Sales Brochure

Automatic Transfer Switch

MCG's circuit breaker-based automatic transfer switches provide an alternative to typical ATS's:

- Circuit breakers provide integral overcurrent protection in addition to source transfer
- Can be provided with different sized circuit breakers for cost savings
- Fixed mount or drawout circuit breakers
- 3-pole and 4-pole options
- Open or closed transition transfer

- Utilizes 3rd party ATS controllers or MCG HMI/PLC based controls
- Can be provided with integral load feeder circuit breakers
- Indoor or outdoor rated
- Service entrance rated
- Low voltage and medium voltage

ATS Variations

Custom 690V, 1200A, indoor rated ATS

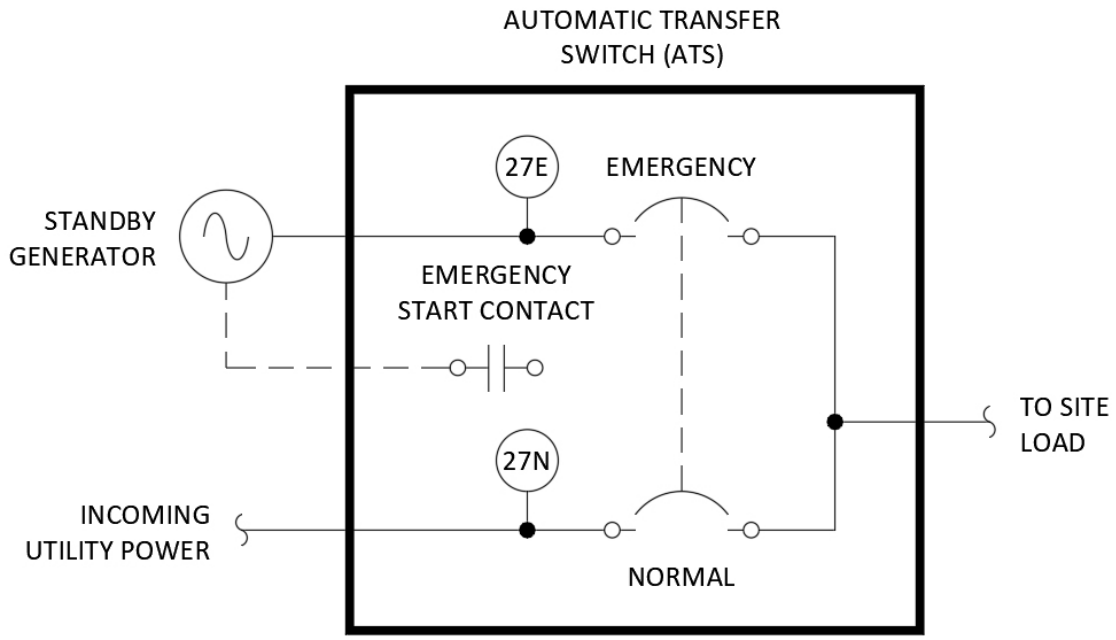
480V, 2000A, bypass isolation ATS, outdoor rated

480V, 4000A, indoor rated ATS

12.47kV, 600A, indoor rated ATS with PLC/HMI-based controls

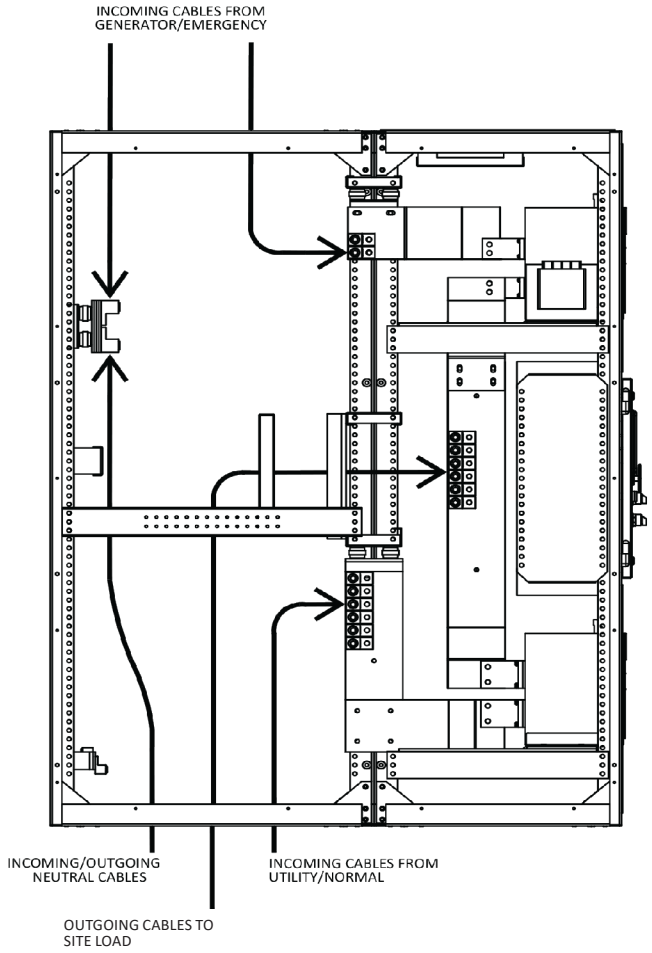
Automatic transfer switches provide automatic backup power to sensitive site loads.

How does an ATS work?



Operational overview of automatic transfer switch (ATS)

- ATS senses voltage of normal source and emergency source, using undervoltage relays (device 27)
- Upon loss of normal voltage (27N), emergency start signal is issued to standby generator
- Generator starts and produces voltage
- ATS senses presence of emergency voltage (27E), automatically trips open normal circuit breaker and closes emergency circuit breaker
- Site load is now powered by generator
- Return of normal power is detected
- ATS automatically retransfers back to normal power and removes generator start signal



Typical cable installation to ATS

Product Specifications

Material:	12 gauge steel enclosure, powder coat painted ANSI 61 gray. Outdoor units are galvannealed steel with primer and topcoat
Dimensions:	Custom designed per application
Circuit Breaker Provided:	Schneider, ABB, Eaton or other
Voltages Available:	Low and medium voltage
Current Ratings Available:	up to 6000A
Interrupting Ratings Available:	up to 100kA
Optional Features:	High accuracy metering, protective relaying, lock-out relay, drawout circuit breakers, remote control and monitoring, etc.

1) Emergency circuit breaker (top breaker)
2) Normal circuit breaker (lower breaker)
3) Isolated low voltage control compartment (middle)
4) ATS controller
5) Optional ground fault relay
6) ATS operational placard
7) Blank weather door with 3-point, padlockable latch and optional polycarbonate window

MISSION CRITICAL GROUP

Powering What's Next

About Mission Critical Group

Mission Critical Group (MCG) is an end-to-end power system solutions and services provider that accelerate time-to-power for essential infrastructure. Through integrated engineering, manufacturing, and field services, MCG delivers reliable power systems for behind-the-meter and mission critical applications.

With deep engineering expertise and a robust U.S.-based manufacturing network, MCG delivers fast, tailored power solutions with the technical support to match. Backed by a nationwide team of experts, we help keep power running for critical operations.

Accelerating Time-to-Power

MCG accelerates time-to-power by uniting design, manufacturing, and service with integrated program management and a fast, flexible U.S.-based supply chain.

Key Advantages

- Unified engineering, manufacturing, and service eliminates vendor handoffs and streamlines communication.
- Direct oversight from design to delivery speeds execution and minimizes risk
- Fast-deploying solutions, both pre-engineered and engineered-to-order, maintain high reliability.
- Trusted by operators in data center, healthcare, and industrial sectors for proven performance.

Mission Critical Group Capabilities

Power Infrastructure Solutions

- Custom electrical power systems
- Integrated switchgear and control solutions
- Engineered power generation systems
- Electrical distribution systems
- Mission critical infrastructure support

Engineering and Services

- System design and electrical engineering
- Program management and project execution
- Manufacturing and factory integration
- Field commissioning and startup support
- Lifecycle service and maintenance