

Model GSW-O ASH Control Description and Installation

Product Description:

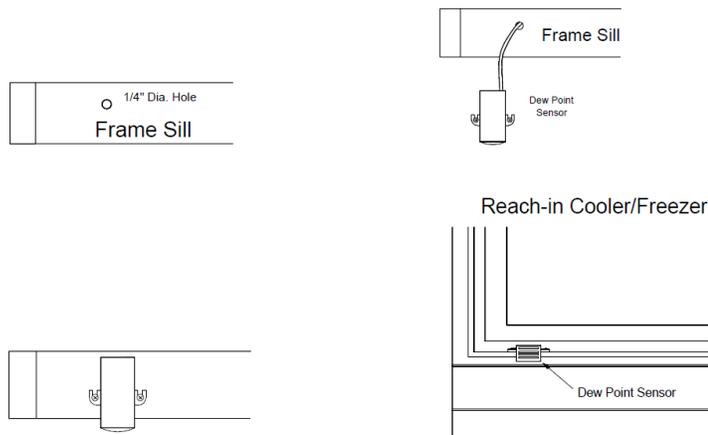
The Model GSW-O is an electronic energy-savings invention designed to smartly control the operation of glass door and frame heaters for walk-in coolers/freezers. Intelligence programmed within the microcontroller of the GSW-O efficiently runs the heater circuit enough to keep condensation from occurring on the door frame and glass without wasting additional energy. An optimized algorithm based on humidity of ambient air efficiently controls the door and frame heaters, only allowing run time when the air is humid enough to require heat. The Model GSW-O can pay for itself within months of installation based upon current costs for electricity. Its compact size and design for easy installation translates into minimum up-front costs and headaches.

Operating ambient temperature	-40°C to 60°C
Shipping and storage temperature	-40°C to 60°C
Control type	Electronically Operated Control
Software Class	A
Overvoltage category	III
Pollution degree	2
Rated impulse voltage	2500 V
Maximum phase to ground voltage of the supply source	150 Vac
Protection against electric shock class	Class II (Intended for mounting internal to equipment)
Environmental	Panel Mount Only for installation internal to end product equipment
Classification of installation and use	Independently Mounted Panel Mount
Supply Connection	External Conductors
Operating Frequency	Continuous

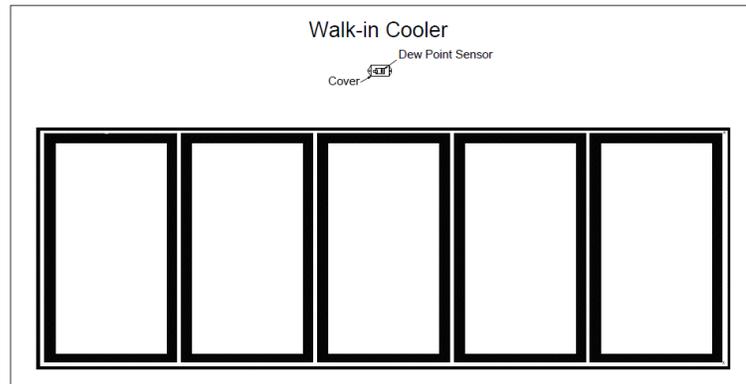
Installation:

1. Locate the unit on a flat surface inside the mullion or within an NEMA rated enclosure suitable for electrical applications. Drill two 7/64" diameter holes at the mounting-hole locations on both end tabs of the unit. Mount the unit using two #6 sheet metal or self-tapping screws.
2. Disconnect the sensor cable from the main unit.

Ledge Mounting the Sensor - Break the mounting tab off the humidity sensor. Locate an appropriate spot on the frame and drill a 1/4" diameter hole from the middle of the frame sill into the wire way area as shown below. Place the reach-in Dew Point housing over the hole so that it sets tightly against the frame sill, and place marks where the mounting ears are located. Drill two 7/64" diameter holes in the center of these marks, feed the Dew Point sensor cable through the 1/4" diameter hole, place the sensor inside the housing so that sensor vents are faced toward the housing vents, and secure the housing to the frame sill using the two black self-tapping screws. Refer to the illustrations below.



Surface Mounting the Sensor - Locate a spot above the center of the door frame, on the wall, to mount the GSW-O's Dew Point sensor. Drill a 1/4" diameter hole through the wall, next to the mounting spot, above or below the cooler, depending upon where the GSW-O is mounted. Run the loose end of the Dew Point sensor cable through the hole until all of the loose cable is on the other side of the wall. Clean the surface of the wall where the sensor is to be mounted and mount it to the wall using a #4 self-tapping screw. Secure the walk-in Dew Point sensor housing using two black self-tapping screws supplied with the unit. Refer to the illustration below.



3. Re-connect the sensor cable to the main unit. This may require drilling 1/4" diameter hole through the sensor mounting surface wall and feeding the cable through the hole back to the main unit.
4. Connect power and heater wires to the quick-connect terminals as follows:
White- Connects to the shared neutral for the power and heater circuit (white wires).
Black- Connects to the incoming line power (black wire).
Red- Connects to the remaining heater wire (usually red).
5. Apply power to unit and make sure that the unit applies power to the heater circuit.

Troubleshooting

If the heater circuit does not energize:

Check the voltage to ensure that it is between 95 to 128 VAC. If there is no AC voltage present, check the fuse or circuit breaker feeding the heater circuit. In the event that the fuse or breaker is blown, recheck your wiring and ensure that the heater circuit does not exceed 10 amps.

Replace the GSW-O if no other issues are found.

If the heater circuit is not running:

Check the wiring to make sure that it is correct and that all connections are tight and secure.

If the heater circuit never turns off:

Check the wiring to make sure that it is correct and ensure that the heater circuit is not drawing more than 10 amps. Make sure the sensor has been properly placed on the door frame.

Replace the GSW-O if no other issues have been found.

If the heater circuit is not running enough and condensation begins to form on the glass:

Rotate the adjustment on the side of GSW-O clockwise, in small increments, until the issue is resolved.

Technical Support

For additional questions and support you may either direct your email to sales@GlassSentry.com, or you may call (888) 780-4827.