



Electrification & Automation

Introduction to our Portfolio

Edward Strasser, Head of Channel Partners CEE

VAR Partner Day 2022 | September 12 -14 | Zagreb, Croatia

| From two, make one

An introduction to the combined portfolio of
Siemens Electrification & Automation

Merging of Distribution Systems and Digital Grid Business Units ...

Regular business partners within Siemens, now united for more effective, efficient teamwork

Since 01 January 2022

Smart power distribution from medium-voltage to low-voltage

Medium-voltage Components, Systems & Solutions

Components



Primary Air-insulated Switchgear



Gas-insulated Switchgear Prim / Sec




SF6-free blue GIS Prim / Sec

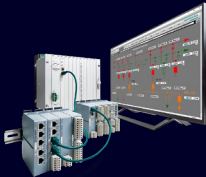


Automation, Protection & Communication for high- and medium-voltage Systems


Protection




Automation



Power Quality




Smart Communication




Low-voltage Systems


Generator Circuit Breaker Switchgear



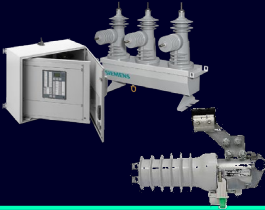
Photovoltaic (PV inverter systems)




Power Distribution Boards & Motor Control Centers




Outdoor Distribution Systems



Solution Business (E-House systems)



Busbar trunking systems



Services

Electrification & Automation Partner Offerings

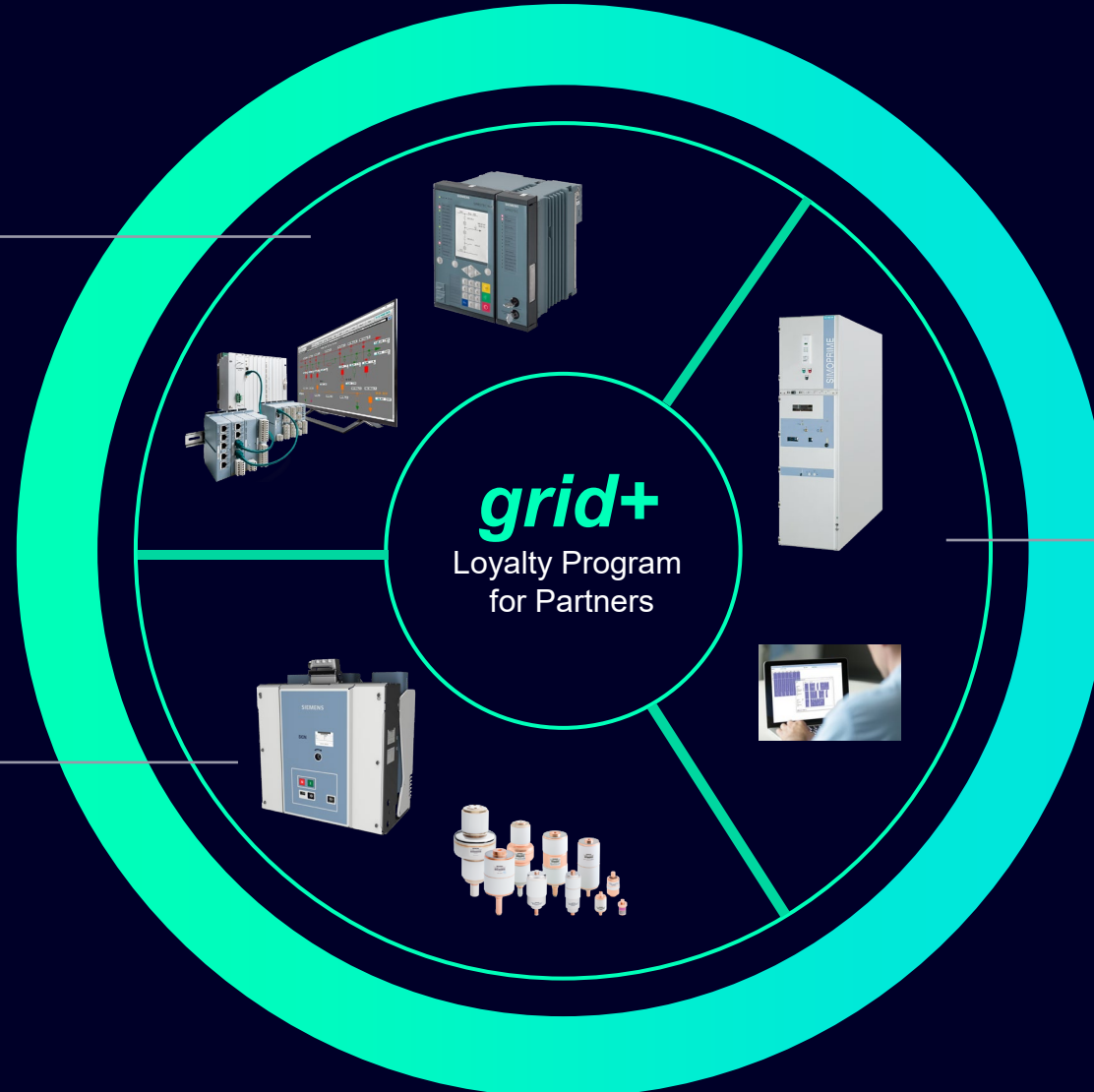
- 3 elements come together -

Protection & Automation

Products

Medium voltage

Components



License models

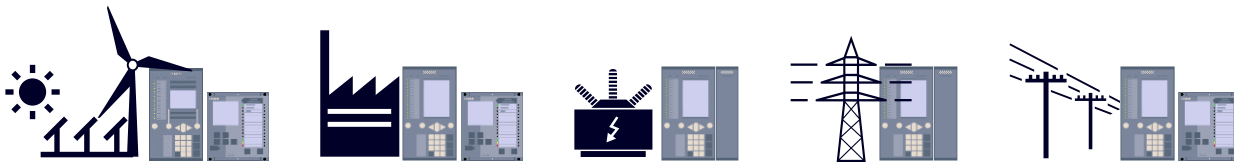
MV Switchgears

Protection - SIPROTEC and Reyrolle - Secure and efficient operation of primary grid assets

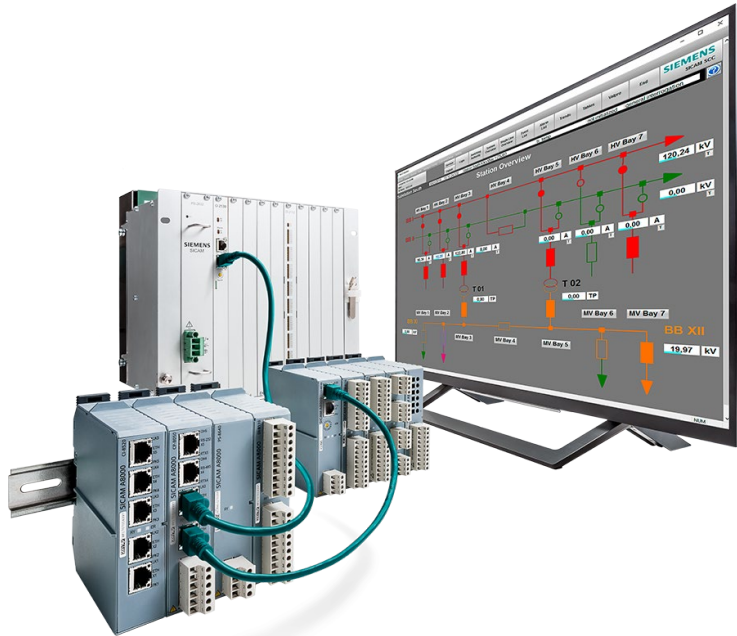


Trendsetting in protection technology - fast, secure and selective in all protection, control, monitoring and measuring tasks:

- Protection of people and assets
 - High performance engineering tool
 - High quality in hardware and software
-
- Extensive, standardized communication
 - Seamless integration in engineering processes
 - Flexible and scalable product portfolio
 - Easy and safe operation



Substation Automation - SICAM for improved grid availability



From large power stations to transformer substations

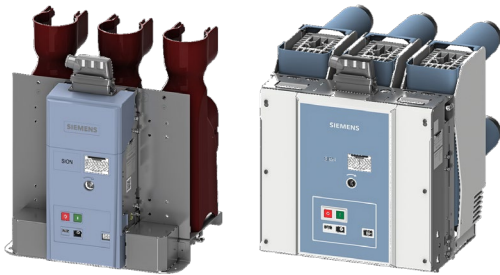
- Flexible, intelligent, and tailor-made
- SICAM substation automation systems, telecontrol and operation of energy systems

- Optimized management concepts
- Comprehensive plant and system overview
- Reduced outages and downtimes
- Programmable for further applications like Load Shedding, Generation Control, etc.

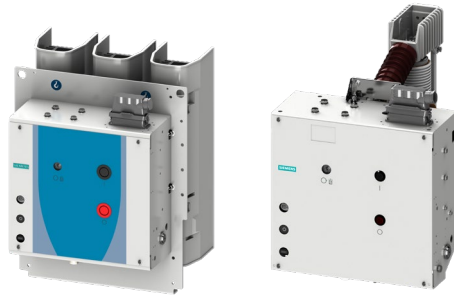
Medium-voltage components

Highly available and efficient power supply with vacuum technology

- In power stations and transformer substations
- In industrial applications
- In local grids
- In transformer and transfer stations
- on ships and trains



Vacuum circuit breakers SION for standard applications (AIS) for voltage levels up to 24 kV



Vacuum circuit breakers for special applications (generator, rail and high-current applications) for voltage levels up to 40,5 kV



Vacuum contactors and contactor-fuse combination for high-switching frequencies



Vacuum interrupters for sustainable and reliable switching portfolio

An Example of Full Range of Siemens Medium Voltage Switchgear



NXAIR
≤ 36 kV
≤ 50 kA
≤ 4,000 A

NXAIRS
≤ 40.5 kV
≤ 40 kA
≤ 3,150 A

Siemens MV Switchgear (incl. AIS, GIS, blue GIS)

A full presentation of our Medium Voltage switchgear portfolio will be offered during the afternoon session of our VAR Partner Day 2022.

Available for Siemens partners in a variety of collaboration models, depending upon switchgear types:

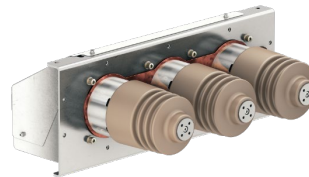
- Complete panels (primary and secondary) factory tested
- Value Added Reseller (complete primary from Siemens, secondary portion by Partner)
- Technology Partnerships (significant localization of Medium Voltage manufacturing processes)
- OEM Concept (Partner's own designs and type tests using Siemens core parts)



8BT2
≤ 36 kV
≤ 31.5 kA
≤ 3,150 A



GM-SG
≤ 15 kV
≤ 63 kA
≤ 4,000 A



SIQuench
Arc quenching
device
tr < 5 ms

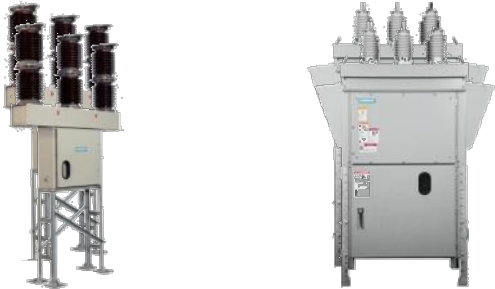

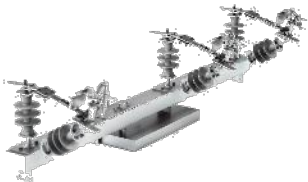
Generator circuit breaker switchgear

Reliable, sustainable and customized solutions for power plants

					
HB3 Generator Switchgear for 63 - 100 kA	HB3-C on-frame without enclosure up to 110 kA	HB1 Generator Switchgear up to 72 kA	VB1 Generator Switchgear up to 72 kA	VB1-D Generator Switchgear up to 72 kA	HIGS Generator Switchgear up to 72 kA
Most durable solution for power plants up to:	Most versatile solution for all applications and retrofit projects up to:	Comprehensive solution for power plants up:	Flexible solution for new and retrofit projects up to:	Withdrawable truck-type design up to	Directly installed on generator terminals up to:
400 MV	450 MW	170 MW	140 MW	140 MW	70 MW
12,500 A	15,000 A	6,700 A	6,000 A	5,000 A	5,000 A
24 kV	24 kV	24 kV	24 kV	17.5 KV	17.5 kV

Outdoor distribution equipment

Maximum reliability and safety in distribution grids

Outdoor Vacuum Circuit-Breakers		Outdoor reclosing devices		Outdoor disconnect switches	
					
Live Tank circuit-breaker 40.5 kV / 31.5 kA / 2,500 A	Dead Tank circuit-breaker 38 kV / 40 kA / 3,000 A	Smart Distribution Recloser (SDR) 38 kV / 16 kA / 800 A	Compact Modular Recloser (CMR) 27 kV / 12.5 kA / 630 A 38 kV / 6.3 kA / 630 A	Fusesaver™ 27 kV / 6.3 kA / 200 A	Disconnect Switch 69kV / 2,000 A
Low weight and space saving OVCB for transformer substations and distribution grids	Arc-resistant OVCB for distribution grids also including fast-acting grounding capability	The flexible all-in-one solution for overhead lines and transformer substations	The new family of single and multi-phase auto-reclosers for overhead lines.	The world's fastest circuit-breaker for overhead lines with multifunctionality: <ul style="list-style-type: none">• Fuse saving• Reclosing• Sectionalizing 27 kV– 400 A A portable, soft ganged switch for temporary isolation.	station class, distribution class and group-operated disconnect switches Safety and reliability for ease of maintenance

Siemens Power Distribution Portfolio

Primary and Secondary Products & Equipment

Regular Requirements (MV)

- Supply contracts for medium voltage components, vacuum circuit breakers, ...
- Certified MV switchgear partnership models
- Localization of scope based upon agreed partner scope

Infrequent Needs (MV)

- Opportunities to supply further types of Siemens medium voltage switchgear without need for new certification
- Either complete primary & secondary systems from Siemens or also available via VAR partner model

Protection & Automation

Proven program of VAR grid+ Partnerships continues

- Working with Integrators, Switchgear OEMs and EPCs.
- SIPROTEC, REYROLLE and SICAM product families

Disclaimer

© Siemens 2022

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or other rights of Siemens AG, its affiliated companies or other companies whose use by third parties for their own purposes could violate the rights of the respective owner.

| Contact

Published by Siemens AG

Edward Strasser

Head of Channel Partners CEE

Siemens AG Oesterreich

Siemensstrasse 90

A-1210 Vienna Austria

Phone +43 664 80117 31554

Mobile +43 664 615 3822

E-mail edward.strasser@siemens.com

www.siemens.at/var