

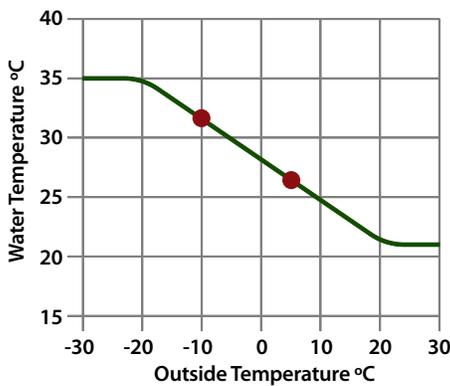


## Outdoor Reset Control:

Our CEBR and CEBR2 series boilers have "Outdoor Reset Control" built into the circuit board. Outdoor Reset improves on the modulation system of our CEB series giving even greater control.

An outdoor temperature sensor (included) is wired to the control circuit board in the boiler. The outdoor temperature is continuously monitored by the boiler. The electronic control then regulates the water temperature based on both the aquastat setting and the outdoor temperature to fine-tune the boiler's heat output. As the temperature outside gets colder, the boiler increases the water temperature. As the temperature outside gets warmer the boiler decreases the water temperature. By better matching the water temperature based on the heat loss of the building, the CEBR or CEBR2 series boiler provides you with the ultimate in indoor comfort throughout the heating season.

The graph below is an example, with the aquastat set to 35°C. During colder weather the boiler will maintain the heat output at the aquastat setting, but as the temperature increases



outdoors, the heat output of the boiler will be decreased. For example when it is -10°C outside the water temperature will be 32°C, and when it is 5°C outside the water temperature will be 27°C.

## Two Thermostat Inputs:

Our CEBR2 series boilers have two thermostat inputs. This allows for two boiler operating modes. These two operating modes are "normal" and "priority". The two thermostat inputs allow for one normally operating thermostat input for heating demands of the home or building, and a second priority thermostat input operating at a high temperature for temporary demand of an auxiliary zone or device. Thermostat 1 is for normal space

heating, the water temperature is controlled by the boiler to the setting of the aquastat. Thermostat 2, the priority thermostat puts the boiler in its high temperature mode. The water temperature is controlled by the boiler to a setting of 75°C. The CEBR2 series also include outdoor reset control. However, the outdoor reset control is for space heating only. The priority thermostat always operates at the same temperature throughout the year.

## Load Management:

Load management is available as an option on single phase CEBR and CEBR2 series boilers. The load management system monitors how much current is being used at the main service entrance of your home or building. The control circuit in the boiler will determine how many boiler elements can be energized, so that the capacity of the electric service is not exceeded. The size of the service entrance must be specified when ordering the boiler.

## Low Water Cut-Off Control:

For added protection, an internal low water cut-off control is available on CEB, CEBR, and CEBR2 series boilers. The low water cut-off control will shut down all the heating elements in the event of a low water condition. This option should be specified at the time of purchase. The low water cut-off control is standard on three phase models.

## Modulating Control:

All models of the Lion Boiler use modulating control to maintain the water temperature at the desired setpoint. A temperature sensor in the tank wired to the control board monitors the water temperature. If the monitored temperature varies slightly from the setpoint, heating elements are turned on or off automatically, one element at a time to bring the water temperature back to the setpoint. This way just the right number of heating elements are used to maintain the heat at the desired level.

## Certified Tank:

CRN certification is available. This option must be specified at the time of purchase.

See our CEB series boiler brochure for additional information. The CEBR and CEBR2 series boilers have the same dimensions as the CEB series.



### MANUFACTURED IN CANADA

#### Concept Manufacturing Inc.

P.O. Box 23008 RPO McGillivray Winnipeg, MB R3T 5S3  
PH. (204) 284-9111 | FX: (204) 284-9229

Visit our website at [www.lionboilers.com](http://www.lionboilers.com)  
Email queries to [sales@lionboilers.com](mailto:sales@lionboilers.com)

Product design and literature are copyright® by:  
Concept Manufacturing Inc.  
All specifications are subject to change without notice.