INSTALLATION INSTRUCTIONS
¾" 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.

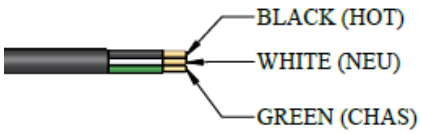
MAINTENANCE

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. To help prevent nuisance dumping ThermOmegaTech® recommends replacing the cartridge assembly approximately every 2 years if sluggish or marginal closing performance from testing in Note 1 is witnessed. We offer a replacement cartridge kit to assist ease of replacement without removal of the Tee Body. Consult factory for information.

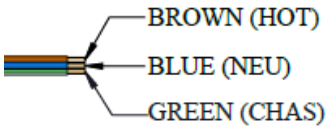
GURU PC® HEATER

1. Wire hookup specifications.

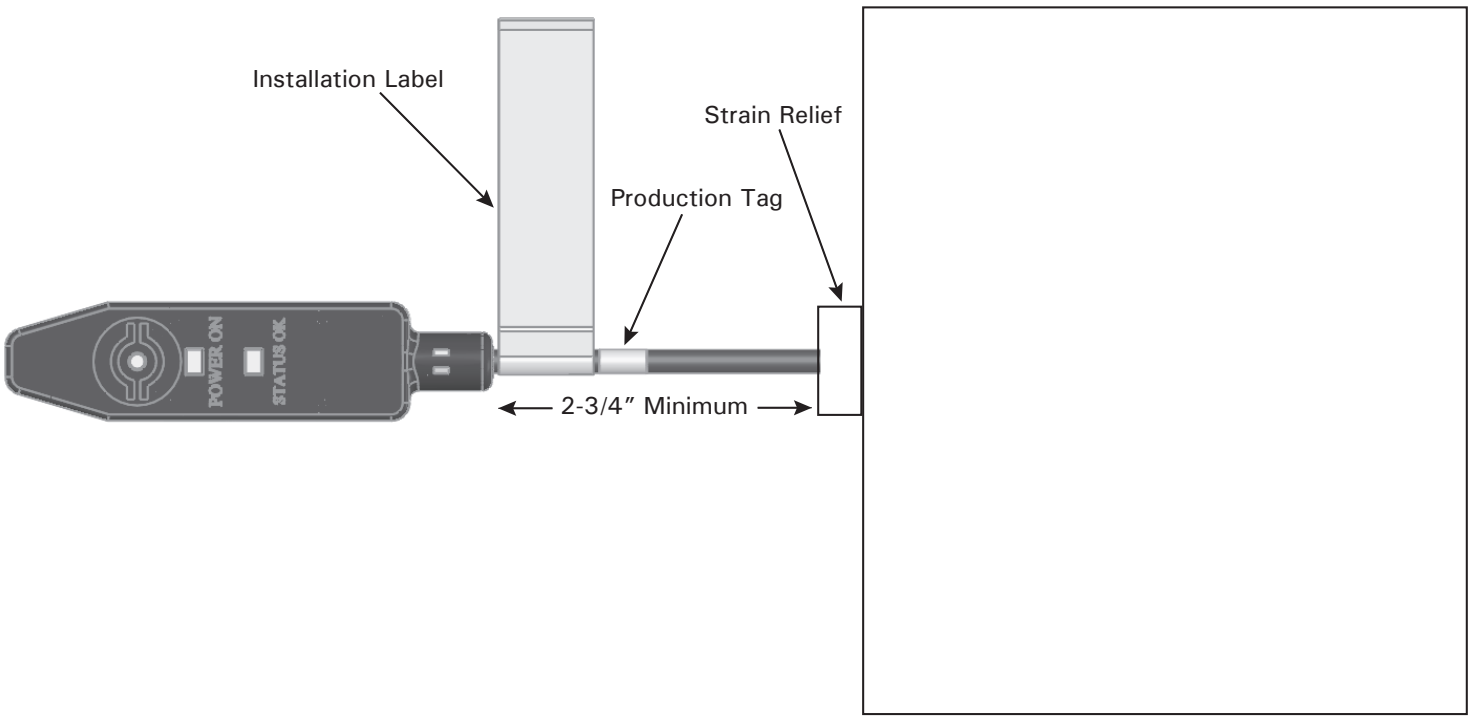
120VAC/74VDC Wire Hook Up
Maximum Current = .185A
Maximum Wattage = 22W
Typical Wattage = 5.5W



230 VAC Wire Hook Up
Maximum Current = .177A
Maximum Wattage = 41W
Typical Wattage = 10W



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



Proper Use: Use ThermOmegaTech® products only as specified to ensure performance, safety, and regulatory compliance.
No Modifications: Do not modify ThermOmegaTech® products, as changes may void warranties and violate regulations (e.g., RoHS, REACH).
Proper Disposal: Dispose of end-of-life products per local hazardous substance regulations; contact ThermOmegaTech® or recycling facilities for

⚠ 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/

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