

CYCLING STEAM HEATING CONTROLS

- With
- *Motorized Valve or Burner Control*
 - *Internet, BACnet, Phone, RS232 Communication*
 - *Separate Day/Night Schedule settings*

MPC Platinum

Description:

A unique Microprocessor Based Control to manage a Steam Boiler or a Two-way Steam Valve in Steam Heating Applications Based on System Temperature and Outdoor Temperature. The MPC Control provides buildings with comfortable, even heat, while maximizing fuel savings. In addition, it incorporates many features that can be customized to each building's unique characteristics.

- **Designed with Steam Heating in Mind.** The MPC control is designed to utilize either a steam boiler or district steam. Each of these options has a set of pre-configured, but adjustable settings to meet the specific needs of each building. The MPC will reduce fuel costs while maintaining a more comfortable space temperature.
- **Multiple Day and Night Schedules.** The control has multiple adjustable day and night settings to help reduce fuel consumption. This includes a built-in, 7 day programmable schedule, with 4 Day settings and 4 Night Setback settings per day, to customize operation for even further temperature control and fuel savings.
- **Boost and Vari-Boost.** To assist a building in recovering quickly to comfortable temperatures after the cooler night period, the control has a built-in Boost feature. The Boost allows the boiler to run on its limits for a calculated time period based on outdoor temperature and warm-up setting. This allows the temperature within the building to rise rapidly.
- **Output Relay & Multiple Auxiliary Outputs.** Utilizing the integrated system relay and multiple auxiliary outputs, the MPC Platinum can be configured to activate or de-activate additional equipment or controls based on any of the MPC cycle operation or on an independent programmable schedule (using the Aux Schedule settings).
- **Vari-Boost with Early Shut Down.** Another saving feature, the MPC Platinum allows office buildings to switch to Night (save) mode earlier than scheduled. The ESD (Early Shut Down) feature takes into consideration the residual heat in the building and outdoor temperature.



- **Optional Remote Communication with or without Modem, Internet Connection Package.** Imagine being able to not just control your building heat from anywhere, but to be able to see boiler and valve status, cycle and temperature logs. In addition, you will be able to change schedules, set and monitor wireless and hard wired sensors, configure and receive alarms, configure and view histories, activate or deactivate sensors, and more. Well, imagine no more. The MPC Platinum can be ordered with any of the communication packages that fit your needs. With the optional Visual Gold Plus or the Internet communication packages you can configure, set alarms and monitor a variety of sensors ranging from wireless, water meter, oil level, temperature, switch, and stack sensors.
- **BACnet IP Communication.** With the BACnet option, an MPC Platinum can act as node in a BACnet network. A proprietary communication EMS/BMS can use their BACnet integration to place the MPC on their network.
- **Memory.** With a built-in E Prom, the MPC Platinum will never lose your settings even after a power outage or loss of battery power.



*Ask About The Internet or The
BACnet Communication Options*



- **Digital Display for all System Settings.** The MPC Platinum's 80 character alphanumeric digital display names each system parameter in plain English and shows its precise value. The easy to follow menu system allows users to quickly make changes to any system setting without having to learn any specialized codes or keyboard commands. Password protection is available to prevent unauthorized users from making adjustments to control settings.
- **Communicate with EMS (Energy Management Systems) (Requires RI-EMS optional communication Package).** The MPC Platinum is capable of receiving and sending information to Energy Management Systems using XML code. In addition, with built-in Shutdown and Prove inputs, the MPC Platinum is capable of connecting to and being controlled by an EMS or other controller.

Features:

Standard Features

- Built-in Outdoor Reset-For better comfort and increased energy savings, the MPC controls building temperature by varying the Cycle-On to Cycle-Off time based on Outdoor temperature.
- Adjustable System Run-On Delay. Allows the System Relay an additional Run-On time to disburse residual heat in the boiler. Thus, reducing boiler stand-by loss.
- Day (Normal)/Night (Save) modes - For additional savings, the MPC Platinum can control two independent heating modes with different Heat Adjustments and Outdoor Cutoffs based on a programmable schedule for Day (Normal) and Night (Save)
- Built-in Prove and Shutdown -The Prove can be used to check the status of other equipment, such as the end switch on a combustion air damper prior to firing the boiler. The Shutdown can be used to deactivate the system.
- Bypass- Allow installers and contractors to test and override control settings when needed.
- Season changes (Summer / Winter) - Controls whether the boiler will operate and provide heat.
- Manual Shift- Allows for a temporary adjustable override of boiler operating schedule by switching from Day (Normal) to Night (Save) or the opposite.
- Control other devices or Equipment - With the Aux Clock output you'll have the ability to turn on or off other equipment on a customized secondary schedule. The schedule has a customizable 4 On and 4 Off settings per day.
- Fast Cycle - Another handy troubleshooting feature. It allows the control to cycle based on seconds instead of minutes.
- Thermal Lockout saves energy by preventing the MPC Platinum from starting a new cycle when system temperature is still hot.

Remote Communication

- Remote Communication Option- Now you can connect your MPC Platinum panel to the Internet, a BACnet compatible network, or to Visual Gold software package using an RS232 connection or a modem and be able to read, change, monitor, and analyze your readings in a variety of ways from virtually anywhere.
- Use Existing Sensors and/or Wireless Sensors and MIG Sensors - (Additional sensor capability is available with Visual Gold or Internet Communication Packages.)
- Connect as many as 64 sensors to the panel - The panel, when purchased as an Internet or with Visual Gold, it can monitor up to 64 additional sensors. Some of these sensors can monitor fuel levels, stack temperature, or smoke detectors. You can even connect your panel to a MIG box (multi-sensor neuron processor.)
- The MPC can communicate with EMS and other systems via XML (Extensible Markup Language).
- Space Lockout saves energy by preventing the MPC Platinum from starting a new cycle when space temperature is still warm.

Interface with Other Controls

- Can connect to a Multi-MOD control – When connected to the Multi-Mod it will control up to 4 modulating boilers. An additional 16 boilers can be added by using Extension Panels.
- Interface with EMS / Energy Management Systems- The MPC Platinum can be enabled / disabled via EMS.

Specifications:

| | |
|--|--|
| Voltage Input: | 120 VAC 60 Hz |
| Power Consumption: | 30 VA Max/30 Amp Max |
| Operating Ambient Temperature: | 20°F to 120°F |
| Seasons: | Winter and Summer |
| Heating Modes: | Burner/Motorized Valve or District Steam |
| Cycle Length: | 10 to 240 minutes |
| System Output: | 1 S.P.S.T. |
| Boiler Motorized Valve Outputs: | 1 N.O. S.P.S.T. for Motorized Valve and 1 N.O. S.P.S.T. for Burner |
| Auxiliary /Clock Output: | 1 N.O. S.P.S.T. operates based on Auxiliary Schedule |
| Option Outputs: | 3 N.O. S.P.S.T. can be configured to match or invert cycle, Day/Night, Outdoor Cutoffs, or System or Aux/Clock relay operations |
| Output Relay Ratings: | 1 Amp inductive, 6Amp resistive at 120 VAC 60 Hz, 15A total for all circuits |
| Temperature Display: | Fahrenheit or Celsius |
| Display: | 80 character Alphanumeric (4 rows with 20 characters each) |
| Sensor Ranges: | Outdoor temperature sensor - minus 35°F to 250°F Heating system sensor - minus 35°F to 250°F |
| System Set Point: | 70°F to 250°F |
| System Differential: | 3°F to 75°F |
| Auxiliary Sensor Inputs: | 3 Auxiliary Temperature Sensor Inputs |
| Network Sensor Input: | 64 Sensors can be connected (Use only Neuron Sensors, MIG, or Wireless Receiver.) |
| Day / Night Outdoor Cutoffs: | 20°F to 100°F |
| Day/ Night Heat Adjustments: | A to P (Changes the ratio of the Cycle On to Cycle Off based on a calculated curve) |
| System Run-On: | 0 to 360 minutes |
| Schedules: | 4 Day Time and 4 Night Time (Setback) settings per day |
| Aux Clock Schedule: | 4 open and 4 closed settings per day to control Aux Clock Output relay |
| Morning Boost: | Vari-Boost - Self-adjusting from 0 to 180 minutes Manual Boost - adjustable from 0 to 120 minutes Early Shutdown - Self-adjusting from 0 to 90 minutes |
| Fast Cycle: | For testing only. Changes cycle minutes to seconds |
| Local Security: | Four letter Password Enabled option |
| Power Backup: | Lithium coin battery, 100 days minimum 5 year replacement (Maintains Clock in power outages) Other parameters are stored in E Prom |
| Memory Backup: | All control parameters are stored in E Prom indefinitely |
| Remote Communications: | 1 RS232 and 1 RS485 (RI and RIM controls), Internet (RINet only), BACnet IP |
| External Inputs: | 1 Network Input, 3 Aux Inputs, Shutdown Input, and Prove Input |
| Season: | Winter and Summer |
| Enclosure: | NEMA 1 |
| Dimensions: | 5-1/8" x 13" x 13" |
| Weight: | 14 pounds |

Remote Communication Specifications:

| | |
|-------------------------------------|--|
| Thermal Lockout: | On/Off |
| Space Lockout: | On/Off |
| Day Target and Night Target: | Day Target (55°F to 85°F), Night Target (50°F to 80°F) |
| Remote Communication Inputs: | 1 Network Input, 3 Aux Inputs |

Item Description

Part

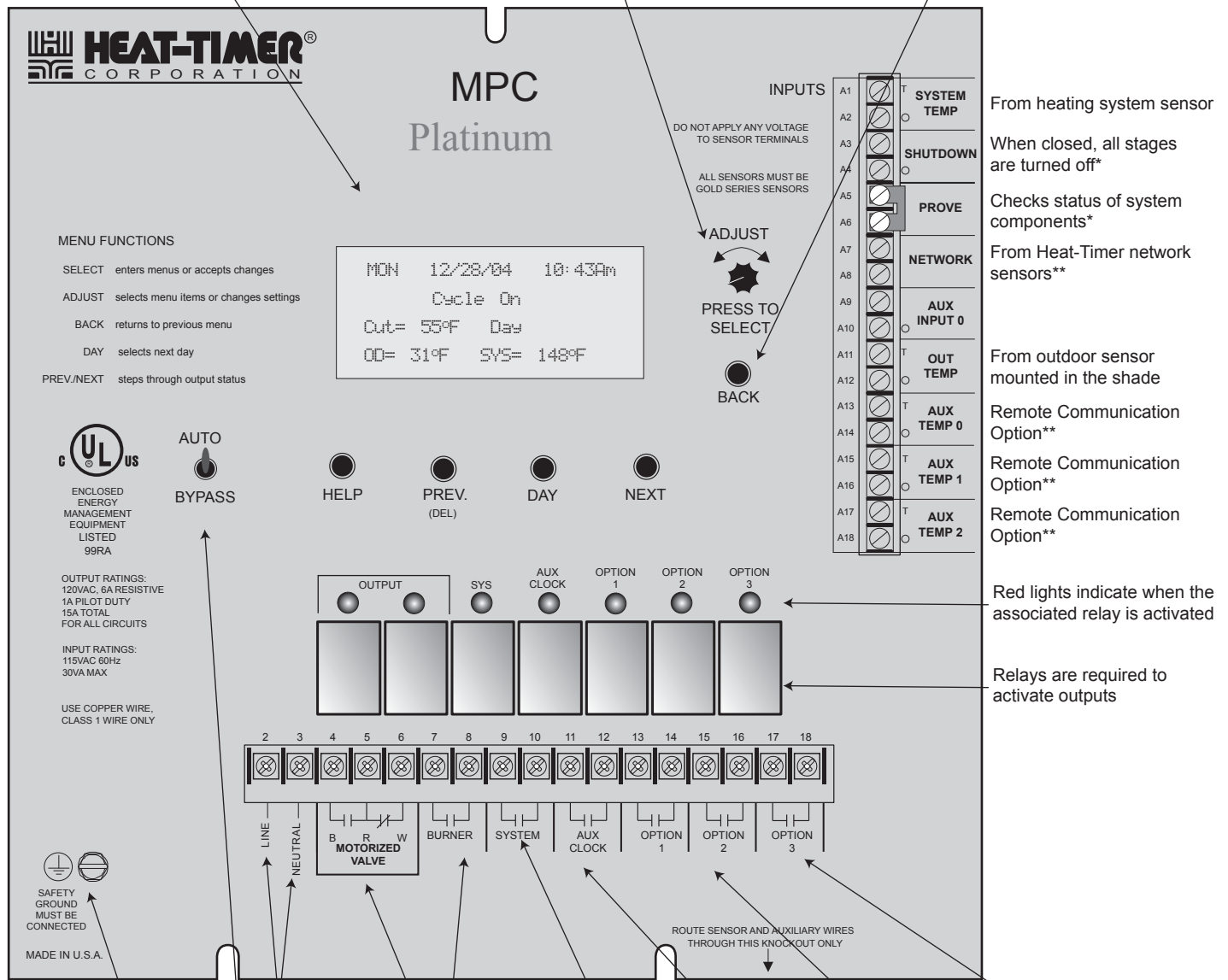
| | |
|--|--------------|
| MPC Platinum | 926785-00 |
| MPC Platinum with Visual Gold Plus with Modem | 926785-RIM |
| MPC Platinum with Visual Gold Plus without Modem | 926785-RI |
| MPC Platinum - Internet | 926785-RINet |
| MPC Platinum - BACnet IP | 926785-BAC |

MPC PLATINUM PANEL

Digital display shows the date, heating status, and cutoff, outdoor, and system temperatures. To view and adjust settings, press the Adjust/Select button.

Depress the knob to move forward through the menus and to accept changes. To change a setting's value, rotate the knob.

Depress the button to go back through the menus



From heating system sensor

When closed, all stages are turned off*

Checks status of system components*

From Heat-Timer network sensors**

From outdoor sensor mounted in the shade

Remote Communication Option**

Remote Communication Option**

Remote Communication Option**

Red lights indicate when the associated relay is activated

Relays are required to activate outputs

Green Ground screw must be connected to Earth Ground

120VAC Power

Aux Clock status is programmable based on time schedule

Internet controls use Option 3 to restart modem

OPEN/BYPASS position mechanically overrides outputs so the valve and burner are always active

Valve and Burner Outputs are active when MPC requires heat

System Output is active when MPC requires steam and has optional Run-On

Options 1, 2, & 3 can be used to match or invert output relays and cycle operations

* DRY CONTACT ONLY

** Only available with the Remote Communications package

ISO 9001:2000
CERTIFIED