



BL983318

TDS Mini Controllers

0 to 10,000 ppm

- Large Clear LCD
- Fire Retardant Casing
- Splash-resistant cover

The BL983318 is a compact, panel mounted, process controller for measuring total dissolved solids (TDS) of a process stream. The device features a large LCD with protective cover. Users may choose from automatic or manual dosing modes. When in automatic mode the dry contact relay is activated when a reading is above the set point. The relay can be used to activate a solenoid valve to open and drain a tank (i.e. boiler bleed and feed) or add freshwater until the desired set point is reached. The BL983318 uses a 0.5 conversion factor in which $1.00 \text{ mS/cm} = 0.50 \text{ ppt}$. The BL983318 can measure TDS from 0.00 to 10.00 ppt (g/L).

Adjustable Dry Contact Dosing Relay

The BL983318 features a dosing relay that is activated when the reading is above a user programmable set point.

Programmable Overdose Protection

For enhanced safety the mini controller can be programmed to deactivate the dosing relay if the set point is not reached within a specified time interval. The overdosing timer is programmable from 5 to 30 minutes or disabled.

Relay Control Override

With the flick of a switch the mini controller's relay can be disabled (Off), placed in control (Auto), or be activated for manual operation (On) which is useful for priming a dosing pump.

Multicolor LED Indicator

Multicolor LED indicator allows an operator to quickly check the status of the controller. Green = Meter in measurement mode and reading is below the set point. Orange/Yellow = Reading is above the set point and the relay is active. Blinking Red = Indicates an alarm condition such as when the maximum dosing time has been exceeded.

Fuse Protected Dosing Contacts

The relay dosing contact is rated for up to a 2A load and is fuse protected.

Labeled Termination Connections

Quick-connect terminal blocks are clearly labeled for easy connection to power, conductivity probe and relay that can be used to operate a dosing pump, valve, audible alarm, or light.

Specifications	BL983318
Range	0.00 to 10.00 g/L (ppt)
Resolution	0.01 g/L (ppt)
Accuracy (@25°C/77°F)	±2% F.S.
TDS Conversion Factor	0.5
Temperature Compensation	automatic from 5 to 50°C (41 to 122°F) with $\beta=2\%/\text{°C}$
Calibration	manual, with CAL trimmer
Dosing Relay	maximum 2A (fuse protected), 250 Vac, 30 VDC contact closed when measure > setpoint
Setpoint	adjustable from 0 to 10 ppt (g/L)
Overtime	adjustable, typically from 5 to approximately 30 minutes
Power Supply	BL983318-0: 12 VDC adapter (included) BL983318-1: 115/230 VAC; 50/60Hz
Dimensions	83 x 53 x 99 mm (3.3 x 2.1 x 3.9")
Weight	BL983318-0: 200 g (7.1 oz) BL983318-1: 300 g (10.6 oz.)
Ordering Information	BL983318-0 (12 VDC) and BL983318-1 (115/230V) are supplied with mounting brackets, transparent cover and instruction manual.
Recommended Probe	HI7632-00 EC/TDS probe with internal temperature sensor and 2 m (6.6') cable (not included).

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