

# GRIMARD

SINCE 1944

COMBINING OUR STRENGTHS TO BUILD THE FUTURE

Exclusive wall standing design with front cable and maintenance access

The most space-efficient solution available on the North American market

Operating temperature of -30°C to 40°C

Paired with high-reliability circuit breakers manufactured by the number 1 producer worldwide

Tested for arc-resistance as per IEEE C37.20.7-2007, type 2B

Indoor Application

Also available as Integrated Factory Assembled Outdoor Building

Meets ANSI, IEEE, CSA and CSA-US (UL) standards

## ***SafeClad-WS*** medium voltage front-accessible arc-resistant switchgear

*SafeClad-WS* Medium Voltage Arc-Resistant switchgear from Grimard provides the ideal cost-effective solution for industries with high energy requirements and severe space restrictions, without compromising safety and reliability.

Paired with Vmax circuit breakers, *SafeClad-WS* is designed to perform reliably even under extreme temperature conditions down to -30°C. As an option, magnetically actuated VM1 circuit breaker technology is available if a high number of switching operations is required without maintenance.

## ***SafeClad-WS*** compact dimensions

Thanks to its modular wall standing design and compact dimensions 600 mm (W) x 2160 mm (H) x 1550 mm (D), our switchgear can be flexibly adapted to situations where space is limited without the use of SF6 Gas-Insulated enclosures (GIS).

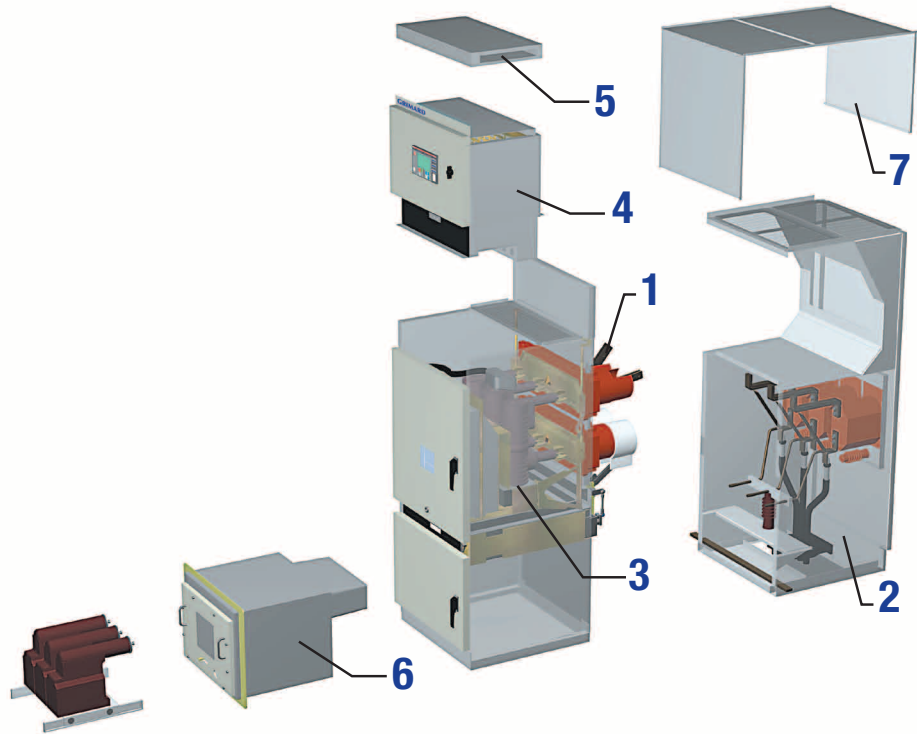
**50% of floor space savings !**



# ***SafeClad-WS***

Each unit consists of the following compartments:

1. Main busbars
2. Power cables
3. Circuit breakers
4. Low-voltage control
5. Low-voltage wiring duct
6. Voltage transformers (if required)
7. Plenum with gas exhaust duct



### General characteristics of *SafeClad-WS* switchgear :

		Rated voltage	
		5 kV	15 kV
Rated insulation voltage	kV	5	15
Test voltage at power frequency	kV 1 min	19	36
Impulse withstand voltage	kV	60	95
Rated frequency	Hz	60	60
Rated short-time withstand current	kA 2 s	... 31.5	... 31.5
Peak current	kA 10 cy.	... 85	... 85
Internal arc withstand current	kA 0.5 s	... 31.5	... 31.5
Main busbar rated current	A	1200	1200
Rated current of the branch connections	A	630 - 1200	630 - 1200
	H	2160 mm (85 in)	2160 mm (85 in)
Overall dimensions of basic cubicles	W	600 mm (24 in)	600 mm (24 in)
	D	1550 mm (60 in)	1550 mm (60 in)

### Floor space requirements for your MV switchgear:

4 units of Standard ANSI Switchgear needs 5210 mm by 3856 mm = 20 m<sup>2</sup>

4 units of *SafeClad-WS* Switchgear needs only 3050 mm by 3400 mm = 10 m<sup>2</sup>

## 50% of floor space savings !



### Industrial sectors :

- Mining
- Marine and offshore applications
- Metal industry
- Oil and Gas
- Energy