



Building a better future
Global Leader

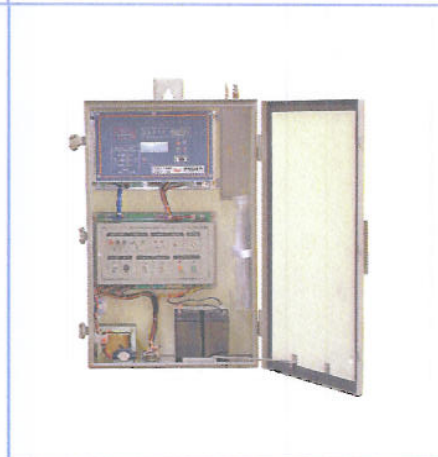
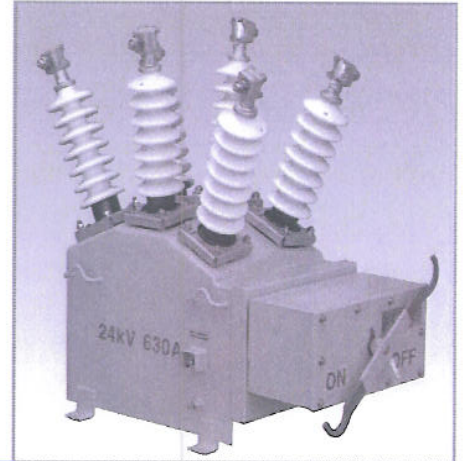
ISO 9001 REGISTERED



DNV Certification B.V., The Netherlands

GLBS

Gas Insulated (SF₆)
Load
Break
Switch



contents

1. Index	1
2. General Features	2
3. Rating, Ordering Information	3
4. Construction and Operation Instruction	4
5. Outline Dimensions	5
6. Installation	6

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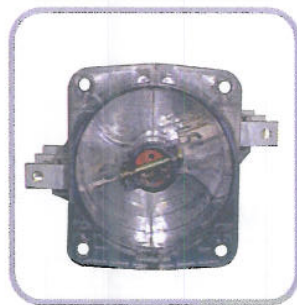
GENERAL FEATURES

DESCRIPTION

- Pole Mounted Load Break Switch has manage to develop a reliable high performing product using its industrial experience in the SF₆ gas insulating, sealing techniques for outdoor use and maintenance free for distribution class up to 24kV.
- The LBS can be operated by manually or motorized with controller can be operated with Distribution Automation System or SCADA operation to isolate a faulted section of distribution line from control center.

FEATURES

- The LBS is compact, light weight and simple for the easy installation.
- Stainless steel sealed enclosure for all weather environmental conditions.
- The spring-Toggle mechanism of LBS type, LBS is reserved in airtight tank for anti-corrosion purpose.
- Rotary puffer Interrupter Module is adopted for maximum arc extinguish.

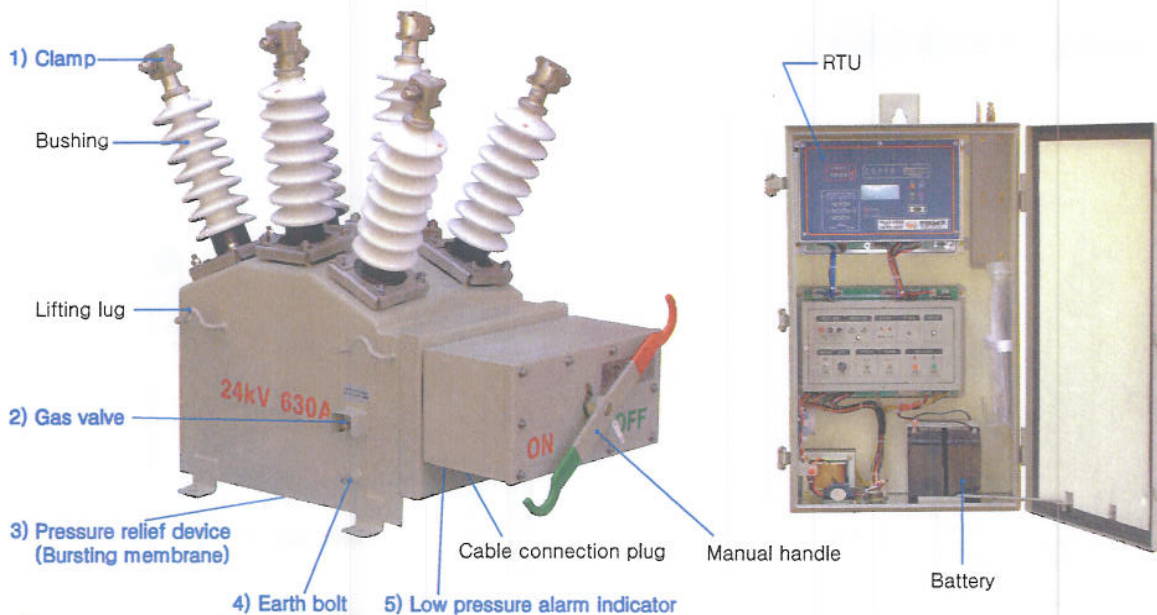


- SAFETY FEATURES
 - Low pressure interlocking device
 - Gas low pressure alarm indicator
 - High pressure bursting membrane

RATING, ORDERING INFORMATION

Operating Method		Manual	Motorized
Rated voltage		24kV	
Rated normal current		630A	
Classification		M2 & E3	
Number of Poles		3	
Rated Frequency		50 / 60 Hz	
Rated Short-time withstand Current		20kA / 1sec	
Rated Short circuit making current		52 kAp (Performance test 65 kAp)	
Rated power frequency withstand voltage (dry)	Phase-Earth	60kV / 1min	
	Phase-Phase	60kV / 1min	
Rated lighting impulse withstand voltage (wet)	Phase-Earth	50kV / 10sec	
	Phase-Phase	50kV / 10sec	
Rated lighting impulse withstand voltage	Phase-Earth	150kVp/ 1.2 X 50 μ s	
	Phase-Phase	150kVp/ 1.2 X 50 μ s	
Control circuit	Auxiliary supply Voltage	AC 220V 50/60Hz	
	Control supply voltage	DC 24V Battery	
	Insulation Voltage	AC 2kV / 1min.	
6kV / 1.2 X 50 μ s			
Insulating material		SF ₆ Gas	
Rated Gas pressure (at 20°C)		0.8 kg / cm ² · G	
Minimum Gas pressure (at 20°C)		0.5 kg / cm ² · G	
Locking Gas pressure (at 20°C)		0.4 ±0.1 kg / cm ² · G	
Gas released pressure (at 20°C)		2.5 ±0.5 kg / cm ² · G	
Sealing for gas tight		Less than 1 X 10 ⁻⁵ cc/sec	
Weight		110kg	130kg
Applied standard		IEC 60265-1 : 1998	

CONSTRUCTION AND OPERATION INSTRUCTION



1) Clamp

Terminal clamp is made of bronze and can be connected $14\text{mm}^2 \sim 250\text{mm}^2$ power cable.

2) Gas valve

SF₆ gas to be filled through this gas valve

3) Pressure relief device

If the internal pressure increases abnormally and reached $2.5 \pm 0.5\text{kg/cm}^2 \cdot \text{G}$ to protect internal parts and thank, gas shall be released through the pressure relief device. The device is located inside of protection cover of bottom plate

4) Earth bolt

Can be connected $22\text{mm}^2 \sim 60\text{mm}^2$ earth cable.

5) Gas low pressure alarm indicator

The press switch senses gas pressure and when the pressure is reached below $0.4\text{kg/cm}^2 \cdot \text{G}$ Red colored indicator can be shown through the operation mechanism automatically locked and can not be operated by manual or electrical.

MANUAL OPERATION

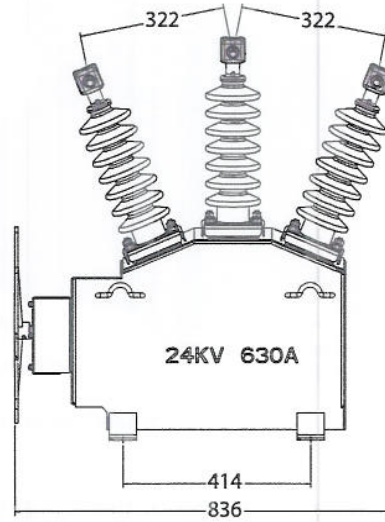
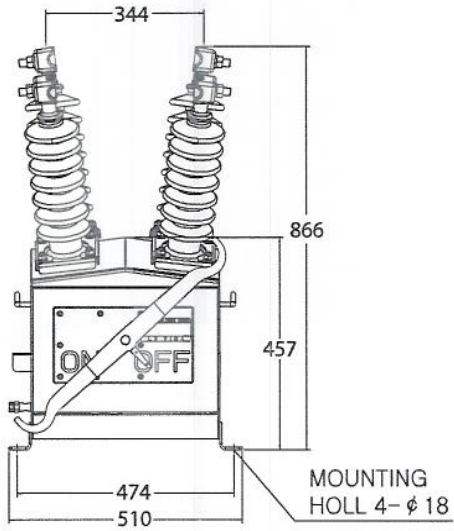
- Closing : Pull down the hook–stick(Red color) located at right– hand side of the LBS untill it makes instantaneous closing action when the spring is fully charged.
- Opening : Pull down the hook–stick(Green color) located at left–hand side of the LBS untill it makes instantaneous opening action when the spring is fully charged.

ELECTRICAL OPERATION

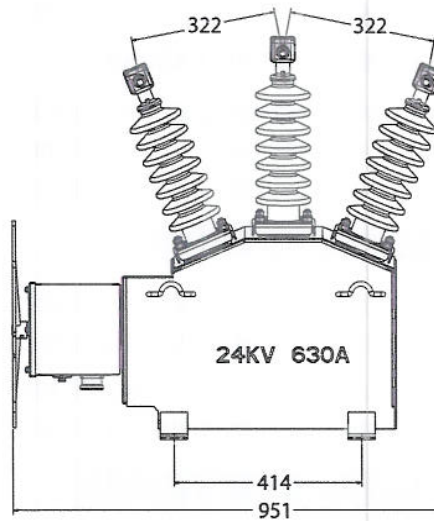
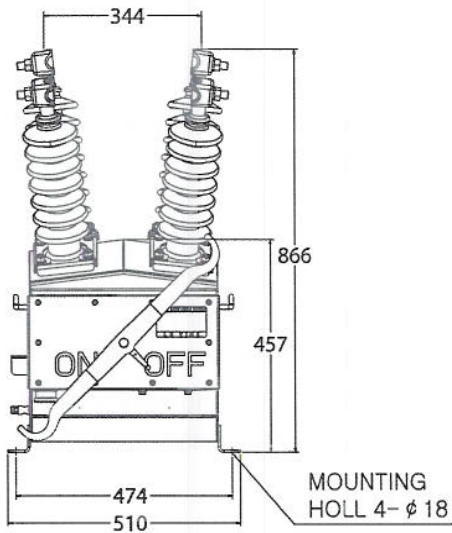
- Closing and Opening can be made through the action of Push Button in the Control Box.
- Auxiliary supply voltage is AC 220V. (For battery charge)
- Closing and Opening of LBS is operated by DC 24V. (Battery)

OUTLINE DIMENSION

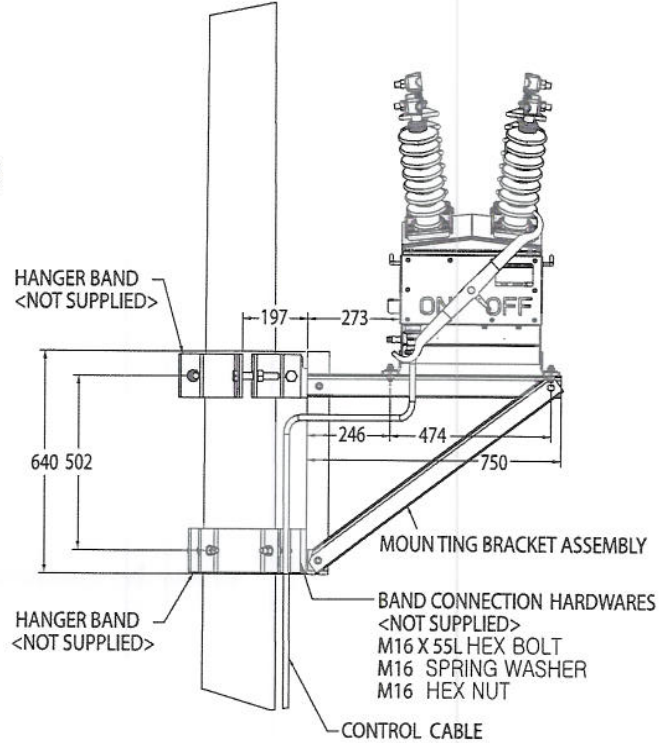
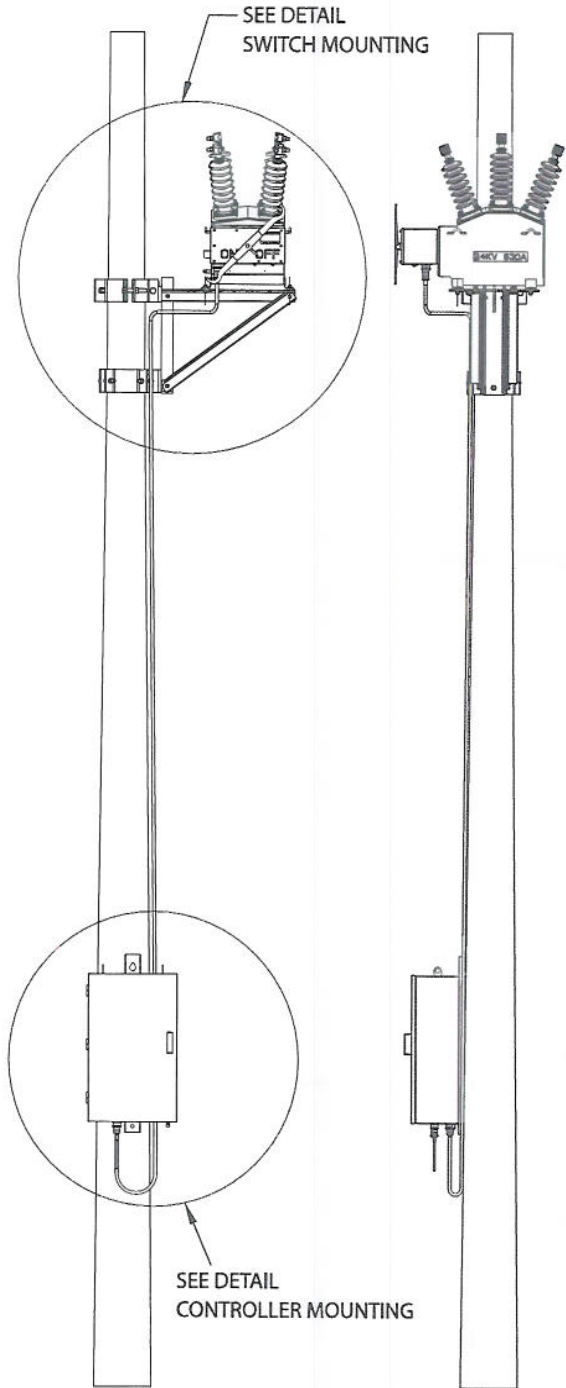
MANUAL OPERATION



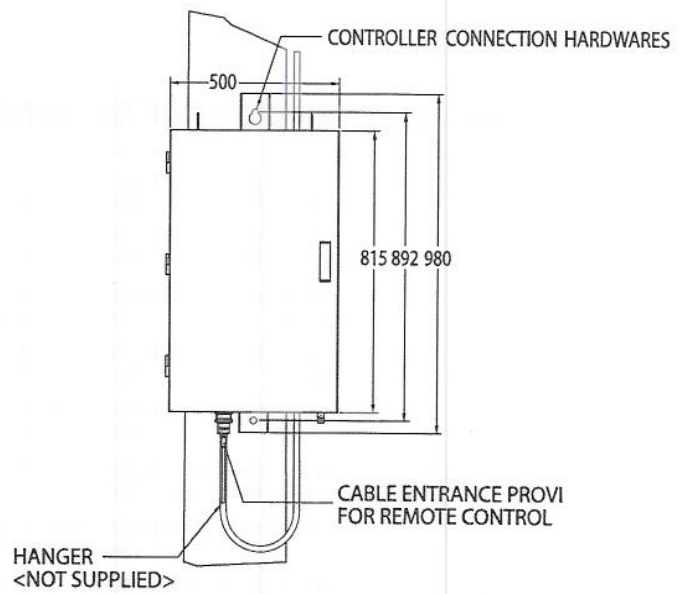
MOTOR OPERATION



INSTALLATION



DETAIL SWITCH MOUNTING



DETAIL CONTROLLER MOUNTING