

**NEMA 4X RAIN TIGHT THERMOSTAT
INSTALLATION AND OPERATING INSTRUCTIONS**

**INSTRUCCIONES DE INSTALACION Y OPERACION
DEL THERMOSTATO A PRUEBA DE LLUVIA NEMA 4X**

**THERMOSTAT NEMA 4X ÉTANCHE AUX INTEMPÉRIES
INSTRUCTION D'INSTALLATION ET D'UTILISATION**

! WARNING

To prevent overheating or fire, use this control as an operating or regulating thermostat. ALWAYS USE A BACKUP CONTROL OR ALARM if a control failure could cause the controlled appliance to overheat or could cause a fire.

Where thermostat is capable of cycling directly between heating and cooling loads, failure to provide a load transfer switch will result in thermostat failure.

Do not install, use or operate if product appears damaged, the enclosure is cracked or broken or if the sensor has been bent, crimped or is dirty.

APPROPRIATE APPLICATION

This thermostat has been tested by CSA and Underwriters Laboratories Inc. (UL), meets the requirements for NEMA 4X equipment and is suitable for use under the National Electrical Code (NEC), Article 547-7, when used with appropriate watertight connectors (not included).

INSTALLATION

! WARNING

To avoid electrical shock or damage to equipment, disconnect all power before installing or servicing.

To avoid potential fire and/or explosion, do not use in potentially flammable or explosive atmospheres.

Installation must be made by a trained, qualified service person in accordance with the National Electrical Code (NEC) and all applicable local codes and ordinances. Installation should meet all applicable national, state and local codes. Refer to the appropriate wiring diagram included. Locate the thermostat (local sensing models) or sensing bulb (remote sensing models) for optimum temperature sensing of the controlled space. Thermostat operation will be affected by unusual heat or cold, such as direct sunlight, near windows or doors or on outside walls.

All fittings and materials used for the installation should be approved, suitable and installed properly for the intended application. For water tightness, the cord seal or conduit hub should be UL listed and marked 4X. The conduit hub is to be tightened onto the conduit before installing in the enclosure.

Where applicable, remove knockout(s) by impacting near the inside edge of the knockout to be removed. **IMPORTANT: Do not impact, dent or use the sensor for support. This will cause calibration and/or thermostat failure.**

! WARNING

READ INSTRUCTION CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THIS THERMOSTAT. Failure to observe safety information and comply with instructions could result in **PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.** Retain these instructions for future reference. This product, when installed, will be part of an engineered system whose specifications and performance characteristics are not designed or controlled by PECO. You must review your application and national and local codes to assure that your installation will be functional and safe.

Even though this thermostat is sealed, water or dust could enter through improperly sealed wiring. A drip loop should be provided to prevent water and other liquids from entering the thermostat housing. The cord or conduit connections to the enclosure must be water and dust tight. The cover must be tightened securely to compress the gasket and provide a watertight seal. Use only screws provided. Do not over-tighten.

Maximum sensing element withstand temperature is 35°F (20°C) above the highest temperature setting. Maximum temperature for the plastic enclosure is 140°F 60°C.

! CAUTION

For use in wet or humid environments or where water tightness is required, failure to use suitable watertight connections and suitable drip loop could allow water to enter the enclosure resulting in thermostat failure.

Use copper wire only. Insulate or wire-nut all unused leads.

Use the grounding provisions provided for connection to the line ground and equipment ground wire.

OPERATION AND CHECK-OUT

Allow one hour or necessary amount of time for the thermostat and system to stabilize for normal operation. This thermostat is factory calibrated and requires no correction on site.

TO CHECK OPERATION OF HEATING SYSTEMS:

1. Disconnect power.
2. Place the heat/cool selector switch, if applicable, in the heat position.
3. Adjust the thermostat set point to at least 10°F (5°C) below the temperature of the controlled space.
4. Restore power.
5. Slowly adjust the thermostat knob to raise the set point. When the set point reaches the approximate temperature of the controlled space, the heating equipment should start.

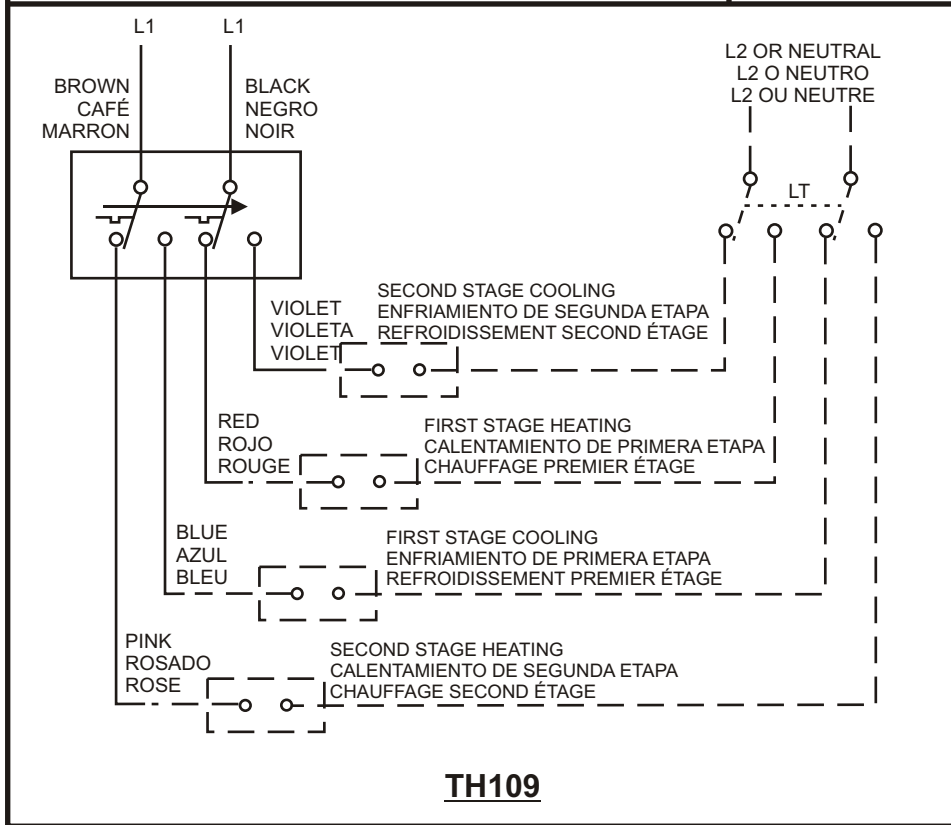
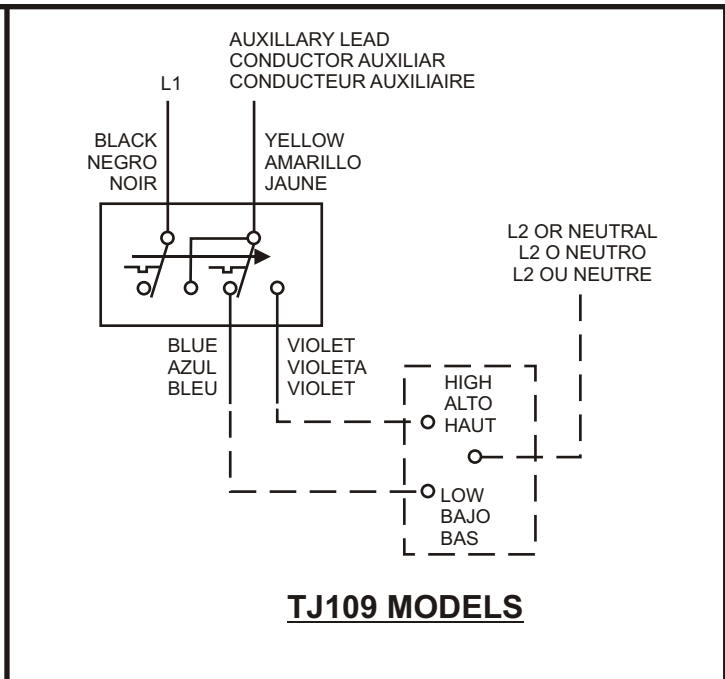
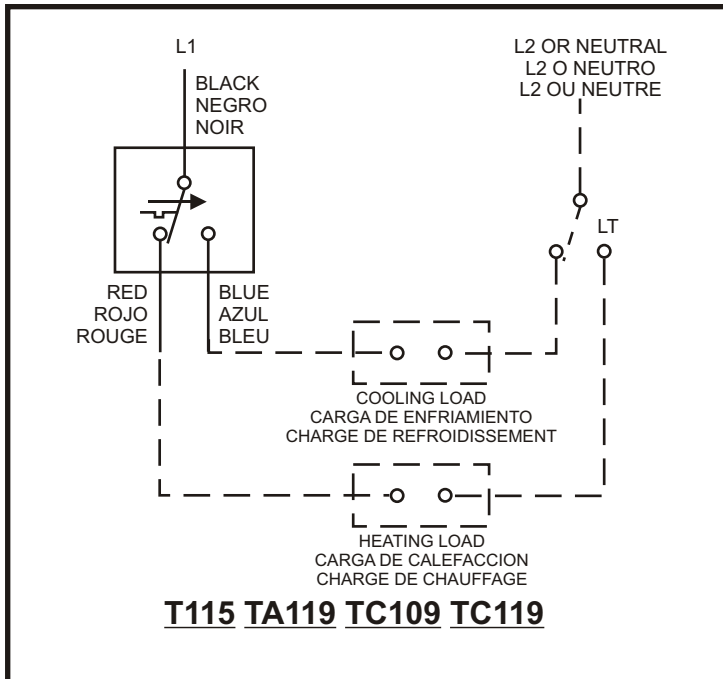
TO CHECK OPERATION OF COOLING SYSTEMS:

1. Disconnect power.
2. Place the heat/cool selector switch, if applicable, in the cool position.
3. Adjust the thermostat set point to at least 10°F (5°C) above the temperature of the controlled space.
4. Restore power.
5. Slowly adjust the thermostat knob to lower the set point. When the set point reaches the approximate temperature of the controlled space, the cooling equipment should start.

LIMITED WARRANTY

1. **WARRANTY COVERAGE.** PECO warrants to the original user of its products that the products will, at the date of initial purchase, meet the applicable specification for such products and will be free from any defects in materials or manufacture under normal use for 18 months after date of manufacture.
2. **DISCLAIMER OF WARRANTY OF PRODUCT SUITABILITY.** PECO makes no warranty to the purchaser or any third party that its products are suitable for a particular application or design. Many states and localities have differing codes or regulations governing the installation and/or use of PECO' products. PECO cannot guarantee compliance with such regulations; purchaser is solely responsible for safe and correct installation and use of the product and for compliance with applicable codes and regulations.
3. **EXCLUSION OF IMPLIED WARRANTIES.** This warranty is the only warranty applicable to this product and excludes all other warranties, including any WARRANTY OF MERCHANTABILITY, any warranty of fitness for a particular purpose, and any implied warranties otherwise arising from course of dealing or usage of trade, except where the product purchased is subject to consumer product warranty laws, in which case ANY APPLICABLE IMPLIED WARRANTIES ARE LIMITED TO 18 MONTHS, or such shorter period as permitted or required under applicable law. Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
4. **REMEDIES FOR NONCONFORMITY.** If the product purchased does not conform to the applicable warranty, PECO will provide, at its option and in accordance with the procedures in the following section, one of the following remedies: (1) repair of the nonconforming product, (2) replacement with a conforming product, (3) refund of the original purchase price. THESE REMEDIES SHALL BE THE EXCLUSIVE AND SOLE REMEDY for any breach of warranty.
5. **TO OBTAIN WARRANTY SERVICE.** For any product believed to be defective within the limited warranty period, first write or call dealer from whom product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to PECO at the address below, giving dealer's name, address, date and number of dealer's invoice, and describe the nature of the defect.
6. **LIMITATION OF LIABILITY.** PECO WILL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES resulting from any defect in the product purchased. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.
Manufactured by PECO, Inc.
4709 SE 18th Avenue - Portland, OR 97202 - USA
P.O. Box 82189 - Portland, OR 97282 - USA



LEGEND
LEYENDA
LÉGENDE

—————
THERMOSTAT WIRING
CABLEADO DEL TERMOSTATO
CABLAGE DU THERMOSTAT

- - - - -
FIELD WIRING
CABLEADO EN EL TERRENO
CABLAGE SUR PLACE

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INDICATES SEQUENCE ON
TEMPERATURE RISE
INDICA LA SECUENCIA CUANDO LA
TEMPERATURA SE
INDIQUE LA SE SÉQUENCE DE LA MONTÉE
DE TEMPÉRATURE

LT
LOAD TRANSFER SWITCH
INTERRUPTOR DE TRANSFERENCIA DE CARGA
INTERRUPTEUR DE TRANSFERT DE CHARGE

WARNING
ADVERTENCIA
AVERTISSEMENT

-TO INSURE WATER TIGHTNESS, THE ENCLOSED GASKET MUST BE INSTALLED UNDER THE WIRING CAP.

-PARA ASEGURAR LA ESTANQUIDAD AL AGUA, LA JUNTA SUMINISTRADA DEBERÁ INSTALARSE DEBAJO DEL CASQUETE DEL ALAMBRADO.

-POUR ASSURER L'ÉTANCHÉITÉ À L'EAU, LE JOINT STATIQUE (FOURNI) DOIT ÊTRE INSTALLÉ SOUS LE CULOT POUR CÂBLAGE.

