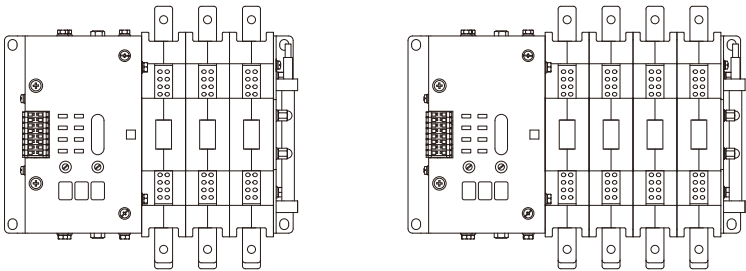


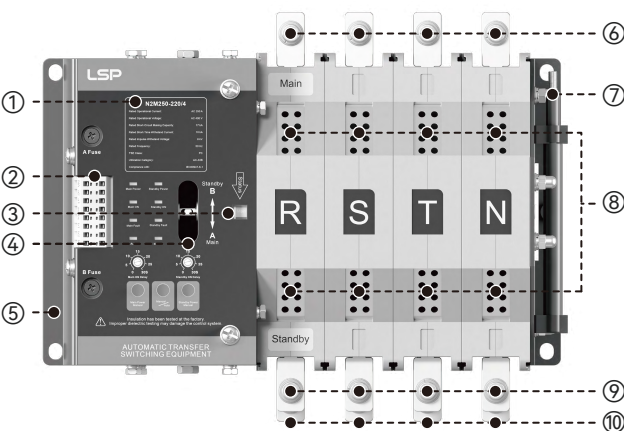
Automatic Transfer Switch Equipment (ATSE) N2M250



⚠ Important Notes:

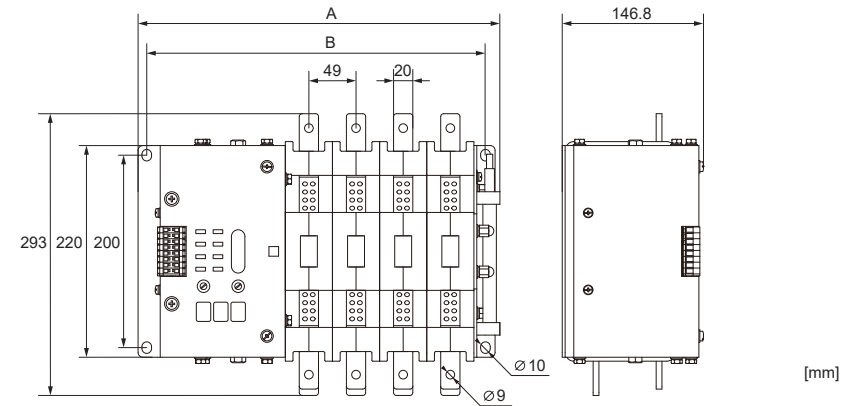
- Please read this manual carefully before installing or operating the product. If you have any questions, please contact our company.
- Unauthorized disassembly of the product is strictly prohibited to prevent instrument failure or malfunctions.

Product Overview



- ① Nameplate
- ② Terminal Blocks for Main Power A & Standby Power B
- ③ Mechanical Indicator of Power Transfer
- ④ Commissioning Handle Socket
- ⑤ Mounting Base
- ⑥ Main Power Terminals
- ⑦ Commissioning Handle (Removable)
- ⑧ Arc Chute
- ⑨ Standby Power Terminals
- ⑩ Load Terminals

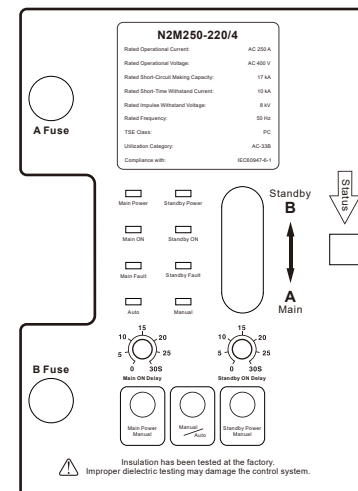
Dimensions



| N2M250-3P | |
|-----------|-----|
| A | 322 |
| B | 303 |

| N2M250-4P | |
|-----------|-----|
| A | 375 |
| B | 352 |

Control Panel Operation



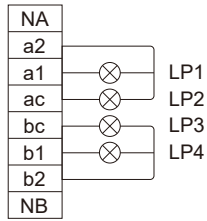
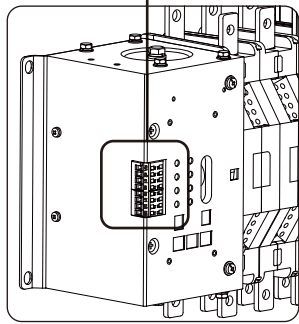
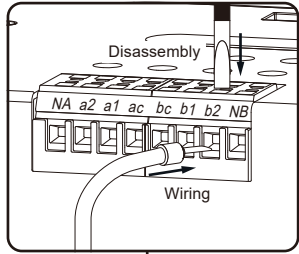
Indicators:

Main Power: Indicates normal condition of main power.
Standby Power: Indicates normal condition of standby power.
Main ON: Indicates main power is currently active.
Standby ON: Indicates standby power supply is currently active.
Main Fault: Indicates main power fault (over-voltage, under-voltage, or phase loss).
Standby Fault: Indicates standby power fault (over-voltage, under-voltage, or phase loss).
Auto: Indicates the system is operating in automatic mode.
Manual: Indicates the system is operating in manual mode.

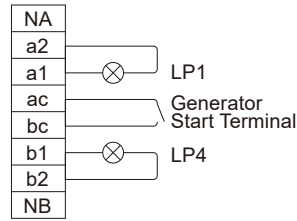
Controls:

Main/Standby ON Delay: Transfer delay time adjustable from 0 to 30 seconds.
Main Power Manual: Manually connects the system to main power.
Manual/Auto: Switches between manual and automatic operation modes.
Standby Power Manual: Manually connects the system to standby power.

Terminal Wiring Instructions



a: Main power-to-standby power transfer
(No generator start signal output)



b: Main power-to-generator transfer with "F" function
(Includes generator start signal output)

- ① NA: Neutral terminal for main power in 3-pole ATS
- ② LP1: Main power indicator light
- ③ LP2: Indicator light for load connected to the main power
- ④ LP3: Indicator light for load connected to standby power
- ⑤ LP4: Standby power indicator light
- ⑥ NB: Neutral terminal for standby power in 3-pole ATS

⚠ Note: When a three-pole switch is selected, the neutral lines of the main and standby power must be connected separately to terminals NA and NB. External indicator lights must be wired correctly; otherwise, the switch may fail to operate properly.

Working Conditions

Ambient Temperature Range: -5°C to $+40^{\circ}\text{C}$; 24-hour average $\leq +35^{\circ}\text{C}$
Operating Humidity: $\leq 50\%$ RH at $+40^{\circ}\text{C}$; monthly maximum $\leq 90\%$ RH, condensation prevention required
Altitude: ≤ 2000 m; consult manufacturer for higher altitudes
Pollution Degree: 3
Installation Category: IV
Mounting Inclination: $\leq \pm 22.5^{\circ}$, fixed within enclosure
Arc Distance: 80 mm at AC 400 V; not required for rated current ≤ 125 A
Utilization Category: AC-33B

⚠ Instructions for Use

In normal operation, set the controller to automatic mode for ATS auto-control, monitoring main and standby power simultaneously with status display via LED indicators. The ATSE transfers to standby power on main power failure (e.g., power cut, under/over-voltage, phase loss) within a 0-30 s delay, and returns to main power upon recovery, prioritizing main power when both sources are normal. For manual operation, set to manual mode; the ATSE will not transfer automatically.

Note: Installation must be performed by qualified personnel, adhering to safety measures. Avoid conductor stress, verify phase sequences, and ensure proper grounding. Before wiring, inspect for damage, tighten terminals, and clean insulation surfaces. Wire the control circuit (AC 220 V) per the diagram.

Product Structure

The product comprises a switch body and an intelligent ATS controller. The switch body features electrical and mechanical interlocks, solenoid actuation, and dual-coil DC pulse operation. The ATS controller, powered by AC 220 V from main or backup sources without additional control power, monitors both sources and auto-transfers on fault to ensure power continuity to critical loads.

⚠ Pre-Commissioning and Commissioning

Warning: For safety and switching speed, use the adjustment handle only for debugging, not under load. Ensure the arc extinguishing device is installed before operation. Operate the switch with the handle to verify main contact closure and running conditions; confirm no abnormalities before use.

- Initial Debugging: After debugging the controller and mechanical parts, perform power-on debugging without load.
- Manual Mode Test: Apply main power; verify the main power indicator lights up. Apply standby power; confirm the standby power indicator lights up. Set the "Manual/Auto" button to manual mode, press the "Main Power Manual" button to transfer to main power, and verify indicators. Press the "Standby Power Manual" button to transfer to standby power, confirming indicators.
- Automatic Mode Test: Set the "Manual/Auto" button to automatic mode, adjust main and standby power delay times. Disconnect main power; confirm automatic transfer to standby power after the set delay, with indicators lighting up. Restore main power; verify return transfer after the set delay, with indicators lighting up.

Troubleshooting Procedures

If the product fails to operate or operates abnormally, check the following:

- Verify proper and correct connections between the switch body and controller.
- Confirm power is applied.
- Ensure the controller is not in manual mode.
- Check voltage levels are normal.
- Confirm main and standby power inputs are not connected in reverse.
- Inspect fuses integrity.
- During debugging, ensure the debug line length is not excessively long and the wire diameter is appropriate.
- Verify correct identification and connection of neutral (N), phase (L), and PE ground lines.

This dual-power ATSE, a high-reliability product using advanced technology, may experience issues. For unresolved faults, contact our after-sales service.

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