



SPC Standard Programmable Controller

The unit is designed to control the ventilation requirements of small buildings or individual zones within larger buildings. It measures temperature and CO₂ levels and operates ventilation units to ensure comfortable internal conditions using natural ventilation.

This controller is based on a programmable logic controller (PLC) which is small, low cost, very powerful and incorporates a small screen and override pushbuttons.

The controller shown above has fascia mounted overrides but a plain fronted version is available where overrides are remote from the panel.

Features

The controller is available in two versions with different inputs and outputs –

	Standard	Extended	Used for
Analogue inputs	6	8	Room temp, CO ₂ , low limits, overrides, etc
Digital inputs	2	10	Switches, fire alarm, timeswitch, rain sensor, etc
Digital outputs	4	10	Indicator lamps, fans, pumps, windows, etc
Analogue outputs	2	2	Positioning dampers, heating valves, etc

Analogue inputs can be used as digital inputs if required.

The unit is programmed via a laptop computer using a graphical software package. The programme is downloaded to the PLC directly from the laptop or indirectly by using a memory cassette. The PLC has an optional Modbus serial communication interface which can be added to communicate to other PLCs on a network or to a BMS system.

EXAMPLE CONTROL SYSTEM FOR NATURAL VENTILATION

TEMPERATURE AND CO2 CONTROL WITH OVERRIDE, OUTSIDE TEMPERATURE SENSOR, WIND SPEED AND DIRECTION, HEATING COIL WITH LOW LIMIT, MOTORISED WINDOWS AND RAIN SENSOR.

