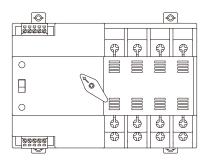
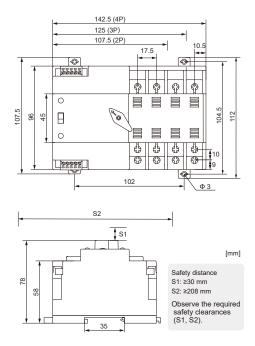
# **Automatic Transfer Switch Equipment (ATSE)** M2R Series



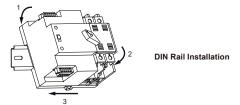
### ▲ Important Notes:

- 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

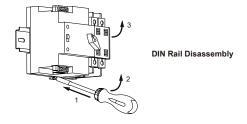
### **Dimensions**



### Installation



1. Insert the upper end of the ATSE base into the DIN rail. 2. Push the lower end of the ATSE base into the DIN rail until the snap fastener locks securely



- 1. Insert a screwdriver into the round hole of the DIN rail snap fastener at the bottom of the ATSE.
- 2. Use a screwdriver to pry the DIN rail snap fastener downward.
- 3. Tilt the ATSE upwards and remove it from the DIN rail.

# 0

### **Screw Mounting**

- 1. Pull out the upper and lower snap fasteners located at the bottom of the ATSE.
- 2. Secure the ATSE to the panel with screws.
- · Installation and wiring must be performed by qualified personnel familiar with this manual
- Before installation, check the ATSE for any damage or missing parts. Manually operate the mechanism using the operation handle to verify smooth movement, correct switching of all phases, and the load status of both power sources.
- Ensure the text on the ATSE panel is visible from the front. Contact the manufacturer if the correct mounting orientation cannot be achieved due to wiring or space constraints.
- Install suitable circuit breakers in accordance with IEC 60947-6-1 and the distribution system design to ensure personnel and equipment

# Working Conditions

Mounting Hole (4P)

Main Power Indicator

Standby Power Indicator

Main Power Terminals

Standby Power Terminals

**Product Overview** 

LSP

Composite Terminal Block for Main Power A

Composite Terminal Block for Standby Power B

- Ambient Temperature Range: -5°C to +40°C (24-hour average must not exceed +35°C)
- The altitude should be higher than the installation site and not exceed 2000 meters

3 Manual / Automatic Selector Switch

Manual Rotary Switch

Load Terminals

- Operating Humidity: Up to 50% at +40°C; up to 90% at +25°C (condensation prevention required)
- Contamination Level: Level 3

Important **Notes** 

· Mounting Orientation: The ATSE can be installed vertically in cabinets.

# L1 L2 L3 N

- Manual / Automatic Operation: Electric (automatic) operation ensures reliable switching. Manual operation may cause contact wear and unstable performance due to variations in operator speed. Switch to manual mode only after power is disconnected and maintenance is completed. Keep the switch in automatic mode during normal operation and return to automatic mode promptly after any manual operation.
- Control Circuit TSE: The TSE is instantly energized during transfer. If internal switches malfunction after transfer, the control coil may be damaged. The coil operates reliably within 85%-110% of its rated voltage: insufficient voltage can cause overheating and failure. Ensure a stable power supply to avoid coil damage.

### Maintenance, Inspection, and Storage

Maintenance and inspection must be performed by qualified personnel after disconnecting all power supplies. The first inspection should be completed within 6 months of commissioning, and at least once per year thereafter. In harsh environments, increase inspection frequency

Key tasks include removing dust and debris, checking contact parts for damage, discoloration, or burn marks, and measuring contact resistance if necessary.

If the ATSE is damp or idle for an extended period, dry it thoroughly and measure insulation resistance with a 500V megohmmeter (minimum 10 MΩ).

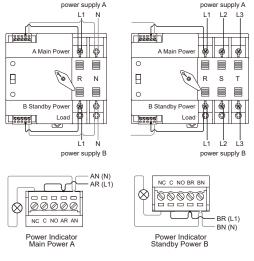
Store the ATSE in a clean, dry environment, protected from mechanical

### Wenzhou Arrester Electric Co., Ltd.

5th FL, Bldg 2, No. 888 Liujiang Road, Liushi, Yueging 325604 Zhejiang, China Email: sales@lsp.global Website: https://lsp.global



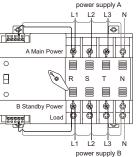
### Wiring Instructions







 Connect the load to the lower terminals on the backup power side using stepped wiring. Remove the isolation board before wiring, connect the load, reinstall the board, and ensure proper alignment. It is recommended to connect the load before wiring the backup power



- . Connect the phase (AR) and neutral (AN) to the main power input terminals (mandatory)
- Connect the phase (BR) and neutral (BN) to the backup power input terminals (mandatory)
- . The power indication signal uses a dry contact output; the generator signal is taken from the common (C) and normally closed (NC)
- Use copper wires with a cross-sectional area of at least 2.0 mm<sup>2</sup>, and keep control circuit wiring as short as possible

## Safe Operating Limits

- · Do not operate the device at control voltages below:
- 190 V (for models with Ue: AC 220 V, 50/60 Hz) • 95 V (for models with Ue: AC 110 V, 50/60 Hz)
- Operation below these limits may cause overheating and permanent damage.