



Model 61 Boiler Blowdown System



ELECTRO-CHEMICAL DEVICES

Features

- **Panel Mounted System Plumb and Play Design**
- **Sample conditioner reduces temperature prior to the conductivity measurement**
- **Sludge trap for easy removal of sludge build up**

Benefits

- **Complete System, Easy Installation, Ready to Use**
- **Improves the accuracy and the longevity of the conductivity measurement**
- **Ease of Maintenance**
- **Local Display, 4-20 mA output, Alarm Relays, XY Graphical Plot**



Model 61
Boiler Blowdown System

Description

The **ECD Model 61 Boiler Blowdown System** provides a reliable solution for the continuous control of the surface blowdown rate for commercial and industrial boilers. Boilers concentrate dissolved solids in the water as the boiler operates. The increasing concentration of dissolved solids (TDS) may cause damage to piping, steam traps and other process equipment. It can also form sludge in the boiler, which impairs boiler efficiency and heat transfer capability. To avoid these problems the boiler water must be periodically discharged, **Blown Down**, and replenished with fresh feedwater. There are two types of blowdown, surface blowdown pulls the water from the top to middle of the boiler while bottom blowdown removes the sludge from the bottom of the boiler.

The **Model 61 Boiler Blowdown System** is a rack mounted modular design that includes: a 316 SS sediment trap, 316 SS sample cooler, temperature gauge, sample control valve and safety relief valve. Tubing and fittings are 316 SS.

The **Conductivity (TDS) measurement** is made with the T80 optional two wire transmitters, the T80, and the field proven S80 conductivity sensor with 316 SS sensor body and integral preamplifier.

The **T80 Transmitter** is a line powered instrument with the standard instrument is supplied with one 4-20 mA output and two alarm relays, options include up to 2 outputs and 3 relays.

The **T80 4-20 mA Output** can be configured for high and low control output. Relay timers and SPDT. This lowers the operating costs of the boiler when compared to manual blowdown by minimizing the blowdown rate which lowers the fuel and make up water consumption. Timers in the T80 can be configured to periodically trigger a relay for bottom blowdown which may only be needed on a weekly or monthly basis.

Optional FM, ATEX, CSA, IECEx version available. Please contact your local ECD dealer for more information.

Model 61 Boiler Blowdown System

Specifications

Measurement range

Conductivity Range:
0-50 mS (standard range)
use sensor S80-20-0001-0100

pH Range: 0-14 pH

Process Connection:
Compression fitting, 3/4" NPT to fit S80

Temperature Range:
0-100°C

Pressure Range:
0-75 psig

Wetted materials:
316 SS, Ryton, VITON

Sample Assembly

Part#: 2000497
Includes Sludge trap, Sample Cooler*, Temperature Gauge, Sample control valve, 75 psi Pressure Relief Valve, Tubing and Piping, all parts are 316 SS, U-Channel Rack is carbon steel

*Sample cooler requires 3-5 gpm water for cooling

Part#: 2000497-2
Includes all features of P/N: 2000497 plus an addition port for a S80 pH sensor

Model T80 Transmitter

(see T80 Data Sheet for detailed specifications)

Part#: T80-01-100-01
T80 conductivity transmitter, 24V loop powered, 1/2 DIN NEMA 4X, (1) 4-20 mA output, universal mounting bracket

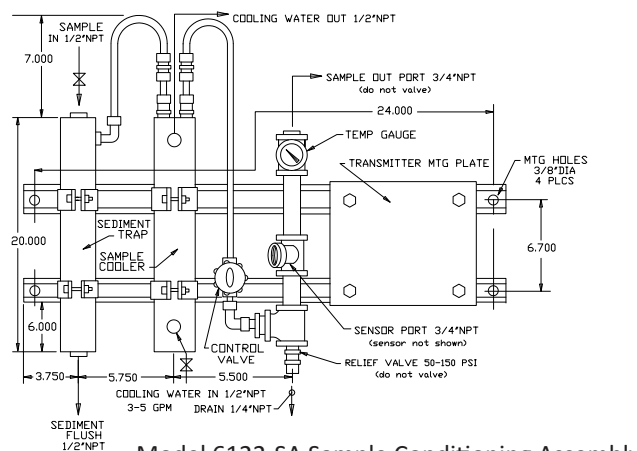
Part#: T80-01-100-01
T80 pH transmitter, 24V loop powered, 1/2 DIN NEMA 4X, (1) 4-20 mA output, Universal Mounting Bracket

Dual Channel:

Part#: T80-11-112-01
T80 pH & Conductivity transmitter, 24VDC powered, 1/2 DIN NEMA 4X, (2) 4-20 mA output, (3) Relays, Universal Mounting Bracket

Part#: T80-11-212-01
T80 pH & Conductivity transmitter, 110-220 VAC powered, 1/2 DIN NEMA 4X, (2) 4-20 mA output, (3) Relays, Universal Mounting Bracket

Part #	Description
2000497	Rack mounted assembly, conductivity only
2000497-2	Rack mounted assembly, conductivity & pH
T80-01-100-01	T80 Transmitter conductivity only Looped
T80-01-100-01	T80 Transmitter pH only looped
T80-01-112-01	T80 Transmitter Dual CH 24VDC, relays
T80-01-212-01	T80 Transmitter Dual CH 110-220 VAC, relays
S80-20-0001-0100	Conductivity Sensor, 0-50 mS range
S80-00-0001-0100-001	pH Sensor, 0-14 pH, 5°-90°C, 0-75 psig
	CALL FOR MORE OPTIONS



Model 6122-SA Sample Conditioning Assembly

Specifications subject to change without notice.

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