

SUNDIAL Y PLAN

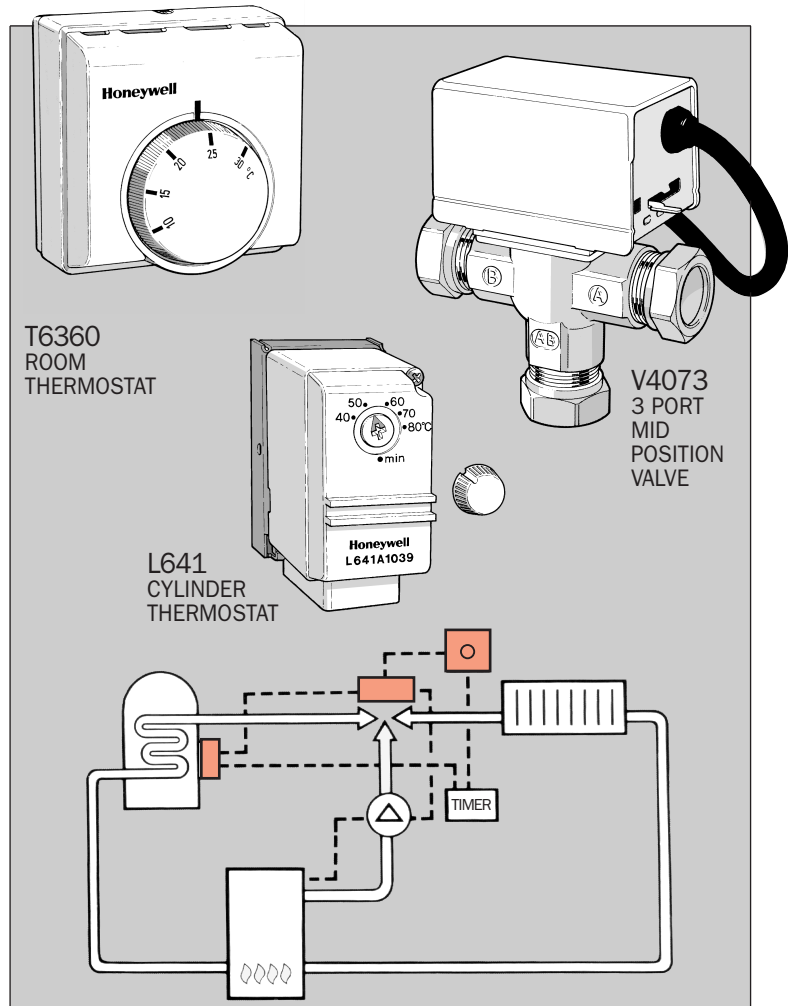
Y PLAN

FEATURES

- Independent control of heating zone
- Independent control of domestic hot water temperature
- Pump & boiler switched off when space and hot water temperature requirements are satisfied
- Both systems can operate at the same time

OPTIONS

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



APPLICATION

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

Sundial Y Plan satisfies the minimum standard requirements of the Building Regulations Part L1 when used in conjunction with radiator thermostats and an automatic bypass valve.

For systems in dwellings with a floor area greater than 150m², Sundial S Plan Plus must be used (see 2.3).

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.

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

Standard Practice

A 2 channel programmer to control the HW and heating zones.

Best Practice

A time switch to control HW and a programmable thermostat for the heating zone.

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 valve remains open to DHW only and the pump and boiler are switched on.

Heating Only Requirement - On a demand for heat from the room thermostat, the valve motor is energised so that the CH port only is opened and the pump and boiler are switched on.

HTG and HW Requirement - When both thermostats demand heat, the valve ball is positioned to allow both ports to be open and the pump and boiler switched on. When neither thermostat is demanding heat, the pump and boiler are off. The valve remains in the last position of operation whilst the mains is switched on.

Specification

Standard Sundial Y Plan comprises:

| | |
|-------------|----------------------------------|
| V4073A1039 | : 22mm 3 port mid-position valve |
| L641A1039 | : Strap-on cylinder thermostat |
| T6360B1028 | : Room thermostat |
| ST9400C1000 | : 7 day full programmer |
| or | |
| ST9400A1002 | : 1 day full programmer |

Automatic Bypass Valve

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

Optional components

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

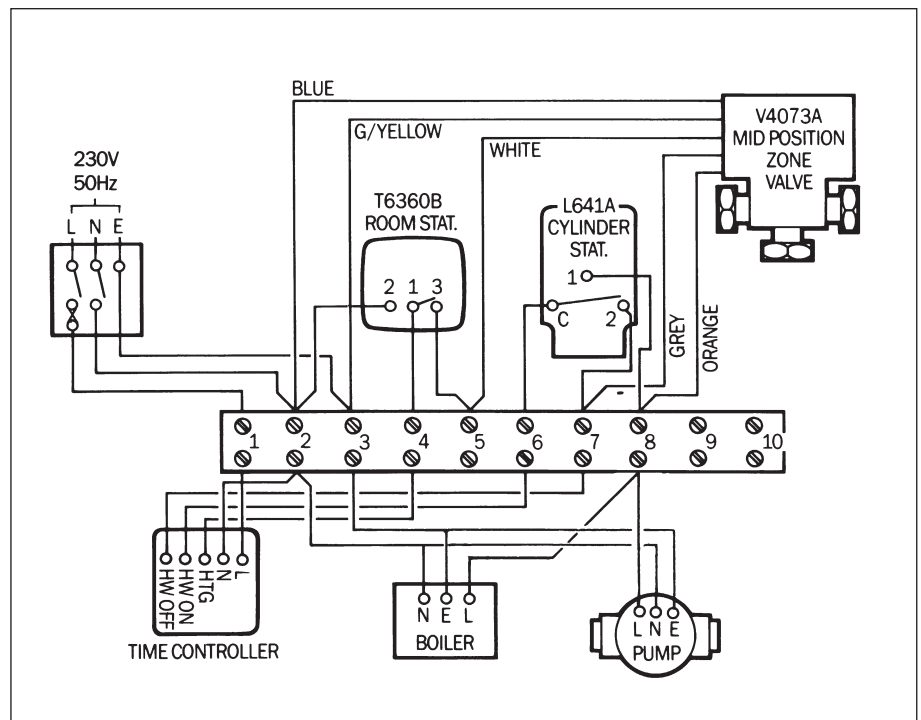
Best Practice

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

Frost protection

| | |
|------------|-----------------------------|
| T4360A1009 | : Frost Thermostat |
| L641B1004 | : Low limit Pipe Thermostat |

Typical Wiring



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