

## France 12030 P5G-2E

# France 12030 P5G-2E Outdoor Neon Transformer User Manual

Model: 12030 P5G-2E

## 1. IMPORTANT SAFETY INFORMATION

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This manual contains critical safety instructions for the installation, operation, and maintenance of the France 12030 P5G-2E Outdoor Neon Transformer. Read all instructions thoroughly before installation or use. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **High Voltage Warning:** This device operates at 12000 volts. Installation and servicing must be performed by qualified personnel only.
- **Grounding:** Ensure proper grounding in compliance with all local and national electrical codes, including UL2161 and NEC requirements.
- **Outdoor Use:** This transformer is designed for outdoor use. Ensure all connections are weather-sealed and protected from moisture.
- **Power Disconnection:** Always disconnect power at the circuit breaker before installing, servicing, or performing any maintenance on the transformer or connected neon signage.
- **Secondary Circuit Ground Fault Protection (SCGFP):** The unit is equipped with SCGFP which disables the unit upon detection of arcs to ground. Do not bypass or tamper with this safety feature.

## 2. PRODUCT OVERVIEW

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The France 12030 P5G-2E is a robust, outdoor-rated ferromagnetic neon transformer designed for reliable operation of neon signage. It features a 120-volt input and provides a 12000-volt, 30mA output. Key features include:

- **Secondary Circuit Ground Fault Protection (SCGFP):** Automatically disables the unit if an arc to ground is detected, enhancing safety and compliance with UL2161 and NEC.
- **Bypass Feature:** Allows temporary override of the SCGFP for up to 30 minutes, aiding in troubleshooting ground faults and primary wiring issues.
- **Diagnostic Circuits:** Integrated LEDs provide visual indicators for service requirements, simplifying troubleshooting.



- Verify correct polarity and secure all connections.

### 3. Secondary Wiring (12000V Output):

- Connect the high-voltage output leads to the neon tubing electrodes.
- Use appropriate high-voltage wiring and insulators.
- Ensure all high-voltage connections are properly insulated and protected from environmental factors.

4. **Grounding:** Establish a reliable earth ground connection to the transformer's grounding terminal. This is crucial for the proper function of the SCGFP and overall safety.

5. **Weather Protection:** As an outdoor transformer, ensure all conduit entries and wiring connections are sealed against moisture ingress.

## 4. OPERATION

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Once properly installed and wired, the France 12030 P5G-2E transformer operates automatically when power is supplied.

- **Power On:** Restore power to the circuit. The neon sign should illuminate.
- **SCGFP Activation:** If the SCGFP detects a ground fault, the transformer will shut down. Refer to the Diagnostic Circuits section for troubleshooting.
- **Bypass Feature:** To temporarily override the SCGFP for diagnostic purposes (up to 30 minutes), activate the bypass feature as per specific instructions provided on the unit or by the manufacturer. This feature is for troubleshooting only and should not be used for continuous operation with a fault present.
- **Flashing/Dimming:** This transformer is compatible with external flashing or dimming controls. Consult the specific instructions for your flashing/dimming device for proper integration.

## 5. MAINTENANCE

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The France 12030 P5G-2E transformer is designed for minimal maintenance. However, periodic inspection is recommended to ensure continued safe and efficient operation.

- **Visual Inspection:** Periodically inspect the transformer and its wiring for any signs of damage, corrosion, or loose connections.
- **Cleaning:** Keep the exterior of the transformer clean and free of debris. Do not use abrasive cleaners or solvents. Ensure ventilation openings are clear.
- **Professional Check:** For any concerns or suspected issues, contact a qualified technician for inspection and service.

## 6. TROUBLESHOOTING

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If your neon sign is not operating correctly, follow these troubleshooting steps. Always disconnect power before inspecting wiring.

- **No Illumination:**
  - Check the primary power supply (120V) to ensure it is active.
  - Inspect the primary wiring connections for looseness or damage.
  - Check the circuit breaker for the transformer's circuit.
- **Transformer Shuts Down (SCGFP Activated):**

- Observe the diagnostic LEDs on the transformer for fault indication.
  - A ground fault in the secondary circuit (neon tubing, high-voltage wiring) is likely.
  - Use the Bypass Feature (for up to 30 minutes) to help isolate the fault. If the sign illuminates during bypass, the fault is in the secondary circuit.
  - Inspect neon tubing for cracks, broken electrodes, or moisture ingress.
  - Check high-voltage wiring and insulators for damage or improper installation.
  - Contact a qualified neon sign technician for repair of secondary circuit faults.
- **Diagnostic LEDs:** Refer to the specific LED indicator guide on the transformer unit itself for detailed fault codes and their meanings.

## 7. SPECIFICATIONS

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Feature	Specification
Model Number	12030 P5G-2E
Manufacturer	France
Input Voltage	120 Volts
Output Voltage (Secondary KV)	12000 Volts
Output Current (Secondary MA)	30 mA
Transformer Type	Ferromagnetic
Style	Outdoor
Mounting Type	Surface Mount
Current Rating	0.5 Amps (Primary)
Item Weight	21 Pounds
Product Dimensions	6.54 x 7.32 x 11.97 inches
Compliance	UL (UL2161, NEC requirements)

## 8. WARRANTY AND SUPPORT

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For specific warranty information regarding your France 12030 P5G-2E Outdoor Neon Transformer, please refer to the documentation provided at the time of purchase or contact the manufacturer directly.

For technical support or service inquiries, please contact your authorized France product dealer or the manufacturer's customer service department.

- **Manufacturer:** France
- **Contact Information:** Refer to the manufacturer's official website or product packaging for the most current contact details.



