

# 27 kV MASTERCLAD<sup>®</sup> Medium Voltage Metal-Clad Switchgear with Type VR Vacuum Circuit Breakers

Class 6055



**Merlin Gerin**  
**Modicon**  
**Square D**  
**Telemecanique**  
*Schneider Electric Brands*

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**SQUARE D**  
Schneider Electric

## Product Description



### RATINGS

- 16.5 to 27 kV
- 1200-2000 Amperes Continuous Ratings
- 16, 25 and 40 kA Symmetrical Interrupting Capacity
- 125 kV BIL, peak (impulse) dielectric withstand
- 60 kV, rms 1 minute 60 Hz dielectric withstand
- NEMA Type 1 – Indoor enclosure

### APPLICATIONS AND STANDARDS

MASTERCLAD® medium voltage metal-clad switchgear is used in a wide variety of switching, control and protective applications including electric utility generation and distribution systems, industrial plants, commercial buildings, hospitals, municipal pumping stations, wastewater treatment plants, transportation systems and pipeline stations.

MASTERCLAD offers a standard two-high breaker arrangement, incorporating a series of basic modular units, control packages and instrumentation that can be assembled in combinations as needed to satisfy user application requirements.

MASTERCLAD switchgear with VR circuit breakers meets or exceeds the design standards of ANSI, IEEE, NEMA and IEC. The switchgear is tested in accordance with both ANSI C37.20.2 and IEC 298. The VR circuit breakers are tested per ANSI C37.09 and IEC 56.

### STANDARD FEATURES

Metal-Clad Switchgear as defined by ANSI C37.20.2 includes:

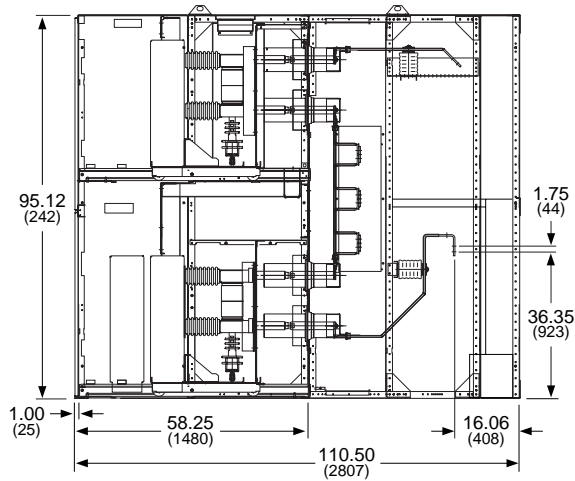
- Removable (Drawout) Circuit Breaker
- Fully Compartmented Construction
- Grounded Metal Barriers enclose all live parts
- Automatic Shutters over primary contacts
- Fluidized-Bed Epoxy Insulated Bus
- Mechanical Interlocks
- Disconnect Type Voltage Transformers
- Fixed Control Power Transformer with Drawout Primary Fuses
- Grounded Breaker Truck in and between Test-Disconnected and Connected Positions
- Low Voltage Instrument/Control Compartment isolated from primary voltage areas



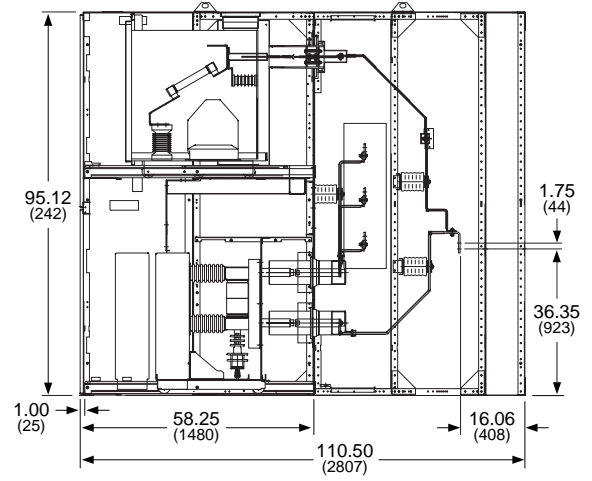
# Dimensions

## 27 kV LAYOUT DIMENSIONS/CONFIGURATION GUIDE

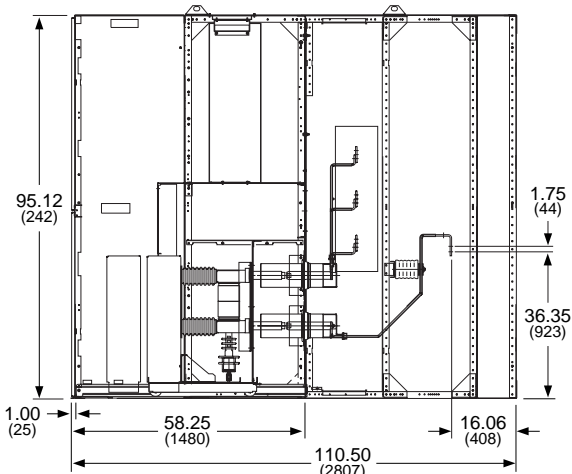
Vertical sections are 36" wide



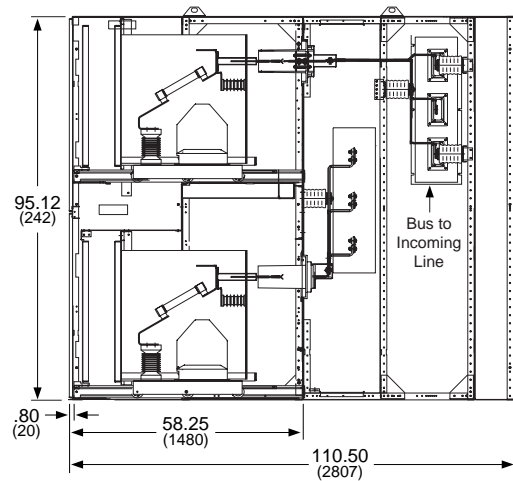
1200/2000 A, 2000/1200 A Circuit Breaker Section



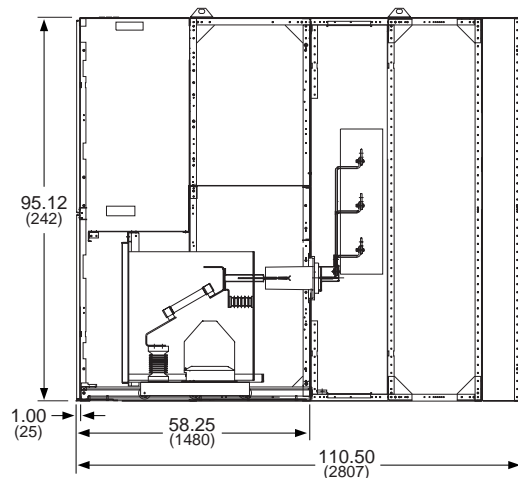
AUX VT/Circuit Breaker Section



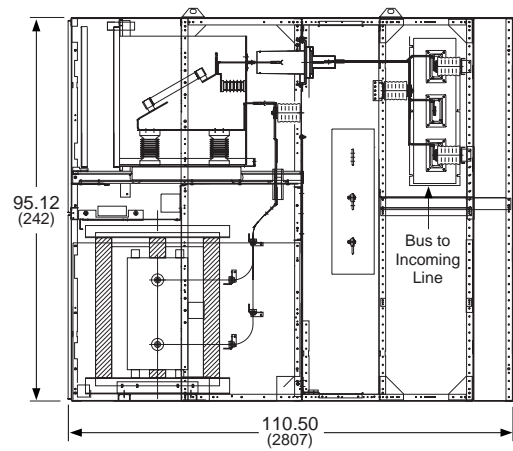
Blank/Circuit Breaker Section



AUX VT/AUX VT Section



Blank/AUX Section



AUX CPT Section

Dimensions are in inches (millimeters).

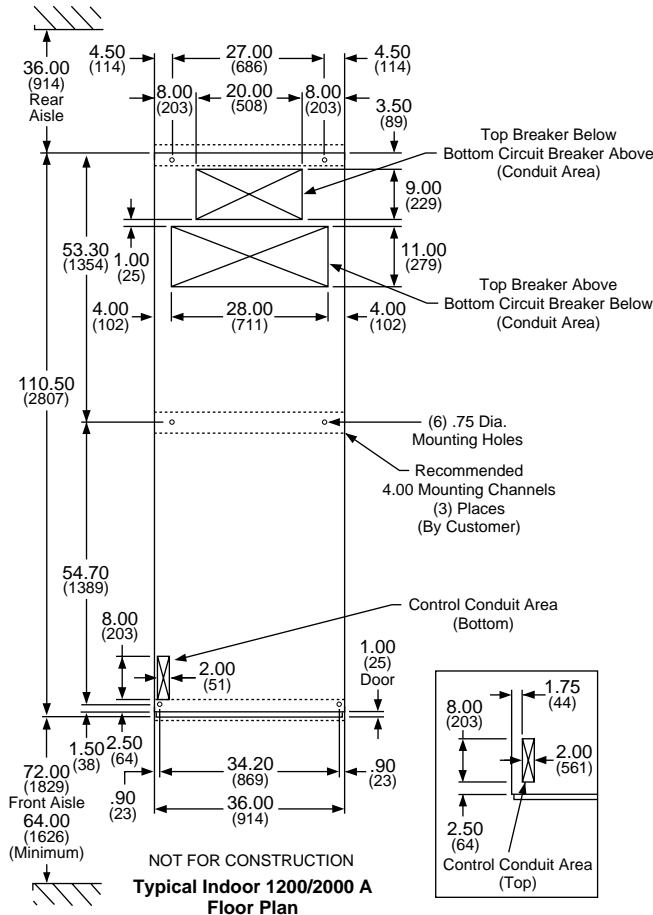


# Ratings

## VR 27 kV Vacuum Circuit Breakers Rating Table on Symmetrical Current Rating Basis

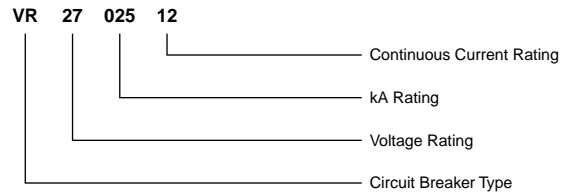
Description	Preferred Ratings per ANSI C37.06-1997 ▲													
	(Ref.) Three Phase MVA	Rated Cont. Current 60 Hz A rms	Rated Short Circuit Current (at rated Max. kV) kA rms	Rated Max. Voltage kV rms	Volt- age Range Factor k	Inter- rupting Time Cycles	Insulation Level Rated Withstand		Rated Permis- sible Tripping Delay Y Sec.	Rated Transient Recovery Voltage		Current Values		
							Low Freq. kV rms	Impulse 1.2 x 50 μs kV Crest ★		Rated Crest Voltage E2 kV Crest	Rated Time to Crest T2 Micro- Sec	Maximum Sym. Inter- rupting Capability kA rms	3 Sec. Short- Time Current Carrying Capability kA rms	Close and Latch Rating Momentary kA Crest ♦
VR2701612	750	1200	16	27	1.0	3	60	125	2	51	105	16	16	43
VR2701620	750	2000	16	27	1.0	3	60	125	2	51	105	16	16	43
VR2702512	1250	1200	25	27	1.0	3	60	125	2	51	105	25	25	68
VR2702520	1250	2000	25	27	1.0	3	60	125	2	51	105	25	25	68
VR2704012	2000	1200	40	27	1.0	3	60	125	2	51	105	40	40	108
VR2704020	2000	2000	40	27	1.0	3	60	125	2	51	105	40	40	108

- ▲ Also tested per IEC 56
- ★ These values apply with circuit breaker in or out of enclosure.
- ♦ Close and Latch Rating (Momentary) Amperes rms = 2.7 k (Rated Short Circuit Current)



Dimensions are in inches (millimeters).

### Breaker Identification



### Weight (Approximate)

Section (less circuit breaker)	2600 lbs. (1179 kgs.)
1200 A circuit breaker	600 lbs. (272 kgs.)
2000 A circuit breaker	630 lbs. (286 kgs.)

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