## Alpha2 & Alpha2L control modes

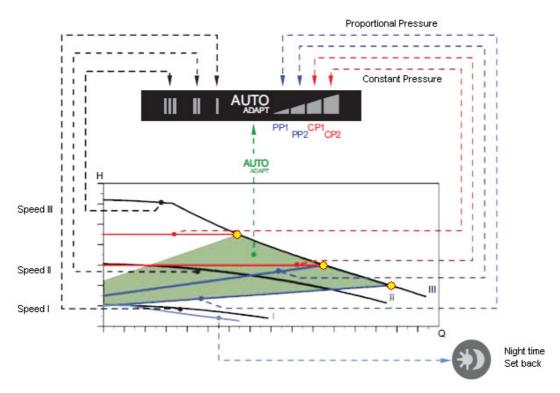
The Alpha2 has four modes of operation, fixed speed, proportional pressure, constant pressure and AutoAdapt. The Alpha2 L does not have the AutoAdapt feature or the power display.

- Fixed speed operation, this control mode is indicated by the bar settings I, II and III. In this mode the Alpha2 & 2L simply operate as a standard three speed circulator. The speed can be selected manually, and once set the speed does not change.
- Proportional pressure, this control mode is indicated by the first two triangular settings PP1 and PP2. In this variable speed mode, the pump speed changes with flow in order to reduce the pressure across the pump as the flow reduces due to radiator valves closing.
- Constant pressure, this mode is indicated by the last two triangular settings CP1 and CP2. In this variable speed mode the pump speed changes with flow in order to maintain a constant pressure across the pump as the flow reduces.

In proportional and constant pressure control modes, the pump operates according to a setpoint which is referenced the maximum speed curve. The setpoint for PP1, PP2, CP1 and CP2 is preset, and is indicated by the yellow spots  $\circ$  on the curve chart below. The setpoint for PP1 and CP1 is the same.

• AutoAdapt, this control mode is indicated when AutoAdapt is illuminated; this is a feature of the Alpha2 only. In this mode the pump operates in proportional pressure mode, however, the setpoint is automatically adjusted according to the general heat load of the system over a 24 hour period. The setpoint can change in incremental steps from PP1 to CP2, operation is always in proportional pressure control. The green shaded area shows the potential operating range.

The intention of AutoAdapt is that the pump can optimise the energy consumption a little further by automatic adjustment of the setpoint, as the CP and PP settings have manually selected setpoints. However, depending on the actual system resistance characteristic, systems with long runs or with micro bore pipe work, or dirty systems, the AutoAdapt feature may not achieve the required circulation, and may operate at a power level of 8 to 10 watts; this is not a product fault. If this is the case, simply select one of the PP1, PP2, CP1 and CP2 modes. Please note, even if using one of the PP or CP modes, the product will still save up to 75% of the energy consumption of a standard UPS heating circulator.



Night time setback, the night time set back feature is selected by pressing the sun/moon button. When the pump detects a falling boiler flow temperature, the pump reverts to minimum speed operation, in order to circulate at a very low level to provide back ground heating. The pump reverts to normal operation when a rising flow temperature is sensed. This mode is only used in systems where the pump runs 24 hours a day as for continental heating systems; this feature is not used in UK systems which are general on/off controlled.

