

Electronic Level Switch

SYSTEM SPECIFICATION

The principle of resistance probe discrimination between water and steam is well established and accepted by the Power Plant industry as the most reliable, convenient and maintenance free method of detecting alarm levels and initiating protective actions.

A single probe channel electronic Level Switch indicates either a steam or water state in the application. Output is via a double pole relay. The system incorporates user set conductivity settings for different water conditions. There are also time delay features on the relay output. Delays can be set for relay on and relay off.

The Probe Insert Assembly is welded into pipework or vessels at the selected detection points. This provides internal shrouding of the probe for defined water conductivities and a robust housing for external protection of the probe. The shrouding is effective in helping stop water droplets giving false indication at startup.

ENCLOSURE - Wall mounted glass-fibre reinforced polyester. Protection IP65/NEMA 4X. Dims: 200Hx154Wx76D mm.

INPUTS - Discrimination between water and steam for a single channel. Switching threshold selected for water conductivities of 0.5, 1 or 2mS/cm.

OUTPUTS - Selection for relay to be normally energised or de-energised. Contact rating : DPCO – 8 Amp., 250V AC / 30V DC.

DISPLAY - One green and one red LED is provided to indicate the presence of either steam or water.

PROBE CABLE - Special PTFE high temperature cable is supplied to connect the electronic unit to the probes. The standard length is 10m with a maximum 30 of meters. The cable consists of 4 cores, 2 earths and 2 signals.



POWER SUPPLY

The system uses a single AC source:
88-264 V AC @ 47-63 Hz, 125-373 V DC

PROBE INSERT ASSEMBLY

Probes can be installed in a pressure vessel for drain pot applications or via a shrouded insert assembly. These inserts can be made from carbon steel or stainless steel. They are welded into points in steam lines or other pipework.



KEY FEATURES

- Single probe channel*
- Conductivity Settings for different water purity conditions*
- Single Power Supply*
- Local Indication using Red & Green high visibility LEDs*
- IP65 Rating of enclosure for external use*
- Relay output for probe channel*
- Time delay settings for relay on and relay off*

RELATED PRODUCTS

The Nano electronic unit is used in conjunction with the following:

- Water column or Pipe inserts
- Probes
- Probe Cable