



INSTALLATION INSTRUCTIONS

3/4" AND 1" GURU PC® RAIL PASSENGER CAR FREEZE PROTECTION DRAIN VALVES

1. Make sure to install valve with correct flow direction as marked on valve body.
2. Use a pipe thread sealant at connection and follow manufacturers' recommendations.
3. If discharge piping from valve is required, do not use reduced size piping or tubing since this becomes a serious freeze hazard that can freeze up even as the valve operates normally. Non-metallic discharge pipe is preferred and as large a size as possible.
4. Do not install valve near a heat source that will still be hot or warm when valve is expected to operate. Even reservoirs, tanks, and large objects can stay well above ambient temperature for a prolonged time and can delay valve opening while smaller piping may be in danger of freezing.
5. When installing heater to valve, make sure it "snaps" securely over the actuator shoulder to hold heater in place.
6. The GURU PC® heater should be connected to a circuit protected by a circuit breaker, or similar fault device. This circuit should only turn on when car heat is required, such as typical floor heat or car heat circuits which will hold the valve closed until the car power is off. After valve activation, when the car power is turned back on, the heater quickly closes the valve to allow refilling of water system in a timely manner without waiting for the entire passenger car to heat up.
7. When using a strain relief, the minimum cable length is 2-3/4" from heater to strain relief; *see sheet 2 for details.*
8. Do NOT remove installation label or production tag from assembly; *see sheet 2 for details.*
9. When removing the GURU PC® heater, lift the "T" handle straight up and off the actuator.

CORRECT GRIP
FOR REMOVAL
LIFT
STRAIGHT UP



INCORRECT GRIP
FOR REMOVAL
MAY DAMAGE
HEATER



System Design Note: Valves are typically installed inside equipment cabinets or between the inner and outer car body. If a valve is to be installed outside or underneath the car, provide proper protection (e.g. skid plate) to avoid damage from impacts of roadside debris. All car designs should be properly validated and tested.

MAINTENANCE

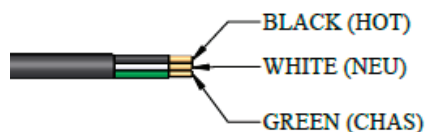
1. Test valve annually prior to freezing weather by holding ice on actuator or applying "freeze spray" to actuator. Confirm valve opening and also observe that valve closes tightly and does not leak.
2. When valve needs to be replaced, factory offers "repair kit" which allows replacing all parts (except valve body) without removing valve body from in-line. Consult factory for information.

120VAC/74VDC Wire Hook Up

Maximum Current = .185A

Maximum Wattage = 22W

Typical Wattage = 5.5W

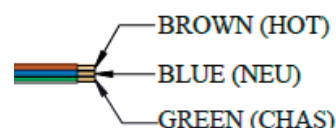


230 VAC Wire Hook Up

Maximum Current = .177A

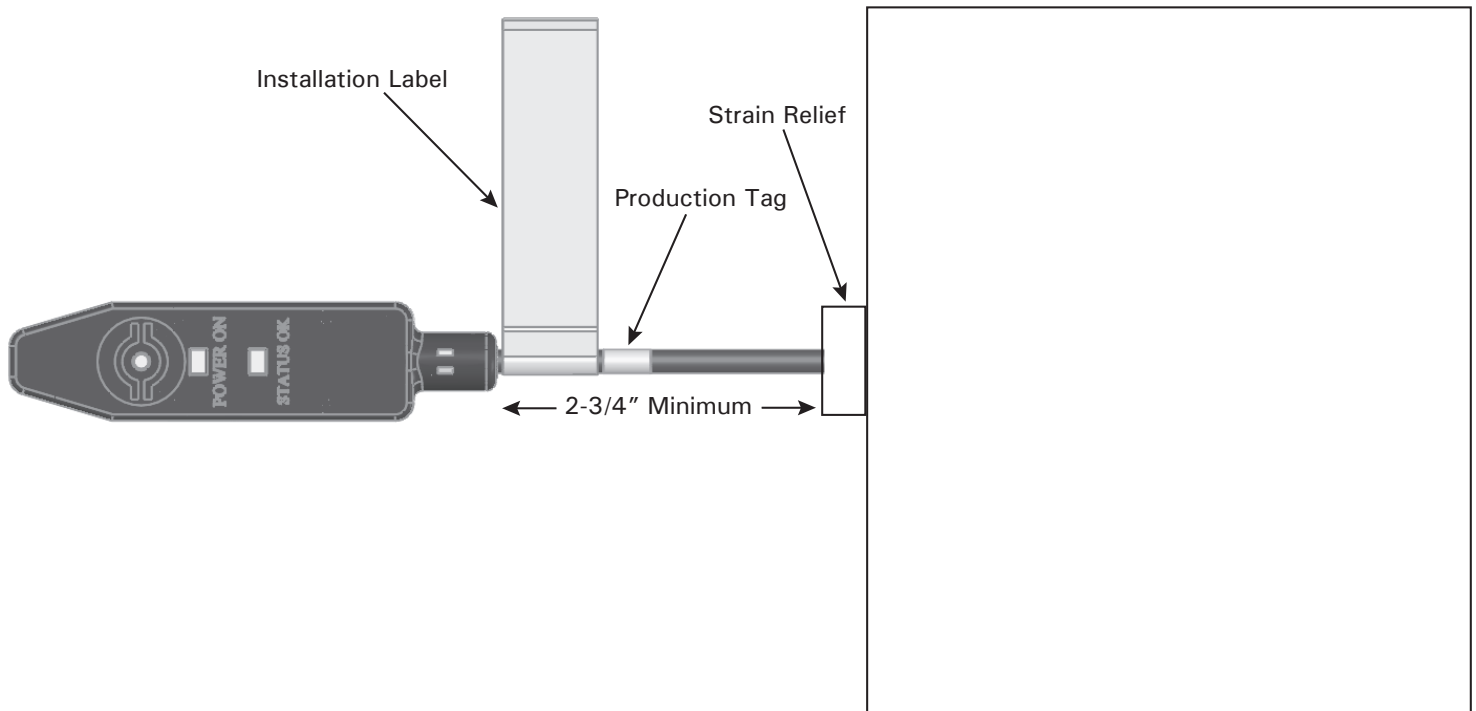
Maximum Wattage = 41W

Typical Wattage = 10W



GURU PC® HEATER

1. When using a strain relief, the minimum cable length is 2-3/4" from heater to strain relief as show below.



WARNING: This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to www.P65Warnings.ca.gov

Warranty information disclosed at www.thermomegatech.com/terms-conditions/

GURUPC_IMI
REV: 9/30/2020