

LP-10 Legionella Protect - Installation Instructions

Description of Operation: This control has been specifically designed to dump water from pipework when the water temperature exceeds a preset level. A solenoid valve is automatically opened, dumping water to a drain therefore replenishing the pipework with fresh cool water. When the temperature of the pipework drops to a preset temperature (typically 2 °C lower) the valve closes again. This prevents water stagnation and the potential buildup of Legionella bacteria.

Unpacking: Each control is supplied ready wired with 1.8m lengths of cable for 230v AC power, solenoid valve, and temperature sensor. It is thus 'Plug & Play' and ready to use. A Calibration Certificate is also supplied for the individual sensor and controller.

Sensor: When choosing a section of pipework on which to install the temperature sensor, consider carefully factors that could affect the measured temperature such as nearby heating pipes or cold spots caused by munsen rings and clamps.

When a suitable location has been found, remove the self adhesive tape and fix the sensor in place using as much surface area as possible.

Secure sensor and cable using a couple of cable ties and or tape.

NOTE 1: ensure the sensor and nearby pipework are well lagged with insulation.

NOTE 2: It is the responsibility of the Installer to ensure that the Set Value (in conjunction with the Calibration Certificate) is set to comply with Legionella and or other byelaws.

Installation - control: locate and fix the control box to a wall etc where the display can be seen and adjusted if necessary. Loosen the 4 screws holding the control onto its back box and fix the backbox to a wall on 163 x 113mm centres.

Installation - electrical: connect the RH cable to a suitable 230/240v AC supply fused at 3A.

Installation - plumbing: The solenoid valve may be removed from the cable by unscrewing the retaining screw on the DIN connector. Plumb in the valve downstream noting the arrow on the body of the valve indicating the direction of flow. There should be no restrictions between the valve outlet and the drain.

Commissioning: when the installation is complete, turn on the mains electricity. The controller will go through a self check routine and will eventually display the SV (set value) in orange and the PV (process value) above it in green.

The parameters have been preset to open the valve at 19 °C and to close the valve again once the temperature has dropped to 17 °C. The blue 'Cooling' led indicates when the valve is energised.

Changing parameters: to change the SV, press the **SET** key, use the **>A/M** key to select (brighten) the required digit. Use the **↑ & ↓** keys to change the value then press the **SET** key to confirm.

The display will revert back to normal if left for 20 seconds.

The lower temperature is set at 2 °C lower than the SV.

Please contact our technical department for help with changing other parameters.

Alarm output: if the temperature of the sensor increases to 1 °C above the SV (possible valve failure) Alarm 1 will be raised, indicated by a red LED on the control module. A Normally Open free relay contact is available on terminals 11 & 12 at the rear of the controller. This may be connected to a BMS or external alarm if required.

Specification:

Power supply - 100/240v AC, 1.8m cable

Controller - with Led Digital display of SV and PV with alarm

Sensor - PT100, 1.8m cable with individual Calibration Certificate

Valve - Brass ½” BSP, Normally Closed, 230v AC, 0.35 to 10 BAR

Alarm - Normally Open on terminals 11 & 12 rated at 5A 250v AC

Enclosure - ABS size 180 x 130 x 125mm W x H x D

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