BurnerMate Programmable Logic Controller (BMPLC)

Ready to ship • Parameter-based set up • Integrates with the rest of your system!
Preferred PLC-based boiler control products

Provide pre-engineered solutions for new and retrofitted boilers. These products execute the same strategies used in our loop-controllers but use industry-proven products from Allen-Bradley.

- Fast Delivery
- Quick Commissioning
- Simple Controls
- Multiple Configurations Available
- UL Labeled 508A

**CONTROL CABINET FEATURES**

- NEMA 4 wall-mounted steel enclosure
- Allen-Bradley Compactlogix Processor and I/O.
- Allen-Bradley 12.5" color touchscreen interface
- Communication via Ethernet/IP standard
- UL-508A panel fabrication
- Made in the USA

**BURNER MANAGEMENT FEATURES**

- Microprocessor controller, U.L. 372 recognized safety device for single burner boiler applications.
- Capable of accepting inputs from one or two flame detectors without external circuitry or amplifiers. Installing two scanners increases burner availability and reduces nuisance trips.
- Compatible with ultraviolet, infrared, self-checking ultraviolet, and flame rod detectors without needing to change the flame amplifier. Our controller has built-in flame amplifiers.
- Twenty-two input, expanded annunciator: custom messages give operator specific information regarding lockouts and alarms.
COMBUSTION CONTROL FEATURES

> **GAS OR OIL FIRING**
All input, outputs, and programming included for boilers that fire gas, oil, or both. If only one fuel is available at commissioning, the second fuel can be added anytime in the future without reprogramming.

> **PARALLEL-POSITIONING OR FULLY METERED**
Fully Metered systems can be switched to Parallel Positioning in the event a transmitter needs to be taken out of service.

> **OXYGEN TRIM**
Oxygen trim reduces the amount of excess air going through the combustion chamber thereby increasing the fuel savings.

> **FLUE GAS RECIRCULATION**
The FGR valve position is included in all curves. The FGR valve will wait to modulate until the flue gas is warm.

> **VFD WITH BYPASS CONTROL**
The system holds combustion curves for both fuels. Each fuel has two sets of curves; one for the forced draft fan running with a VFD, and one set running at full speed (VFD bypassed). A speed-controlled fan will use less power than a full speed fan thereby increasing electrical savings.

> **3-ELEMENT DRUM LEVEL**
This strategy will automatically switch to two or single element based firing rate and transmitter availability.

> **DRAFT CONTROL**
Enhances stability and control for boilers with tall stacks. Reduces stack losses thereby increasing thermal efficiency.

Preferred PLC-based boiler control products...
for fast delivery and easy commissioning. Fully-featured with intuitive color touchscreens, and detailed diagnostics make boiler operations more efficient. The M85-PLC is designed and ready for use with CSD-1 and NFPA-85 boilers. Built and labelled UL-508A in the USA.