

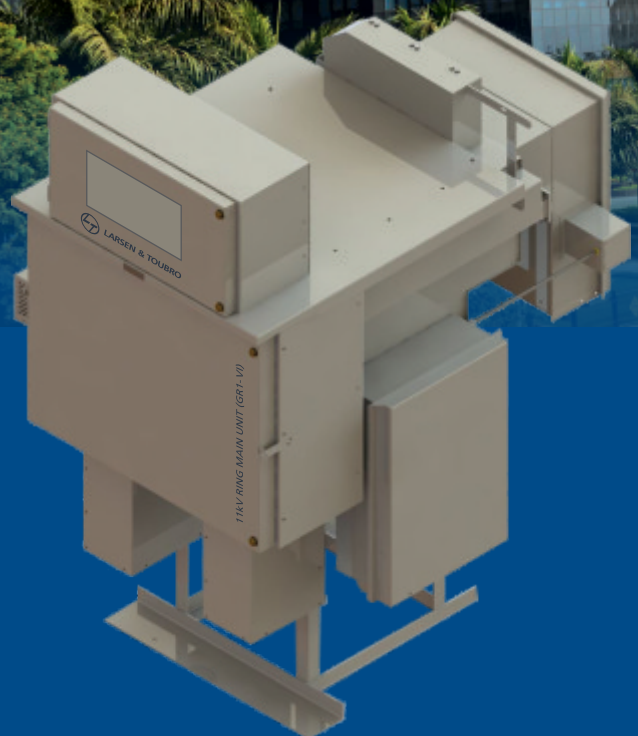
# GR1 - VI Ring Main Unit

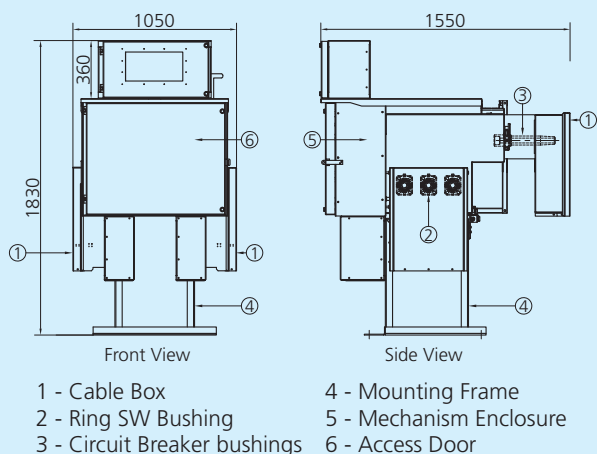
...17.5kV...630A...21kA

L&T's GR1- VI is a compact, modular and extendable SF<sub>6</sub> Gas Insulated Ring Main Unit with vacuum interrupter based circuit breaker.

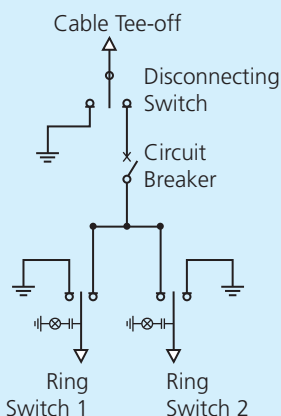
GR1-VI provides safe, reliable and cost effective solution for the switching operations in secondary distribution network with minimum maintenance.

L&T Electrical and Automation is a part of the multi-billion dollar technology, engineering, construction, manufacturing and services, Larsen and Toubro conglomerate. The company designs, manufactures and markets a wide range of low voltage and medium voltage electrical systems, control and automation systems, electrical products and metering and protection systems.





### Single Line Diagram



Type tested according to  
IEC 62271-100,  
IEC 62271-200 &  
IEC 62271-102

Internal Arc Classification : IAC AFL, 21kA-1s  
Ingress Protection Class : IP54, IP67 (Tank)  
Cable Termination: Side / Rear  
Safety Interlocks : As per IEC  
Extension : Both Side

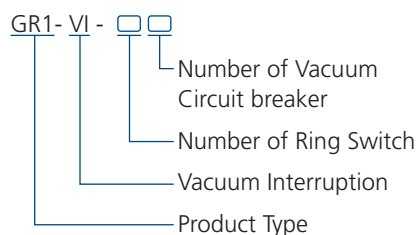
Electrical Characteristics			
Rated Voltage	kV	12	17.5
Impulse Withstand Voltage (1.2/50 $\mu$ s)	kVp	75	95
Power Frequency Withstand Voltage	kV(rms)	28	38
Frequency	Hz	50/60	50/60
Rated Current	A	630	630
Rated Short Time Current – 3s	kA	21	21
Rated Short circuit Making Current	kAp	52.5/54.6	52.5/54.6
Rated short circuit symmetric Breaking Current	kA	21	21
Internal Arc Fault withstand – 1s	kA	21	21
Width (3 Way / 4 way)	mm	1050/1660	
Depth	mm	1550	
Height	mm	1830	

### Design for Safety

- Protection against Arc faults
- No exposure to live parts
- Passive interlocks to prohibit unintended operations
- Comprehensive padlocking facilities
- Mimic diagram and position indicators to guide the operator
- Complete Safety for User and Pedestrian

### Product variants

The Type GR1-VI range includes extensible and non extensible RMU.



Variants

GR1-VI - 01      GR1-VI - 20  
GR1-VI - 10      GR1-VI - 12  
GR1-VI - 11      GR1-VI - 21  
GR1-VI - 02      GR1-VI - 22

### Features

- SF6 gas insulation with vacuum circuit breaker - No fire hazard
- Minimum maintenance and sealed for life contact system
- Robotic welding of gas tank ensuring leak free operation
- Robust construction
- Tee-off circuit breaker with integral protection system
- Internal arc Classified and fully type tested according to Latest IEC Standards
- Motorized Spring charging options for Vacuum Circuit Breaker and Load Break Switch
- Power Cable Termination and Cable Test facilities
- Integral Remote Control and Monitoring

### Customer benefits

- Ergonomic design for simple and quick operation
- Minimum footprints
- Lesser components in linkages
- Integral safety for peace of mind
- Easy installation
- Round-the-clock after sales team support
- Both Indoor and outdoor Installation
- Live Cable Indicators - High Operator Safety
- Low cost cable termination



#### L&T Business Park

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