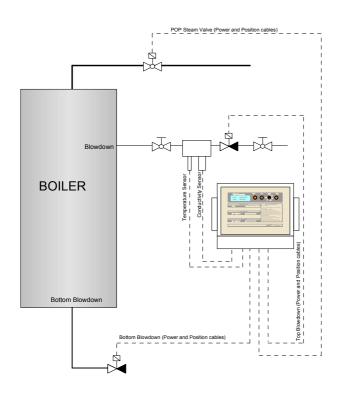
AQUANET International Ltd. Specialist Instrumentation and Software Engineers for Automated Water Quality Control

AQTDS Dissolved Solids and Blowdown Controller



DESCRIPTION

At a pre-determined interval the controller pulses its scum line blowdown valve and measures the temperature and conductivity of the discharged boiler water.

If the conductivity is above the pre-set limit it will pulse the valve open and closed for a few seconds at a time until the conductivity (and hence TDS) falls to within limits, after which it waits for a predetermined time until the cycle starts again.

The CP10 conductivity and Pt100 temperature sensors are designed to withstand the temperatures and stresses involved and are extremely robust.

The system will accept 230/110 Vac input.

The primary functions are: -

- Surface blowdown control
- Optional timed bottom blowdown
- Pulsed output control for steam valve

The bottom blowdown valve and the steam header valve inputs have provision for micro-switch feedback which indicate to the controller the success or failure of the valve opening.

- The front panel houses LCD display
 - Status LED's
 - Alarm / Fault LED's

When a valve fails the alarm LED is illuminated.

SPECIFICATIONS

110/220VAC 50/60 Hz Input power

Power requirement 50 watts Operational temperature 0 to 55°C Storage temperature -15 to 85°C

0-95% non condensing Alarm relay contacts 220 Vac @ 1 Amp

Terminals suitable for 2.5 mm

Cables

4 core screened 1 mm² max **Probes**

length 10 metres **Terminations** 2.5 mm² screw terminals

Quiescent current 40mA (approx)

Probe energisation voltage 200 mV volts Standard range 0-5000 uMhos

(other ranges available)

Temperature compensation curve 2% per °C Auto compensation of standard probes 0 to 200°C Electronics temperature coefficient 0.18% per °C **Controls**

Conductivity Set point

Surface blow down On Time in seconds Surface blow down Off time in minutes Bottom blow down Period (in minutes) Bottom blow down On time (Max)

Steam header Valve POP ON time in seconds Steam header Valve POP OFF time in seconds

Alarm band in uMhos

Temperature coefficient of conductivity as % per degrees C Scale Factor (SF) conversion (conductivity to micro Siemens)

Alarm Outputs

SMS

Volt Free Relay contacts

Software via Aquanet

Amplifier Enclosure

Material **GRP**

Rating IP 65 dimensions Dimensions 300 x 200 x 190 mm Cable entry cable glands

Environmental

Operational temperature 0 to 55°C -15 to 85°C Storage temperature

RH 0-95% non condensing Note: All specifications may be subject to change without notice



