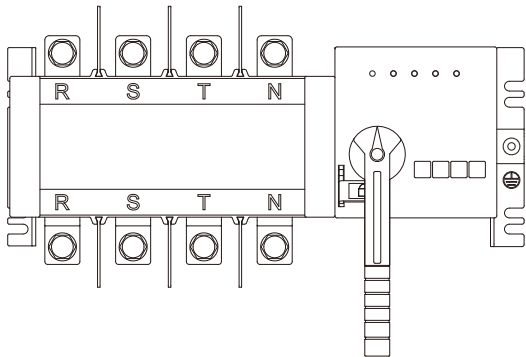


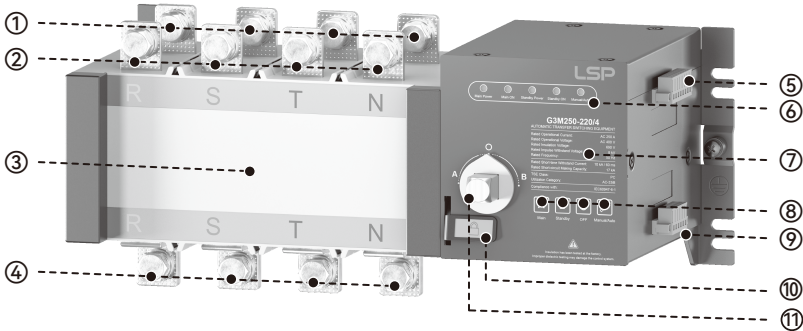
Automatic Transfer Switch Equipment (ATSE) G3M250



⚠ Important Notes:

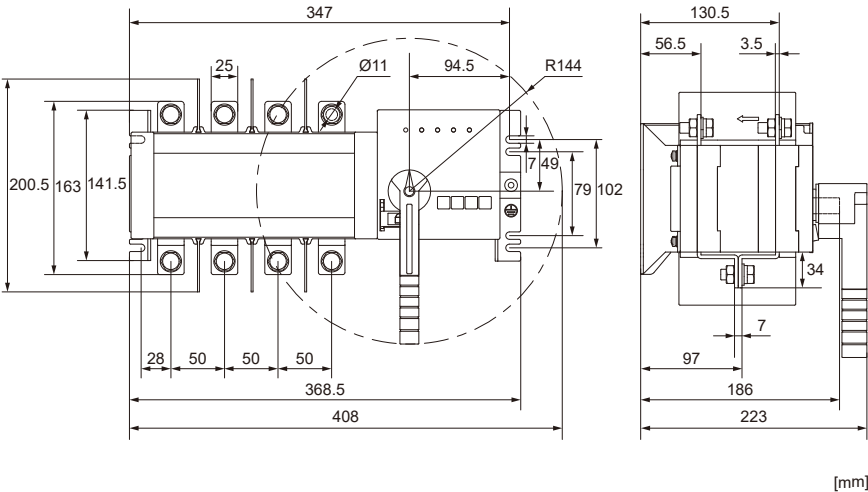
- Please read this manual carefully before installing or operating the product. If you have any questions, please contact our company.
- Unauthorized disassembly of the product is strictly prohibited to prevent instrument failure or malfunctions.

Product Overview

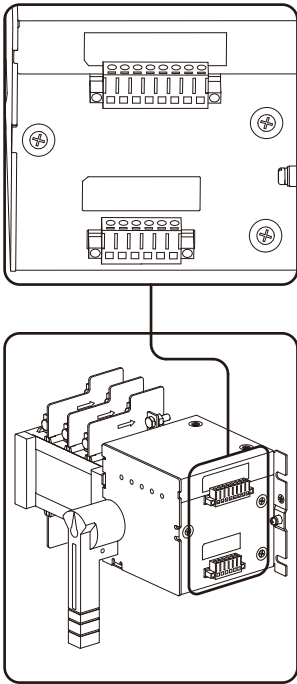


① Standby Power Terminals	⑤ Auxiliary and Control Terminals	⑨ Operating Status Indicator Terminals
② Main Power Terminals	⑥ Indicator Lights	⑩ Mechanical Padlock Provision
③ Power Switch Unit	⑦ Nameplate	⑪ Operation Handle and Indicator
④ Load Terminals	⑧ Control Buttons	

Dimensions



Terminal Wiring Instructions



Generator start output (dry contact)

Fire alarm feedback output (dry contact)

Fire alarm input (dry contact)

RS-485 Communication interface

Position status output (dry contact)

N1 Main power neutral terminal (3P)

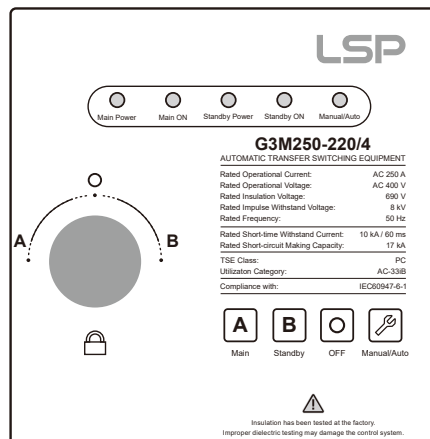
N2 Standby power neutral terminal (3P)

14	13	12	11	10	9	8	7
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1	2	3	4	5	6
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- **Terminal 1:** Main Power Neutral Input (N)
- **Terminal 2-3:** Main A Position Output – Dry contact; indicates Main Power is connected
- **Terminal 2-4:** OFF Position Output – Dry contact; indicates both power sources are disconnected
- **Terminal 2-5:** Standby B Position Output – Dry contact; indicates Standby Power is connected
- **Terminal 6:** Standby Power Neutral Input (N)
- **Terminal 7:** RS-485 B (–)
- **Terminal 8:** RS-485 A (+)
Note: RS-485 communication is optional and supports Modbus-RTU protocol.
- **Terminal 9-10:** Fire Alarm Input – Dry contact; triggers fire emergency transfer when shorted
- **Terminal 11-12:** Fire Alarm Feedback Output – Dry contact; indicates fire emergency transfer has been executed
- **Terminal 13-14:** Generator Start Output – Connects to generator controller for auto-start during power outage

Control Buttons

**A**

“Main A” Button

In manual mode, this button switches the load to the main power supply.

B

“Standby B” Button

In manual mode, this button switches the load to the standby power supply.

“OFF” Button

In manual mode, this button switches the device to the OFF position, disconnecting both power sources; no output to the load.

“Manual / Auto” Button

- Used to toggle between automatic and manual operation modes.
- The Manual / Auto indicator lights up when automatic mode is active.

Indicators

Main Power Indicator

- Lights up when all three phases of the main power supply are within range.
- Off when there is a phase loss.
- Fast flashing indicates overvoltage (>270 V); Slow flashing indicates undervoltage (<165 V).

Standby Power Indicator

- Lights up when all three phases of the standby power supply are within range;
- Off when there is a phase loss;
- Fast flashing indicates overvoltage (>270 V); Slow flashing indicates undervoltage (<165 V).

Main ON Indicator

- Lights up when the main power source is connected.

Standby ON Indicator

- Lights up when the standby power source is connected.
- Both indicators (Main ON and Standby ON) are off when the switch is in the OFF position.

Manual / Auto Indicator

- Lights up in automatic mode; off in manual mode.

Working Conditions

Ambient Temperature Range: -5 °C to +40 °C, 24-hour average $\leq$ +35 °C

Storage Temperature Range: -25 °C to +55 °C, Short-term (up to 24h) $\leq$ +70 °C

Operating Humidity: $\leq$ 50% RH at +40°C; monthly maximum $\leq$ 90% RH, condensation prevention required

Altitude: $\leq$ 2000 m

Pollution Degree: 3

Protection Degree: IP20

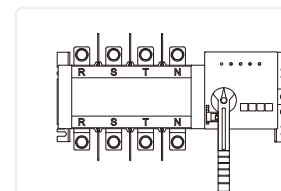
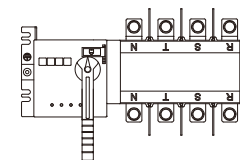
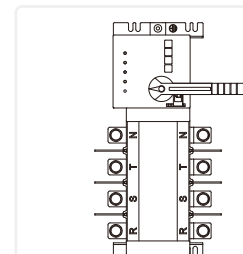
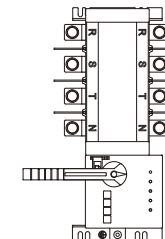
Overvoltage Category (Installation Category):

- Main circuit: Category III

- Control and auxiliary circuits: Category II

Mounting Orientation: The ATSE can be installed vertically or horizontally in the cabinet. For specific installation requirements, please consult our company before use.

⚠ Installation Instructions

**Correct****Correct****Correct****Incorrect**

- Installation must be carried out by qualified personnel following all applicable safety regulations.
- Avoid mechanical stress on conductors during installation.
- Verify correct phase sequence and ensure proper grounding.
- Before wiring, inspect all components for damage, tighten all terminals securely, and clean insulation surfaces.
- Wire the control circuit (AC 220 V) according to the provided wiring diagram.

Installation and Commissioning Instructions

1. Installation and commissioning shall be carried out exclusively by qualified personnel familiar with the equipment and its operation.
2. Prior to commissioning, ensure all necessary safety and preventive measures are implemented. Main circuit conductors must be installed free of mechanical stress or strain.
3. Inspect the equipment for any damage or adverse environmental conditions before wiring. Verify that all terminal connections remain secure following transport, and thoroughly clean insulation surfaces to remove contaminants.
4. When connecting the primary circuit, confirm the correct and consistent phase sequence for both main and standby power sources. Secondary control circuit wiring must strictly follow this manual. The equipment shall be properly grounded in accordance with applicable standards.
5. Before energizing, remove the dedicated operating handle provided. Manually cycle the switch three times—from main to standby and back—verifying smooth and reliable mechanical operation.
6. After confirming correct primary and secondary wiring, with the switch in the main position, connect both main and standby power sources. Disconnect the main power; following the designated delay, the switch shall transfer to the standby source. Upon restoration of the main power and after the delay, the switch shall return to the main source position (except for models without automatic retransfer). Repeat this test cycle three times, allowing a minimum interval of 20 seconds between cycles.

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