

## AIR CONDITIONER OPTIONS:

# **REDUNDANT SYSTEM (XRX)**

For applications that require redundancy to share the cooling requirement, Thermal Edge has a system that alternates the operation between tow air conditioners, thereby giving each equal operating time.

This design also provides for the situation where one air conditioner may become disabled. In this event, the second unit is automatically called upon to provide the appropriate amount of cooling to the electrical enclosure while the disabled unit is in alarm mode.

Additionally, the Thermal Edge redundant system will operate both air conditioners simultaneously when the environment calls for an extra amount of cooling.

This system is intended for 100% redundancy *where failure is not an option*.

This is our alternating, or toggle system.

### **ALTERNATING CONTROL**

This control method is intended to provide cooling to a common enclosure by two (or more) air conditioners which alternate operation rather than share load. This provides 100% redundancy while balancing the run time on each unit

Two self contained air conditioners with independent dual stage thermostats will be connected with a toggle control so that the units will alternately share the cooling load. In the event of the failure of one unit, the toggle system will be deactivated and cooling load will be switched to the remaining operational unit. A failure signal will be available to alert the customer that one unit has failed.

### **HIGH LIMIT**

Each Thermostat has a high set point which is used as a failure alarm. On either high limit, that unit is switched out of the toggle control and cooling will be solely by the alternate air conditioner until the limit is manually reset.

### **EXCESSIVE HEAT LOAD**

The controller senses the need for extra cooling and will operate both air conditioners on a needed basis.





All information subject to change without notice