

# AIGS<sup>®</sup>

**Air Insulated 38 kV  
Switchgear with Combined  
Vacuum Circuit Breakers  
with Grounding Switch**

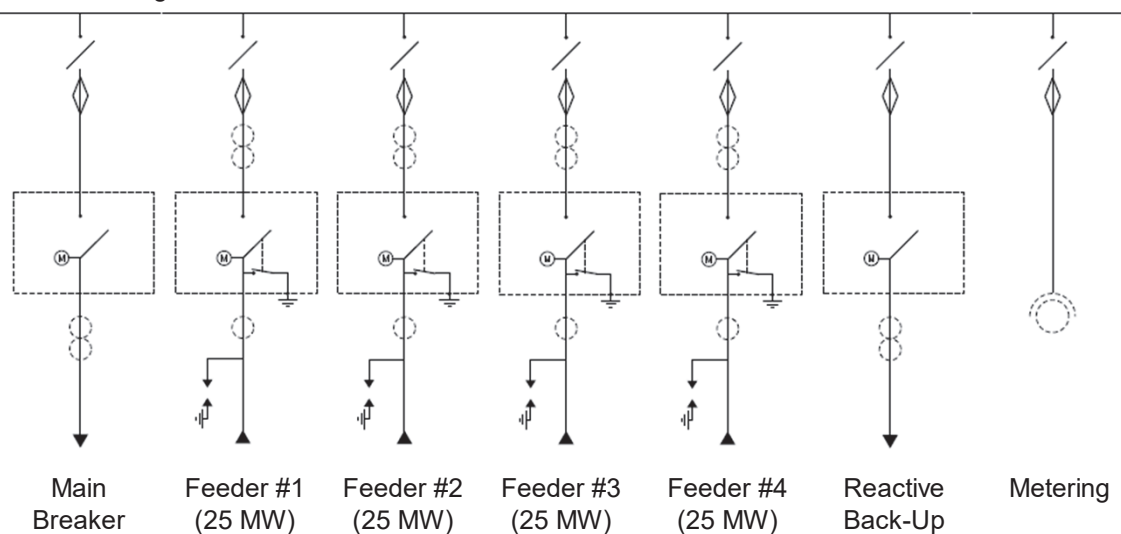


EMA Electromechanics is the designer and manufacturer of the **VDH/GSMI®** combined outdoor vacuum circuit breaker and high speed, mechanically interlocked grounding switch, a **unique and patented system** specifically designed for switching and grounding of 38 kV wind and solar energy collection circuits.

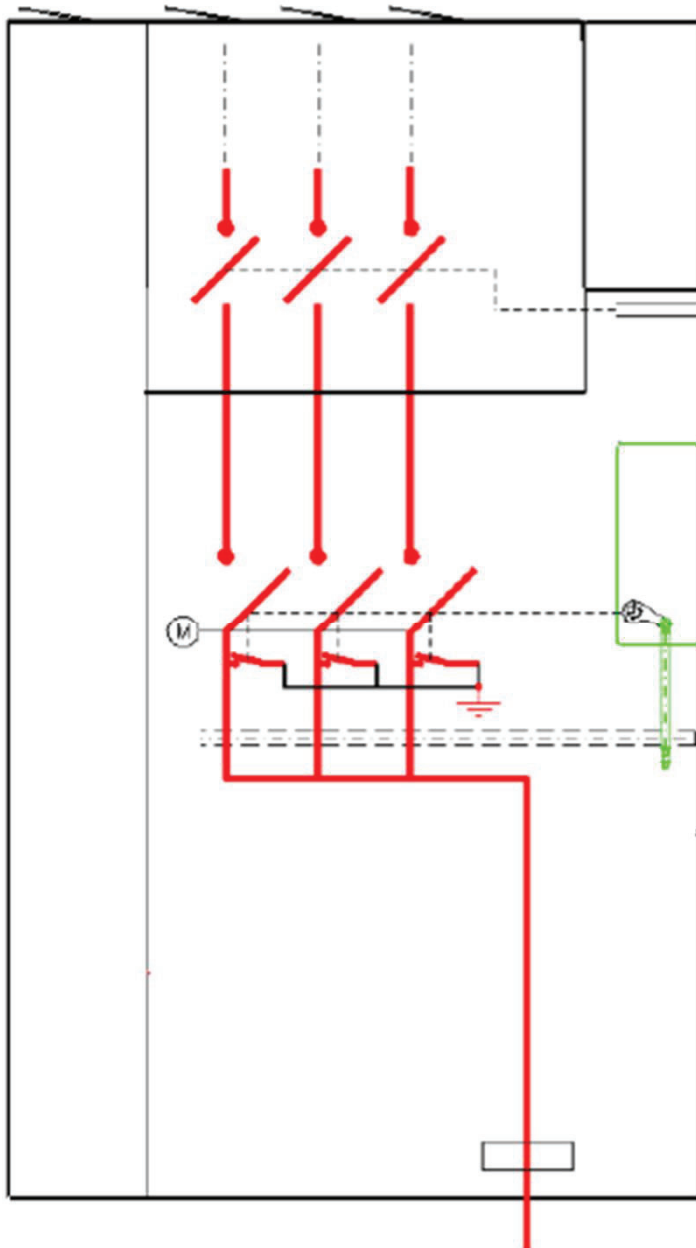
Through the last 10 years this design has become an **industry standard**, replacing traditional use of oil insulated grounding transformers combined with conventional circuit breakers in every feeder of a wind or solar power substation, improving over voltage mitigation and reducing costs.

EMA now introduces **AIGS®** model in which the well-known combined vacuum circuit breaker and high speed, mechanically interlocked grounding switch is fitted in a **38 kV metal enclosed switchgear for indoor application**.

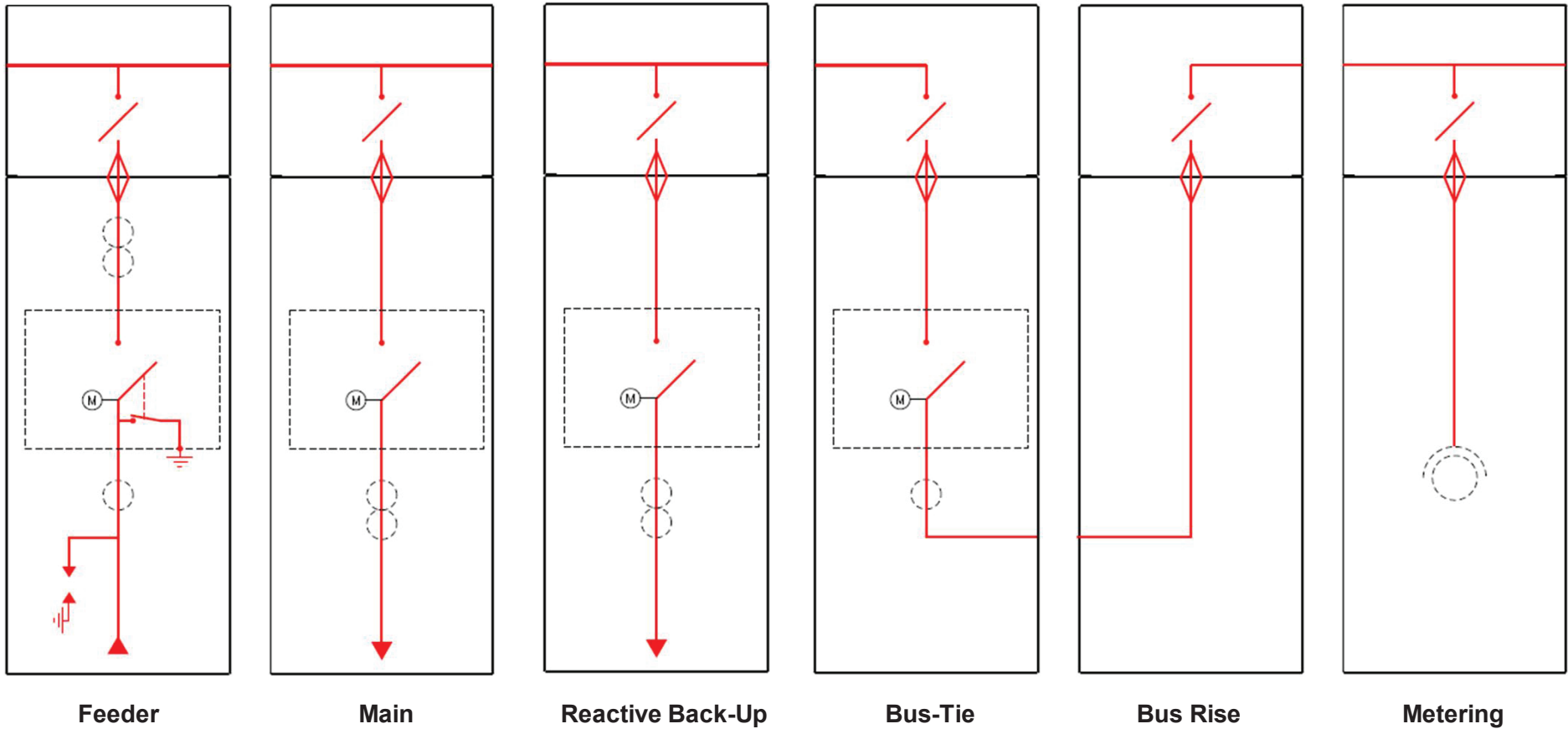
38 kV Switchgear



**EMA AIGS® Switchgear**



- ❖ 38 kV switchgear specially designed for wind and solar projects.
- ❖ Air Insulation.
- ❖ Metal enclosed design.
- ❖ Against the wall arrangement.
- ❖ *Circuit Breaker & Cable Compartment* including removable vacuum circuit breaker with mechanically interlocked grounding switch, current transformers and cable terminals.
- ❖ *Busbar Compartment* including manual operated switch disconnector and main busbar.
- ❖ *Auxiliary Compartment* including low voltage components and terminal blocks.
- ❖ Rear pressure release vent flaps and arc duct exit .
- ❖ The switchgear line-up is formed by suitably combining of a number of completely standardized 38 kV cubicle units selected from the available types, positioned side by side.



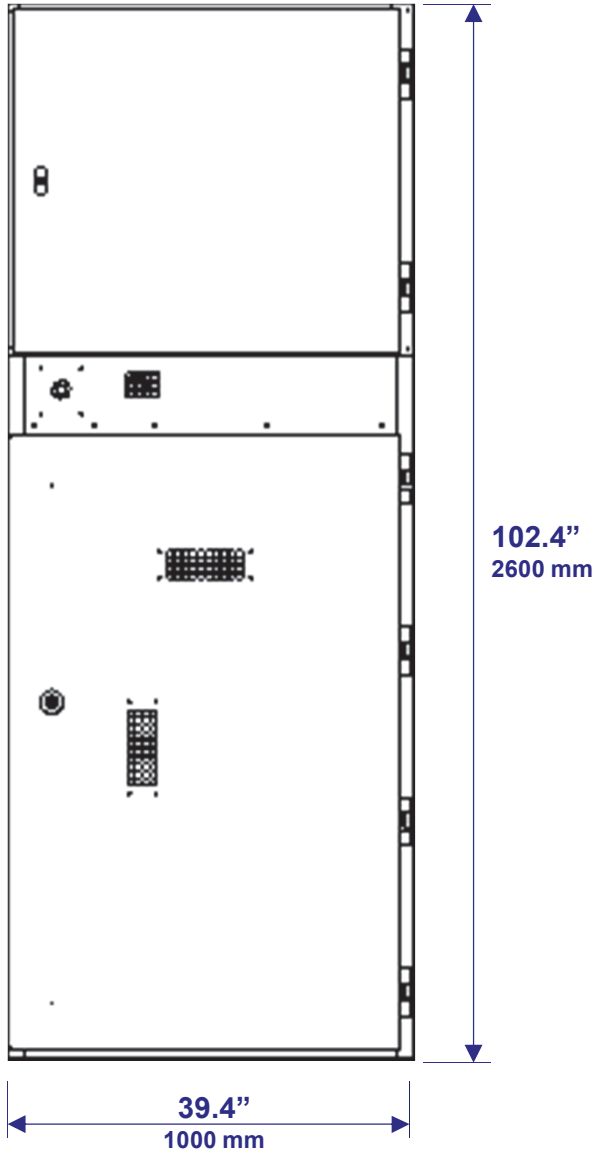
Feeder unit is supplied with combined circuit breaker and grounding switch, while Main and Bus Tie units are supplied with standard high current circuit breaker.

Other non-standard units to be supplied upon request.

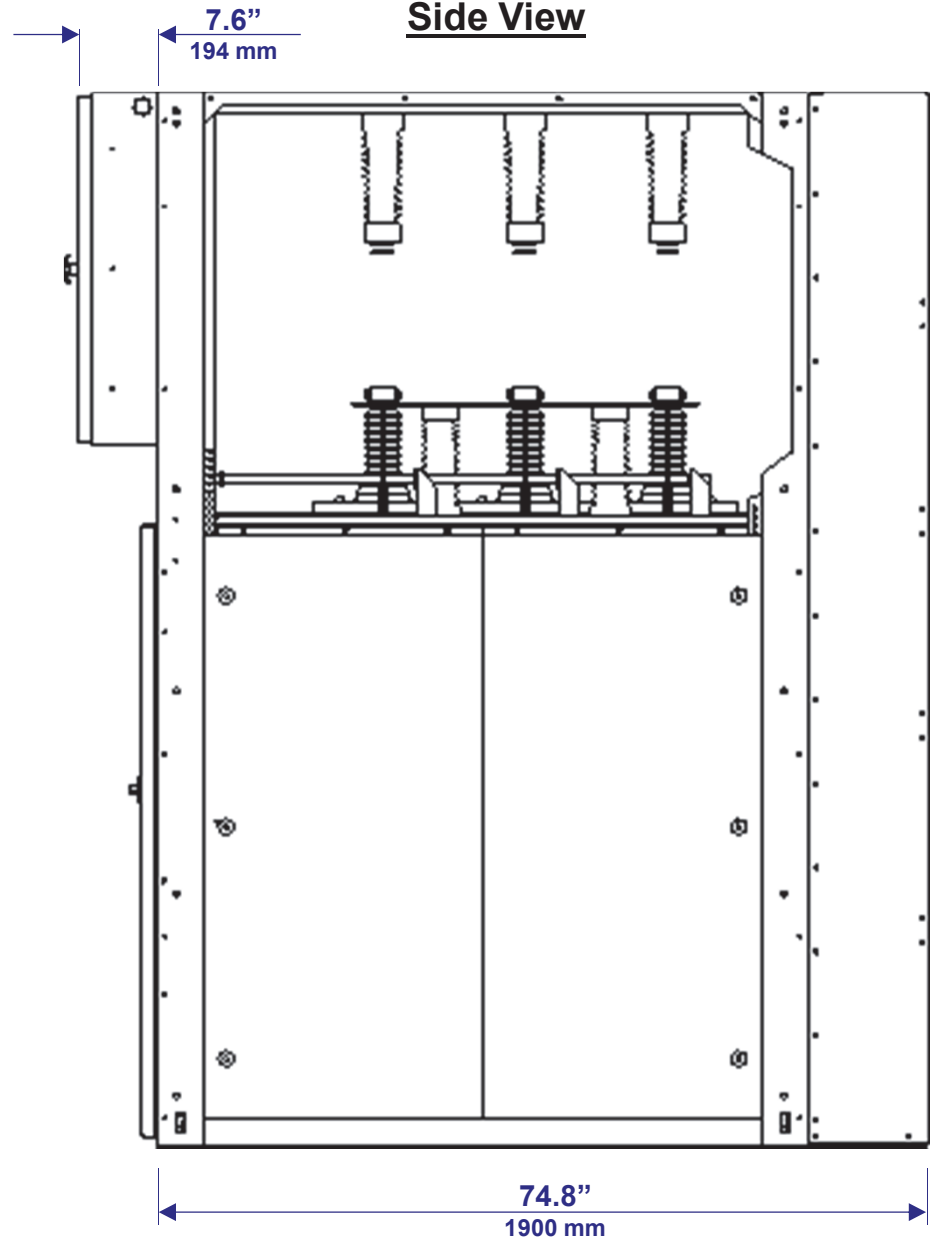
Rated Voltage	KV	34.5
Rated Maximum Voltage	KV	38
Rated Continuous Current – Main Busbar	A	2500
Rated Continuous Current – Main & Bus-Tie Circuit Breakers	A	2500*
Rated Continuous Current – Feeder Circuit Breaker with Grounding Switch	A	600
Rated Symmetrical Interrupting Capability (RMS)	KA	25 / 31.5 / 40
Rated Short Time Current (RMS, 3 sec)	KA	25 / 31.5 / 40
Rated Closing & Latching Current for Circuit Breakers (Peak)	KA	65 / 82 / 104
Rated Closing & Latching Current for Grounding Switch (Peak)	KA	33
Rated Dielectric Strength Power Frequency	kV	80
Rated Dielectric Strength Impulse Full Wave (BIL) at sea level	kV	150
Rated Frequency	Hz	60

\* Naturally cooled

**Front View**  
(single cubicle)



**Side View**





**A progressive and innovative company with  
continuous growth from its beginning**

**EMA Electromechanics, Inc.**

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