

## 1" GURU PC® & HEATER ASSEMBLY

PASSENGER CAR FREEZE PROTECTION



### BENEFITS

- Eliminates costly freeze damage in passenger cars
- Thermostatic valve - no outside power required
- High flow design for rapid draining
- Easy installation
- Minimal maintenance required
- NSF 61/372 Certified

### DESIGN FEATURES

- Low lead brass/bronze
- Self-operating valve
- Dual port seals
- No power or air required when used without heater
- Inline serviceable

### OPERATION

Freezing conditions which put water tanks and piping at risk for freeze damage occur when the car heat is turned off for switching locomotives or even brief layovers. The **1" GURU PC®** valve is self-contained and drains water bearing systems automatically before freeze damage can occur by monitoring ambient temperatures. Since the valve is completely mechanical, no electrical or air connections are required however an electric heater assembly is available to quickly heat up the valve after a dump. When used with the heater assembly, we provide a 5 foot power cable and wiring diagram for hard wiring or various plugs of your choice.

### HEATER ASSEMBLY

Valves placed in equipment cabinets tend to be colder than the heated passenger areas and take longer to heat back up when the car heat is restored. This can significantly delay the ability to refill the water systems and get the car back into service after a valve activation. The heater assembly causes the valve to heat up and close quickly. This allows refilling of the water system and getting the passenger car back into service as quickly as possible.



### DESIGN FEATURES

- 2 LED lights for easy visual status check of power and heater
- Fully encapsulated PC board
- Self limiting heater
- No moving parts to wear
- Minimal electrical noise
- Easy installation/removal with one hand or gloves
- Heaters available: 120VAC/74VDC & 230 VAC

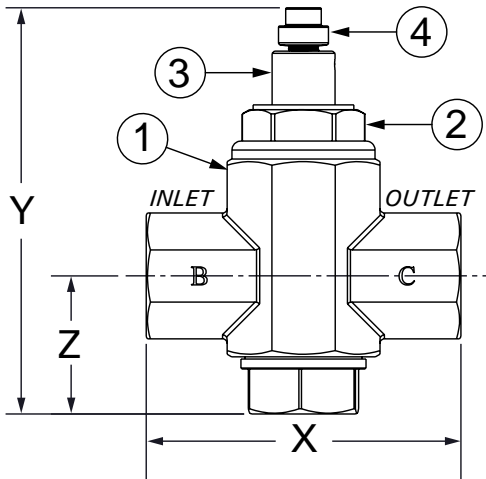


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## PARTS & MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	VALVE BODY	Low lead Bronze
2	VALVE CAP	Brass
3	INSULATOR BUSHING	Acetal Plastic
4	THERMAL ACTUATOR	Brass

## DIMENSIONS & CAPACITIES

END CONNECTIONS	X		Y		Z		Weight		Cv	Maximum Operating Pressure	Full Open Temperature	Closing Temperature	Operating/Storage Temperature Range
	in	cm	in	cm	in	cm	lb	kg					
1" NPT	4-3/8	11.1	5-5/8	14.3	1-7/8	4.8	4.1	1.9	6.3	120 PSIG (8.3 BAR)	35°F (1.7°C)	45°F (7°C)	-67°F - 160°F (-55°C - 71°C)

## ORDERING

Part Number	Description
451-000000-035	1" GURU® PC <sup>3</sup>
455-000000-060	120VAC/74VDC with plug and 5ft cord <sup>1,2</sup>
455-010000-060	120VAC/74VDC with plain end and 5ft cord <sup>1,2</sup>
456-000000-060	230VAC with Type-F plug and 5ft cord <sup>1,2</sup>
456-010000-060	230VAC with plain end and 5ft cord <sup>1,2</sup>

## NOTES

1. Other wiring options available
2. Complies with fire safety requirements under Title 49, Chapter II, Part 238.103
3. NSF 61/372 Certified
4. Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)



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Because of continuous improvements, ThermOmegaTech®, Inc. reserves the right to change the design and specifications without notice