Control Types 63C20 & 63C40 - Water Temperature Sensing (Radiant) Controls **Installation & Operating Instructions** Type 63C20 and 63C40 controls may be **APPLICATION** used with any Ammark thermostatic radiator valve. The control is supplied with a bulb holder and straps to attach the sensing bulb and holder to a pipe. The sensing bulb may also be installed inside a well. **TYPICAL** Ammark Control Types 63C20 and **INSTALLATIONS** 63C40 feature extended temperature ranges and pipe contact sensors for Type 63C20 & 63C40 applications which include temperature mixing, water to water heat exchange and water to air heat exchange. Heating Zone Sensor Mixing application in radiant heating system Valve and supply should be one dimension larger than leg from return Valve and 立 Control Type 63C20 Water to water heat exchanger Water to air heat exchange Sensor may also Valve and be installed in Control Type 63C40. well in water storage tank.

CAPACITIES

Max System Temperature: 250 °F

Max Operating Pressure: 200 psig

Max Test Pressure: 725 psig

Max Differentil Pressure: 40 Ft. W.G.

Adjustment Range - 63C20: 68 - 122 °F

Adjustment Range - 63C40: 104 - 158 °F

Valve Size $1\frac{1}{2}$ $3\frac{4}{4}$ 1Valve Capacity (C_v) 1.2 2.1 4.9 C_v is the flow rate, in gpm, with 1 psi pressure drop across the valve.

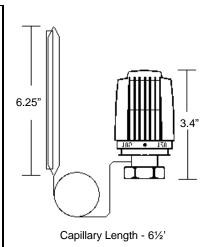
Sensor

Valve and Control Type

Control Types 63C20 & 63C40 - Water Temperature Sensing (Radiant) Controls Installation & Operating Instructions (pg 2)



INSTALLATION DIMENSIONS



	Part #	<u>Size</u>	<u>A</u>	<u>B</u>	<u>C-63x0</u>
C C	61.5	1/2	31/4		41/2
	61.75	3/4	4	_	41/2
	61.100	1	5		5
C B B	60.5	1/2	2	1	41/2
	60.75	3/4	21/2	1	41/2
	60.100	1	3	1	43/4
C A B	67.5	1/2	21/4	11/2	43/4
	67.75	3/4	21/2	11/2	43/4
	67.100	1	3	11/2	51/4

All dimensions / sizes are in inches. Dimension 'A' is with NPT tailpiece. Dimension 'C' indicates installation clearance for each control/valve combination (distance from center of pipe to the end of the control).

INSTALLATION

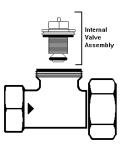
Each Ammark Type 63Cx0 Control is supplied with a sensor bulb holder and two cable ties.

To install the Type 63x0 Control:

- Turn the adjustment dial to the maximum. Press the control on the valve stem and tighten the control's connecting nut.
- Route the capillary to the sensor installation position. Store extra capillary by winding it around the neck of the control above the connecting nut.
- Attach the sensor and bulb holder to a of pipe using the cable ties. The sensor may also be installed in a length of pipe or in a vessel using the optional immersion well (part #TIW).
- Adjust the control's setting to automatically maintain the desired temperature. The control dial's scale displays temperature in degrees F.

MAINTENANCE

When replacing a control which is not functioning, remove the old control from the valve be loosening the connecting ring. If the old control was damaged by leakage from the valve stem, then valve maintenance is required. All seals and moving parts are incorporated into the internal valve assembly (IVA). The IVA may be removed and replaced with an adjustable wrench, or with Ammark tool #ICT to avoid draining the system.



PARTS & ACCESSORIES

	Part #	<u>Description</u>
	IVA	Internal Valve Assembly includes disk, stem and seals. Specify valve size.
Ö	ATC	Anti Theft Collar prevents removal of control from valve. Fits all controls.

Part #	<u>Description</u>
ICT	Tool to remove and install IVA with system under pressure.
TIW	1/2" NPT x 8" immersion well for use with Control Type 6320 or 63C40.