

# ***EPU and EPU-CH***

## *Steam Cycling Controls*

### **Description:**

The EPU and EPU-CH are outdoor/indoor heating controls for steam heated buildings. They effectively regulate the ambient indoor temperatures according to outdoor temperature. The heating system is shutdown when the outdoor temperature rises above an adjustable set point. A built-in program clock allows the control to hold lower temperatures during the night or when the building is not occupied. An adjustable morning warm-up is also, included.

The EPU and EPU-CH run on the cycle concept. The cycle concept causes the heating plant to run longer as outdoor temperatures fall. This means as outdoor temperatures fall, more heat enters the building, and the ambient indoor temperature remain constant and comfortable. For more information on the cycle concept, see the back of this document.

The EPU and EPU-CH both come equipped with an outdoor sensor and a heating system sensor. The heating system sensor signals the panel that heat has circulated through all the pipes in the building. The EPU-CH has an additional use for the heating system sensor. If the building pipes are still hot, the EPU-CH will not start another cycle. This feature helps prevent over heating.

### **Features:**

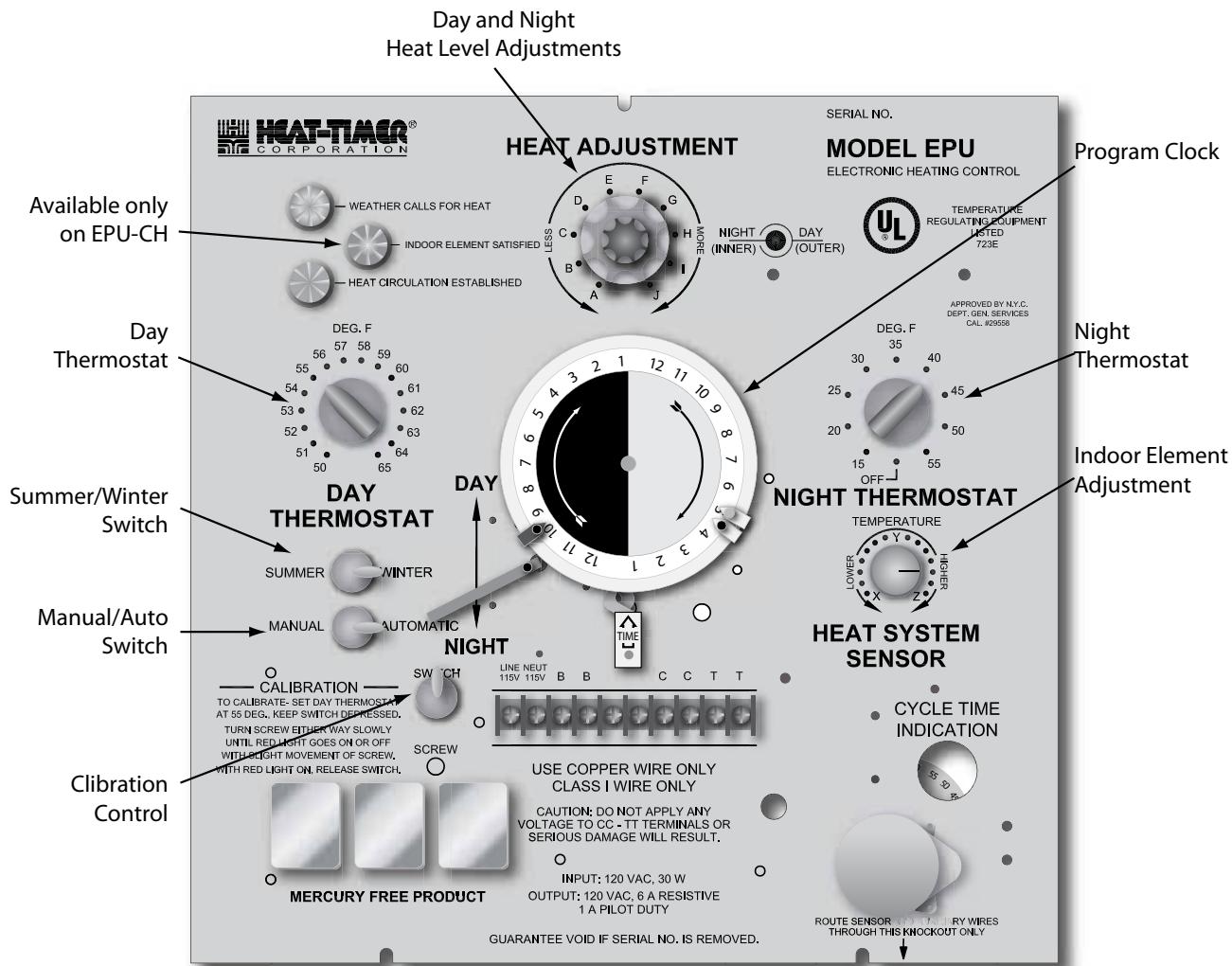
- Automatically cycles boiler operation based on outdoor temperature.
- A reliable, easily installed, "Weather-Head". This sensor monitors outdoor temperature and can be run up to 500' from the panel.
- A heating system sensor to signal the panel that heat has circulated to all parts of the building. This sensor is strapped onto a system return pipe and can be run to 500' from the panel.
- Time clock to provide three different heat levels:
  - Day or Normal heat levels for when the building is occupied or tenants are active.
  - Night or Save heat levels for when the building is empty or for when tenants are sleeping.
  - Morning Warm-up to quickly return the building to comfortable heat levels after Night or Save periods.

### **EPU-CH:**

- Thermal Lockout prevents a new cycle from starting if there is sufficient heat in the building.
- Lights to indicate heating system sensor status.

<b>Item Description</b>	<b>Part #</b>
<b>EPU-60</b>	<b>926554-00</b>
<b>EPU-CH-60</b>	<b>926555-00</b>

# EPU and EPU-CH Control Panel



These controls effectively regulate indoor heat levels according to outdoor temperatures. The system is shutdown when it becomes warm outside. If the outdoor temperature drops, the control automatically begins heating cycles. The colder it is outside, the longer the heating cycle. Following the start of the heating cycles at the preset morning hour, the control recycles through out the day. At the desired nighttime hour, the heat is reduced.

The chart shows the approximate number of minutes of heat per hour after heat has been established. C on the chart refers to continuous operation. The standard cycle is one hour. However, 30-minute cycles are available on special order. If you use a 30-minute cycle, divide all figures in the chart by half.

## OUTDOOR TEMPERATURE

HEAT ADJUSTMENT	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
A	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6
B	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10
C	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14
D	46	44	42	40	38	36	34	32	30	28	26	24	22	20	18
E	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22
F	C	52	50	48	46	44	42	40	38	36	34	32	30	28	26
G	C	C	C	52	50	48	46	44	42	40	38	36	34	32	30
H	C	C	C	C	C	52	50	48	46	44	42	40	38	36	34
I	C	C	C	C	C	C	52	50	48	46	44	42	40	38	36
J	C	C	C	C	C	C	C	52	50	48	46	44	42	40	38

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