

# SUNDIAL W PLAN

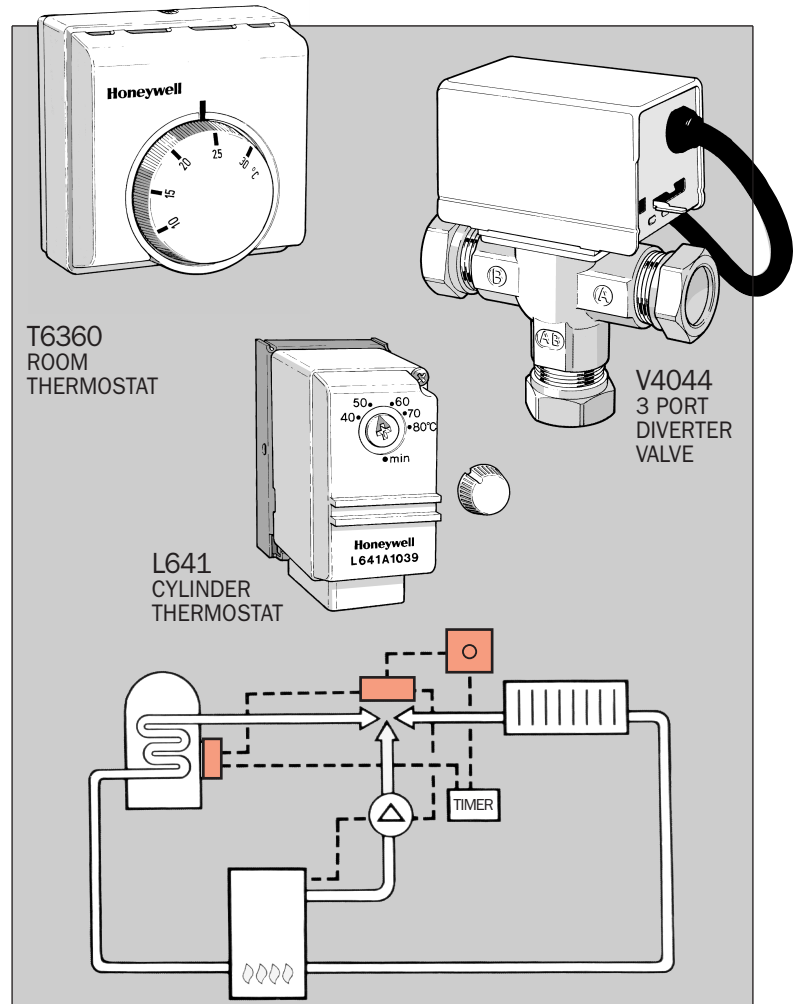
## W PLAN

### FEATURES

- Independent control of domestic hot water temperature
- Pump and boiler switched off when space & hot water temperature requirements are satisfied
- Reduces peak boiler demand as heating and hot water never operate simultaneously

### OPTIONS

- Programmable thermostat in heating zone to provide 'Best Practice' system
- Radiator thermostats may be fitted to provide temperature control in selected areas
- CM Zone can provide wireless boiler interlock for individual radiator control



### 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.

**SUNDIAL SYSTEMS**

**Honeywell**

## ■ Installation

**Valve** - Water flow must be into port AB. Port A is the outlet connection to the radiator circuit and port B to the cylinder primary circuit. Note: This, together with the standard wiring will give domestic hot water priority.

**Room Thermostat** - The thermostat must be located where 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 cylinder from the floor.

## ■ Time Control

Should be one which does not allow 'Heating' to be selected without 'Hot Water'.

**Bypass Valve** - An automatic bypass valve should be fitted to the system to stop wastage of energy and prevent increased pressure within the circuit. Even though there is always one valve outlet open, the bypass will guard against the possibility of the heating circuit being isolated by radiator thermostats or operation of manual radiator 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.

**HTG and HW 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	: 22mm 3 port diverter valve
L641A1039	: Strap-on cylinder thermostat
T6360B1028	: Room thermostat
ST9400C1000	: 7 day full programmer
or	
ST9400A1002	: 1 day full programmer

### Option components

Y6630D1007	: Wireless analogue room thermostat
T6620B1008	: DT200 digital room thermostat

### Best Practice

CMT901A1044	: 1 day programmable thermostat
CMT907A1041	: 7 day programmable thermostat

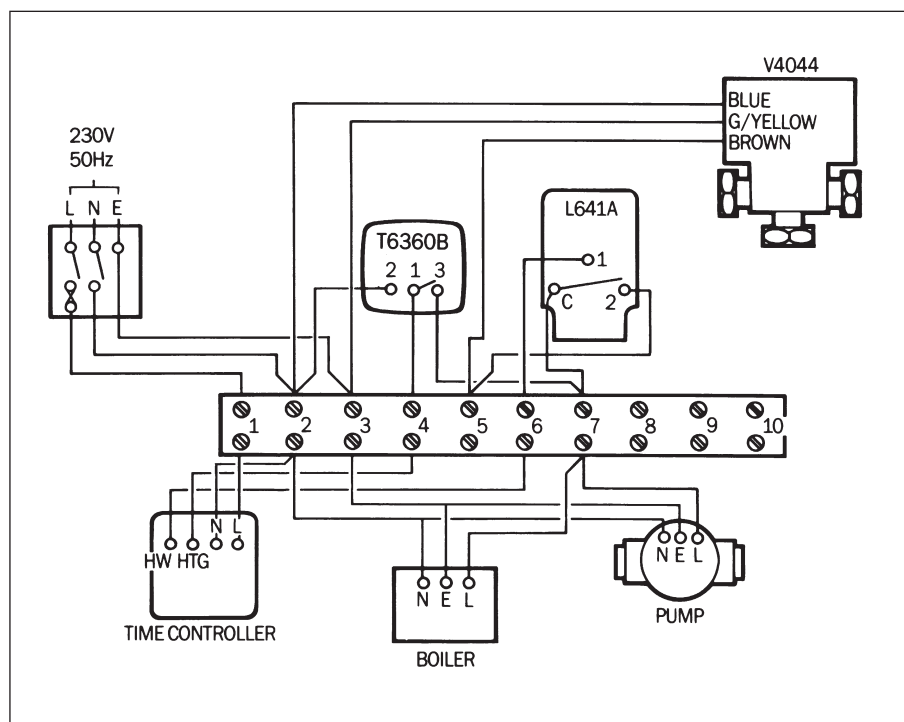
### Automatic Bypass Valve

DU144A1001	: 22mm straight auto bypass valve
DU145 - $\frac{3}{4}$ B	: 22mm angled auto bypass valve

### Frost protection

T4360A1009	: Frost Thermostat
L641B1004	: Low limit Pipe Thermostat

## ■ Typical Wiring



Note: It is recommended that the 10 way Junction Box should be used to ensure first time, fault free wiring.