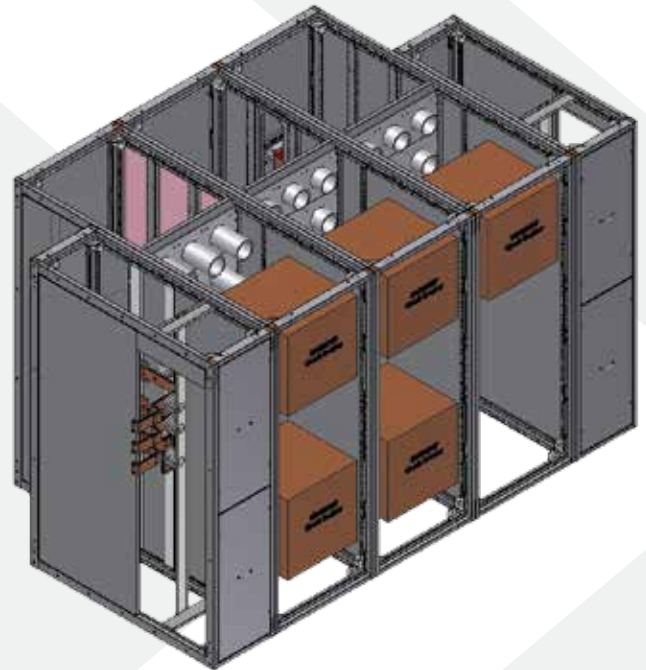


» CUSTOM PRODUCT DESIGN & APPLICATION ENGINEERING SUPPORT

ESS Metron is at the forefront of Engineering Automation. We extract from our massive portfolio of 3-D modeled designs to provide our clients with custom drawings almost instantly. From the moment your project begins, you'll have detailed drawings specific to your parameters that meet the most demanding applications and standards. In addition, our broad engineering skill-set includes electrical, mechanical and structural disciplines; so you know you have the most skilled and state-of-the art engineering support at your disposal.



COMMON RATINGS					KA RATED		MVA RATED			NEMA 1			NEMA 3R		
Rated Max RMS Voltage (kV)	Nominal ANSI Operating Voltage (kV)	Typical System Operating Voltages (kV)	Rated Withstand/ Crest Impulse Voltage (kV)	Continuous RMS Current Rating (@ 60HZ) (AMPS)	Rated Short Circuit Current (KAIC)	Rated Interrupting Time (Cycles)	Nominal MVA Class	Short Circuit RMS Current @ Rated Max Voltage (KAIC)	Max Symmetrical Interrupting/ 3 sec Short Time Current Carrying Capability (KA)	Width (W)	Depth (D)	Height (H)	Width (W)	Depth (D)	Height (H)
4.76	4.16	2.4 4.16 4.2	60	1200-3000	31.5 40 50 63	→ 3 or 5 → 3 or 5 → 3 or 5 → 5	250 350 450	29 41 63	36 49 63	36"	94"	95"	36"	102"	110"
8.25	7.2	6.6 6.9 7.2	95	1200-3000	40 50 63	→ 3 or 5 → 3 or 5 → 5	500 785	33 63	41 63	36"	94"	95"	36"	102"	110"
15	13.8	12 12.47 13.2 13.8 14.4	95	1200-3000	20 25 31.5 40 50 63	→ 3 or 5 → 3 or 5 → 3 or 5 → 3 or 5 → 3 or 5 → 5	500 750 1000 1500	18 28 37 63	23 36 48 63	36"	94"	95"	36"	102"	110"

- NOTES:
- 1200A / 2000A Circuit Breakers may be stacked 2-High.
 - 3000A Circuit Breaker may not be stacked 2-High with any other Circuit Breaker or CPT / PT configuration.
 - CPT's (Maximum 15KVA) and PT's may use two (2) Rollout Drawers in either the Upper or Lower Frame Compartments.
 - Fixed Mount, fused CPT (Maximum of 37.5KVA) may be mounted in either the Upper or Lower Frame Compartments.
 - NEMA 3R information above is a non-Walkin type with a sloped roof. ES&S can provide any custom NEMA 3R Walkin or Power Distribution Center.

MEDIUM VOLTAGE SWITCHGEAR

Engineered, Manufactured, Assembled, and Tested to Meet Your Requirements



REAR VIEW



INTERIOR



PARALLELING

STANDARD FEATURES

- 1 Meets or Exceeds ANSI C37.20.2 Switchgear Standards/UL Listing on VCB's
- 2 Available in 1200, 2000, 3000 and 4000 Amps. 5–15KV Ratings
- 3 Silver Plated Copper Bus Bars
- 4 All Power and Feeder Bus Epoxy Encapsulated
- 5 Nema 1 and Nema 3R Non-Walkin Enclosures
- 6 Roll-in MV Vacuum Breakers in 1 and 2 High Stack Configuration
- 7 Protective Relaying, Control Switches, and Indicating Lights
- 8 Safety Interlocks, Breaker Position Indication, and Safety Shutters
- 9 CPT and PT in Various Ratings all in Drawout Tray Configurations
- 10 All Major Manufacturers Components Available Including Sq D, CH, GE, ABB, and Siemens
- 11 Fully Tested to ANSI, IEEE, and Nema Standards/ 1 Year Standard Warranty on Entire Equipment

OPTIONAL FEATURES

- 1 Power Metering
- 2 Complex Mechanical and Electrical Interlocking
- 3 Nema 3R Walk-in Enclosures with full Environmental and Utility Features
- 4 ATO Schemes—Incoming Power Sources
- 5 Integration with Building Management Systems
- 6 Custom Bus Bar Configuration for Incoming/Outgoing or Matching to Existing/Other Equipment
- 7 Custom Mimic Bus
- 8 Custom Metering
- 9 Surge Arrestor Protection
- 10 Special Paint Colors Available
- 11 Remote Control Operator Stations
- 12 Arc Flash Mitigating Relay Protection
- 13 Short Cycle Manufacturing Capabilities Available
- 14 Paralleling/load shedding controls
 - a. Emergency or standby
 - b. Prime power
 - c. Co-gen
 - d. Controls for all types of generators
 - e. Load sharing for multiple generators
 - f. Speed and voltage control components