
THERMO ASH-MONITORING GRATE CONTROL

Ash that contains fuel that is not fully combusted will be a higher temperature than ash coming from thoroughly combusted fuel. The Thermo Ash-Monitoring Control automatically monitors the temperature of the ash leaving the coal pot and leaves the ash in place until complete combustion occurs before allowing it to fall away. Therefore, no adjustment other than the factory adjustment is typically necessary to have the boiler perform at peak power output throughout the burn season (a minor on-site adjustment may be necessary when the boiler is first installed). With the Thermo Ash-Monitoring controlled grate, it is possible for the fire to remain lit for days during low usage periods without having to adjust the grate by hand as would be necessary in a timer-based grate control system.

If an ash temperature sensor is used, it should be set at 130° for normal operation. During periods of light demand, reducing the setting to 120° will aid in maintaining the proper level of coal in the firebox.

Programming the Fuji PXR3 Controller for the Thermo Ash Monitoring Grate Control

1. Hold down SEL key until P-n1 is showing (5 sec).
2. Set control range
 - a. Scroll down to SV-L
 - b. Hit SEL
 - c. Set number to 120
 - d. Hit SEL
 - e. Scroll down to SV-H
 - f. Hit SEL
 - g. Set number to 150
3. Hold down SEL key until SV light (red) is lit.
4. Set number of 140

5. Hold down SEL key until P is showing
6. Hit SEL
7. Set number to 0.0
8. Hit SEL
9. Scroll down to HYS
 - a. Hit SEL
 - b. Set number to 10
 - c. Hit SEL
10. Hold down SEL key until SV light (red) is lit.
11. Hit SEL again

Once all settings have been programmed, to change the upper value (temperature at which the grates are to shut off), press SEL, choose the new value, and then press SEL again.

REMOVAL AND DISPOSAL OF ASHES

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in a closed container until all cinders have thoroughly cooled to prevent inadvertently starting a fire.

CONDITIONING OF BOILER WATER

Proper treatment of make up water and boiler water are necessary to prevent scale or other deposits and corrosion within the boiler. The absence of adequate external and internal treatments can lead to operation upsets or total boiler failure. Where a choice is available, pretreatment external to the boiler is always preferred and more reliable than treatment within the boiler.