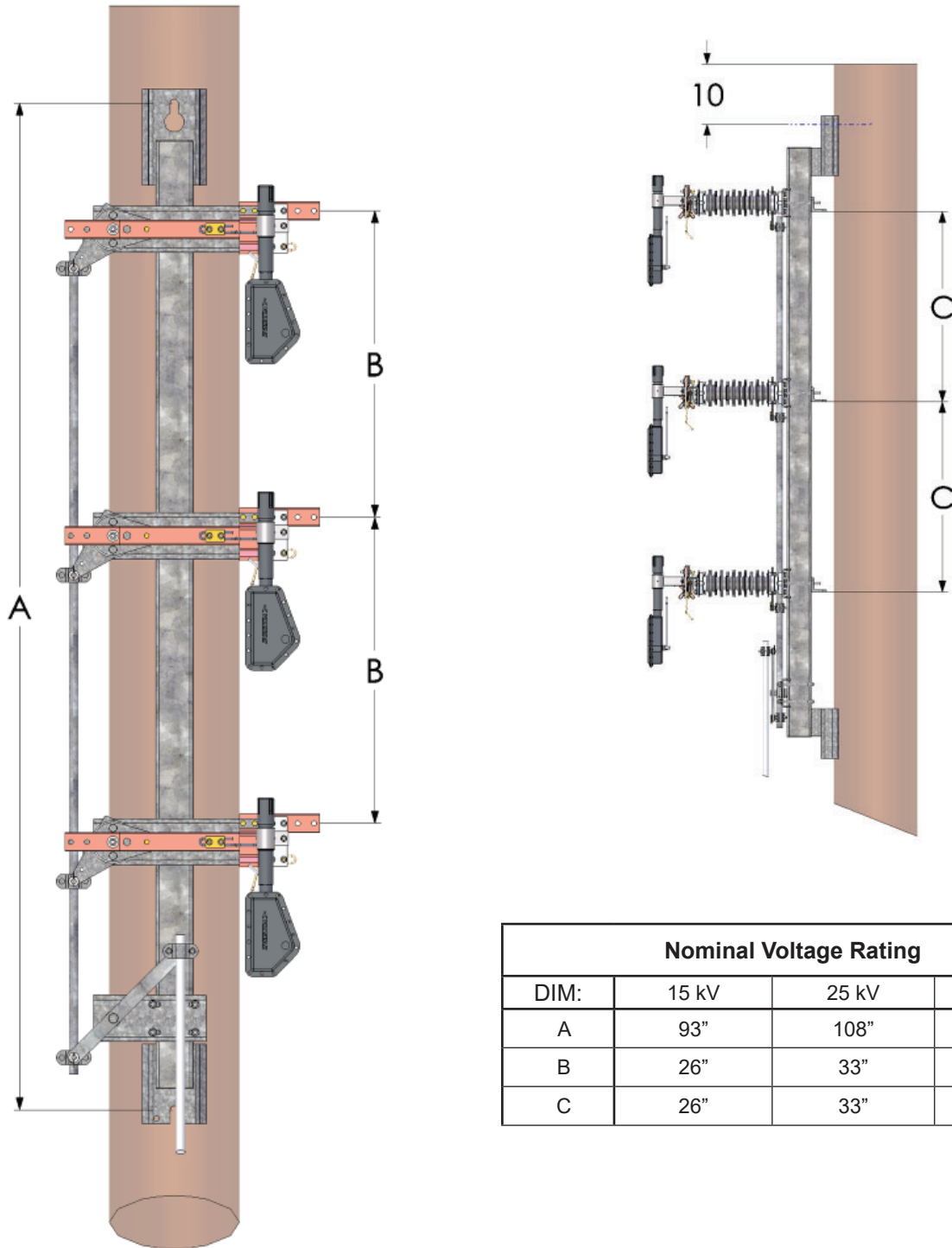
Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
LBS, 15 kV - 38 kV RISER, Dimensions

Drawing No.:
9185M

Revision:
02

15 kV - 38 kV Vertical Dimensions



Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	93"	108"	135"
B	26"	33"	45"
C	26"	33"	45"

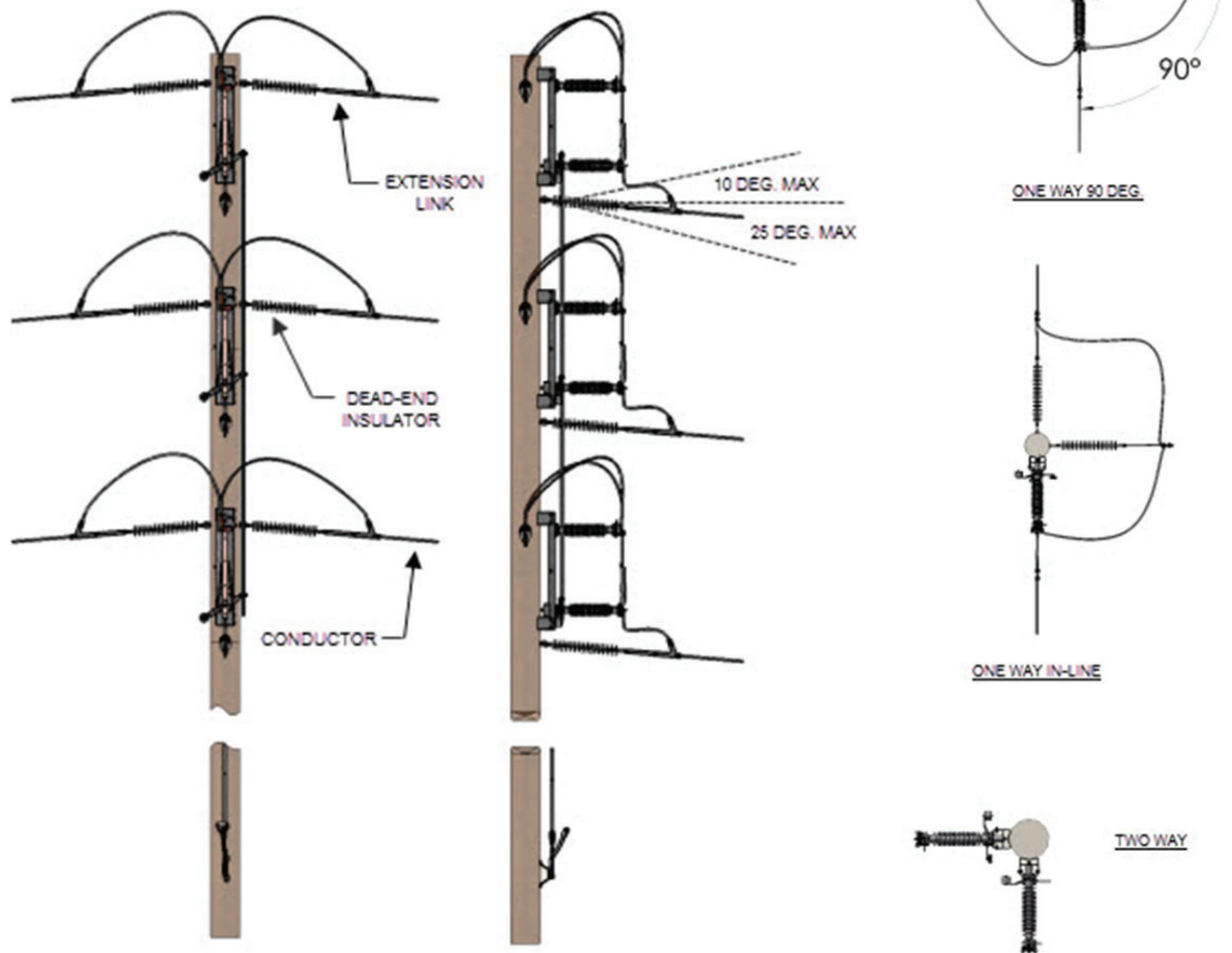
This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description: LBS, 15 kV - 38 kV, VERTICAL, (Phase-over-phase) Dimensions	
Drawing No.: 9184M	Revision: 01

15 kV - 38 kV Tap Switch Dimensions



THE VERTICALLY MOUNTED TAP SWITCH IS A GANG OPERATED POLE MOUNTED SWITCH WHICH CAN BE USED IN VARIOUS CONSTRUCTION APPLICATIONS. RIGHT HAND (SHOWN) AND LEFT HAND OPERATING MODELS ARE ADAPTABLE TO EXTREME HORIZONTAL AND VERTICAL LINE ANGLES. TIN PLATED COPPER BUSS "TEES" AND BOLTED CONDUCTORS CLAMPS ARE AVAILABLE FOR CONNECTING TWO AND THREE-WAY SWITCH CONFIGURATIONS.

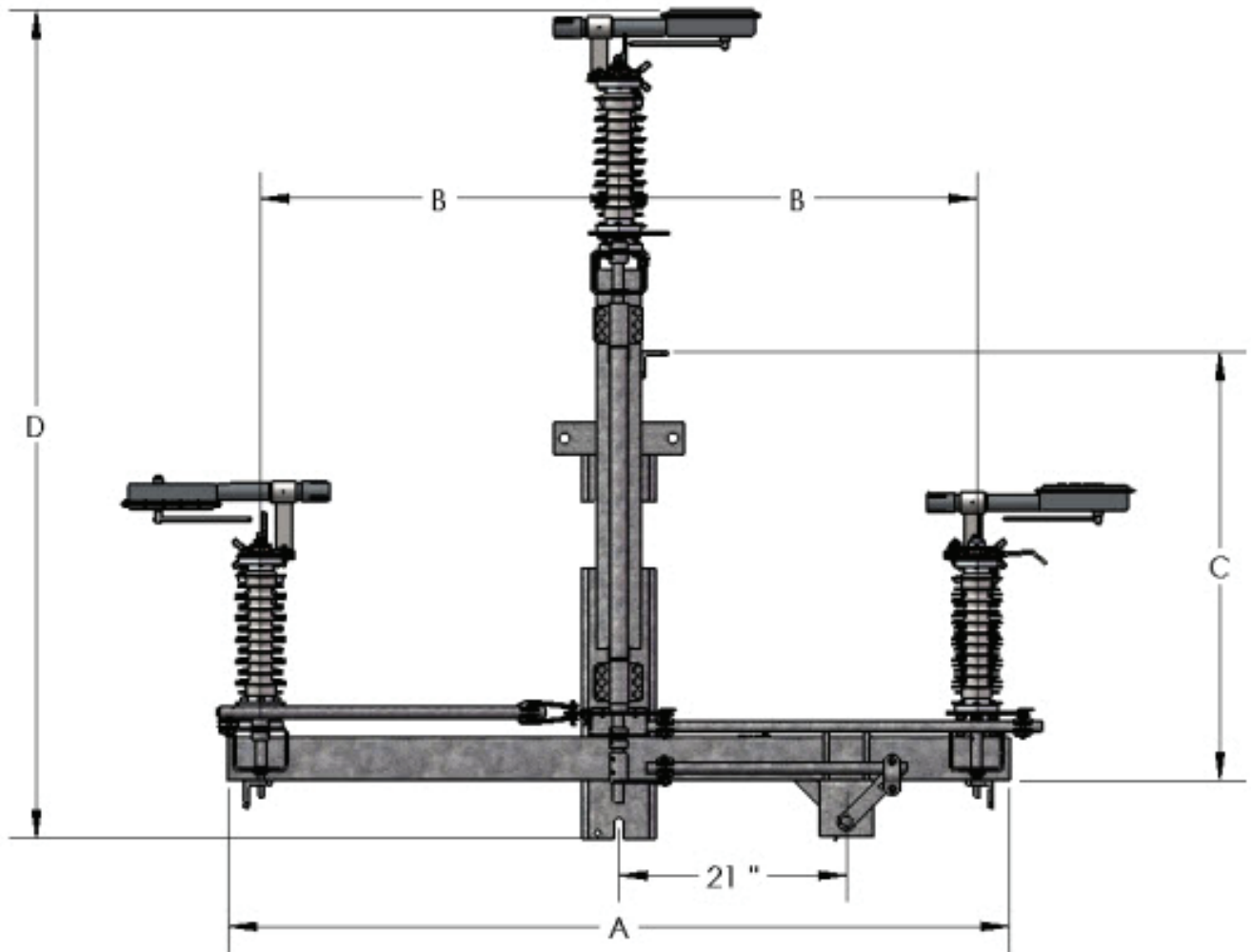
This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:	LBS 15 kV - 38 kV, LineBOSS™ Tap Switches
Dimensions	
Drawing No.:	9239M
Revision:	00

15 kV - 38 kV Triangular Pole Top Dimensions



Nominal Voltage Rating

DIM:	15 kV	25 kV	38 kV
A	76"	76"	76"
B	35"	35"	35"
C	39.5"	39.5"	39.5"
D	73"	77"	81"

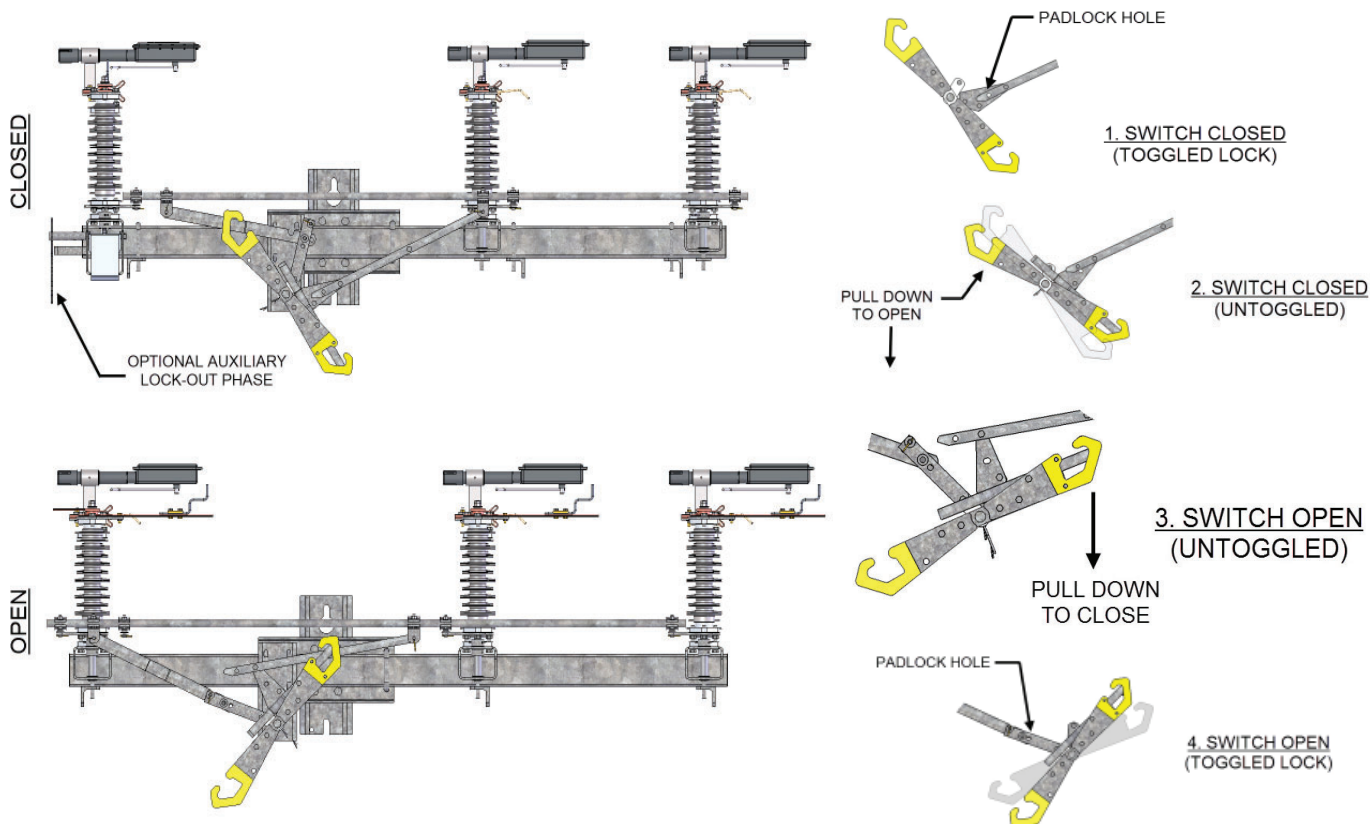
This drawing is for illustrative purposes only and therefore; may, or may not reflect the current revision of this drawing. Please request the current revision from the factory upon quote.



Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description: LBS, 15 kV - 38 kV Triangular (Pole Top) Dimensions	
Drawing No.: 9227M	Revision: 00

Hook-Stick Operating Mechanism, Crossarm Mounted



MOUNT IT! WIRE IT! OPERATE IT!

Fast, Easy Installation The Inertia hookstick operated switch eliminates the need for a control rod, so there is no need for any field adjustment of the switch. Compression of the blades into the clips and interrupter timing are factory set. Without lower controls; pole clutter is reduced.

Versatile Hookstick operating mechanisms are available on Horizontal, Underarm horizontal, Riser, Vertical (Phase-over-phase) and Delta (triangular) configurations.

Safe Operation The Inertia Hookstick safety features include:

1. Hookstick mechanism is located below the xarm, away from hot parts.
2. No springs that could be affected by ice.
3. The switch bell crank has built in toggle-over in both the open and closed positions, which in conjunction to the lock-out bar feature, prevents inadvertent operation of the switch from either positions by perching wildlife.
4. For night and inclement weather operation, the "hook" positions are high-lighted with a high visibility, yellow reflective surface.

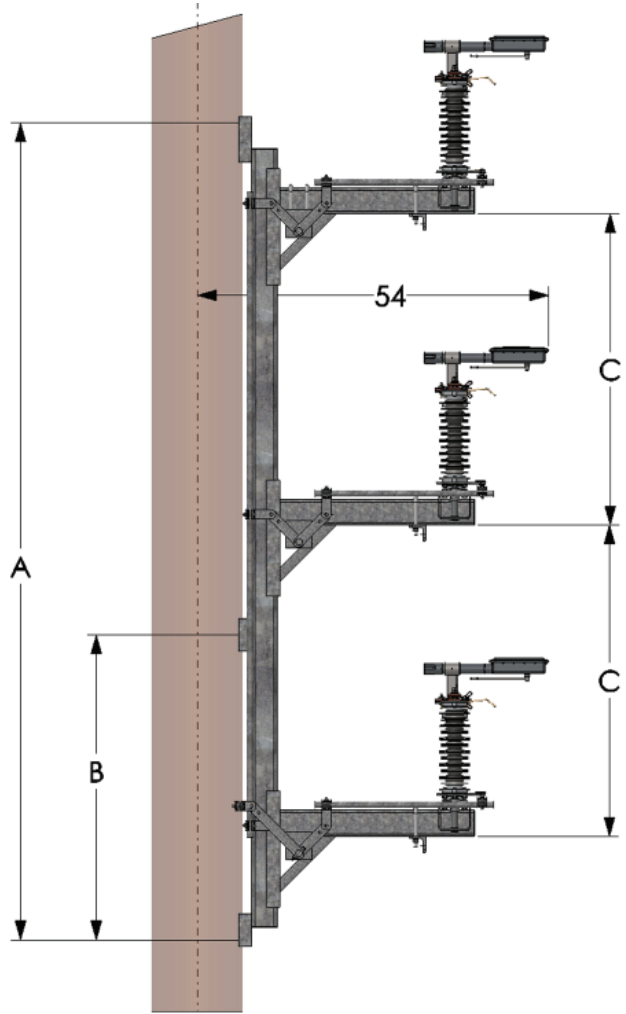
Easy Operation The Inertia Hookstick bellcrank and rotating stacks have stainless steel-to-brass shaft bearings. Consider the savings in restrictive losses when the control rods, guides and handle are no longer a factor! This makes the inertia hookstick operated switch the easiest switch to operate, High leverage cam action ensures properly closed switch and reduced operating force.

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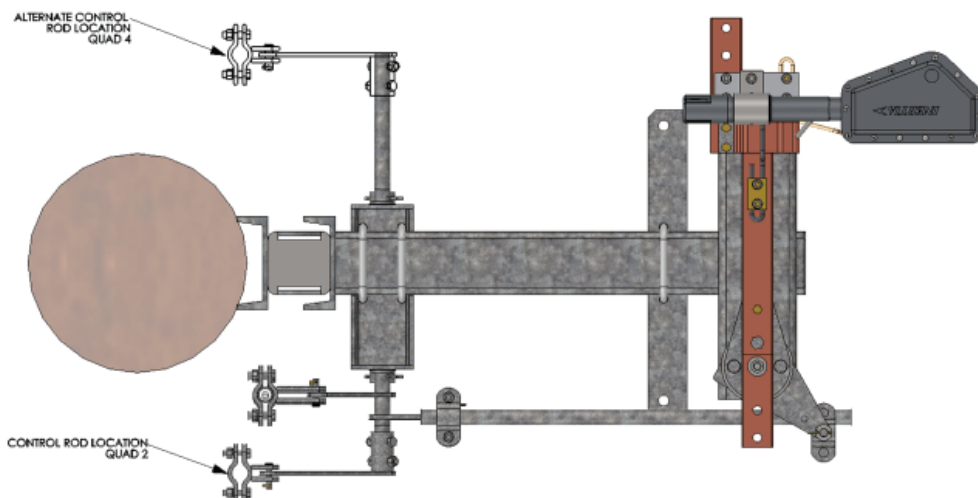


Materials: N/A	Description: Hook-Stick Operating Mechanism, Crossarm Mounted	
Finish: N/A		
Scale: NTS	Drawing No.: 9298M	
Drawn By: N/A		
Date: 12/19/16		
		Revision: 00

15 kV - 38 kV Vertical Tiered Outboard Dimensions



NOTE: MINIMUM PHASE SPACING SHOWN. ALTERNATE SPACING IS AVAILABLE



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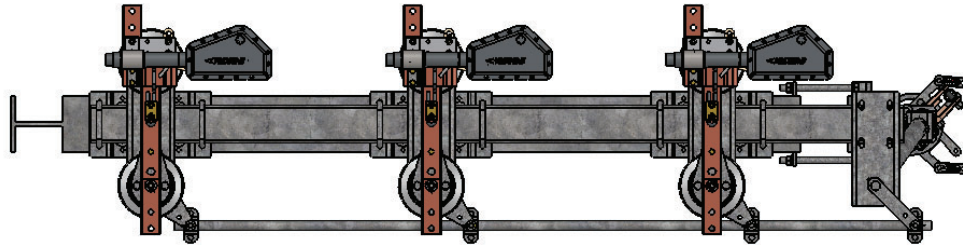
Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
25 kV Tiered Outboard, Armless Unitized
LineBOSS™ Sidebreak GOAB Switch

Drawing No.:
9374M

Revision:
00

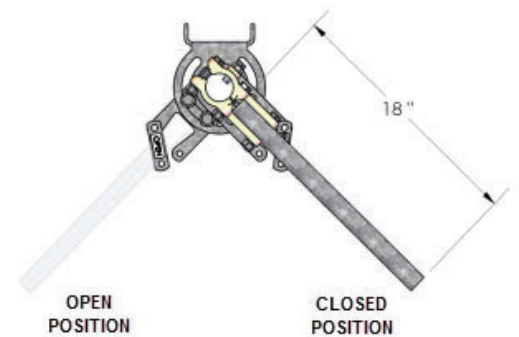
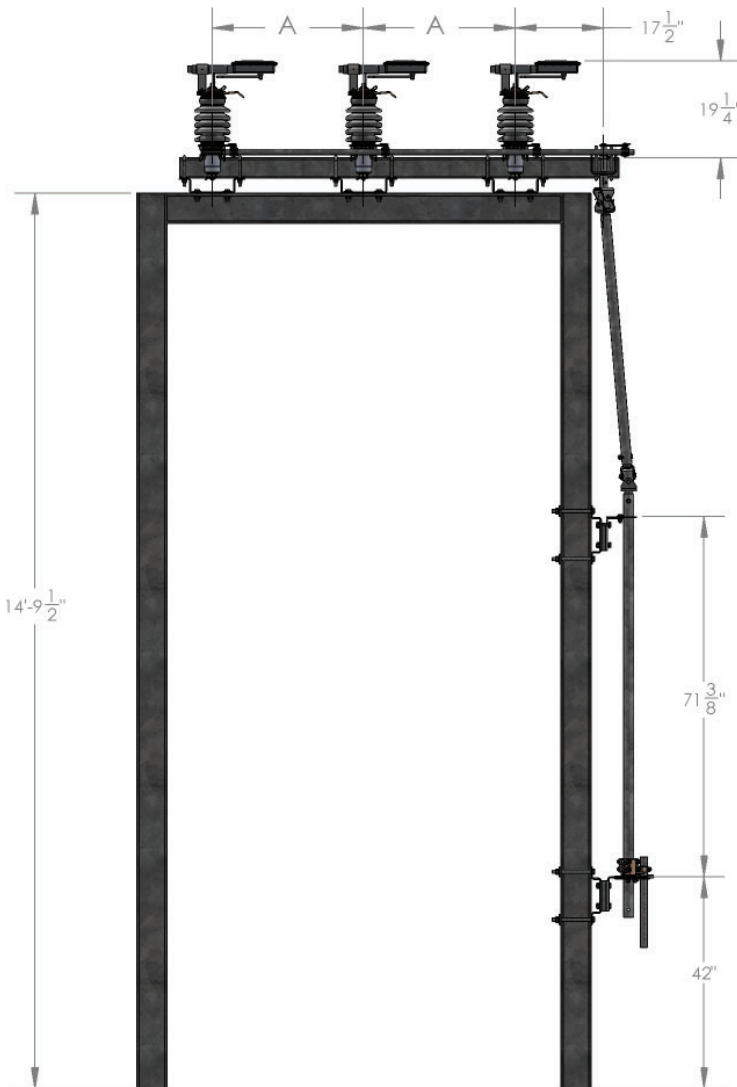
15-38 kV Horizontal Substation H-Frame Dimensions



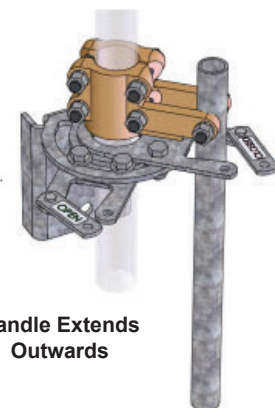
MINIMUM PHASE SPACING

Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	30"	36"	48"

NOTE: MINIMUM PHASE SPACING SHOWN. ALTERNATE SPACING IS AVAILABLE. TORSIONAL "SWING" HANDLE CONTROL MECHANISM SHOWN. RECIPROCATING CONTROLS ARE AVAILABLE.



TOP VIEW
TORSIONAL CONTROL
(HANDLE EXTENDED)



Handle Extends
Outwards

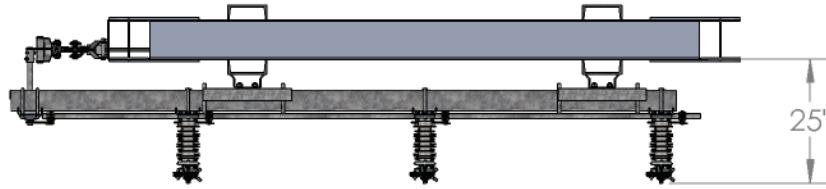
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Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description: 15-38 kV, Horizontal Switch, Substation H-Frame Mounted, Torsional Control	
Drawing No.:	Revision:
9661-28M	00

15 kV - 38 kV Riser Substation H-Frame Dimensions

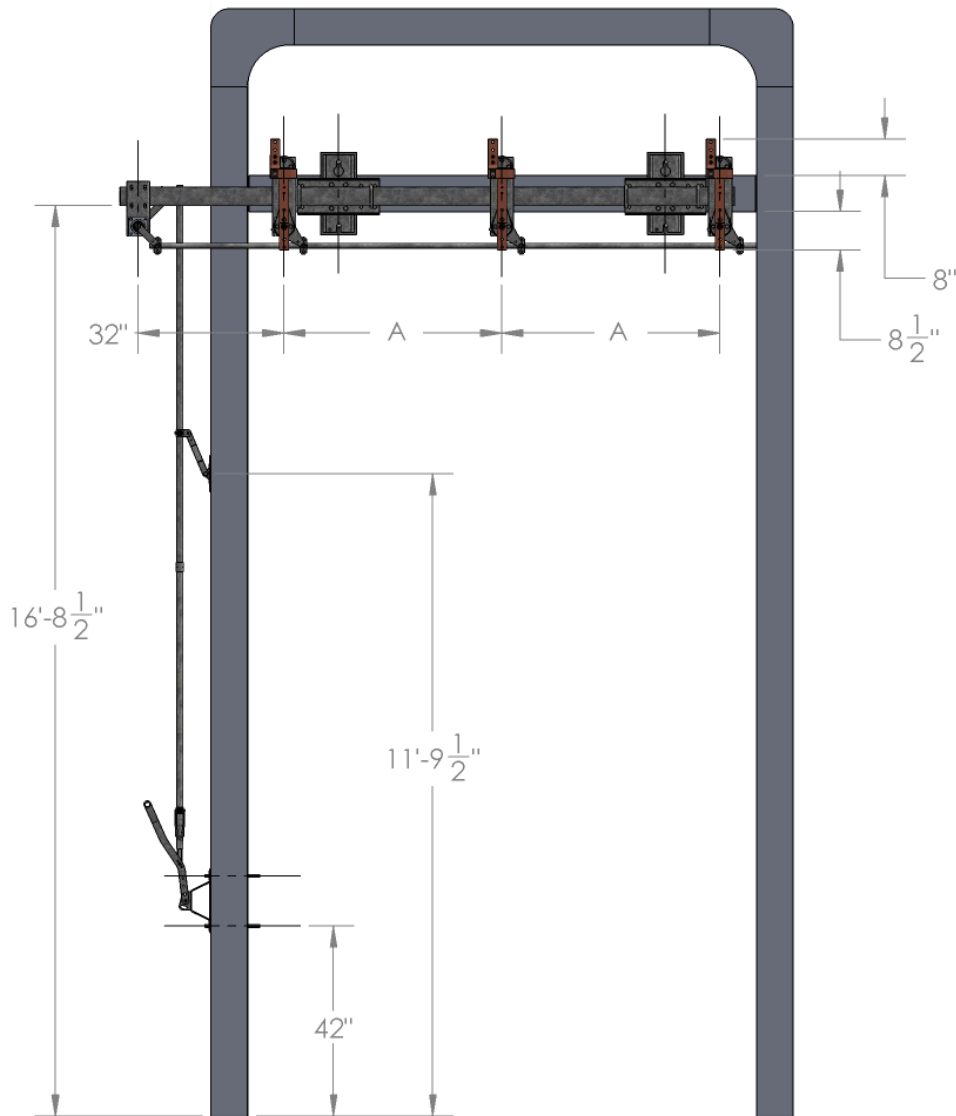


MINIMUM PHASE SPACING

Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	30"	36"	48"

NOTE: MINIMUM PHASE SPACING SHOWN. ALTERNATE SPACING IS AVAILABLE.

RECIPROCATING HANDLE CONTROL MECHANISM SHOWN. TORSIONAL "SWING" CONTROLS ARE AVAILABLE.



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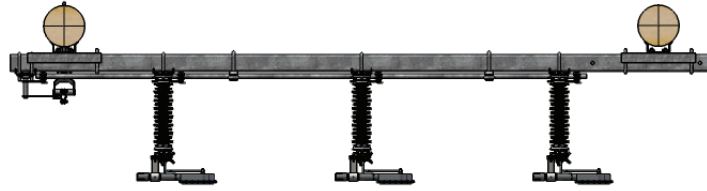
Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
15-38 kV, Riser Switch, Substation H-Frame
Mounted, Recip. Control

Drawing No.:
9661-32M

Revision:
00

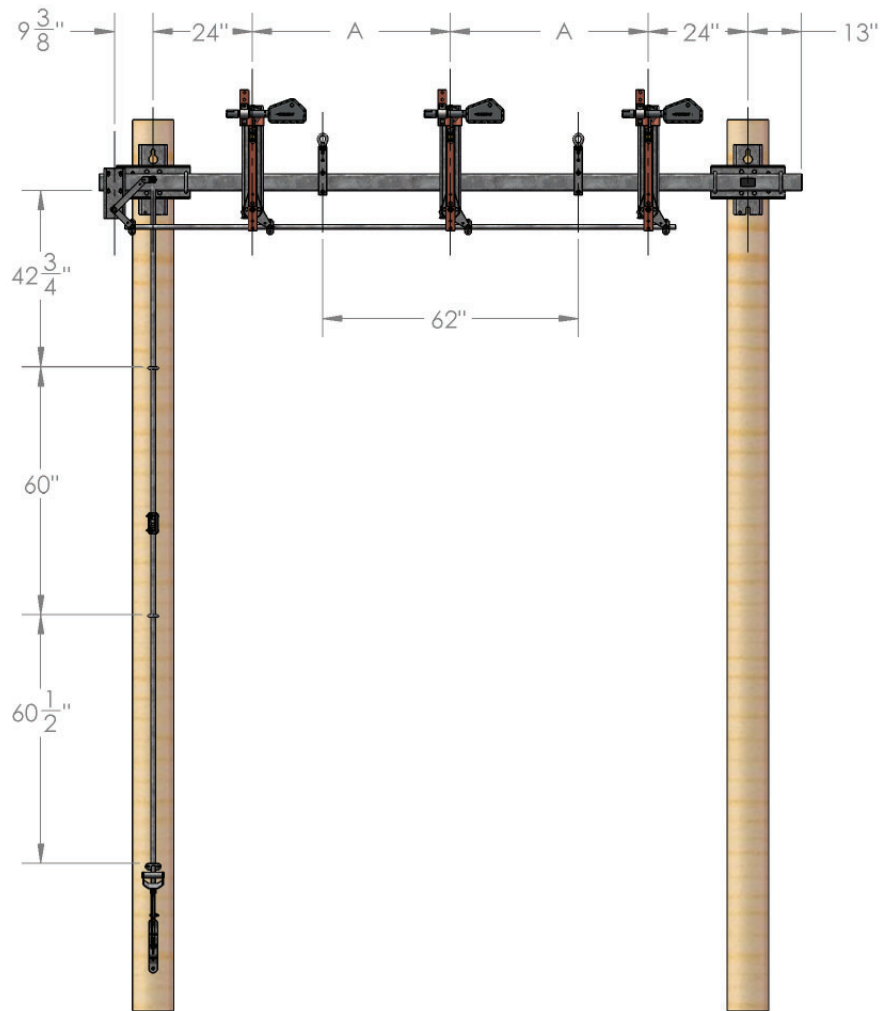
15 kV - 38 kV Riser Substation H-Frame Dimensions



MINIMUM PHASE SPACING

Nominal Voltage Rating			
DIM:	15 kV	25 kV	38 kV
A	30"	36"	48"

NOTE: MINIMUM PHASE SPACING SHOWN. ALTERNATE SPACING IS AVAILABLE.
RECIPROCATING HANDLE CONTROL MECHANISM SHOWN. TORSIONAL "SWING" CONTROLS ARE AVAILABLE.



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Materials:	N/A
Finish:	N/A
Scale:	NTS
Drawn By:	N/A
Date:	12/19/16

Description:
15-38 kV, H-Frame, Riser Switch, Substation Mounted, Recip. Control

Drawing No.:
9688-13M

Revision:
00

