## **ECONOMASTER II**

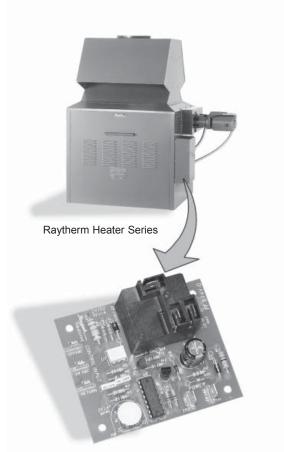
Energy saving pump control for Raypak heating and hot water boilers

For use in commercial hydronic heating and domestic hot water applications, with Raypak boilers and water heaters.

- Raytherm
- Hi Delta

The Raypak Economaster II is a solid-state timedelay relay which regulates pump operation to optimize system efficiency and reduce operating costs. It activates the pump as needed to support hot water demand, and shuts the pump down only after evacuating the boiler's residual heat to the heating system or hot water storage tank.

The Economaster II saves money in several ways. Electrical costs are reduced, since the pump is not running constantly. In addition, gas costs are cut, because residual heat that would otherwise escape through the flue is captured, and water is not subject to cooling during unnecessary circulation through the system. Finally, without constant water circulation, wear and tear on the boiler waterways is also reduced, prolonging the life of the boiler. And the Economaster II delivers these savings regardless of variable load conditions experienced by the boiler!



Economaster Circuit Board

## Gas Savings with Economaster II

| Model Number   | 181     | 624                      | 1223      | 1826      | 3001      |
|----------------|---------|--------------------------|-----------|-----------|-----------|
| BTUH Input     | 181,000 | 627,000                  | 1,222,500 | 1,825,000 | 3,000,000 |
| Cost per Therm |         | Annual Savings (dollars) |           |           |           |
| 0.30           | 56      | 196                      | 381       | 570       | 936       |
| 0.60           | 113     | 391                      | 763       | 1139      | 1872      |
| 0.90           | 169     | 587                      | 1144      | 1709      | 2808      |
| 1.20           | 226     | 782                      | 1526      | 2278      | 3744      |

Savings based on typical heater operation. Your results may vary.



Catalog No.: 5100.20-I Effective: 12-28-07 Replaces: 03-15-03

## **ELECTRICAL DATA**

Adjustable Timing: 3 to 10 minutes (Factory set at 7 minutes)

Input Power (Primary): 24 VAC 50/60 Hz Input Signal (Controller): 24 VAC or 120 VAC

Output (SPST Relay): Load - Up to 10 Amp-120 VAC Single Phase\*

Ambient Temperature: -67°F to +158°F

## SUGGESTED SPECIFICATION

The Economaster II pump delay controller shall maintain pump operation until all usable heat from the combustion chamber is absorbed into the system or storage tank. It shall be adjustable from 3 to 10 minutes to facilitate fine tuning to the specific system.

Raypak, Inc. reserves the right to make product changes or improvements at any time without notice.

<sup>\*</sup> Motors larger than 3/4 HP and three-phase current require a contactor or motor starter equipped with a 120 VAC coil.