



AUTOMATIC TRANSFER SWITCH

Automated Power Reliability for Seamless Operational Continuity



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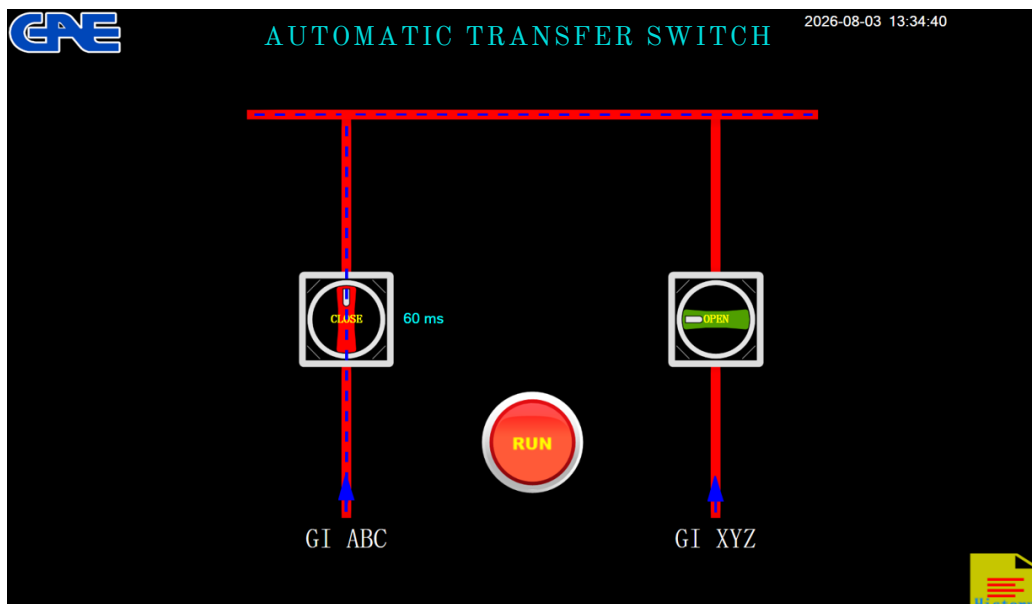


Intelligent Power Management

What is an ATS System?

Automatic Transfer Switch (ATS), is an essential control panel in modern electrical infrastructure designed to guarantee a continuous power supply. This intelligent device monitors the voltage from the active power source and automatically transfers the electrical load to an alternative source the moment it detects an outage, brownout, or phase loss.

Crucially, this system is highly versatile: it can be configured to switch between a primary utility grid and a backup generator, or seamlessly transition between two independent utility power sources (e.g., Substation 1 and Substation 2) for critical facilities equipped with dual utility feeds.



Transition Logic Configuration

General Mode (Non-Priority)

In configurations where both sources are of equal priority, the system adopts a 'stay-put' logic. It will remain in its last active, stable position and will only initiate a transfer when a power anomaly or failure explicitly forces it to switch to the alternative source.

Priority Mode

If a preferred primary source is designated (e.g., Grid vs. Generator), the ATS system executes an automated reverse transition once the main power is restored.



Intelligent Power Management

Key Features & Core Benefits

1. Ultra-Fast Transfer

Detects power anomalies in milliseconds, minimizing downtime that could damage sensitive equipment.

2. Dual Interlock Protection

Utilizes both mechanical and electrical interlock protections simultaneously to guarantee that the two power sources are never connected at the same time, absolutely preventing shortcircuits.

3. Switchgear Integration

Detecting Local/Remote operational modes, monitors CB positions (Open/Closed), Voltage Source status, Earthing Switch Status, VCB Rack-in/out status, and Fault/Trip conditions. This ensures transitions only occur under safe and verified mechanical and electrical states.

4. Smart Automation

Eliminates the reliance on manual operation. For generator applications, the control module features programmable time delays for engine warm-up and cool-down cycles. For dual-substation applications, it ensures synchronized switching to prevent phase clash.

5. Real-Time Monitoring & SCADA Integration

Supported by an intuitive HMI/LCD interface for on-site operation. Furthermore, the system is fully equipped with advanced network connectivity, enabling operators and technicians to control and monitor real-time status directly via local computer networks (LAN) or remotely from anywhere in the world using Cloud SCADA integration.



6. Comprehensive Event Logging & History Record

Automatically captures and stores a detailed log of all operational events, including source transfers, power anomalies, and system alarms. This historical data is invaluable for quick troubleshooting, maintenance planning, and analyzing long-term power quality trends.



AUTOMATIC TRANSFER SWITCH ALARM



Real time alarm	History alarm	No confirmed alarm	Been confirmed alarm	
Alarm time	Alarm text	Alarm type	Confirmed time	
2026-08-03 13:42:48	PLC CPU - RUN - Start	alert		
2026-08-03 13:42:48	Status - CB F2 - Open	alert		
2026-08-03 13:34:29	Status - RUN	recovery		
2026-08-03 13:32:53	Status - not RUN	alert		
2026-08-03 13:32:52	Status - RUN	recovery		
2026-08-03 13:32:25	Status - not RUN	alert		
2026-08-03 13:31:27	Status - RUN	recovery		
2026-08-03 13:31:24	Status - not RUN	alert		
2026-08-03 13:26:51	Status - Voltage F2 - Ready	recovery		
2026-08-03 13:26:49	Close Command F1 - Finish	recovery		



Intelligent Power Management

Technical Parameter

Monitoring and Control

- Local Monitoring (via HMI)
 - Onsite
- Remote Monitoring (via PC/Smart Phone)
 - Local Area Network
 - Internet (Cloud SCADA)

Communication Protocol

- Modbus
- DNP3

Communication Port

- RJ45
- RS485
- Wifi
- Sim Card 4G

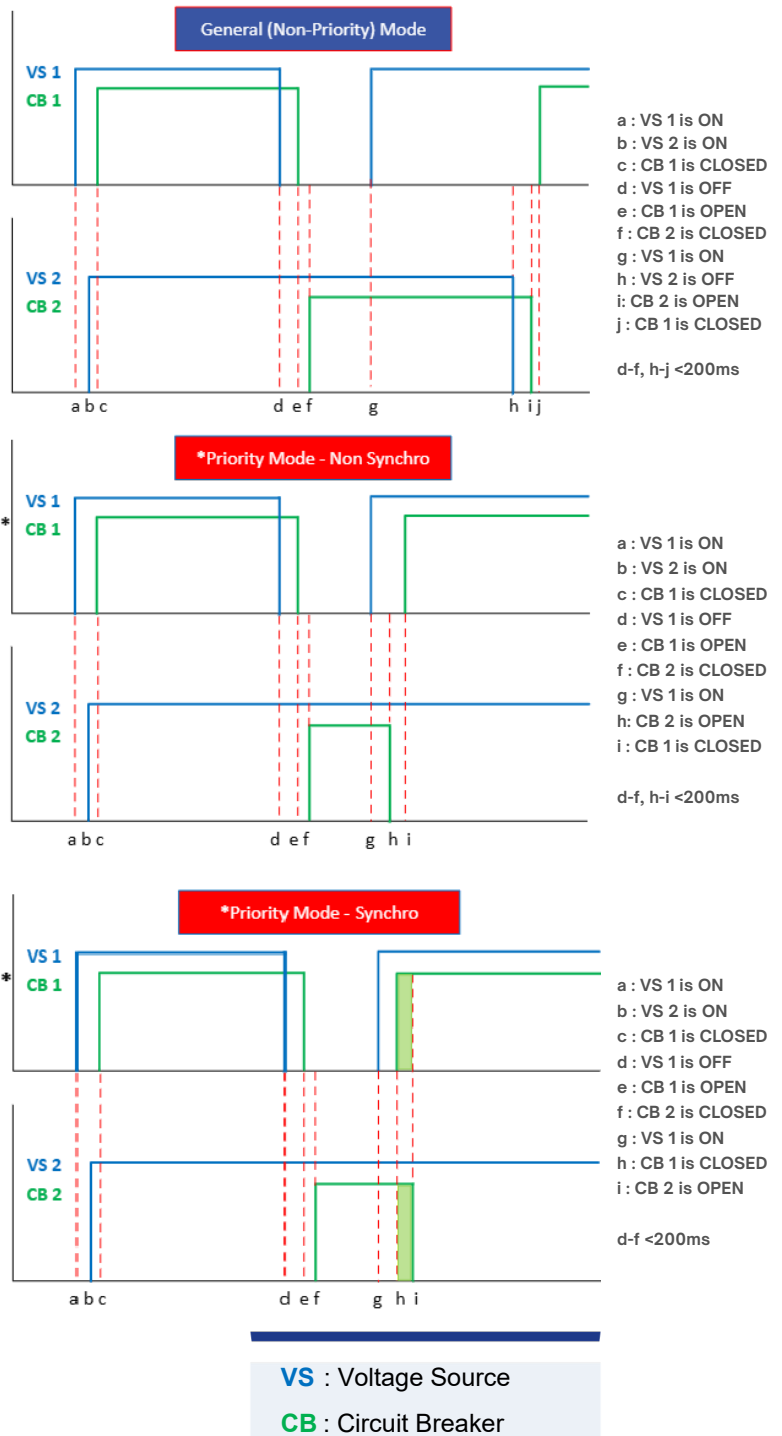
Digital Input (Status)

- Local/Remote
- Voltage Source
- Open/Closed CB
- Trip
- Earthing Switch
- Rack-In/Rack-Out
- Synchro Check

Digital Output (Command)

- Closed CB
- Open CB

Transfer Switch Timing Diagram



"Don't let power outages interrupt your productivity."

*With the **GAE Automatic Transfer Switch**, ensure seamless facility operations through ultra-fast, automatic, and secure power transitions. Protect your critical assets and enjoy total peace of mind with the ultimate power management solution from PT Guna Era Manufaktura. Consult your electrical infrastructure needs with us today. Contact our expert team at gem.info@senzo.id."*