

SUNDIAL 'W' PLAN

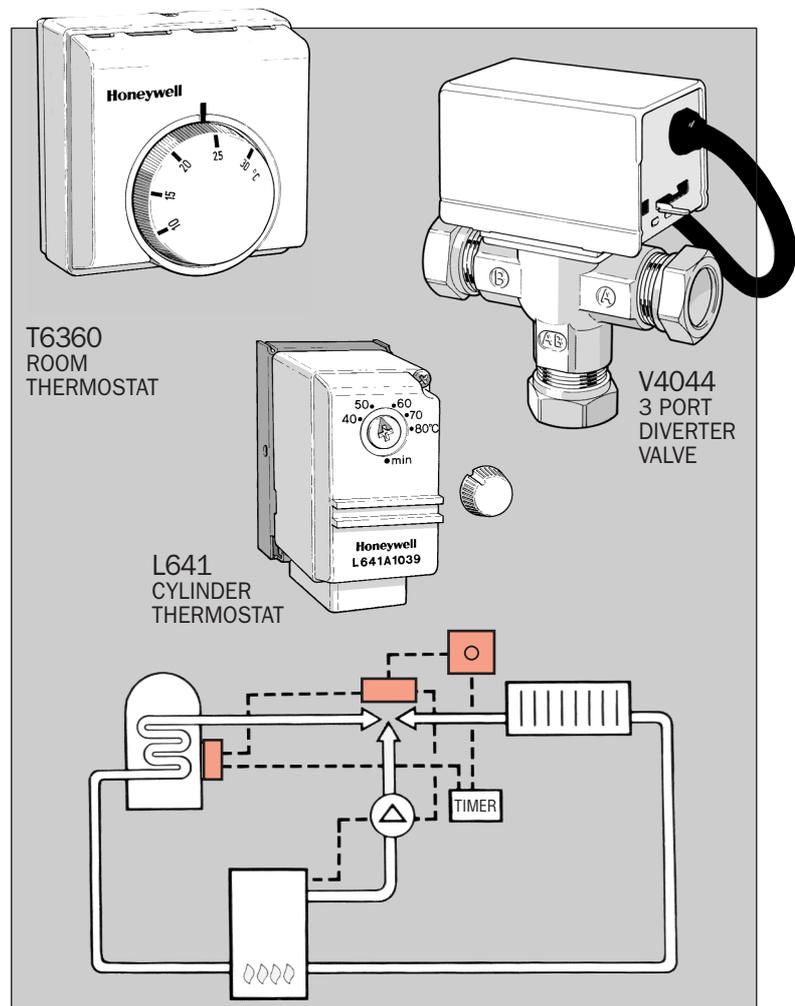
'W' PLAN

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.
- Low cost, full control system.
- Reduces peak boiler demand as heating and hot water never operate simultaneously.
- Provides full control of fully pumped installations.

OPTIONS

- Radiator thermostats may be fitted to provide over-riding temperature control in selected areas.
- Automatic bypass valve.



APPLICATION

The Sundial 'W' Plan is designed to provide independent temperature control of both heating and domestic hot water circuits in fully pumped central heating installations.

The 'W' Plan uses a two position diverter valve which is normally installed to give priority to the domestic hot water circuit. Because the 'W' Plan is a priority control system, it is recommended that it should not be used when there is likely to be a high hot water demand during the heating season which could lead to the space temperature dropping below comfort level. This situation is likely to occur, for example, in large family dwellings or in poorly insulated properties.

Time control must be provided by a programmer to satisfy Building Regulations.

Installation

Valve – Water flow must be into Port A B. Port A is the outlet connection to the radiator circuit and Port B to the cylinder primary circuit.

N.B. Following these connection recommendations together with the standard wiring will give domestic hot water priority.

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 mini-programmer may be used provided that “Heating” cannot be selected without “Hot Water”.

Bypass – An automatic bypass should be fitted to prevent any increase in pressure within the system. Even though there is always one valve outlet open: the bypass will guard against the possibility of the heating circuit being isolated by the radiator thermostats or manual operation of the radiator hand wheel valves.

Operation

Hot Water Only Requirement – On a demand for heat from the cylinder thermostat, the pump and boiler are switched on.

Heating Only Requirement – On a demand for heat from the room thermostat, the valve is energised, so that the hot water port is closed and the heating port is open, and the pump and boiler switched on.

Heating and Hot Water Requirement

When wired and installed to give HOT WATER priority the heating will remain off until the hot water is up to the required temperature.

Specification

Standard Sundial 'W' Plan comprises:-

V4044C1288 : 3 port diverter valve having 22mm compression fittings

T6360B1028 : Room thermostat

L641A1039 : Strap-on cylinder thermostat

OPTIONAL COMPONENTS

ST6100A1009 : Time switch

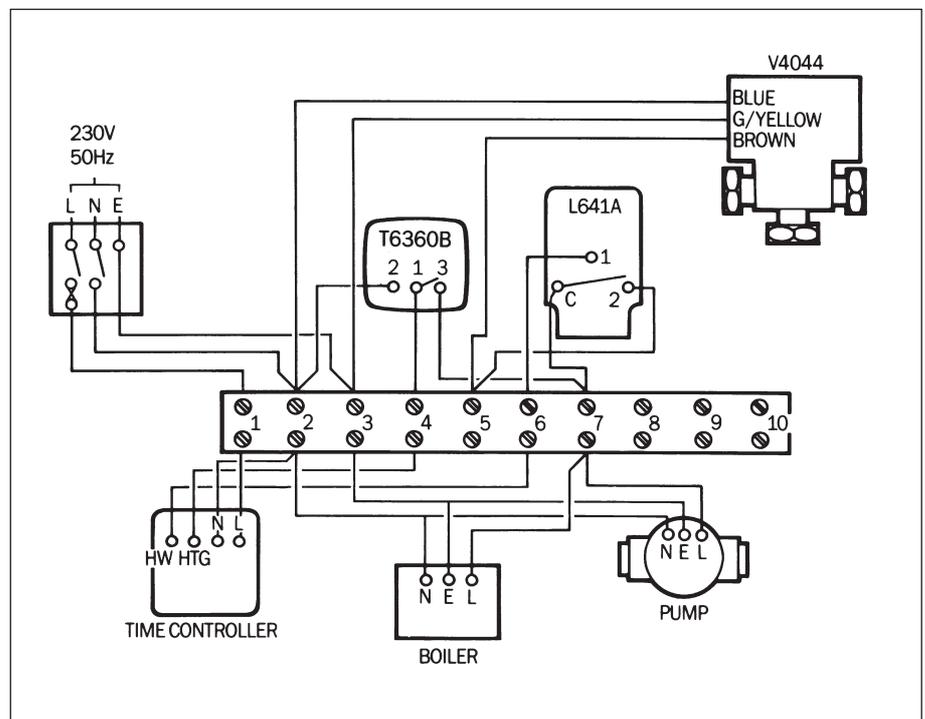
ST6100C1009 : 7 day time switch

ST6200A1009 : Mini-programmer

42002116-001 : 10 way junction box

DU145/DU146 : Automatic by-pass valves

Wiring



NOTE: It is recommended that the 10 way junction box should be used to ensure first time, fault free wiring.