

BP Control Panel

BP-201STA



Product Overview

MIURA's BP-201 is the brain of the boiler room. It serves as a central monitor for all MIURA equipment and as the primary controller allowing multiple connected boilers to effectively operate as one (MI Installation). This optimizes in-service efficiency while providing unparalleled system reliability and load following. Through use of an intuitive interface and user-defined control patterns, the system can be configured to optimize operations, bring back-up boilers online automatically, and to accommodate daily or weekly schedules. This revolutionary design allows MIURA's modular boilers to deliver intelligent, on-demand steam.

Standard Features

• Multiple Installation (MI) System Control

Intelligently controls all connected MIURA boilers to coordinate operation and to meet the required steam load while optimizing efficiency, response time, system reliability, and boiler longevity. The BP-201 brings boilers on-and-off as needed, keeps the right number of boilers online to meet load spikes, and accurately maintains steady pressure in the main steam header.

• Central Monitoring

Displays the status of all connected MIURA devices including boilers, feedwater systems, and water treatment equipment. Key values, such as system steam pressure, tank levels, and flowrates are displayed, as well as operational status, cautions and alarms.

• Control Patterns

Customizable system settings that control pressures, boiler sequencing, maximum steam output, optional alarms, and response time. Patterns can be switched manually, set to a weekly schedule, or changed remotely from external inputs.

• Rapid Response Settings

Allow the MI system to meet fluctuating steam demand by keeping the appropriate number of boilers online for quick response. System responsiveness can be adjusted to optimize the balance between fuel efficiency and fast action within each control pattern.

• Boiler Rotation

Automatically shifts priority between boilers to evenly distribute runtime across all boilers for prolonged life. The frequency and timing of rotation is fully adjustable.

• Inputs and Outputs

Optional control, safety, and alarm inputs/outputs can be configured to expand the capabilities of the BP-201. Basic dry contact outputs are also available to provide equipment status information and approximate MI system output.



BP Status Light Indicator

GREEN

The green status light indicates that the system is OK.



YELLOW

The yellow status light indicates a caution with the system.



RED

The red status light indicates an alarm with the system.



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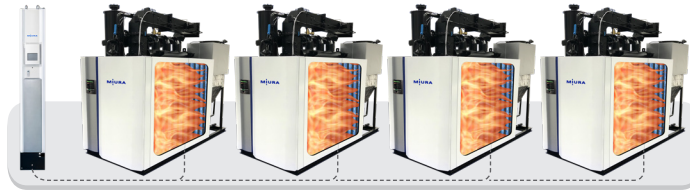
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NOT FOR ENGINEERING PURPOSES.
 Contact your sales representative for latest drawings and data.

BP Flexible Control Sequence

(Example Only: The BP-201STA selects different modes (A, B or other) based on the load condition and user settings for each control pattern. Low fire output % varies by model.)



100%
STEAM
OUTPUT

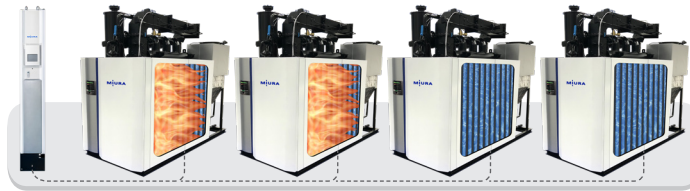


Operating at 100% capacity, all boilers are being used in high-fire mode producing maximum steam system output.



50%
STEAM
OUTPUT

MODE A



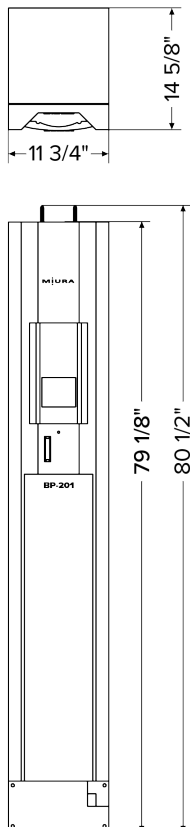
MODE A two boilers in high-fire and two boilers in stand-by providing 50% system output.

MODE B



MODE B four boilers in low-fire providing 50% system output with fast-response capability to match dynamic load swings.

Specifications



Item	Specification
Model	BP-201STA
Power supply	120 VAC, 60 Hz
Wire diameter for power supply	14 AWG
Power circuit breaker capacity	15 A
Maximum power consumption	850 VA
Maximum product weight	132 LBS
	60 kg
Overall dimensions (W × D × H)	11.8" × 14.6" × 79.1"
	300mm × 370mm × 2,010mm
Operating environment	Temperature: 32°F - 122°F (0–50°C) Humidity: 30–90% RH
Controllable boiler units	36
M-NET 3 communication line	Shielded LAN cable (Cable length per cable: 330 ft (100 m) or less) Category 5 or better, single-wire STP straight cable
DS-NET communication line	Twisted-pair cable (Total cable length: 980 yd (900 m) or less) AWG-18, 1P, braided copper wire shielded cable
Dry contact input	Standard number of inputs: 12 - Input voltage: 24 VDC; Input current: 10 mA Normally-open contact (a-contact) input or normally-closed contact (b-contact) input can be selected. <i>Setting must be made by MIURA maintenance personnel.</i>
Dry contact output	Contact rating: 30 VDC, 0.5 A (inductive load) Standard number of outputs: 4 <i>Setting must be made by MIURA maintenance personnel.</i>