FENWAL CONTROLS

Fall 2020

# The Front Burner

*A Quarterly Newsletter Highlighting Product & Industry News*

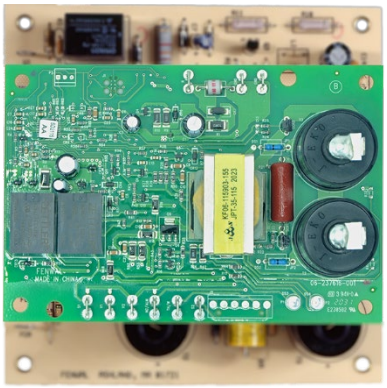
## *The newly redesigned 35-62, Dual Direct Spark Control*


The 35-62 Series controls are designed for appliances that require dual burner configurations at a cost comparable to a single burner controller. These 24VAC controls provide high energy 18KV spark output for reliable gas ignition.

The new microprocessor and design combined with the latest surface-mount technology components provide precise, repeatable timing and operating sequences. Dual diagnostic and flame sense LEDs provide instant visible status when supporting your appliance.

### Enhanced Servicing & Troubleshooting

Servicing and troubleshooting your appliance is enhanced through the available Universal Asynchronous Receiver/Transmitter (UART) communications, providing real time control status data. The redesigned 35-62 meets the newest ANSI Z21.20 harmonized ignition standard well in advance of the October 2023 deadline.



### Reduced Footprint

Now with a 25% smaller footprint than the previous generation, these controls install into your appliance easier and offer additional versatility with flame sense capabilities for local as well as remote applications.

### Additional Options

Single/three try ignition, Automatic reset, Intelligent alarm out, Standoffs/enclosure, Fan control board for inducer blower support and Wiring harnesses.

***Click here to learn more about the new 35-62…***

# *Modulation Made Simple*

The Fenwal Controls PIM® is designed for flexibility and the needs of modulating burners and provides more control and creates higher-efficiency appliances.

Combining multiple capabilities into a single control creates a cost competitive modulating system.

**The PIM in Action**

A typical modulating fryer included a gas ignition control, a pulse width modulation control and multiple time delay relays. The PIM consolidates these components into a single control, saving money and reducing the total numbers of vendors needed to manufacture the fryer.

**Design Flexibility**

Controlling modulation can be done with a range of techniques. The PIM accepts 0-10V or 4-20mA signals that can be used to control modulation from a variety of sources or a building management system. The onboard potentiometer can be used to set a target temperature, allowing the control to drive the burner modulation to optimally reach that setpoint. The available thermistor inputs read output, input, room and other temperatures to calculate and provide a modulation rate for a desired efficiency. The PIM uses the integrated UL353 high limit and embedded software to meet your design requirements.

**Your Complete Solution**

The Platform Ignition Module is a single control with the versatility to meet your design needs. When leveraging its full capabilities, a system can be designed without a user interface or additional control boards, making the PIM a cost-effective candidate for controlling your modulating appliance.

***Click here to learn more about the PIM…***

## *Did you see us in Appliance & HVAC Report?*


Our white paper, EMI and Gas Ignition: The impact of Electrical Noise, was published in the September 2020 issue of Appliances & HVAC Report. This white paper discusses the control board design and how that can impact EMI. It also discusses wiring and cables, including the impact of layout and information on length and ratings. Additional tips are offered regarding grounding and external wiring and their impact on EMI.

The topics of confirming system performance and testing are also covered. Several tests must be performed to ensure the product performs as expected in a variety of conditions. Factors such as input voltage, spark electrode gap, temperature, placement / spacing and component variations all require testing for their potential noise impact.

***Click here to read the full white paper…***

**Questions with your control systems**?
Contact our Sales Managers: Bill Sager or Mark Tully
Or find a representative near you at fenwalcontrols.com



Kidde-Fenwal, Inc. | 400 Main Street, Ashland, MA 01721