FIREYE Inc.

## INSTALLATION INSTRUCTIONS 133-701 PIGTAIL WIRING BASE <br> Used with BurnerLogix $\mathbf{Z}$ type only FLAME SAFEGUARD and BOILER CONTROLLER

Wiring base part number 60-2850-1 is a pre-wired wiring base for use with the BurnerLogix Z flame safeguard and boiler control family. As shipped, cable clamps are provided to anchor the wires in the wiring base. For applications requiring alternate mounting, these can be removed and replaced with rigid conduit hubs. Each wire is identified by its unique color and a label identifying the corresponding terminal number. The wiring base can be mounted using either a din rail or direct mounted to a back plate using up to \#10-32 screws. The mounting location for the din rail is along the horizontal center line. The mounting information is detailed as follows:


## Ensure that electric power is turned off!

WARNING: Installer must be trained and qualified. Follow the burner manufacturer's instructions. Controls require safety limits utilizing isolated mechanical contacts. Electronic limit switches may cause erratic operation and should be avoided.
CAUTION: Refer to $\mathrm{SN}-100$ for recommended grounding techniques. Be aware that power to some interlocks (operating controls, air flow switches, modulating circuits, etc.) may be derived from sources other than what is controlling the BurnerLogix.

| Terminal No. | Wire Color | Type | Description | Rating |
| :---: | :---: | :---: | :---: | :---: |
| L1 (Hot) | Black |  | Line voltage supply | 120 VAC (+10\%,-15\%), $50 / 60 \mathrm{~Hz}$ |
| L2 (Neutral) | White |  | Line voltage common |  |
| EARTH | Green | Ground |  |  |
| S1 | Red/Wht |  | Scanner Input | 300 VAC, 3 mA |
| S2 | Blu/Wht |  | Scanner Input | 300 VAC, 3 mA |
| A | Red | Output | Alarm | 120 VAC, 1 A pilot duty |
| M | Brown | Output | Combustion Blower | 120 VAC, 9.8 FLA, 58.8 LRA |
| 3 | Yellow | Input | Operating Control | $120 \mathrm{VAC}, 1 \mathrm{~mA}$ |
| 13 | Orange | Input | Fuel Valve End Switch, Pre-Ignition Interlock | 120 VAC, 1 mA |
| P | Gray | Input | Running Interlock | 120 VAC, 1 mA |
| D | Wht/Brn | Input | Low Fire Start Switch | 120 VAC, 1 mA |
| 8 | Wht/Gry | Input | Open Damper Proving Switch | 120 VAC, 1 mA |
| W | Wht/Orn | Output | Delayed Main Valve | See Table |
| 5 | LT Blue | Output | Ignition / Pilot Valve | See Table |
| 6 | Tan | Output | Pilot Valve | See Table |
| 7 | Violet | Output | Main Fuel Valve | See Table |
| 16 | DK Blue | Input | Lag 1 Input | SEE BULLETIN BLZ-1001 FOR |
| 21 | Pink | Input | Lag 2 Input | ALTERNATE USES |
| LOW VOLTAGE INPUT / OUTPUT |  |  |  |  |
| 12 | Wht/Yel | Output | Modulator Drive Positive 4-20 mA Output |  |
| 10 | Wht/Red | Output | Modulator Drive Common (0 volts) |  |
| X | Wht/Blue | Output | Temp/Pressure Source Voltage (28 Vdc nominal) |  |
| 11 | Wht/Grn | Input | Temp/Pressure \#1 (PCV) 4-20 mA Input |  |
| 22 | Wht/Vio | Input | Temp/Pressure \#2 (AUX 1) 4-20 mA Input |  |
| 23 | Brn/Wht | Input | Temp/Pressure \#3 (AUX 2) 4-20 mA Input |  |


| Combination No. | n Pilot | Main $\quad$ I | Ignition | Delayed Valve |
| :---: | :---: | :---: | :---: | :---: |
| 1 | C | E ${ }^{\text {E }}$ No Lo |  | No Load |
| 2 | B | E |  | No Load |
| 3 | No Load | E |  | B |
| 4 | E | E |  | No Load |
| 5 | No Load | E ${ }^{\text {E }}$ |  | E |
| 6 | D | E |  | No Load |
| 7 | D | D ${ }^{\text {D }}$ |  | D |
| 8 | No Load | D $\quad$ A |  | No Load |
| Composition of each Combination |  |  |  |  |
| A | B | C | D | E |
| 4.5 A Ignition | 50 VA Pilot Duty plus 4.5 A Ignition | 180 VA Ignition plus motor valves with: 660 VA inrush, 360 VA open, 250 VA hold. | 2 A Pilot Duty | 65 VA Pilot Duty plus motor valves with: 3850 VA inrush 700 VA open, 250 VA hold |

MAXIMUM CONNECTED LOAD NOT TO EXCEED 2000 VA

