

COMBUSTEX

BURNER IGNITION & CONTROL SYSTEMS

A Canalta Controls Company



The Combustex Burner Management System

BMS-2000 Series Heater Controllers

Powerful, Flexible B149.3 Compliant Burner Control

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CANALTA
CONTROLS GROUP

With the BMS-2000, You Have Exceptional Control

The BMS-2000 Series Burner Management System gives you the automated control to safely start, monitor and manage a single or dual burner gas-fired industrial heater.

- Calibrate, tune and configure more than 60 parameters and variables via the front keypad.
- Maintain system security through password protection.
- Access a wide selection of sequencing, monitoring and control information through easy page scrolling on the heated, back-lit display.
- Gain flexibility with remote and local start / shutdown / set point capabilities.
- Take control of shutdowns with first out annunciation and a direct readout of shutdown conditions.

With Control Comes Safety

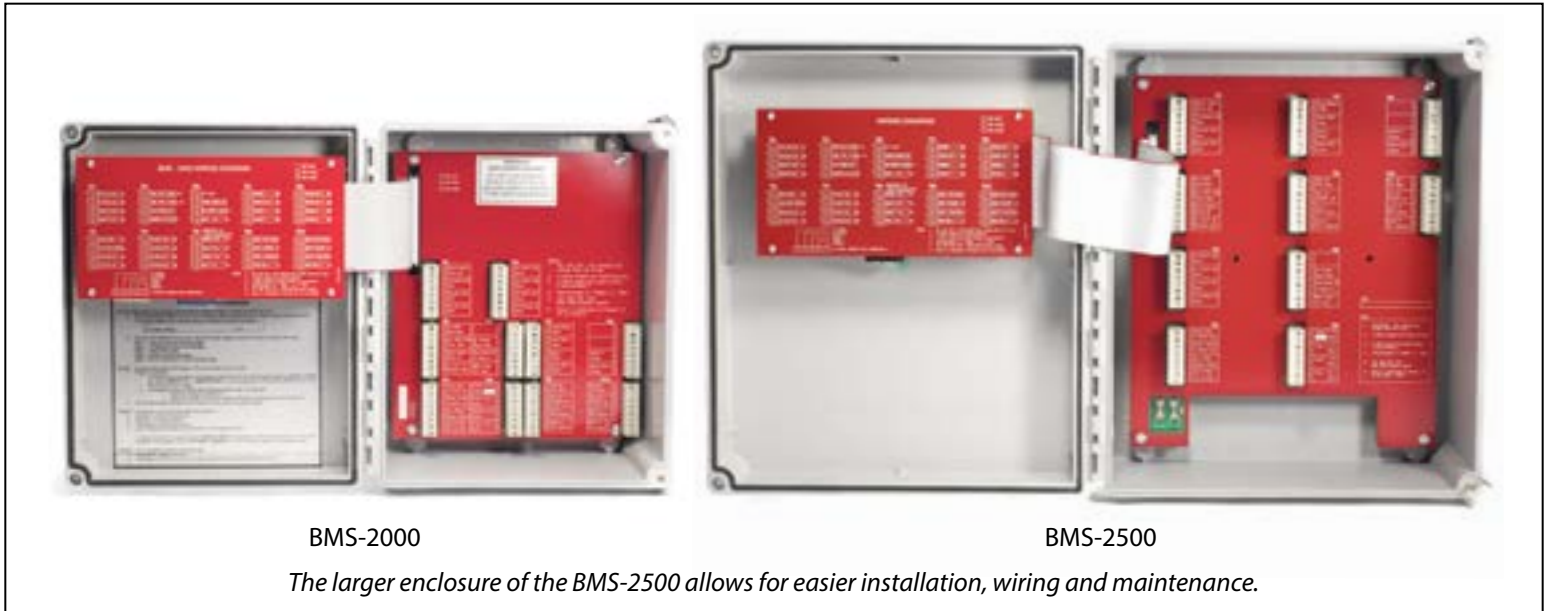


The BMS-2000 Series Burner Management System is now available with an all new plug-in low power solenoid module for peak and hold applications.

Automatic Sequencing Features

- Single or dual burner control (*in conjunction or independent*)
- Auto relight sequence set to up to three retry attempts (*or deselected*)
- Configurable pre- and post-purge times, auxiliary blower with confirmation and prepurge
- Configurable dual set point thermocouple operation, flame ionization detection and/or U.V. detection
- Ignition output signal can be configured as steady or pulsed
- Adjustable startup bypass timers
- Wide variety of configurable safety interlock devices
- Configurable remote start / stop
- Configuration settings are password-protected and stored in non-volatile memory
- Configurable auto-startup after power failure
- Configurable intermittent or standing pilot

The BMS-2000 Series heater controllers are at their most powerful when the single or dual burner system incorporates Pilot Pro™ Ignition Assemblies. These igniters are designed and built around the features of the BMS-2000 and provide the operator with significant control both at the BMS-2000 keypad and in the control room.



Shutdown Annunciation Features

A first out annunciator is built in with direct readout of the shutdown conditions. Each shutdown condition is marked with its chronological incoming position and must be acknowledged and cleared before startup can be initiated.

Available Standard and Configurable Shutdown Conditions:

- Flame failure - Burner #1
- Flame failure - Burner #2
- Flame failure during auto-relight
- Low voltage input
- Bath high temperature
- Remote shutdown
- Low bath level
- Stack #1 high temperature
- Stack #2 high temperature
- Local manual shutdown
- Auxiliary flame failure
- Low fuel gas pressure - Burner #1
- Low fuel gas pressure - Burner #2
- High fuel gas pressure - Burner #1
- High fuel gas pressure - Burner #2
- Purge blower failure
- Thermocouple failure
- Proof of closure - Burner #1
- Proof of closure - Burner #2

Temperature Control Features

The BMS controller is available as a single or dual temperature control version. The dual temperature control version can be configured so that the controls work completely independent of each other, or with one controller over-riding the other. Control can be primarily selected between ON/OFF with adjustable dead band or PID (Proportional with Integral and Derivative). Dead band and PID parameters are adjustable for tuning and are password-protected. The operator can select between auto / manual and remote / local set point. Remote temperature indication output and temperature set point input are configurable. Bath temperature set point and high limit are locally displayed and easily accessible.

Technical Specifications

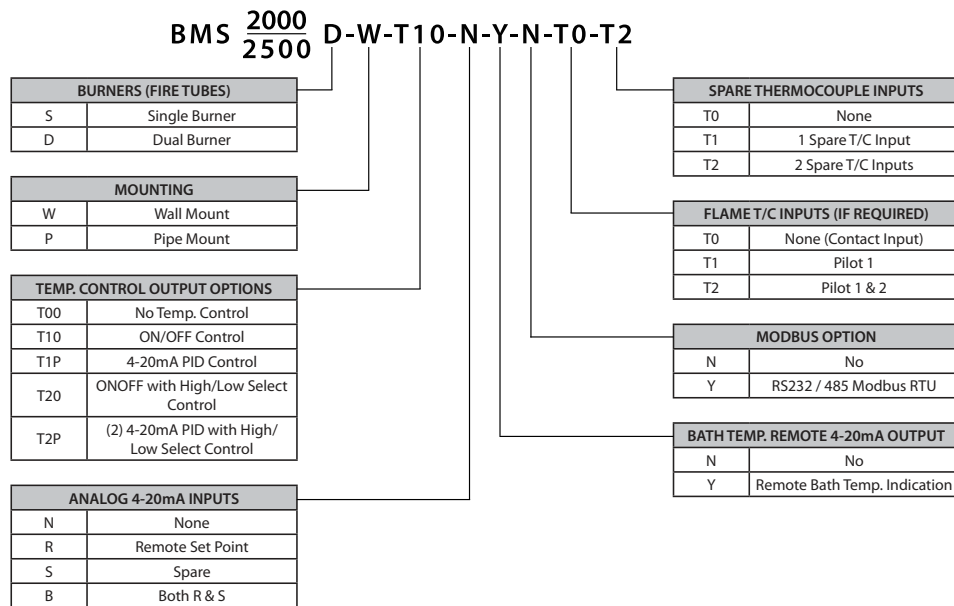
| | |
|-------------------------------|---|
| Enclosure Dimensions | 10.5" H, 8.5" W, 6" D (2000) / 12.5" H, 10.75" W, 6.125" D (2500) |
| Enclosure Construction | Molded Fiberglass Polyester with Quick Release Latches |
| Operating Temperature | - 40°C to + 40°C (-40°F to +104°F) |
| Inputs | (12) Digital Solid State; (2) Analog 4-20mA; (5) Thermocouple Type K Underground Cold Junction Compensated |
| Outputs | (16) 12-30 VDC Digital Solid State Optical Isolated (1.5A each) (2) Analog 4-20mA 500 Ohm (max.) |
| Power Supply | 12 to 30VDC Clean Filtered |
| Current Draw | 80 mA (min), 160 mA (typical), 300 mA (max) for Electronics + LCD Backlight + Display Heater. Current draw of solenoids and other devices driven by BMS will have to be added to above to calculate total. Total current draw not to exceed 3A. |
| Display | Low Temp. Heated LCD |
| Mounting | Wall Mount Bracket Standard; 2" Pipe Mount Optional |
| Communication | Digital, Analog and Modbus |

Standards & Certifications

ANSI Z21.20 - 2007
 CSA C22.2 No. 199 - B149.3 Compliant
 CSA 22.2 No. 213 - M1987
 UL 1998
 UL 372
 Class 1, Div. 2 Groups B, C and D Haz. Loc.
 Temp. Code T4
 NEMA Type 4x



Model Number Information



Contact us today to find out how the BMS-2000 can safely meet all of your burner needs.

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