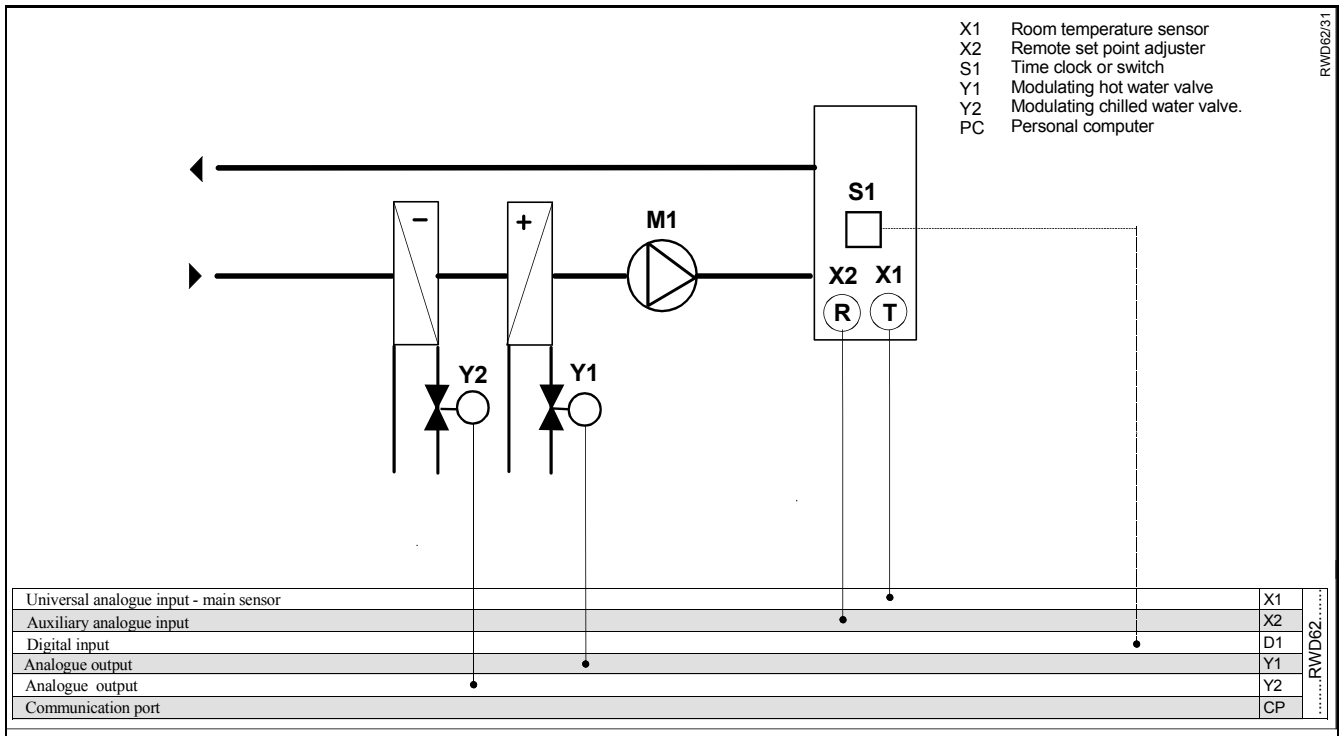


**RWD62 Universal Controller**  
**Application 31**  
**Remote set point**

Room temperature control  
 Hot water control valve  
 Chilled water control valve

- Control (P or PI)
- Room temperature control
- Proportional control ( 0..10Vdc ) of the hot water valve.
- Proportional control ( 0..10Vdc ) of the chilled water valve.
- Remote set point adjustment
- Optional day / night set point adjustment .



**Supplemental features**

**Control**

- Room temperature sensor can be selected as Ni1000, Pt1000, or active sensor.
- Adjustable dead zone with separate heating and cooling set points.
- Adjustable proportional band of analogue output Y1.
- Adjustable proportional band of analogue output Y2.
- Adjustable Integral action function selection and adjustment.
- Remote set point adjustment via auxiliary analogue input X2.

**Operating modes**

- Day / night set points can be selected via time clock or switch.

**Description of operation**

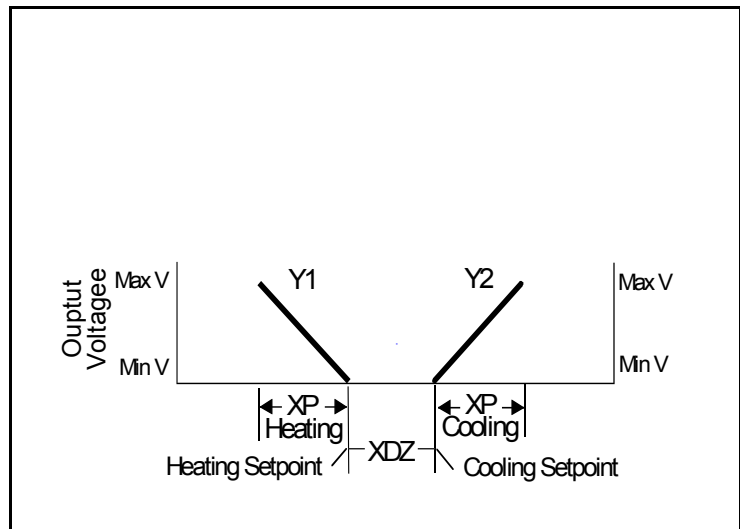
The temperature sensor senses the room conditions and on a fall in temperature the RWD62 via Y1 analogue output modulates the hot water valve as determined by the heating set point and proportional band (XP) setting.

On a rise in temperature the RWD62 via the Y2 analogue output modulates the chilled water valve as determined by the cooling setpoint and the proportional band (XP) setting

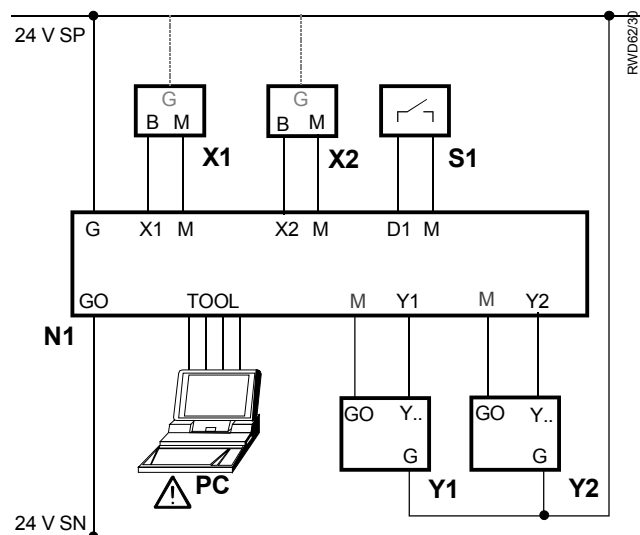
The remote set point adjuster is connected to X2 and adjusts the day set point for Y1 output. Y2 set point is adjusted by XDZ that sets the dead zone between Y1 and Y2 set points. The night set points are set on the controller.

Heating and cooling sequences

**Function diagram**



**Connection diagram**



**RWD62**

- N1 RWD62 controller
- X1 Main temperature sensor
- X2 Remote set point adjuster
- S1 Time clock or switch
- Y1 Heating control valve with 0..10Vdc input
- Y2 Cooling control valve with 0..10Vdc input
- PC Personal computer

**Main Display**

The main display shows ,

- a) Y1 output in Volts dc. (0..10V = 0..100% range)
- b) Y2 output in Volts dc. (0..10V = 0..100% range)
- c) Whether day or night set point is selected. ( ☐ = day, ( = night)
- d) X1 value ( room temperature) in ° C.
- e) Auxiliary application selected ( REM for remote set point adjustment ).

Other displays are available by pressing the + button, and the various displays are listed below in sequence from the main display.

On entering any of the four set point displays, the setpoint on display can be adjusted by pushing the ● enter/save button, increase value by pressing the ▲ + button or decrease the value by pressing the ▼ – button, and when the required value is reached, press the ● enter/save button to save the new value.

The alternative displays return to the main display after 20 seconds.

Press buttons	Action	Current display	Selected display	Selected display comments.
▲	Push + button	REM Y1 Y2 ☐ X1	Y1 SP – h ( 16.0c	Y1 heating night set point.
▲	Push + button	Y1 SP – h ( 16.0c	Y2 SP – c ( 32.0c	Y2 cooling night set point.
▲	Push + button	Y2 SP – c ( 32.0c	XDZ ☐ 3.0c	XDZ to set Y2 day set point
▲	Push + button	XDZ ☐ 3.0c	X1 22.0c	X1 - main temperature sensor reading
▲	Push + button	X1 22.0c	X2SP 19.0c	X2 - actual remote set point setting
▲	Push + button	<b>X2SP 19.0c</b>	Y1 0.0	Y1 – heating analogue output value in Vdc to one decimal point
▲	Push + button	Y1 0.0	Y2 5.0	Y2 – cooling analogue output value in Vdc to one decimal point.
▲	Push + button	<b>Y2 5.0</b>	REM ☐ 31	Control sequence diagram and application number display.
▲	Push + button	REM ☐ 31	REM Y1 Y2 ☐ X1	Back to main display.

Values shown are either default values or nominated for information only

### Alternatives

- 1) Proportional control of electric heater bank via SEM61.4 signal converter with SEA 41.2 current valve, and modulating chilled water valve.