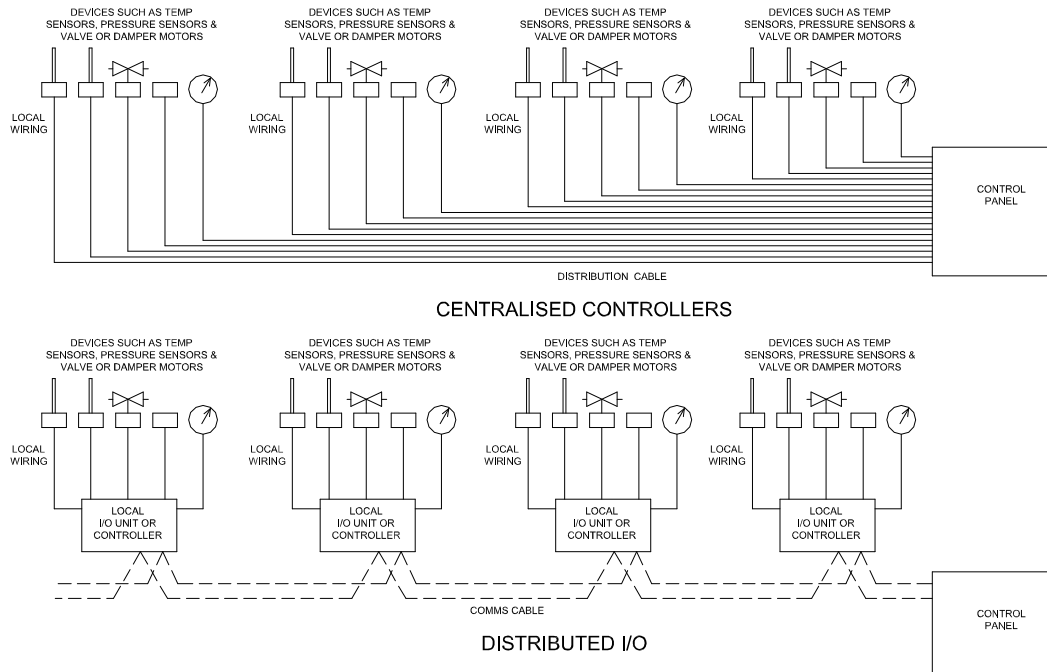


Distributed Input and Output in an HVAC Control System

The traditional method of wiring an HVAC control system is to house the controllers in a central control panel and wire out to the field devices, such as temperature and pressure sensors, valve and damper motors etc., that may be spread all over the building. Even in quite simple systems this can lead to very long runs of device distribution wiring and containment. The wiring is time consuming and difficult to commission. Future modifications are also difficult due to the distances involved.



Distributed I/O is a system that places the input/output unit or controller very close to the field devices so that only local wiring is required. Typically a single I/O/controller would be positioned at each air handling unit, fan coil unit, under-floor heating manifold etc. Each controller would then be connected to each other and the control panel with a simple daisy chained communications cable, usually a twisted pair to the required specification.

Key Benefits

- Significant reduction in site wiring and containment.
- Reduced site time aids safe working.
- Reduced commissioning time.
- Future modifications are easier to carry out.