

TF115P-002 RAINIGHT NEMA 4X THERMOSTAT

The PECO® TF115P-002 is a robust commercial thermostat—fully assembled, and ready to use — for plug-in temperature control of ventilation in greenhouses, warehouses (industrial), and/or animal confinement facilities. The rugged NEMA® 4X enclosure can be used for cooling or heating in indoor or outdoor applications. Note: For heating applications, see Wiring Diagram on page 2.

The PECO® TF115P-002 control, which is housed in the raintight gray NEMA 4X plastic enclosure, uses a stainless steel coil as a temperature-sensing bulb.

Maximum sensing element withstand temperature is 145°F (62°C). Maximum temperature for the plastic enclosure is 140°F (60°C).

INSTALLATION INSTRUCTIONS

Locate the thermostat about four feet (1.2 m) above the floor on a wall in an area with good ventilation and an average temperature, where it will be responsive to changes in room temperature. The unit is to be assembled with cover, gasket, and four (4) screws installed and fully tightened (see Fig. 1). The TF115P-002 enclosure may be mounted onto a wall or panel surface with #8 or #10 screws.

- With the plug-in inserted to 120 VAC outlet, a fan may be plugged into the series plug (see Fig. 2) to provide temperature-related ventilation
- Power cord is attached to internal leads; default wiring is set for cooling.
- Adjustable temperature range is 40° to 110° F (4° to 43° C)
- Temperature Dial: One dial division equals 2°F (1.1° C) (See Fig. 1)
- Cord seal must remain tightened around power cord to maintain rain-tight seal; if removed, the locking nut must be held stationary while gland nut is fully tightened (see Fig 1, 2)

CAUTION! USE 120 VAC ONLY!

TF115P-002 FRONT PANEL AND SIDE REFERENCE

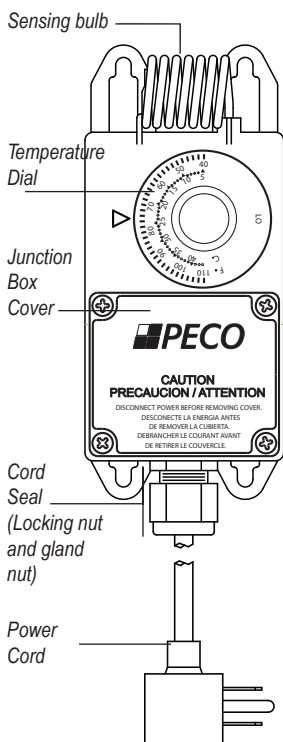


Figure 1. TF115P-002. Frontal view

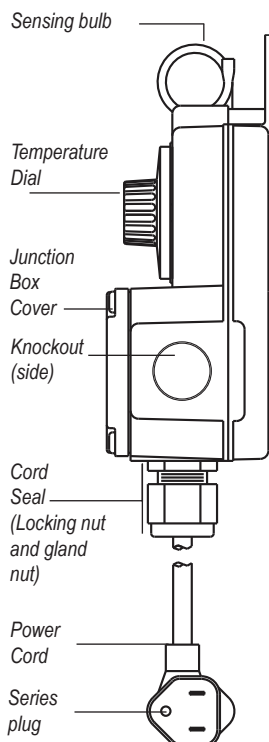


Figure 2. TF115P-002. Side view

WARNING

- READ THESE INSTRUCTIONS 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.
- 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.
- 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.
- To avoid potential fire and/or explosion, do not use in potentially flammable or explosive atmospheres.
- IMPORTANT: Do not impact, dent or use the sensor for support. This will cause calibration and/or thermostat failure.

PRODUCT SPECIFICATIONS

VAC	INDUCTIVE		RESISTIVE AMPS	PILOT DUTY
	FLA	LRA		
120	4.4	26.4	13	125 VA

Temperature Control Range: 40° to 110° F (4° to 43° C)
Differential: 3° F (1.7° C)
Maximum Ambient Temperature: 140°F (60°C)
Dimensions: 2.80"(L) X 2.5" (W) X 7" (H) inches
Line cord: 6 feet, 7-wire, double insulated, 16 AWG,
U.L. Listed, Plug: 3-pole male/female,
120 VAC plug style, American (grounded)
Weight: 0.88 lbs

OPERATION AND CHECKOUT

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. By default, the TF115P-002 thermostat is wired for cooling operation.

To Check Operation:

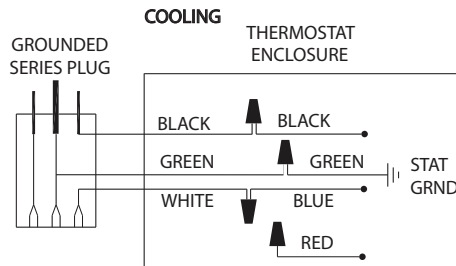
1. Set Temperature Dial to desired temperature setpoint.
2. Plug the controlled device (e.g., fan) into the series plug (female side of TF115P plug).
3. Plug the TF115P power cord into the wall outlet. Note: Outlet must be 120 VAC.
4. To start operation, rotate Temperature Dial. Wait for the unit to turn on.
Note: For units that are wired for Cooling/Ventilation operation (default) rotate the Dial at least five (5) degrees below the current ambient temperature. For units that are rewired for Heating operation, rotate the Dial at least five (5) degrees above the current ambient temperature.
5. Return Temperature Dial to the desired temperature setpoint. (The TF115P will automatically control to desired temperature).

WIRING DIAGRAMS

COOLING (DEFAULT) OPERATION

By default, the TF115P-002 is wired as a cooling control (see Fig. 3).

Figure 3.
TF115P-002.
Wiring for
COOLING.



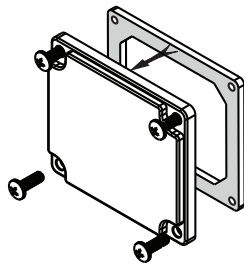
HEATING OPERATION



- **WARNING:** Disconnect power before changing wiring.

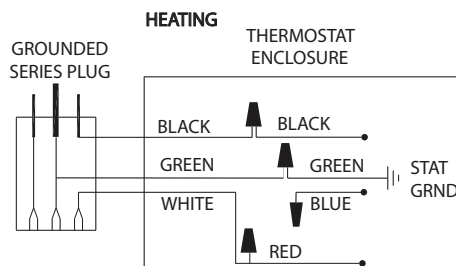
To change the operation from a cooling control to a heating control, proceed with the following steps.

Figure 4.
TF115P-002
Junction Box
removed.



1. Remove TF115P plug from the outlet to disconnect power.
2. Unscrew four screws and remove the junction box cover (see Fig. 4).
3. Disconnect the blue and white wires by removing the wirenut.
4. Connect the red and white wires together with the wirenut (see Fig. 5).

Figure 5.
TF115P-002.
Wiring for
HEATING



5. Twist the wirenut on the blue wire only.
6. Re-install the junction box cover and tighten four screws.



WARNING

TO ENSURE WATER TIGHTNESS, THE GASKET MUST BE RE-INSTALLED UNDER THE JUNCTION BOX COVER.

LIMITED WARRANTY

1. **WARRANTY COVERAGE.** PECO Automation and Controls 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 Automation and Controls 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 Automation and Controls' products. PECO Automation and Controls 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 Automation and Controls 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 Automation and Controls 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 Automation and Controls 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 Mfg. Co., Inc.
4784 SE 17th Avenue - Portland, OR 97202 - USA
P.O. Box 82189 - Portland, OR 97282 - USA
(PECO Automation and Controls is a division of PECO Mfg. Co., Inc.)

Note: Even though this thermostat is sealed, water or dust may enter through improperly sealed wiring. The cover must be tightened securely to compress the gasket and provide a watertight seal. Use only screws provided. Do not over-tighten.