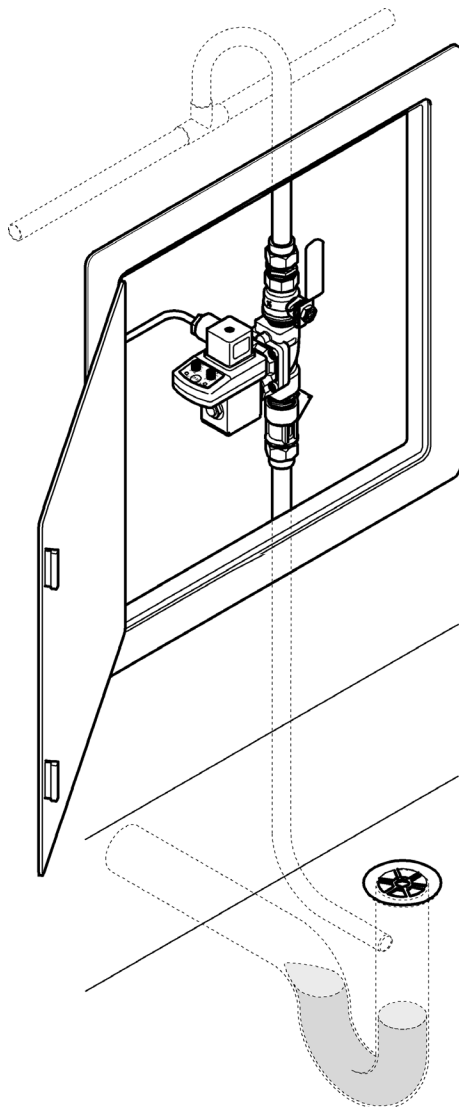


## **MACDONALD - SV1-TP** ELECTRONIC TRAP PRIMER



# MACDONALD INDUSTRIES LIMITED

## INSTALLATION INSTRUCTIONS

### DESCRIPTION

The MacDonald electronic trap primer is a means of maintaining a seal in floor wastes, gully traps or shower wastes where there is a likelihood of trap dryout due to long periods of inactivity or where ventilation of airconditioning systems speed the natural drying process.

### Parts Supplied

The MacDonald Model SV1/TP is supplied as a kitset including:

- 1/2" 230V AC solenoid valve
- Electronic timer
- DIN plug
- 1/2" M/F isolating ball valve
- 2L/min flow regulator
- 1/2" vacuum relief backflow preventer

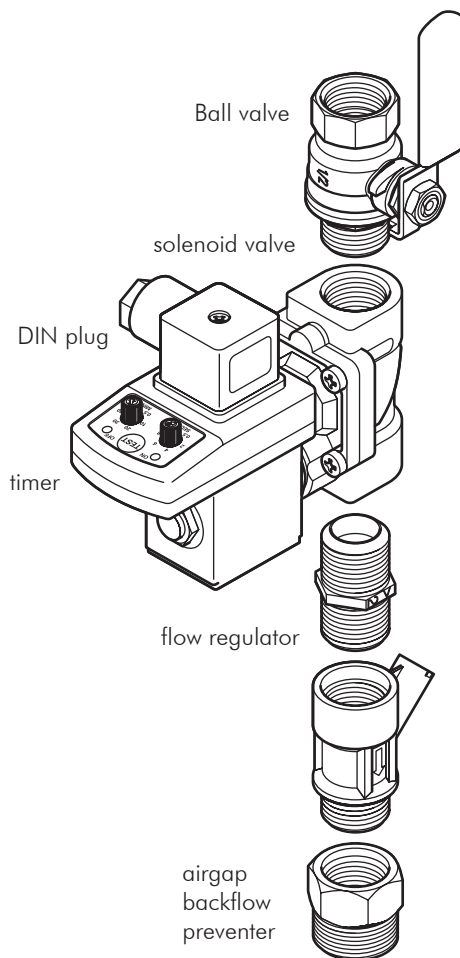
### INSTALLATION

#### Electrician

The electrician should wire 230V AC 10A supply directly into the DIN plug supplied. Do not power up without water available to provide heat sink to the solenoid coil.

#### Plumber

The parts should be assembled on site by the installing plumber in the order as shown in the diagram(right). Ensure the backflow preventer and the flow regulator are installed vertically. Once completed check for leaking joints. All joints should be completed using proprietary hemp, tape or liquid sealant. Do not overtighten joints. The backflow preventer provides the necessary separation to comply with Building Act Acceptable Solutions AS1/G1, ensure there is a minimum distance of 300mm between the backflow preventer and the FFL or drain (whichever is the higher).



## INSTALLATION (CONT)

Ensure water flows through the solenoid valve and flow regulator in the direction of the arrows on the side of each fitting.

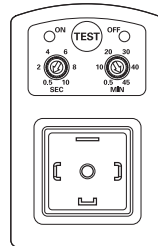
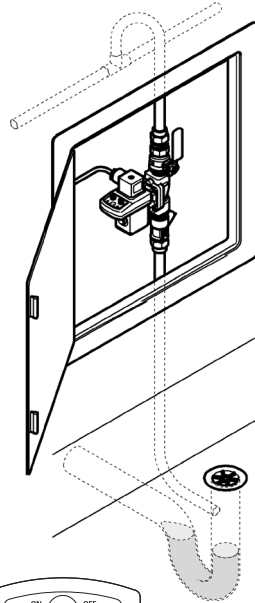
The timer is preset to achieve minimum flows. Adjust timer to suit the application or as specified by the design engineer.

The trap primer is designed to be installed on a mains pressure water supply. It is recommended that it be positioned as close as practical to the trap which it serves.

Never install in a position which does not have adequate ventilation or that is exposed to the weather. Cold water provides the necessary heat sink to the solenoid coil so ensure power is not applied to the trap primer valve before water is available.

All piping to and from the trap primer is to be completed by the plumber to suit the plumbing layout and the engineers specification. If water quality is potentially a problem we recommend the fitting of a line strainer before the valve set.

If pressures are excessive a pressure reducing valve and/or water hammer arrestor may be required. We recommend Wilkins quality products.



## CHART OF WATER USE (LITRES/DAY)

\* preset

Off Time (minutes)	10	20	30	40	45*
ON TIME					
0.5* seconds	2.4	1.2	0.8	0.6	0.5
1 second	4.8	2.4	1.6	1.2	1.06
1.5 seconds	7.2	3.6	2.4	1.8	1.6
2.0 seconds	9.6	4.8	3.2	2.4	2.1
5 seconds	24	12	8	6	5
10 seconds	48	24	16	12	10.6

## TIMER ADJUSTMENTS

The MacDonald SV1/TP trap primer has two trim pots that allow the installer to adjust the "ON" and "OFF" times for the solenoid valve. Longer ON times and shorter OFF times provide more water to the trap so care should be taken when adjusting trim pots to avoid excessive water use. The timer has a test button which allows immediate opening of the solenoid valve. The timer resets its timer count once the test button is released.

## **SPECIFICATION**

**Supply Voltage:** 230V AC 8W **Pressure**

**Range:** 100 - 500kPa (recom-mended 300kPa)

**Operating Temperature:** 2 - 60°C

**ON Time:** 0.5 - 10 seconds

**OFF Time:** 0.5 - 45 minutes

**Scale Accuracy:** 10%

**Inlet/Outlet Connections:** 1/2" BSP

## **HANDI-ACCESS PANELS**

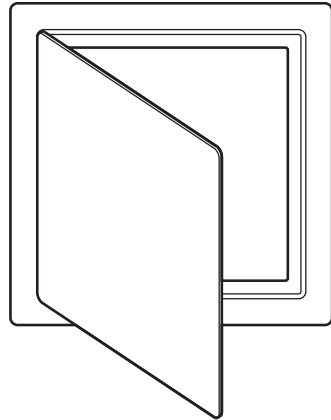
If you are installing the MacDonald electronic trap primer in a wall cavity or ceiling, you will need to provide access to the valve for servicing purposes.

MacDonald Industries Ltd offers a full range of access panels from simple plastic panels such as:

HA88 - 200 x 200 or

HA1414 - 350 x 350

through to large metal panels with optional stopping bead edge, locks, soundproofing, and fire rated. Ask any of our sales staff for information to suit your contract.



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