



NEW PRODUCTS & FEATURES

NEW Digital Controller

- Fully programmable
- Built in alarms and alerts
- Will operate heating & cooling
- Standard on every unit
- Ethernet system available



NEW Air to Air Heat Exchangers

- 4 different chassis sizes
- Standard units include thermostat & on/off switch
- NEMA Type 12, 4 & 4X
- 120VAC, 230VAC, 24VDC & 48VDC
- Needs no filter
- **UL Listed for standard & hazardous location**



WHY THERMAL EDGE USES THERMAL EXPANSION VALVES

All phase change refrigerant systems require an expansion device which controls the flow of refrigerant in the evaporator. Two principal types of control are used: Thermal Expansion Valves or Capillary Tubes.

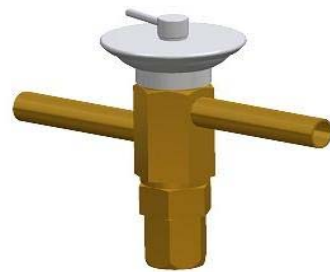
Thermal Expansion Valves

balance and modulate the refrigerant flow to the heat load by sensing the temperature of the refrigerant leaving the evaporator.

There are three major advantages to this refrigerant control method.

1. Maximum efficiency over a wide temperature and load range.
2. Improved refrigerant return to the compressor assures better cooling at high temperatures and reduces the possibility of liquid slugging which can destroy the compressor.
3. Variations in refrigerant charge, particularly smaller units, are less critical.

Every Enclosure Air Conditioner has a compressor, coils and fans, but ONLY Thermal Edge uses a THERMAL EXPANSION VALVE



Alternately, fixed expansion devices, such as **Capillary Tubes**, are fixed; working at one preset level and have no ability to compensate for load changes. They are more commonly used in unchanging environmental temperatures such as refrigerators and freezers. Since most refrigerators are in a temperature controlled space and have limited temperature set point, they work just fine. Due to their simplicity, capillary tubes are very inexpensive. (However, this rarely translates into a cost savings for the purchaser of industrial enclosure air conditioning.)

Variations of capacity over the ambient temperature range of 80°F to 131°F can cause a performance loss of 85% with a cap tube system. An expansion valve system will lose less than one half of this amount, while maintaining better compressor temperature control.

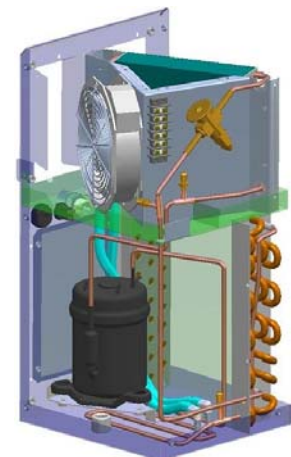
That is why Thermal Edge uses Thermal Expansion Valves. In your demanding environment, you need enclosure cooling that you can depend on, regardless of temperature changes through out the work day or seasonal year.

CONDENSATE REMOVAL IS NOT OPTIONAL

Liquid Condensate is the by-product of every air conditioner. At Thermal Edge we understand that a puddle next to your sensitive electronic enclosure may not be ideal. We eliminate this messy problem by changing the troublesome liquid back into a vapor and venting it out of your way. That means no puddles, stains or mess near your Industrial Electrical Enclosure, Control System or production line. **STANDARD on EVERY UNIT**

With Thermal Edge Units...NO DRAIN TUBE IS NEEDED

Call Thermal Edge for your Temperature Control Applications at (972) 580-0200 or (888) 580-0202



THE TOTAL EDGE PACKAGED SYSTEMS

All Thermal Edge Enclosure Air Conditioners are listed under UL File # SA 32252



- Inventory on Hand
- Customer Service answering your calls
- A website that is easy to navigate AND solutions that are easy to find
- Equipment tested to perform and built to last
- Units designed with our customer's applications and environments in mind
- Systems engineered to maintain lower running amps and higher efficiency
- Features and Accessories designed to solve critical applications as in Corrosive or Hazardous Environments



- UL Listed NEMA Type 12, 4 & 4X electrical enclosures
- Precut and ready for air conditioner installation
- Appropriately sized UL Listed NEMA Type 12, 4 & 4X enclosure air conditioner
- Mounted panel
- All mounting hardware and gaskets

Coming Soon

THE NE SERIES OF AIR CONDITIONERS



1000 BTUH	4000 BTUH
1500 BTUH	5000 BTUH
2000 BTUH	6000 BTUH
3000 BTUH	8000 BTUH

- Active Condensate Evaporation is standard
- Fits on a 12" Enclosure
- Available in NEMA Types 12, 4, 4X and Hazardous Environment applications
- Fully programmable digital controller with high and low pressure switches for a **smarter** air conditioner
- 120V, 230V, 480V

THE CS SERIES OF AIR CONDITIONERS



1000 BTUH
2000 BTUH

- Smallest 2000 BTUH available
- Active Condensate Evaporation is standard
- Fits on a 10" Enclosure
- Available in NEMA Types 12, 4, 4X
- Fully programmable digital controller with high and low pressure switches for a **smarter** air conditioner
- 120V, 230V

THE HC SERIES OF AIR CONDITIONERS



10,000 BTUH
12,000 BTUH
15,000 BTUH
20,000 BTUH

- Active Condensate Evaporation is standard
- Includes built in hanging feature to make mounting a simple and safe process
- Available in NEMA Types 12, 4, 4X and Hazardous Environment applications
- Fully programmable digital controller with high and low pressure switches for a **smarter** air conditioner
- 120V, 230V, 480V

THE WF SERIES OF AIR CONDITIONERS



6000 BTUH
8000 BTUH

- Active Condensate Evaporation is standard
- Includes built in hanging feature to make mounting a simple and safe process
- Available in NEMA Types 12, 4, 4X
- Fully programmable digital controller with high and low pressure switches for a **smarter** air conditioner
- 120V, 230V

*"Customer Service" is not a name or a place, it is a verb, an action that means when a **Customer** calls, you take his call, answer the questions posed and resolve whatever issues the **Customer** has.*

PLASTIC AND METAL FILTERED FANS



80 CFM - 750 CFM in a variety of sizes

- Available in injection molded plastic, 16 gauge powder coated steel and 304 stainless steel
- Quiet & Efficient ball bearing fan
- 50 micron, washable electrostatically treated filters
- Comes assembled and includes mounting hardware, template and gaskets



The Legendary
Green Bay Packers Coach
Vince Lombardi said:

“Winning is not a sometime
thing; it’s an all-the-time
thing. You don’t win once in
a while, you don’t do things
right once in a while, you do
them right all the time.

Winning is a habit.
Unfortunately, so is losing.”

At Thermal Edge, we understand your environment and the issues that your environment create for your electrical enclosures and systems. Everything we build has been designed and tested to meet your strict requirements for quality and durability

Food & Beverage, Paper & Pulp, Chemical, Gas, Cement or Telecom, Thermal Edge has a system to handle the problem of controlling the environment of your sensitive and important operating systems

OPTIONS

- Protective Coil Coating to protect from corrosion caused by a salt or chemical environment
- Integrated Heat Packages to provide total temperature control for your enclosure not just from the heat of summer but from the cold of winter
- Dry Contact Options to allow the use of alarms, lights and notifications
- External Heat Control to allow for customers to use an externally mounted heater in their enclosure
- 316 Stainless Steel for applications where 304 is not suitable
- Hazardous Location provides conversion to Class 1, Division 2 Groups B, C & D
- Vibration Package allows for enclosure cooling on cranes, moving vehicles or other difficult locations. These systems are available in two levels
- 2" Deep Extended Filter Media for applications like flour, cement or coal when a standard filter will load to quickly
- OD Remote Controller Option to place our digital controller inside the electrical enclosure when the environment requires a more secure setting
- Redundant System Package for critical applications, when enclosure cooler failure is not an option. This system operates two air conditioners with one specially programmed controller that toggles the two units to operate them back and forth to guarantee that your enclosure always stays at its required temperature.
- The Universal Mounting Plate allows the mounting of the Thermal Edge Enclosure Air Conditioner onto an enclosure that formerly held a different brand of air conditioner.

(972) 580-0200

or

(888) 580-0202

1751 Hurd Drive
Irving, Texas 75038

Get the Edge...Get Thermal Edge