



ADVANCED POWER
TECHNOLOGIES

NEMA 1 • Outdoor 3R • Walk-In

15kV – 38kV
GIS-VFI Gas Insulated
Vacuum Fault Interrupter
Transfer & Distribution Switchgear



AGV-Series

Solutions Brochure



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Volume Production



Advanced Engineered Solutions



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Solution Brochure Contents

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Applications – Why APT Switchgear?

Rapid Response

Engineered to deploy fast when every second counts.



Engineered-to-Order

Tailored engineering solutions no off-the-shelf compromises.



Built for Tomorrow

Smaller, Smarter, Future-ready.



Mobile Power Solutions

Reliable power that moves you-anytime, anywhere



Figure 1*



Next-Generation Switchgear Technology for Use In



Data Centers

- Medium Voltage (MV) Switchgear
- Low Voltage (LV) Switchgear
- Automatic Transfer & Distribution
- Engineered Control Power Cabinets



Utilities & Prime Power

- Electric Supply Substations
- Electric Substation Backup
- Water & Wastewater Treatment Plants
- LNG, Trash & Recycling Plants



Manufacturing & Industrial

- Textile
- Steel Mills
- Stamping



Generators & Backup Power

- LV & MV Quick Connections Solutions
- Permanent Gen Protection
- Permanent or Temporary Load Bank
- Temporary Generator
- Manual or Automatic Transfer
- Extended Generator Terminal Boxes



University & Medical Campuses

- Hospitals/Critical Care Centers
- Medical Clinics
- Airports, Train Stations



Mining, Oil Field Drilling, & Fracking

- Vibration Withstand
- Integrated Transformers
- Automatic Paralleling & Transfer
- Integrated Power & Controls



Renewable Energy Collection Control

- Solar, Wind, Geothermal, Biogas, Hydro
- Micro Grids & Reactors
- Energy Storage
- Education, Healthcare, & Transit



Government

- Federal, State, & Local Buildings
- Correctional Facilities
- U.S. Army & Navy Bases

GIS Construction & Ratings



Figure 2*



Figure 3*

Compact Metal Enclosed Withdrawable Vacuum Circuit Breaker Switchgear for Tomorrow's Critical Infrastructure

| Specification | Ratings & Options |
|---------------------------------|---|
| Voltage Ratings | 15 kV – 38 kV |
| Interrupting Capacity | 25 kA, 31.5 kA |
| Main Bus Ampacity | 600 - 2500 A |
| Bus Insulation | Insulated |
| Operation Modes | Manual Automatic Open Transition, Automatic Closed Transition, Delayed, Soft Loading, Parallel |
| Transfer/Control Configurations | Utility-to-Utility, Utility-Tie-Utility, Ring Main Unit (RMU) |
| Circuit Disconnect Types | Gas Insulated Vacuum Fault Interrupter Circuit Breaker, Gas-Insulated Load Break Switch, Unfused or Fused, Earthing Switch |
| Reference Standards | ANSI/IEEE: C37.20.3, C37.20.4, C37.20.7, C37.20.9, C37.74, 1247, C37.123, C37.04, C37.06, C37.09 |

Flexible & Durable Enclosure Options

Standard Indoor: NEMA 1
Weatherproof Outdoor: NEMA 3R Non-Walk-In (stainless hardware, pad-lockable doors)
APT PwrSkid: Outdoor Non-Walk-In Skid-Mounted

Walk-in Solutions:

APT PwrContainer: Compact Containerized Outdoor Walk-In Enclosure
APT PwrHouse: Outdoor Walk-In Enclosure

Material & Finish Options: Carbon Steel, Aluminum, Stainless Steel (304 & 316) Powder-coated ANSI 61 Gray or the color of your choice!

Utility & Generator Sections

Simple To Service Modular Compartmentalized Switchgear

Our modular switchgear design is meticulously engineered for serviceability, reliability, and simplified integration, compliant with IEEE/ANSI, and component applicable standards. Each specialized section is optimized and compartmentalizable to meet your exact application requirements.



Figure 4*

Incoming Main & Utility Intertie Feed Sections

- **Rated Voltage:** Up to 38kV, ensuring compatibility and safety with your utility grid.
- **Advanced Protection:** Comprehensive relay and protective systems safeguard generator integrity and ensure fault tolerance.
- **Load Breaking Switches:** Gas Insulated Load Breaking Switches either fused or unfused, with Earthing Switch
- **Circuit Breakers:** Gas Insulated Vacuum Fault Interrupter vacuum circuit breaker integrated into the insulated tank, simplifying maintenance.
- **Precision Instrumentation:** Integrated current transformers (CTs) and voltage transformers (PTs) configured for precise metering, monitoring, and protection.
- **Maintenance Ease:** Optimized compartment design provides easy access to critical components, minimizing downtime.

Tie & Distribution Sections

Utility Bus Isolation Tie, Multi-Gen Bus Tie, Main-Tie-Main Sections

- **Robust Source Transfer:** Designed for dependable automatic or manual transfer between multiple power sources without service interruption.
- **Seamless Controls:** Equipped with intelligent transfer controllers capable of automatic and fast switching between the power sources.
- **Digital Integration:** Advanced digital relaying and metering enhance system monitoring and fault identification, improving uptime.
- **Maximum Flexibility:** Designed to accommodate various operational and expansion scenarios seamlessly.

Distribution Feeder Sections

- **Precision Power Distribution:** Optimized layout to ensure efficient and secure distribution to downstream loads.
- **Comprehensive Protection:** Integrated CTs and PTs, meticulously engineered for accuracy and reliability in protection schemes and power management.
- **Expandability:** Future-ready provisions included, facilitating easy upgrades or expansions as your needs evolve.
- **High Short-Circuit Withstand:** Engineered internal bus bars with exceptional thermal and mechanical stress resilience.

Easy Integration & Planning

- Detailed dimensional layouts, clear equipment labeling, and precise technical drawings provided, ensures a straightforward submittal approval process, with revisions as required to ensure compliance with the project intent.
- Choose reliable delivery, flexibility, and performance — choose APT Switchgear solutions for your critical power infrastructure.



Figure 5*

Gas Insulated Load Break Switches



Figure 6*



Figure 7*

Fused or Unfused Gas-Insulated Load Break Switch with Earthing

- Gas-Insulated Load Break Switch with Combination Earthing Switch
- Best when the system requires:
- Compact sealed switching for space-constrained installations
- • compact installation
- • sealed environment
- • minimal maintenance
- • harsh environment protection
- Compact Sealed Switching for Harsh Environments
- This design enables extremely compact switchgear installations while maintaining reliable switching performance even in harsh environmental conditions.
- Typical industries
- • urban substations
- • offshore energy
- • renewable collector stations

Gas Insulated Vacuum Fault Interrupter Circuit Breaker

- Gas-Insulated Load Break Switch with integral Vacuum Fault Interrupter Vacuum Circuit Breaker Combination with Earthing Switch
- Gas-insulated load break switches integrate switching devices inside a hermetically sealed gas tank, isolating energized components from dust, humidity, and contaminants.
- GIS switchgear is often selected when space constraints, environmental conditions, or operational reliability requirements make air-insulated systems less desirable.
- Sealed Switching Technology
- • Hermetically Sealed Gas Tank
- Contains the busbar and switching equipment within a sealed

Protective Relaying Functions



Figure 8*



Figure 9*



Digital Multifunction Relays

APT uses industry-leading relay brands such as SEL, GE Multilin, Basler, Beckwith, ABB, Eaton, Siemens and more for overcurrent, voltage, frequency, differential, distance, directional power and ground fault protection in the following applications:

- Utility Intertie
- Paralleling Protection
- Advanced Generator Protection
- Tie Protection
- Transformer Protection
- Feeder Protection
- Various Differential Protection Schemes

All devices are factory-labeled and documented in submittals with wiring diagrams.

Common Relaying functions

- **50/51** – Inst./Time Overcurrent
- **50N/51N** – Inst./Time Ground Overcurrent
- **27/59** – Under/Overvoltage
- **59N** – Ground Overvoltage
- **81U/81O** – Under/Overfrequency
- **25** – Synch Check
- **32** – Reverse Power
- **40** – Loss of Excitation
- **60** – Current Balance
- **67** – Directional Overcurrent
- **86** – (LO) Lock-Out Relay (Knob Grip)
- **87** – Differential Protective Relay
- **87B** – Bus Differential
- **87G** – Generator Differential
- **And More!**

Lockout Relays & Test Switches

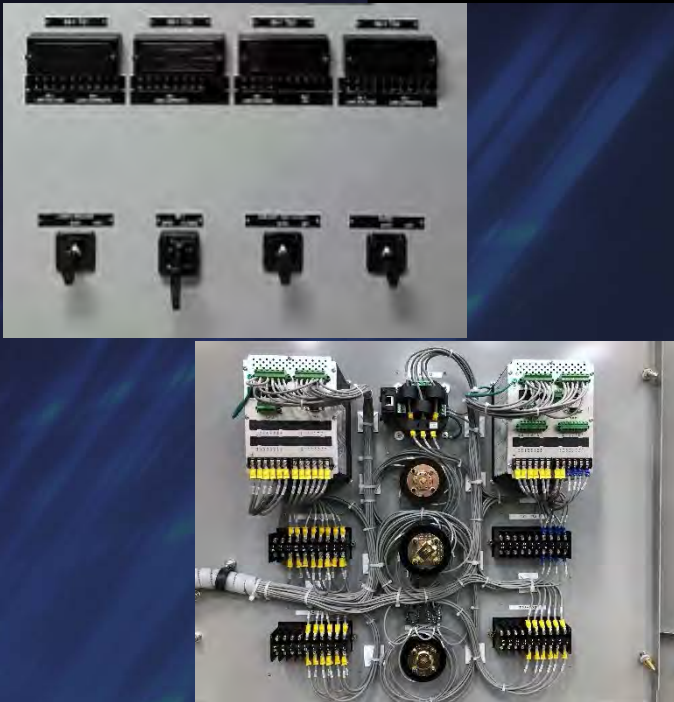


Figure 10*

Lockout 86 Function

- **Fail-Safe Design:** Designed to remain in the lockout condition until manually or electrically reset, ensuring full inspection before re-energization.
- **Knob-Grip Manual Reset:** Heavy-duty mechanical lockout relay with a manual reset knob. Activates on critical protection trips to disable automatic reclosing.
- **Visible Mechanical Target:** Red "TRIPPED" indicator shows at-a-glance breaker lockout condition.

Optional Test Switches & Test Plugs

- Provide a safe, simple, fast, and reliable method to isolate, test, and service installed equipment without disturbing the power system.
- Permits convenient isolation of relays, meters, and instrument transformers (PTs & CTs).
- Allows for quick and easy multi-circuit testing by conventional test methods.
- **Test Plug:** Enables easier measurement, calibration, verification and maintenance of relays, meters, PTs, & CTs.
- Conveniently connects external instruments to the same currents and voltages being applied to the panel relays and meters by the PTs, & CTs, without interrupting or short-circuiting the circuit.



Figure 11*

Power Sensing & Revenue Grade Metering



Figure 12*



Figure 13*

High Accuracy Power Quality Metering

| METERING | | | |
|-----------------------|----------|------------|----------------------|
| Parameters | Accuracy | Resolution | Range |
| Voltage | 0.5% | 0.1V | 20V 1000kV ~ |
| Current | 0.5% | 0.001A | 0 ~ 50000A |
| Current Demand | 0.5% | 0.001A | 0 ~ 50000A |
| Power | 0.5% | 1W | -9999MW 9999MW ~ |
| Reactive Power | 0.5% | 1Var | -9999Mvar 9999Mvar ~ |
| Apparent Power | 0.5% | 1VA | 0 ~ 9999MVA |
| Power Demand | 0.5% | 1W | -9999MW 9999MW ~ |
| Reactive Power Demand | 0.5% | 1Var | -9999Mvar 9999Mvar ~ |
| Apparent Power Demand | 0.5% | 1VA | 0 ~ 9999MVA |
| Power Factor | 0.5% | 0.001 | -1.0 ~ 1.0 |
| Frequency | 0.2% | 0.01Hz | 45.00 ~ 65.00Hz |
| Energy | 0.5% | 0.1kWh | 0 ~ 99999999.9kWh |
| Reactive Energy | 0.5% | 0.1kvarh | 0 ~ 99999999.9kvarh |
| Apparent Energy | 0.5% | 0.1 VAh | 0 ~ 99999999.9kVAh |
| Harmonics | 1.0% | 0.01% | |
| Meter Running Time | | 0.1hrs | 0 ~ 99999999.9hrs |
| Load Running Time | | 0.1hrs | 0 ~ 99999999.9hrs |

- Optional Revenue Grade
 - Active Energy Accuracy according to ANSI C12.20: Class 0.2s
- Optional Data Logging
- Optional Time of Use
- Optional Waveform Capture & Event Logging
- Optional Harmonic Resolution to the 63rd

Standard Advanced Metering Functions

- Voltage: $V_A, V_B, V_C, V_{AB}, V_{BC}, V_{CA}$
- Current: I_A, I_B, I_C, I_N
- Power: P_A, P_B, P_C, P_{sum}
- Reactive Power: Q_A, Q_B, Q_C, Q_{sum}
- Apparent Power: S_A, S_B, S_C, S_{sum}
- Frequency: F
- Power Factor: PF_A, PF_B, PF_C, PF
- Energy: $E_{pimport}, E_{pexport}$
- Reactive Energy: $E_{qimport}, E_{qexport}$
- Apparent Energy: E_s
- Demand: $Dmd_{IA}, Dmd_{IB}, Dmd_{IC}, Dmd_P, Dmd_Q, Dmd_S$
- Power Quality
- Voltage Harmonics: 2nd - 31st and THD
- Current Harmonics: 2nd - 31st and THD
- Voltage Unbalance Factor: U_{unbl}
- Current Unbalance Factor: I_{unbl}
- Max/Min Statistics
- Meter Running Time and Load Running Time
- Pulse Output option
- RS485, industry standard Modbus RTU protocol
- Alarm Parameters
- Active Energy Accuracy according to ANSI C12.20: Class 0.5s

Utility & Generator Control/Paralleling



Figure 14*



Figure 15*



Figure 16*

Connect, Protect, Control

Utility Integration & Load Management

- Utility Intertie (UI)
- Utility Paralleling (UP)
 - Peak Shaving (PS)
 - Import/Export Control (IE)



Figure 17*



Figure 18*



Figure 19*

Seamless Power Continuity

Generator Paralleling & Redundancy

- ACM 5150 Paralleling Controller (PG1)
- N+1 Redundant Backup Transfer (N1)

Automatic & Manual Transfer Controls

Switch Smarter, Power Safer



Figure 20*

Automatic Transfer Systems

- Open Transition (OT2)
- Closed Transition (CT1)
- Soft loading & Unloading (SL1)
- Automatic Return to Normal (AR) – Standard
- Operator-Supervised Return (NA) – Optional

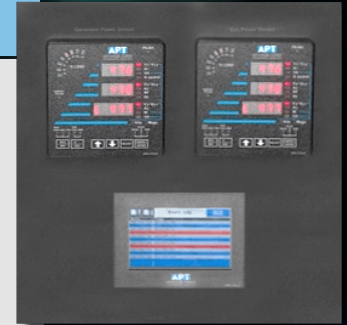


Figure 21*

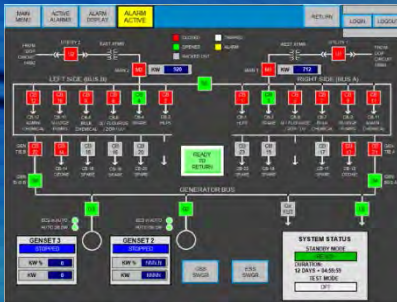


Figure 22*

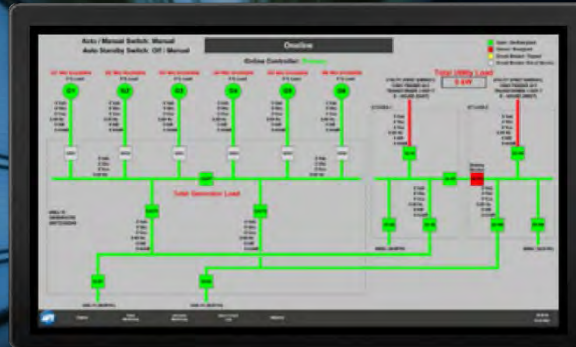


Figure 23*

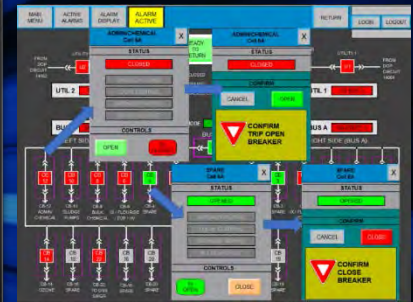


Figure 24*



Figure 25*

Safe Maintenance, Minimized Downtime

Maintenance & Bypass Isolation

- Main-Tie-Main Operation (MTM)
- Automatic Bypass (ATO-BI)
- Manual Bypass/Isolation (BI)
- Manual Transfer (MT) w/Captive Key Interlocking
- Solenoid Key Release Bypass (SK)

Advanced SCADA Controls - APTView

Demand Control, Simplified

Advanced Load Management

- Load Shed Prioritization (LSC)
- Load Add Control (LAC)
- Load Demand Optimization (LDC)



Figure 26*



Figure 27*

Advanced Master Control

20" minimum Touchscreen Display
Microgrid & Island Mode Capabilities

- Black Start for Turbines
- Island Mode Control (IM)
- Microgrid Integration (MG)



APTView
Enabled

Control From Anywhere, Anytime

SCADA & Remote Management

- APTView Remote SCADA (AV)
- External BAS Integration (BSI)

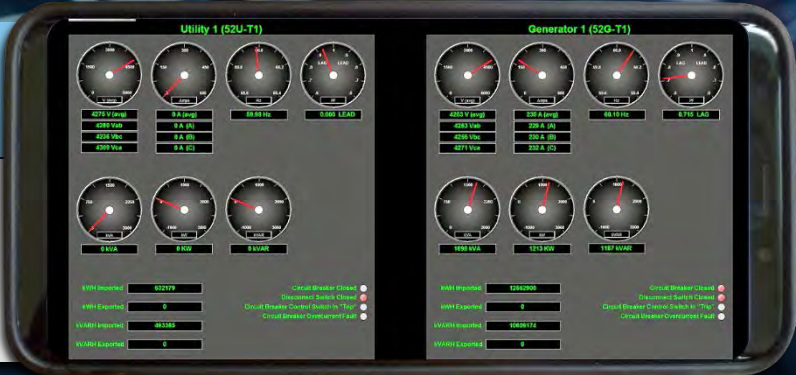


Figure 28*

*Due to ongoing product improvements, actual delivered products may differ from the images shown.
*Optional equipment features are frequently illustrated.
*Availability of options varies by product series.

Master Control Panel (MCP)

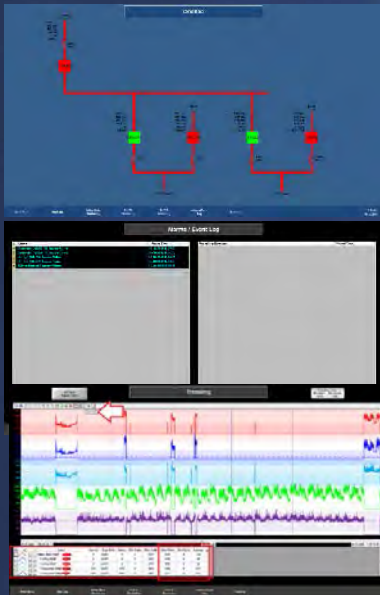


Figure 29*



Figure 30*



Figure 31*

Master Control Panel Benefits

- Provides for the central point of control and monitoring of an entire system and interfaces with control systems at other locations.
- Configurable for control of incoming/outgoing utilities, tie breakers, generation sources, and load feeders for the ultimate in control flexibility.
- Customizable for any system/requirements.
- Provides events logging and automatic responses to changing conditions.
- Integrates the various pieces defined in other documents and makes them a system.
- Allows for full operational control and monitoring while keeping the operator outside of the arc-flash zone.
- Uninterruptable Power Supply keeps unit powered during unplanned outages

APT Intelligent Master Control Features and Parameters

- Monitoring of generator, utility and load electrical data:
 - Line to line voltages: V_{ab} , V_{bc} , V_{ca}
 - Source frequency: Hz
 - Phase currents: I_a , I_b , I_c
 - 3 \emptyset power: kW, PF, kVAR, kVA
 - 3 \emptyset energy: kWh import, kWh export, kVARh import, kVARh export
- Bus electrical data:
 - Line to line voltages: V_{ab} , V_{bc} , V_{ca}
 - Bus Frequency: Hz
- System Status Information (alarm and events log):
 - Source and Feeder circuit breakers position
 - Circuit breaker control switch in Trip position
 - Protective relaying trip
 - Battery charger alarms

DC Control Power – Batteries & Chargers

Comprehensive Switchgear Station Battery Systems

Whether you have an existing switchgear station battery system or are looking to purchase one, APT offers flexible battery solutions across multiple chemistries and voltages (24VDC, 48VDC, and 125VDC), tailored to your project's specific requirements and preferences. Our standard 24 VDC battery system solutions deliver exceptional reliability, minimal maintenance, and robust performance, complemented by advanced integrated battery chargers designed specifically for our medium voltage (2.4kV–38kV, 3Ø) switchgear applications.

APT 24 VDC Switchgear Battery System Features

- **Maintenance-Free Operation:** Fully sealed, eliminating routine electrolyte checks.
- **Reliable High-Current Delivery:** Stable and dependable current for breaker trip/close and protective relay functions.
- **Compact Design:** Optimized for installations where space is limited.
- **High Efficiency & Fast Recharge:** Quick recovery to full capacity following discharge events.
- **Standard Voltage: 24 VDC**

Optional Enhanced Features (Available Upon Request)

- **Extended Lifecycle:** Long-lasting performance with minimal degradation.
- **Advanced Battery Management System (BMS):** Real-time diagnostics, automated balancing, and continuous health monitoring & alarm status.
- **Ultra-Compact & Lightweight Construction:** Further reduced space requirements and ease of installation.
- **Enhanced Cycle Life & Longevity:** Superior long-term performance for demanding applications.
- **Optional: 48 VDC, 125 VDC** upon request.



Figure 32*

Specialty 48VDC & 125VDC Systems

Nickel-Cadmium (NiCd) Rugged Reliability

- **Extreme Temperature Tolerance:** Excellent performance from -40°C to $+50^{\circ}\text{C}$, ideal for harsh outdoor installations.
- **Long Service Life:** Robust construction delivers 15–25+ years of dependable service.
- **High Discharge Resilience:** Exceptional performance during deep discharge cycles and rapid recovery capability.
- **Maintenance Considerations:** Moderate routine maintenance (periodic electrolyte replenishment) balanced by exceptional reliability and lifecycle cost-effectiveness.
- **Advanced features supplied as required**



Figure 33*

Flooded Lead Acid (FLA) Proven Performance

- **Reliable, Proven Technology:** Long-established battery type delivering predictable performance and dependable service over 15–20 years.
- **High Current Capability:** Handles high instantaneous currents for breaker operations effectively.
- **Routine Maintenance:** Requires periodic electrolyte checks, watering, and maintenance, suitable for installations with structured maintenance resources.

Lead Selenium (PbSe) Premium Longevity

- **Extended Lifecycle:** Proven 15–20+ years of service life with excellent cycling capability.
- **Reduced Maintenance:** Low-maintenance vented battery type, fewer watering intervals than standard flooded cells.
- **Enhanced Thermal Stability:** Reliable in demanding environments with temperature fluctuations.
- **High-Rate Discharge:** Strong, stable current output ideal for breaker tripping and high load demands.

Outdoor Walk-In Switchgear Enclosures

Engineered Precision, Delivered Performance

APT's PwrHouse and PwrContainer enclosures deliver industry-leading reliability, flexibility, and rapid deployment capabilities. Each solution is fully customizable to precisely meet your specific site and operational requirements, ensuring robust performance for critical power infrastructure.



Figure 34*



Figure 35*

Custom Modular Enclosures: Built for Specialization

PwrHouse:

- Tailored dimensions and modular flexibility to application-specific requirements.
- Fully integrated switchgear delivered ready for rapid commissioning.
- Robust construction adhering to stringent structural and environmental standards.
- Galvanized steel structure.
- Kynar 500 coated galvalume panels.
- Eliminates the need for shipping splits with compact, integrated switchgear design.
- Optional enhancements for critical operational conditions.

ISO Container Enclosures: Compact, Mobile, & Ready

PwrContainer:

- 20', 40', 45' ISO container-based, engineered for portability and immediate operational readiness.
- Ideal for rapid global deployment.
- Factory integrated switchgear and equipment in one self-contained unit significantly reducing on-site installation time.
- Easily Transportable by standard logistics networks: truck, rail, or ship.
- Optional features to withstand marine-grade environments, extreme seismic events, and Category 5 hurricanes available upon request.
- Optional Enhanced Marine-grade reinforced structural integrity with corrosion-resistant finishes and integrated environmental control.

APT PwrHouse – Walk-In Enclosure

Custom-Built Durability and Integration

APT's PwrHouse walk-in enclosures are meticulously engineered and factory-integrated to ensure structural integrity, durability, and simplified onsite deployment, explicitly designed to accommodate critical electrical systems safely and efficiently.



Figure 36*

Precision Engineered Modular Solutions

- **Robust Structural Integrity:**
 - Galvanized structural steel framing exceeding building code requirements.
 - ASTM A36 steel base ensures structural integrity for lifting and placing fully loaded enclosures.
 - Multi-rib panels with Kynar 500 finish, offer superior corrosion resistance.
 - Standing-Seam Metal Roof with UL 580 Class 90 Roof Uplift Certification.
- **Enhanced Safety & Comfort:**
 - Insulated steel doors with heavy-duty stainless-steel hinges and panic hardware.

Factory-Built for Rapid Onsite Deployment

- **Flexible Sizing & Rapid Deployment:**
 - Delivered fully integrated with no field assembly of internal components needed.
 - Compact design streamlines logistics, reduces installation time, and accelerates commissioning.
- **Compliance and Excellence:**
 - Detailed, accurate submittal documentation streamlines project approvals, reduces engineering, and installation risks.

Rapid, Efficient, & Robust Deployment

Engineered within ISO-certified sea-worthy containers, APT's PwrContainer enclosures offer unmatched portability, rapid deployment, and comprehensive environmental resilience for permanent & temporary global urban & rural operations and emergency response scenarios.



Figure 37*

Rugged, Robust Design ISO Container-Based Design

- **Superior Mobility and Reliability:**
 - Modified ISO shipping containers (20', 40', 45') allow international mobility, ideal for permanent, temporary, emergency, urban, or remote sites.
 - Eliminates onsite assembly; containers arrive fully tested and ready to operate immediately upon placement and acceptance testing.
- **Optional Marine-Grade Construction & Protection:**
 - Heavy-duty, reinforced steel framing and structural floor replacement ensures seismic stability and Category 5 hurricane resistance.
 - Corrosion-resistant marine-grade paint provides exceptional durability and heat deflection.

Fully Integrated Plug-and-Operate System

- **Enclosure Features:**
 - Insulated personnel doors with quick-escape panic hardware.
 - Closed-cell polyurethane foam insulation protects internal equipment from temperature extremes and condensation.
- **Integrated Systems and Optional Features:**
 - For additional customizable features such as corrosion-resistant coatings, HVAC redundancy, marine-grade protections, and advanced operational safety enhancements, please see the comprehensive list of optional features provided on the following page.

Optional Walk-In Enclosure Features

Tailored Optional Features

Customize your APT Walk-In Enclosure with specialized enhancements designed to maximize performance, reliability, safety, and adaptability for your exact operational needs.



Figure 38*



Figure 39*

Environmental Control & Interior Options

- (WA) – Climate-Controlled HVAC Systems (Heating, AC, Humidity Control)
- (WR) – Redundant Dual HVAC Systems with Automatic Lead-Lag Changeover
- (WH) – Anti-Condensation Aisle Strip Heating
- (WS) – Humidity Control System with Integrated Humidistat
- (WM) – Motorized Louvers for Optimized Ventilation
- (WN) – Corrosion-Resistant HVAC Coils
- (WL) – Enhanced Interior LED Lighting (≥ 300 lux)
- (WF) – Aluminum Diamond Plate Flooring
- (WK) – Non-Skid Epoxy Flooring

Optional Additions & Features Available

- (RD) – Rear Access Doors
- (WW) – Hinged Wireway
- (WC) – Cable Tray
- (WE) – Eye Wash Station
- (WU) – Corrosion-Resistant Aluminum Panels (PwrHouse Only)
- (WV) – Marine-Grade Corrosion Protection
- (WP) – Advanced Panel Insulation
- (WI) – Install UPS/BESS System
- (WD) – Control Room Desk
- (WJ) – Interior Divider Wall
- (WG) – Arc-Gas Venting Plenum System
- (WO) – Overhang Over Entrance Doors
- And more!

Sample Application One-Line Diagrams

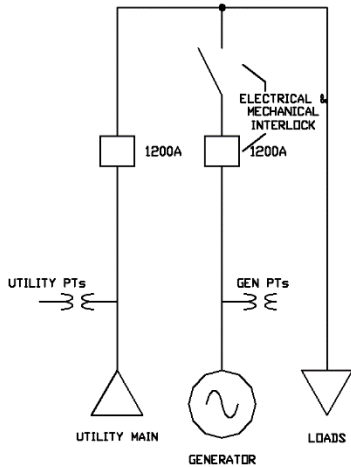


Figure 40*

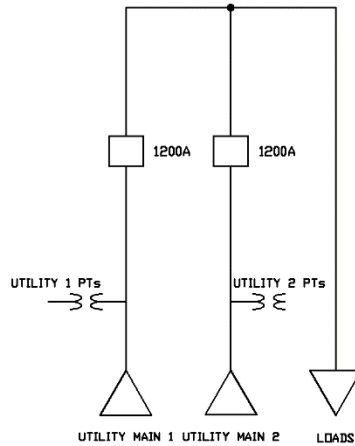


Figure 41*

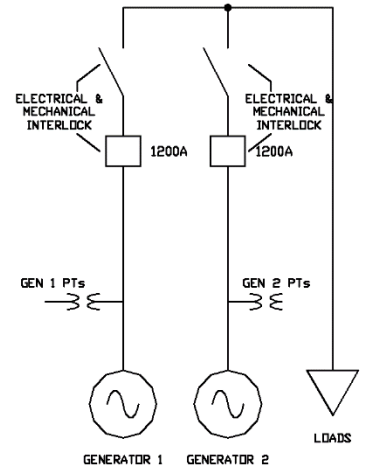


Figure 43*

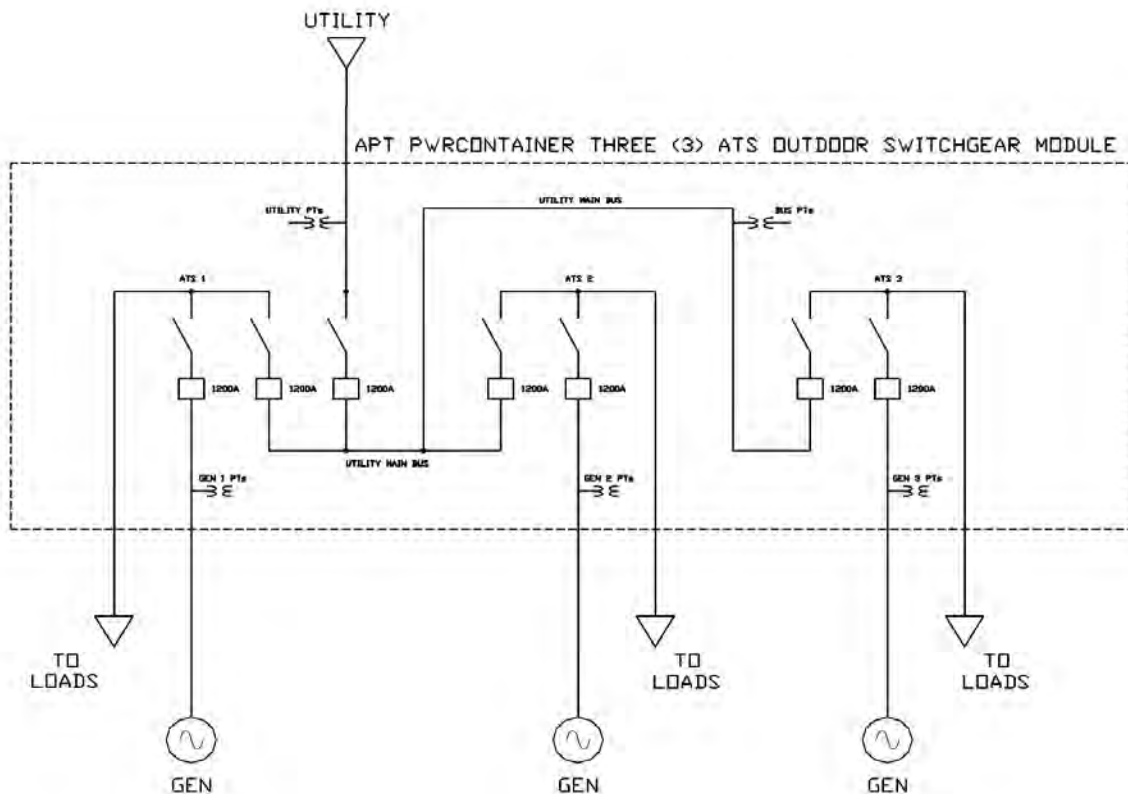


Figure 42*

About Advanced Power Technologies



Advanced Power Technologies (APT) is a leading innovator in engineered low and medium voltage power systems, delivering customized solutions worldwide. From our strategically central headquarters in Lafayette, Indiana, we design and manufacture precision-crafted switchgear, switchboards, and electrical infrastructure systems.

Decades of Expertise, Customized Solutions

Our skilled engineering team brings extensive experience across industries such as utilities, data centers, healthcare, agriculture, education, and commercial manufacturing. Leveraging cutting-edge switchgear technologies, we specialize in:

- 208V-800VAC Switchgear & Switchboards
- 2.4kV-38kV Custom Metal Enclosed/Clad Style Switchgear
- Generator Enclosure Package Integrated Equipment
- Utility and Generator Paralleling, Transfer, Peak Shaving & Distribution Switchgear
- Automatic & Manual Load Transfer Switchgear
- Outdoor Walk-In Electrical Houses (E-Houses) & Skid-Mounted Switchgear
- Containerized Switchgear & Battery Energy Storage Systems (BESS)
- Generator/Load Bank Quick Connection Switchgear, Switchboards, & Tap Boxes
- Microgrids, Master Control Panels, SCADA Systems
- Low & High Resistance Grounding Systems
- Bypass/Isolation & Power Distribution Circuit Breaker Switchboards
- Photovoltaic (PV) Solar Power Collection & Renewable Energy Storage Systems
- Motor Control Centers & Motor Control Switchgear
- High Efficiency Combined Heat and Power (CHP, Co-generation) Switchgear & Control Systems
- Industrial Control Panels

Precision Manufacturing & Innovation

APT proudly offers complete in-house, Made-in-USA manufacturing with precision metal fabrication capabilities, ensuring unparalleled quality, rapid turnaround, and tailored solutions that meet your exact specifications. As an OEM partner with industry leaders like Siemens, Square D, ABB, LG, and Eaton/Cutler Hammer, we integrate superior components into every system.

Flexible, Efficient, Scalable Solutions

APT provides highly flexible solutions with efficient production processes and scalable manufacturing capacities, tailored specifically to meet the demands of high-volume customers. Our capabilities position us ideally to serve large-scale operations including oil and gas producers, large data centers, extensive solar portfolios, and projects specified by leading engineers and facility managers.

Compact, Efficient, Reliable

APT excels at optimizing facility footprints and reducing installation costs through innovative, space-efficient designs. Each project benefits from our collaborative approach, open communication, and relentless commitment to customer success.

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