VOX

OUTDOOR DEAD TANK CIRCUIT BREAKER

Distribution companies are facing ever-increasing challenges to improve the service quality and reduce operation cost of their network. VOX outdoor dead tank circuit breakers provide a reliable, cost effective solution for outdoor substation equipment.

The sealed-for-life, maintenance-free tank enables customers to reduce the cost of inspection and maintenance. In addition, the high-endurance mechanism contributes to further enhance the reliability of VOX reducing overall lifetime costs.

Flexible and easy to upgrade, VOX is the ideal, cost-effective choice for both dead and live tank applications, especially when complex protection and current transformer schemes are needed.

A NEW GENERATION OF DEAD TANK CIRCUIT BREAKERS

VOX combines the best new and proven technology for outdoor distribution applications up to 38 kV.

CO7 Technologies' latest range of vacuum interrupters are housed in a fully welded, sealed-for-life, stainless steel tank, providing a controlled gas insulated environment totally immune from external ambient conditions. A spring charged mechanism provides manual or motorized circuit breaker operation.

VOX has been designed and tested to meet the requirements of the relevant applicable IEC, BS, AS, ANSI, IEEE, GOST and GB standards.

FEATURES & BENEFITS

- Reduced life-time costs
- Minimal maintenance required
- Sealed for life design
- Small footprint for distribution breakers from 25.8 kV and above
- Internal arc tested in compliance with IEC 60298 featuring accessibility class A. Test has been performed with low voltage door in open and close position to ensure maximum operator protection
- Out-of-phase switching for decentralized generation (windfarms)
- Suitable for high-speed auto-recloser switching
- Suitable for capacitor bank switching Class C2 (Recommended for capacitor Bank switching).
- ANSI/IEEE "rain tested" enclosure (ANSI/IEEE C37.20.2)
- Polymer bushing with creepage distance of more than 31.5mm/kV
- Build with proven, highly reliable vacuum interrupter assemblies mounted inside the SF6 filled tank
- Moderate and high seismic qualification

KEY APPLICATIONS

All outdoor applications

EASE OF INSTALLATION

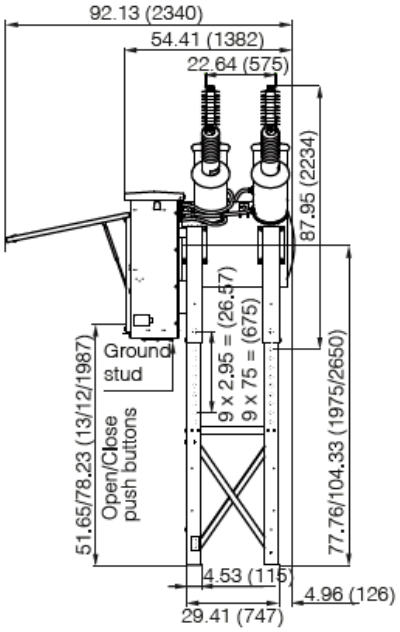
The compact, lightweight design of the VOX makes it easy to transport, handle and install.

The separate support frame can be pre-installed to accept the breaker tank and the control cabinet. Height can be adjusted within a range of 27 inches (675 mm).

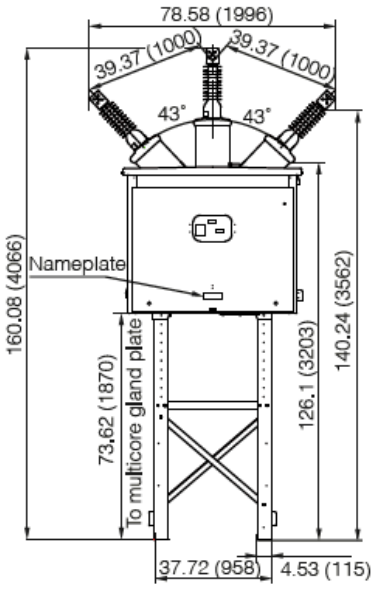
EASE OF USE

Provisions for current transformers is available on all six polymer bushings which are external from the sealed circuit breaker tank.

Mechanical circuit breaker and spring status indications are easily viewable from ground level. An easily accessible cabinet houses the operating mechanism, control and protection equipment, with ample space to accommodate auxiliary equipment.



Side View at Maximum Height (Dimensions given for support at min/max height)



Front view at maximum height (Dimansions given for support et min/max height)

Measurements: inch (millimeter)

Technical characteristics		IEC/BS/AS	ANSI	GOST/GB
Rated maximum voltage	kV	36	38	40.5
Rated impulse withstand voltage	kVp	170/200	200 (258 kVp chopped wave)	190
Power frequency withstand voltage	kV	70/80/95	80	95
Rated continuous current Rated withstand current (3s) Rated arc fault containment	A kA kA	1 200 / 2 000 25 / 31.5 / 40 25-1s / 31.5-0.5s		
Rated short circuit breaking current Closing and latching capability	kA kAp	25 / 31.5 / 40 65 / 82 / 100		
Operating sequence		OCO-15s-CO (IEC) O-0.3s-CO-15s-CO (ANSI)		
Number of operations at rated current Number of operations at short circuit current		10 000 100		
Gas fill pressure	bar	0.5		
Control voltage	Vdc Vac	24,48,125, 250 120, 240		
Environment				
Operating temperature range	°C	- 40 to + 40 (option - 60 to + 55)		
Relative humidity	%	0 - 100		
Altitude (maximum for quoted ratings)	ft / m	10,000 / 3,000		
Seismic withstand	g	0.5		

OPTIONAL EQUIPMENTS

- Accommodation for additional current transformers
- Gas density monitoring
- Surge arresters
- Recloser configuration with auxiliary voltage transformer and protection relay
- “Bay Module” installation with disconnectors, grounding switch, VT’s, CT’s, SA

CO7 Technologies
2525, Louis A. Amos
Montreal, QC, Canada H8T 1C3
(866) 267-0045
info@CO7Tech.com
www.CO7Tech.com

BM-01E, November 2020