

Method Statement for Installation of Control Valves & Actuators for HVAC System

Purpose & Scope

Set out a clear and defined method of ensuring that the **correct control valve** is selected and installed in the correct position in the HVAC system. In addition a method is also set out which will ensure that the correct actuators for each specific control valve assembly are also correctly selected and installed.

This Procedure is to define the method that will be used to ensure that the correct selection and installation of all control valves and control valve assemblies are correct, acceptable and conforms to the contract documents and specifications.

Method Statement for Installation of Control Valves and Actuators

Below procedure will be followed to ensure that no mistake is made at installation stage with regard to the correct selection, positioning and installation of all the control valves and actuators assembly.

- Using the Valve Schedules the valve tag numbers can be related to the plant reference numbers. The pairing of the tag numbers and the plant reference numbers must correctly match those shown on the construction drawings.
- If a discrepancy does occur between the schedule and contractors drawing. Technical department will be consulted and any confusion will be resolved before continuing with the installation of the Control valves.
- All valve labels will be as specified (or equivalent approved size), and where applicable will be fixed by means of a key ring in each upper corner suspended from brass or stainless steel chain loops over the relevant valve or adjacent pipe. Prior to installation samples of tagging will be submitted to client for review and approval to be taken.
- To further eliminate any possible errors tag numbers will be indicated on the valve packing box at delivery as well as being attached clearly to each valve. To ensure a valve is properly selected before being tagged, the valve schedule should indicate System Reference, Type of fluid, valve number, size and manufacturer.
- The valve specification schedules indicate the valve part numbers for each type of valve. This part number is further qualified by the valve. The part number is generic for all approved Control valve types and will be pressed onto the brass valve body to facilitate easy identification of valves whilst tagging.
- The actuator part number is also indicated on the schedules. These are also generic for each specific control Valve type. The part number will be clearly indicated on the actuator, and when delivered shall be packed as a detachable unit with the specific valve to which it is paired.

- The correct valves for each specific control valve assembly will be selected by using MEP contractors drawings, system Valve Schedule and commissioning set schedule
- The three different types of commissioning sets will be identifiable by imprinted with L or M on the valve orifice body.

L – Indicating “Low Flow”

M – Indicating “Medium Flow”

No imprint –indicating “Standard Flow”

When the correct valves, test points, vents and drain points have been identified for a specific control valve assembly. These will be tagged and stored ready for installation stage. Their tag numbers will be identified on contractors’ drawings, and commissioning valve schedule.

Installation of actuators (where applicable) will be in conformance to manufacturer’s recommendation.

- Mount actuator to the shaft of valve body and fix the screwed nut by hand. Check for the correct rotation.
- Fix the mounting bracket with two sheet metal screws.
- Fasten clamp nut for security.
- Adjust the mechanical stopper for full movement.
- Protect the actuator with plastic cover for protection from water ingress.
- A meter long lead wire cable is provided for connecting to nearest junction box.
- Manufacturer’s exploded view of the valve and actuator is within material submittal

Inspection

After site installation assembly of the control valve a final inspection will be made prior to pre-commissioning, in accordance with approved system Commissioning Valve Schedule and then tagged.

The above procedure will eliminate confusion and allow ease of *installation and trouble free commissioning of control valves and actuators.*

Reference Documents

Valve Schedule

Construction Drawings

Manufactures Instructions

Commissioning Valve Schedule