

# SUNDIAL 'S' PLAN

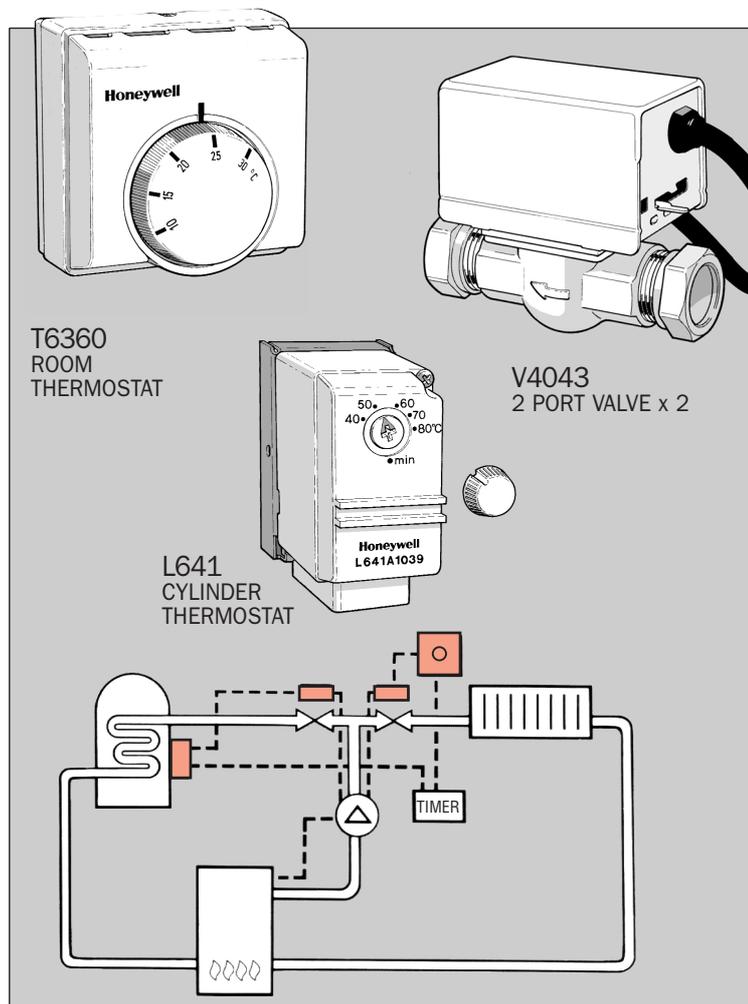
## 'S' PLAN

### FEATURES

- Space temperature control from a central point.
- Independent control of domestic hot water temperature.
- Pump and boiler switched off when space and hot water temperature requirements are satisfied.
- Additional heating or hot water zones may be provided.
- Provides full control of fully pumped installations.

### OPTIONS

- Supplied as individual components or boxed.
- Radiator thermostats may be fitted to provide over-riding temperature control in selected areas.
- Sundial 'S' Plan Plus using additional zone valve(s) and thermostat(s).
- Automatic bypass valve.



### APPLICATION

The Sundial 'S' Plan is designed to provide independent temperature control of both heating and hot water circuits in fully pumped central heating installations. Time control must be provided by a programmer.

Sundial 'S' Plan satisfies the minimum requirements of the Building Regulations which used in conjunction with radiator thermostats and on automatic bypass valve.

For systems in dwellings with a floor area greater than 150m<sup>2</sup>. Sundial 'S' Plan + should be used.

## Installation

**Valve** – Water flow must be in the direction of arrow on the valve body.

**Room Thermostat** – The thermostat must be located where it is not subject to extraneous heat gains, direct sunlight or draughts.

**Cylinder Thermostat** – For optimum performance the thermostat should be located between  $\frac{1}{4}$  and  $\frac{1}{3}$  up the vertical height of the cylinder.

**Time Control** – Any time switch or central heating programmer may be used.

**Bypass** – An automatic bypass should be fitted to prevent any increase in pressure within the system.

The **Sundial S Plan** can be extended by the addition of zone valves and thermostats so that further heating zones or domestic hot water circuits can be separately controlled. Separating the heating into several zones provides greater flexibility in operation with consequent improvements in temperature control and efficiency.

When a central heating system is being specified, the possibility of the future addition of a building extension or "Granny flat" zoning should be considered. Installation of a Sundial S Plan will permit the system to be upgraded with extra zoning control.

## Operation

On a demand for heat from either thermostat the respective zone valve will be energised to open. Just before the valve reaches its fully open position, the auxiliary switch will be closed and switch on both pump and boiler.

When both thermostats are satisfied, the valves are closed and the pump and boiler switched off.

## Specification

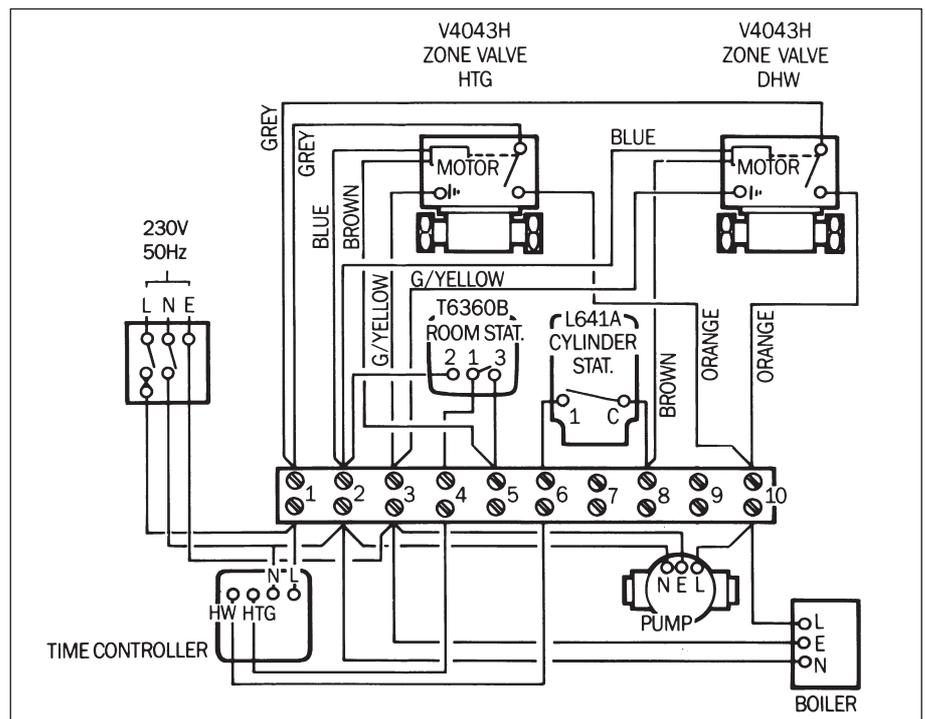
Standard Sundial 'S' Plan comprises:-

2 x V4043H1056	: 2 port valve having 22mm compression fittings
T6360B1028	: Room thermostat
L641A1039	: Strap-on cylinder thermostat

### OPTIONAL COMPONENTS

ST6100A1001	: Time switch
ST6100C1009	: 7 day time switch
ST6200A1009	: Mini-programmer
ST6300A1007	: Full programmer having 2 ON/OFF operations
ST6400C1003	: Full programmer having 3 ON/OFF operations and 7 day programming
ST699B1002	: Full programmer having 2 ON/OFF operations
ST799A1003	: Full programmer having 2 ON/OFF operations and 7 day or 5 day/2 day programming
T4360A1009	: Frost thermostat
42005748-001	: Sundial Wiring Centre
42002116-001	: 10 way junction box
DU145/DU146	: Automatic by-pass valves

## Wiring



### NOTE:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.

2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.