

THERMOELECTRIC PRODUCTS

Catalog NO.

Air Conditioners

14.1



Uteca



What We Stand On

Our mission

TECA's fundamental purpose is to provide world-class products of superior quality. Our goal is to continue setting the standard in thermoelectric cooling by monitoring and improving our operations to meet our customers' needs and exceed their expectations.

A former division of Borg-Warner, **TECA** was spun-off as an independent company in 1984.

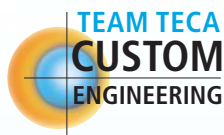
Today the Chicago-based corporation manufactures a wide range of solid state cooling products, including air-cooled and liquid-cooled air conditioners, cold plates, and liquid chillers.

Our guiding principles

Quality is our top priority. We are "**TEAM TECA**," recognizing that our success depends upon the involvement, commitment, and performance of every team member, including suppliers.

How to use this catalog

We hope you'll view this catalog as a working guide to the possibilities of thermoelectric cooling. We've included a foundation of information designed to help you think about the applications for your company, in addition to detailed descriptions of the off-the-shelf products we offer.



Please keep in mind that we are always willing and available to customize existing products or to design and build new products to meet your needs.

Call us at 888-TECA-USA – we're here to help!

888-832-2872

Our solutions

We can fulfill all of your cooling requirements, whatever your application. In fact, our engineers may have already developed a solution for an application similar to yours.

We offer complete engineering services, prototype development, and custom-built cooling equipment on an exclusive and confidential basis, enabling us to meet the needs of all our customers, including those in the Original Equipment Market.

We will continue to focus our efforts on the people we serve and the products we produce in order to ensure quality without sacrificing health, safety, or the environment in which we live.

TECA web site

There are numerous things you can get from the web site that you cannot get from this catalog! www.thermoelectric.com

- Drawings and 3D solid model of most products.
- Product Information Packets are downloadable. These are the installation and service documents and schematics which are shipped with the products when you buy them.
- Example applications.
- This catalog is downloadable, so you can print pages or sections of interest for your own use.
- The site is often updated with news and other current items of interest ...articles, stories, links, etc.
- Teca Sizing Software is downloadable. This is a handy, easy to use program which is very helpful in choosing air conditioners of the appropriate capacity for your job.

General Information

Thermoelectric Technology
Product notes
A/C Notes
Ratings & Curves

Air Conditioners-Air Cooled

Through Mounted

AHP-6200
AHP-4200
AHP-3200
AHP-2200
AHP-1800
AHP-1802XP
AHP-1501
AHP-1400
AHP-1200
AHP-1200CXP (North American)
AHP-1200CXP (EU; UK)
AHP-500
AHP-451
AHP-400
AHP-301FF
AHP-300FF
AHP-250FF

Flush Mounted

FHP-6200
FHP-4200
FHP-3200
FHP-2200
FHP-1501
FHP-750
FHP-500
FHP-451
FHP-400

A/C Accessories

Air Conditioners-Liquid Cooled

LHP-1200XE
LHP-1200XP

Temperature Controllers

TC-4600
TC-3400
TC-3500
TC-1F, TC-4F, TC-6F, TC-3F, TC-7F
Relay Packs
Temperature Control Accessories
Power Supplies

Thermoelectric Technology

The Peltier Effect

Thermoelectric cooling, is a solid-state method of heat transfer through dissimilar semiconductor materials.

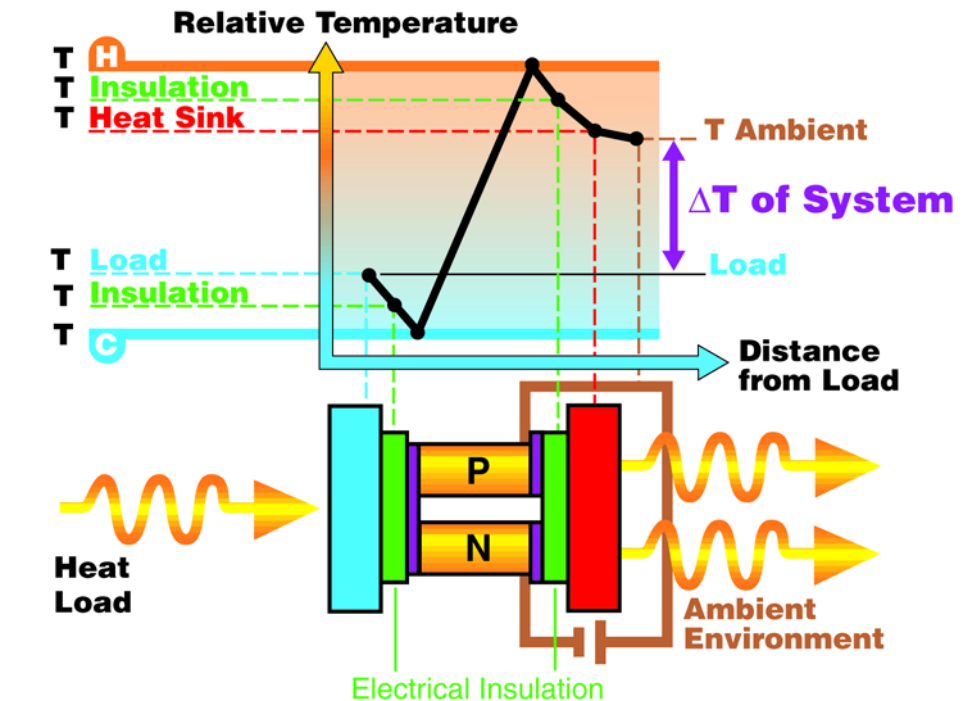
It is also called "the Peltier Effect" after the French watchmaker who discovered the phenomenon in the early 19th century. Like their conventional refrigeration counterparts, thermoelectric cooling systems obey the basic laws of thermodynamics. However, the actual system for cooling is different.

In a conventional refrigeration system, the main working parts are the evaporator, condenser, and compressor.

The evaporator surface is where the liquid refrigerant boils, changes to vapor, and absorbs heat energy. The compressor circulates the refrigerant and applies enough pressure to increase the temperature of the refrigerant above ambient level. The condenser helps discharge the absorbed heat into surrounding room air.

The three main working parts in a thermoelectric refrigeration system are a cold junction, a heat sink, and a DC power source.

Two dissimilar conductors replace the refrigerant in both liquid and vapor form. The cold sink (evaporator surface) becomes cold through absorption of energy by the electrons as they pass from one semiconductor to another, instead of energy absorption by the refrigerant as it changes from liquid to vapor. The DC power source pumps the electrons from one semiconductor to another, and the heat sink (condenser) discharges the accumulated heat energy from the system.



Therefore, the thermoelectric cooling system refrigerates without refrigerant and without the use of mechanical devices, except perhaps in the auxiliary sense.

The semiconductor materials used in thermoelectric cooling are N and P type, named because they either have more electrons than necessary to complete a perfect molecular lattice structure (N-type) or not enough electrons (P-type). The extra electrons in the

N-type material and the holes left in the P-type material are called "carriers," responsible for moving the heat energy from the cold to the hot junction. Good thermoelectric semiconductor materials such as bismuth telluride greatly impede conventional heat conduction from hot to cold areas, yet provide an easy flow for the carriers.

Product Notes

General Product Part Numbering Notes:

TECA builds both air cooled and liquid cooled products. The model numbers of the products (example: AHP-1200XMHC) can be very descriptive of the product. Air cooled air conditioners (prefix AHP and FHP) use fans and finned heat sinks to transfer heat. Liquid cooled products (prefix LHP) require a flow of water or cooling fluid to dissipate the heat. Within air conditioners, suffixes such as XE, X, XM, CXP, EP, and XP relate to environment. Additionally, most product families offer a selection of DC or AC voltages and temperature controllers detailed with complete part numbers on their individual catalog pages. All products offer cooling and many offer cooling and heating. Products capable of both heating and cooling typically include "HC" in the suffix. The heating can be from resistive heaters or via reverse polarity (rev. pol.) input to the thermoelectrics. Please see the below table and feel free to contact us for further assistance.

				AHP	1200	X	HC
AHP Air Cooled Heat Pump, "AHP" air conditioners mount through an enclosure wall with the cold side heat exchanger inside and the hot side heat exchanger outside of the enclosure.							
FHP Flush mounted Heat Pump, "FHP" Air Cooled air conditioners that do not intrude into enclosure.							
LHP Liquid Cooled Heat Pump, "LHP" air conditioners require flow of coolant to remove heat.							
FAMILY	COOLING CAPACITY	INPUT VOLTAGE	DIMENSIONS INCHES				
150	100 BTU/HR	12/24 VDC	7 X 3.6 X 6				
300	210 BTU/HR	12/24/48 VDC	10 X 5.4 X 6.5				
301	180 BTU/HR	120/240 VAC	10 X 5.5 X 7.8				
450	207 BTU/HR	24 VDC	10 X 5.8 X 7.8				
470	315 BTU/HR	24 VDC	10 X 5.8 X 7.8				
401	342 BTU/HR	120, 240 VAC	10 X 5.8 X 8.8				
570	303 BTU/HR	24 VDC	10 X 5.8 X 7.8				
590	460 BTU/HR	24 VDC	10 X 5.8 X 7.8				
750	430 BTU/HR	120, 240 VAC; 24 VDC	12 X 6 X 9				
1200	530 BTU/HR	120, 240 VAC; 24 VDC	15 X 7.3 X 8.2				
1400	850 BTU/HR	120 VAC	12 X 12 X 9.2				
1500	1000 BTU/HR	120/240 VAC; 24 VDC	15 X 12 X 9.2				
1800	1100 BTU/HR	120, 240 VAC; 24 VDC	18 X 12.3 X 9.7				
2850	1700 BTU/HR	120, 240 VAC	24 X 12 X 9				
2200	1400-2060 BTU/HR	120, 240 VAC; 24 VDC	20.5 X 13 X 8.5				
3200	2250-2610 BTU/HR	120, 240 VAC	20.5 X 19 X 8.5				
4200	2330-3600 BTU/HR	120, 240 VAC	20.5 X 25 X 8.5				
6200	4300-5200 BTU/HR	120, 240 VAC	20.5 X 37 X 8.5				
FF These air conditioners are suitable for indoor, Nema-12 applications.							
XE These air conditioners are suitable for outdoor, Nema-4 and hose down applications. They use industrial grade sealed fans suited for the environment. Power supply components exposed to the environment are also sealed.							
X These air conditioners are designed for harsh Nema-4X environment. Military grade fans are used on the hot side (exposed to the environment). Power supply components exposed to the environment are sealed.							
XM One step more rugged is the XM line of products. Also Nema-4X, these products use military grade fans on both the hot (environment) side and the cold (enclosure) side. These products can typically handle more shock and vibration, especially along the fans							
EP Suitable for Hazardous Locations CI D2 and Nema-12 indoor applications.							
XP Suitable for Hazardous Locations CI D2 and Nema-4X outdoors/harsh environments.							
CXP Suitable for Hazardous Locations CI D1 & ATEX Zone 1 and Nema-4X outdoors/harsh environments (no ATEX approvals).							
HC These products are capable of heating and cooling.							

Air Conditioner Notes

Things you need to know to start sizing an air conditioner:

Temperatures: The **ambient** is the air temperature around the enclosure (also referred to as operating temperature), often the room temperature. The **enclosure temperature** or the **interior temperature** is the temperature range you wish to maintain inside the enclosure. The difference between the two is the design temperature differential (**delta T**). Look at these temperatures with care. What is the real maximum ambient? What is the real maximum allowable enclosure temperature? How can I define these? Ask maintenance or those who work in the area. Look at the temperature specs of the equipment inside. You may want 72 F in your enclosure but is it really necessary? Would 95 F be just as acceptable with occasional excursions to 104 F under worst case conditions? Do not impose unrealistic demands if you are unwilling to pay the price.

Heat Loads Active and Ambient: We define an active load as any source of heat inside the enclosure. Waste electric heat or exothermic reactions are examples. This can be determined in several ways. The first is by simply adding up the amount of heat generated by each component. This sounds easy but the information is often not readily available in component spec sheets and requires direct inquiries to manufacturers. A second method is to apply a control volume approach and to measure the total electrical input and output, subtract the two and assume the remainder has been turned into heat. Another method requires knowledge of the thermal characteristics of the enclosure, how many degrees does it rise given a defined amount of internal heat generation. This can be found by monitoring internal and external temperatures and varying a known internal load while bringing the system to equilibrium between each step and recording the values. Use these numbers to determine the degrees per watt enclosure characteristic. Once this characteristic of the enclosure is known the system can be operated to steady state, the ambient and enclosure temperatures measured and a quick calculation made to estimate the amount of internal heat generated. An ambient load is that amount of heat added to the enclosure due to ambient conditions. The usual ambient load is that caused by the temperature difference between the enclosure and the ambient. It is a function of the enclosure thermal characteristics (size, insulation, seals, windows etc...). The same value determined experimentally as described above can be used to estimate the ambient load. Outdoor applications often have an additional solar component. Indoor applications can have something similar if for instance they are in close proximity to a heat source such as a furnace.

Performance Curves: The total load and temperature differential (dT) can be applied to the performance curves of the air conditioners to determine if the cooling capacity is sufficient. Complete details on this process can be found in the ratings and performance page of this catalog.

Things you should consider when selecting an air conditioner:

Purpose: What is the real need for cooling: maintaining electronics temperatures, precision temperature control, maintaining sample temperatures, cooling a process? Answering these questions will ascertain the need for an air conditioner and help in selecting the control types and methods.

Temperature Control: Several control options are available. The most widely used controls are the TC-F family of controls which come in cool only, heat/cool and heat/cool with Eco-mode, a passive power saving heat exchanger mode. The 35C setting for cooling and the 15C setting for heating are the most common. These settings provide a comfortable temperature for the electronics, minimizes chances of condensation and provides for an efficient duty cycle for the air conditioner. For tighter control cool only and heat/cool air conditioners can be used in conjunction with programmable TC-3400, TC-4600 or TC-3500 controllers, or customer supplied controls. These units typically require a 3 to 32 VDC drive signal to turn the heating

or cooling on. Accessories such as relay packs (for reverse polarity heat/cool air conditioners) and communications are available. Buck heating control where the air conditioner is on 100% of the time and control is provided through a separate heater is another option. P, PI, PID and PWM control schemes have all been used with success. There is one caution regarding input surges when trying to get tight temperature control with AC input units. Each application should be evaluated independently to assure safe and proper control.

Environment: IP and NEMA ratings both define the types of environments one might find. We have included those types of designations with the air conditioner model number to help you select the right one for your environment. In general our standard air conditioners can handle factory and office environments. "XE" styles are appropriate for many wet factory environments and outdoors. "X" styles employ Military fans on the hot side or ambient side and can handle much more rugged environments such as salt and wind blown sand. The "XM" styles employ military fans throughout and have been customer tested to survive severe shock and vibration in all axes. "EP" (indoor) and "XP" (outdoor) units are suitable for hazardous locations many being independently evaluated.

Power Input: Air conditioners requiring 110 VAC, 220 VAC, 110/220 VAC, 12 VDC, 24 VDC and 12/24/48 VDC are available. Inquiries for other inputs such as 250 VDC are welcome.

Cooling Medium: Air cooled and liquid cooled air conditioners are available. Liquid cooled air conditioners require a water source. Perhaps the environment rules both fan and liquid cooled out. Is compressed air available (AHP-1200CXP products)?

Enclosure size and characteristics: Regarding surface dimensions, the bigger an enclosure is, the more heat it will transfer in and out. Adding insulation can help reduce the cooling capacity required for an enclosure. Windows and access ports can increase the amount of cooling required. A well sealed enclosure will help with this. Further, protecting the enclosure from external loads by using solar shades or shields will help reduce the amount of cooling required.

Air Conditioner Mounting: Most of our air conditioners can be mounted in any orientation; wall mounted is usually best. There are two types of mounting styles available. Through-mounted air conditioners will intrude into the enclosure a few inches. Flush-mounted units do not intrude into the enclosure. Regardless of which style is chosen it is important to orient the air conditioner in such a way that it compliments rather than hinders internal air circulation. Internal fans (cold side fans) run continuously to provide a constant internal air flow. The external fans cycle on and off with demand.

Condensation Concerns: The best time to address condensation concerns is in the selection of the air conditioner. Will conditions be ripe for condensation to occur? Condensation may form on the fins when their surface temperature goes below the dew point temperature. Use the "Cold Sink" equations provided for each product with your total load value in this equation to determine the delta T and therefore the actual temperature of the cold side heat exchanger. Compare this value to your expected dew point to see if condensation might occur. On cool-only air conditioners with TC-6F (adjustable controller), the 35 C setting of the TC-6F temperature control goes a long way in minimizing moisture as it creates a smaller delta-T than colder settings. Side, front, or back mounting is recommended if there are condensation concerns. Many flush mount units come with sponge and wick condensate control systems which soak up moisture (sponge) and transport it (wick) to the hot side, where the moisture can be evaporated via the hot side heat sink. There are drip pan accessories for through mount air conditioners to collect and remove moisture. See Air Conditioner Accessories for more details on drip pans.

Air Conditioner Applications



AERONAUTICS:

A leading military and aeronautics contactor needed a cooling solution for an enclosure which would be on a high altitude vessel. The system would be exposed to high winds and ambient elements present in the altitude. Working with the customer; TECA's sales and engineering team designed a cooling solution with specific intake and exhaust characteristics along with custom paint and a finish process that could withstand the conditions to which the system is exposed.

COOLING GLOVE BOXES:

A customer manufactures a range of glove box systems for atmosphere control applications in clinical and industrial environments. TECA air conditioners are a vital component on a variety of the glove box models that this customer produces. Standard and customized versions of TECA air conditioners from the AHP-1800-Series are used to control the glove box temperature to below ambient. Clinical applications primarily revolve around cell and bacterial studies within cancer research, bio-fuels studies, sleep apnea, anaerobic microbiology research and clinical applications etc. Industrial applications include product weighing or assembly with humidity and temperature maintenance.



KIOSK:

The picture on the left shows a 4 year-old outdoor kiosk that is located in a zoo in the Sonoran Desert. The kiosk holds a computer and LCD screen, both generating heat, both mounted within an inch of each other. This active heat load coupled with the high ambient temperatures creates a significant need for cooling. TECA's model AHP-1800XE Thermoelectric Air Conditioner has proven to be a reliable solution. Our customer raves "I had zero problems in past years, not even one tech. call. During the summertime here, when outside temperatures reach 95-110F, and surface of the kiosk gets as high as 125F, the LCD, computer and other components were running cooler than the components in our indoor kiosks."

LARGE LCD SCREENS:

Specializing primarily in the food and beverage processing industries, one of our longtime customers uses TECA air conditioners in several applications. These include cooling or heating LCD screens, desktop computers, thin clients, and KVM kiosks. The locations of these applications are indoors, outdoors, in cold rooms and baking areas. TECA's comprehensive line of air conditioners fits the bill. We offer each model in different configurations according to the customer's need regarding input voltage, mounting and application environment.



MILITARY COMMUNICATIONS:

A branch of the US military had a need for cooling a small enclosure containing a critical voice communication system. The shipboard system had to be resistant to salt water corrosion as well as pass stringent shock and vibration testing. Modification to TECA's AHP-300X solid state air conditioner allowed the unit to meet specialized air flow requirements and pass these tests. The challenge was to overcome the small available space both inside and outside the enclosure. The heat sinks were turned so that the heat rejection air flow and internal cold side air flow moved in different directions.

This unit is a prime example of how flexible Team TECA is when customer needs require modification of standard products.

PORTABLE SECURITY EQUIPMENT:

Site monitor and security equipment for oil fields and transfer stations needed more security. It was an enclosure housing cameras, WI-FI access, antennas and a Mac Mini computer inside, leveraging the Mac platform to provide virtually instant access hi speed via "Wild Blue". The system will be like a watchdog that they can strap on wherever they need the monitoring. With a slight modification the solution was a TECA model AHP-1200XE thermoelectric cooler, it provided the best solution while keeping the NEMA-4 rating of the enclosure.



ANALYZER COOLING IN HARSH ENVIRONMENT:

TECA's Model AHP-1202XEHC Thermoelectric Air Conditioner provides accurate heating and cooling for the customer's analysis machine. The environment is harsh: it is in a cement plant. The customer's product quickly analyzes composition of raw materials, allowing for increased productivity. TECA's AHP-1202XEHC provides reliable thermal management within a harsh environment. The AHP-1202XEHC has an industrial grade sealed fan and sealed hot side components, allowing for frequent washdown (NEMA-4). The solid-state construction is the perfect low-maintenance solution for hard-to-access areas. There are no filters to change and no moving parts except for the fans. TECA air conditioners use robust thermoelectric modules and boast a long service life.

Ratings and Performance Curves

Understanding

Air Conditioner Ratings

Ratings

Thermoelectric Modules:

Traditionally thermoelectric modules have been rated at two points under two conditions. The first point is the maximum load (Q_{max}) at zero degrees delta T ($dT=0$) and the second point is the maximum delta T (dT_{max}) at a no load ($Q=0$). The load is defined as the amount of energy removed from the cold side ceramic. The delta T is defined as the temperature difference between the cold side and hot side ceramics. Extensive curves showing the performance under other conditions are often available.

Thermoelectric systems:

Reputable system manufacturers rate thermoelectric systems in watts or btu/hr under zero degree delta T conditions. In this case the load is defined as the amount of energy removed from the cooling medium. For air cooled systems the delta T is the temperature difference between the cooled medium and the ambient air. The cooled medium would be a cold plate in direct contact applications, a fluid such as water in liquid chiller applications and the enclosure air return temperature in air conditioner applications.

Air Conditioners, U.S.

Standards have not yet been created for enclosure air conditioners in the United States. The portions of the standards which deal with ratings and test conditions can still be interpreted for enclosure air conditioners. Too complex to display here, these standards define, among other parameters, the temperature conditions under which ratings are supposed to be made. These temperatures are generally defined as the room temperature and the ambient temperature. Typically the room temperature is either below or equal to the ambient temperature.

Air Conditioners, Europe:

The Europeans have developed a standard, DIN 3168, which specifically addresses enclosure air conditioners or coolers for distribution boxes. This standard does contain temperature information specific to the rating of such air

conditioners. The load or the "useful cooling capacity", is only the useful sensible heat flow which is taken up by the appliance for lowering the inside temperature of the distribution box. The temperature rating conditions for DIN 3168 are for the evaporator inlet (enclosure) temperature and condenser inlet (ambient) temperature to be an equal 35 C, or for the evaporator temperature to be 35 C and the condenser temperature to be 50 C, stated L35 L50.

Performance Curves:

The two types of performance curves used throughout the industry are shown on the following page. Both of these curves represent the performance of the **TECA** model **AHP-1200**. The top curve is shown per DIN 3168. In this curve temperatures are represented as absolutes, the x axis represents the inlet temperature at the condenser (the enclosure temperature), the vertical axis represents the useful cooling capacity, and separate load lines represent various evaporator inlet temperatures (ambient temperatures). Plotting a vertical line from the condenser inlet temperature to a specific evaporator temperature line and from that intersection horizontally, provides the useful cooling capacity. The bottom curve is for the same product represented in the traditional format. Here the temperatures are presented as differentials. Plotting a horizontal line from a desired delta T to intersect with the selected performance curve and then vertically to the x axis provides the cooling capacity under that condition. Both types of curves accurately represent the performance of a thermoelectric cooling system.

Ratings and Performance Curves

Understanding Different Performance Curves

Description

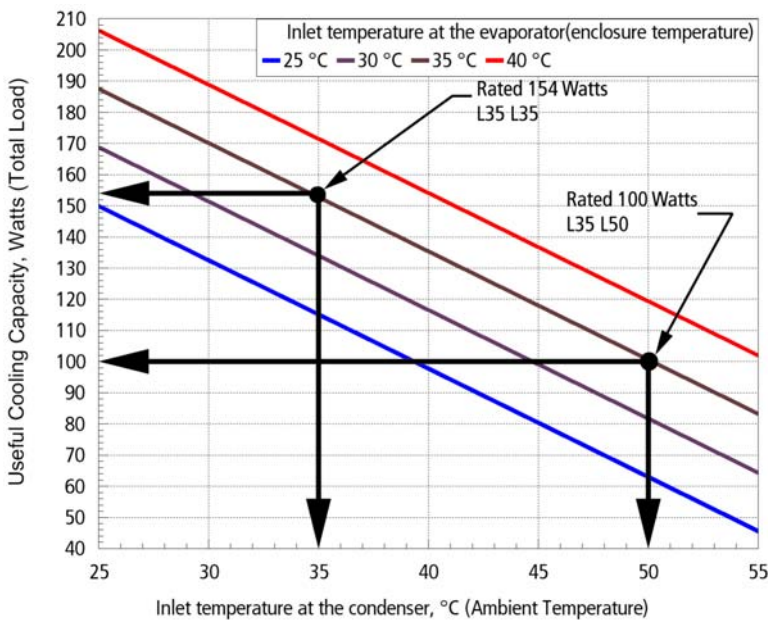
MODEL #

MOUNTING STYLE

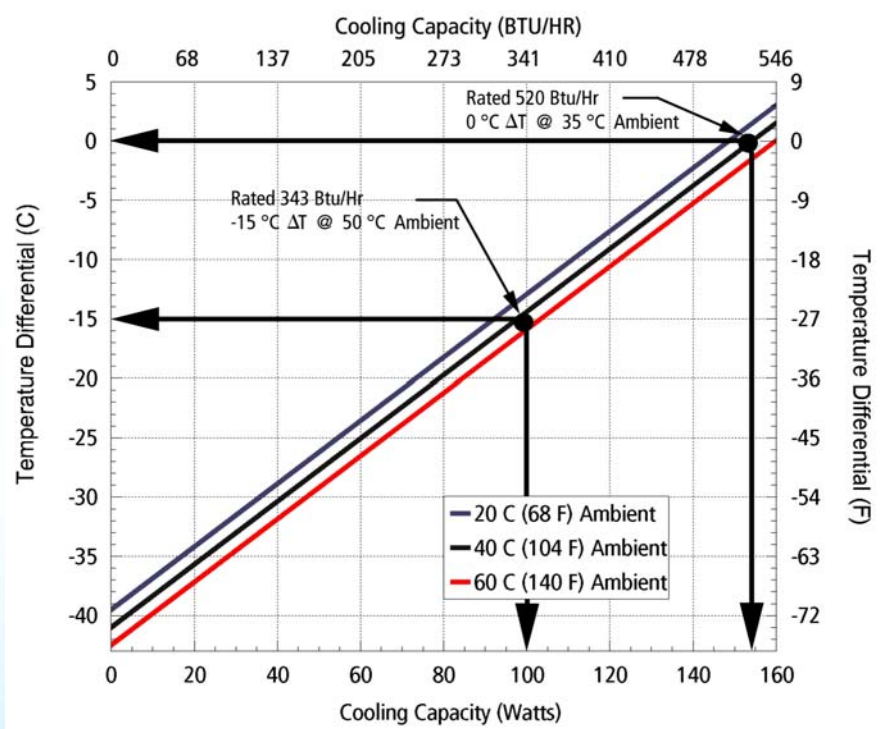
ENVIRONMENTS SERVED

RATINGS

Performance curve per Din 3168 (AHP-1200)



TECA's traditional performance curve (AHP-1200)



1/2
TON

AHP-6263

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Capacity
5660 - 6000 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller (optional remote control *)
- Weight 180 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

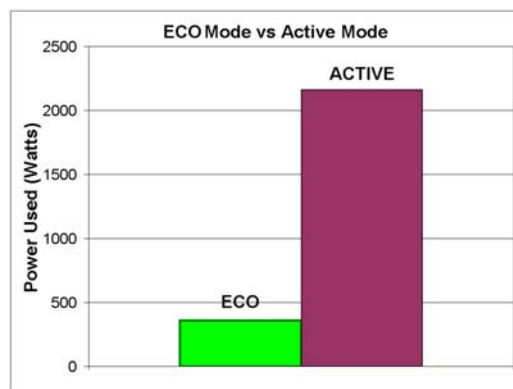
Voltage, 3 Phase Delta	240 VAC
Current, Active	11 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	5660 BTU/HR
Cooling (Din 3168)	1660 WATTS
Cooling COP (at L35 L35)	0.36
Heating (Traditional)	> 15000 BTU/HR
Heating (Din 3168)	> 4570 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	40 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-6263	0-K5JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-6263HC	0-K5ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-6263XE	0-K5JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-6263XEHC	0-K5ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-6263X	0-K5JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-6263XHC	0-K5ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

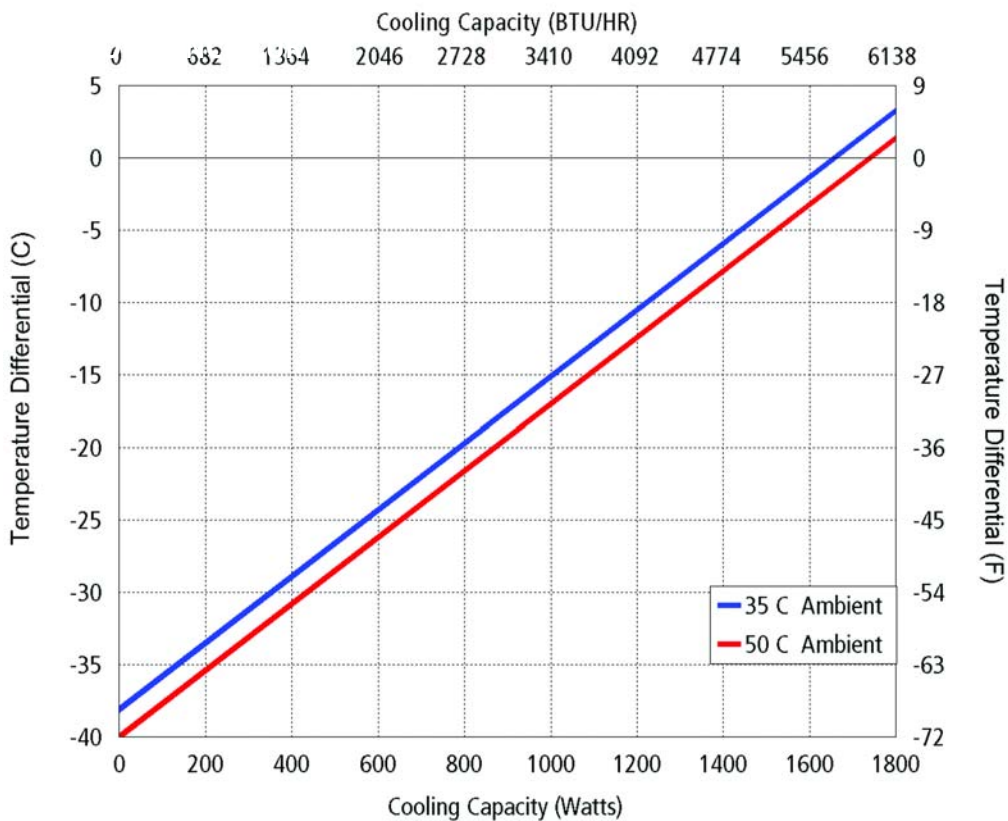
* Consult factory

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .023x - 38.1$	$y = .023x - 40$
Cold Sink	$y = .015x - 38.1$	$y = .015x - 40$

AHP-6263

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

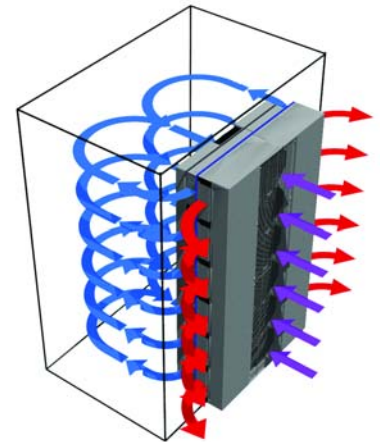
5660 BTU/hr @ 0 °F ΔT 7295 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

1/2 TON L50 L50

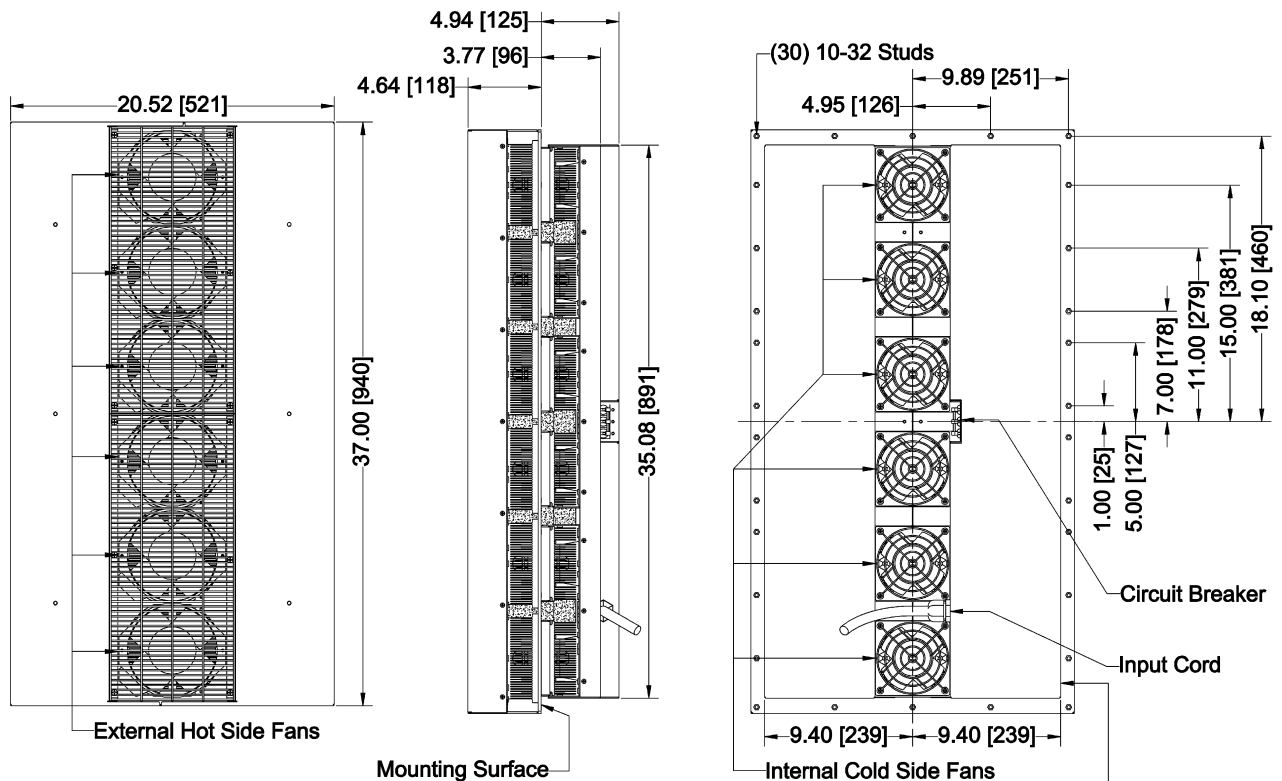
1660 Watts L35 L35

1080 Watts L35 L50



Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

AHP-6253

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Capacity
5080 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller (optional remote control *)
- Weight 180 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

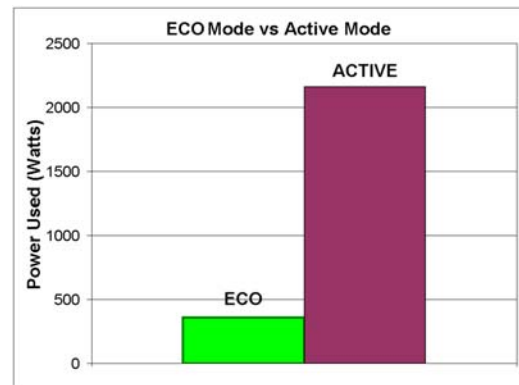
Voltage, 3 Phase Delta	240 VAC
Current, Active	5.5 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	5080 BTU/HR
Cooling (Din 3168)	1490 WATTS
Cooling COP (at L35 L35)	0.65
Heating (Traditional)	> 7800 BTU/HR
Heating (Din 3168)	> 2290 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	40 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-6253	0-K4JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-6253HC	0-K4ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-6253XE	0-K4JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-6253XEHC	0-K4ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-6253X	0-K4JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-6253XHC	0-K4ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

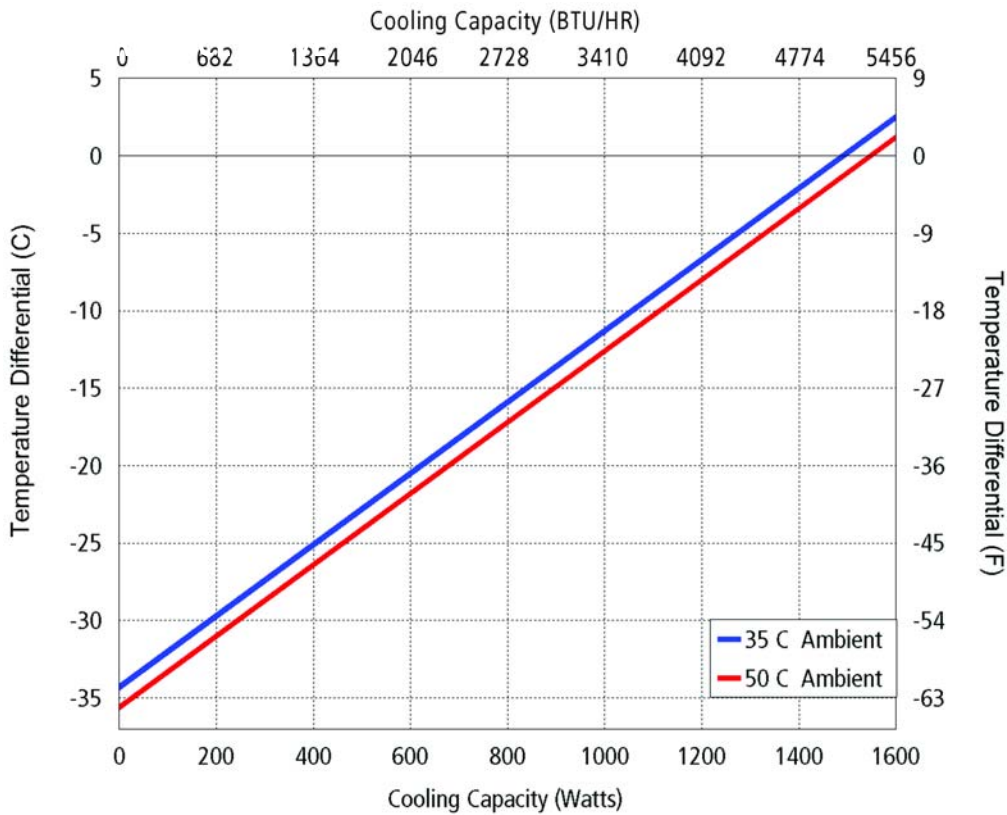
* Consult factory

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .023x - 34.3$	$y = .023x - 35.6$
Cold Sink	$y = .015x - 34.3$	$y = .015x - 35.6$

AHP-6253

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

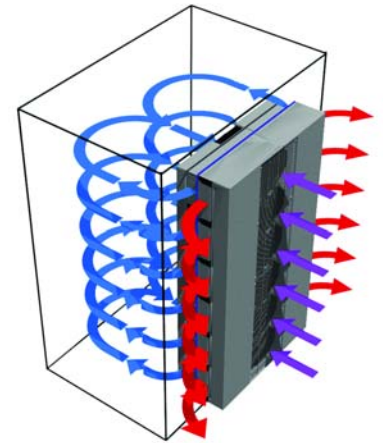
5080 BTU/hr @ 0 °F ΔT 6730 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

1490 Watts L35 L35

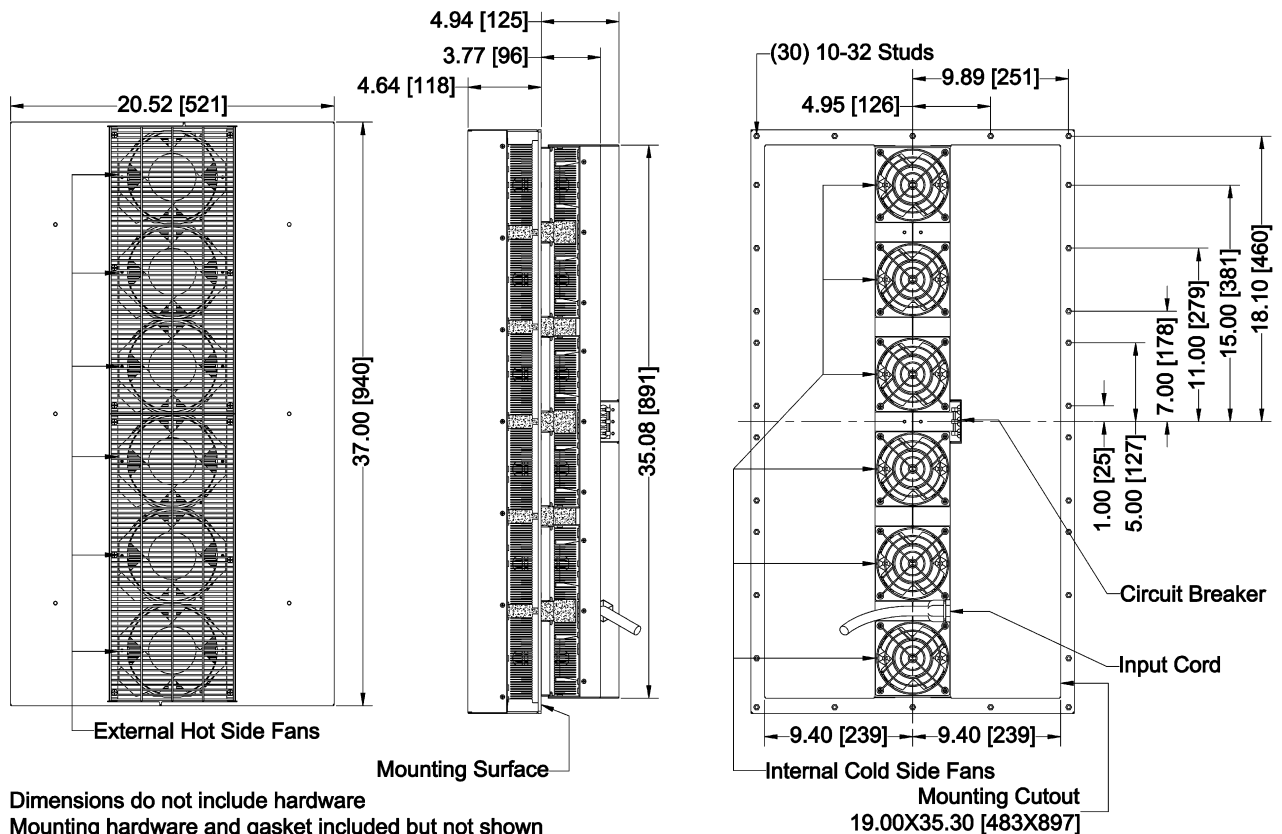
895 Watts L35 L50

Temperature Differential (F)



Air Flow Pattern

DIMENSIONS





AHP-6252

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

240 VAC Input
High Efficiency
5200 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 170 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

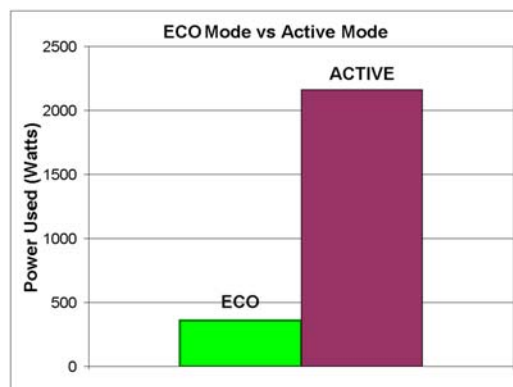
Voltage	240 VAC
Current, Active	9.2 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	5196 BTU/HR
Cooling (Din 3168)	1524 WATTS
Cooling COP (at L35 L35)	0.7
Heating (Traditional)	> 7365 BTU/HR
Heating (Din 3168)	> 2160 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-6252	0-K4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-6252HC	0-K4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-6252XE	0-K4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-6252XEHC	0-K4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-6252X	0-K4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-6252XHC	0-K4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-6252**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

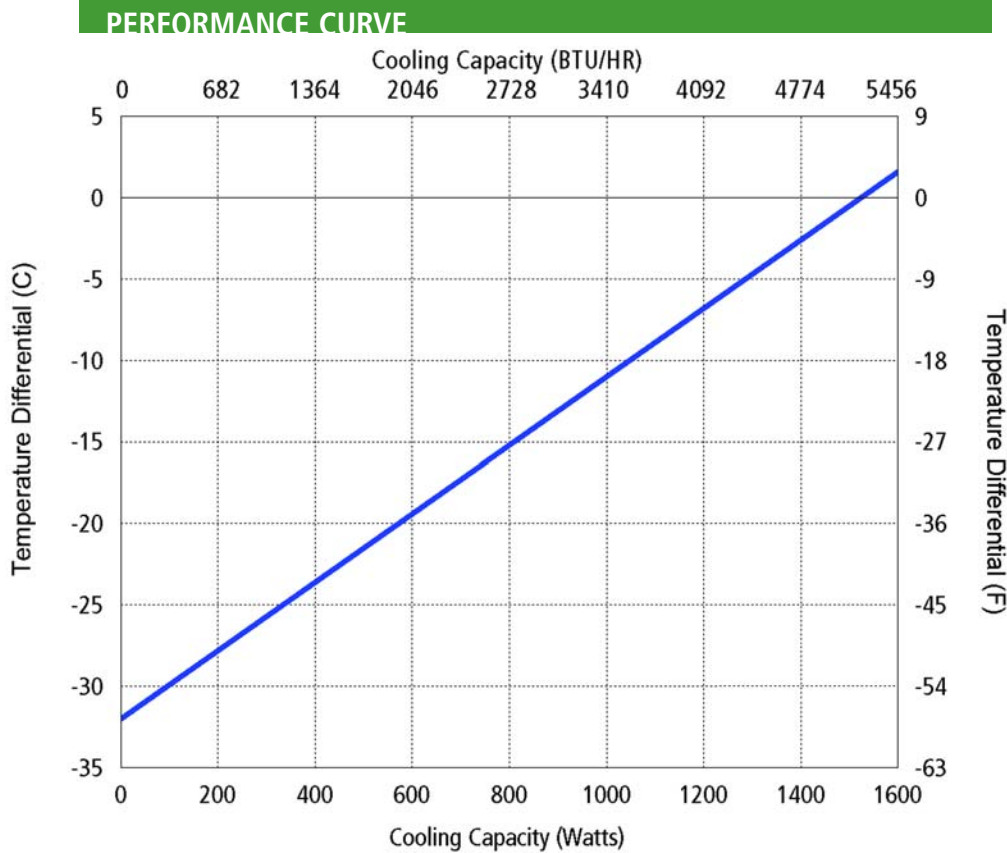
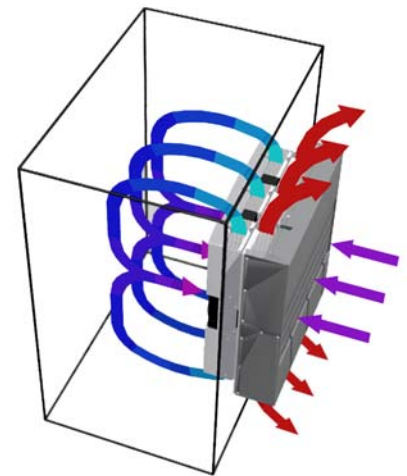
5200 BTU/hr @ 0 °F ΔT

7000 BTU/hr @ +20 °F ΔT

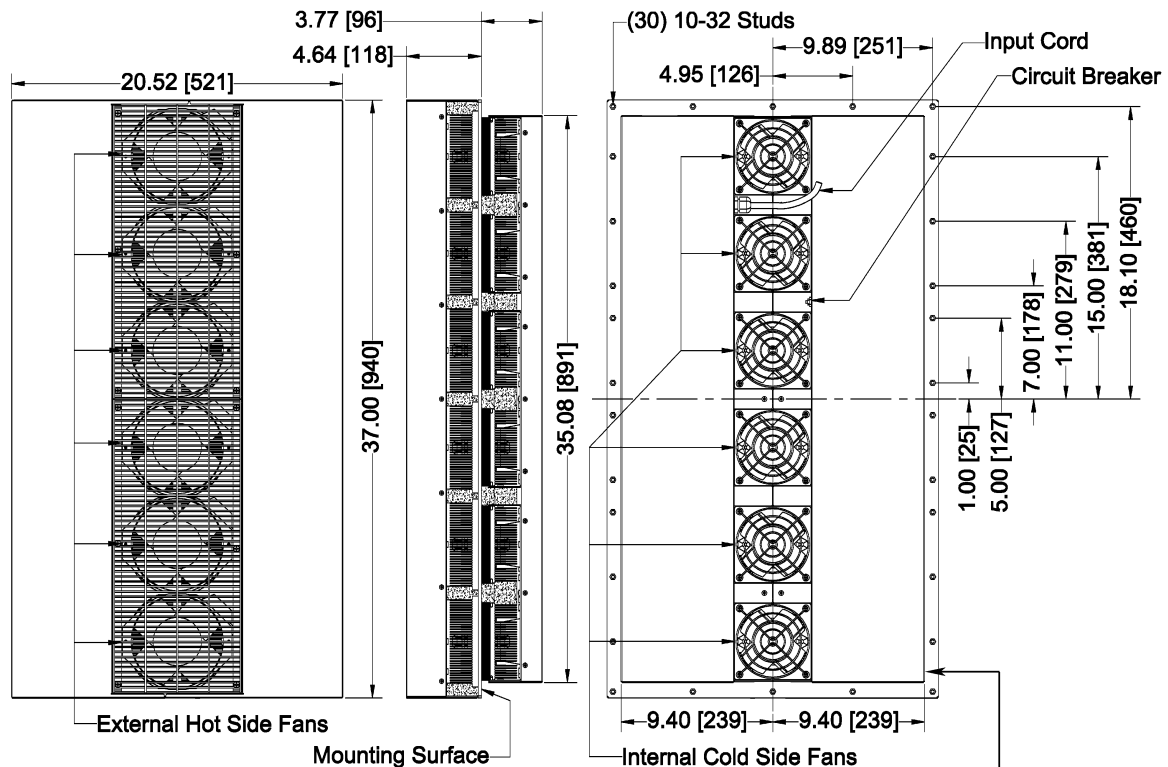
RATING (DIN 3168)

1524 Watts L35 L35

800 Watts L35 L50

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$ Enclosure Air $y = .021x - 32$ Cold Sink $y = .015x - 32$ 

Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

Mounting Cutout
 19.00X35.30 [483X897]



AHP-6250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
4340 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 170 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

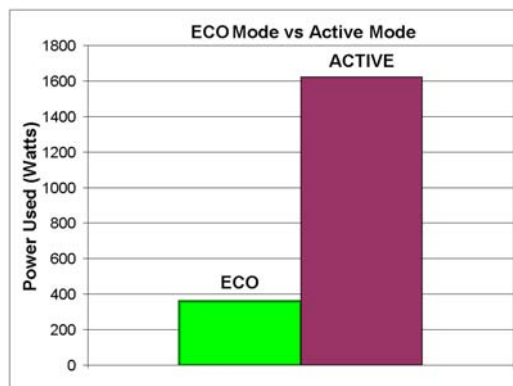
Voltage	120 VAC
Current, Active	14 AMPS
Current , ECO-Mode	3.0 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	4340 BTU/HR
Cooling (Din 3168)	1273 WATTS
Cooling COP (at L35 L35)	0.76
Heating (Traditional)	> 5524 BTU/HR
Heating (Din 3168)	> 1620 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-6250	0-K4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-6250HC	0-K4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-6250XE	0-K4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-6250XEHC	0-K4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-6250X	0-K4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-6250XHC	0-K4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-6250**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

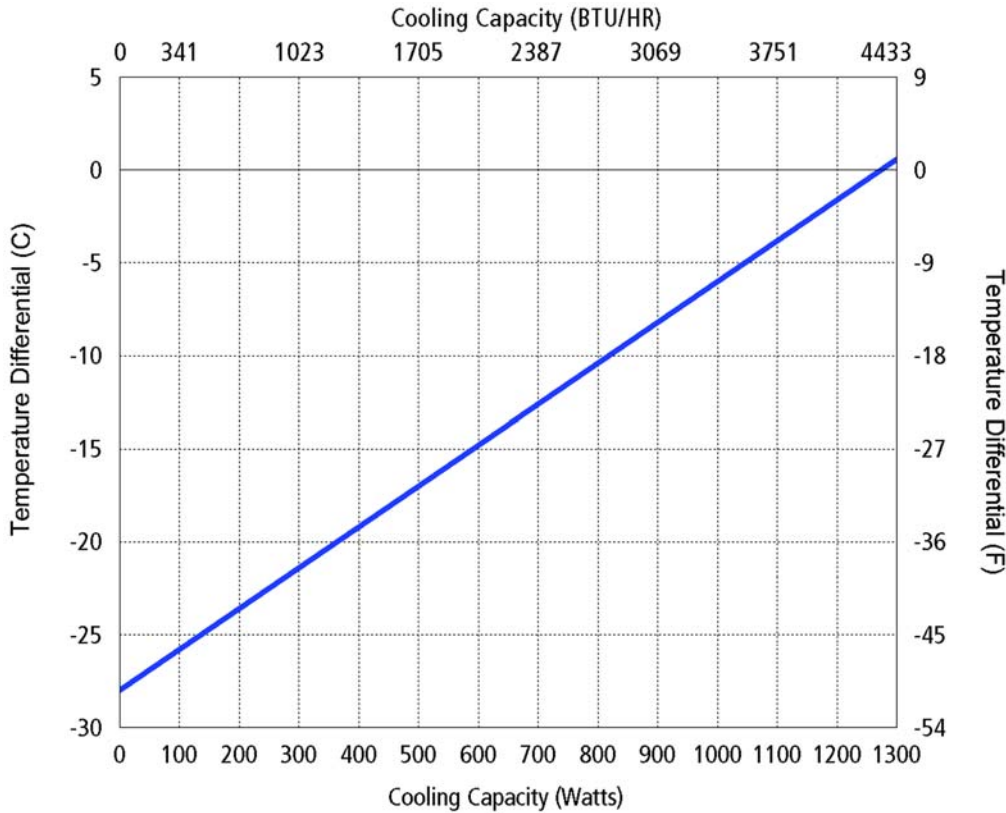
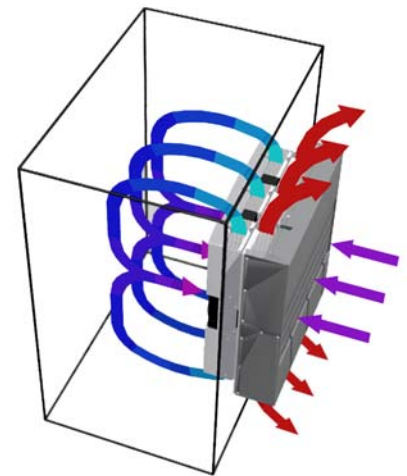
4340 BTU/hr @ 0 °F ΔT

6060 BTU/hr @ +20 °F ΔT

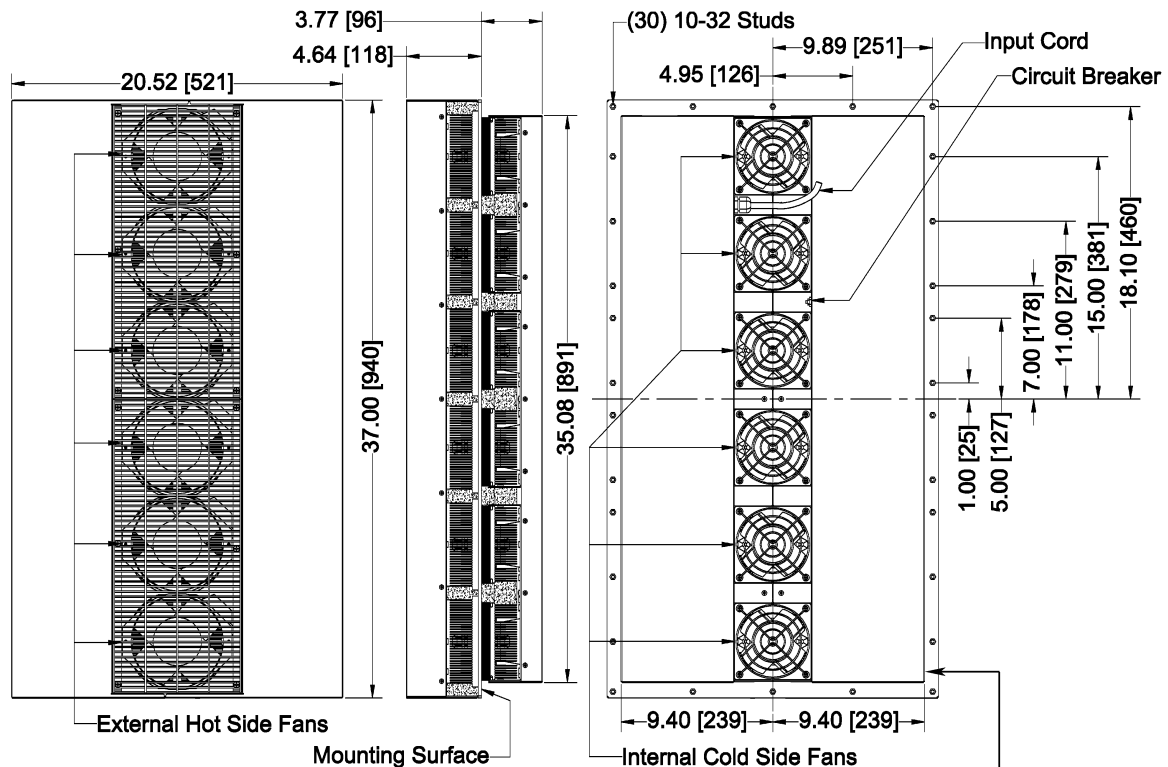
RATING (DIN 3168)

1273 Watts L35 L35

600 Watts L35 L50

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$ Enclosure Air $y = .022x - 28$ Cold Sink $y = .016x - 28$ 

Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

Mounting Cutout
 19.00X35.30 [483X897]

AHP-4252

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
3810 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 110 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

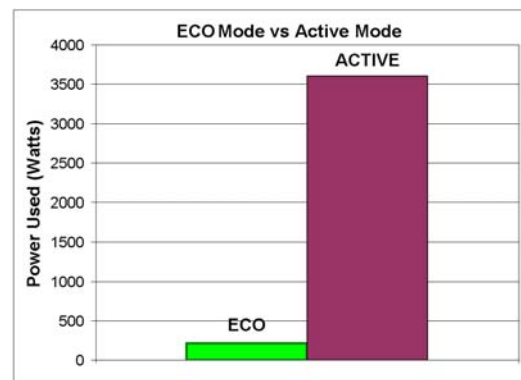
Voltage	240 VAC
Current, Active	12.5 AMPS
Current , ECO-Mode	0.9 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	3810 BTU/HR
Cooling (Din 3168)	1120 WATTS
Cooling COP (at L35 L35)	0.37
Heating (Traditional)	> 12000 BTU/HR
Heating (Din 3168)	> 3600 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-4252	0-J5J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-4252HC	0-J5I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-4252XE	0-J5J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-4252XEHC	0-J5I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-4252X	0-J5J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-4252XHC	0-J5I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-4252

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

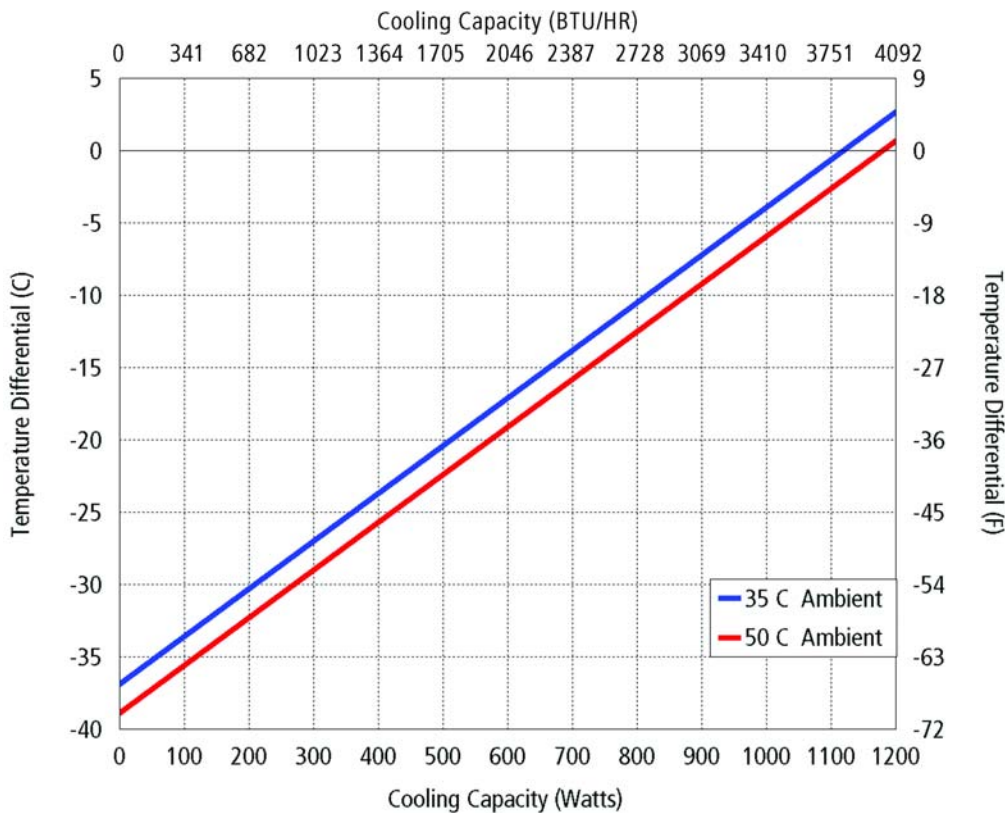
3810 BTU/hr @ 0 °F ΔT

4960 BTU/hr @ +20 °F ΔT

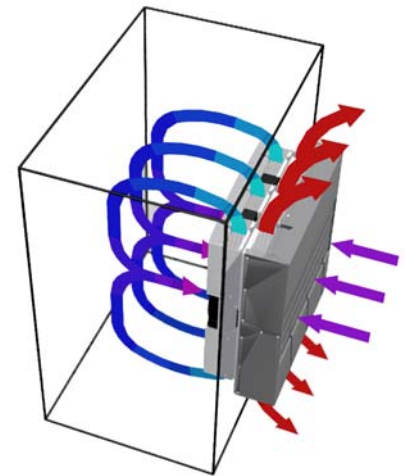
RATING (DIN 3168)

1120 Watts L35 L35

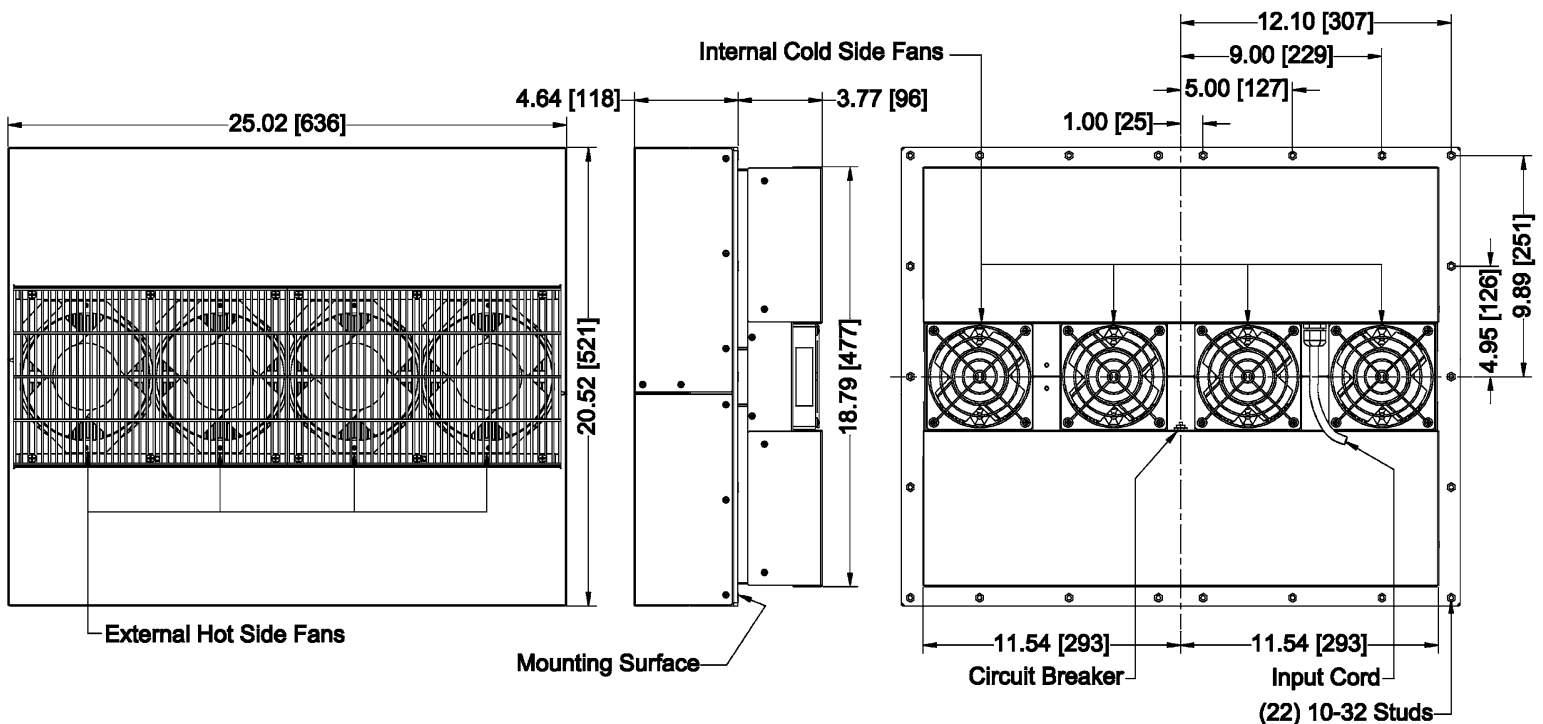
720 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = -.033x - 36.9$	$y = -.033x - 38.9$
Cold Sink	$y = -.025x - 36.9$	$y = -.025x - 38.9$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout
 23.20X18.90 [589X480]



AHP-4252

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

240 VAC Input
High Efficiency
2780 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 110 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

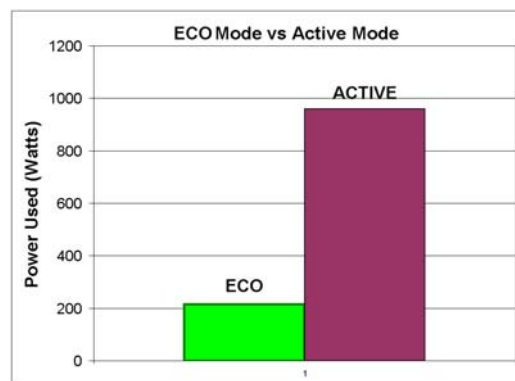
Voltage	240 VAC
Current, Active	4.0 AMPS
Current , ECO-Mode	0.9 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2780 BTU/HR
Cooling (Din 3168)	815 WATTS
Cooling COP (at L35 L35)	0.85
Heating (Traditional)	> 3270 BTU/HR
Heating (Din 3168)	> 960 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker

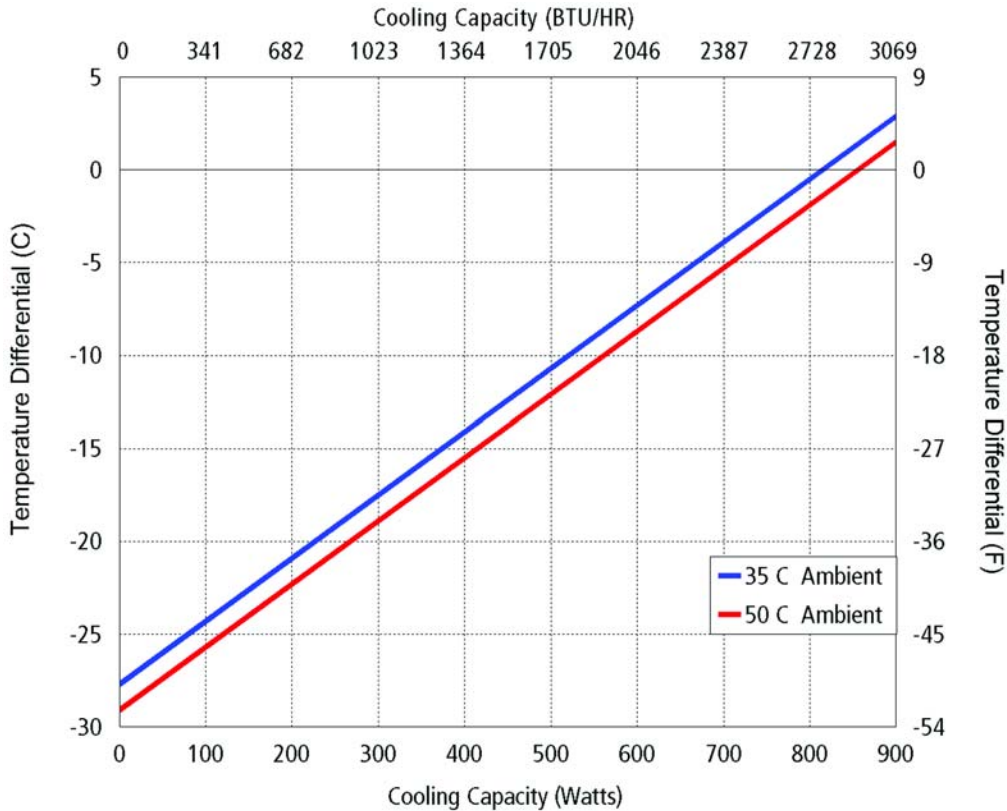


250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-4252	0-J4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-4252HC	0-J4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-4252XE	0-J4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-4252XEHC	0-J4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-4252X	0-J4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-4252XHC	0-J4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .034x - 27.7$	$y = .034x - 29.1$
Cold Sink	$y = .026x - 27.7$	$y = .026x - 29.1$

AHP-4252

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

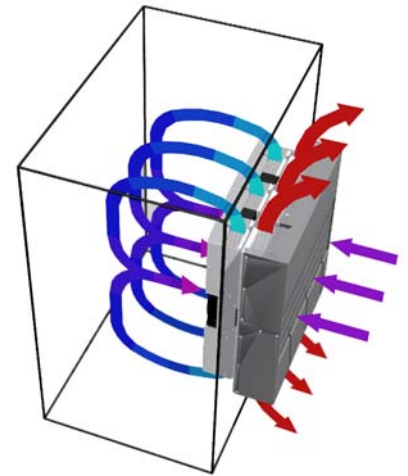
RATING (TRADITIONAL)

2780 BTU/hr @ 0 °F ΔT 3892 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

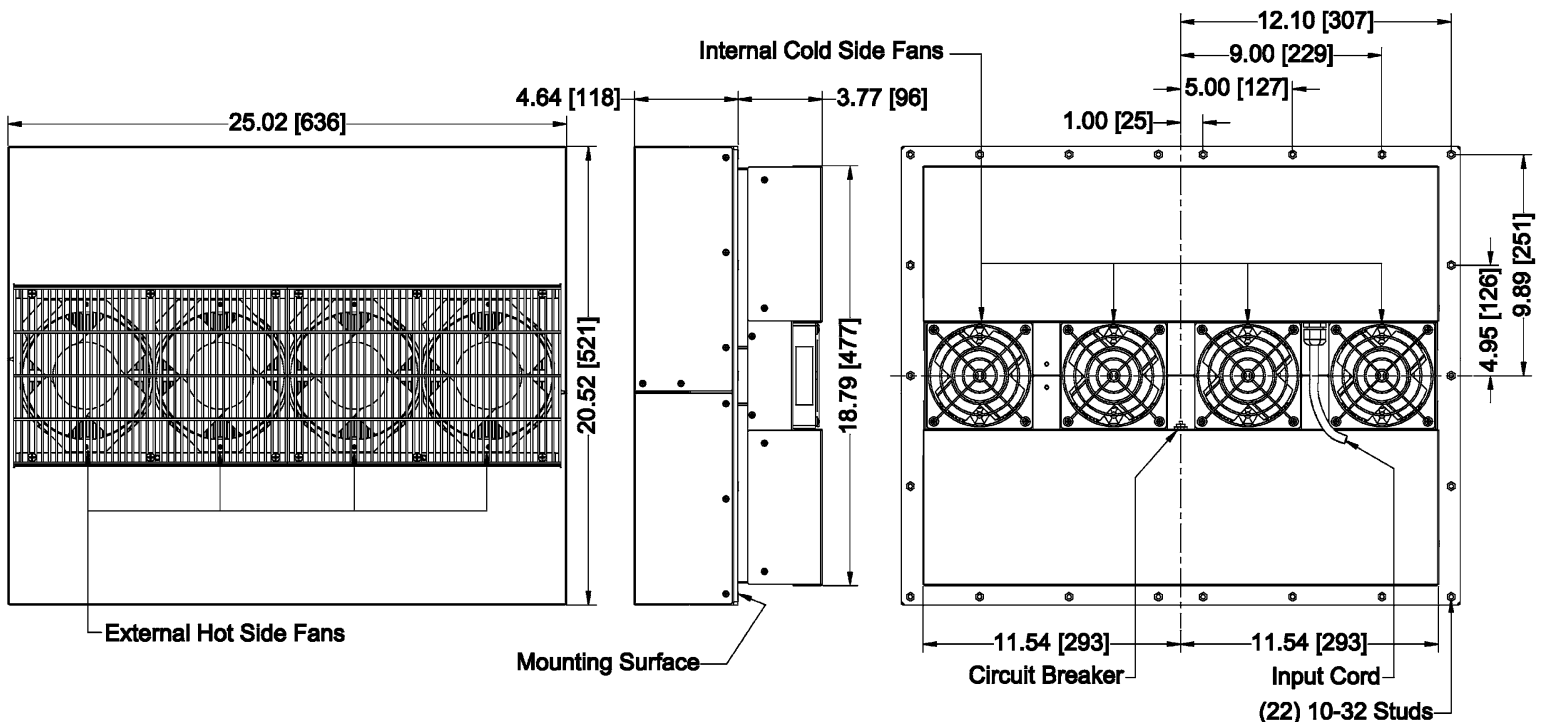
815 Watts L35 L35

410 Watts L35 L50



Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout
 23.20X18.90 [589X480]



AHP-4250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
2490 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 110 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

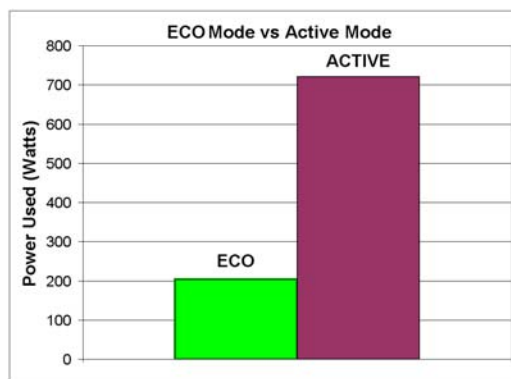
Voltage	120 VAC
Current, Active	6 AMPS
Current , ECO-Mode	1.7 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2490 BTU/HR
Cooling (Din 3168)	730 WATTS
Cooling COP (at L35 L35)	0.98
Heating (Traditional)	> 2455 BTU/HR
Heating (Din 3168)	> 720 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-4250	0-J4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-4250HC	0-J4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-4250XE	0-J4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-4250XEHC	0-J4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-4250X	0-J4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-4250XHC	0-J4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-4250**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

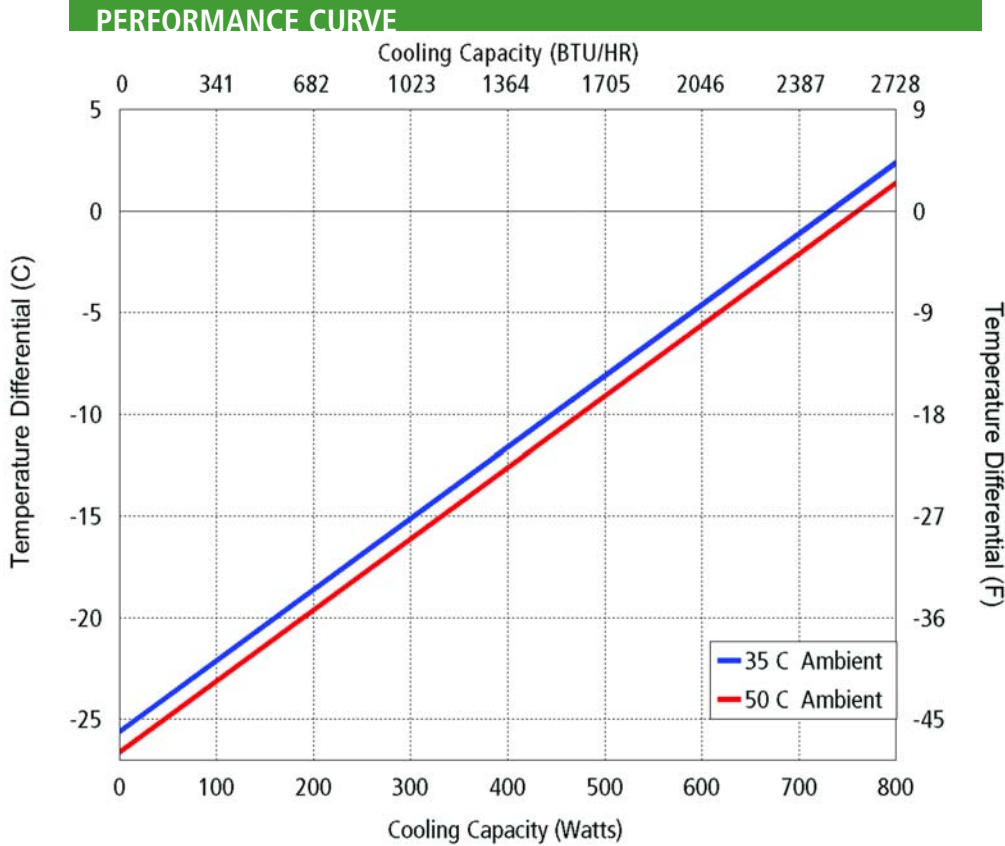
2490 BTU/hr @ 0 °F ΔT

3575 BTU/hr @ +20 °F ΔT

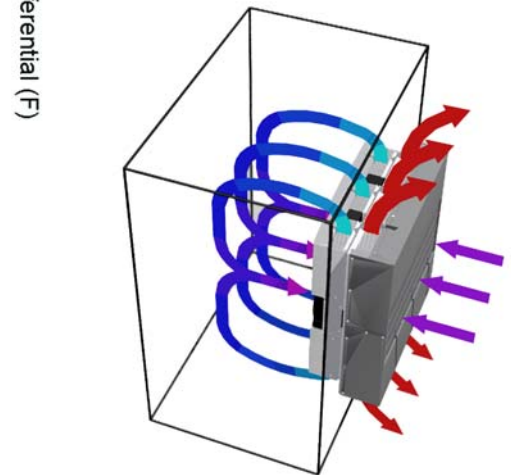
RATING (DIN 3168)

730 Watts L35 L35

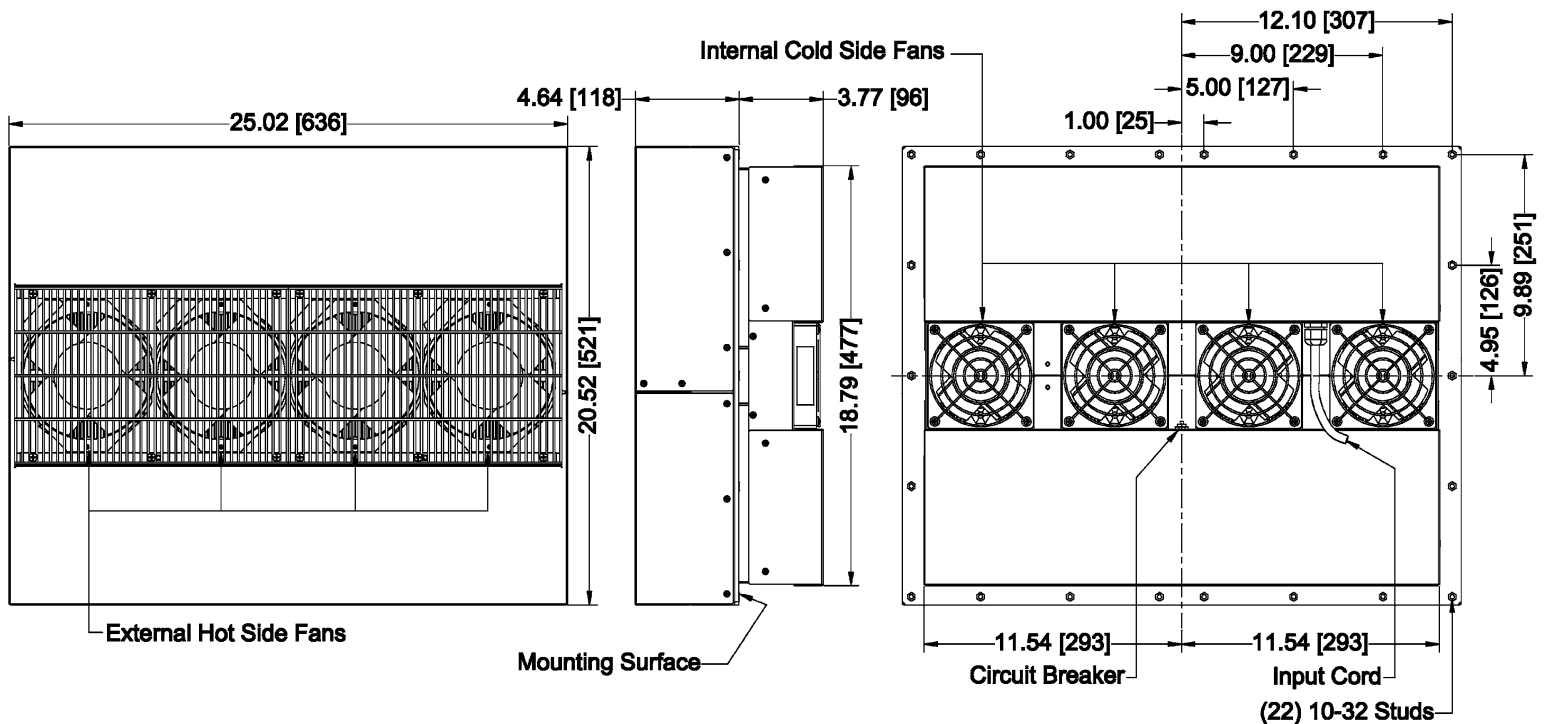
320 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .035x - 25.6$	$y = .035x - 26.6$
Cold Sink	$y = .027x - 25.6$	$y = .027x - 26.6$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout
 23.20X18.90 [589X480]

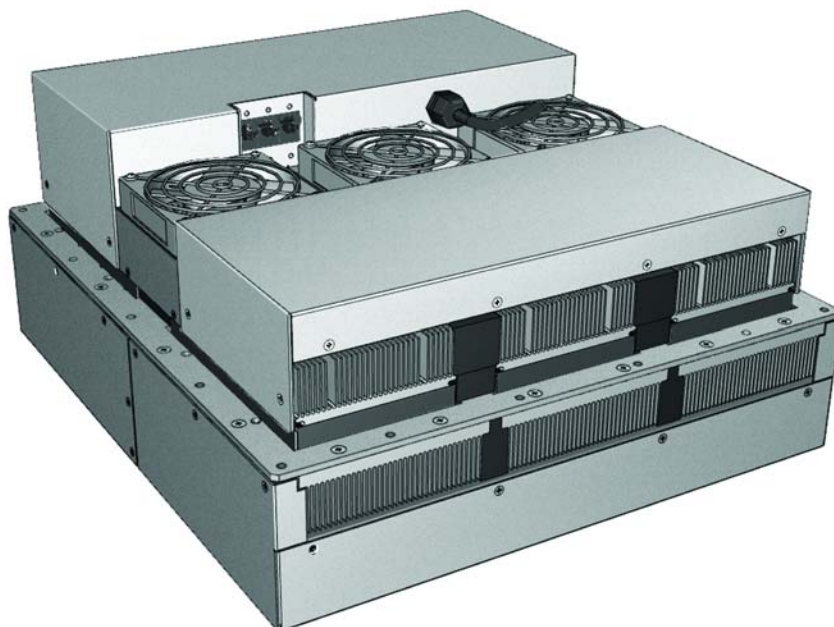


AHP-3253

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Efficiency
2973 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 88 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

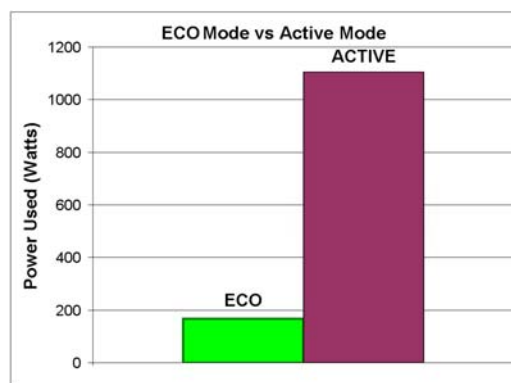
Voltage, 3 Phase Delta	240 VAC
Current, Active (per phase)	2.9 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2973 BTU/HR
Cooling (Din 3168)	872 WATTS
Cooling COP (at L35 L35)	0.72
Heating (Traditional)	> 4100 BTU/HR
Heating (Din 3168)	> 1205 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-3253	0-14JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-3253HC	0-14ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-3253XE	0-14JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-3253XEHC	0-14ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-3253X	0-14JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-3253XHC	0-14ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-3253**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

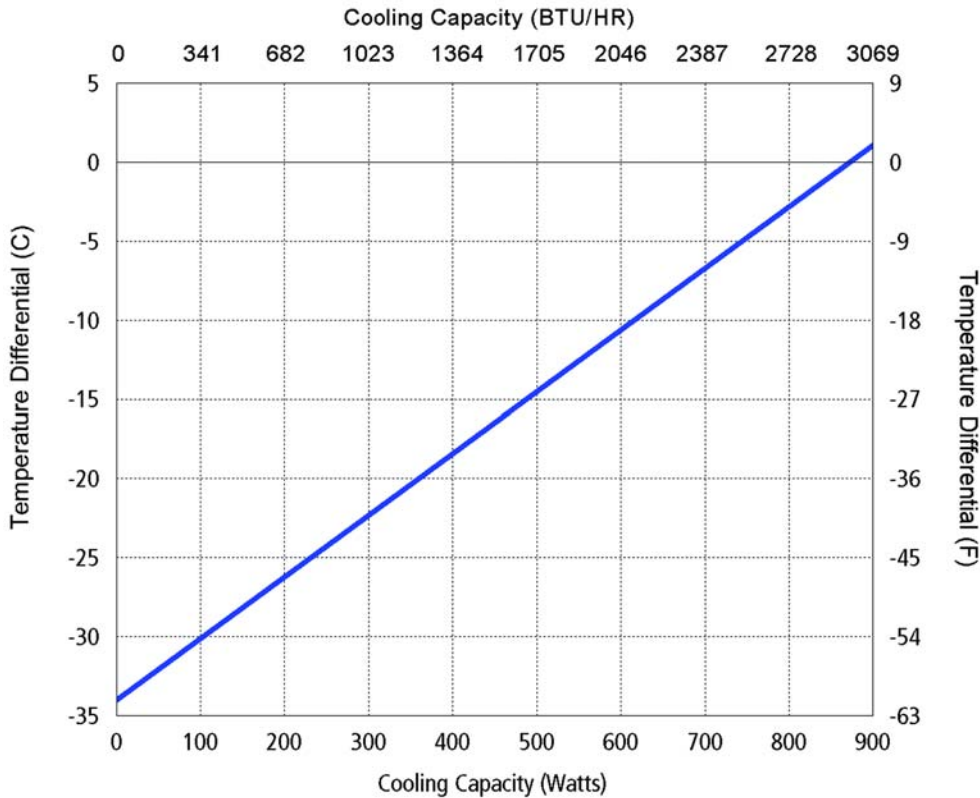
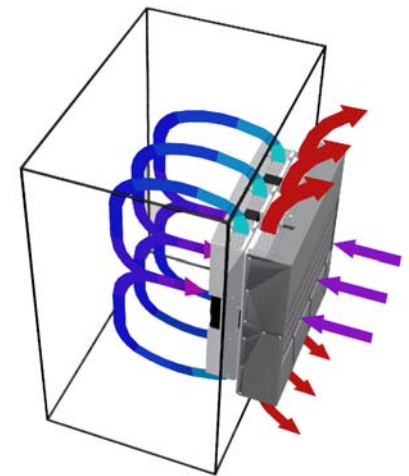
2973 BTU/hr @ 0 °F ΔT

3945 BTU/hr @ +20 °F ΔT

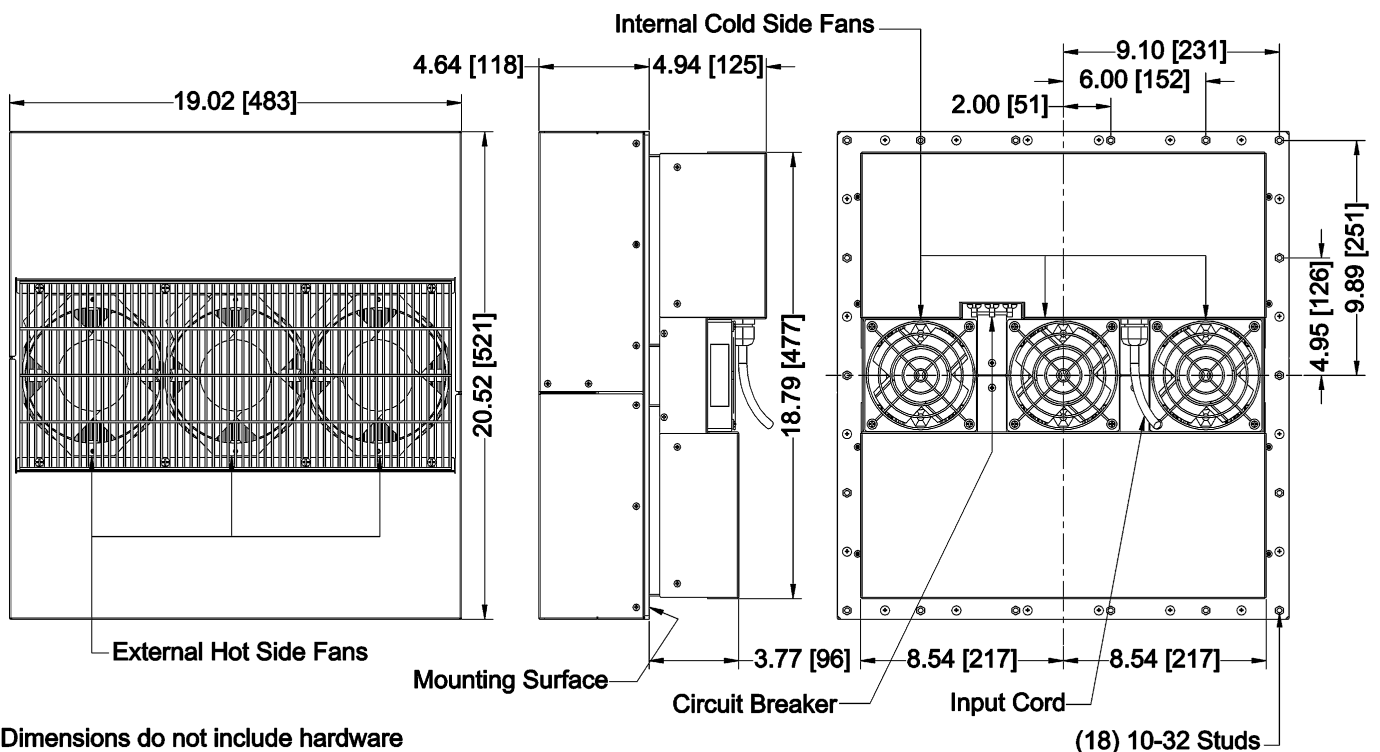
RATING (DIN 3168)

872 Watts L35 L35

480 Watts L35 L50

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$ Enclosure Air $y = .039x - 34.02$ Cold Sink $y = .029x - 34.02$ 

Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout
 17.20X18.90 [437X480]



AHP-3254

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

3 Phase, 208 VAC, 4 Wire Wye
High Efficiency
2686 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 88 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

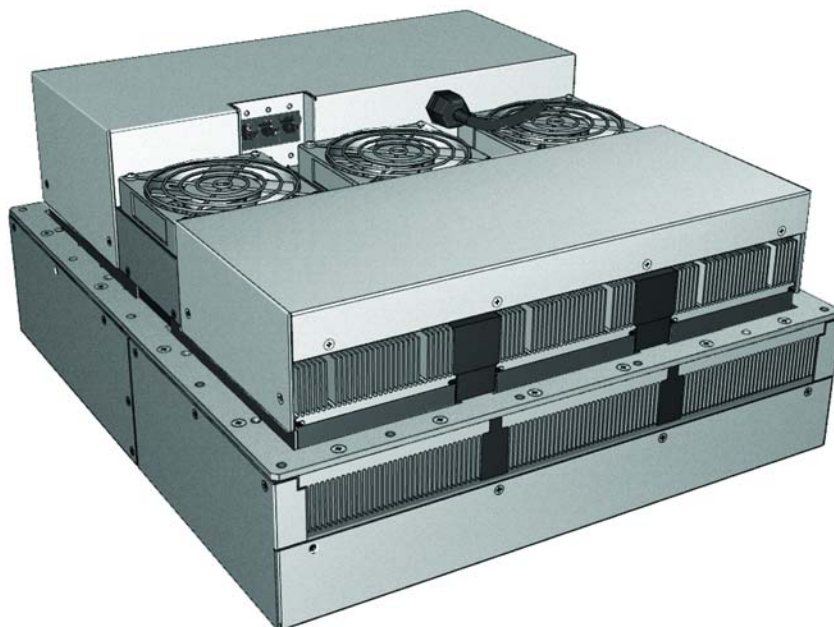
Voltage, 3 Phase Wye	208 VAC
Current, Active (per phase)	2.6 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2686 BTU/HR
Cooling (Din 3168)	787 WATTS
Cooling COP (at L35 L35)	0.84
Heating (Traditional)	> 3294 BTU/HR
Heating (Din 3168)	> 937 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

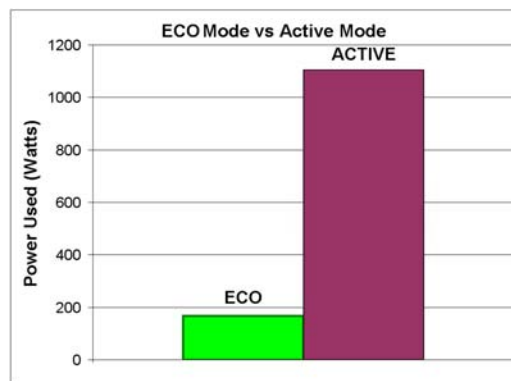
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-3254	0-I4JE-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-3254HC	0-I4IE-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-3254XE	0-I4JE-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-3254XEHC	0-I4IE-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-3254X	0-I4JE-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-3254XHC	0-I4IE-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



AHP-3254**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

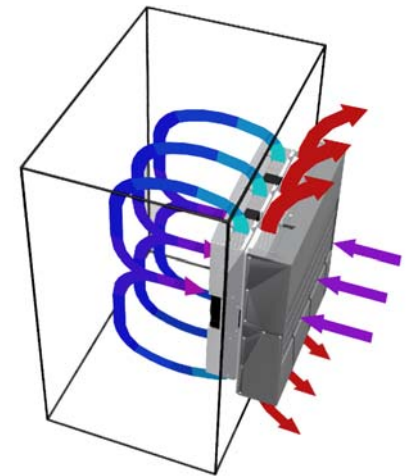
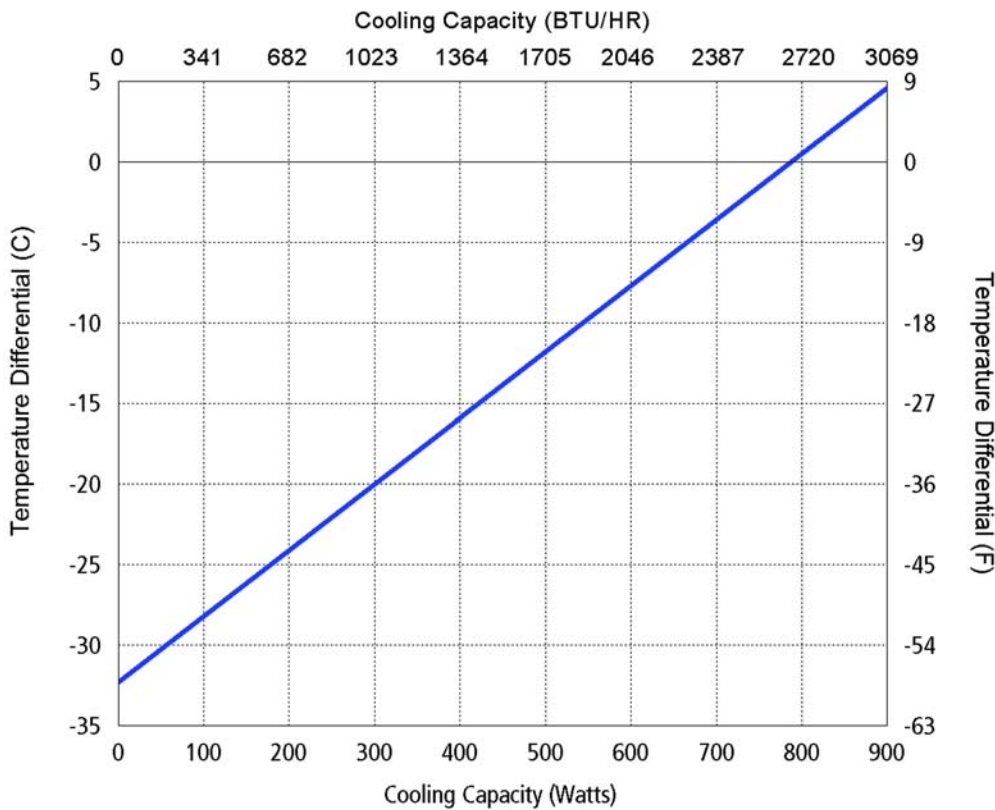
2686 BTU/hr @ 0 °F ΔT

3610 BTU/hr @ +20 °F ΔT

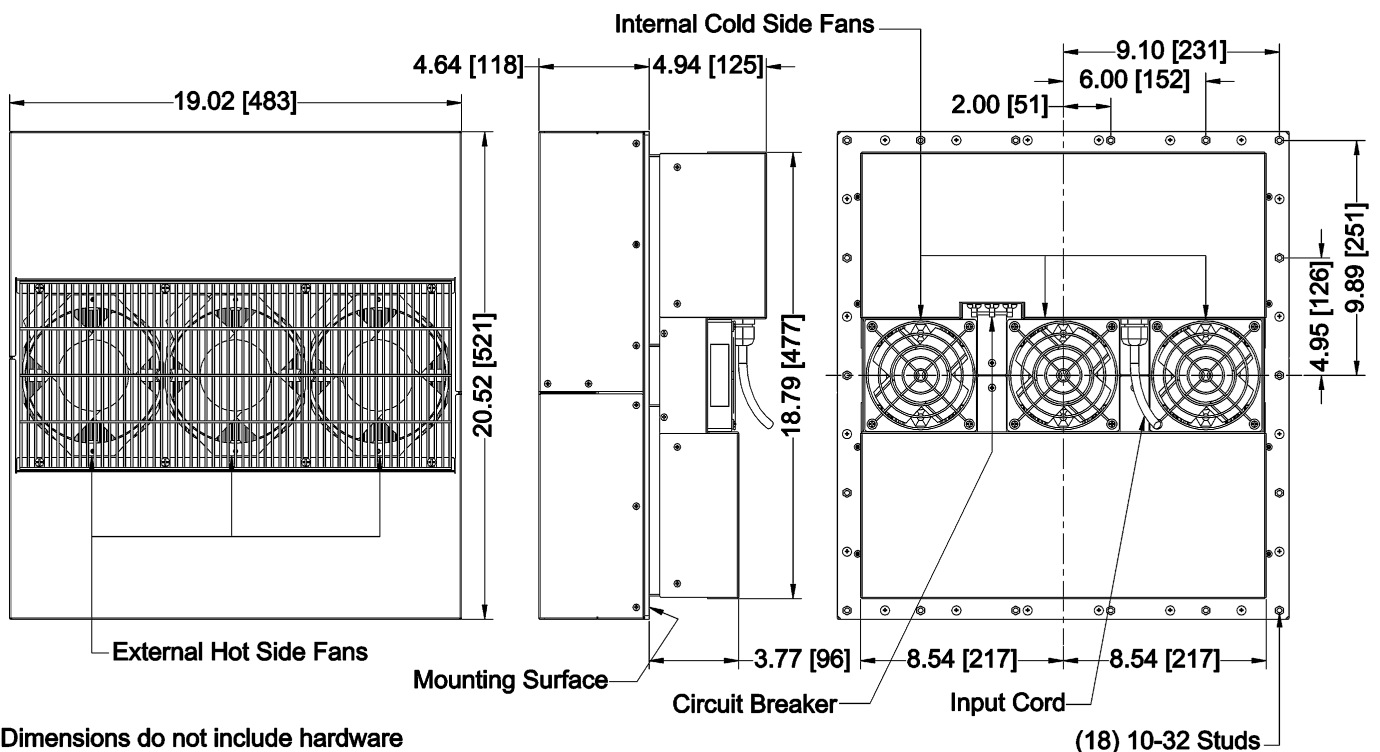
RATING (DIN 3168)

788 Watts L35 L35

420 Watts L35 L50



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout
 17.20X18.90 [437X480]



AHP-3252

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

240 VAC Input
High Efficiency
2610 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 88 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

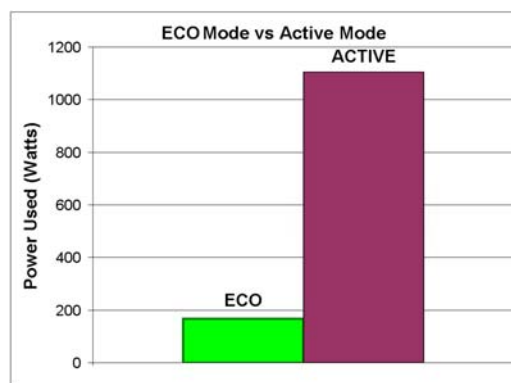
Voltage	240 VAC
Current, Active	4.6 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2610 BTU/HR
Cooling (Din 3168)	765 WATTS
Cooling COP (at L35 L35)	0.70
Heating (Traditional)	> 3765 BTU/HR
Heating (Din 3168)	> 1104 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-3252	0-I4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-3252HC	0-I4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-3252XE	0-I4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-3252XEHC	0-I4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-3252X	0-I4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-3252XHC	0-I4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-3252

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

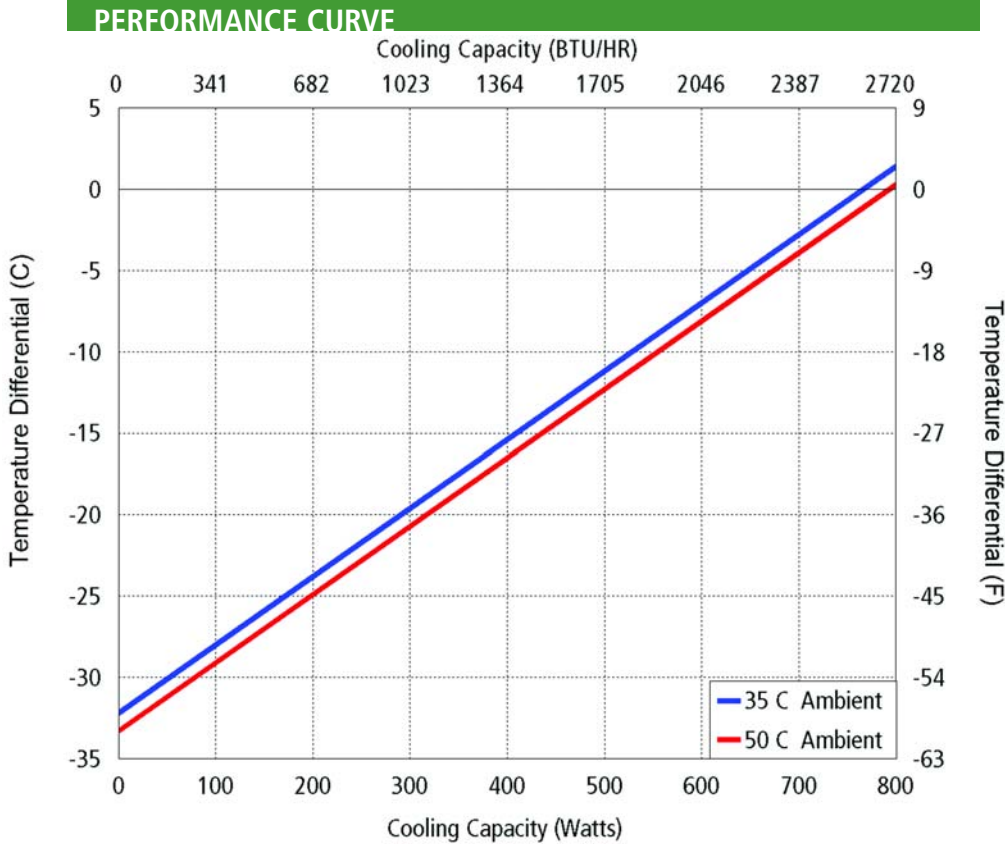
2610 BTU/hr @ 0 °F ΔT

3515 BTU/hr @ +20 °F ΔT

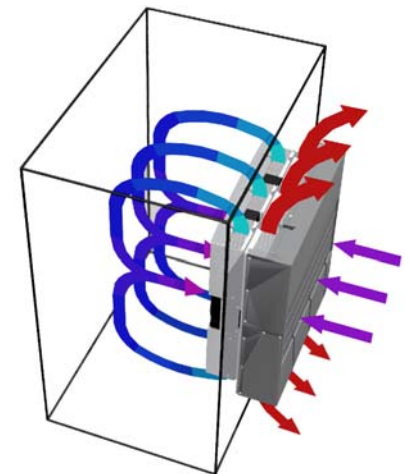
RATING (DIN 3168)

765 Watts L35 L35

430 Watts L35 L50

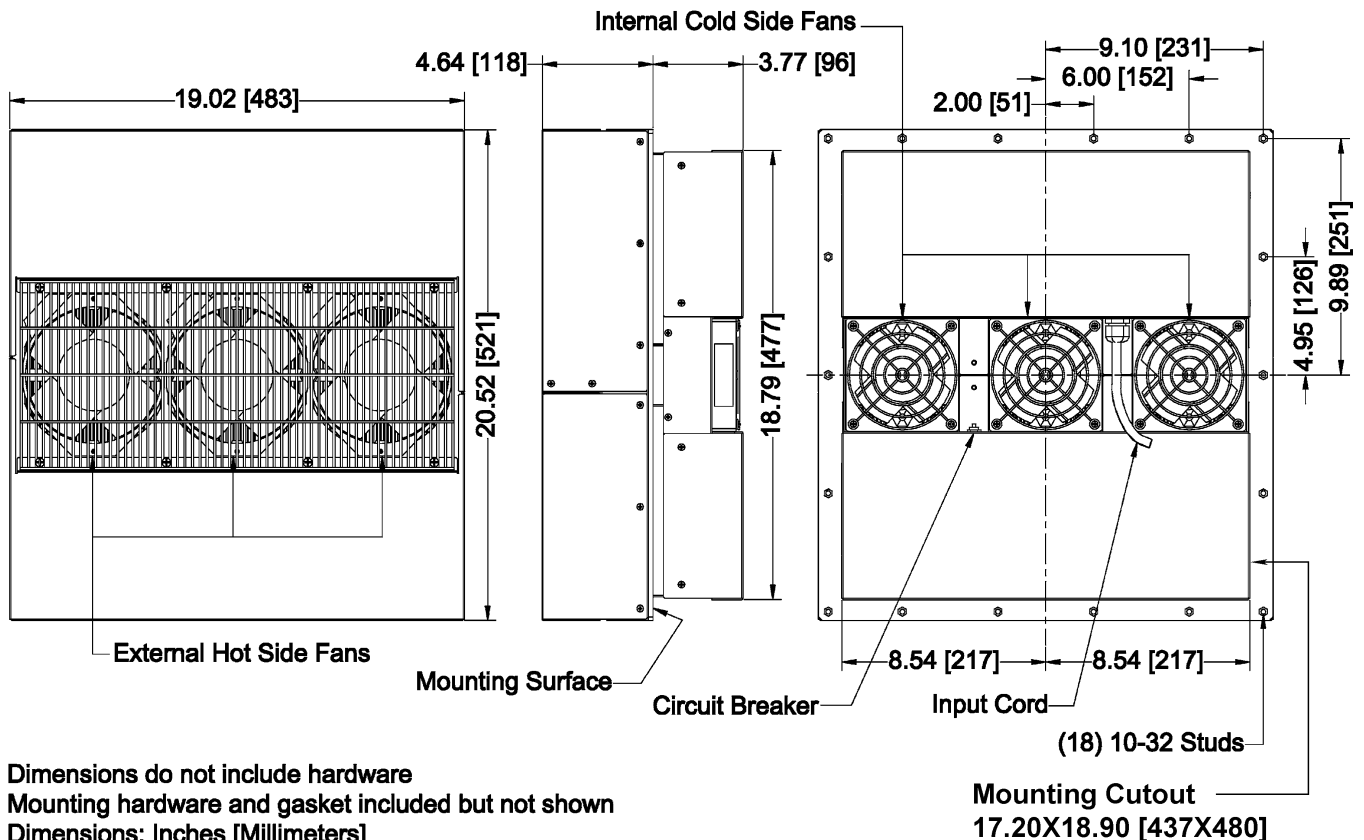


Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .042x - 32.2$	$y = .042x - 33.3$
Cold Sink	$y = .031x - 32.2$	$y = .031x - 33.3$



Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]



AHP-3250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
2250 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 88 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

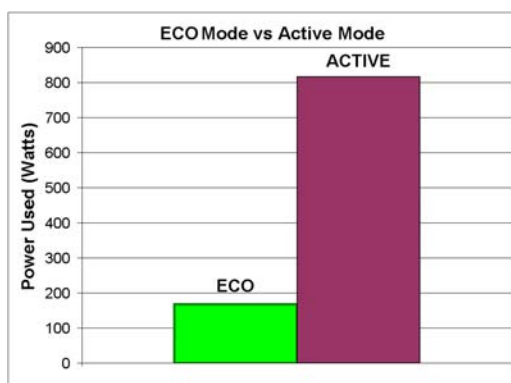
Voltage	120 VAC
Current, Active	7.0 AMPS
Current , ECO-Mode	1.4 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2250 BTU/HR
Cooling (Din 3168)	660 WATTS
Cooling COP (at L35 L35)	0.78
Heating (Traditional)	> 2780 BTU/HR
Heating (Din 3168)	> 815 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker

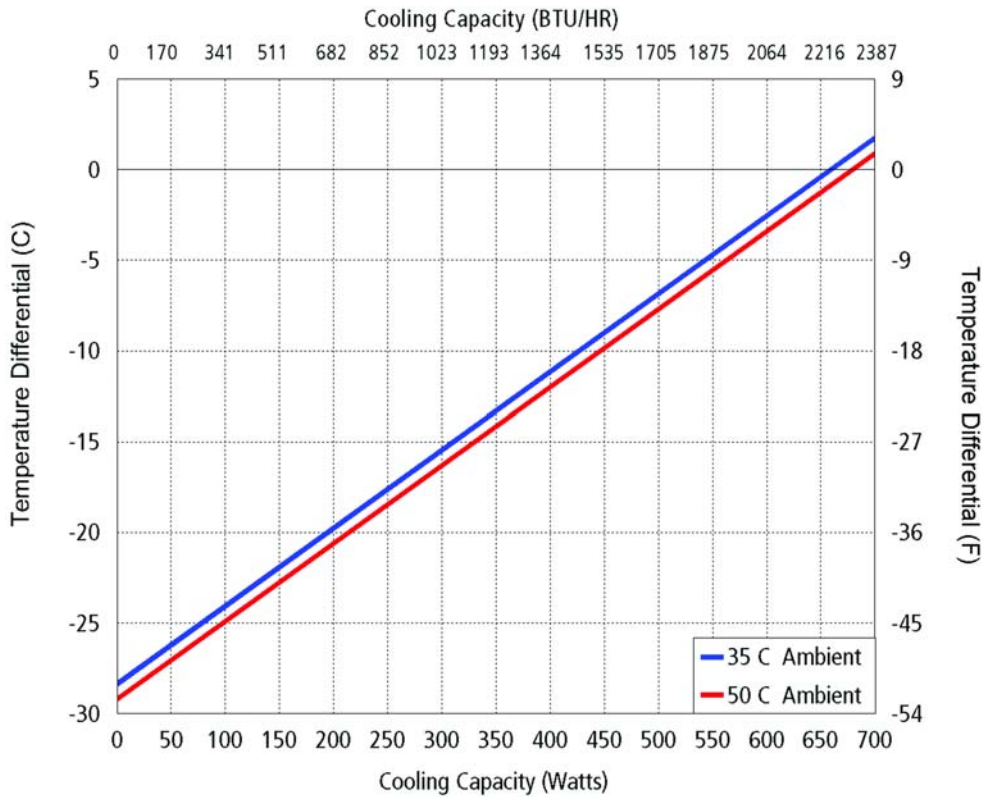


250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-3250	0-14J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-3250HC	0-14I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-3250XE	0-14J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-3250XEHC	0-14I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-3250X	0-14J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-3250XHC	0-14I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .043x - 28.3$	$y = .043x - 29.2$
Cold Sink	$y = .032x - 28.3$	$y = .032x - 29.2$

AHP-3250

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

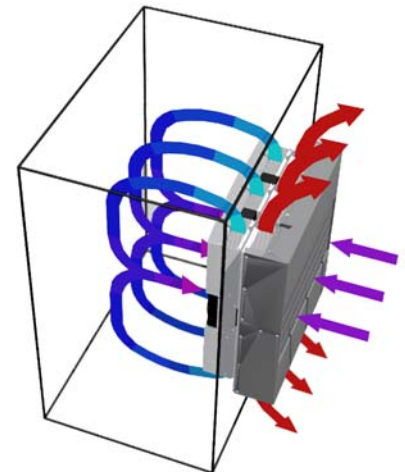
RATING (TRADITIONAL)

2250 BTU/hr @ 0 °F ΔT 3130 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

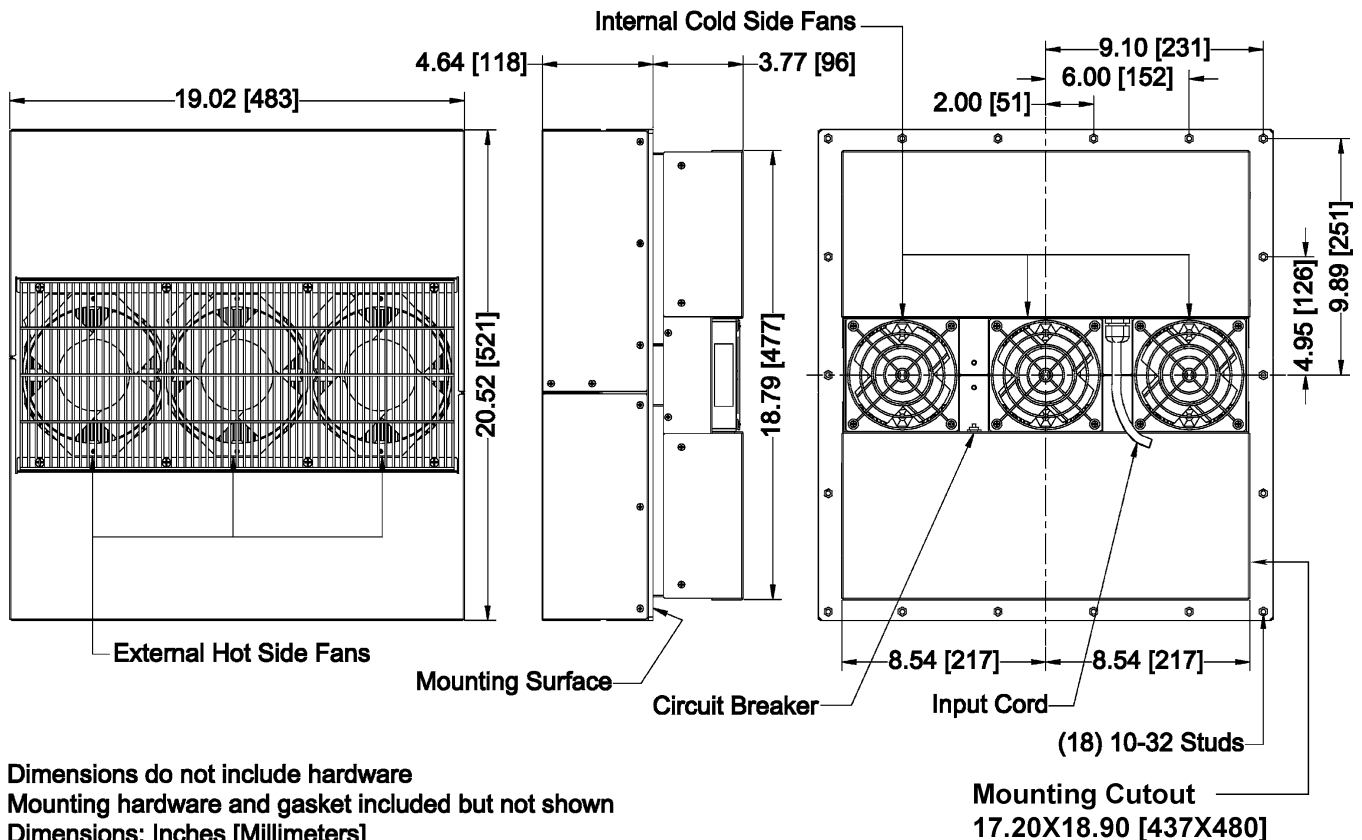
660 Watts L35 L35

330 Watts L35 L50



Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

AHP-2252

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
2060 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 60 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	240 VAC
Current, Active	6.5 AMPS
Current , ECO-Mode	0.5 AMPS
Frequency	50/60 Hz

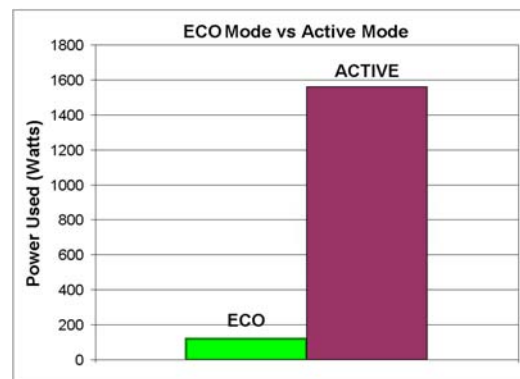
PERFORMANCE RATINGS

Cooling (Traditional)	2060 BTU/HR
Cooling (Din 3168)	605 WATTS
Cooling COP (at L35 L35)	0.4
Heating (Traditional)	> 5320 BTU/HR
Heating (Din 3168)	> 1560 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-2252	0-H5J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-2252HC	0-H5I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-2252XE	0-H5J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-2252XEHC	0-H5I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-2252X	0-H5J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-2252XHC	0-H5I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-2252**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

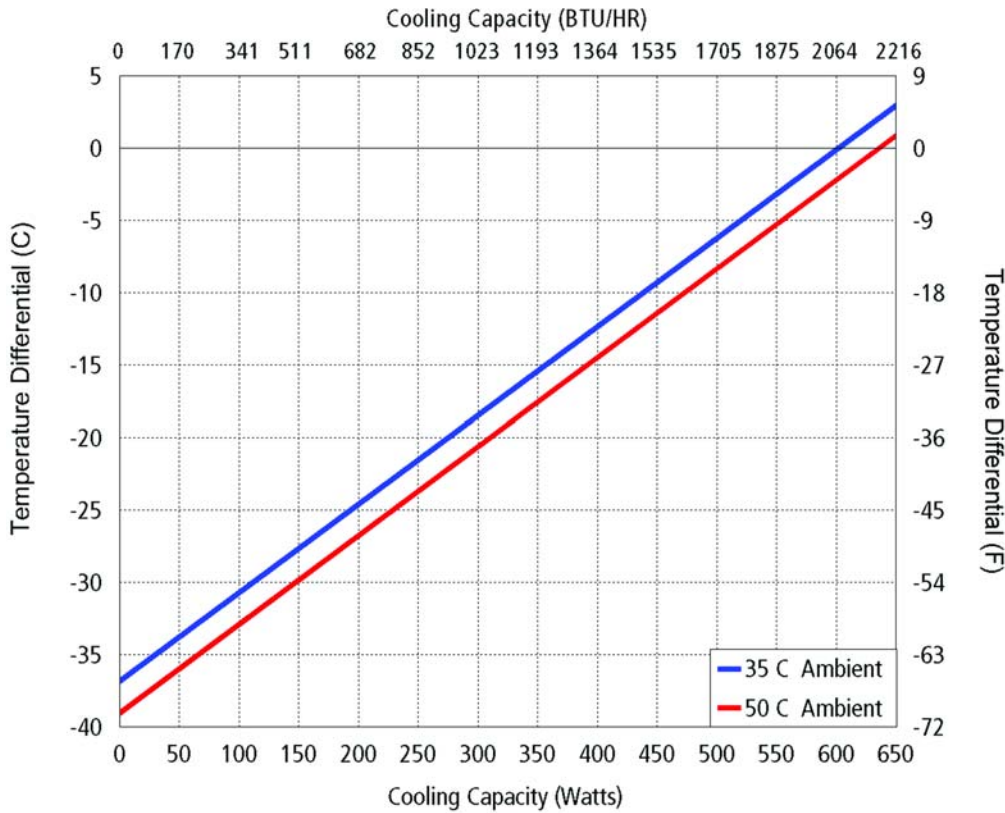
2060 BTU/hr @ 0 °F ΔT

2680 BTU/hr @ +20 °F ΔT

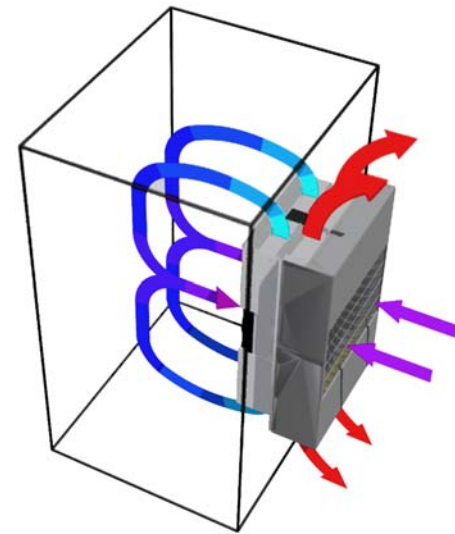
RATING (DIN 3168)

605 Watts L35 L35

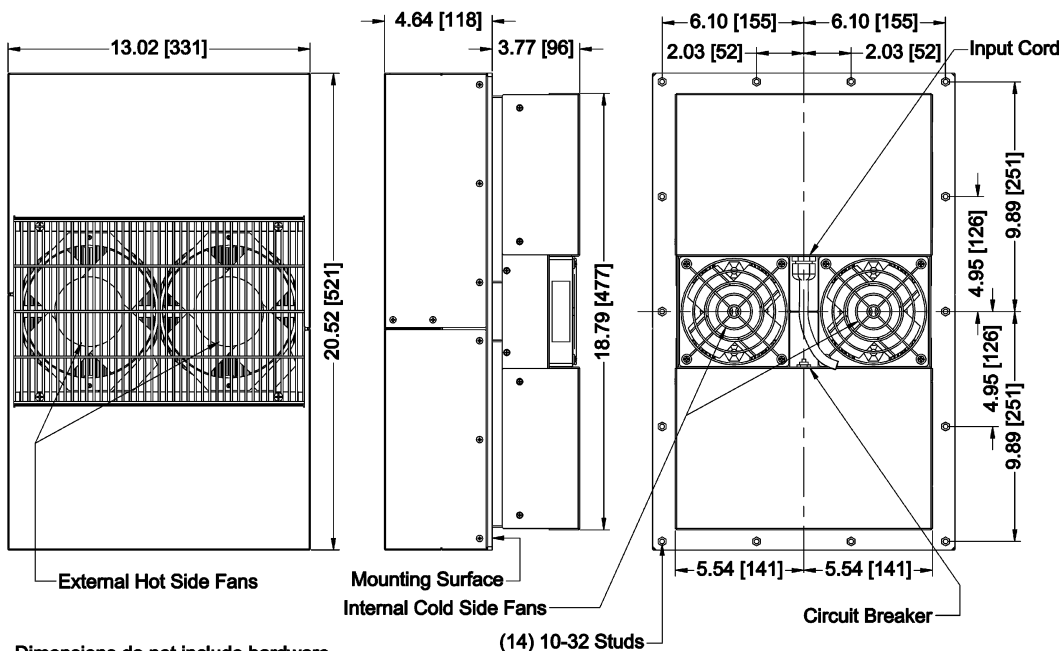
395 Watts L35 L50



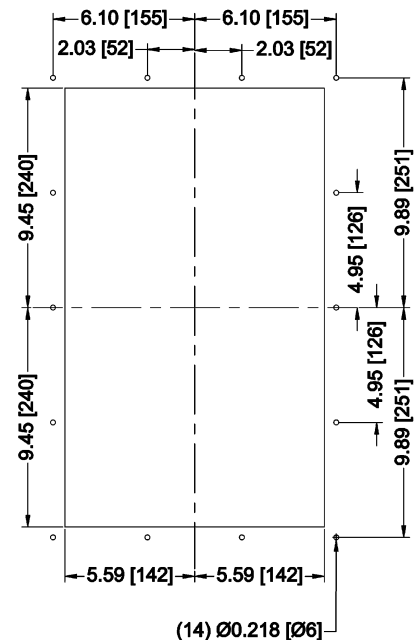
Temperature Differential (F)



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

AHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

120 VAC Input
High Capacity
1880 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 60 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	120 VAC
Current, Active	10.8 AMPS
Current , ECO-Mode	1 AMP
Frequency	50/60 Hz

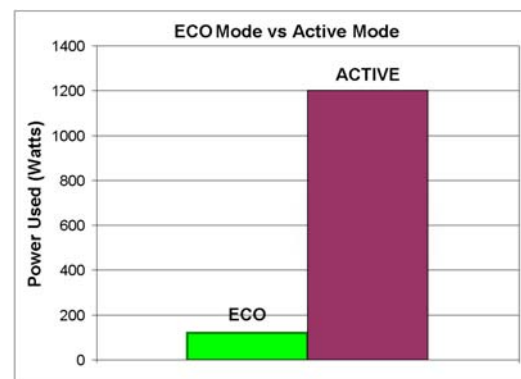
PERFORMANCE RATINGS

Cooling (Traditional)	1880 BTU/HR
Cooling (Din 3168)	550 WATTS
Cooling COP (at L35 L35)	0.42
Heating (Traditional)	> 4000 BTU/HR
Heating (Din 3168)	> 1200 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-2250	0-H5J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-2250HC	0-H5I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-2250XE	0-H5J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-2250XEHC	0-H5I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-2250X	0-H5J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-2250XHC	0-H5I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-2250

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

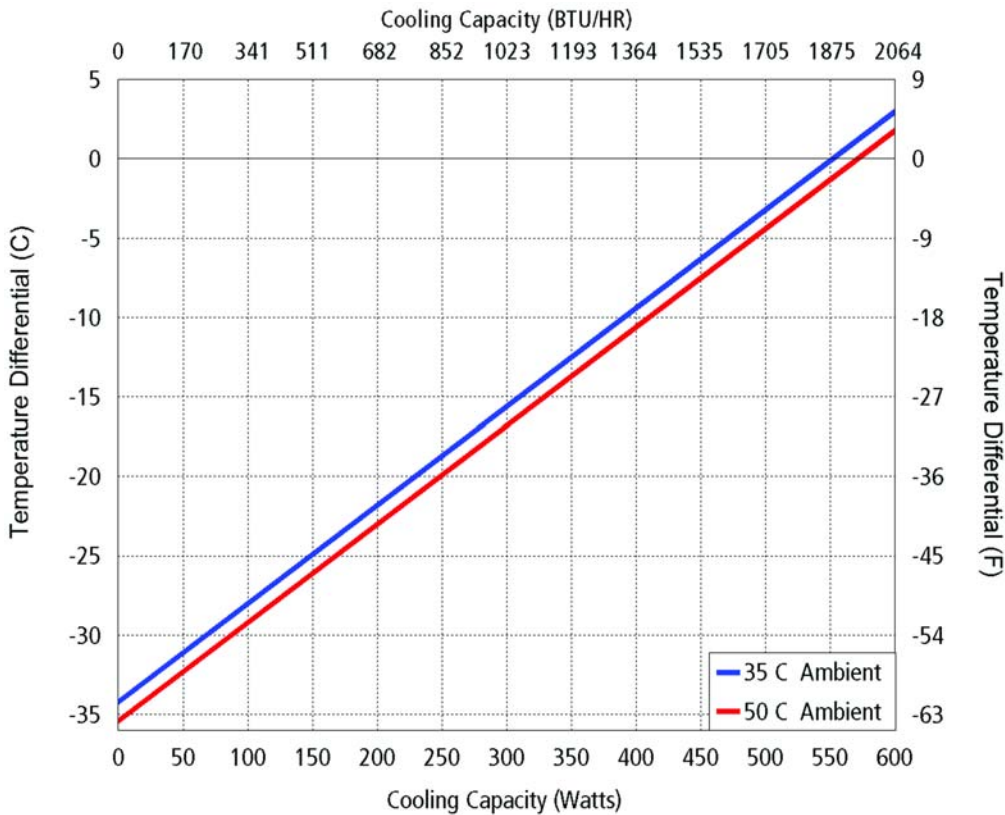
1880 BTU/hr @ 0 °F ΔT

2490 BTU/hr @ +20 °F ΔT

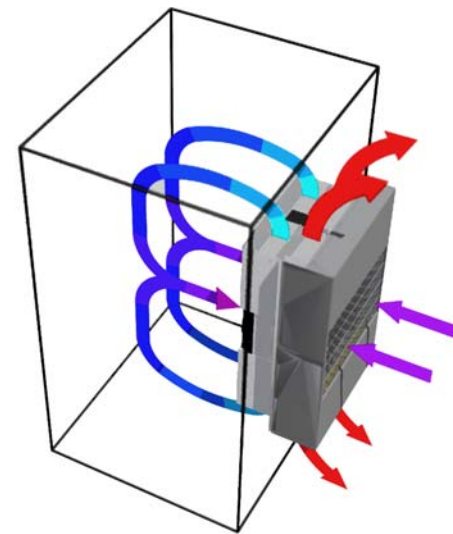
RATING (DIN 3168)

550 Watts L35 L35

330 Watts L35 L50

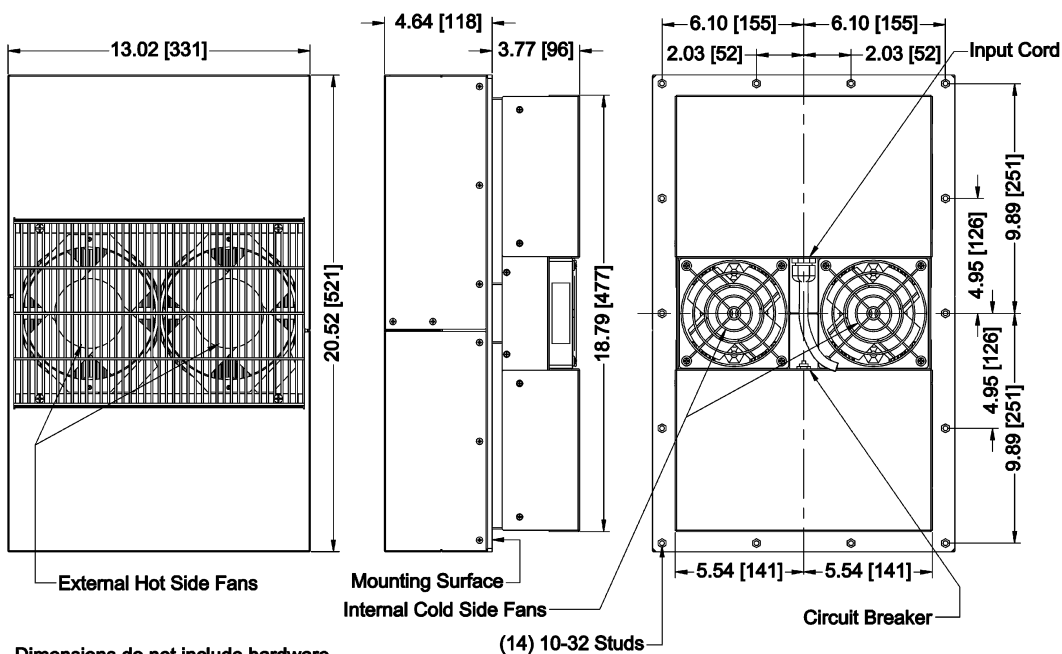


Temperature Differential (F)



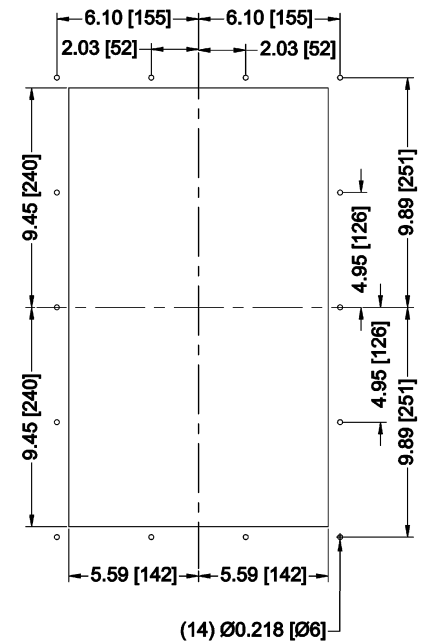
Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS





AHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
1400 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 60 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

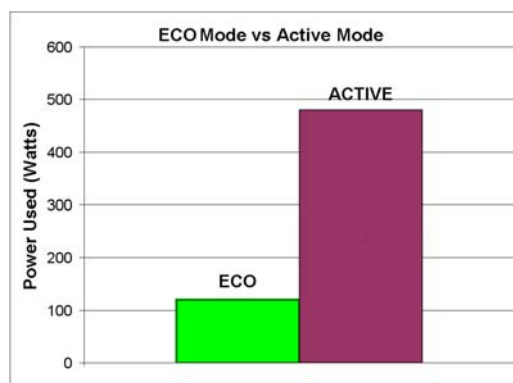
Voltage	120 VAC
Current, Active	3.6 AMPS
Current , ECO-Mode	1 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	1400 BTU/HR
Cooling (Din 3168)	410 WATTS
Cooling COP (at L35 L35)	0.95
Heating (Traditional)	> 1640 BTU/HR
Heating (Din 3168)	> 480 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-2250	0-H4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
AHP-2250HC	0-H4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
AHP-2250XE	0-H4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
AHP-2250XEHC	0-H4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
AHP-2250X	0-H4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
AHP-2250XHC	0-H4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

AHP-2250**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

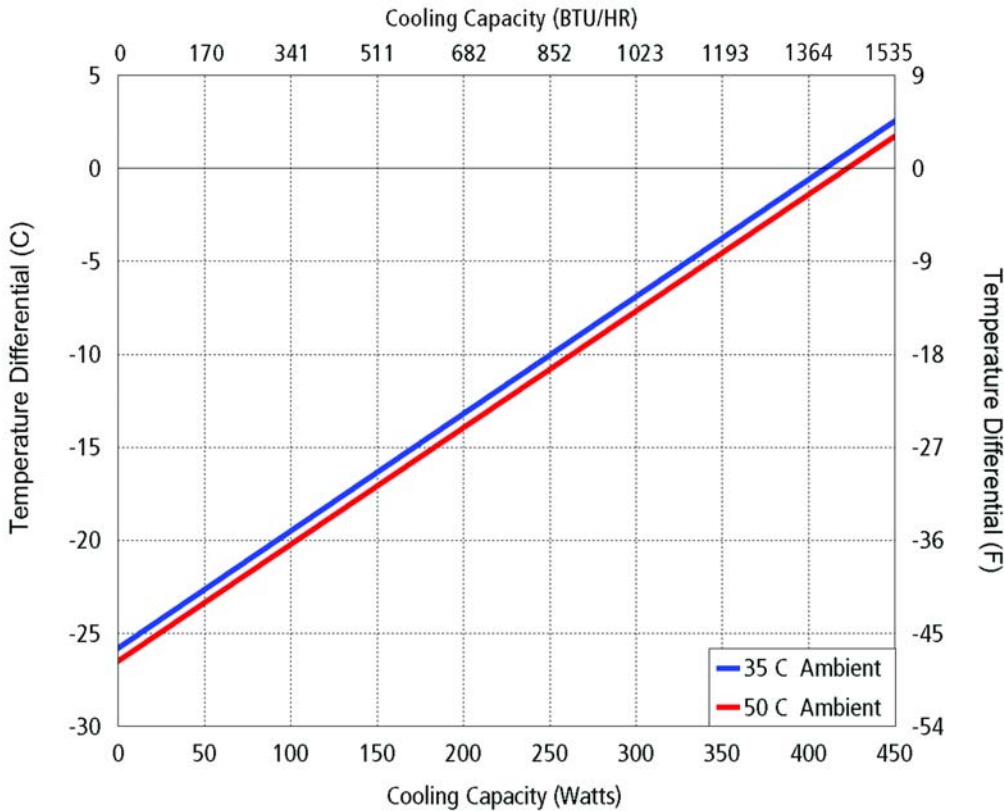
1400 BTU/hr @ 0 °F ΔT

1990 BTU/hr @ +20 °F ΔT

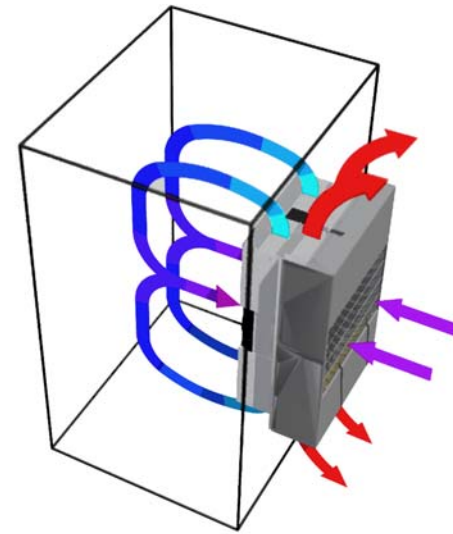
RATING (DIN 3168)

410 Watts L35 L35

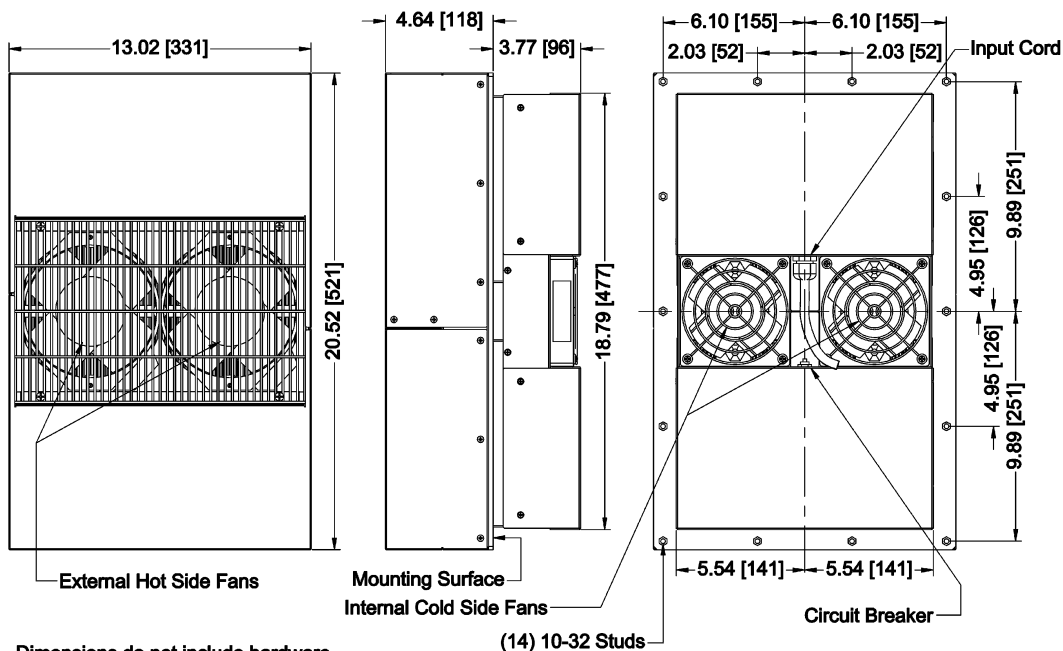
180 Watts L35 L50



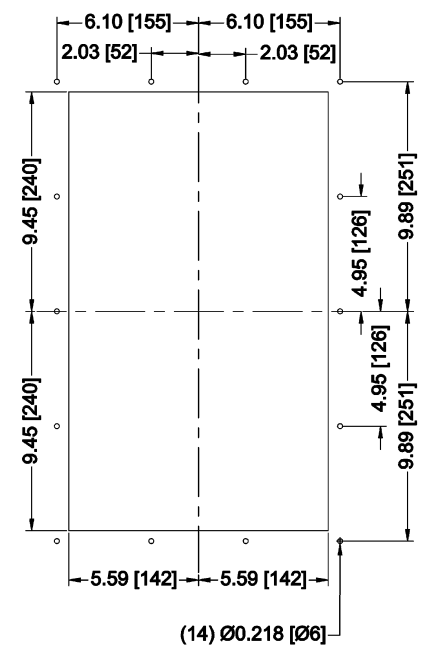
Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .063x - 25.7$	$y = .063x - 26.5$
Cold Sink	$y = .047x - 25.7$	$y = .047x - 26.5$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC Input
High Efficiency
1420 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- Lower profile intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 60 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

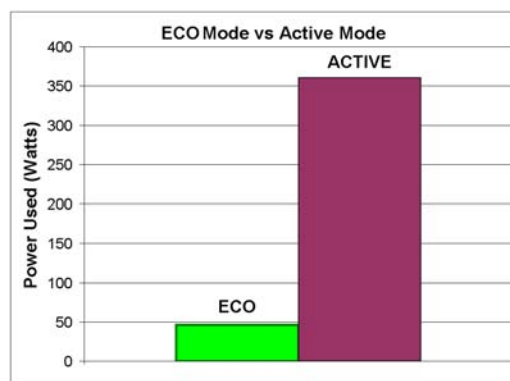
Voltage	24 VDC
Current, Active	15 AMPS
Current , ECO-Mode	1.9 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	1420 BTU/HR
Cooling (Din 3168)	417 WATTS
Cooling COP (at L35 L35)	1.16
Heating (Traditional)	> 1220 BTU/HR
Heating (Din 3168)	> 417 WATTS
Heating COP	1.16
Heat Exchanger (ECO-Mode)	12.5 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-2250	0-H4J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-2250HC	0-H4I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-2250XE	0-H4J5-4-000	Cool only, sealed hot side fans	TC-4F	NEMA-4, IP 56
AHP-2250XEHC	0-H4I5-5-000	Heat/Cool, sealed hot side fans	TC-7F	NEMA-4, IP 56
AHP-2250X	0-H4J5-2-000	Cool only, Mil. grade hot side fans	TC-4F	NEMA-4X, IP 56
AHP-2250XHC	0-H4I5-3-000	Heat/Cool, Mil. grade hot side fans	TC-7F	NEMA-4X, IP 56

AHP-2250**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

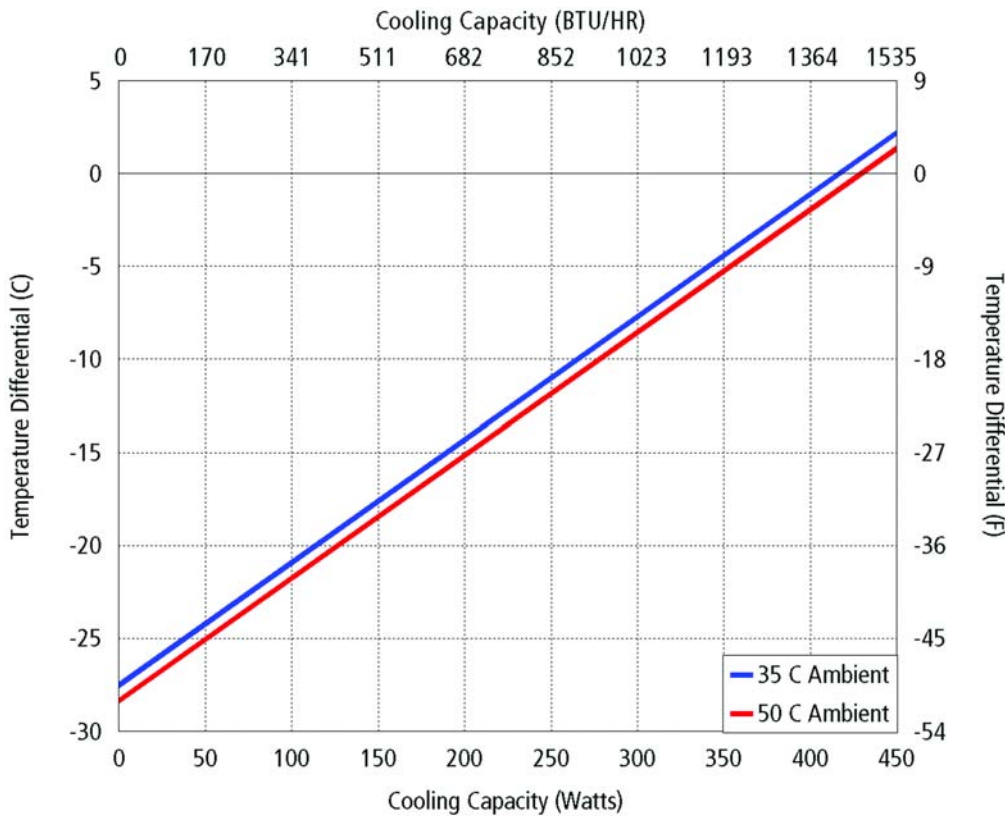
1420 BTU/hr @ 0 °F ΔT

1990 BTU/hr @ +20 °F ΔT

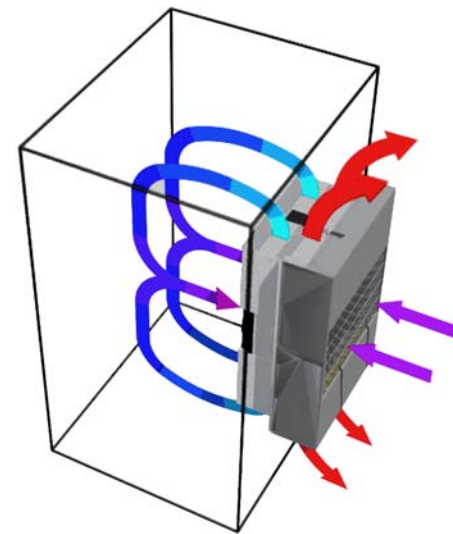
RATING (DIN 3168)

417 Watts L35 L35

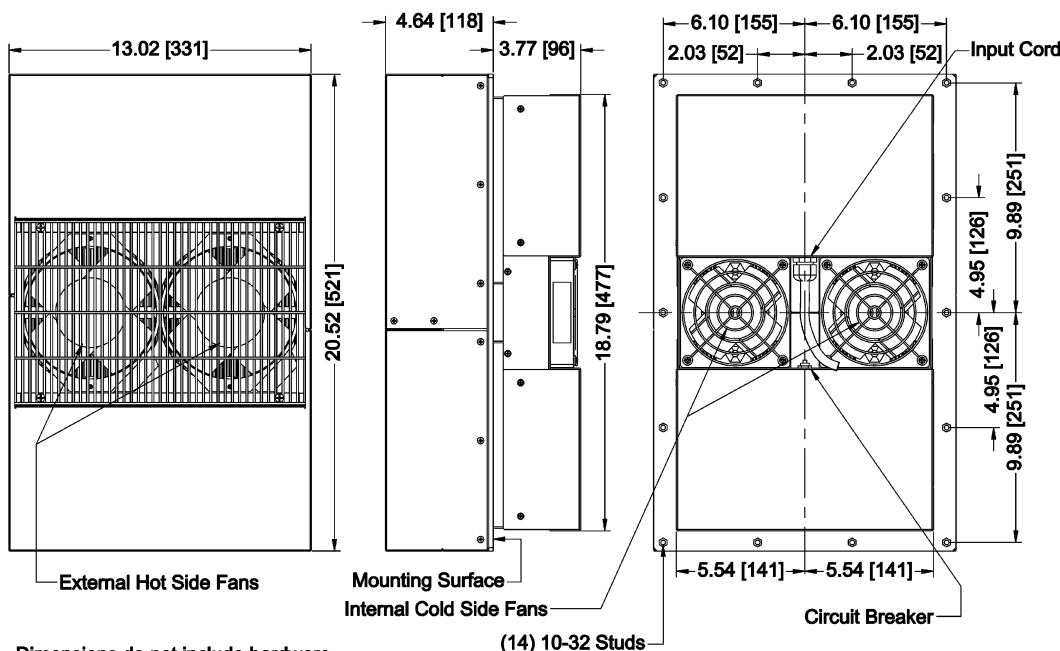
270 Watts L35 L50



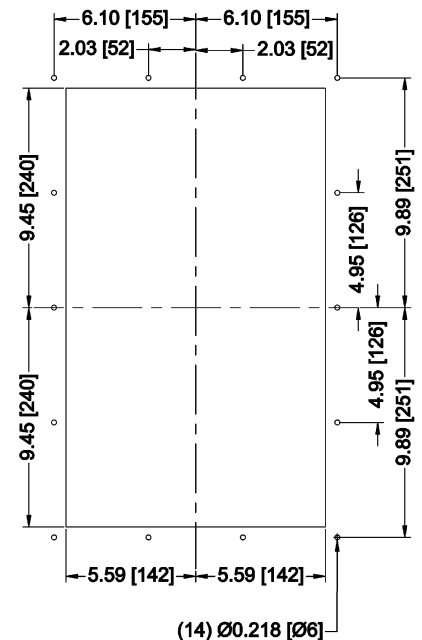
Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp.	35 °C	50 °C
Enclosure Air	$y = .066x - 27.5$	$y = .066x - 28.3$
Cold Sink	$y = .05x - 27.5$	$y = .05x - 28.3$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

AHP-1800

Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4, 4X

120 VAC, 240 VAC Input
1100 BTU/HR



FEATURES

- Compact, (18" L X 12.35" W X 9.69"D)
- Excels in high ambient temperatures
- Environmentally Safe
- Dual voltage versions available, consult factory.
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Versions to withstand corrosive environments, shock and vibration
- Mounts and operates in any orientation
- Easy to use Pivot Clean feature
- Agency approvals: UL 1995, CSA 22.2, CE

INCLUDES

- Temperature control
- Mounting gasket and hardware
- Power input line cord

OPTIONS

- Other temperature settings for single set point controls
- Custom finishes



SPECIFICATIONS

MODEL	PART NUMBER	VOLTAGE VAC 50/60 HZ	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT TEMPERATURE RANGE °C	OPERATING ENCLOSURE TEMPERATURE RANGE °C	ENVIRONMENT
AHP-1800	0-0180-0-000	120	8.0	46(21)	TC-6F	-40/+65	-10/+60	NEMA-12
AHP-1800	0-0150-0-000	120	8.0	46(21)	EXT*	-40/+65	-10/+60	NEMA-12
AHP-1800	0-01F0-0-000	120	8.0	46(21)	TC-1F	-40/+65	-10/+60	NEMA-12
AHP-1800HC	0-0130-1-000	120	8.0	46(21)	TC-3F	-40/+65	-10/+60	NEMA-12
AHP-1800HC	0-0150-1-000	120	8.0	46(21)	EXT*	-40/+65	-10/+60	NEMA-12
AHP-1802	0-0182-0-000	240	5.0	46(21)	TC-6F	-40/+65	-10/+60	NEMA-12
AHP-1802	0-0152-0-000	240	5.0	46(21)	EXT*	-40/+65	-10/+60	NEMA-12
AHP-1802	0-01F2-0-000	240	5.0	46(21)	TC-1F	-40/+65	-10/+60	NEMA-12
AHP-1802HC	0-0132-1-000	240	5.0	46(21)	TC-3F	-40/+65	-10/+60	NEMA-12
AHP-1802HC	0-0152-1-000	240	5.0	46(21)	EXT*	-40/+65	-10/+60	NEMA-12
AHP-1801	0-0181-0-000	120/240	8.0/5.0	46(21)	TC-6F	-40/+65	-10/+60	NEMA-12
AHP-1801	0-01F1-0-000	120/240	8.0/5.0	46(21)	TC-1F	-40/+65	-10/+60	NEMA-12
AHP-1801HC	0-0131-1-000	120/240	8.0/5.0	46(21)	TC-3F	-40/+65	-10/+60	NEMA-12
AHP-1800XE	0-0180-4-000	120	8.0	47(21.4)	TC-6F	-40/+65	-10/+60	NEMA-4
AHP-1800XE	0-0150-4-000	120	8.0	47(21.4)	EXT*	-40/+65	-10/+60	NEMA-4
AHP-1800XE	0-01F0-4-000	120	8.0	47(21.4)	TC-1F	-40/+65	-10/+60	NEMA-4
AHP-1800XEHC	0-0130-5-000	120	8.0	47(21.4)	TC-3F	-40/+65	-10/+60	NEMA-4
AHP-1800XEHC	0-0150-5-000	120	8.0	47(21.4)	EXT*	-40/+65	-10/+60	NEMA-4
AHP-1802XE	0-0182-4-000	240	5.0	52(23.6)	TC-6F	-40/+65	-10/+60	NEMA-4
AHP-1802XE	0-0152-4-000	240	5.0	52(23.6)	EXT*	-40/+65	-10/+60	NEMA-4
AHP-1802XE	0-01F2-4-000	240	5.0	52(23.6)	TC-1F	-40/+65	-10/+60	NEMA-4
AHP-1802XEHC	0-0132-5-000	240	5.0	52(23.6)	TC-3F	-40/+65	-10/+60	NEMA-4
AHP-1802XEHC	0-0152-5-000	240	5.0	52(23.6)	EXT*	-40/+65	-10/+60	NEMA-4
AHP-1800X	0-0180-2-000	120	8.0	47(21.4)	TC-6F	-40/+65	-10/+60	NEMA-4X
AHP-1800X	0-0150-2-000	120	8.0	47(21.4)	EXT*	-40/+65	-10/+60	NEMA-4X
AHP-1800X	0-01F0-2-000	120	8.0	47(21.4)	TC-1F	-40/+65	-10/+60	NEMA-4X
AHP-1800XHC	0-0130-3-000	120	8.0	47(21.4)	TC-3F	-40/+65	-10/+60	NEMA-4X
AHP-1800XHC	0-0150-3-000	120	8.0	47(21.4)	EXT*	-40/+65	-10/+60	NEMA-4X
AHP-1801X	0-0181-2-0000	120/240	8.0/6.0	47(21.4)	TC-6F	-40/+65	-10/+60	NEMA-4X
AHP-1801X	0-01F1-2-000	120/240	8.0/6.0	47(21.4)	TC-1F	-40/+65	-10/+60	NEMA-4X
AHP-1801XHC	0-0131-3-000	120/240	8.0/6.0	47(21.4)	TC-3F	-40/+65	-10/+60	NEMA-4X

* Unit is set for 5-32 VDC external signal, relay(s) included

Consult factory for shock and vibration models

TECA

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The graph illustrates the relationship between Cooling Capacity (BTU/HR and Watts) and Temperature Differential (C and F) for three ambient temperatures: 20 C (68 F), 40 C (104 F), and 60 C (140 F). The X-axis represents Cooling Capacity in both BTU/HR (top scale, 0 to 1195) and Watts (bottom scale, 0 to 350). The Y-axis represents Temperature Differential in both Celsius (left scale, -45 to 10) and Fahrenheit (right scale, -81 to 18). Three linear data series are plotted, all showing a positive correlation between temperature differential and cooling capacity. The 20 C (68 F) Ambient series (blue line) has the highest capacity, followed by the 40 C (104 F) Ambient series (black line), and the 60 C (140 F) Ambient series (red line) has the lowest capacity for any given temperature differential.

Temperature Differential (C)	Temperature Differential (F)	Cooling Capacity (Watts) - 20 C (68 F) Ambient	Cooling Capacity (Watts) - 40 C (104 F) Ambient	Cooling Capacity (Watts) - 60 C (140 F) Ambient
-35	-63	0	0	0
-30	-54	50	0	0
-25	-45	100	0	0
-20	-36	150	0	0
-15	-27	200	0	0
-10	-18	250	0	0
-5	-9	300	0	0
0	0	350	0	0
5	9	400	0	0
10	18	450	0	0

Figure 1: Dimensions of the 1801 model terminal strip. The diagram shows a rectangular terminal strip with dimensions in inches and millimeters. The overall width is 10.90 [277] inches, divided into three sections: 1.34 [34] inches for the left and right sections, and 5.45 [138] inches for the central section. The overall height is 16.90 [429] inches, divided into two sections of 8.45 [215] inches each. The distance from the center to the left and right edges is 4.34 [110] inches. The distance from the center to the top and bottom edges is 8.63 [219] inches. The diagram also shows the locations of the circuit breakers and the terminal strip for the 1801 model only.

TECA I



AHP-1800

Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4, 4X

24 VDC Input
High Efficiency
1100 BTU/HR

FEATURES

- High capacity thermoelectric design
- Lower profile intrusion into enclosure
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 12%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Operating ambient temperature range -40/+65 °C
- Operating enclosure temperature range -10/+60 °C
- Easy to use Pivot Clean feature
- Weight 55 LBS.

POWER INPUTS

Voltage	24 VDC
Current, Active	18 AMPS
Current , ECO-Mode	1.9 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	1100 BTU/HR
Cooling (Din 3168)	322 WATTS
Cooling COP (at L35 L35)	0.74
Heating (Traditional)	> 1473 BTU/HR
Heating (Din 3168)	> 432 WATTS
Heating COP	> 1.0

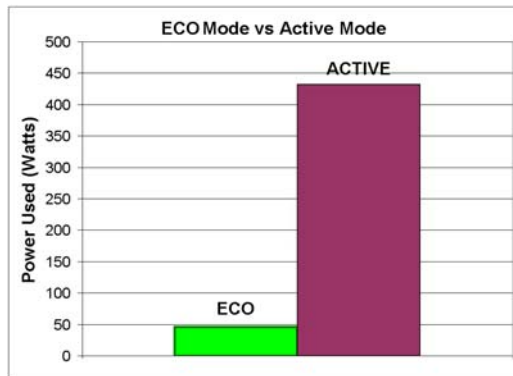
INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads



CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35
TC-7F	10	25	35



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1800	0-0195-0-000	Cool only	None	NEMA-12, IP 52
AHP-1800	0-0185-0-000	Cool only	TC-6F	NEMA-12, IP 52
AHP-1800	0-01F5-0-000	Cool only	TC-1F	NEMA-12, IP 52
AHP-1800	0-0155-0-000	Cool only	EXT*	NEMA-12, IP 52
AHP-1800HC	0-0135-1-000	Heat/Cool	TC-3F	NEMA-12, IP 52
AHP-1800HC	0-0115-1-000	Heat/Cool	TC-7F	NEMA-12, IP 52
AHP-1800HC	0-0155-1-000	Heat/Cool	EXT*	NEMA-12, IP 52
AHP-1800HC	0-01H5-1-000	Heat/Cool	TC-4600	NEMA-12, IP 52
AHP-1800XE	0-0195-4-000	Cool only	None	NEMA-4, IP 56
AHP-1800XE	0-0185-4-000	Cool only	TC-6F	NEMA-4, IP 56
AHP-1800XE	0-01F5-4-000	Cool only	TC-1F	NEMA-4, IP 56
AHP-1800XE	0-0155-4-000	Cool only	EXT*	NEMA-4, IP 56

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1800XEHC	0-0135-5-000	Heat/Cool	TC-3F	NEMA-4, IP 56
AHP-1800XEHC	0-0115-5-000	Heat/Cool	TC-7F	NEMA-4, IP 56
AHP-1800XEHC	0-0155-5-000	Heat/Cool	EXT*	NEMA-4, IP 56
AHP-1800XEHC	0-01H5-5-000	Heat/Cool	TC-4600	NEMA-4, IP 56
AHP-1800X	0-0195-2-000	Cool only	None	NEMA-4X, IP 56
AHP-1800X	0-0185-2-000	Cool only	TC-6F	NEMA-4X, IP 56
AHP-1800X	0-01F5-2-000	Cool only	TC-1F	NEMA-4X, IP 56
AHP-1800X	0-0155-2-000	Cool only	EXT*	NEMA-4X, IP 56
AHP-1800XHC	0-0135-3-000	Heat/Cool	TC-3F	NEMA-4X, IP 56
AHP-1800XHC	0-0115-3-000	Heat/Cool	TC-7F	NEMA-4X, IP 56
AHP-1800XHC	0-0155-3-000	Heat/Cool	EXT*	NEMA-4X, IP 56
AHP-1800XHC	0-01H5-3-000	Heat/Cool	TC-4600	NEMA-4X, IP 56

* Unit is set for 5-32 VC external signal, relay(s) included

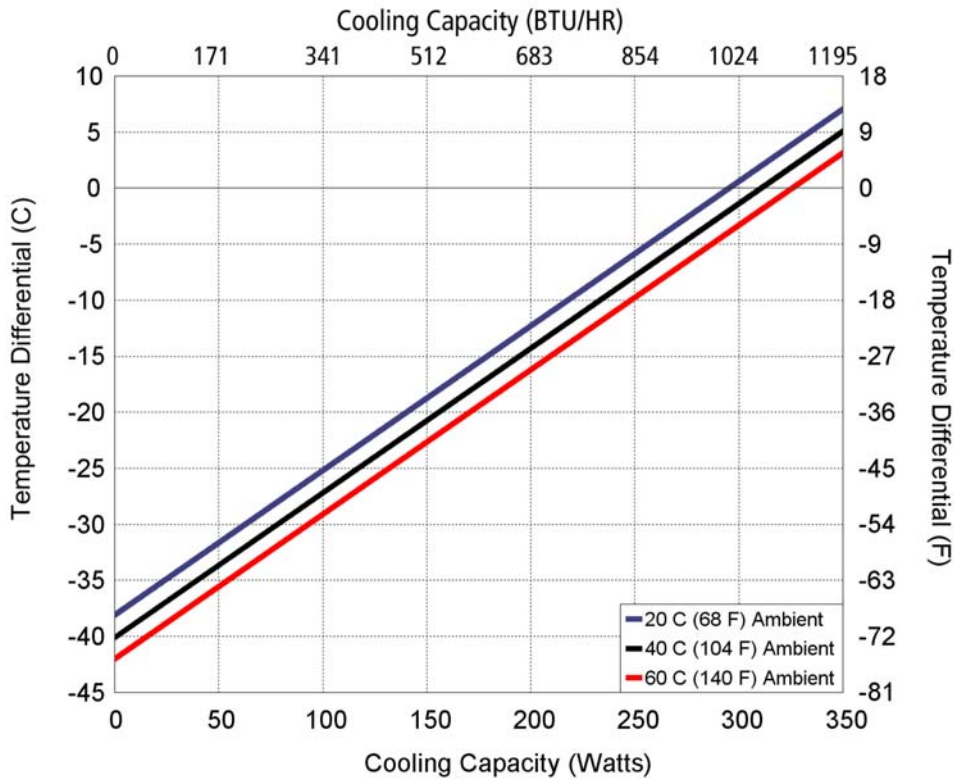
Consult factory for full shock and vibration models

TECA

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www.teca-usa.com

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .129x - 38.1$	$y = .129x - 40.1$	$y = .129x - 42.0$
Cold Sink	$y = .09x - 38.1$	$y = .09x - 40.1$	$y = .09x - 42.0$

AHP-1800

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

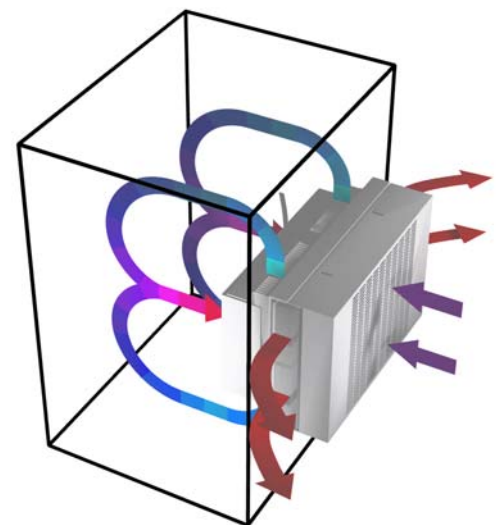
1100 BTU/hr @ 0 °F ΔT

1420 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

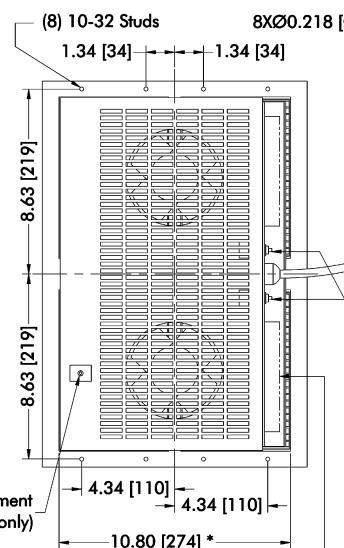
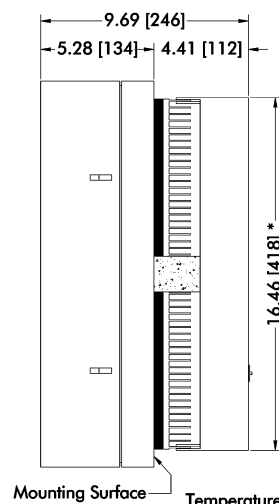
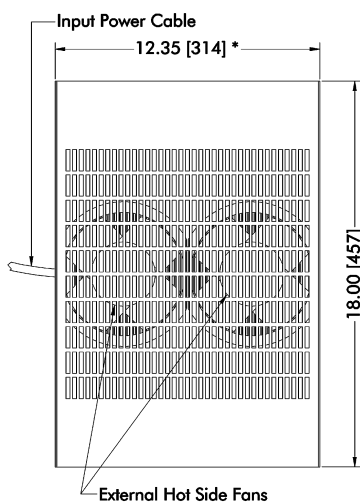
322 Watts L35 L35

210 Watts L35 L50

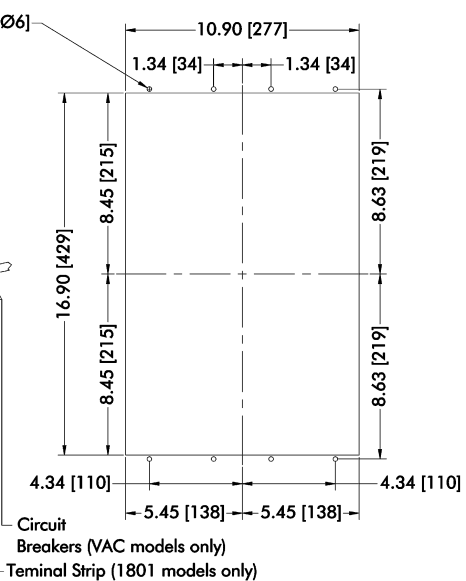


Air Flow Pattern

DIMENSIONS



MOUNTING CUTOUT DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-1800

Hazardous Location Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4X, Class I Div 2

120 VAC, 240 VAC Input
1100 BTU/HR
Hazardous Locations

FEATURES

- Compact, (18" L X 12.35" W X 9.69"D)
- Excels in high ambient temperatures
- Environmentally Safe
- Dual voltage versions available, consult factory.
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Versions to withstand corrosive environments, shock and vibration
- Mounts and operates in any orientation
- Groups A, B, C, D
- Easy to use Pivot Clean feature
- Agency approvals: UL 1604, UL 1995, CSA 22.2

INCLUDES

- Adjustable temperature control
- Mounting gasket and hardware
- Power input line cord

OPTIONS

- Other temperature settings for single set point controls



SPECIFICATIONS

MODEL	PART NUMBER	VOLTAGE VAC 50/60 HZ	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT TEMPERATURE RANGE °C	OPERATING ENCLOSURE TEMPERATURE RANGE °C	ENVIRONMENT
AHP-1800EP	0-0180-0-002	120	8.0	46(21)	TC-6F	-40/+63	-10/+60	NEMA-12
AHP-1800EP	0-01F0-0-002	120	8.0	46(21)	TC-1F	-40/+63	-10/+60	NEMA-12
AHP-1800EP-1	0-0170-0-004	120	8.0	46(21)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1800EPHC	0-0130-1-003	120	8.0	46(21)	TC-3F	-40/+63	-10/+60	NEMA-12
AHP-1800EPHC-1	0-0170-1-006	120	8.0	46(21)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1801EP	0-0181-0-002	120/240	8.0/5.0	46(21)	TC-6F	-40/+63	-10/+60	NEMA-12
AHP-1801EP	0-01F1-0-002	120/240	8.0/5.0	46(21)	TC-1F	-40/+63	-10/+60	NEMA-12
AHP-1801EP-1	0-0171-0-002	120/240	8.0/5.0	46(21)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1801EPHC	0-0131-1-003	120/240	8.0/5.0	46(21)	TC-3F	-40/+63	-10/+60	NEMA-12
AHP-1801EPHC-1	0-0131-1-006	120/240	8.0/5.0	46(21)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1800XP	0-0180-2-002	120	8.0	47(21.4)	TC-6F	-40/+75	-10/+60	NEMA-4X
AHP-1800XP	0-01F0-2-002	120	8.0	47(21.4)	TC-1F	-40/+75	-10/+60	NEMA-4X
AHP-1800XP-1	0-0170-2-004	120	8.0	47(21.4)	EXT*	-40/+75	-10/+60	NEMA-4X
AHP-1800XPHC	0-0130-3-003	120	8.0	47(21.4)	TC-3F	-40/+75	-10/+60	NEMA-4X
AHP-1800XPHC-1	0-0170-3-006	120	8.0	47(21.4)	EXT*	-40/+75	-10/+60	NEMA-4X
AHP-1801XP	0-0181-2-002	120/240	8.0/5.0	47(21.4)	TC-6F	-40/+75	-10/+60	NEMA-4X
AHP-1801XP	0-01F1-2-002	120/240	8.0/5.0	47(21.4)	TC-1F	-40/+75	-10/+60	NEMA-4X
AHP-1801XP-1	0-0171-2-005	120/240	8.0/5.0	47(21.4)	EXT*	-40/+75	-10/+60	NEMA-4X
AHP-1801XPHC	0-0131-3-003	120/240	8.0/5.0	47(21.4)	TC-3F	-40/+75	-10/+60	NEMA-4X
AHP-1801XPHC-1	0-0171-3-004	120/240	8.0/5.0	47(21.4)	EXT*	-40/+75	-10/+60	NEMA-4X

* Unit is set for 5-32 VDC external signal, relay(s) included

Consult factory for shock and vibration models

AHP-1800EP

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

Class I Div 2 NEMA-12 IP 52

Class I Div 2 NEMA-4X IP 56

RATING (TRADITIONAL)

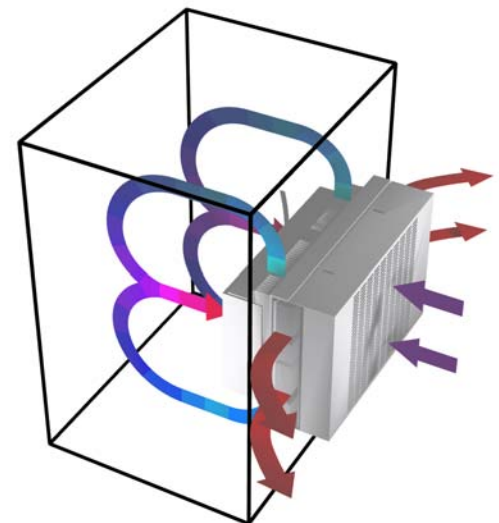
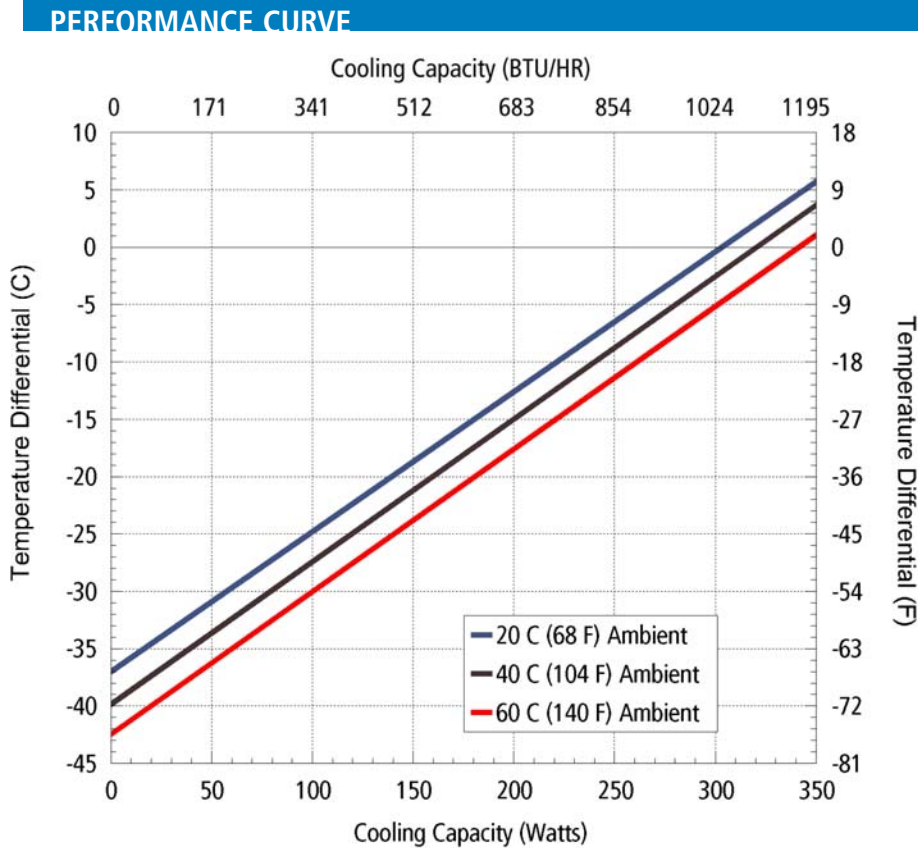
1100 BTU/hr @ 0 °F ΔT

1420 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

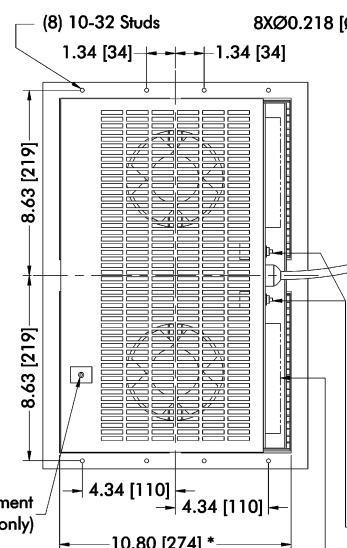
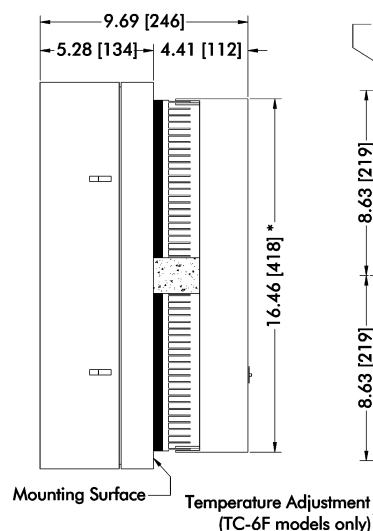
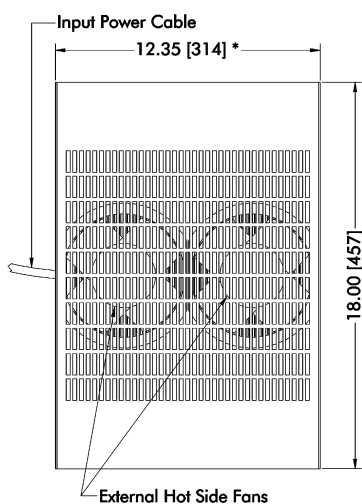
322 Watts L35 L35

210 Watts L35 L50

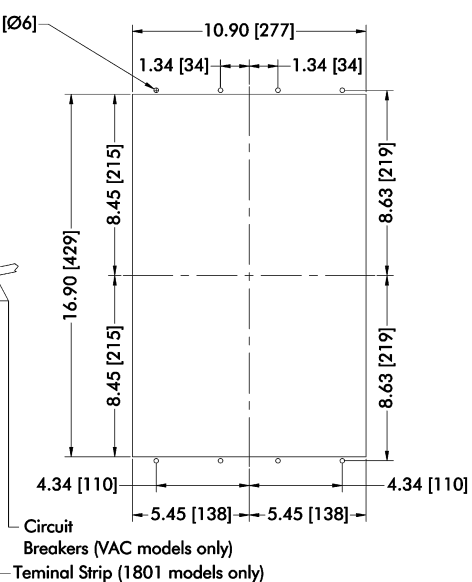


Air Flow Pattern

DIMENSIONS



MOUNTING CUTOUT DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-1802XP

European

Air Cooled
Through Mounted

Hazardous Location Air Conditioner

950 BTU/HR

FEATURES

- Designed for European Zone 1 and Zone 2
- Compact (24" L X 12.35" W X 19.9" D)
- Weighs approximately 100 lbs. (45 kg)
- Heavy gauge aluminum and stainless steel construction
- Ambient temperature up to +50°C
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Integral power supply
- Environmentally safe
- Mounts and operates in any orientation

CONTROL TEMPERATURES

Active Cooling (TC-6F)	25 °C or 35 °C
Active Cooling (TC-3F)	35 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	240 VAC
Current, Active	5.3 AMPS
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	950 BTU/HR
Cooling (Din 3168)	280 WATTS
Heating (Traditional)	< 1300 BTU/HR
Heating (Din 3168)	< 400 WATTS
Weight	98 LBS.



INCLUDES

- Semi-Centrifugal duct fan, DN 220, AC, explosion proof, zones 1 and 2
- Integral linear power supply
- TC-6F, adjustable, cool only controller
- TC-3F, heat/cool, controller available
- Versions for customer supplied control
- Gasket and mounting hardware included
- Power input line cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL
AHP-1802XP	0-0182-2-007	Cool only	TC-6F
AHP-1802XP	0-0172-3-009	Cool Only	EXT*
AHP-1802XPHC	0-0132-3-008	Heat/Cool	TC-3F
AHP-1802XPHC	0-0172-3-010	Heat/Cool	EXT*

* Unit is controlled by a separate 5-32 VDC external signal, relay(s) included

AHP-1802XP

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

IP54

Zone 1, Zone 2

Ex II 2 G

T1 - T3

RATING (TRADITIONAL)

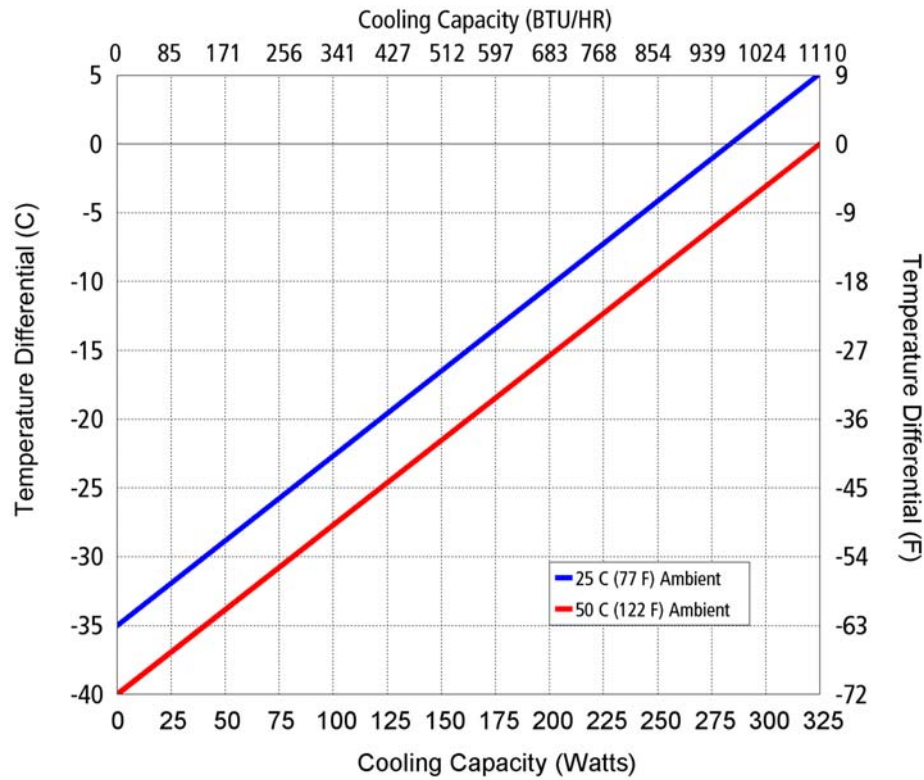
950 BTU/hr @ 0 °F ΔT

1210 BTU/hr @ +20 °F ΔT

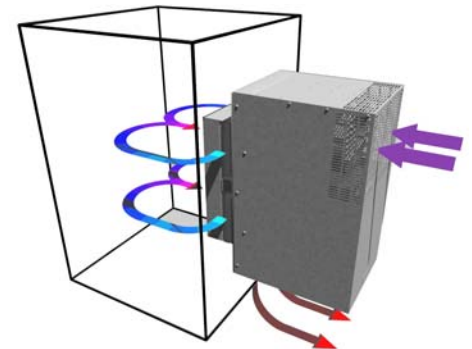
RATING (DIN 3168)

280 Watts L35 L35

160 Watts L35 L50

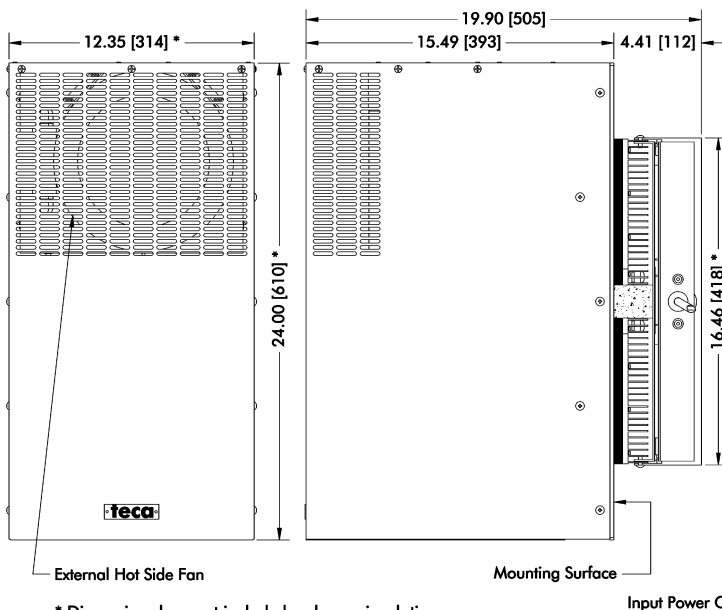


Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	25°C	50°C
Enclosure Air	$y = .123x - 35.0$	$y = .123x - 40.0$
Cold Sink	$y = .09x - 35.0$	$y = .09x - 40.0$



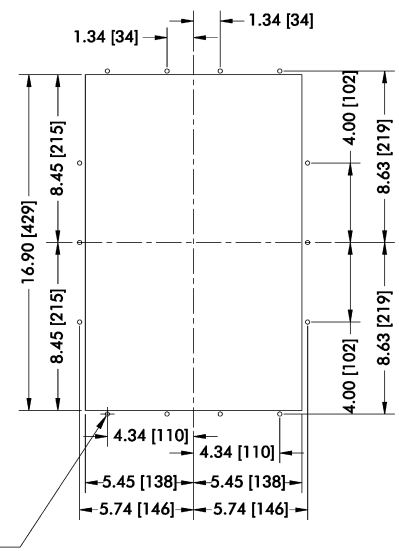
Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware, insulation.
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-1501 Air Conditioner

Air Cooled
Through Mounted
NEMA-12 & NEMA-4

120/240 VAC Input
1000 BTU/HR



FEATURES

- Mounts in multi-unit array for incremental capacity
- Dual voltage 120/240 VAC
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance-free operation
- Environmentally friendly and safe
- No compressor, fluorocarbons or filters
- Stainless steel exterior housing
- Operating ambient temperature range -40/+65 °C
- Operating enclosure temperature range -10/+60 °C
- Agency approvals: UL 1995, CSA 22.2, CE
- Weight 52 LBS.

POWER INPUTS

Voltage	120/240 VAC
Current	8.0/5.0 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	1000 BTU/HR
Cooling (Din 3168)	300 WATTS
Cooling COP (at L35 L35)	0.31
Heating (Traditional)	< 2000 BTU/HR
Heating (Din 3168)	< 600 WATTS

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35



250 VDC configuration for crane applications available

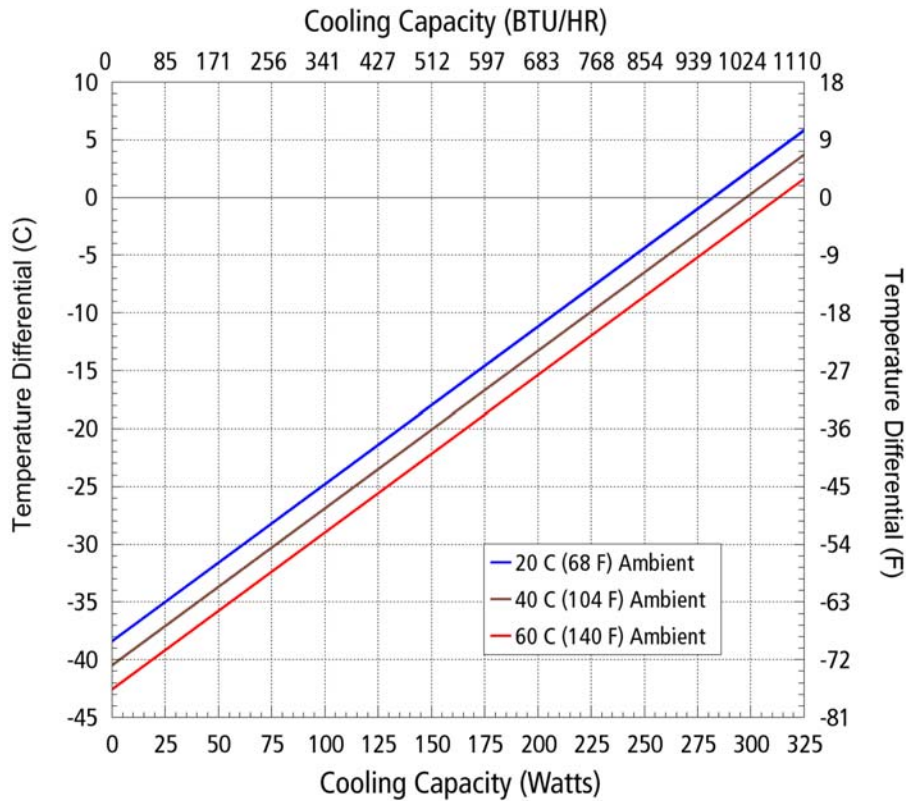
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1501	0-2181-0-000	Cool only	TC-6F	NEMA-12, IP 52
AHP-1501	0-21F1-0-000	Cool only	TC-1F	NEMA-12, IP 52
AHP-1501	0-2151-0-000	Cool only	EXT*	NEMA-12, IP 52
AHP-1501HC	0-2131-1-000	Heat/Cool	TC-3F	NEMA-12, IP 52
AHP-1501HC	0-2151-1-000	Heat/Cool	EXT*	NEMA-12, IP 52

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1501XE	0-2181-4-000	Cool only	TC-6F	NEMA-4, IP 56
AHP-1501XE	0-21F1-4-000	Cool only	TC-1F	NEMA-4, IP 56
AHP-1501XE	0-2151-4-000	Cool only	EXT*	NEMA-4, IP 56
AHP-1501XEHC	0-2131-5-000	Heat/Cool	TC-3F	NEMA-4, IP 56
AHP-1501XEHC	0-2151-5-000	Heat/Cool	EXT*	NEMA-4, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .136x - 38.4$	$y = .136x - 40.5$	$y = .136x - 42.6$
Cold Sink	$y = .10x - 38.4$	$y = .10x - 40.5$	$y = .10x - 42.6$

AHP-1501

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

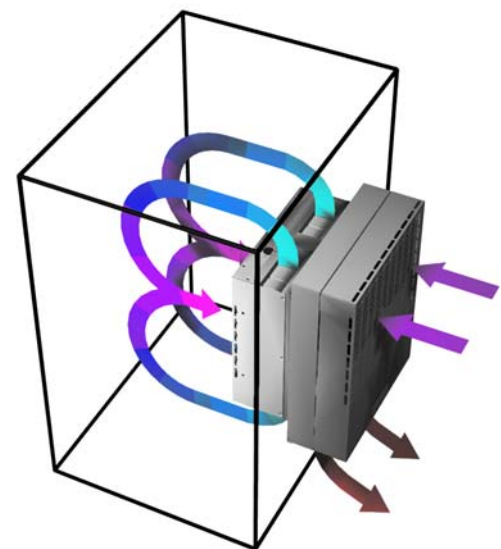
RATING (TRADITIONAL)

1000 BTU/hr @ 0 °F ΔT 1300 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

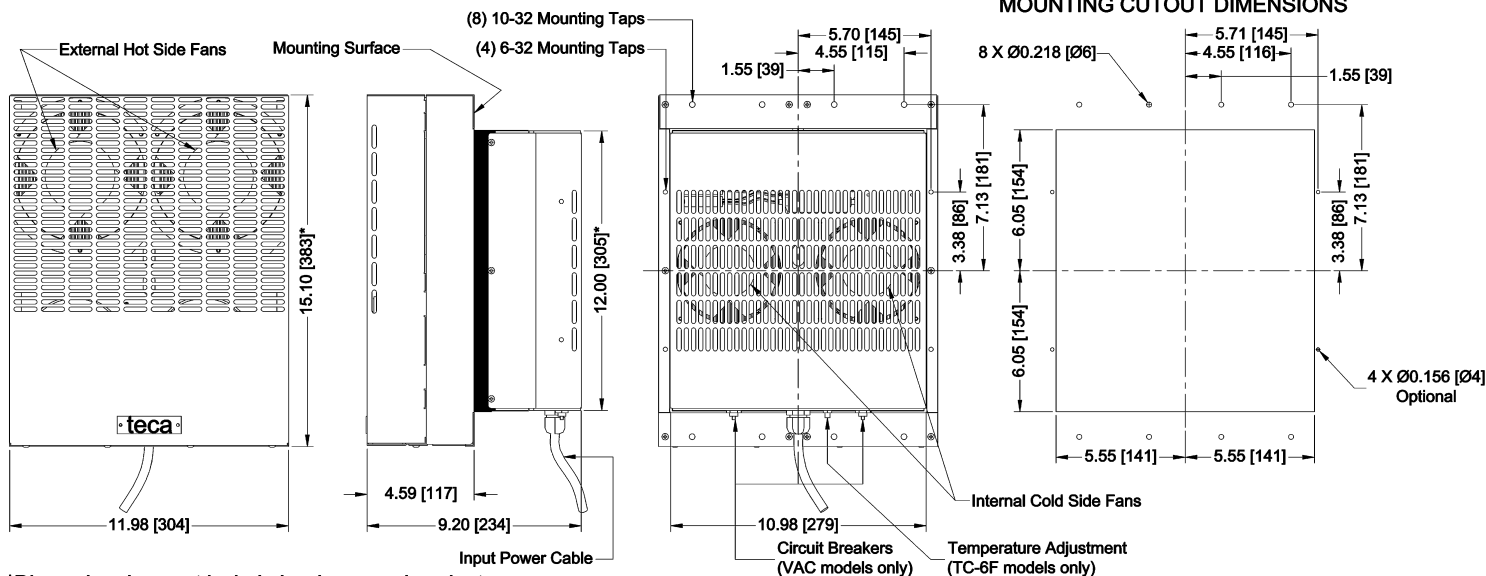
300 Watts L35 L35

187 Watts L35 L50



Air Flow Pattern

AHP-1501 DIMENSIONS



*Dimension does not include hardware and sealant.
Mounting hardware, drip pan and gasket included but not shown.
Dimensions: Inches [Millimeters]



AHP-1501

Air Conditioner

Air Cooled
Through Mounted
NEMA-12 & NEMA-4

24 VDC Input
High Efficiency
1000 BTU/HR



FEATURES

- Mounts in multi-unit array for incremental capacity
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambient temperatures by as much as 10%
- Virtually maintenance-free operation
- Environmentally friendly and safe
- No compressor, fluorocarbons or filters
- Stainless steel exterior housing
- Operating ambient temperature range -40/+65 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 48 LBS.

POWER INPUTS

Voltage	24 VDC
Current, Active	18 AMPS
Current, ECO-Mode	1.9 AMPS

PERFORMANCE RATINGS

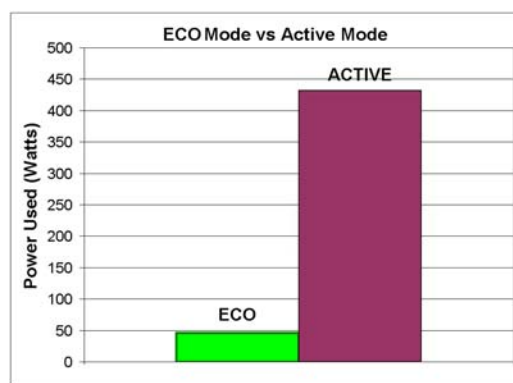
Cooling (Traditional)	1000 BTU/HR
Cooling (Din 3168)	300 WATTS
Cooling COP (at L35 L35)	0.70
Heating (Traditional)	> 1473 BTU/HR
Heating (Din 3168)	> 432 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35
TC-7F	10	25	35



250 VDC configuration for crane applications available

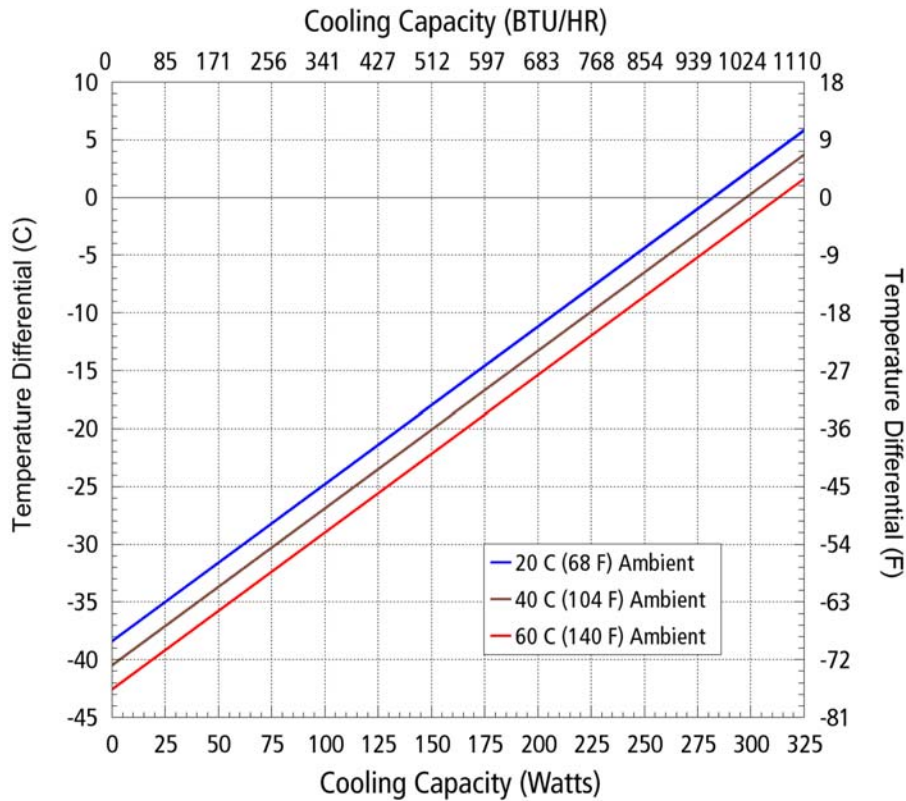
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1501	0-2185-0-000	Cool only	TC-6F	NEMA-12, IP 52
AHP-1501	0-21F5-0-000	Cool only	TC-1F	NEMA-12, IP 52
AHP-1501	0-2155-0-000	Cool only	EXT*	NEMA-12, IP 52
AHP-1501HC	0-2135-1-000	Cool only	TC-3F	NEMA-12, IP 52
AHP-1501HC	0-2115-1-000	Heat/Cool	TC-7F	NEMA-12, IP 52
AHP-1501HC	0-2155-1-000	Heat/Cool	EXT*	NEMA-12, IP 52
AHP-1501HC	0-21H5-1-000	Heat/Cool	TC-4600	NEMA-12, IP 52

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1501XE	0-2185-4-000	Cool only	TC-6F	NEMA-4, IP 56
AHP-1501XE	0-21F5-4-000	Cool only	TC-1F	NEMA-4, IP 56
AHP-1501XE	0-2155-4-000	Cool only	EXT*	NEMA-4, IP 56
AHP-1501XEHC	0-2135-5-000	Cool only	TC-3F	NEMA-4, IP 56
AHP-1501XEHC	0-2115-5-000	Heat/Cool	TC-7F	NEMA-4, IP 56
AHP-1501XEHC	0-2155-5-000	Heat/Cool	EXT*	NEMA-4, IP 56
AHP-1501XEHC	0-21H5-5-000	Heat/Cool	TC-4600	NEMA-4, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .136x - 38.4$	$y = .136x - 40.5$	$y = .136x - 42.6$
Cold Sink	$y = .10x - 38.4$	$y = .10x - 40.5$	$y = .10x - 42.6$

AHP-1501

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

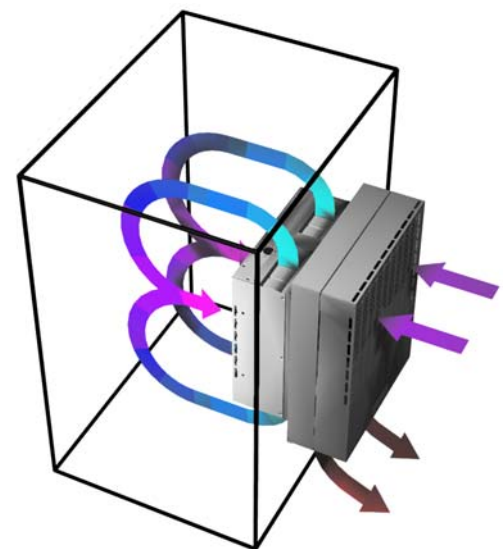
RATING (TRADITIONAL)

1000 BTU/hr @ 0 °F ΔT 1300 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

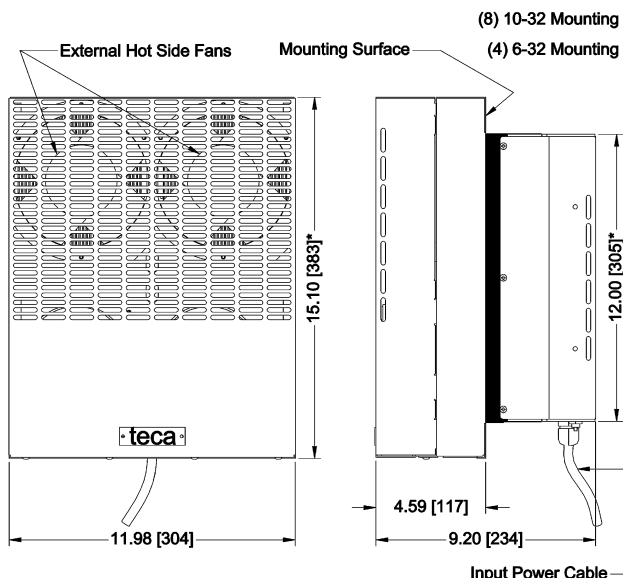
300 Watts L35 L35

187 Watts L35 L50

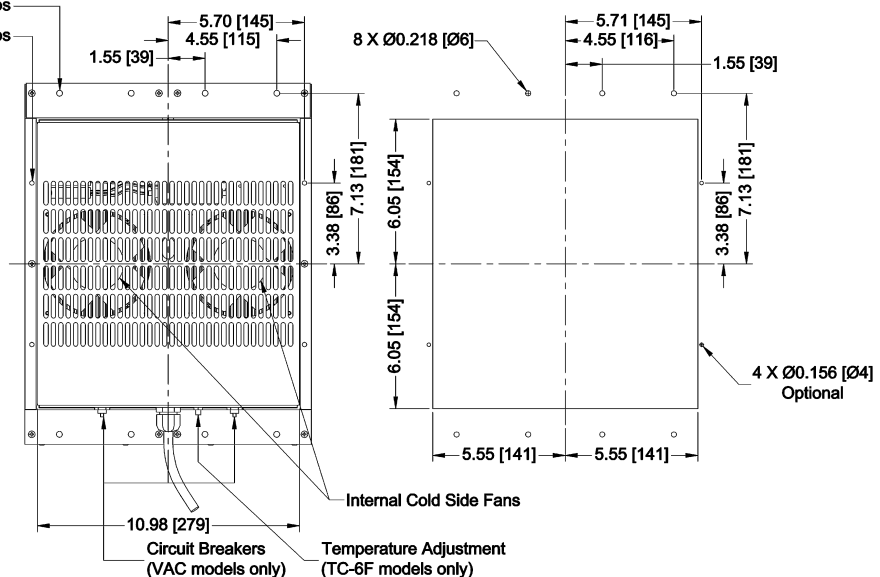


Air Flow Pattern

AHP-1501 DIMENSIONS



MOUNTING CUTOUT DIMENSIONS



*Dimension does not include hardware and sealant.
Mounting hardware, drip pan and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-1200

Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4,4X

120 VAC, 240 VAC Input
530 BTU/HR

FEATURES

- Compact, (only 15"L X 7.35"W X 8.17"D)
- Weighs only 21 lbs. (9.5 kg)
- Excels in high ambient temperatures
- Environmentally safe
- Dual voltage versions available
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Versions to withstand corrosive environments, shock and vibration
- Mounts and operates in any orientation
- Easy to use Pivot Clean feature
- Agency approvals: UL 1995, CSA 22.2, CE

INCLUDES

- Adjustable temperature control
- Gasket and mounting hardware
- Power input line cord

OPTIONS

- Other temperature settings for single set point controls
- Custom finishes

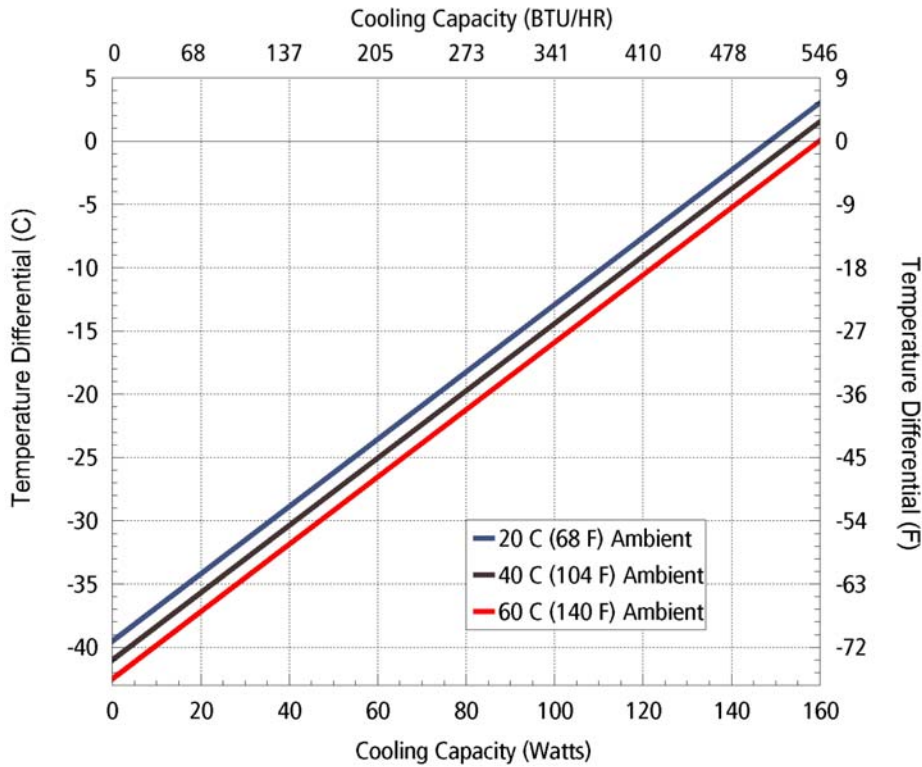


SPECIFICATIONS

MODEL	PART NUMBER	VOLTAGE VAC 50/60HZ	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT TEMPERATURE AMBIENT °C	OPERATING ENCLOSURE TEMPERATURE RANGE °C	ENVIRONMENT
AHP-1200FF	0-3090-0-000	120	4.0	21(9.5)	None	-40/+70	-10/+60	NEMA-12
AHP-1200FF	0-3080-0-000	120	4.0	21(9.5)	TC-6F	-40/+70	-10/+60	NEMA-12
AHP-1200FF	0-30F0-0-000	120	4.0	21(9.5)	TC-1F	-40/+70	-10/+60	NEMA-12
AHP-1200FF	0-3050-0-000	120	4.0	21(9.5)	EXT*	-40/+70	-10/+60	NEMA-12
AHP-1200FFHC	0-3030-1-000	120	4.0	21(9.5)	TC-3F	-40/+70	-10/+60	NEMA-12
AHP-1200FFHC	0-3050-1-000	120	4.0	21(9.5)	EXT*	-40/+70	-10/+60	NEMA-12
AHP-1201FF	0-3081-0-000	120/240	4.0/2.2	29(13.2)	TC-6F	-40/+70	-10/+60	NEMA-12
AHP-1201FF	0-3051-0-000	120/240	4.0/2.2	29(13.2)	EXT*	-40/+70	-10/+60	NEMA-12
AHP-1201FF	0-30F1-0-000	120/240	4.0/2.2	29(13.2)	TC-1F	-40/+70	-10/+60	NEMA-12
AHP-1201FFHC	0-3031-1-000	120/240	4.0/2.2	29(13.2)	TC-3F	-40/+70	-10/+60	NEMA-12
AHP-1201FFHC	0-3051-1-000	120/240	4.0/2.2	29(13.2)	EXT*	-40/+70	-10/+60	NEMA-12
AHP-1200XE	0-3080-4-000	120	5.0	23(10.4)	TC-6F	-40/+70	-10/+60	NEMA-4
AHP-1200XE	0-3050-4-000	120	5.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4
AHP-1200XE	0-30F0-4-000	120	5.0	23(10.4)	TC-1F	-40/+70	-10/+60	NEMA-4
AHP-1200XEHC	0-3030-5-000	120	5.0	23(10.4)	TC-3F	-40/+70	-10/+60	NEMA-4
AHP-1200XEHC	0-3050-5-000	120	5.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4
AHP-1202XE	0-3082-4-000	240	2.5	30(13.6)	TC-6F	-40/+70	-10/+60	NEMA-4
AHP-1202XE	0-3052-4-000	240	2.5	30(13.6)	EXT*	-40/+70	-10/+60	NEMA-4
AHP-1202XE	0-30F2-4-000	240	2.5	30(13.6)	TC-1F	-40/+70	-10/+60	NEMA-4
AHP-1202XEHC	0-3032-5-000	240	2.5	30(13.6)	TC-3F	-40/+70	-10/+60	NEMA-4
AHP-1202XEHC	0-3052-5-000	240	2.5	30(13.6)	EXT*	-40/+70	-10/+60	NEMA-4
AHP-1200X	0-3090-2-000	120	4.0	23(10.4)	None	-40/+70	-10/+60	NEMA-4X
AHP-1200X	0-3080-2-000	120	4.0	23(10.4)	TC-6F	-40/+70	-10/+60	NEMA-4X
AHP-1200X	0-3050-2-000	120	4.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4X
AHP-1200X	0-30F0-2-000	120	4.0	23(10.4)	TC-1F	-40/+70	-10/+60	NEMA-4X
AHP-1200XHC	0-3030-3-000	120	4.0	23(10.4)	TC-3F	-40/+70	-10/+60	NEMA-4X
AHP-1200XHC	0-3050-3-000	120	4.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4X
AHP-1200XM	0-3080-2-100	120	4.0	23(10.4)	TC-6F	-40/+70	-10/+60	NEMA-4X
AHP-1200XM	0-3050-2-100	120	4.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4X
AHP-1200XMHC	0-3030-3-001	120	4.0	23(10.4)	TC-3F	-40/+70	-10/+60	NEMA-4X
AHP-1200XMHC	0-3050-3-001	120	4.0	23(10.4)	EXT*	-40/+70	-10/+60	NEMA-4X

* Unit is set for 5-32 VDC external signal, relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .266x - 39.5$	$y = .266x - 41.0$	$y = .266x - 42.5$
Cold Sink	$y = .173x - 39.5$	$y = .173x - 41.0$	$y = .173x - 42.5$

AHP-1200

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

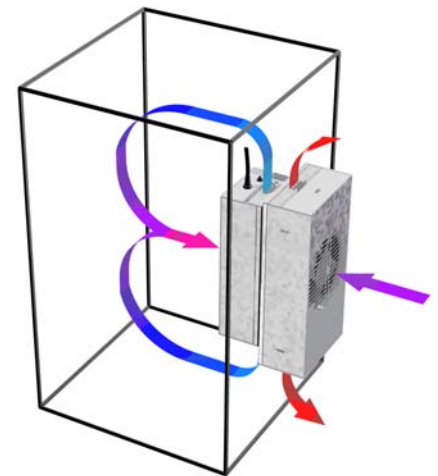
530 BTU/hr @ 0 °F ΔT

670 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

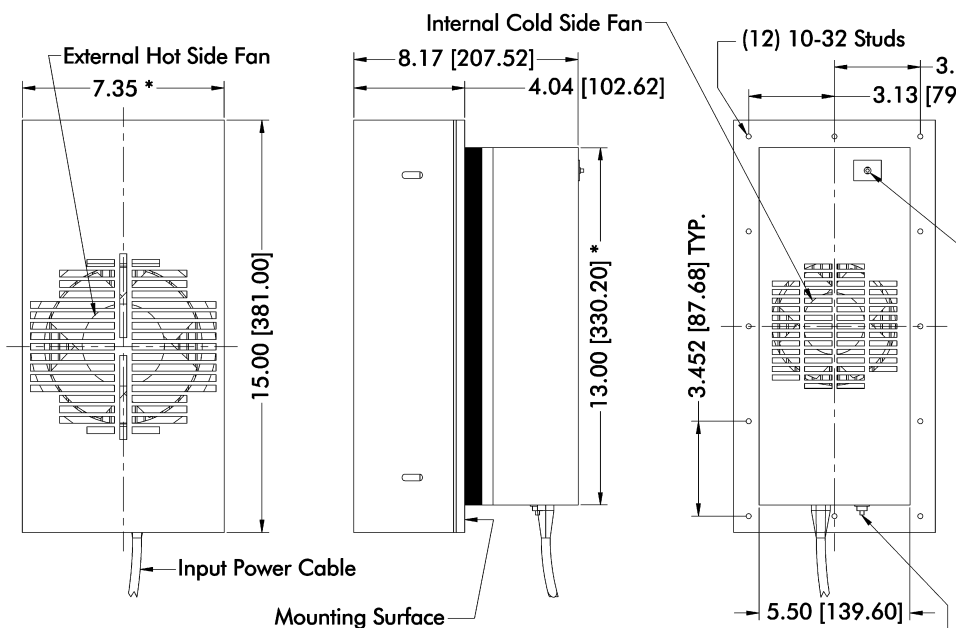
154 Watts L35 L35

100 Watts L35 L50



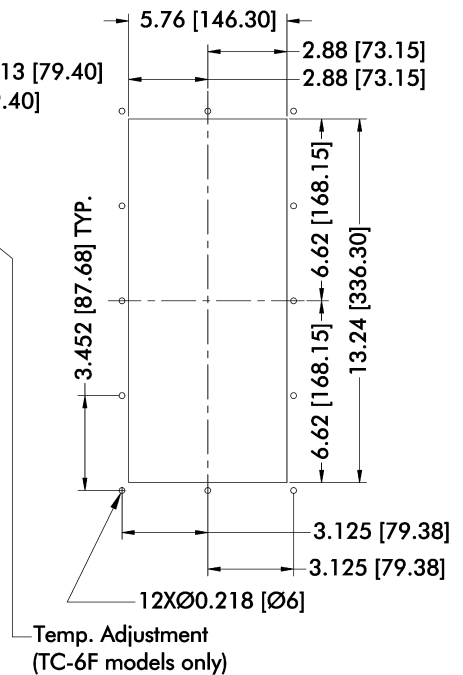
Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS





AHP-1200

Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4,4X

24 VDC Input
High Efficiency
530 BTU/HR

FEATURES

- High capacity thermoelectric design
- Lower profile intrusion into enclosure
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 12%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Operating ambient temperature range -40/+65 °C
- Operating enclosure temperature range -10/+60 °C
- Easy to use Pivot Clean feature
- Weight 18 LBS.

POWER INPUTS

Voltage	24 VDC
Current, Active	9.0 AMPS
Current , ECO-Mode	0.9 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	530 BTU/HR
Cooling (Din 3168)	154 WATTS
Cooling COP (at L35 L35)	0.71
Heating (Traditional)	> 736 BTU/HR
Heating (Din 3168)	> 216 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads

CONFIGURATIONS

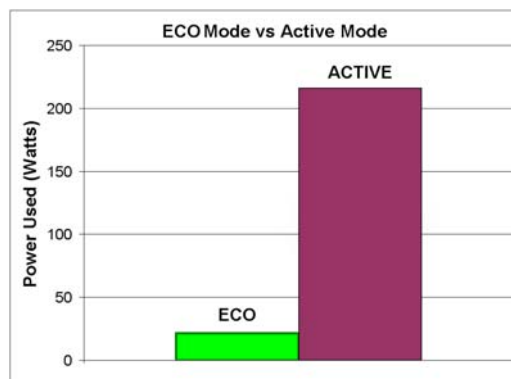
MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1200	0-3095-0-000	Cool only	None	NEMA-12, IP 52
AHP-1200	0-3085-0-000	Cool only	TC-6F	NEMA-12, IP 52
AHP-1200	0-30F5-0-000	Cool only	TC-1F	NEMA-12, IP 52
AHP-1200	0-3055-0-000	Cool only	EXT*	NEMA-12, IP 52
AHP-1200HC	0-3035-1-000	Heat/Cool	TC-3F	NEMA-12, IP 52
AHP-1200HC	0-30I5-1-000	Heat/Cool	TC-7F	NEMA-12, IP 52
AHP-1200HC	0-3055-1-000	Heat/Cool	EXT*	NEMA-12, IP 52
AHP-1200HC	0-30H5-1-000	Heat/Cool	TC-4600	NEMA-12, IP 52
AHP-1200XE	0-3095-4-000	Cool only	None	NEMA-4, IP 56
AHP-1200XE	0-3085-4-000	Cool only	TC-6F	NEMA-4, IP 56
AHP-1200XE	0-30F5-4-000	Cool only	TC-1F	NEMA-4, IP 56
AHP-1200XE	0-3055-4-000	Cool only	EXT*	NEMA-4, IP 56
AHP-1200XEHC	0-3035-5-000	Heat/Cool	TC-3F	NEMA-4, IP 56
AHP-1200XEHC	0-30I5-5-000	Heat/Cool	TC-7F	NEMA-4, IP 56
AHP-1200XEHC	0-3055-5-000	Heat/Cool	EXT*	NEMA-4, IP 56
AHP-1200XEHC	0-30H5-5-000	Heat/Cool	TC-4600	NEMA-4, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included



CONTROL TEMPERATURES

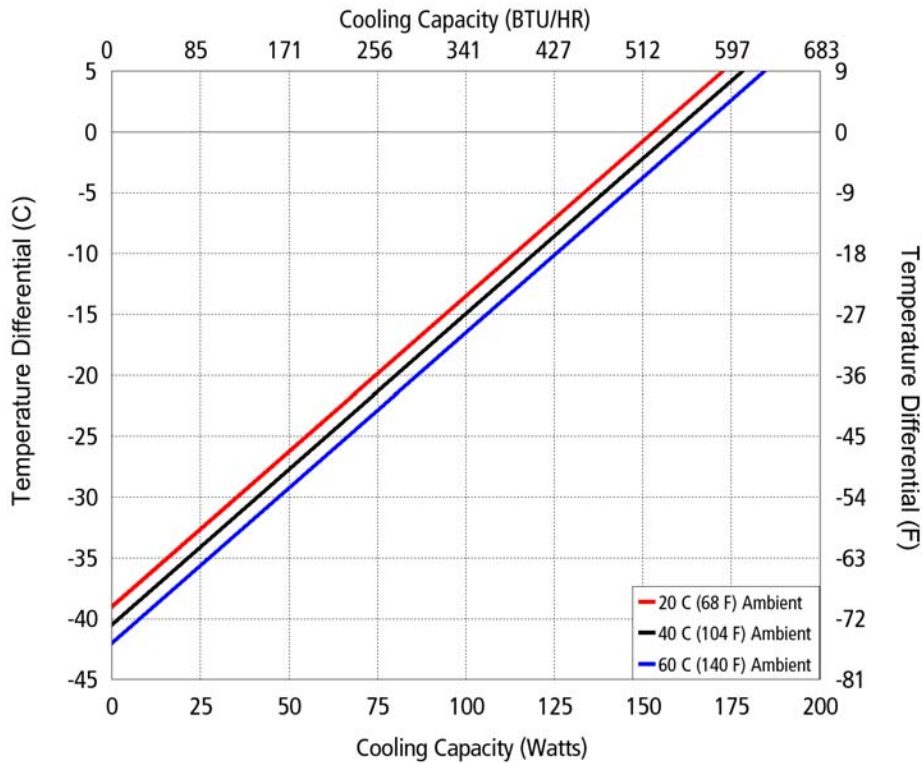
Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35
TC-7F	10	25	35



MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-1200X	0-3095-2-000	Cool only	None	NEMA-4X, IP 56
AHP-1200X	0-3085-2-000	Cool only	TC-6F	NEMA-4X, IP 56
AHP-1200X	0-30F5-2-000	Cool only	TC-1F	NEMA-4X, IP 56
AHP-1200X	0-3055-2-000	Cool only	EXT*	NEMA-4X, IP 56
AHP-1200XHC	0-3035-3-000	Heat/Cool	TC-3F	NEMA-4X, IP 56
AHP-1200XHC	0-30I5-3-000	Heat/Cool	TC-7F	NEMA-4X, IP 56
AHP-1200XHC	0-3055-3-000	Heat/Cool	EXT*	NEMA-4X, IP 56
AHP-1200XHC	0-30H5-3-000	Heat/Cool	TC-4600	NEMA-4X, IP 56
AHP-1200XM†	0-3095-2-041	Cool only	None	NEMA-4X, IP 56
AHP-1200XM†	0-3085-2-034	Cool only	TC-6F	NEMA-4X, IP 56
AHP-1200XM†	0-30F5-2-035	Cool only	TC-1F	NEMA-4X, IP 56
AHP-1200XM†	0-3055-2-036	Cool only	EXT*	NEMA-4X, IP 56
AHP-1200XMHC†	0-3035-3-037	Heat/Cool	TC-3F	NEMA-4X, IP 56
AHP-1200XMHC†	0-30I5-3-040	Heat/Cool	TC-7F	NEMA-4X, IP 56
AHP-1200XMHC†	0-3055-3-038	Heat/Cool	EXT*	NEMA-4X, IP 56
AHP-1200XMHC†	0-30H5-3-039	Heat/Cool	TC-4600	NEMA-4X, IP 56

† Full shock and vibration models

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .255x - 39.0$	$y = .255x - 41.0$	$y = .255x - 42.0$
Cold Sink	$y = .166x - 39.0$	$y = .166x - 41.0$	$y = .166x - 42.0$

AHP-1200

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

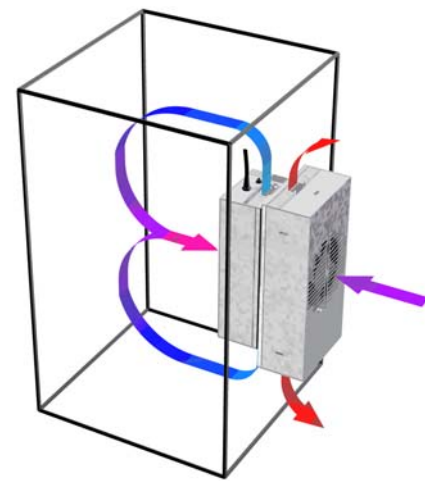
530 BTU/hr @ 0 °F ΔT

670 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

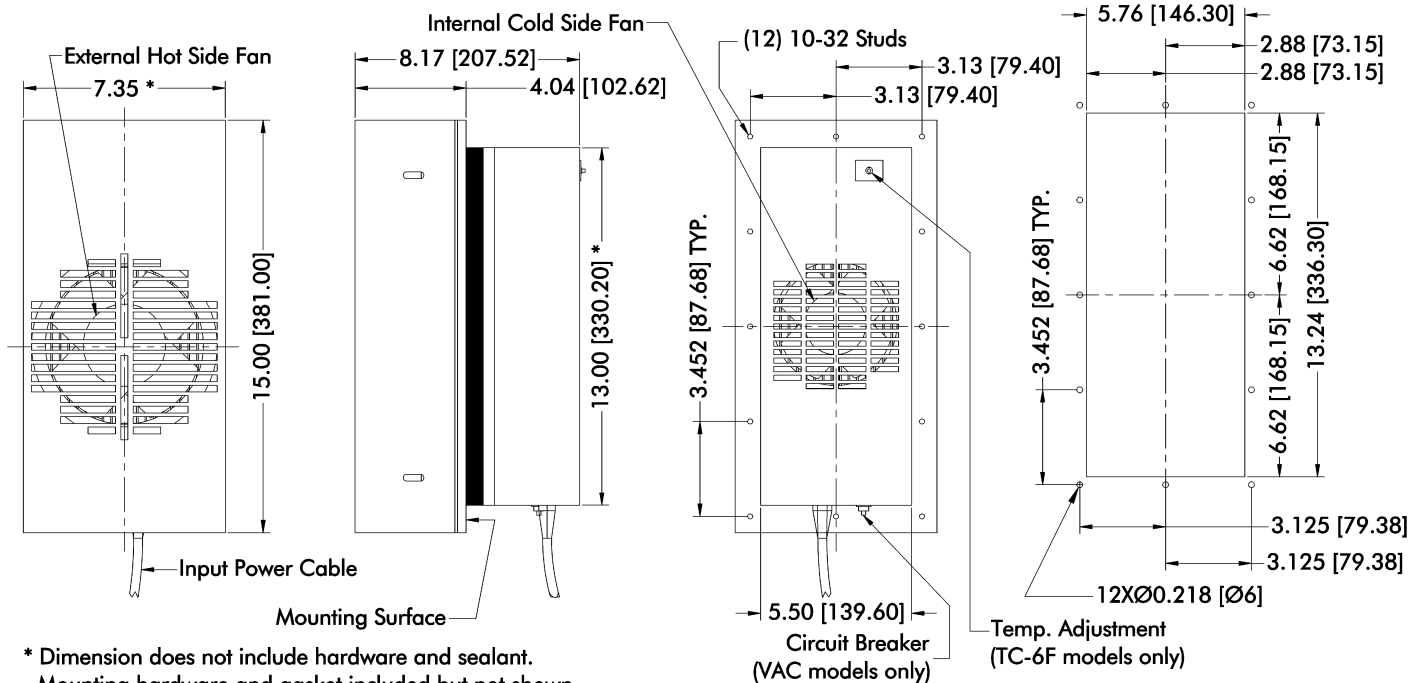
154 Watts L35 L35

100 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

AHP-1200 Hazardous Location Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4X, Class I Div 2

120 VAC, 240 VAC Input
530 BTU/HR
Hazardous Location

FEATURES

- Compact, (only 15" L X 7.35" W X 8.17" D)
- Weighs only 21 lbs. (9.5 kg)
- Excels in high ambient temperatures
- Environmentally safe
- Dual voltage versions available
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Versions to withstand corrosive environments, shock and vibration
- Mounts and operates in any orientation
- Easy to use Pivot Clean feature
- Agency Approvals: UL 1604, UL 1995, CSA 22.2
- Groups A, B, C, D

INCLUDES

- Temperature control
- Gasket and mounting hardware
- Power input line cord

OPTIONS

- Other temperature settings for single set point controls
- Custom finishes

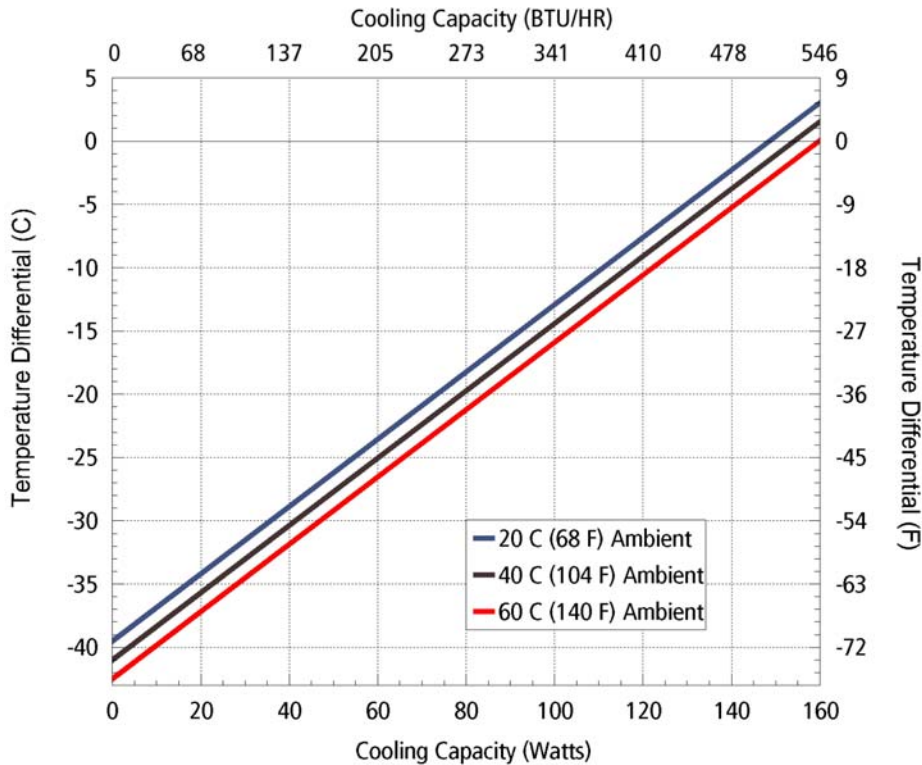


SPECIFICATIONS

MODEL	PART NUMBER	VOLTAGE VAC 50/60HZ	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT TEMPERATURE AMBIENT °C	OPERATING ENCLOSURE TEMPERATURE RANGE °C	ENVIRONMENT
AHP-1200EP	0-3080-0-003	120	4.0	21(9.5)	TC-6F	-40/+63	-10/+60	NEMA-12
AHP-1200EP	0-30F0-0-004	120	4.0	21(9.5)	85°F (30°C)	-40/+63	-10/+60	NEMA-12
AHP-1200EP-1	0-3070-0-010	120	4.0	21(9.5)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1200EPHC	0-3030-1-007	120	4.0	21(9.5)	TC-3F	-40/+63	-10/+60	NEMA-12
AHP-1200EPHC-1	0-3070-1-009	120	4.0	21(9.5)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1201EP	0-3081-0-003	120/240	4.0/2.0	29(13.2)	TC-6F	-40/+63	-10/+60	NEMA-12
AHP-1201EP	0-30F1-0-004	120/240	4.0/2.0	29(13.2)	85°F (30°C)	-40/+63	-10/+60	NEMA-12
AHP-1201EP-1	0-3071-0-010	120/240	4.0/2.0	29(13.2)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1201EPHC	0-3031-1-007	120/240	4.0/2.0	29(13.2)	TC-3F	-40/+63	-10/+60	NEMA-12
AHP-1201EPHC-1	0-3071-1-009	120/240	4.0/2.0	29(13.2)	EXT*	-40/+63	-10/+60	NEMA-12
AHP-1200XP	0-3080-2-003	120	4.0	21(9.5)	TC-6F	-40/+71	-10/+60	NEMA-4X
AHP-1200XP	0-30F0-2-004	120	4.0	21(9.5)	85°F (30°C)	-40/+71	-10/+60	NEMA-4X
AHP-1200XP-1	0-3070-2-010	120	4.0	21(9.5)	EXT*	-40/+71	-10/+60	NEMA-4X
AHP-1200XPHC	0-3030-3-007	120	4.0	21(9.5)	TC-3F	-40/+71	-10/+60	NEMA-4X
AHP-1200XPHC-1	0-3070-3-009	120	4.0	21(9.5)	EXT*	-40/+71	-10/+60	NEMA-4X
AHP-1201XP	0-3081-2-014	120/240	4.0/2.0	29(13.2)	TC-6F	-40/+71	-10/+60	NEMA-4X
AHP-1201XP	0-30F1-2-020	120/240	4.0/2.0	29(13.2)	85°F (30°C)	-40/+71	-10/+60	NEMA-4X
AHP-1201XP-1	0-3071-2-012	120/240	4.0/2.0	29(13.2)	EXT*	-40/+71	-10/+60	NEMA-4X
AHP-1201XPHC	0-3031-3-011	120/240	4.0/2.0	29(13.2)	TC-3F	-40/+71	-10/+60	NEMA-4X
AHP-1201XPHC-1	0-3071-3-013	120/240	4.0/2.0	29(13.2)	EXT*	-40/+71	-10/+60	NEMA-4X

* Unit is set for 5-32 VDC external signal, relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .266x - 39.5$	$y = .266x - 41.0$	$y = .266x - 42.5$
Cold Sink	$y = .173x - 39.5$	$y = .173x - 41.0$	$y = .173x - 42.5$

AHP-1200EP

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

Class 1 Div 2 NEMA-12 IP 52

Class 1 Div 2 NEMA-4X IP 56

RATING (TRADITIONAL)

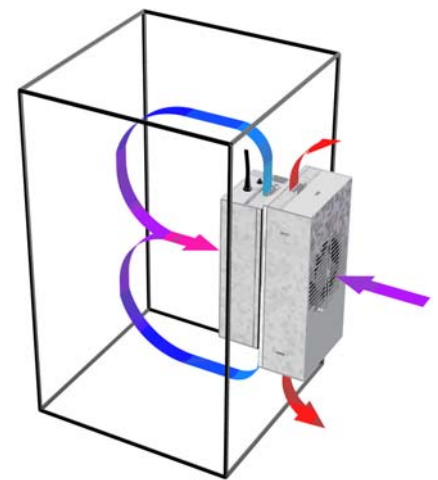
530 BTU/hr @ 0 °F ΔT

670 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

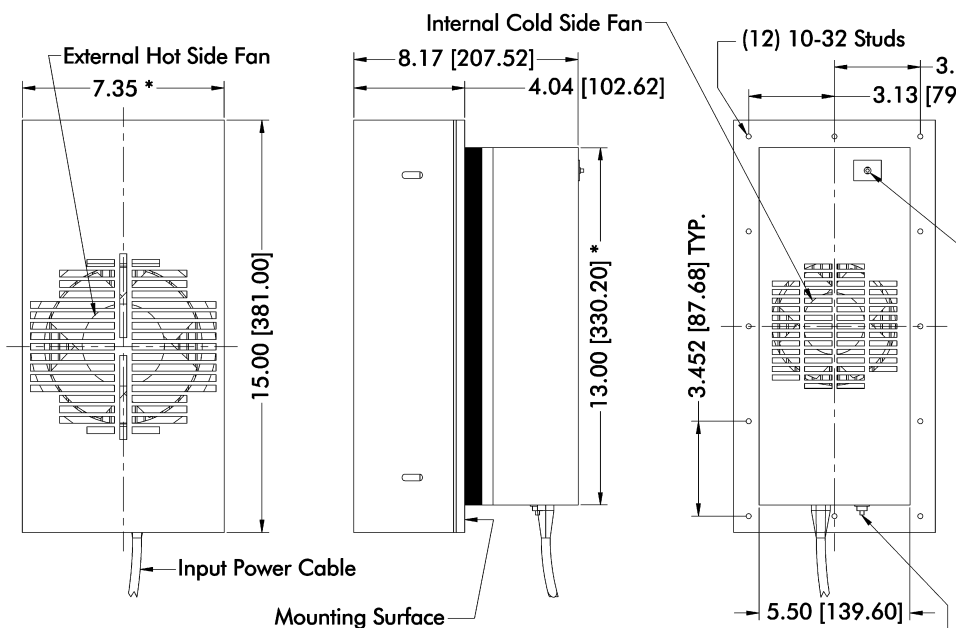
154 Watts L35 L35

100 Watts L35 L50



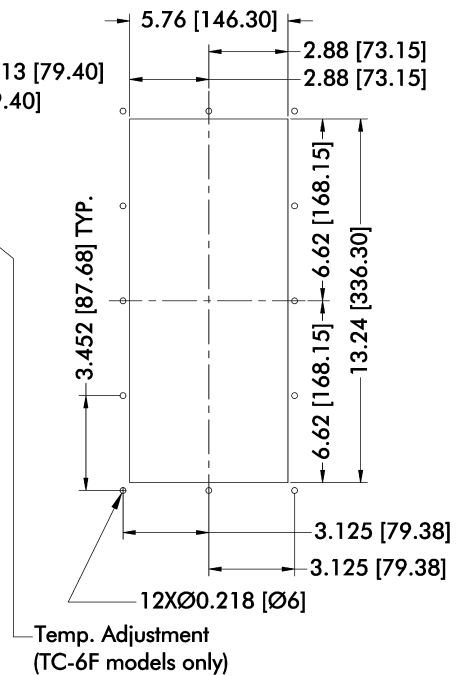
Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-1200CXP

North American Air Cooled
Through Mounted
Class I, Division 1 Groups B, C, D

Hazardous Location Air Conditioner

FEATURES

- Compact, (only 15" L X 7.35" W X 14" D)
- Weighs only 36 lbs. (16.4 kg)
- Excels in high ambient temperatures
- Environmentally safe
- Vortex Air Amplifier included
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Mounts and operates in any orientation

REQUIREMENTS

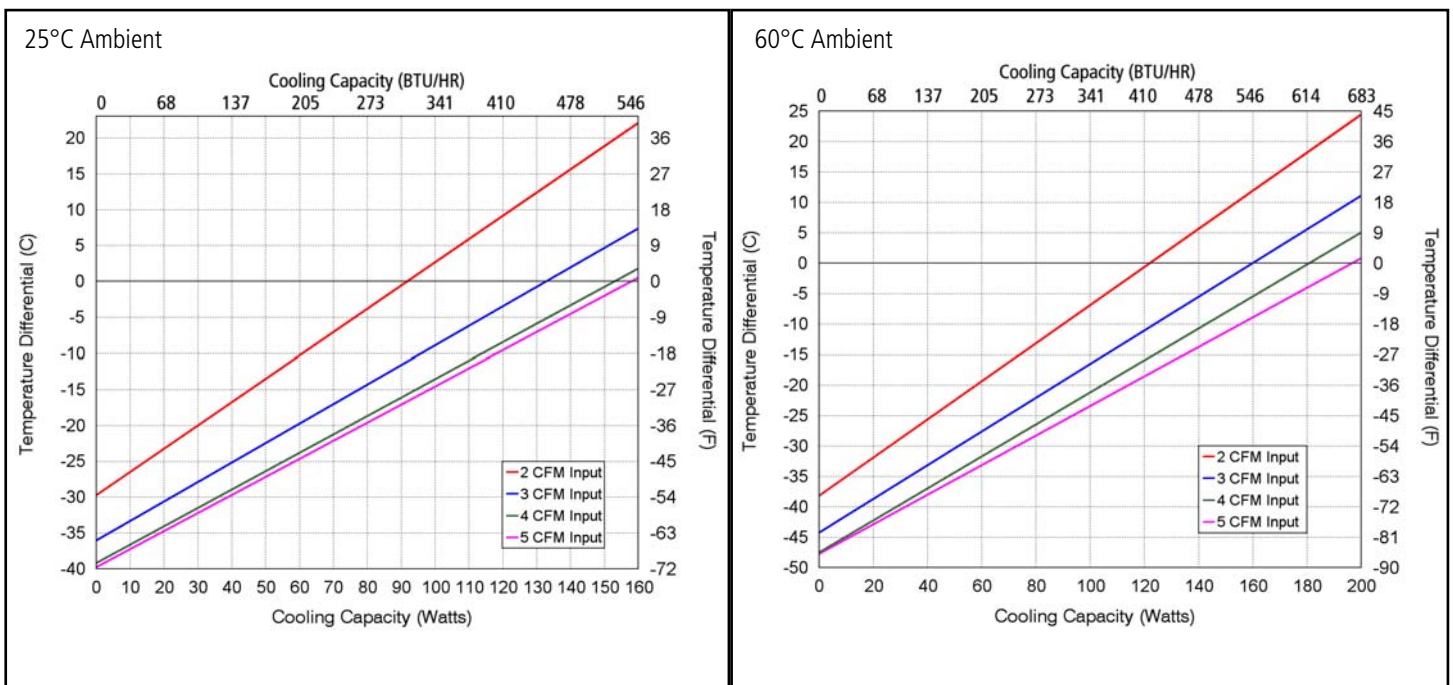
- Clean and dry compressed air supply
- Purged enclosure
- 120 VAC Input voltage

INCLUDES

- Mounting gasket and hardware
- Power input line cord



PERFORMANCE CURVE



LISTING & CLASSIFICATION:

The AHP-1200CXP by TECA is the first solid state air conditioner designed for use in Class I Division 1 Groups B, C and D hazardous environments in North America. The AHP-1200CXP features a unique air moving device that eliminates static discharge that traditional fans can generate. A compressed air line is required for the air moving device. The AHP-1200CXP has been used successfully in pharmaceutical plants on analyzers that monitor chemical reactions.

As an integral part of a larger system AHP-1200CXP has been investigated in accordance with UL 3111-1, First Edition, Rev. 6/94 Electrical Equipment for laboratory Use and CSA C22.2 No. 1010.1-92 Safety requirements for Electrical Equipment for Measurement, Control, and Laboratory use and has been investigated in accordance with NFPA 496 Edition Purged and pressurized Enclosure for Electrical Equipment.

AHP-1200CXP

Through Mounted

Class I, Division 1

Groups B, C, D

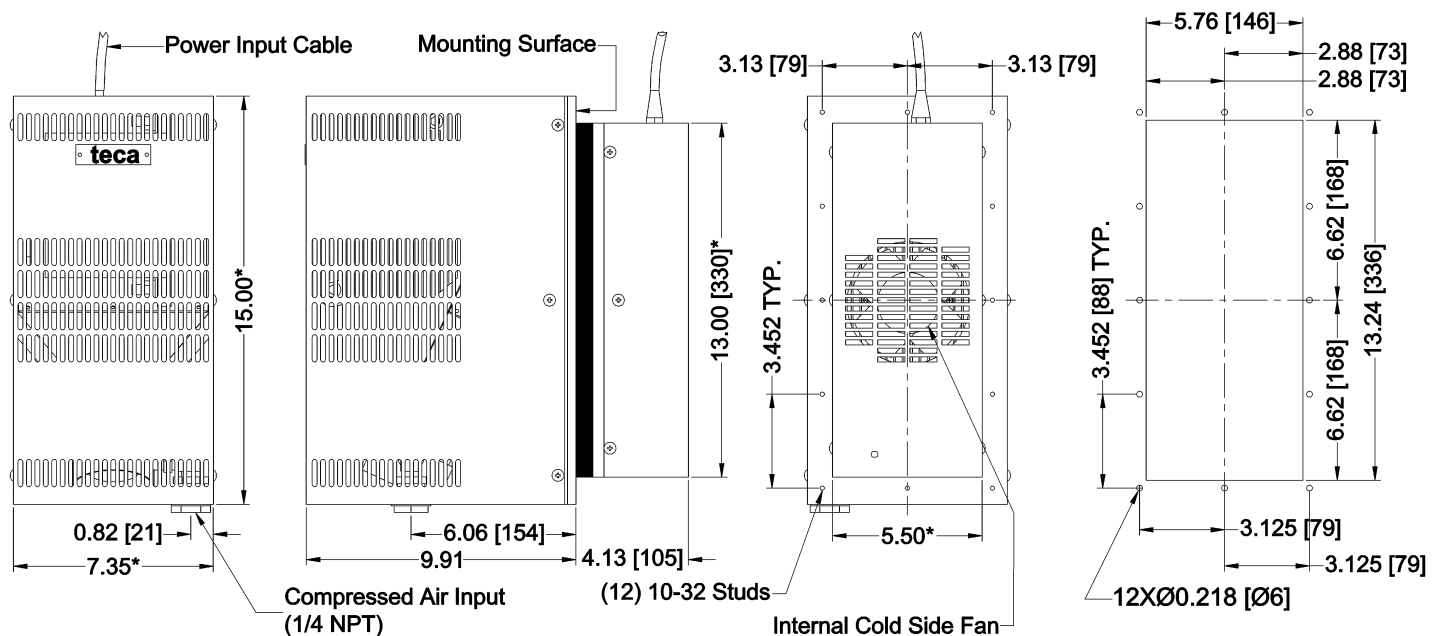
307-680 BTU/hr

NEMA-4/4X

SPECIFICATIONS

MODEL	PART NUMBER	NOTES	PERFORMANCE RATING (BTU/HR)	VOLTAGE (VAC 50/60 HZ)	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT (°C)
AHP-1200CXP	0-3070-2-016	Cool Only	307-680	120	4.0	36 (16.4)	EXT *	-20/+40

* Unit is set for 5-32 VDC external control signal, relay(s) included

DIMENSIONS**MOUNTING CUTOUT DIMENSIONS**

* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-1200CXP

European

Air Cooled

Through Mounted

Group II, Category 2 [1] G

EExd p d [ia] ia IIB+H2 T4

Hazardous Location Air Conditioner

FEATURES

- Compact, (only 15" L X 7.35" W X 18.4" D)
- Weighs only 39 lbs. (17.7kg)
- Excels in high ambient temperatures
- Environmentally safe
- Vortex Air Amplifier included
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Mounts and operates in any orientation

REQUIREMENTS

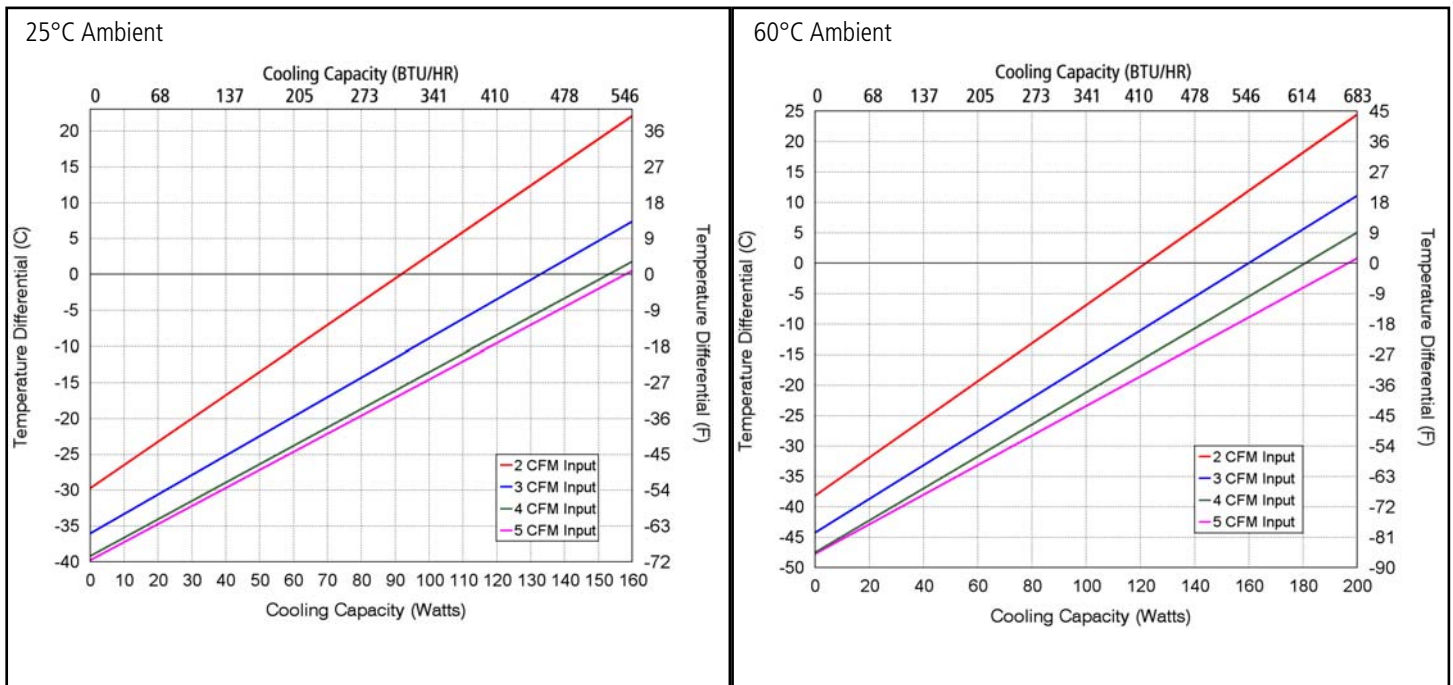
- Clean and dry compressed air supply
- Purged enclosure
- 120 VAC Input voltage

INCLUDES

- Mounting gasket and hardware
- Power input line cord



PERFORMANCE CURVE



AHP-1200CXP

Through Mounted

Group II, Category 2 [1] G

EEx p d [ia] ia IIB+H2 T4

307-680 BTU/hr

The AHP-1200CXP is TECA's first solid state air conditioner designed for use in hazardous environments in the United Kingdom and European Union. The AHP-1200CXP features a unique air moving device that eliminates static discharge that traditional fans can generate. A compressed air line is required for the air moving device. The AHP-1200CXP has been successfully implemented with a purged enclosure and other approved equipment in pharmaceutical, petrochemical and other similar applications.

Directive 94/9/EC with reference to EN50014:1997/A2:1999, EN50016:2002.

Procedure XF011, XF013

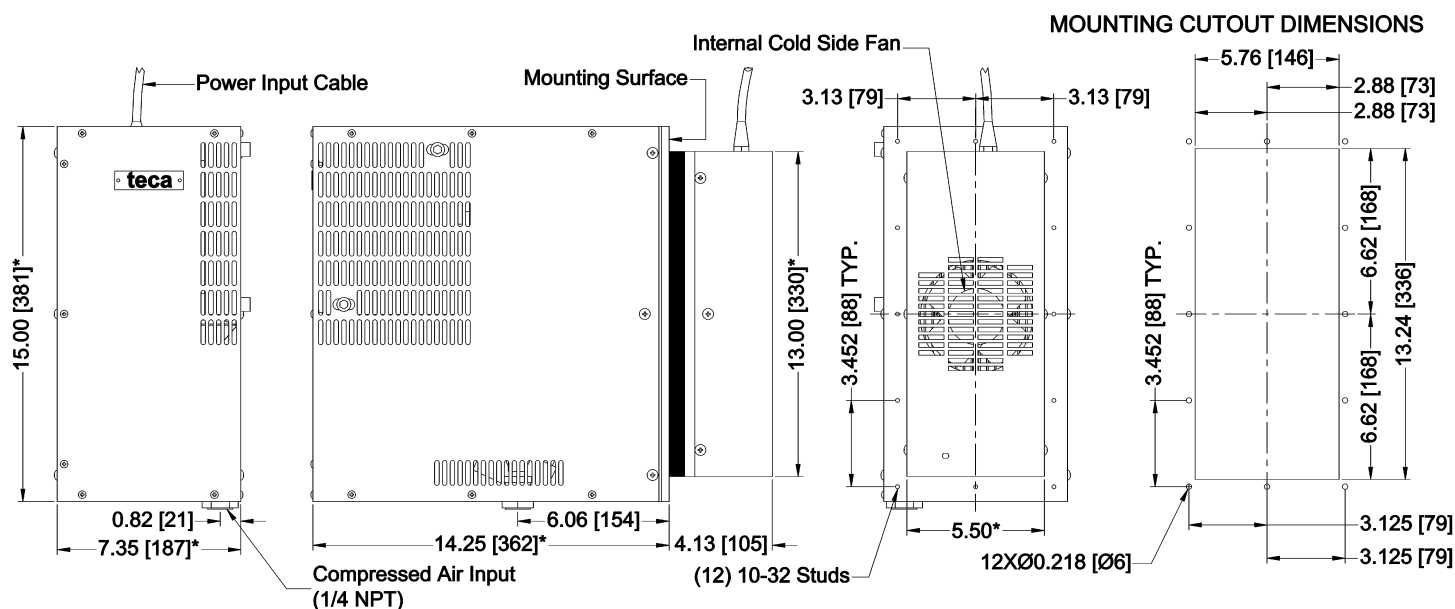
Group II, Category 2 [1] G EEx p d [ia] ia IIB+H2 T4 Ta=-20 °C to +40 °C

SPECIFICATIONS

MODEL	PART NUMBER	NOTES	PERFORMANCE RATING (BTU/HR)	VOLTAGE (VAC 50/60 HZ)	CURRENT AMPS.	WEIGHT LBS.(KG)	TEMP. CONTROL	OPERATING AMBIENT (°C)
AHP-1200CXP	0-3070-2-018	Cool Only	307-680	120	4.0	39(17.7)	EXT*	-20/+40

* Unit is set for 5-32 VDC external external control signal, relay(s) included

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-690

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC
467 BTU/HR

FEATURES

- Compact (only 10" X 6" X 8.5")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight 15 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	24 VDC
Current, Active	15 AMPS
Current, ECO-Mode	0.5 AMPS

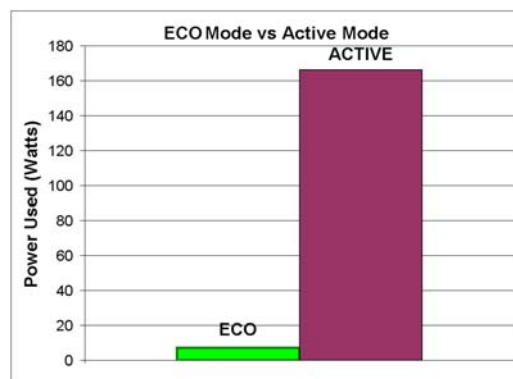
PERFORMANCE RATINGS

Cooling (Traditional)	467 BTU/HR
Cooling (Din 3168)	137 WATTS
Cooling COP (at L35 L35)	0.52
Heating (Traditional)	> 900 BTU/HR
Heating (Din 3168)	> 264 WATTS
Heating COP	> 1.0



INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-690	0-M0J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-690HC	0-M095-1-000	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
AHP-690HC	0-M0I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-690XE	0-M0J5-4-000	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
AHP-690XEHC	0-M095-5-000	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
AHP-690XEHC	0-M0I5-5-000	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
AHP-690X	0-M0J5-2-000	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
AHP-690XHC	0-M095-3-000	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
AHP-690XHC	0-M0I5-3-000	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56
AHP-690XM	0-M0J5-2-001	Cool only, Mil. grade fans	TC-4F	NEMA-4X, IP 56
AHP-690XMHC	0-M095-3-001	Heat/Cool, Mil. grade fans	None*	NEMA-4X, IP 56
AHP-690XMHC	0-M0I5-3-001	Heat/Cool, Mil. grade fans	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

AHP-690**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

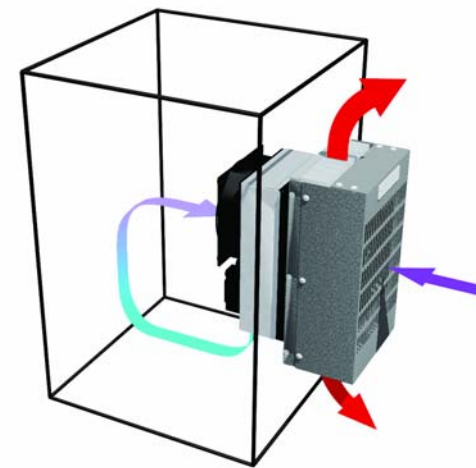
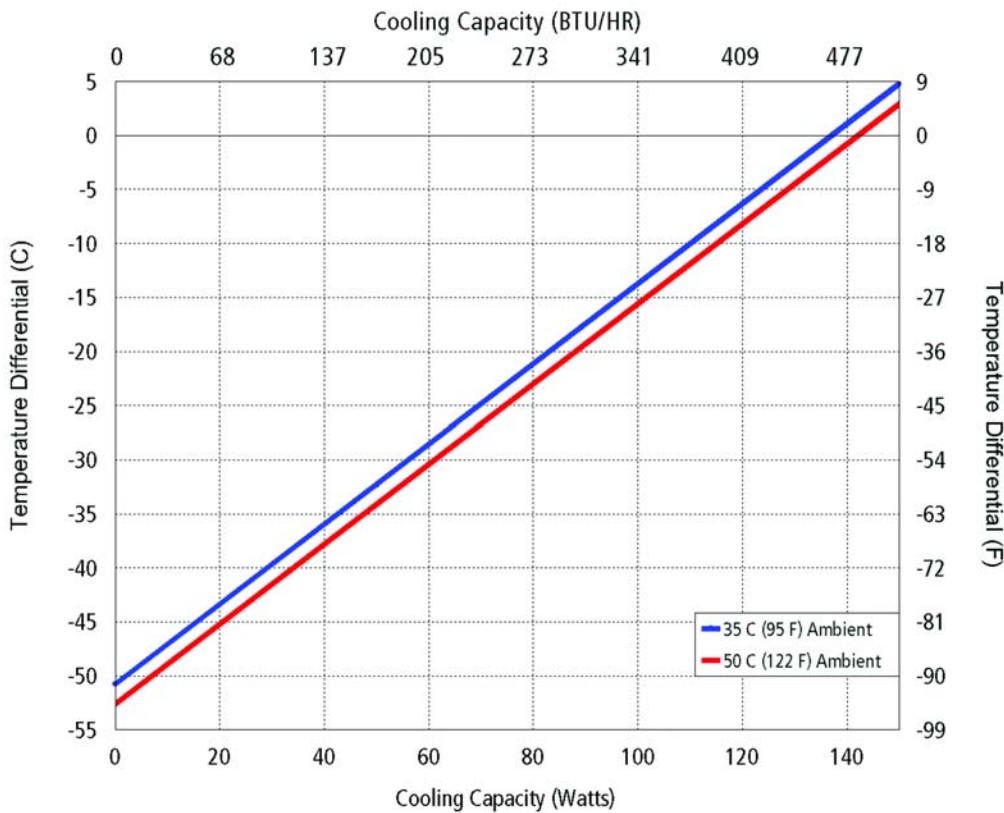
467 BTU/hr @ 0 °F ΔT

570 BTU/hr @ +20 °F ΔT

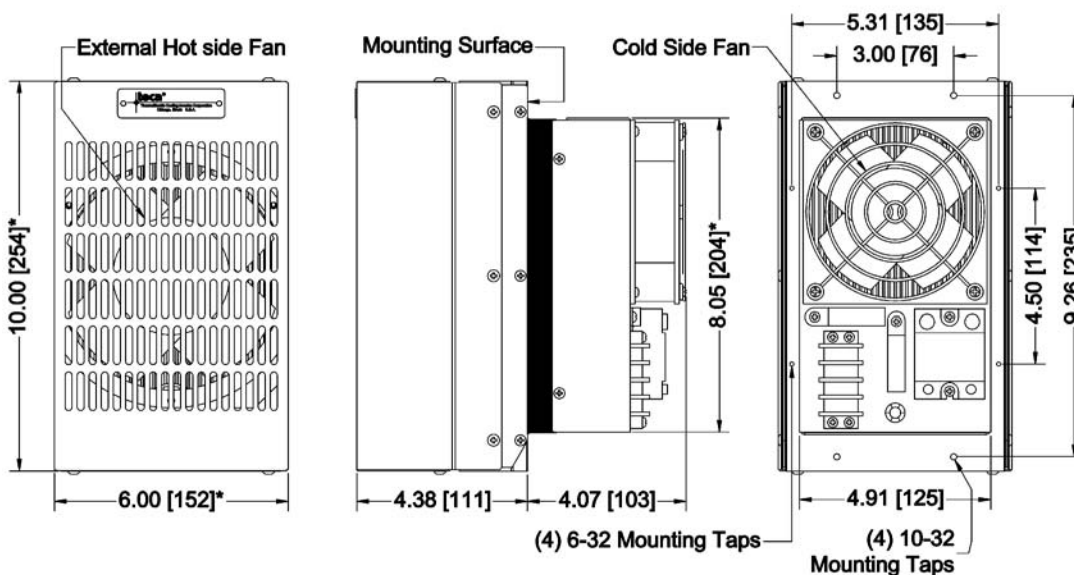
RATING (DIN 3168)

137 Watts L35 L35

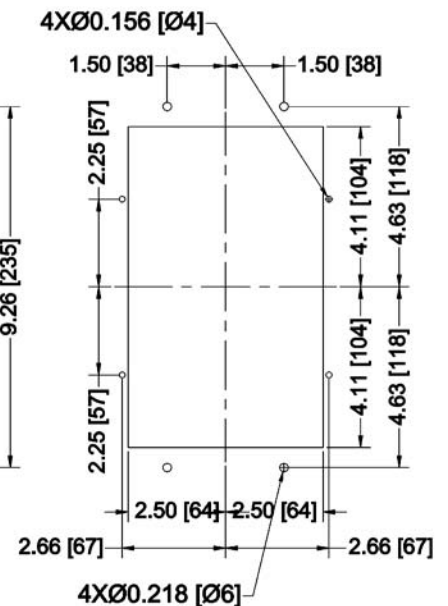
101 Watts L35 L50

PERFORMANCE CURVE

Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware and gasket
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-590

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
460 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight 14 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

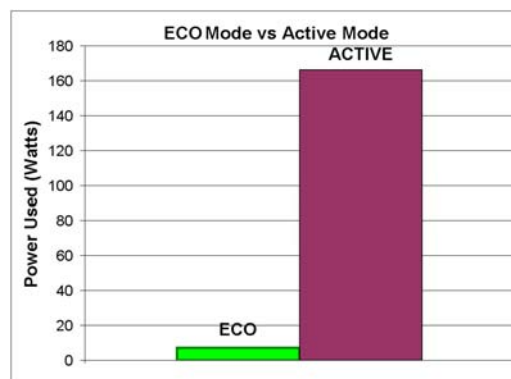
Voltage	24 VDC
Current, Active	6.9 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	460 BTU/HR
Cooling (Din 3168)	137 WATTS
Cooling COP (at L35 L35)	0.85
Heating (Traditional)	> 562 BTU/HR
Heating (Din 3168)	> 165 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-590	0-G0J5-0-001	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-590HC	0-G095-1-001	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
AHP-590HC	0-G0I5-1-001	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-590XE	0-G0J5-4-001	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
AHP-590XEHC	0-G095-5-001	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
AHP-590XEHC	0-G0I5-5-001	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
AHP-590X	0-G0J5-2-001	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
AHP-590XHC	0-G095-3-001	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
AHP-590XHC	0-G0I5-3-001	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56
AHP-590XM	0-G0J5-2-011	Cool only, Mil. grade fans	TC-4F	NEMA-4X, IP 56
AHP-590XMHC	0-G095-3-011	Heat/Cool, Mil. grade fans	None*	NEMA-4X, IP 56
AHP-590XMHC	0-G0I5-3-011	Heat/Cool, Mil. grade fans	TC-7F	NEMA-4X, IP 56

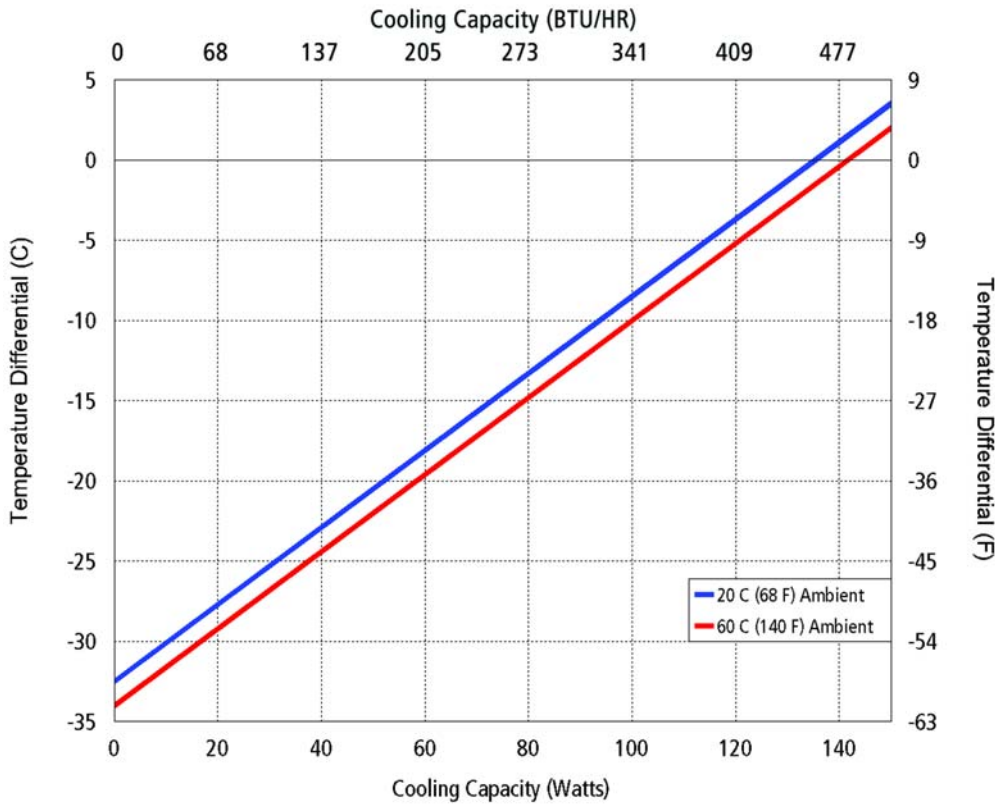
* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
AHP-590	$y = .25x - 32.5$	$y = .25x - 35$

AHP-590

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

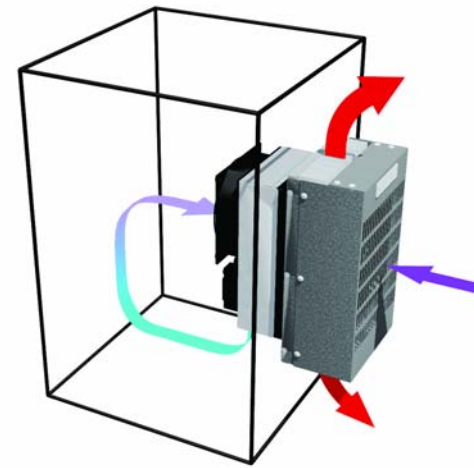
AHP-590 460 BTU/hr @ 0 °F ΔT

593 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

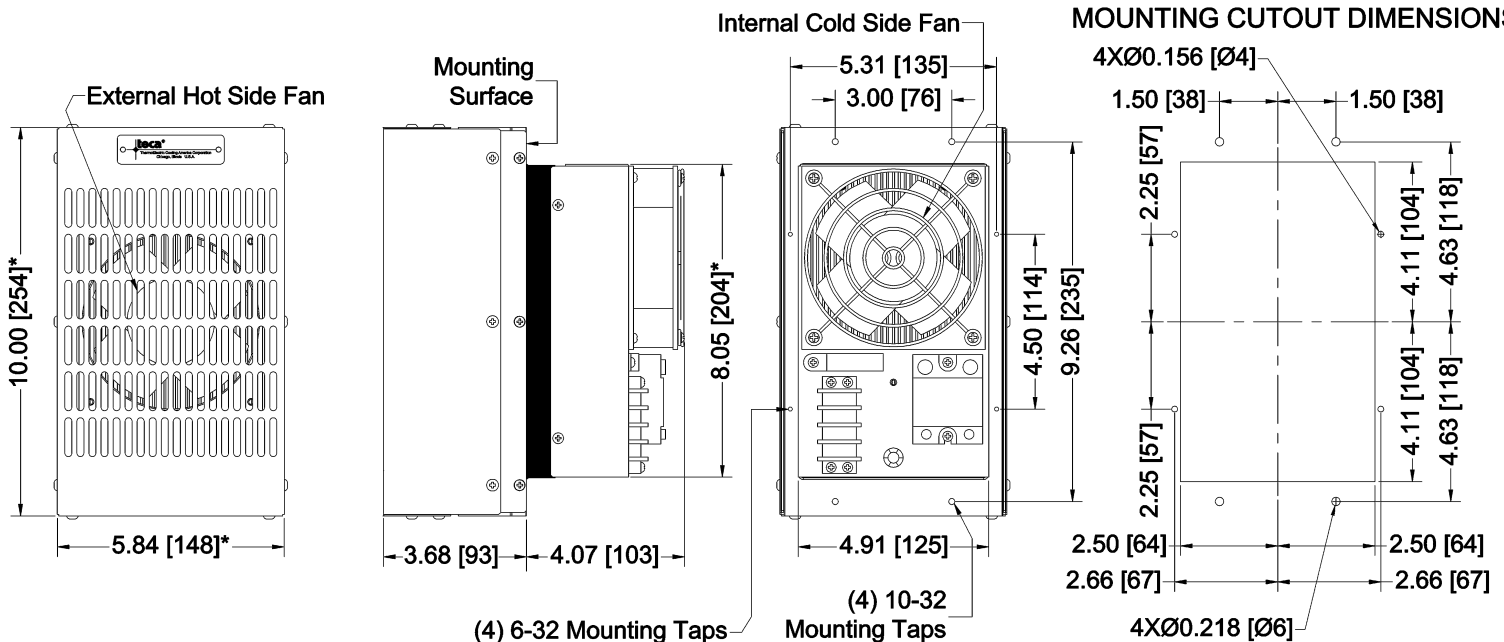
AHP-590 137 Watts L35 L35

75 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]



AHP-570

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
305 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight 14 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

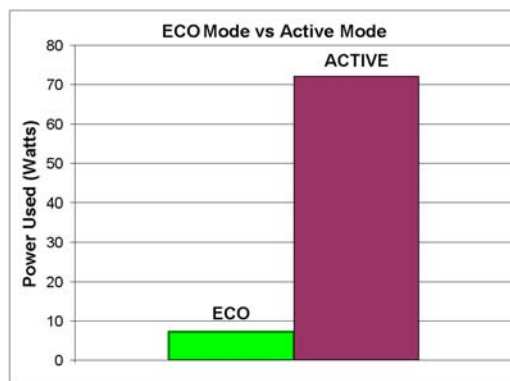
Voltage	24 VDC
Current, Active	3.0 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	303 BTU/HR
Cooling (Din 3168)	90 WATTS
Cooling COP (at L35 L35)	1.25
Heating (Traditional)	> 245 BTU/HR
Heating (Din 3168)	> 72 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-570	0-G0J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-570HC	0-G095-1-000	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
AHP-570HC	0-G0I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-570XE	0-G0J5-4-000	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
AHP-570XEHC	0-G095-5-000	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
AHP-570XEHC	0-G0I5-5-000	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
AHP-570X	0-G0J5-2-000	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
AHP-570XHC	0-G095-3-000	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
AHP-570XHC	0-G0I5-3-000	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56
AHP-570XM	0-G0J5-2-010	Cool only, Mil. grade fans	TC-4F	NEMA-4X, IP 56
AHP-570XMHC	0-G095-3-010	Heat/Cool, Mil. grade fans	None*	NEMA-4X, IP 56
AHP-570XMHC	0-G0I5-3-010	Heat/Cool, Mil. grade fans	TC-7F	NEMA-4X, IP 56

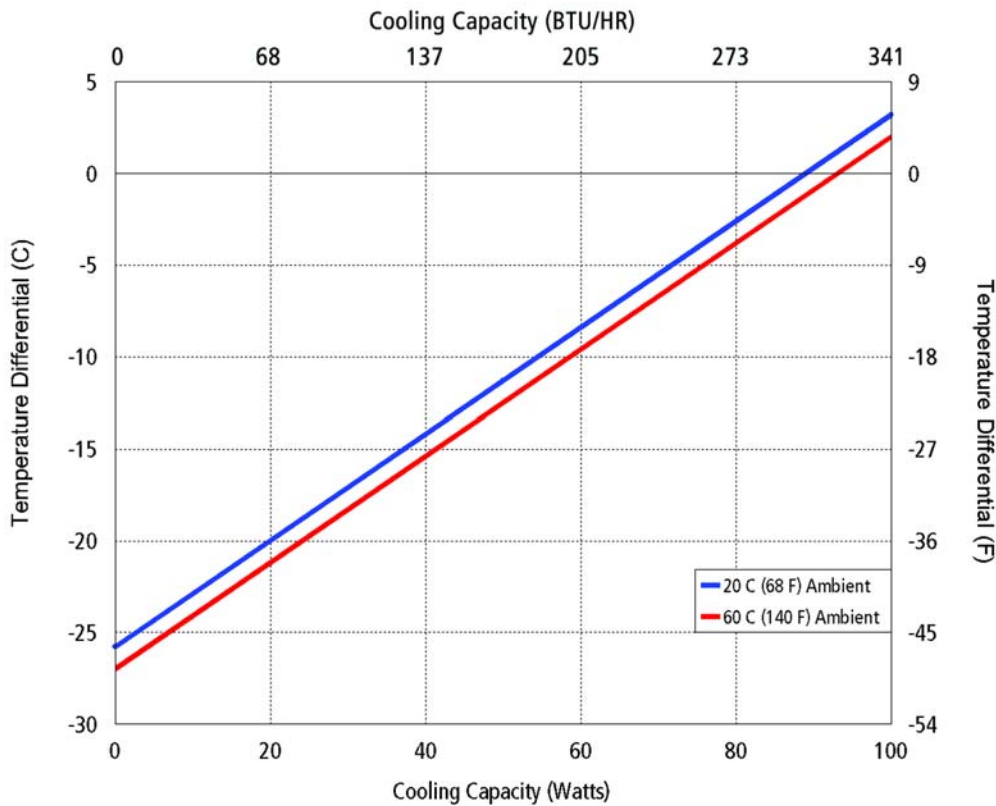
* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
AHP-570	$y = .29x - 25.8$	$y = .29x - 27$

AHP-570

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

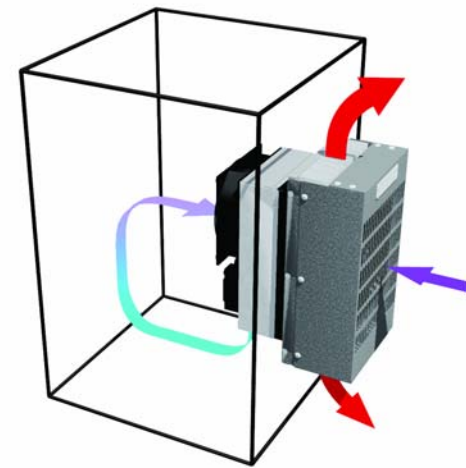
AHP-570 305 BTU/hr @ 0 °F ΔT

432 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

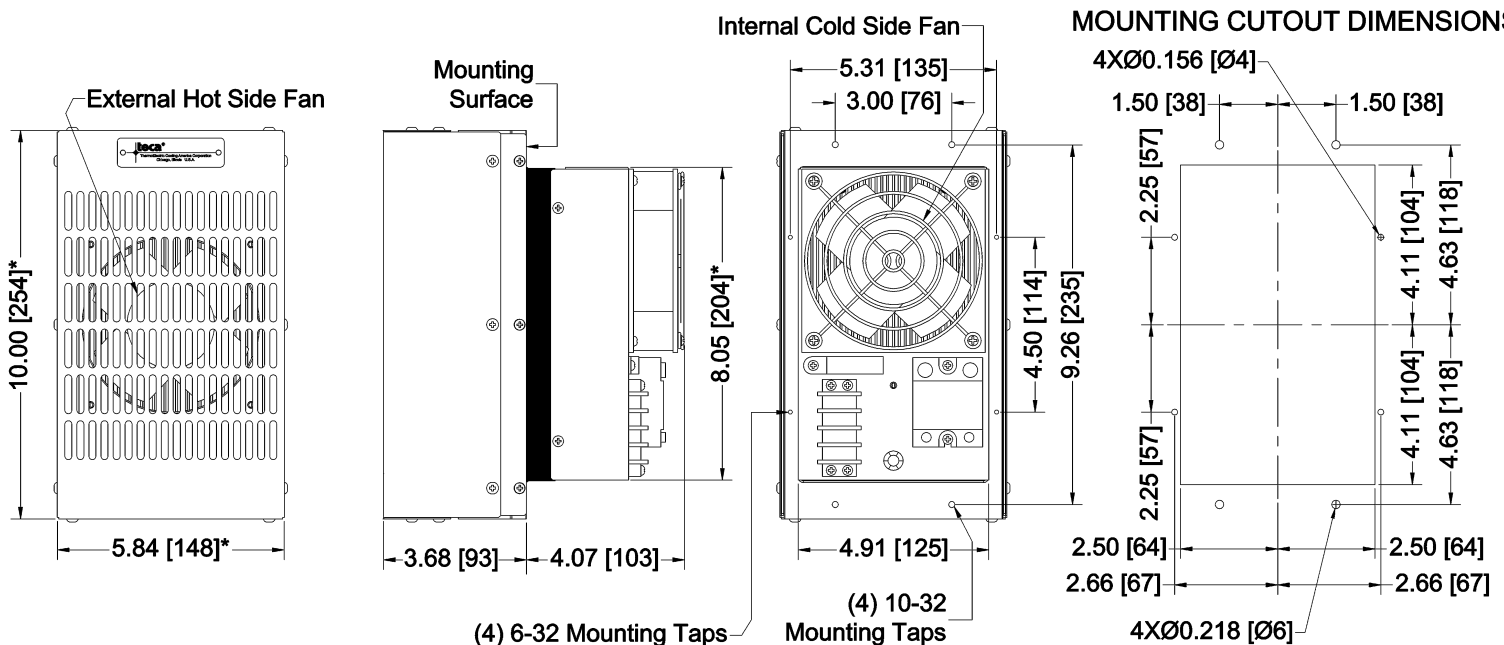
AHP-570 90 Watts L35 L35

40 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-451 Air Conditioner

Air Cooled
Through Mounted
Nema-12

120 VAC or 240 VAC
340 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Suitable for NEMA-12 (IP 52) environment
- Easy to use Pivot Clean feature
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling (TC-1F, TC-3F)	35 °C
Active Heating (TC-3F)	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

PERFORMANCE RATINGS

Cooling (Traditional)	342 BTU/HR
Cooling (Din 3168)	102 WATTS
Cooling COP (at L35 L35)	0.65

POWER INPUTS

Voltage	120 or 240 VAC
Current, Active	1.3 / 0.71 AMPS

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Integral power input cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL
AHP-451	0-F090-0-000	Cool only	120	1.3	None
AHP-451	0-F0F0-0-000	Cool only	120	1.3	TC-1F
AHP-451	0-F050-0-000	Cool only	120	1.3	EXT*
AHP-451HC	0-F030-1-000	Heat/Cool	120	1.3	TC-3F
AHP-452	0-F092-0-000	Cool only	240	0.70	None
AHP-452	0-F0F2-0-000	Cool only	240	0.70	TC-1F
AHP-452	0-F052-0-000	Cool only	240	0.70	EXT*
AHP-452HC	0-F032-1-000	Heat/Cool	240	0.70	TC-3F

* Unit is set for 5-32 VDC external signal; relay(s) included

AHP-451

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

RATING (TRADITIONAL)

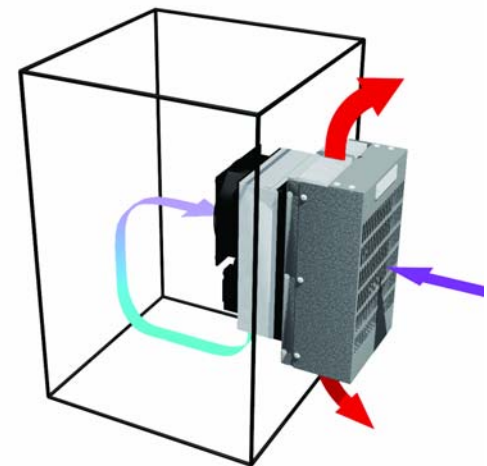
340 BTU/hr @ 0 °F ΔT

486 BTU/hr @ +20 °F ΔT

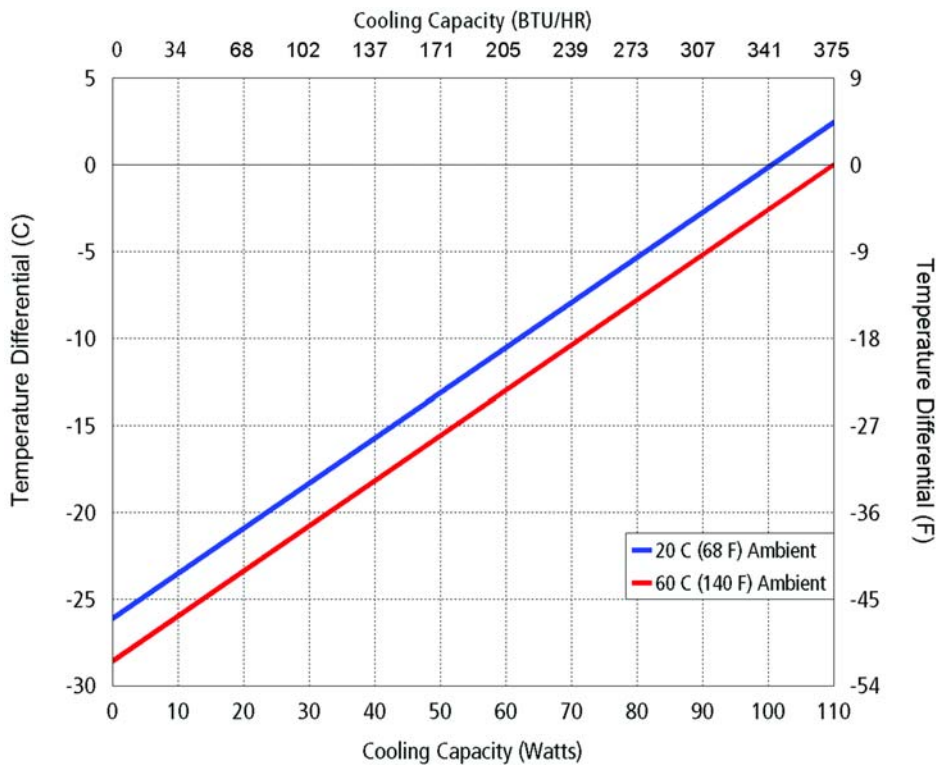
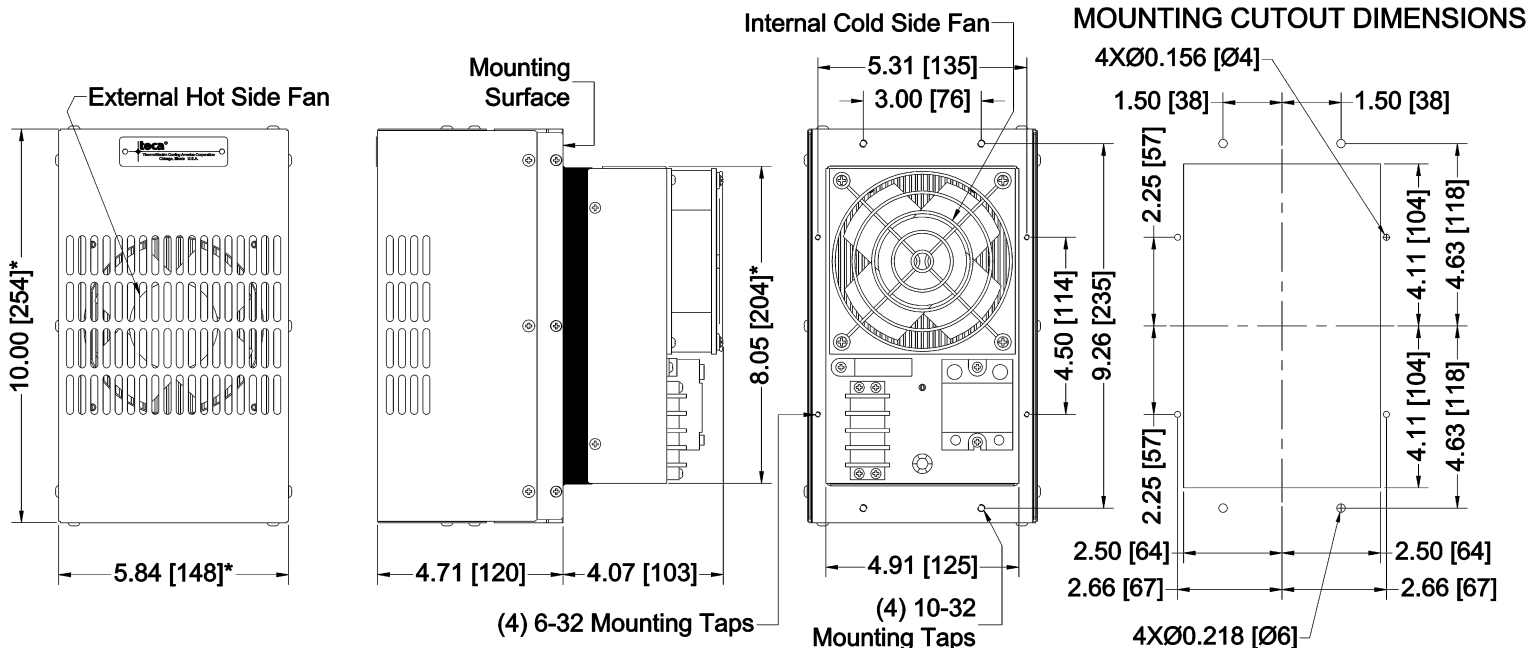
RATING (DIN 3168)

102 Watts L35 L35

50 Watts L35 L50



Air Flow Pattern

PERFORMANCE CURVE**DIMENSIONS**

* Dimension does not include hardware and sealant.
 Mounting hardware and gasket included but not shown.
 Dimensions: Inches [Millimeters]

AHP-401 Air Conditioner

Air Cooled
Through Mounted
Nema-12

120 VAC or 240 VAC
220 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Suitable for NEMA-12 (IP 52) environment
- Easy to use Pivot Clean feature
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling (TC-1F, TC-3F)	35 °C
Active Heating (TC-3F)	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	120 or 240 VAC
Current, Active	1.2 / 0.65 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	220 BTU/HR
Cooling (Din 3168)	102 WATTS
Cooling COP (at L35 L35)	0.45

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Integral power input cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL
AHP-401	0-F090-0-001	Cool only	120	1.2	None
AHP-401	0-F0F0-0-001	Cool only	120	1.2	TC-1F
AHP-401	0-F050-0-001	Cool only	120	1.2	EXT*
AHP-401HC	0-F030-1-001	Heat/Cool	120	1.2	TC-3F
AHP-402	0-F092-0-001	Cool only	240	0.65	None
AHP-402	0-F0F2-0-001	Cool only	240	0.65	TC-1F
AHP-402	0-F052-0-001	Cool only	240	0.65	EXT*
AHP-402HC	0-F032-1-001	Heat/Cool	240	0.65	TC-3F

* Unit is set for 5-32 VDC external signal; relay(s) included

AHP-401

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

RATING (TRADITIONAL)

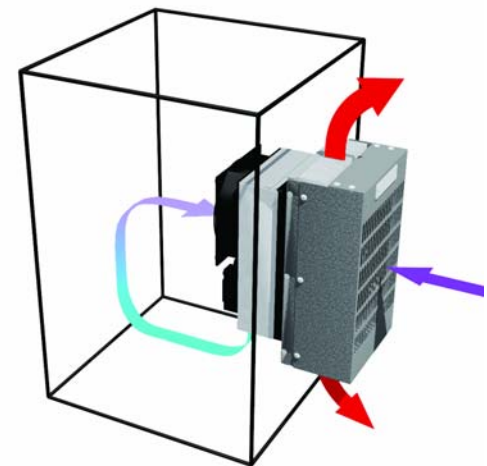
220 BTU/hr @ 0 °F ΔT

275 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

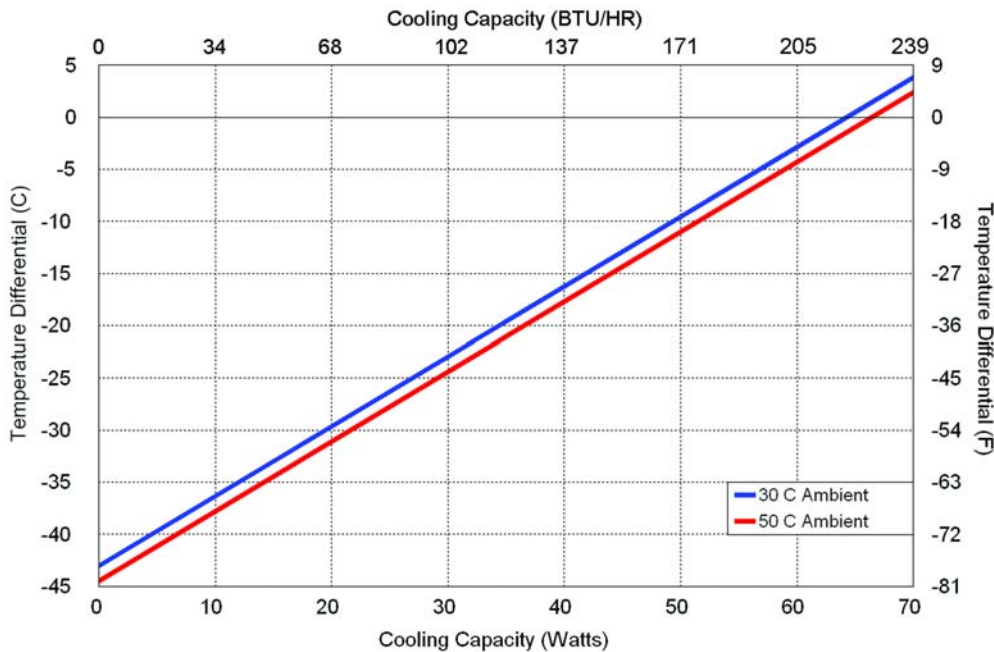
65 Watts L35 L35

45 Watts L35 L50



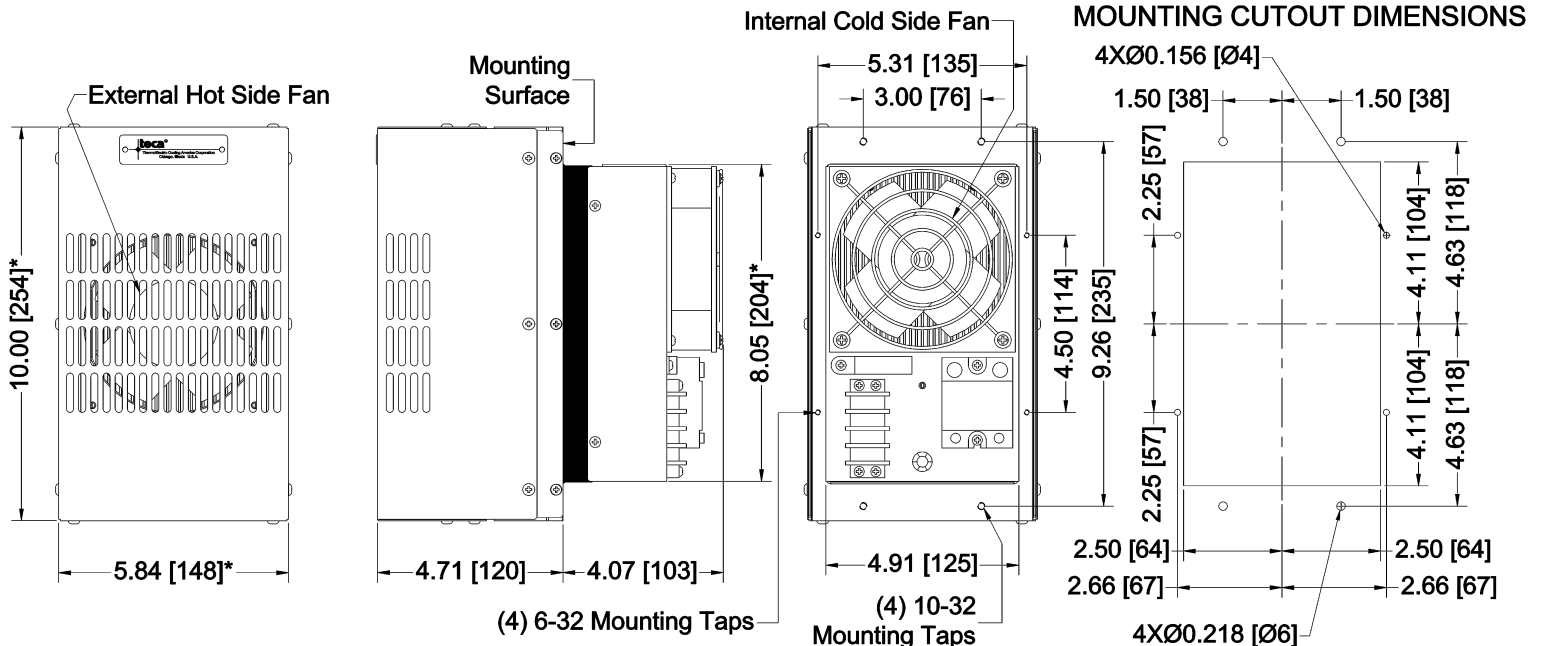
Air Flow Pattern

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	30°C	50°C
Enclosure Air	$y = .67x - 43$	$y = .67x - 44.5$

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-470

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC
315 BTU/HR

FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight 14 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	24 VDC
Current, Active	7.0 AMPS
Current, ECO-Mode	0.3 AMPS

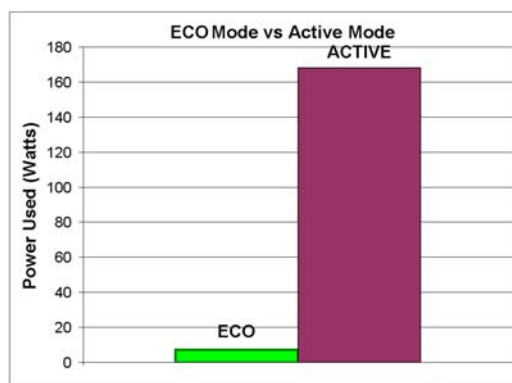
PERFORMANCE RATINGS

Cooling (Traditional)	315 BTU/HR
Cooling (Din 3168)	95 WATTS
Cooling COP (at L35 L35)	056
Heating (Traditional)	> 572 BTU/HR
Heating (Din 3168)	> 168 WATTS
Heating COP	> 1.0



INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-470	0-F0J5-0-001	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-470HC	0-F095-1-001	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
AHP-470HC	0-F0I5-1-001	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-470XE	0-F0J5-4-001	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
AHP-470XEHC	0-F095-5-001	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
AHP-470XEHC	0-F0I5-5-001	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
AHP-470X	0-F0J5-2-001	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
AHP-470XHC	0-F095-3-001	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
AHP-470XHC	0-F0I5-3-001	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56
AHP-470XM	0-F0J5-2-011	Cool only, Mil. grade fans	TC-4F	NEMA-4X, IP 56
AHP-470XMHC	0-F095-3-011	Heat/Cool, Mil. grade fans	None*	NEMA-4X, IP 56
AHP-470XMHC	0-F0I5-3-011	Heat/Cool, Mil. grade fans	TC-7F	NEMA-4X, IP 56

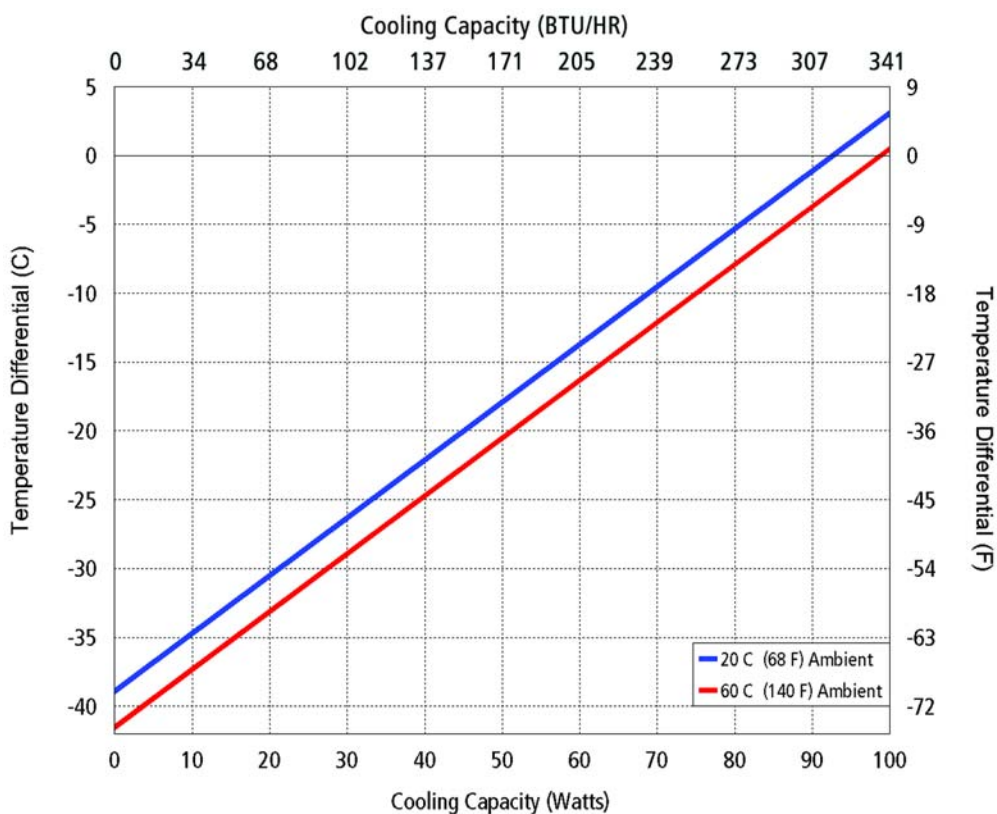
* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of Line: $y = DT(^{\circ}C)$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
AHP-470	$y = .42x - 38.9$	$y = .42x - 41.5$

Air Conditioner - Air Cooled

AHP-470

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

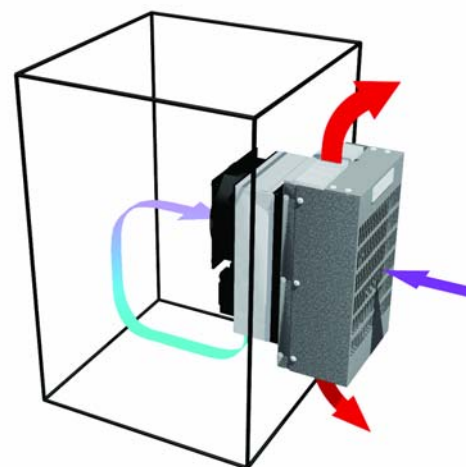
AHP-470 315 BTU/hr @ 0 °F ΔT

405 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

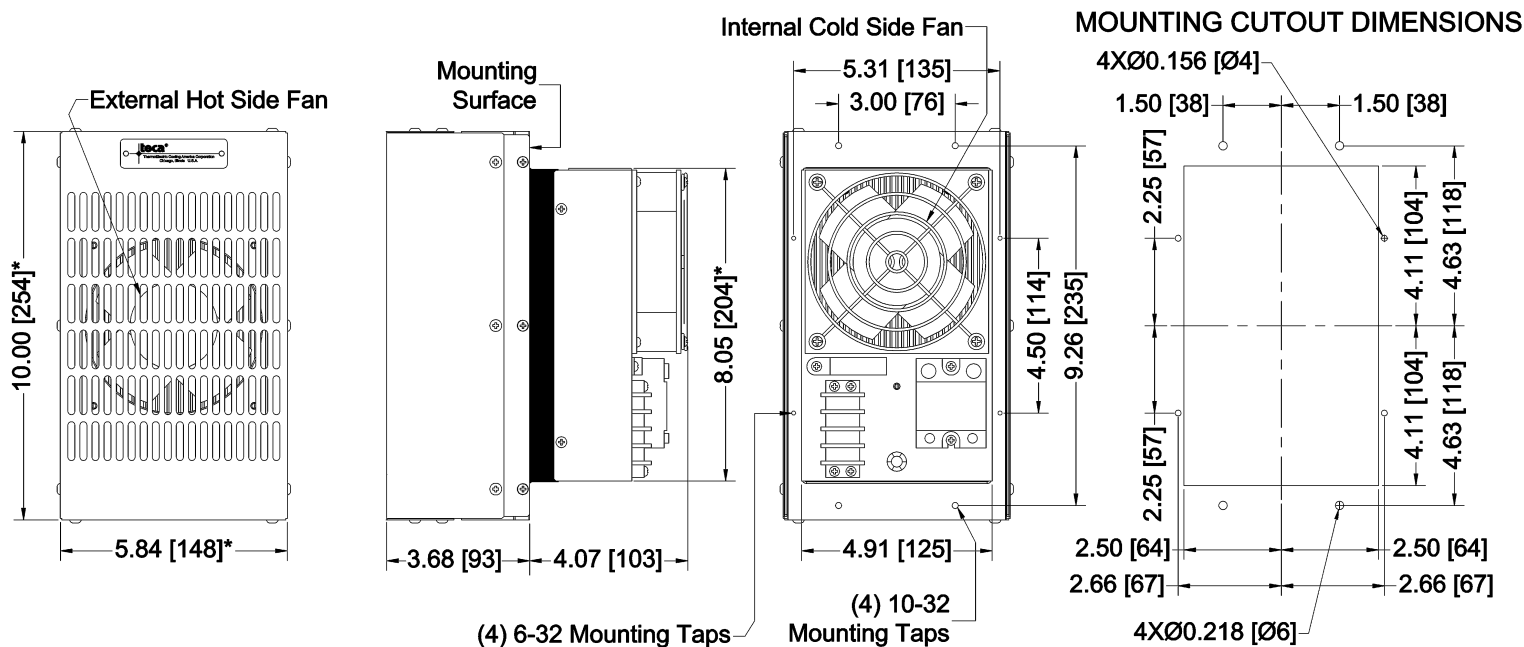
AHP-470 95 Watts L35 L35

62 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]



AHP-450

Air Conditioner/Heat Exchanger

Air Cooled
Through Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
210 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight 14 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

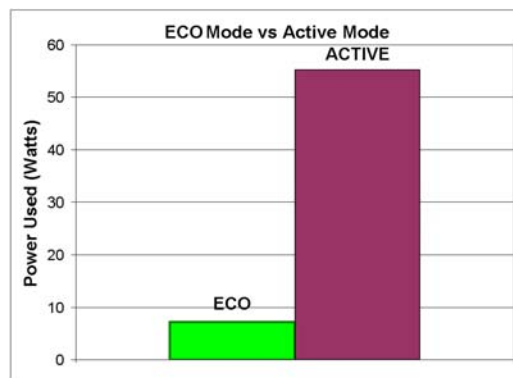
Voltage	24 VDC
Current, Active	2.3 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	207 BTU/HR
Cooling (Din 3168)	62 WATTS
Cooling COP (at L35 L35)	1.12
Heating (Traditional)	> 188 BTU/HR
Heating (Din 3168)	> 55 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-450	0-F0J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
AHP-450HC	0-F095-1-000	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
AHP-450HC	0-F0I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
AHP-450XE	0-F0J5-4-000	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
AHP-450XEHC	0-F095-5-000	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
AHP-450XEHC	0-F0I5-5-000	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
AHP-450X	0-F0J5-2-000	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
AHP-450XHC	0-F095-3-000	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
AHP-450XHC	0-F0I5-3-000	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56
AHP-450XM	0-F0J5-2-010	Cool only, Mil. grade fans	TC-4F	NEMA-4X, IP 56
AHP-450XMHC	0-F095-3-010	Heat/Cool, Mil. grade fans	None*	NEMA-4X, IP 56
AHP-450XMHC	0-F0I5-3-010	Heat/Cool, Mil. grade fans	TC-7F	NEMA-4X, IP 56

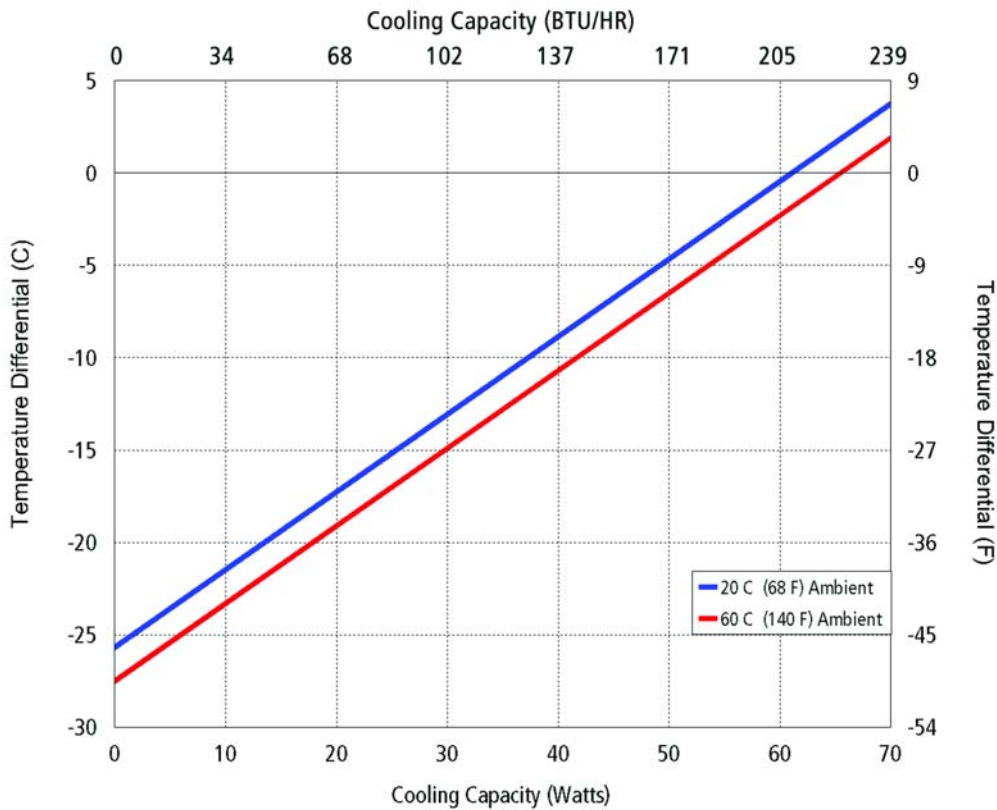
* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

PERFORMANCE CURVE



Equation of Line: $y = DT(^{\circ}C)$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
AHP-450	$y = .42x - 25.6$	$y = .42x - 27.5$

AHP-450

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

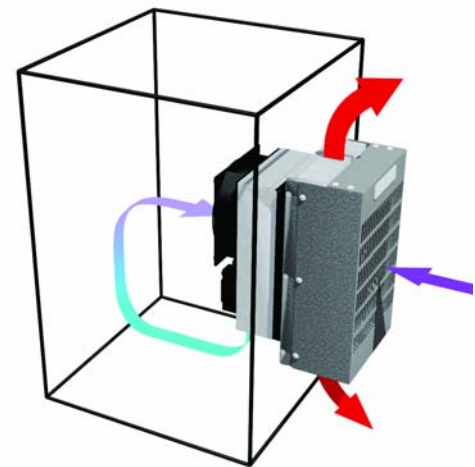
AHP-450 210 BTU/hr @ 0 °F ΔT

297 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

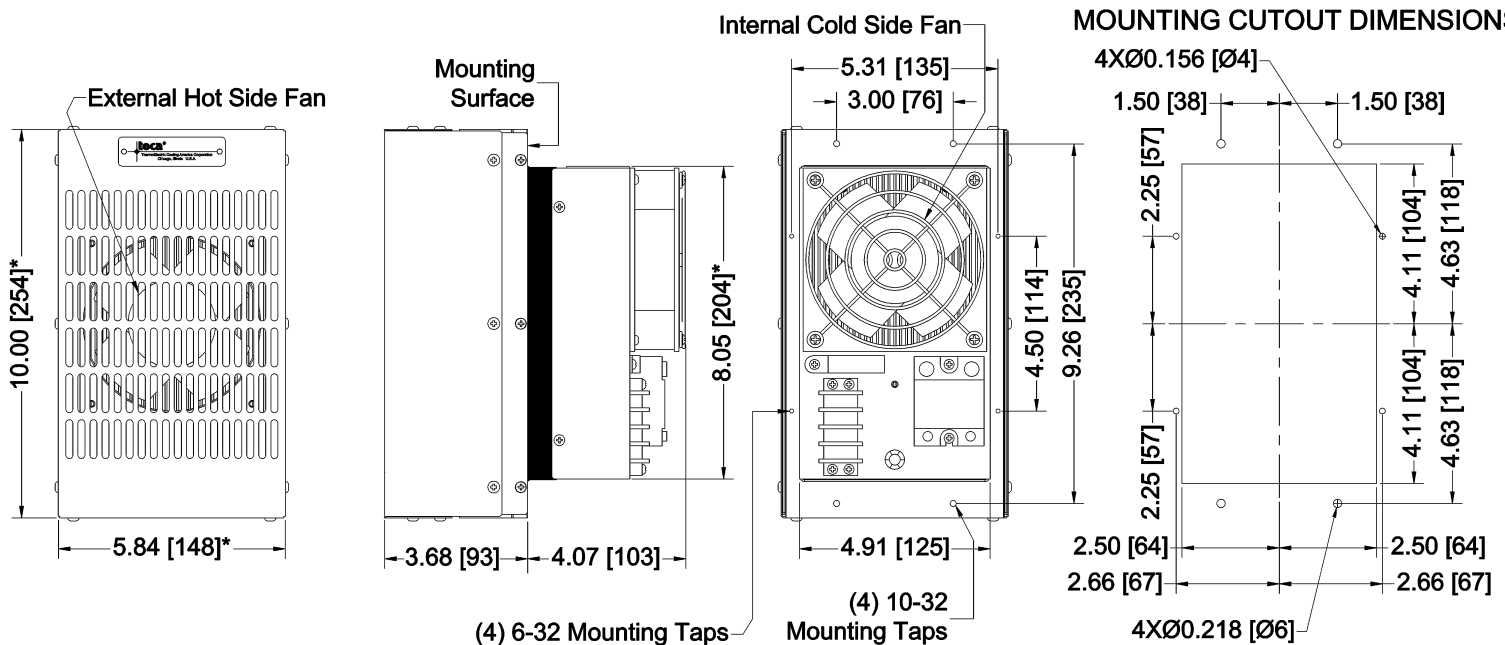
AHP-450 62 Watts L35 L35

28 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
 Mounting hardware and gasket included but not shown.
 Dimensions: Inches [Millimeters]

AHP-301FF

Air Conditioner

Air Cooled
Through Mounted
NEMA-12

120/240 VAC input
180 BTU/HR

FEATURES

- Compact (only 10"L X 5.52"W X 7.83"D)
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- Dual voltage (jumper selectable)
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Operating ambient temperature range -10/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 12 LBS.

POWER INPUTS

Voltage	120/240 VAC
Current, Active	1.4/0.70 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	180 BTU/HR
Cooling (Din 3168)	52 WATTS
Cooling COP (at L35 L35)	0.36



CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35

INCLUDES

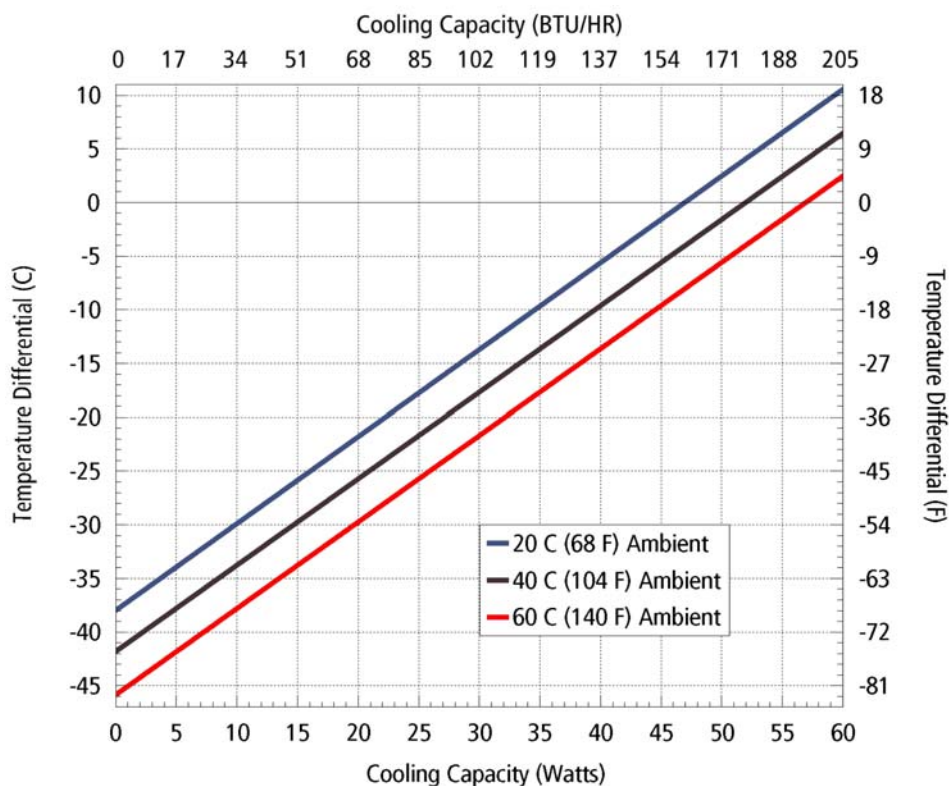
- Integral 120/240 VAC power supply
- Mounting gasket
- Mounting hardware
- Power input cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
AHP-301FF	0-7091-0-000	Cool only, industrial fans	None	NEMA-12
AHP-301FF	0-70F1-0-000	Cool only, industrial fans	TC-1F	NEMA-12
AHP-301FF	0-7081-0-000	Cool only, industrial fans	TC-6F	NEMA-12
AHP-301FF	0-7051-0-000	Cool only, industrial fans	EXT*	NEMA-12
AHP-301FFHC	0-7031-1-000	Heat/Cool , industrial fans	TC-3F	NEMA-12
AHP-301FFHC	0-7051-1-000	Heat/ Cool, industrial fans	EXT*	NEMA-12

* Unit is set for 5-32 VDC external signal; relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .81x - 38.0$	$y = .81x - 42.0$	$y = .81x - 46.0$
Cold Sink	$y = .62x - 38.0$	$y = .62x - 42.0$	$y = .62x - 46.0$

AHP-301FF

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

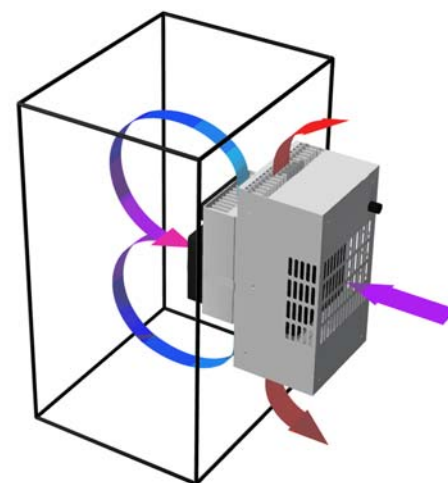
RATING (TRADITIONAL)

180 BTU/hr @ 0 °F ΔT 220 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

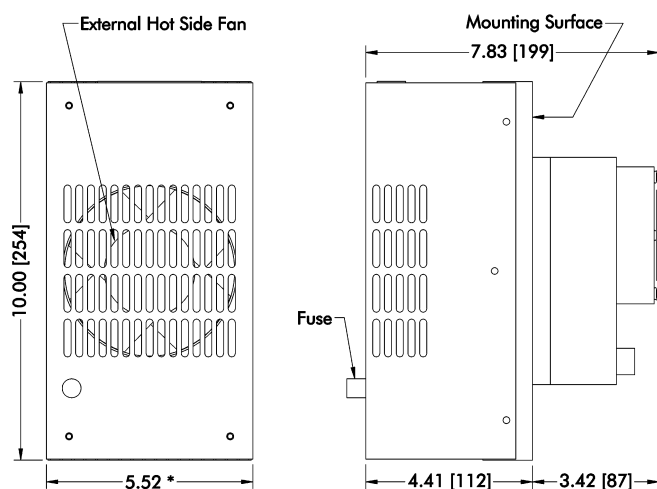
52 Watts L35 L35

36 Watts L35 L50



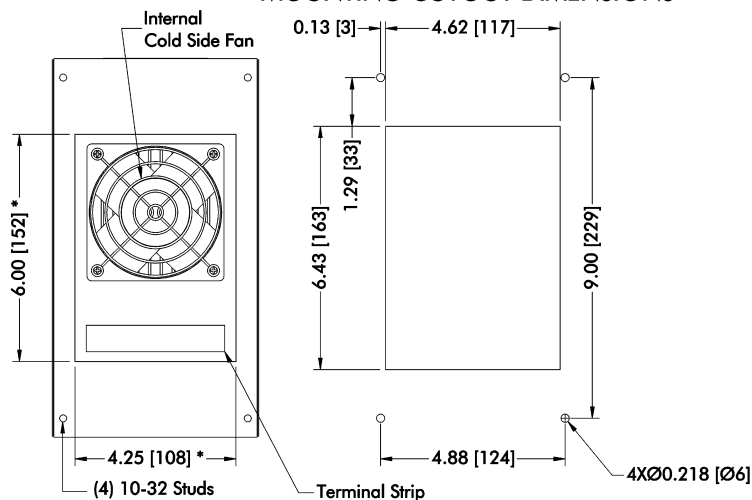
Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and sealant.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-300FF

Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4, and 4x

General Purpose VDC Input
210 BTU/HR



FEATURES

- Compact (only 10" X 5.37" X 6.45")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Weight 7.5 LBS.

OPERATING TEMPERATURES

Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

PERFORMANCE RATINGS

Cooling (Traditional)	210 BTU/HR
Cooling (Din 3168)	61 WATTS
Cooling COP (at L35 L35)	0.42

OPTIONS

- Temperature Control TC-6F DC for cool only
- Temperature Control TC-3F DC for heat/cool
- Adaptable for TC-3400
- Adaptable for TC-3500 (only Rev. Pol. versions @ 24VDC)
- Cover for hot side

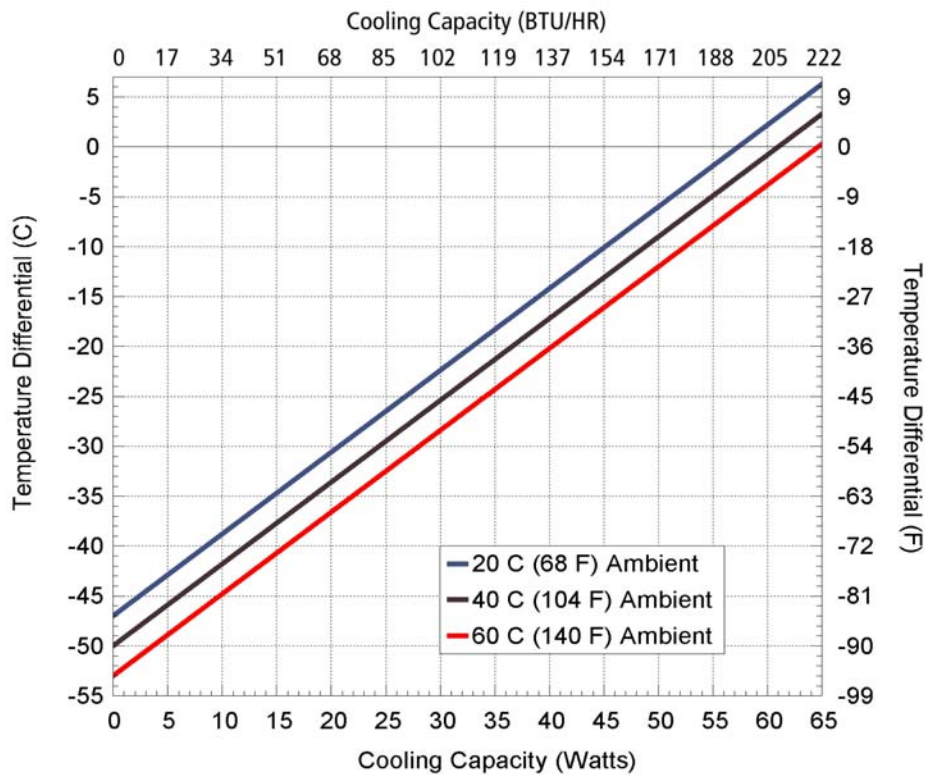
INCLUDES

- Mounting gasket
- Mounting hardware
- Power input leads

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	HEAT Watts	VOLTAGE VDC	CURRENT AMPS	ENVIRONMENT
AHP-300FF	0-7097-0-000	Cool only, industrial fans	None	12/24/48	12/6/3	NEMA-12, IP 52
AHP-300FFHC	0-7094-1-000	Heat/Cool, industrial fans	75	12	12	NEMA-12, IP 52
AHP-300FFHC	0-7095-1-000	Heat/Cool, industrial fans	75	24	6	NEMA-12, IP 52
AHP-300FFHC	0-7097-1-001	Heat/Cool, industrial fans, Rev. Pol.	144	12/24/48	12/6/3	NEMA-12, IP 52
AHP-300XE	0-7097-4-000	Cool only, sealed hot side fan	None	12/24/48	12/6/3	NEMA-4, IP 56
AHP-300XEHC	0-7095-5-000	Heat/Cool, sealed hot side fan	75	24	6	NEMA-4, IP 56
AHP-300XEHC	0-7097-5-001	Heat/Cool, sealed hot side fan, Rev. Pol.	144	12/24/48	12/6/3	NEMA-4, IP 56
AHP-300X	0-7097-2-000	Cool only, Mil. grade hot side fan	None	12/24/48	12/6/3	NEMA-4X, IP 56
AHP-300XHC	0-7094-3-000	Heat/Cool, Mil. grade hot side fan	75	12	12	NEMA-4X, IP 56
AHP-300XHC	0-7095-3-000	Heat/Cool, Mil. grade hot side fan	75	24	6	NEMA-4X, IP 56
AHP-300XHC	0-7097-3-001	Heat/Cool, Mil. grade hot side fan, Rev. Pol.	144	12/24/48	12/6/3	NEMA-4X, IP 56

PERFORMANCE CURVE



	y=ΔT(°C) x=Capacity (Watts)		
Ambient Temp	20°C	40°C	60°C
Enclosure Air	y=.82x-47.0	y=.82x-50.0	y=.82x-53.0
Cold Sink	y=.64x-47.0	y=.64x-50.0	y=.64x-53.0

AHP-300FF

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

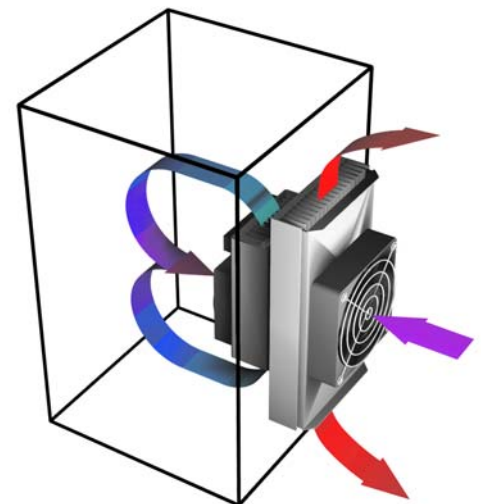
210 BTU/hr @ 0 °F ΔT

250 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

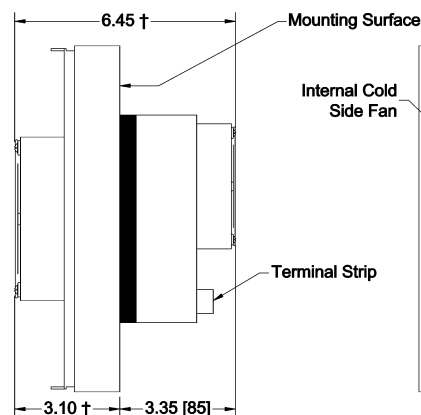
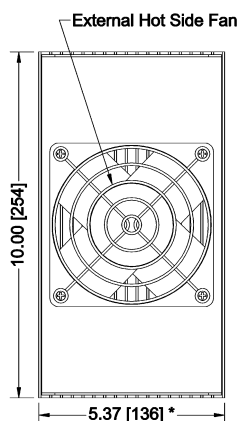
61 Watts L35 L35

44 Watts L35 L50

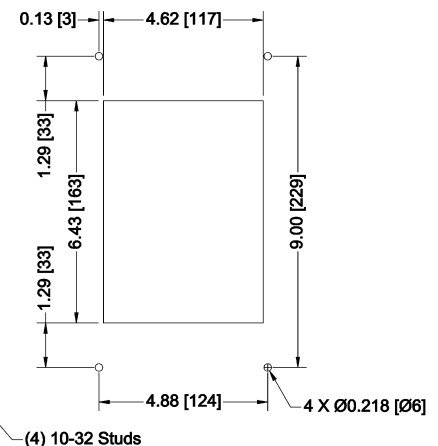


Air Flow Pattern

DIMENSIONS



MOUNTING CUTOUT DIMENSIONS



* Dimension does not include hardware and sealant.

† On all models of AHP-300X, these dimensions are greater by 0.25 inch.
Mounting hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

AHP-270

Air Conditioner

Air Cooled
Through Mounted
Nema-12, 4, 4X

12 VDC, 24 VDC
161 BTU/HR



FEATURES

- Compact (only 6" X 4.75" X 6.6")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Heat via reverse polarity
- Virtually maintenance-free operation
- Weight 4.4 LBS.

OPERATING TEMPERATURES

Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

PERFORMANCE RATINGS

Cooling (Traditional)	161 BTU/HR
Cooling (Din 3168)	47 WATTS
Cooling COP (at L35 L35)	0.46

OPTIONS

- Temperature Control TC-6F DC for cool only
- Temperature Control TC-3F DC for heat/cool
- Adaptable for TC-3400
- Stainless steel exterior housing

INCLUDES

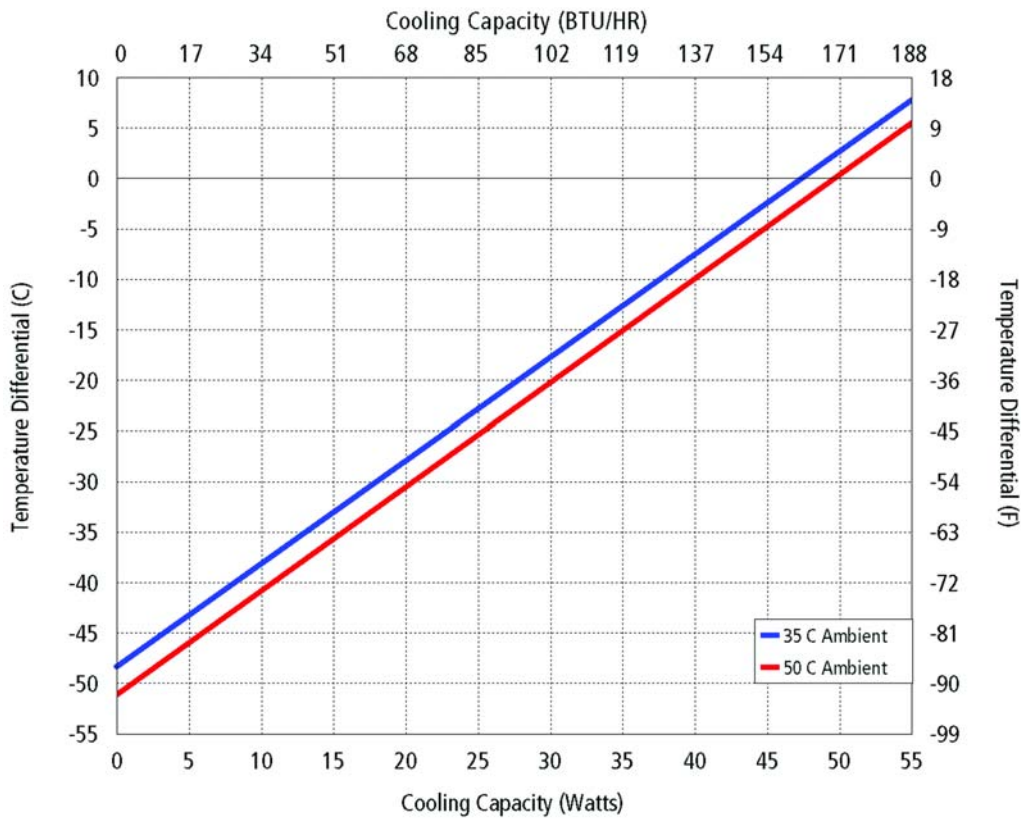
- Mounting gasket
- Mounting hardware
- Power input leads

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	HEAT Watts	VOLTAGE VDC	CURRENT AMPS	ENVIRONMENT
AHP-270FF	0-L094-1-001	Industrial Fans	100	12	8.3	NEMA-12, IP 52
AHP-270FF	0-L095-1-001	Industrial Fans	100	24	4.1	NEMA-12, IP 52
AHP-270XE	0-L094-5-001	Sealed Hot Side Fan	100	12	8.3	NEMA-4, IP 56
AHP-270XE	0-L095-5-001	Sealed Hot Side Fan	100	24	4.1	NEMA-4, IP 56
AHP-270X	0-L094-3-001	Mil. Grade Hot Side Fan	100	12	8.3	NEMA-4X, IP 56
AHP-270X	0-L095-3-001	Mil. Grade Hot Side Fan	100	24	4.1	NEMA-4X, IP 56

Heat function via reverse polarity (controller dependent)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = 1.02x - 48.3$	$y = 1.03x - 51$
Cold Sink	$y = 0.78x - 48.3$	$y = 0.79x - 51$

AHP-270

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

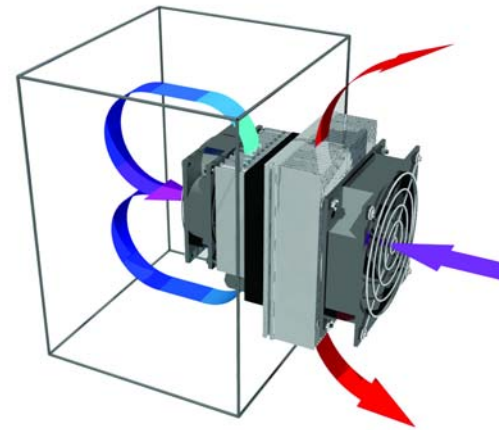
RATING (TRADITIONAL)

161 BTU/hr @ 0 °F ΔT 198 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

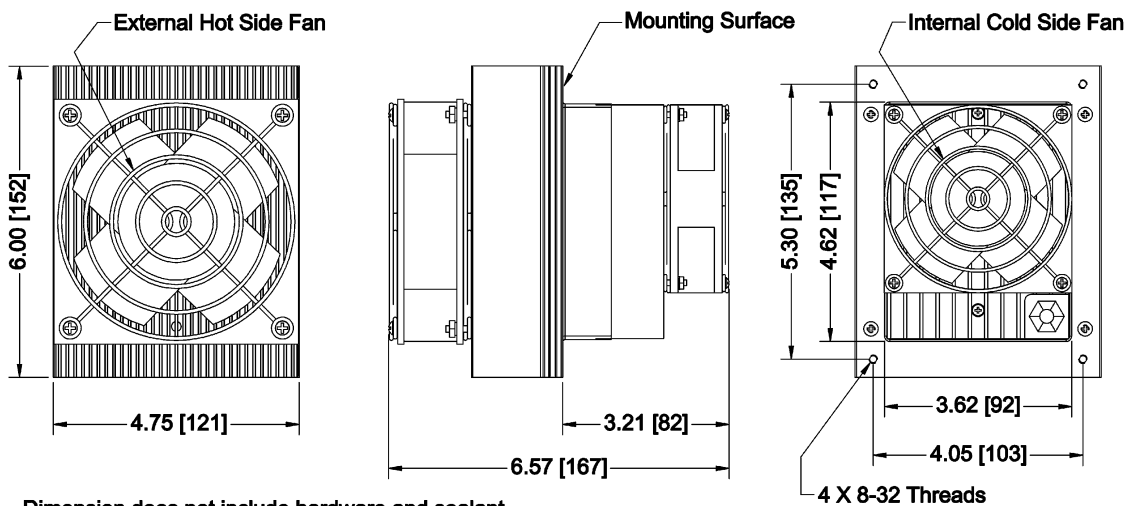
47 Watts L35 L35

35 Watts L35 L50



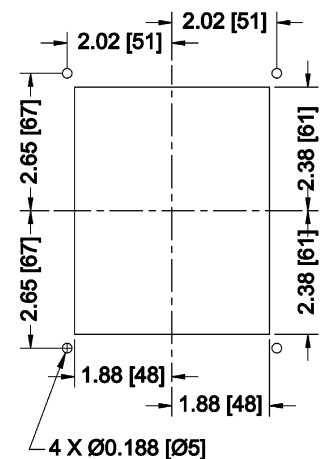
Air Flow Pattern

DIMENSIONS



Dimension does not include hardware and sealant.
Hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



AHP-250 Air Conditioner

Air Cooled
Through Mounted
Nema-12, 4, 4X

12 VDC, 24 VDC
129 BTU/HR



FEATURES

- Compact (only 6" X 4.75" X 6.6")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Heat via reverse polarity
- Virtually maintenance-free operation
- Weight 4.4 LBS.

OPERATING TEMPERATURES

Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

PERFORMANCE RATINGS

Cooling (Traditional)	129 BTU/HR
Cooling (Din 3168)	38 WATTS
Cooling COP (at L35 L35)	0.53

OPTIONS

- Temperature Control TC-6F DC for cool only
- Temperature Control TC-3F DC for heat/cool
- Adaptable for TC-3400
- Stainless steel exterior housing

INCLUDES

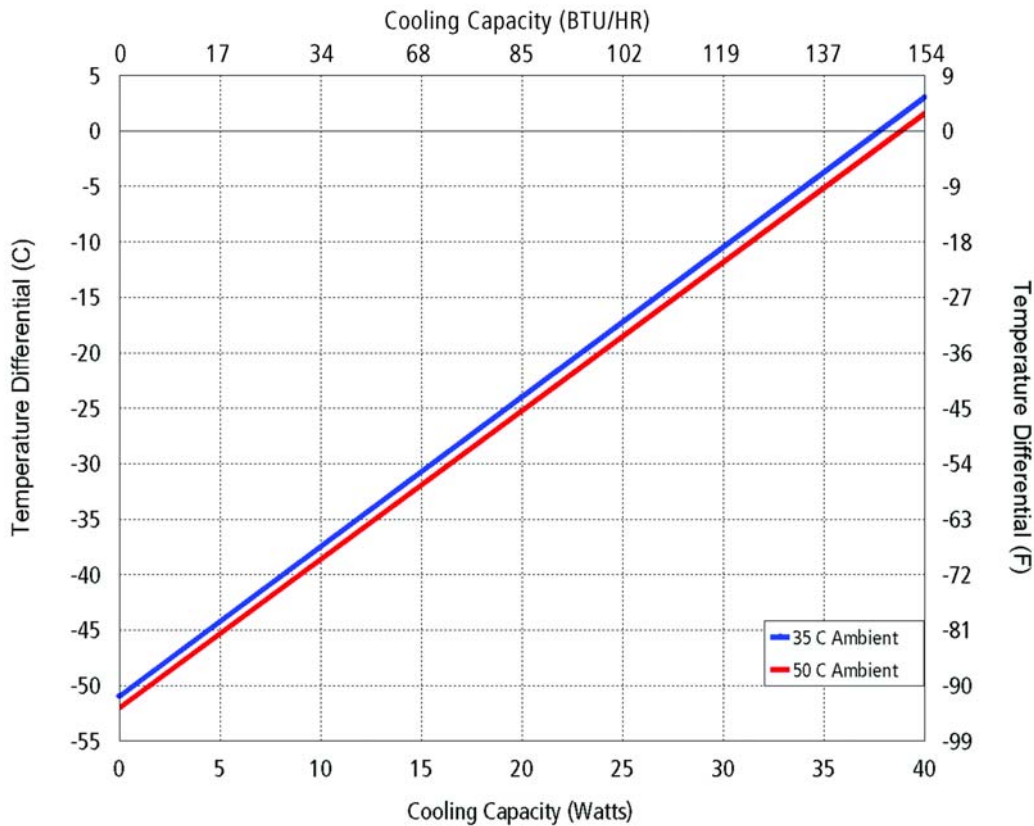
- Mounting gasket
- Mounting hardware
- Power input leads

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	HEAT Watts	VOLTAGE VDC	CURRENT AMPS	ENVIRONMENT
AHP-250FF	0-L094-1-000	Industrial Fans	100	12	6	NEMA-12, IP 52
AHP-250FF	0-L095-1-000	Industrial Fans	100	24	3	NEMA-12, IP 52
AHP-250XE	0-L094-5-000	Sealed Hot Side Fan	100	12	6	NEMA-4, IP 56
AHP-250XE	0-L095-5-000	Sealed Hot Side Fan	100	24	3	NEMA-4, IP 56
AHP-250X	0-L094-3-000	Mil. Grade Hot Side Fan	100	12	6	NEMA-4X, IP 56
AHP-250X	0-L095-3-000	Mil. Grade Hot Side Fan	100	24	3	NEMA-4X, IP 56

Heat function via reverse polarity (controller dependent)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	35°C	50°C	
Enclosure Air	$y = 1.35x - 51$	$y = 1.34x - 52$	
Cold Sink	$y = 1.15x - 51.7$	$y = 1.13x - 52.6$	

AHP-250

MOUNTING STYLE

Through Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

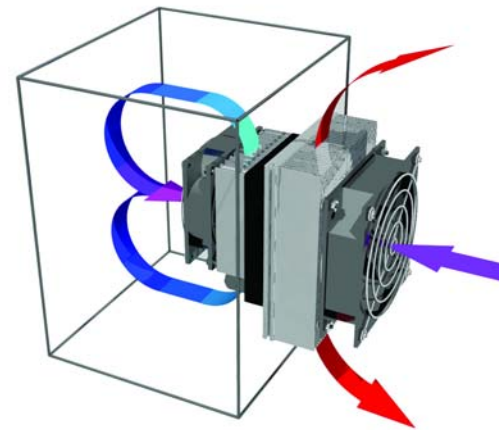
RATING (TRADITIONAL)

129 BTU/hr @ 0 °F ΔT 162 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

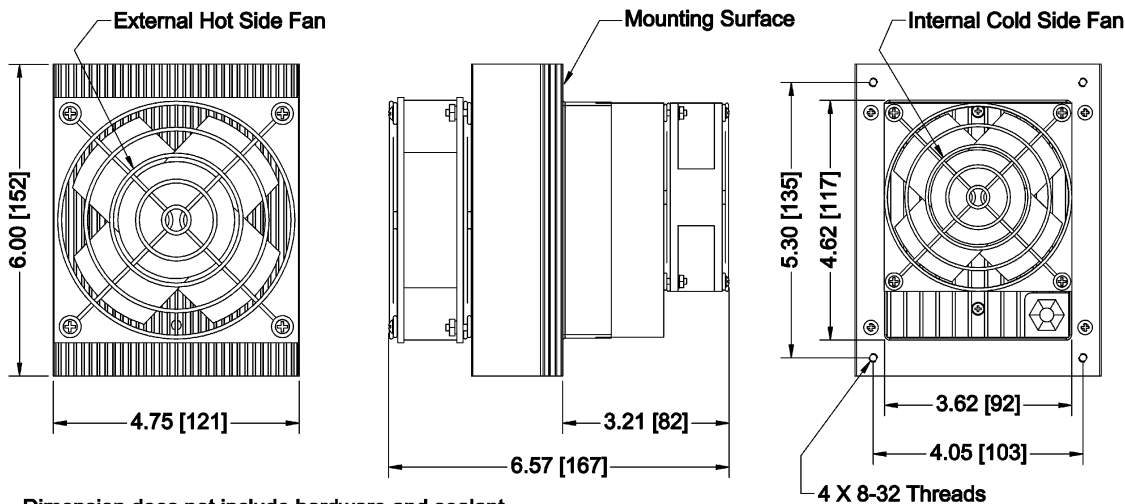
38 Watts L35 L35

28 Watts L35 L50



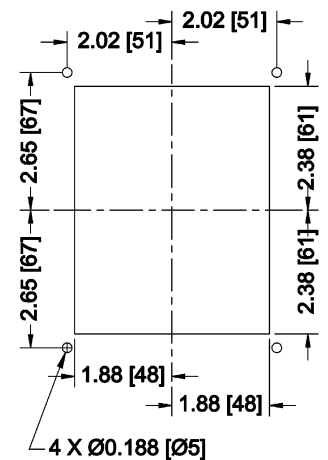
Air Flow Pattern

DIMENSIONS



Dimension does not include hardware and sealant.
Hardware and gasket included but not shown.
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



FHP-6263

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Capacity
4970 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 180 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

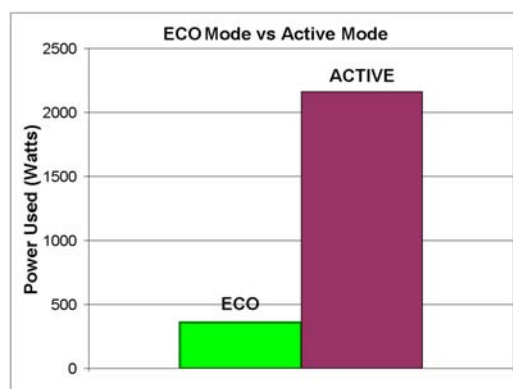
Voltage, 3 Phase Delta	240 VAC
Current, Active	11 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	4970 BTU/HR
Cooling (Din 3168)	1458 WATTS
Cooling COP (at L35 L35)	0.32
Heating (Traditional)	> 15000 BTU/HR
Heating (Din 3168)	> 4570 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

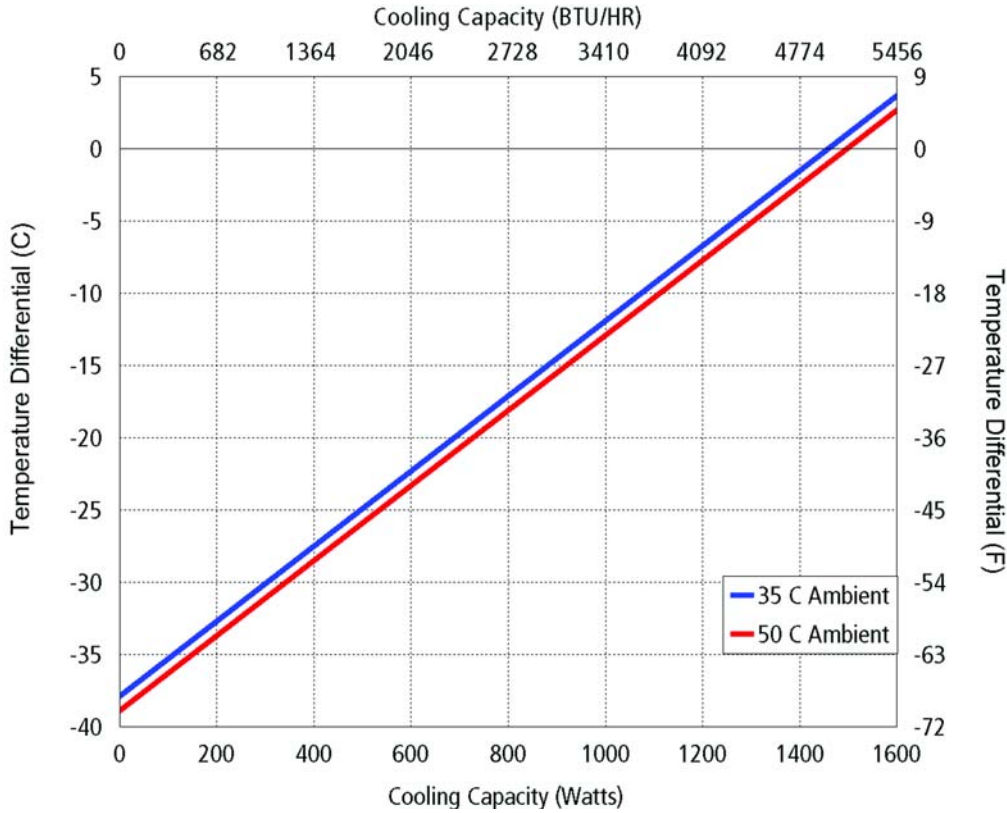
- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-6263	7-K5JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-6263HC	7-K5ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-6263XE	7-K5JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-6263XEHC	7-K5ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-6263X	7-K5JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-6263XHC	7-K5ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-6263**PERFORMANCE CURVE**

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient	35 C	50 C
Enclosure Air	$y = .026x - 37.9$	$y = .026x - 38.9$
Cold Sink	$y = .018x - 37.9$	$y = .018x - 38.9$

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

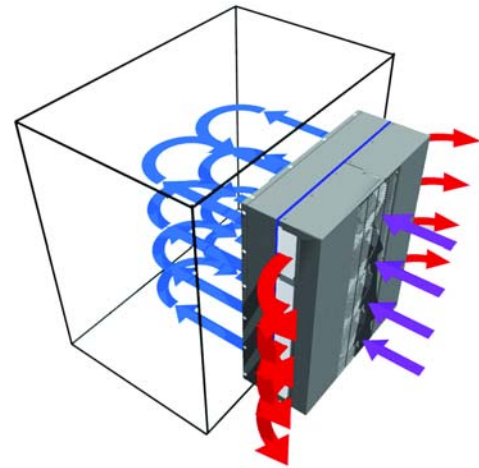
NEMA-12 IP 52

NEMA-4,4X IP 56

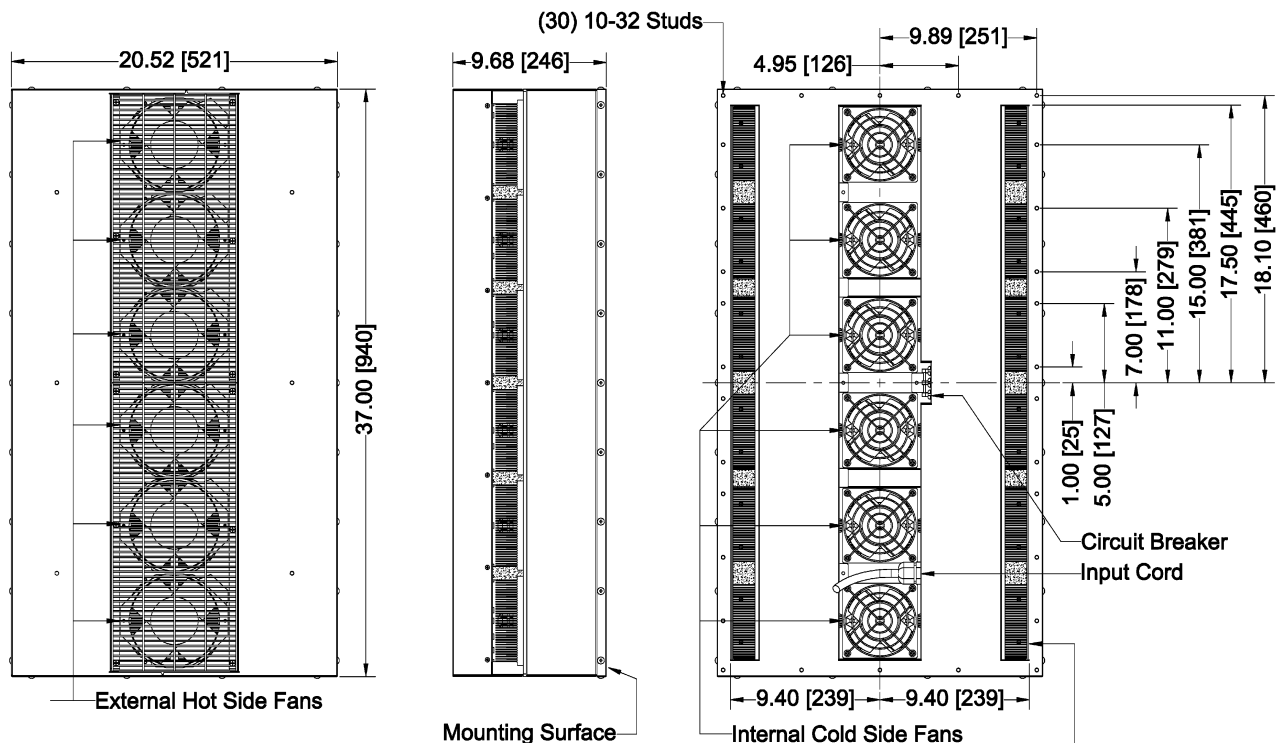
RATING (TRADITIONAL)4970 BTU/hr @ 0 °F ΔT 6428 BTU/hr @ +20 °F ΔT **RATING (DIN 3168)**

1458 Watts L35 L35

919 Watts L35 L50



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

FHP-6253

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Capacity
4830 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 180 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

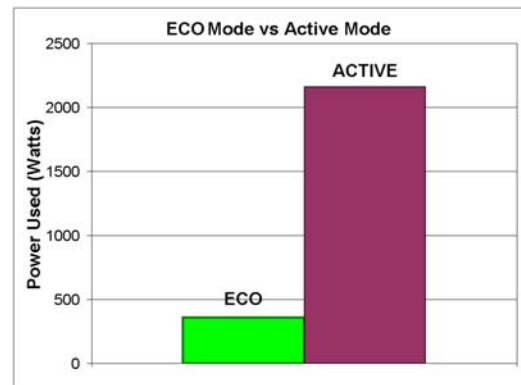
Voltage, 3 Phase Delta	240 VAC
Current, Active	5.5 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	4830 BTU/HR
Cooling (Din 3168)	1416 WATTS
Cooling COP (at L35 L35)	0.62
Heating (Traditional)	> 7800 BTU/HR
Heating (Din 3168)	> 2290 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-6253	7-K4JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-6253HC	7-K4ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-6253XE	7-K4JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-6253XEHC	7-K4ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-6253X	7-K4JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-6253XHC	7-K4ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-6253**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

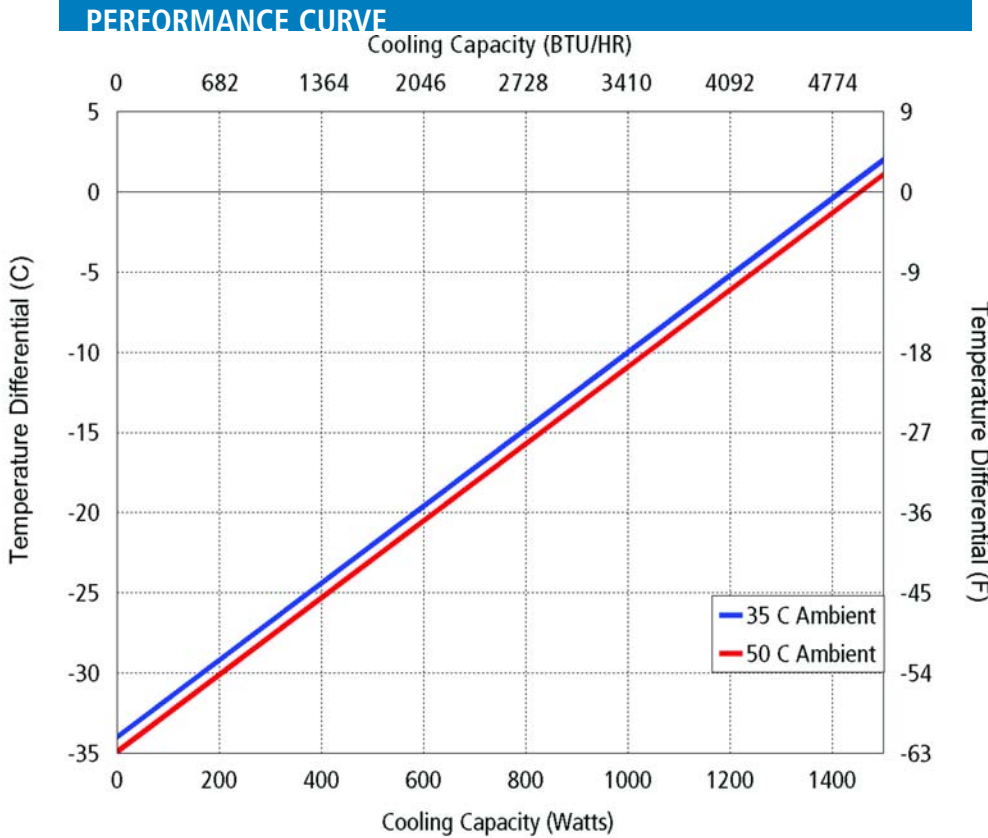
4830 BTU/hr @ 0 °F ΔT

6410 BTU/hr @ +20 °F ΔT

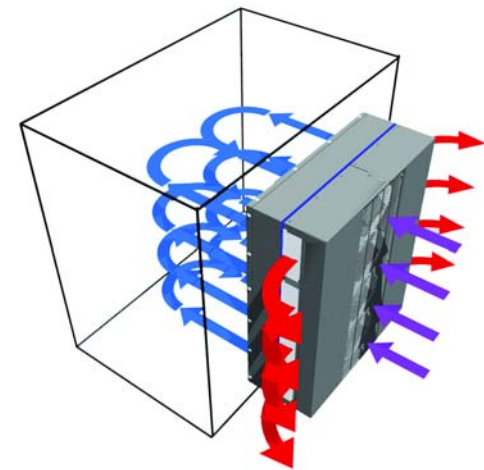
RATING (DIN 3168)

1416 Watts L35 L35

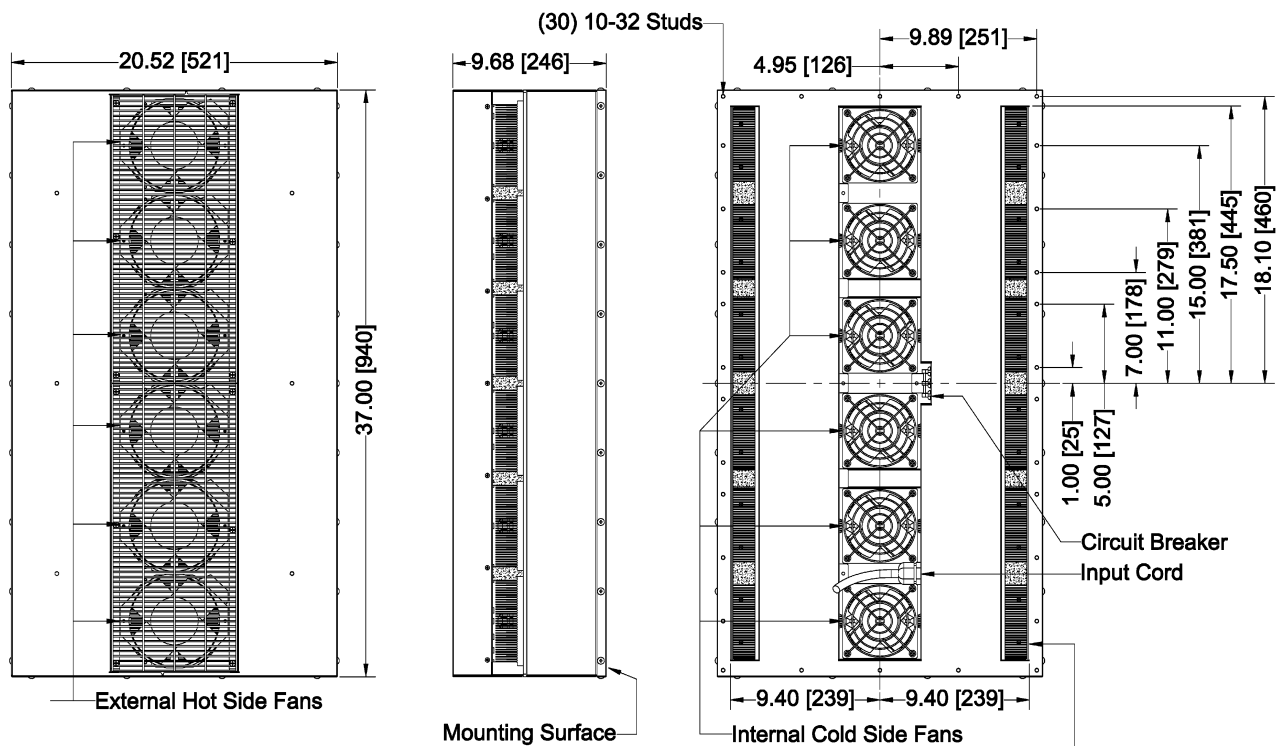
829 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient	35 C	50 C
Enclosure Air	$y = .024x - 34$	$y = .024x - 34.9$
Cold Sink	$y = .016x - 34$	$y = .016x - 34.9$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

FHP-6252

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
4480 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 180 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

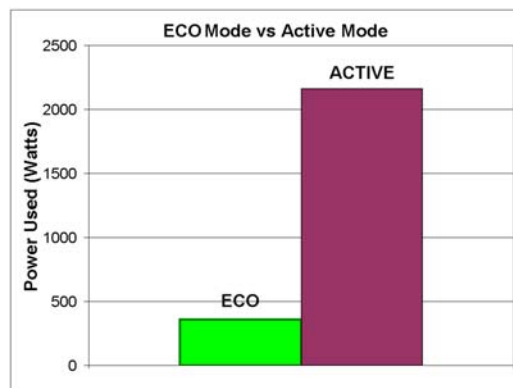
Voltage	240 VAC
Current, Active	9.2 AMPS
Current , ECO-Mode	1.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	4480 BTU/HR
Cooling (Din 3168)	1315 WATTS
Cooling COP (at L35 L35)	0.60
Heating (Traditional)	> 7365 BTU/HR
Heating (Din 3168)	> 2160 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-6252	7-K4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-6252HC	7-K4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-6252XE	7-K4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-6252XEHC	7-K4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-6252X	7-K4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-6252XHC	7-K4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-6252**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

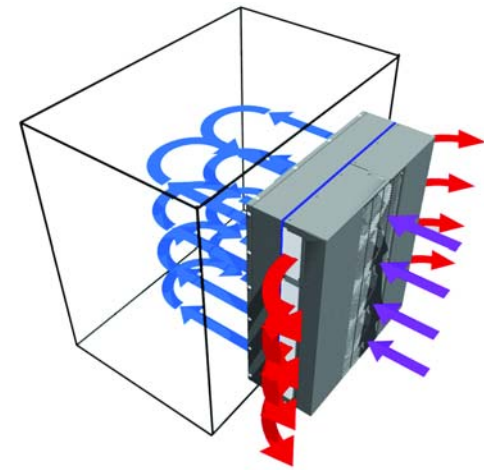
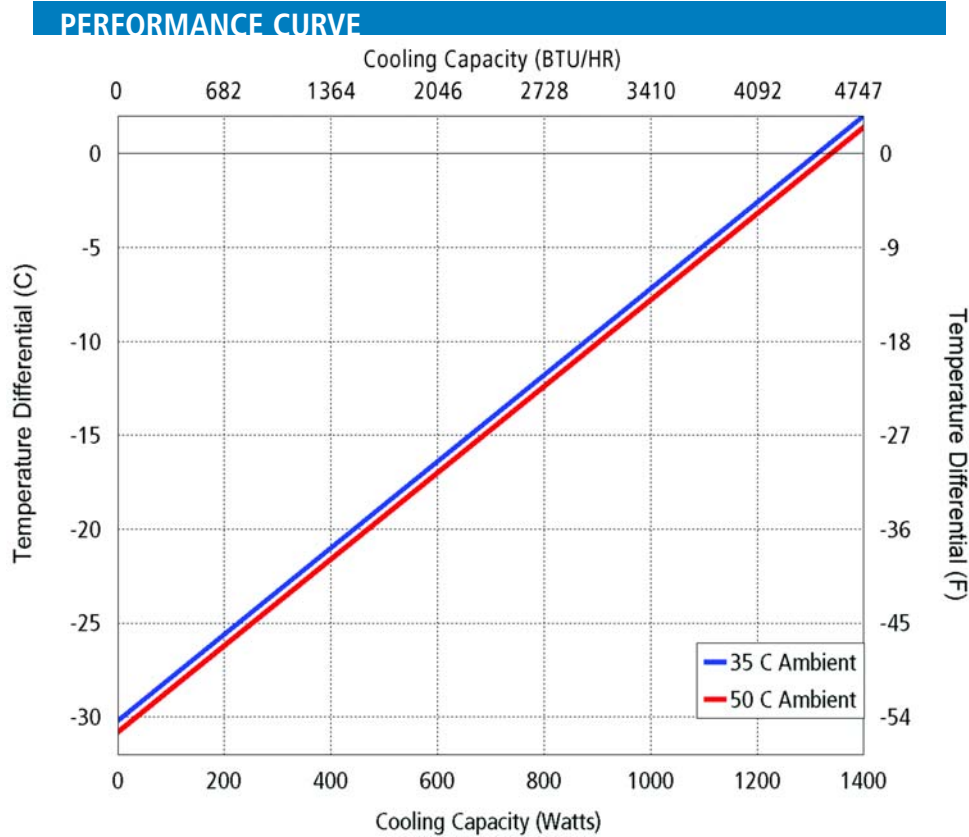
4480 BTU/hr @ 0 °F ΔT

6125 BTU/hr @ +20 °F ΔT

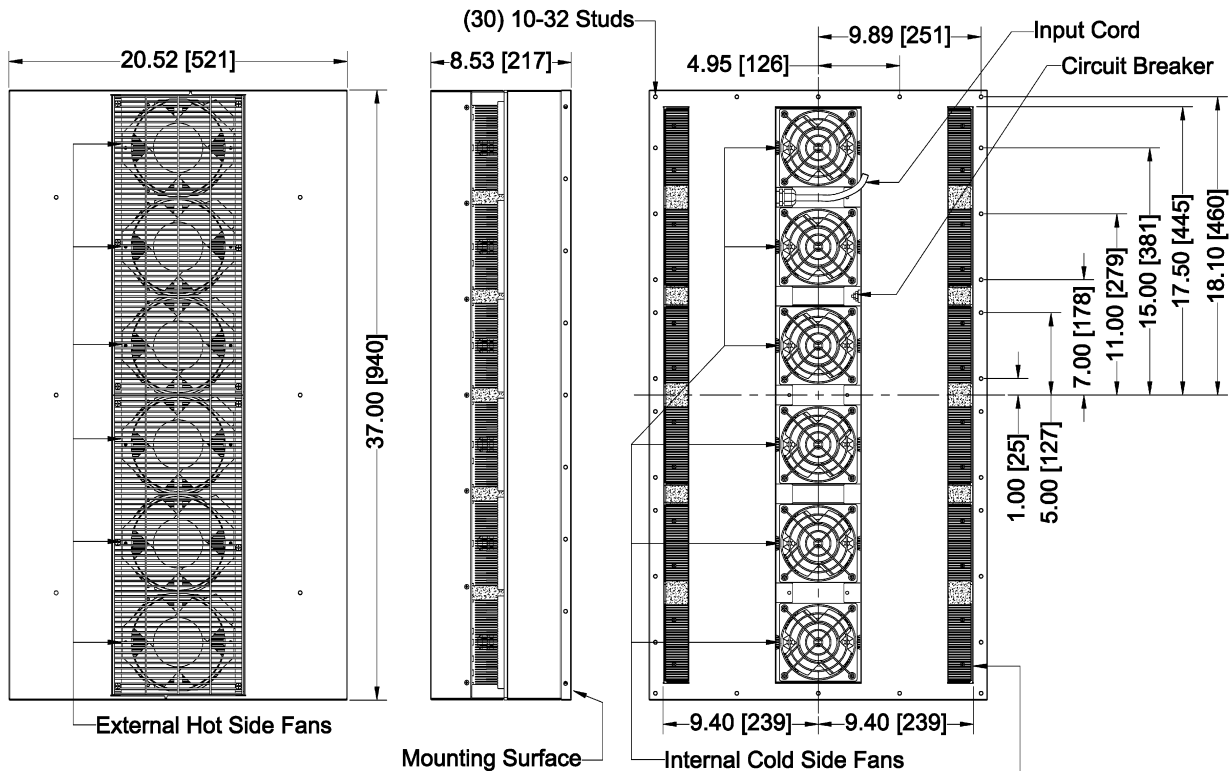
RATING (DIN 3168)

1315 Watts L35 L35

687 Watts L35 L50



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

FHP-6250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

120 VAC Input
High Capacity
3820 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger (ECO-mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 170 LBS.



CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

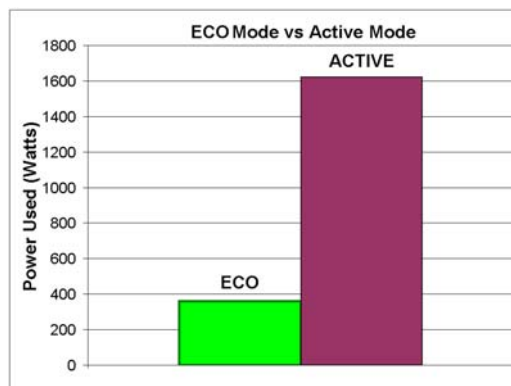
Voltage	120 VAC
Current, Active	14 AMPS
Current , ECO-Mode	3.0 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	3820 BTU/HR
Cooling (Din 3168)	1120 WATTS
Cooling COP (at L35 L35)	0.67
Heating (Traditional)	> 5524 BTU/HR
Heating (Din 3168)	> 1620 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-mode)	45 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-6250	7-K4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-6250HC	7-K4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-6250XE	7-K4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-6250XEHC	7-K4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-6250X	7-K4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-6250XHC	7-K4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-6250**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

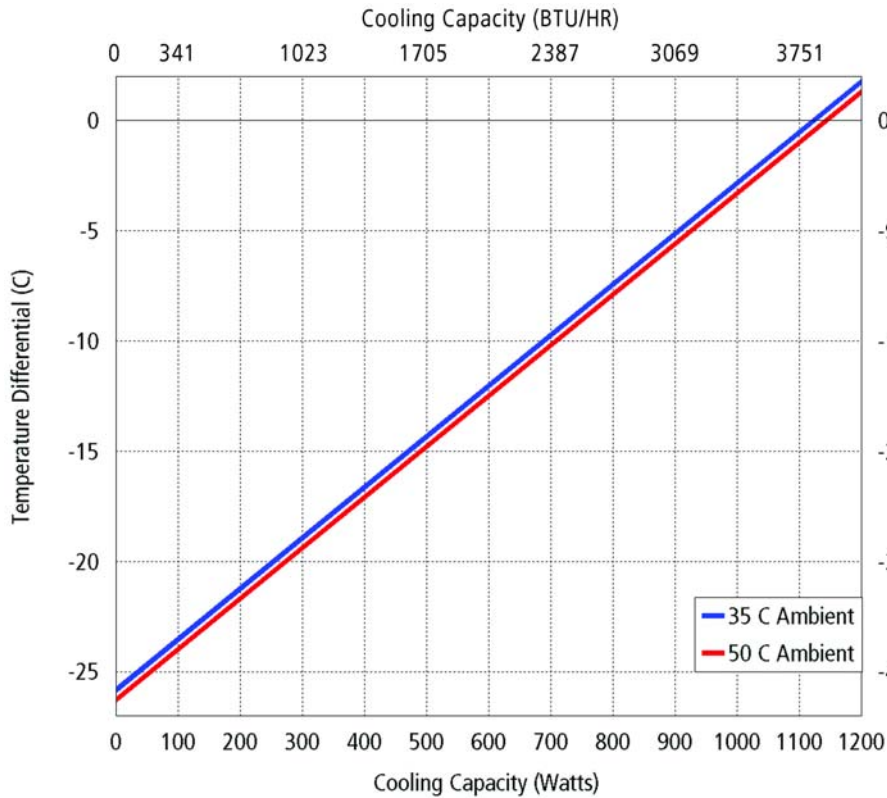
3820 BTU/hr @ 0 °F ΔT

5472 BTU/hr @ +20 °F ΔT

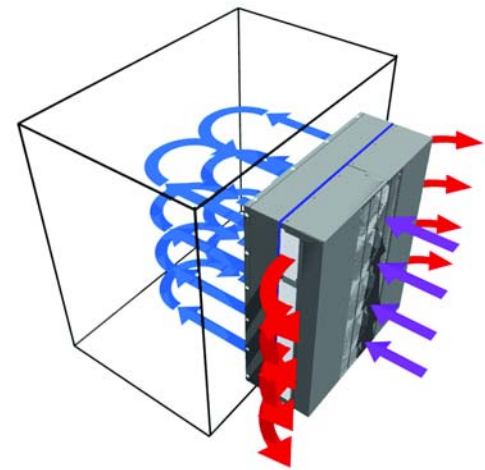
RATING (DIN 3168)

1120 Watts L35 L35

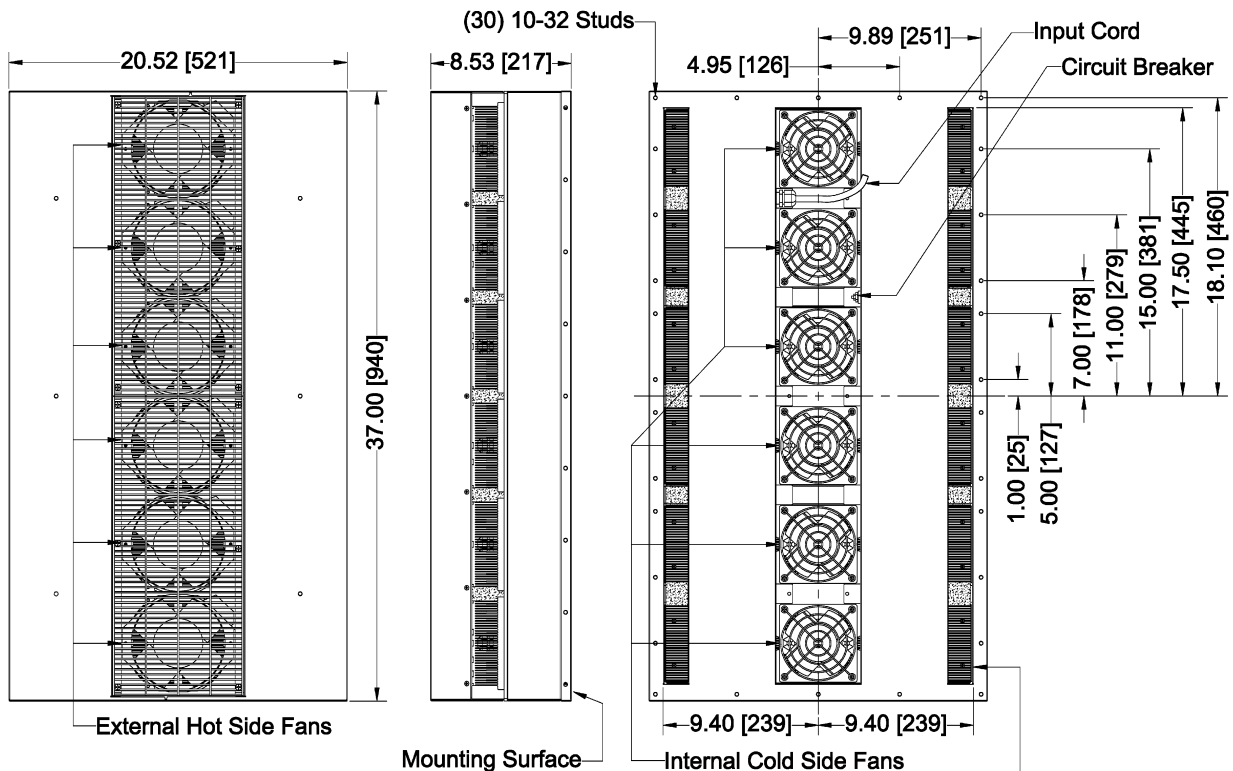
491 Watts L35 L50



Temperature Differential (F)



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimension: Inches [Millimeters]

FHP-4252

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
3615 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 116 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

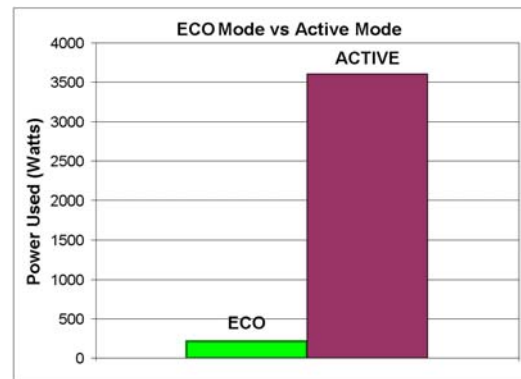
Voltage	240 VAC
Current, Active	12.5 AMPS
Current , ECO-Mode	0.9 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	3615 BTU/HR
Cooling (Din 3168)	1060 WATTS
Cooling COP (at L35 L35)	0.35
Heating (Traditional)	> 12000 BTU/HR
Heating (Din 3168)	> 3600 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-4252	7-J5J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-4252HC	7-J5I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-4252XE	7-J5J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-4252XEHC	7-J5I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-4252X	7-J5J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-4252XHC	7-J5I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-4252**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

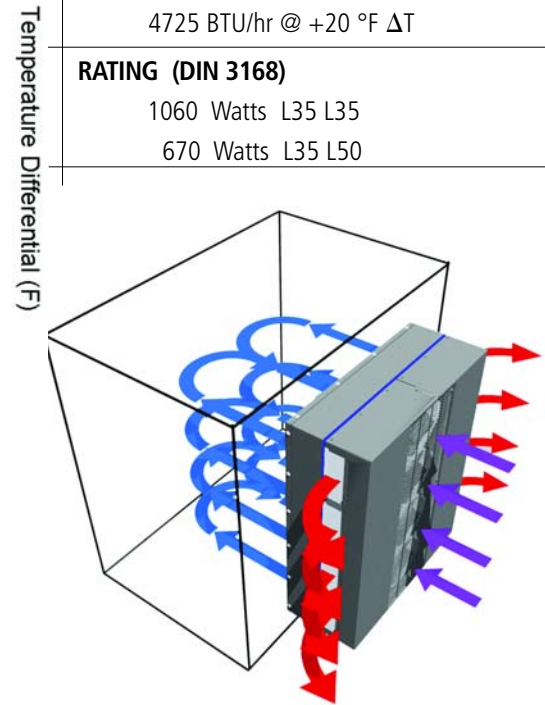
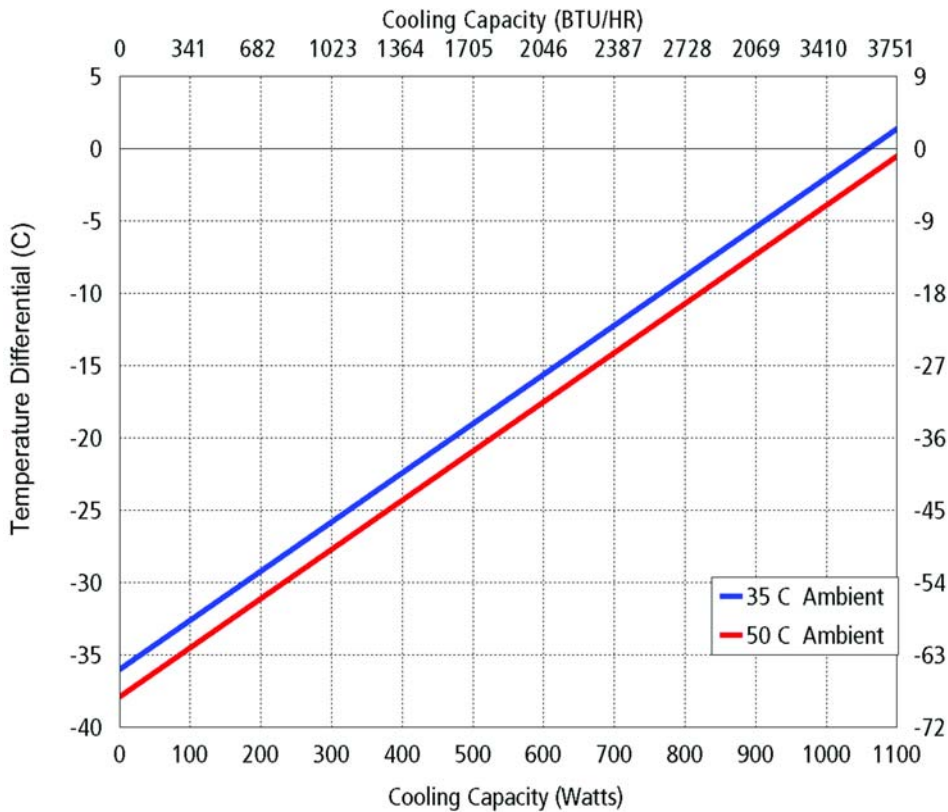
3615 BTU/hr @ 0 °F ΔT

4725 BTU/hr @ +20 °F ΔT

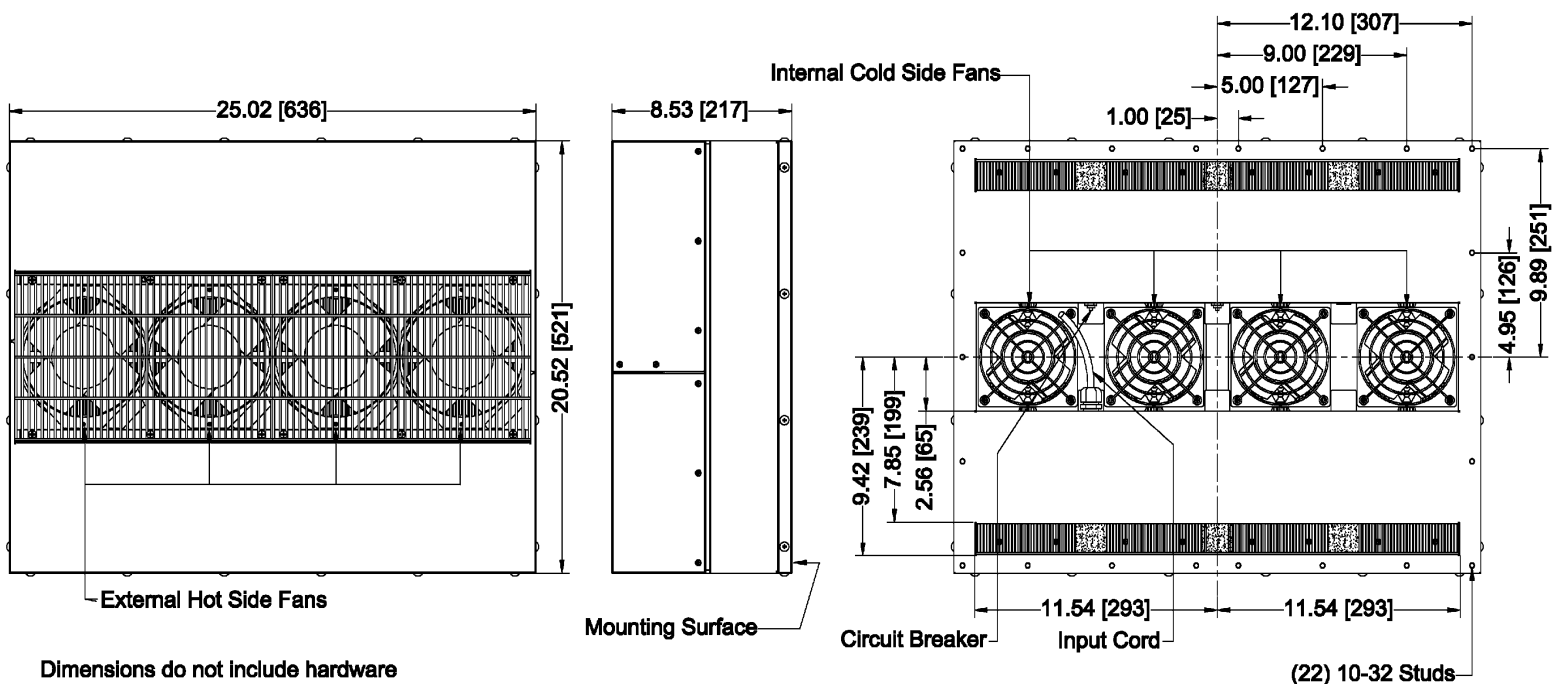
RATING (DIN 3168)

1060 Watts L35 L35

670 Watts L35 L50



Air Flow Pattern

DIMENSIONS



FHP-4252

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

240 VAC Input
High Efficiency
2615 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 116 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

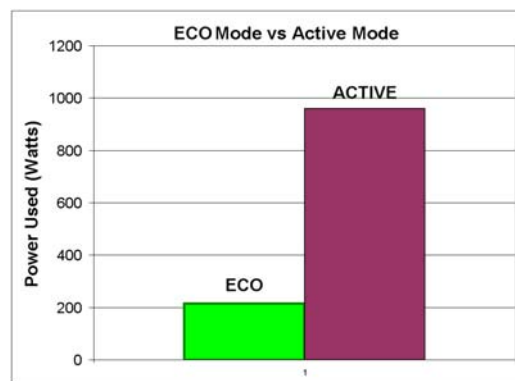
Voltage	240 VAC
Current, Active	4.0 AMPS
Current , ECO-Mode	0.9 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2615 BTU/HR
Cooling (Din 3168)	767 WATTS
Cooling COP (at L35 L35)	0.80
Heating (Traditional)	> 3270 BTU/HR
Heating (Din 3168)	> 960 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-4252	7-J4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-4252HC	7-J4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-4252XE	7-J4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-4252XEHC	7-J4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-4252X	7-J4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-4252XHC	7-J4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-4252**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

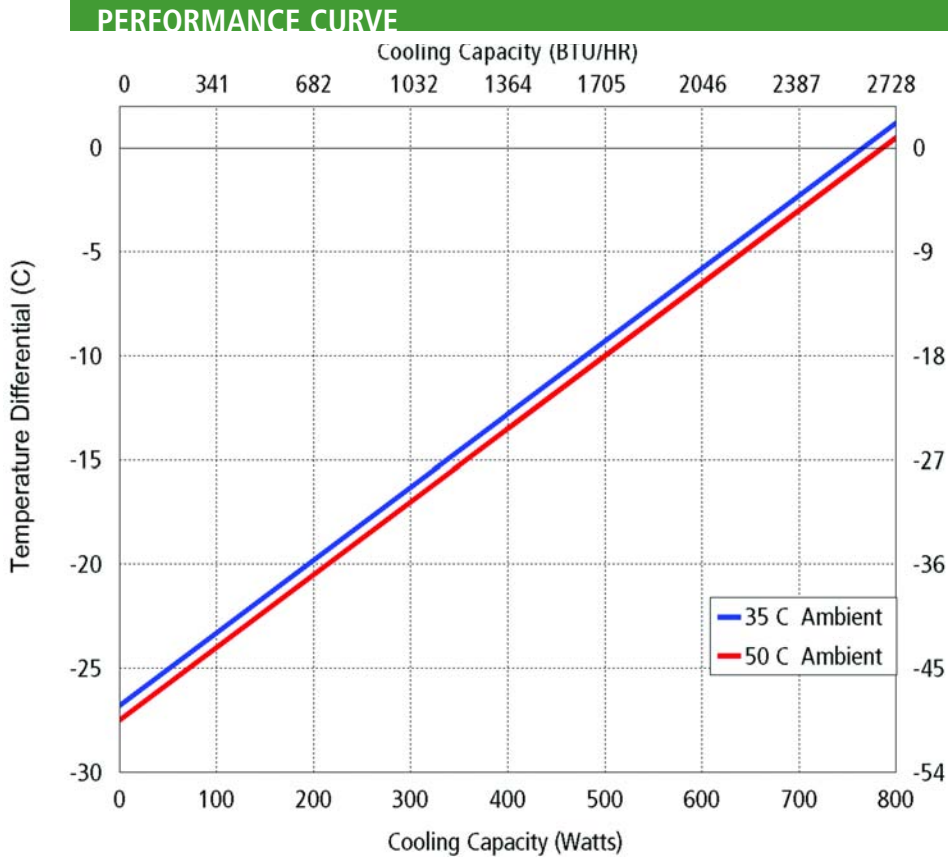
2615 BTU/hr @ 0 °F ΔT

3693 BTU/hr @ +20 °F ΔT

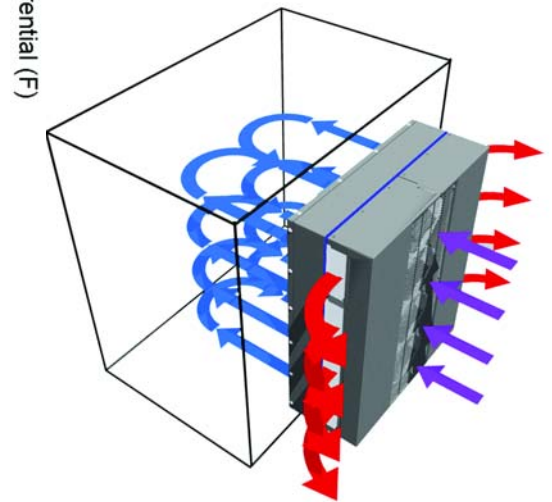
RATING (DIN 3168)

767 Watts L35 L35

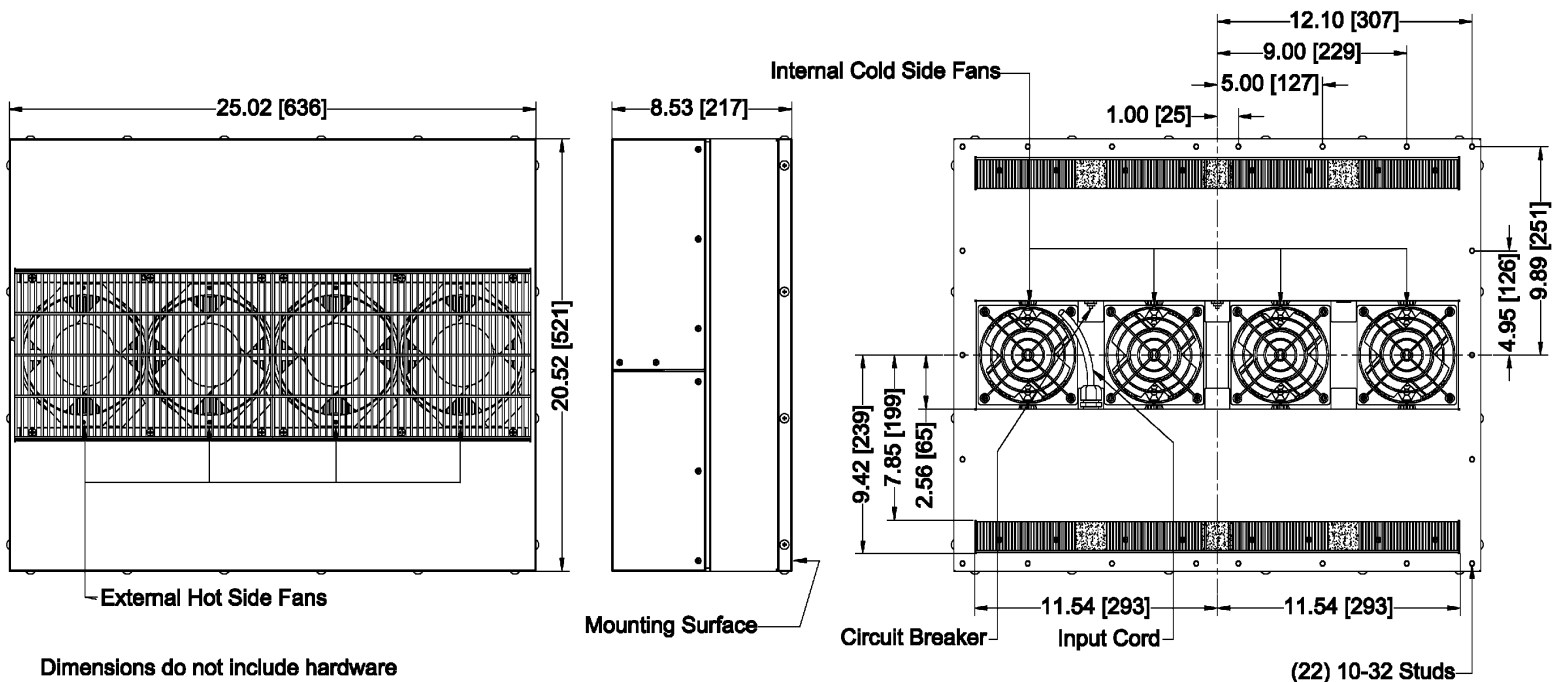
360 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .035x - 26.8$	$y = .035x - 27.5$
Cold Sink	$y = .027x - 26.8$	$y = .027x - 27.5$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]



FHP-4250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
2408 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 116 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

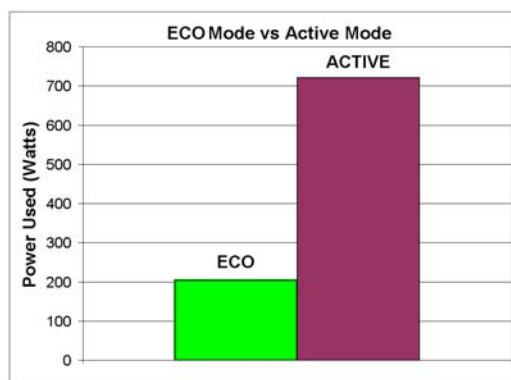
Voltage	120 VAC
Current, Active	6 AMPS
Current , ECO-Mode	1.7 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2408 BTU/HR
Cooling (Din 3168)	706 WATTS
Cooling COP (at L35 L35)	0.98
Heating (Traditional)	> 2455 BTU/HR
Heating (Din 3168)	> 720 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	30 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-4250	7-J4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-4250HC	7-J4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-4250XE	7-J4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-4250XEHC	7-J4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-4250X	7-J4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-4250XHC	7-J4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-4250**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

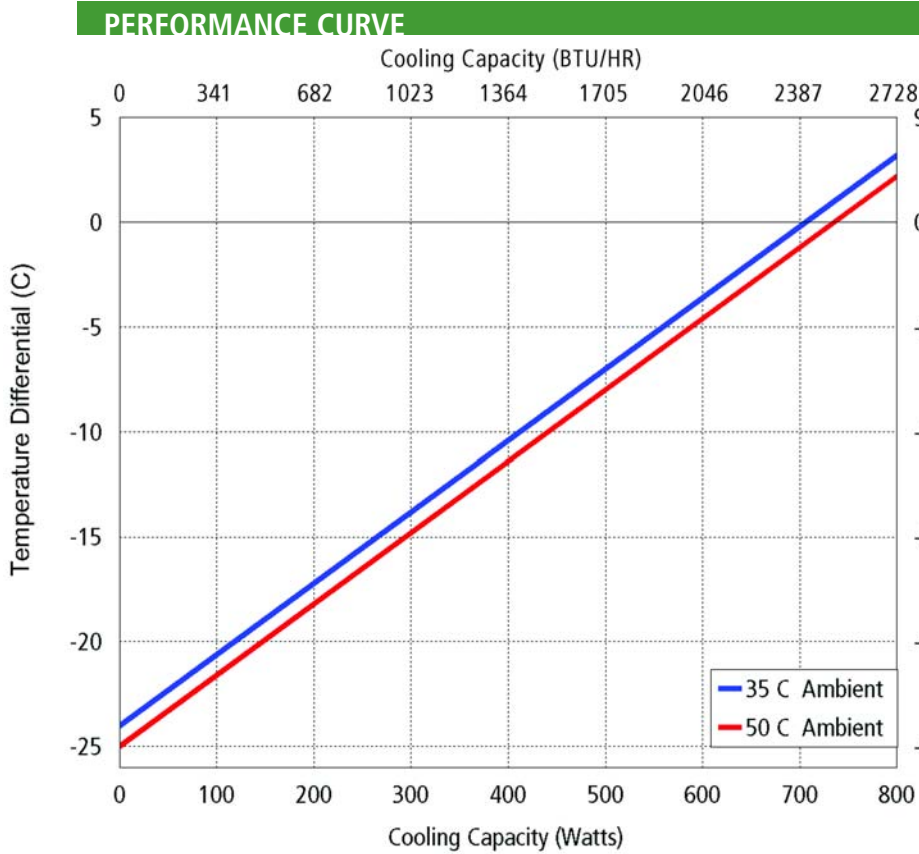
2408 BTU/hr @ 0 °F ΔT

3520 BTU/hr @ +20 °F ΔT

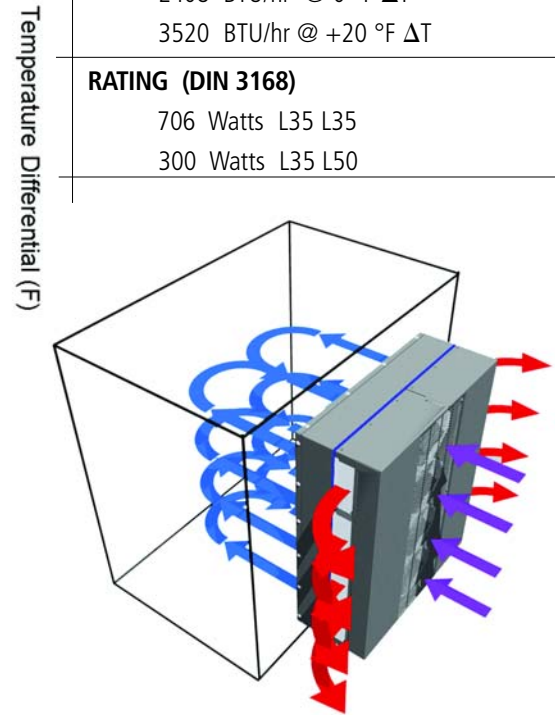
RATING (DIN 3168)

706 Watts L35 L35

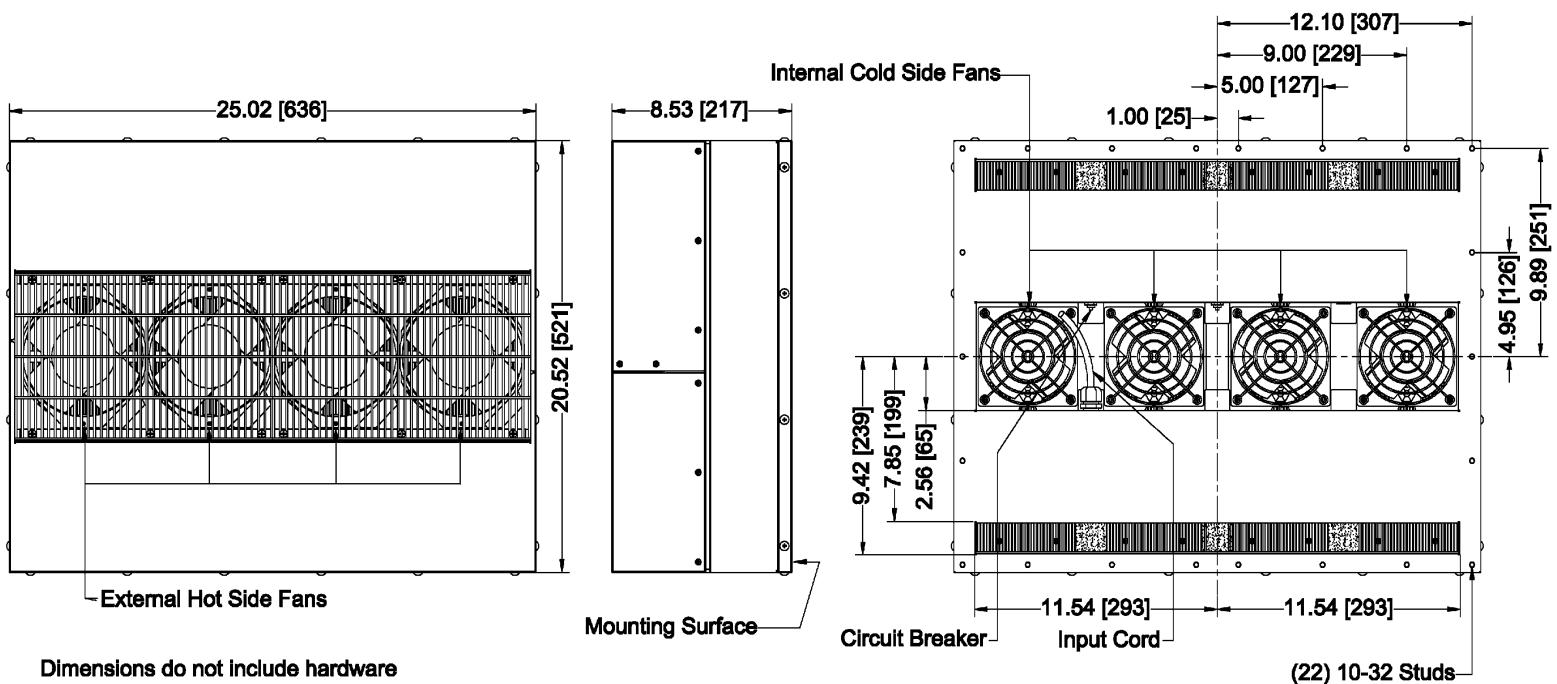
300 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .034x - 24$	$y = .034x - 25$
Cold Sink	$y = .026x - 24$	$y = .026x - 25$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

FHP-3253

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

3 Phase, 240 VAC, 3 Wire Delta
High Capacity
2593 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 93 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

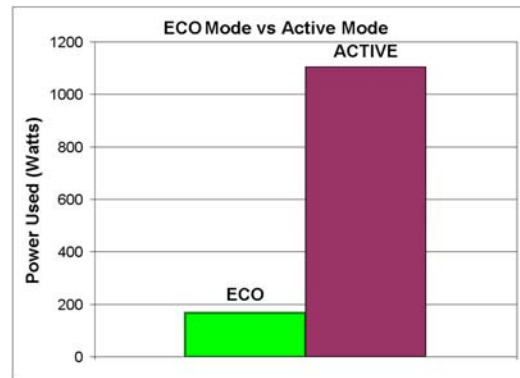
Voltage, 3 Phase Delta	240 VAC
Current, Active (per phase)	2.9 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2593 BTU/HR
Cooling (Din 3168)	760 WATTS
Cooling COP (at L35 L35)	0.63
Heating (Traditional)	> 4100 BTU/HR
Heating (Din 3168)	> 1205 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-3253	7-I4JD-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-3253HC	7-I4ID-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-3253XE	7-I4JD-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-3253XEHC	7-I4ID-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-3253X	7-I4JD-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-3253XHC	7-I4ID-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-3253**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

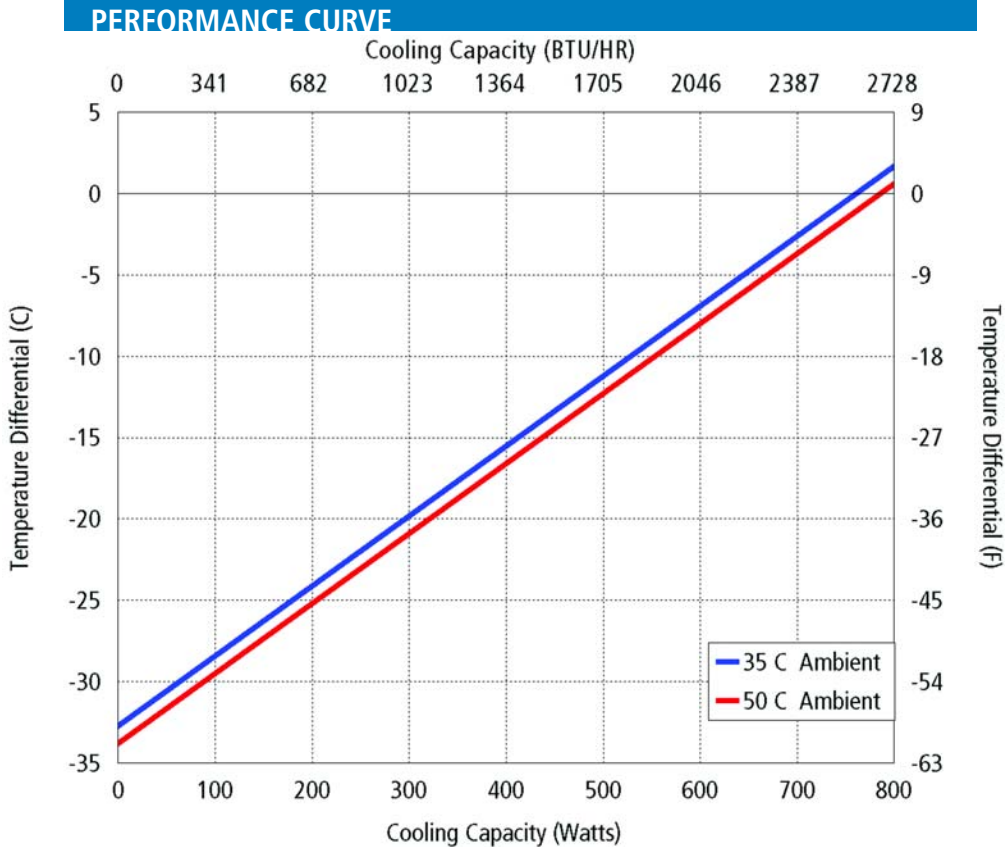
2593 BTU/hr @ 0 °F ΔT

3474 BTU/hr @ +20 °F ΔT

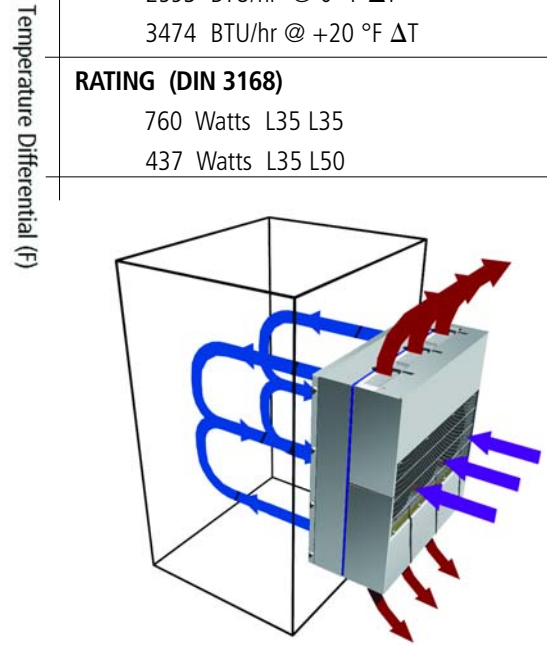
RATING (DIN 3168)

760 Watts L35 L35

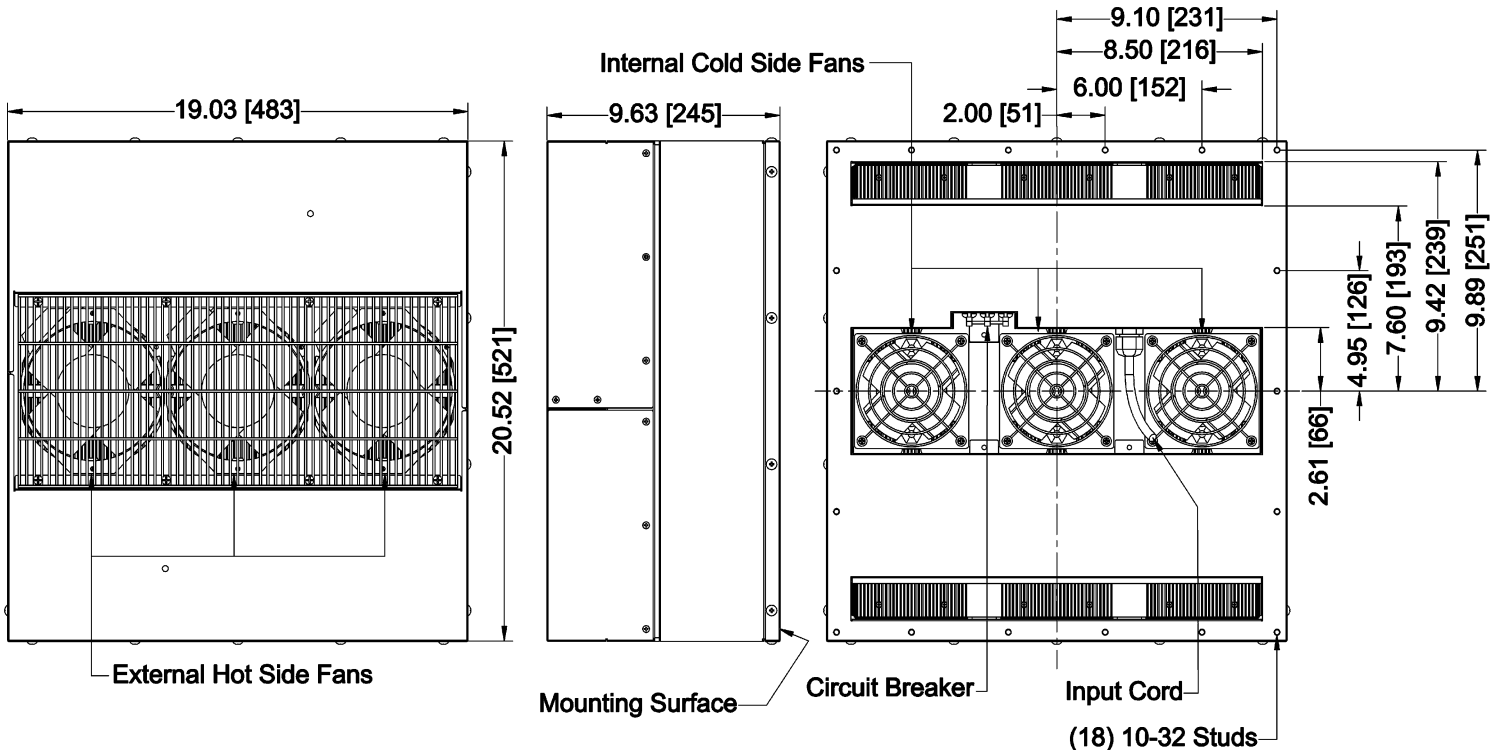
437 Watts L35 L50



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Enclosure Air	$y = .043x - 32.7$	$y = .043x - 33.8$
Cold Sink	$y = .032x - 32.7$	$y = .032x - 33.8$



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware

Mounting hardware and gasket included but not shown

Dimensions: Inches [Millimeters]

FHP-3254

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

3 Phase, 208 VAC, 4 Wire Wye
High Capacity
2235 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 93 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

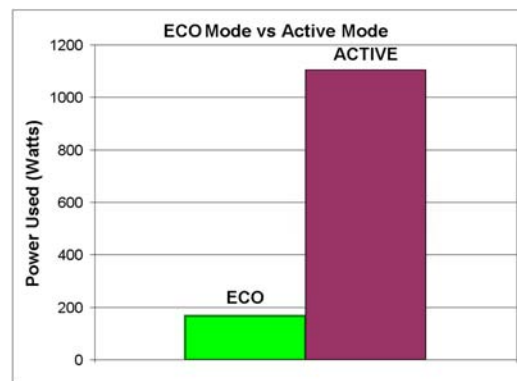
Voltage, 3 Phase Wye	208 VAC
Current, Active (per phase)	2.6 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2235 BTU/HR
Cooling (Din 3168)	655 WATTS
Cooling COP (at L35 L35)	0.61
Heating (Traditional)	> 3294 BTU/HR
Heating (Din 3168)	> 937 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-3254	7-I4JE-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-3254HC	7-I4IE-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-3254XE	7-I4JE-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-3254XEHC	7-I4IE-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-3254X	7-I4JE-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-3254XHC	7-I4IE-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-3254**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

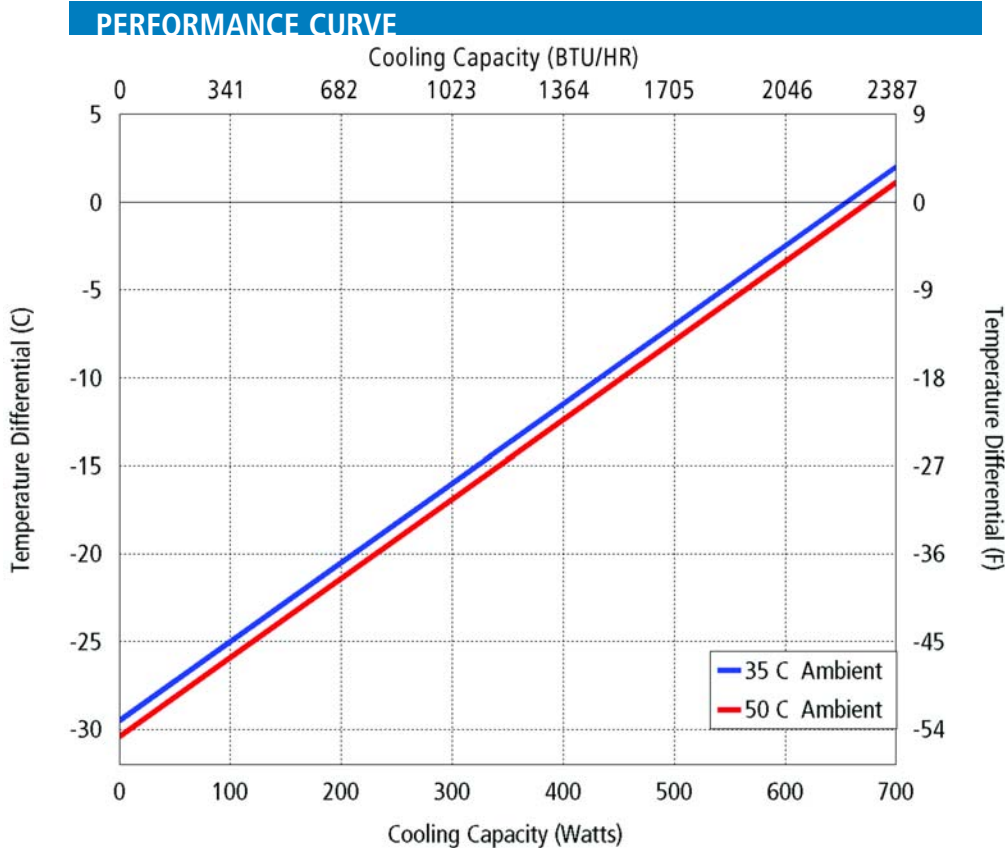
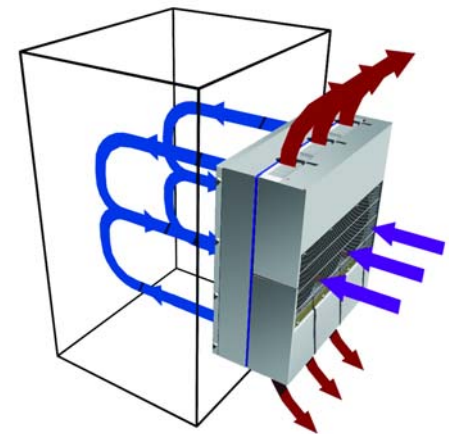
2235 BTU/hr @ 0 °F ΔT

3077 BTU/hr @ +20 °F ΔT

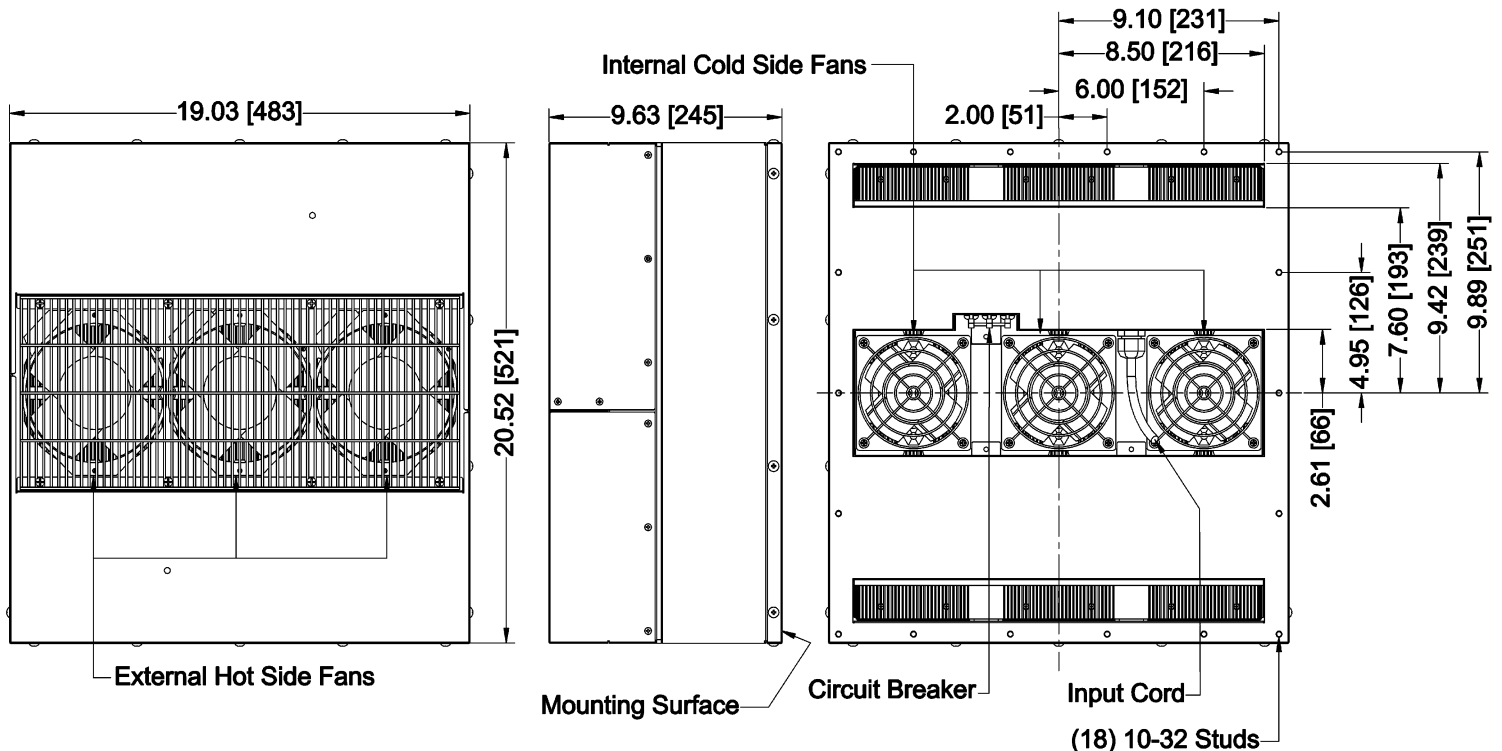
RATING (DIN 3168)

655 Watts L35 L35

342 Watts L35 L50

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$ Enclosure Air $y = .045x - 29.5$ $y = .045x - 30.4$ Cold Sink $y = .0354x - 29.5$ $y = .035x - 30.4$ 

Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware

Mounting hardware and gasket included but not shown

Dimensions: Inches [Millimeters]

FHP-3252

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
2290 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 93 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

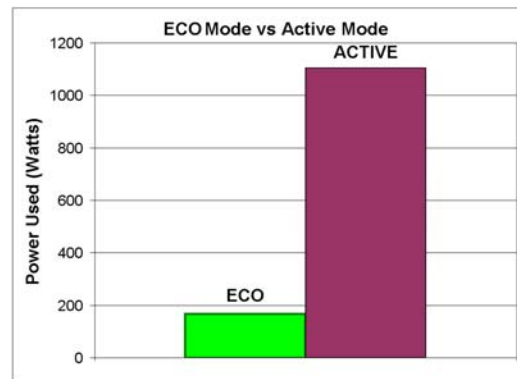
Voltage	240 VAC
Current, Active	4.6 AMPS
Current , ECO-Mode	0.70 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	2290 BTU/HR
Cooling (Din 3168)	672 WATTS
Cooling COP (at L35 L35)	0.61
Heating (Traditional)	> 3765 BTU/HR
Heating (Din 3168)	> 1104 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-3252	7-I4J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-3252HC	7-I4I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-3252XE	7-I4J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-3252XEHC	7-I4I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-3252X	7-I4J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-3252XHC	7-I4I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-3252**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

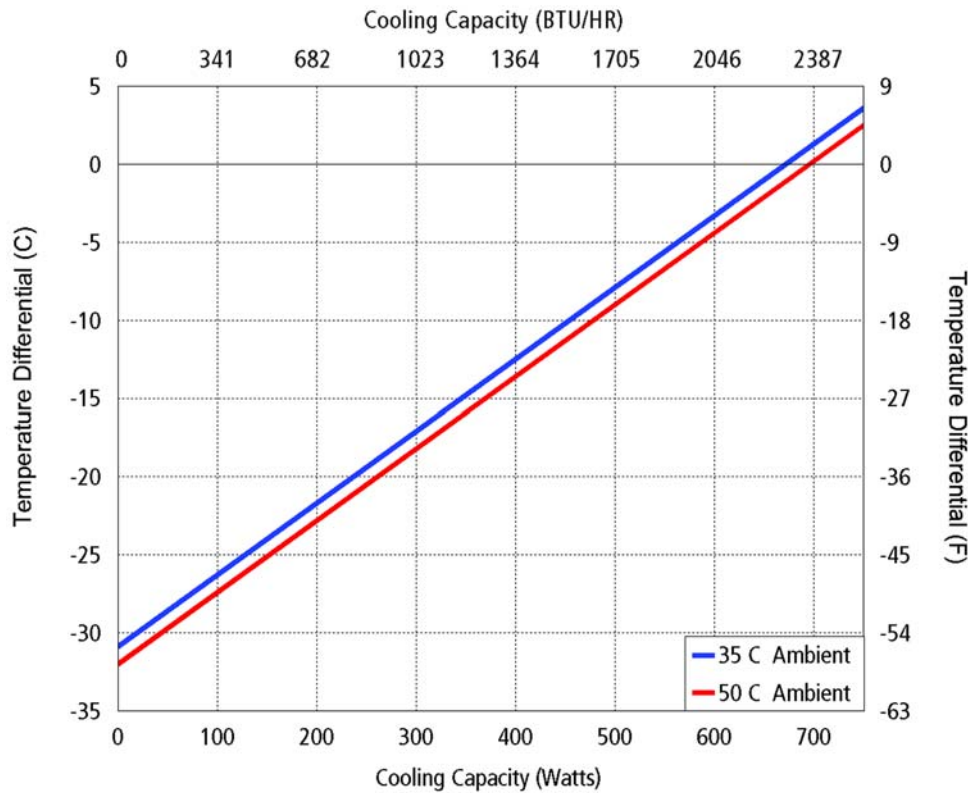
2290 BTU/hr @ 0 °F ΔT

3115 BTU/hr @ +20 °F ΔT

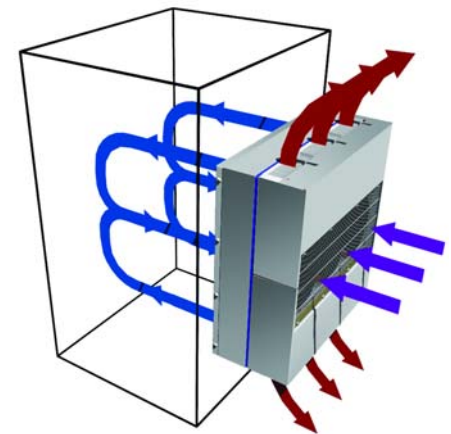
RATING (DIN 3168)

672 Watts L35 L35

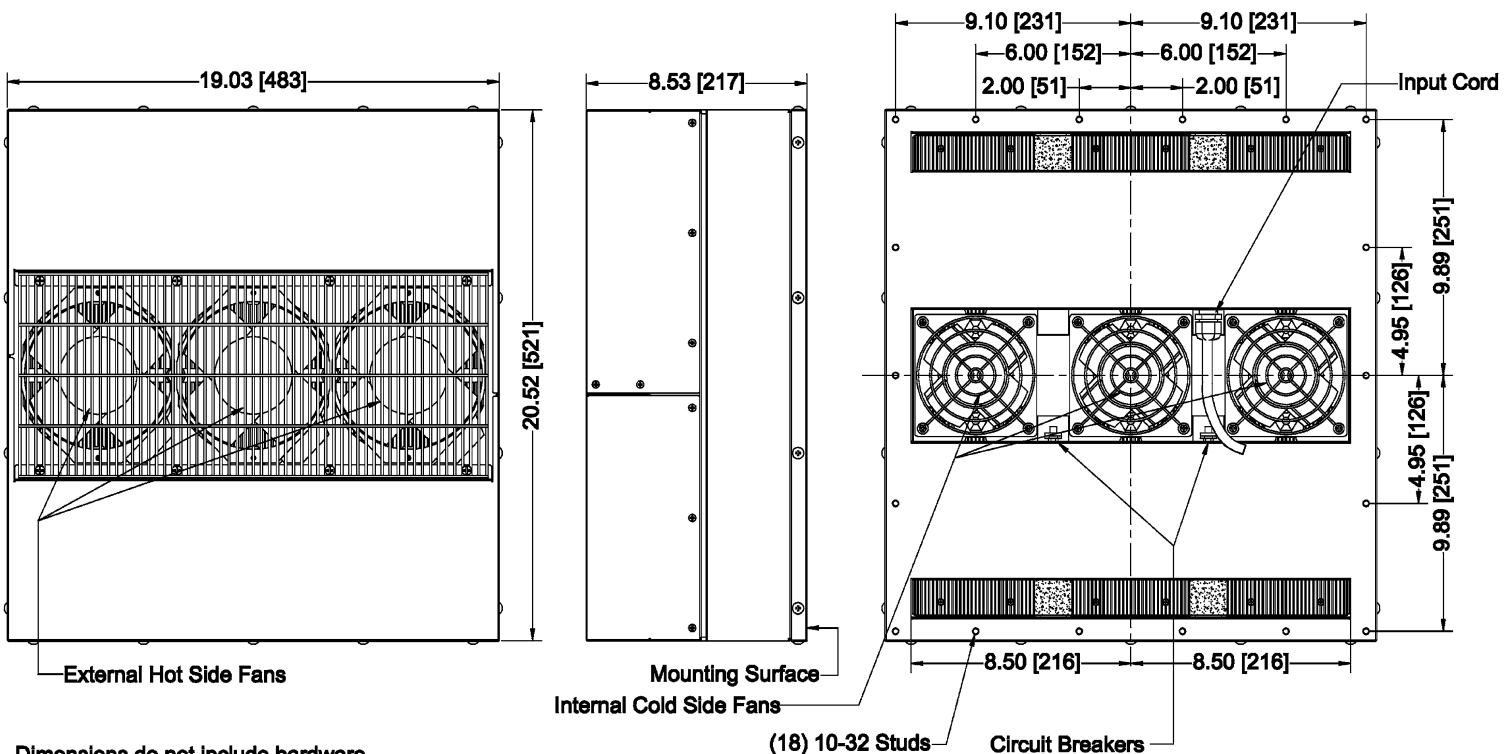
360 Watts L35 L50



Temperature Differential (F)



Air Flow Pattern

DIMENSIONS

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout: 17.20X18.90 [437X480]



FHP-3250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
1978 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Increased efficiency at higher ambients
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 93 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

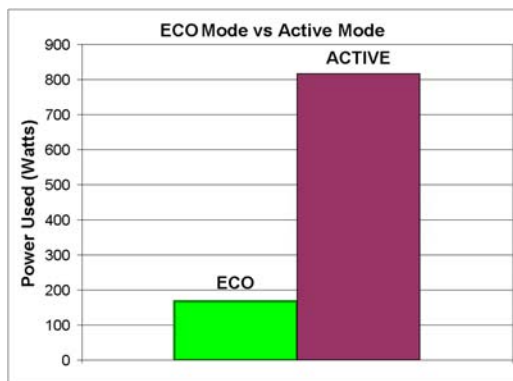
Voltage	120 VAC
Current, Active	7.0 AMPS
Current , ECO-Mode	1.4 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	1978 BTU/HR
Cooling (Din 3168)	580 WATTS
Cooling COP (at L35 L35)	0.70
Heating (Traditional)	> 2780 BTU/HR
Heating (Din 3168)	> 815 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	18 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker

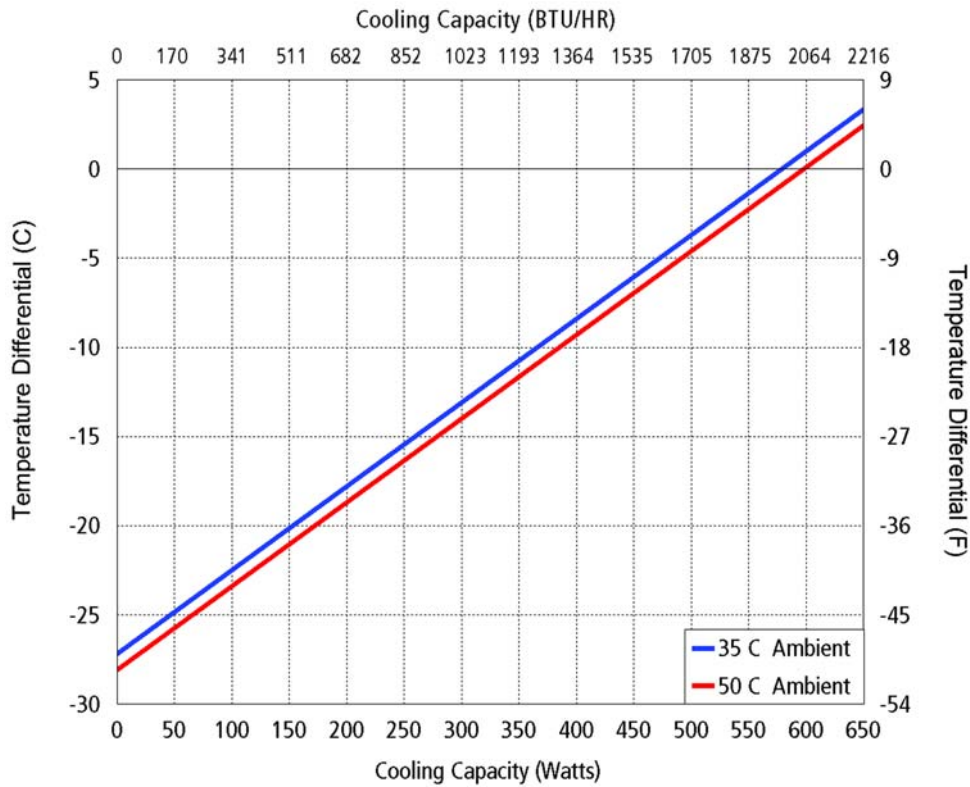


250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-3250	7-14J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-3250HC	7-14I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-3250XE	7-14J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-3250XEHC	7-14I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-3250X	7-14J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-3250XHC	7-14I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .047x - 27.2$	$y = .047x - 28.1$
Cold Sink	$y = .035x - 27.2$	$y = .035x - 28.1$

FHP-3250

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

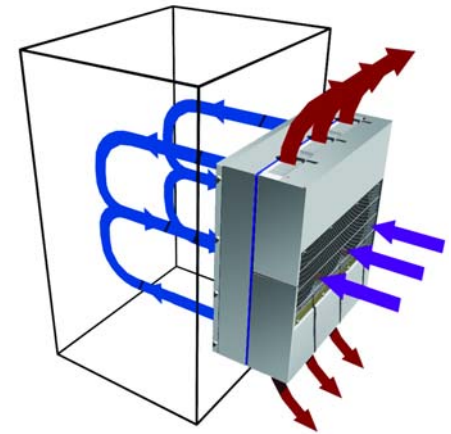
RATING (TRADITIONAL)

1978 BTU/hr @ 0 °F ΔT 2780 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

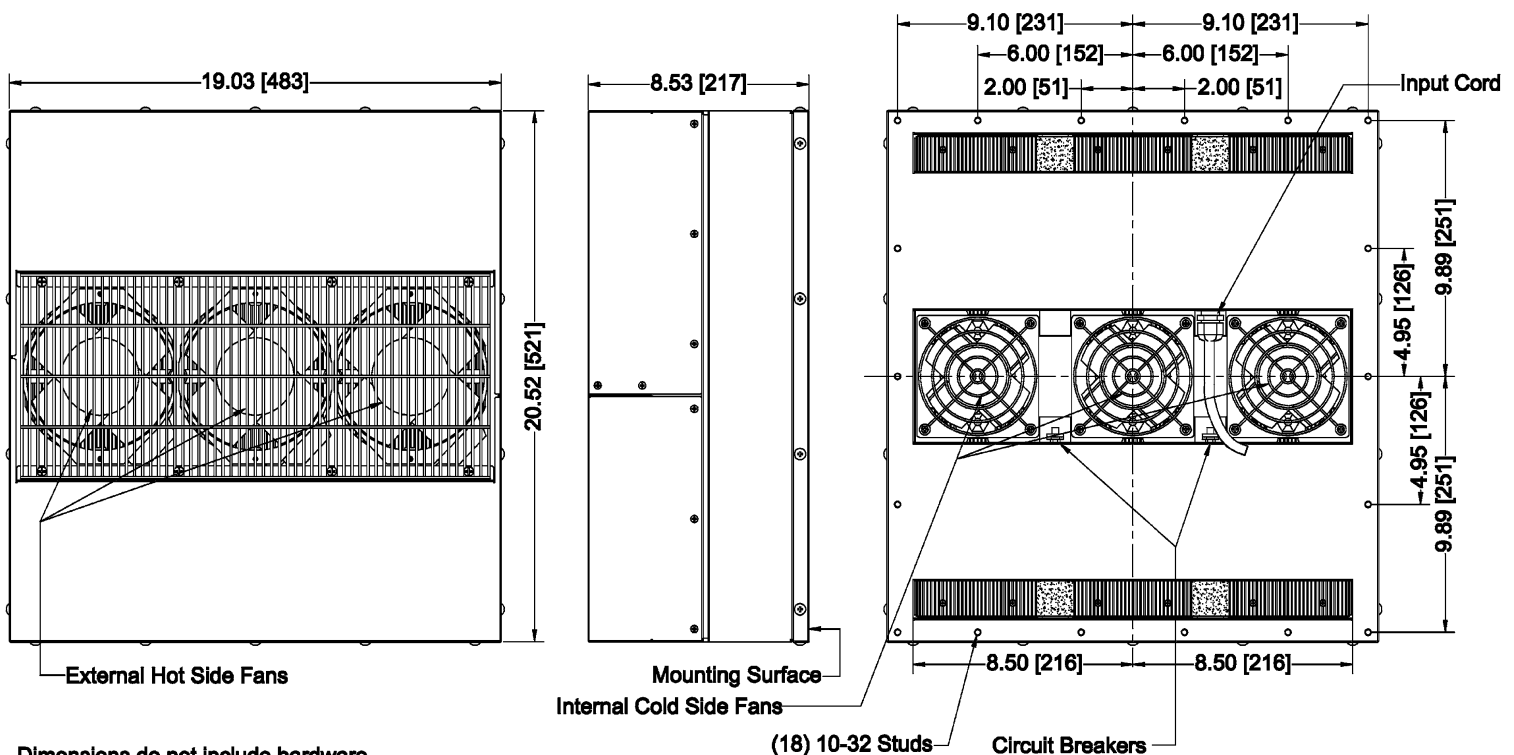
580 Watts L35 L35

275 Watts L35 L50



AIR FLOW PATTERN

DIMENSIONS



Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

Mounting Cutout: 17.20X18.90 [437X480]

FHP-2252

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

240 VAC Input
High Capacity
1875 BTU/HR

FFEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact (20.5" L X 13" W X 8.5" D)
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 66 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	240 VAC
Current, Active	6.5 AMPS
Current , ECO-Mode	0.5 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	1875 BTU/HR
Cooling (Din 3168)	550 WATTS
Cooling COP (at L35 L35)	0.35
Heating (Traditional)	> 5320 BTU/HR
Heating (Din 3168)	> 1560 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C

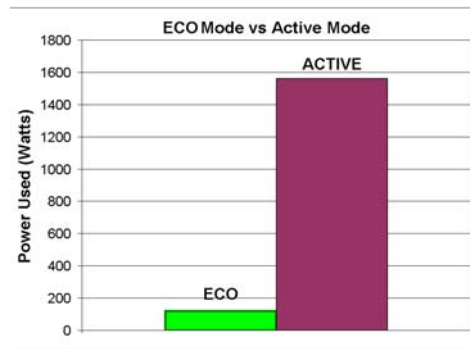
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-2252	7-H5J2-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-2252HC	7-H5I2-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-2252XE	7-H5J2-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-2252XEHC	7-H5I2-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-2252X	7-H5J2-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-2252XHC	7-H5I2-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

MOUNTING STYLE

ENVIRONMENTS SERVED

NEMA-4,4X IP 56

RATING (TRADITIONAL)

2480 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

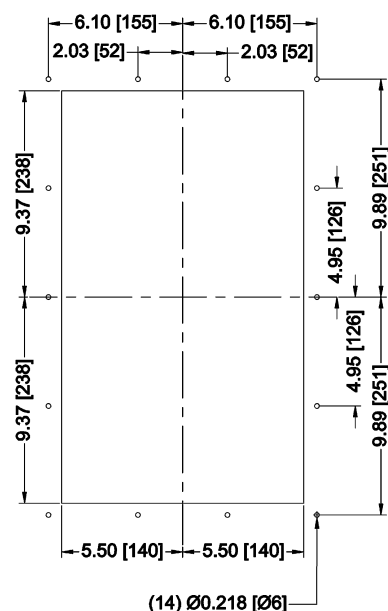
355 Watts L35 L50



A diagram illustrating a mechanical ventilation system. A grey rectangular unit is positioned on the right side of a 3D wireframe room. Blue arrows show air being drawn from the room into the unit and then being pushed back into the room, creating a circulation loop. Red arrows show air being exhausted from the top and bottom of the unit out of the room. Purple arrows show fresh air being drawn into the unit from outside the room.

Air Flow Pattern

MOUNTING CUTOUT DIMENSIONS



www.teca-eu.com

1-888-TECA-USA (832-2872)

TECA

FHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

120 VAC Input
High Capacity
1715 BTU/HR

FFEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact (20.5" L X 13" W X 8.5" D)
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 66 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	120 VAC
Current, Active	10.8 AMPS
Current , ECO-Mode	1 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	1715 BTU/HR
Cooling (Din 3168)	503 WATTS
Cooling COP (at L35 L35)	0.39
Heating (Traditional)	> 4000 BTU/HR
Heating (Din 3168)	> 1200 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C

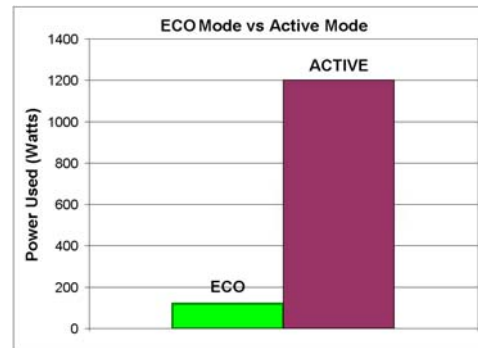
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-2250	7-H5J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-2250HC	7-H5I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-2250XE	7-H5J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-2250XEHC	7-H5I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-2250X	7-H5J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-2250XHC	7-H5I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

FHP-2250

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

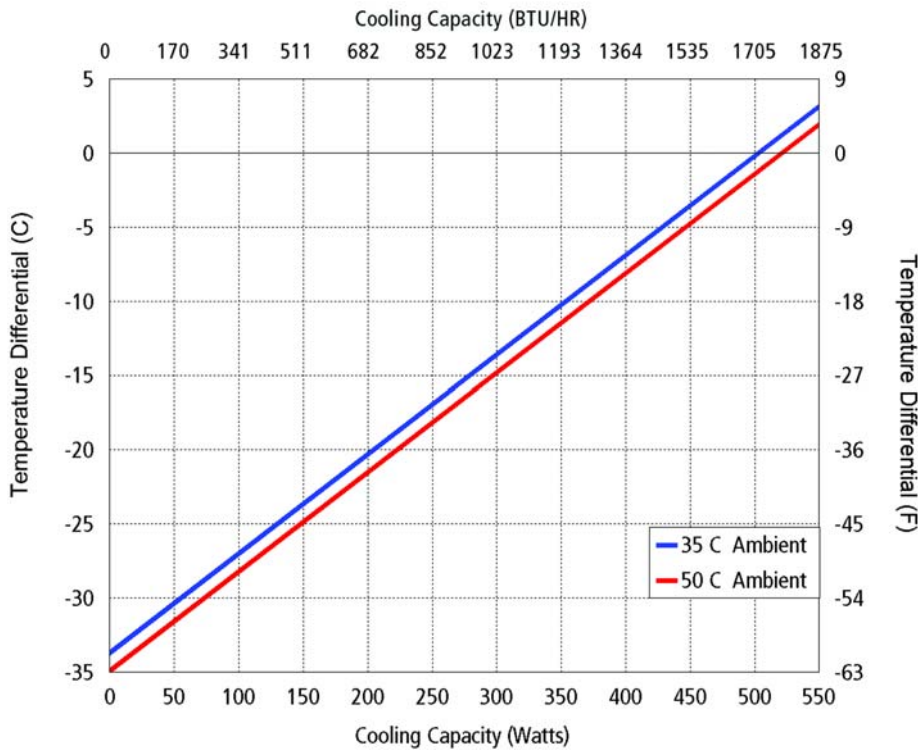
1715 BTU/hr @ 0 °F ΔT

2280 BTU/hr @ +20 °F ΔT

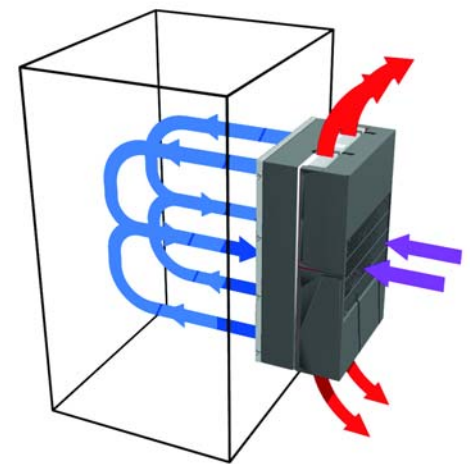
RATING (DIN 3168)

503 Watts L35 L35

275 Watts L35 L50

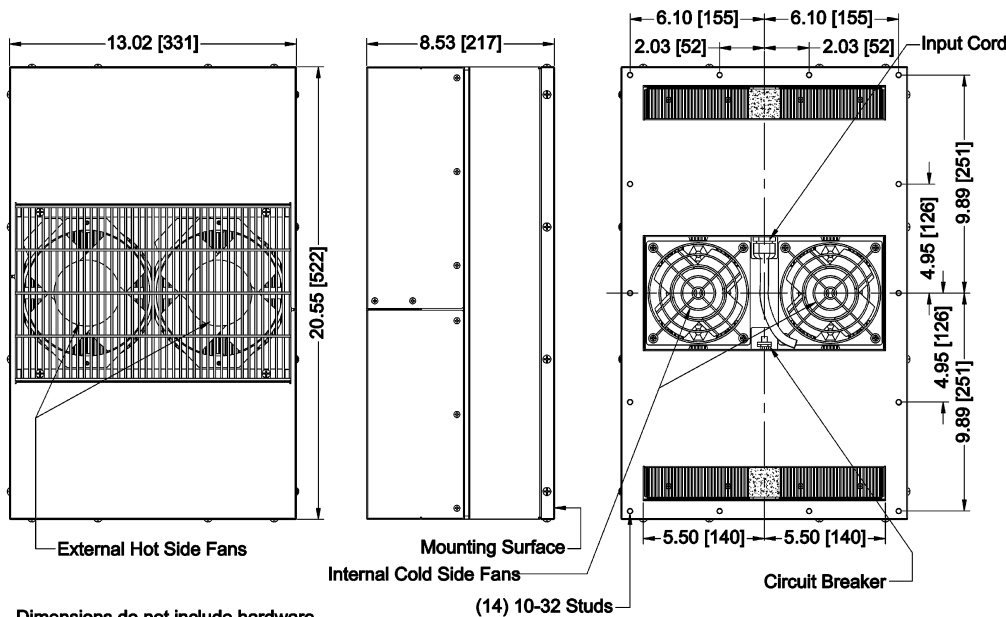


Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .067x - 33.7$	$y = .067x - 34.9$
Cold Sink	$y = .051x - 33.7$	$y = .051x - 33.7$



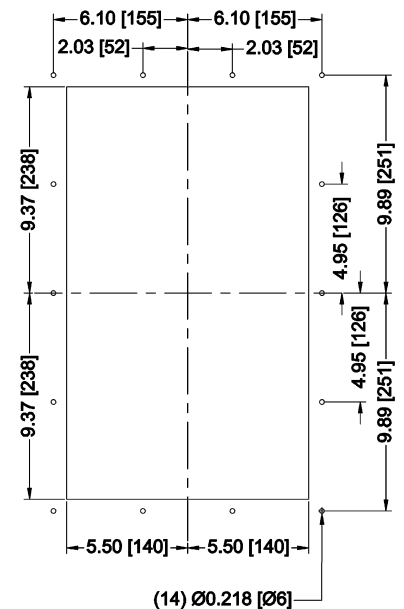
Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS





FHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

120 VAC Input
High Efficiency
1220 BTU/HR



FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact (20.5" L X 13" W X 8.5" D)
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 66 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

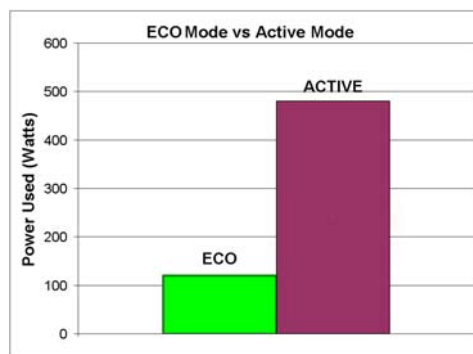
Voltage	120 VAC
Current, Active	3.6 AMPS
Current , ECO-Mode	1 AMP
Frequency	50/60 Hz

PERFORMANCE RATINGS

Cooling (Traditional)	1220 BTU/HR
Cooling (Din 3168)	358 WATTS
Cooling COP (at L35 L35)	0.83
Heating (Traditional)	> 1640 BTU/HR
Heating (Din 3168)	> 480 WATTS
Heating COP	> 1.0
Heat Exchanger (ECO-Mode)	12.5 W/°C

INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-2250	7-H4J0-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-2250HC	7-H4I0-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-2250XE	7-H4J0-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-2250XEHC	7-H4I0-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-2250X	7-H4J0-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-2250XHC	7-H4I0-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56

FHP-2250

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

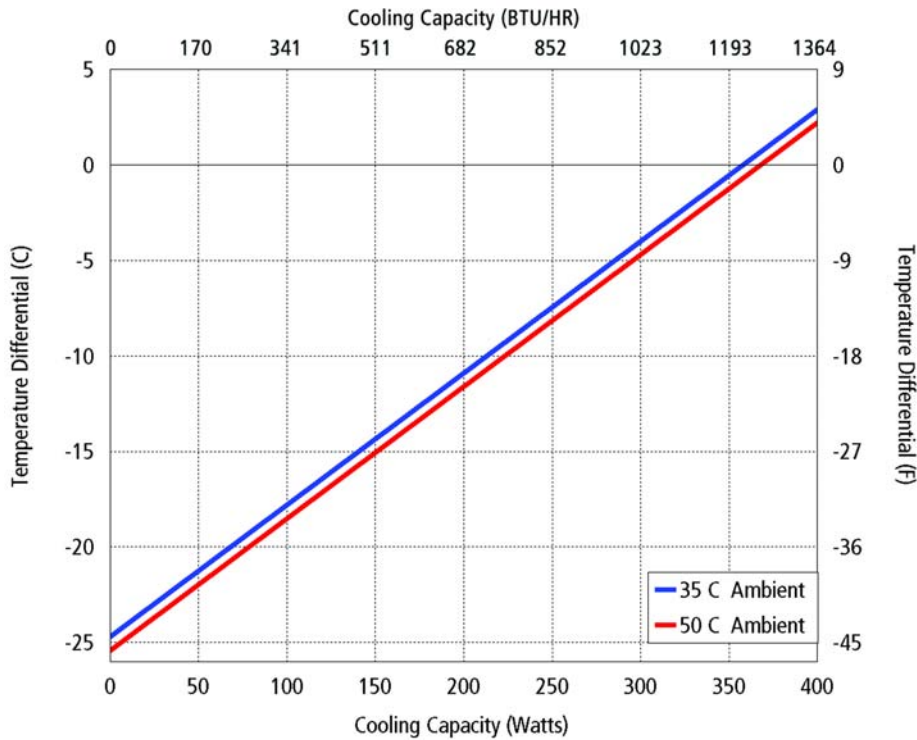
1220 BTU/hr @ 0 °F ΔT

1770 BTU/hr @ +20 °F ΔT

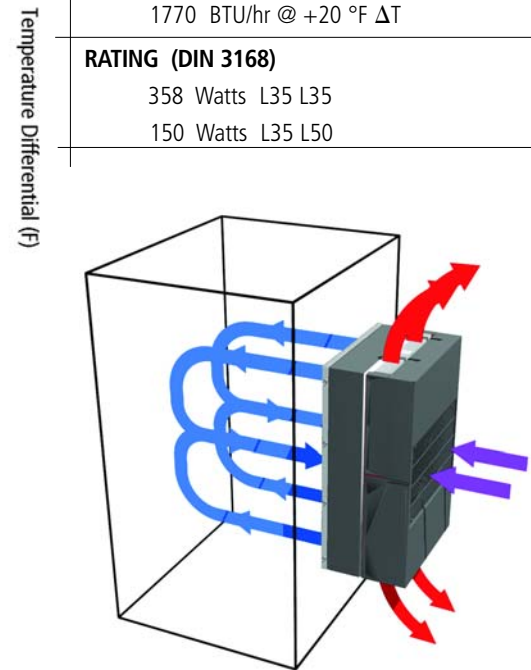
RATING (DIN 3168)

358 Watts L35 L35

150 Watts L35 L50

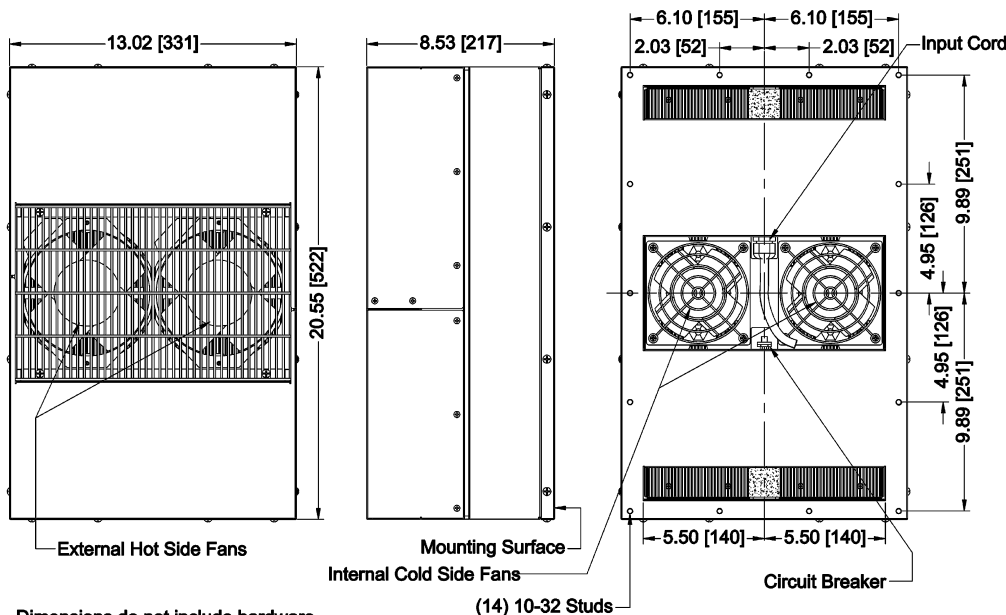


Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .069x - 24.7$	$y = .069x - 25.4$
Cold Sink	$y = .053x - 24.7$	$y = .053x - 25.4$



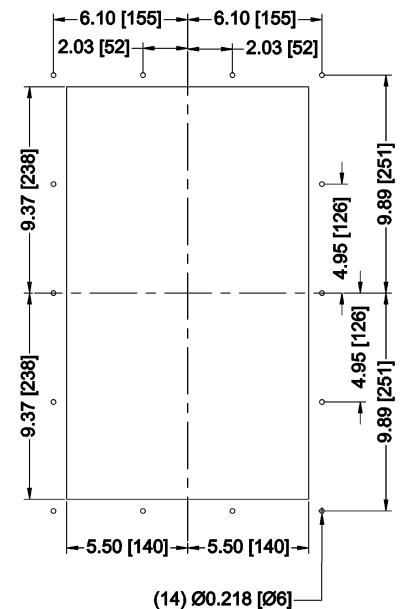
Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS





FHP-2250

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

24 VDC Input
High Efficiency
1250 BTU/HR

FEATURES

- High capacity thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact (20.5" L X 13" W X 8.5" D)
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 66 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+65 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	24 VDC
Current, Active	15 AMPS
Current , ECO-Mode	1.9 AMP

PERFORMANCE RATINGS

Cooling (Traditional)	1250 BTU/HR
Cooling (Din 3168)	367 WATTS
Cooling COP (at L35 L35)	1.02
Heating (Traditional)	> 1220 BTU/HR
Heating (Din 3168)	> 367 WATTS
Heating COP	> 1.02
Heat Exchanger (ECO-Mode)	12.5 W/°C

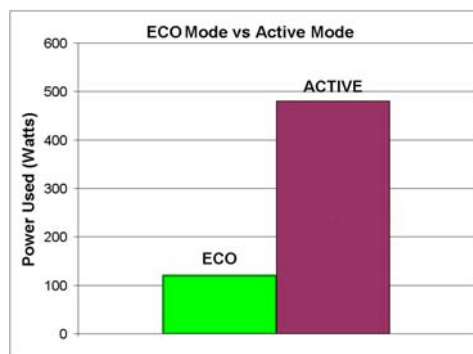
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-2250	7-H4J5-0-000	Cool only, industrial fans & power supply	TC-4F	NEMA-12, IP 52
FHP-2250HC	7-H4I5-1-000	Heat/Cool, industrial fans & power supply	TC-7F	NEMA-12, IP 52
FHP-2250XE	7-H4J5-4-000	Cool only, sealed hot side fans & power supply	TC-4F	NEMA-4, IP 56
FHP-2250XEHC	7-H4I5-5-000	Heat/Cool, sealed hot side fans & power supply	TC-7F	NEMA-4, IP 56
FHP-2250X	7-H4J5-2-000	Cool only, Mil. grade hot side fans & power supply	TC-4F	NEMA-4X, IP 56
FHP-2250XHC	7-H4I5-3-000	Heat/Cool, Mil. grade hot side fans & power supply	TC-7F	NEMA-4X, IP 56



INCLUDES

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord
- Circuit breaker



250 VDC configuration for crane applications available

FHP-2250

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

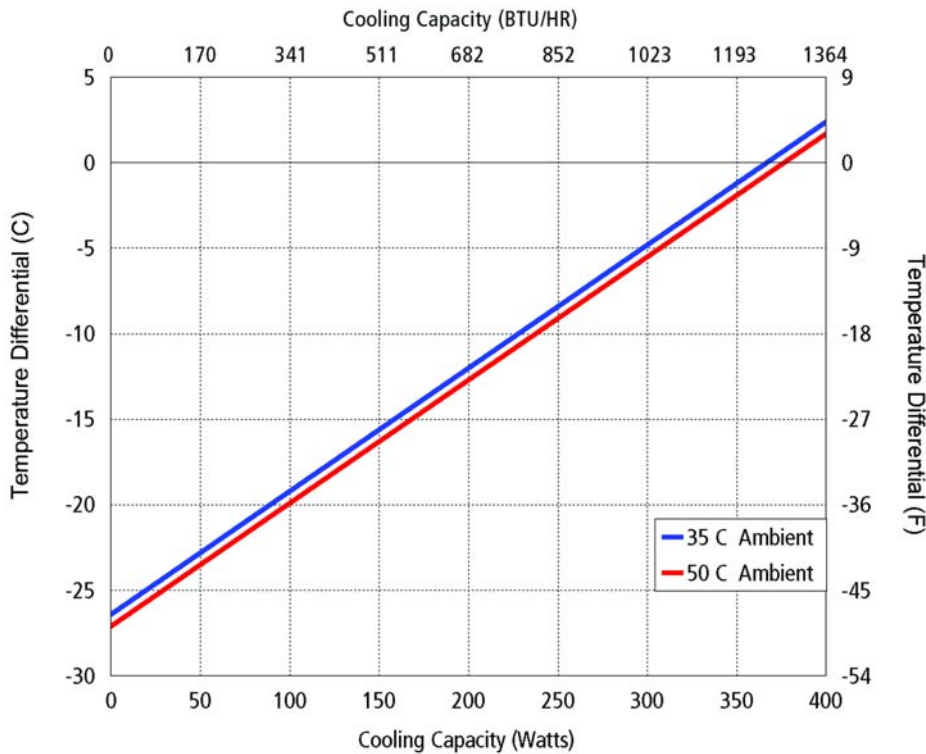
1250 BTU/hr @ 0 °F ΔT

1776 BTU/hr @ +20 °F ΔT

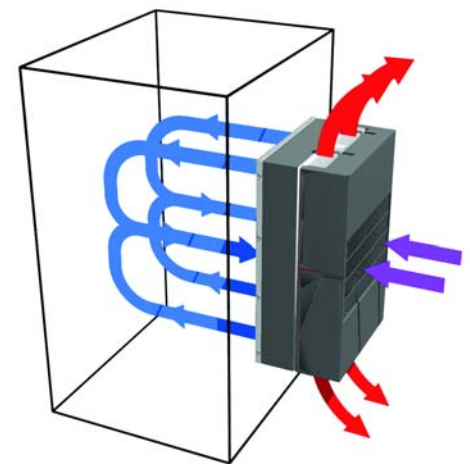
RATING (DIN 3168)

367 Watts L35 L35

168 Watts L35 L50

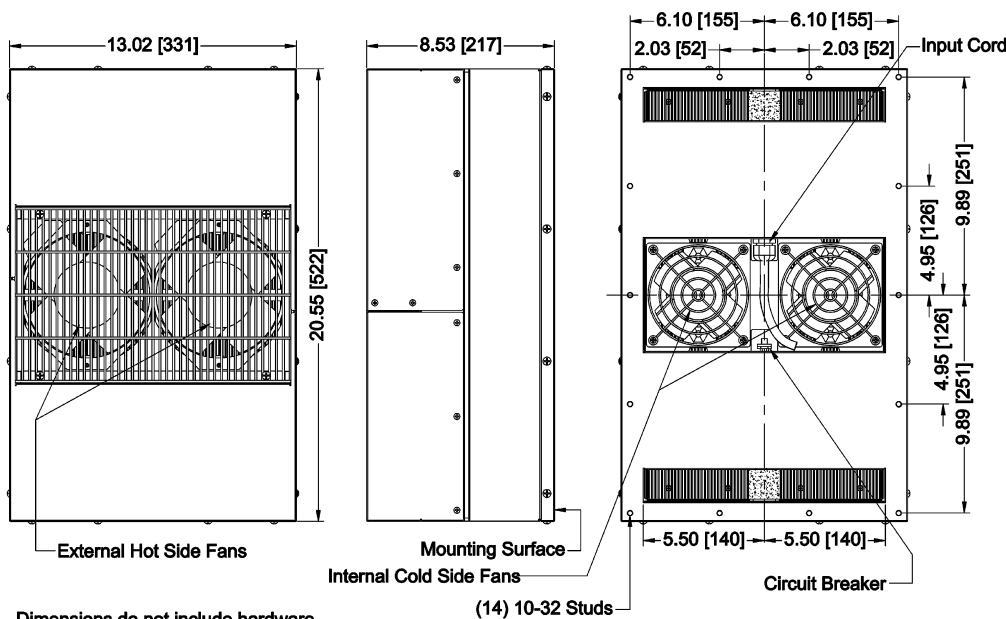


Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
Enclosure Air	$y = .072x - 26.4$	$y = .072x - 27.1$
Cold Sink	$y = .056x - 26.4$	$y = .056x - 27.1$



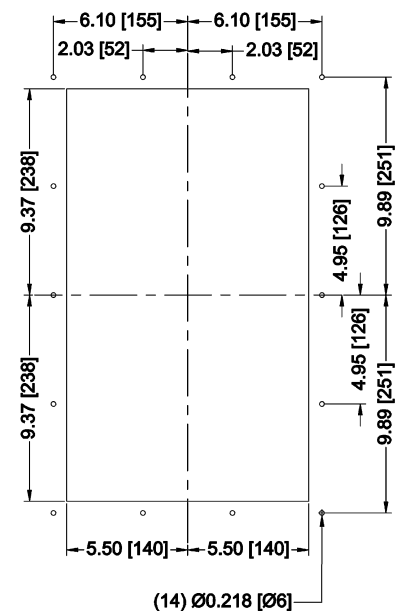
Air Flow Pattern

DIMENSIONS



Dimensions do not include hardware
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



FHP-1501

Air Conditioner

Air Cooled
Flush Mounted
NEMA-12, NEMA-4

120/240 VAC Input
950 BTU/HR



FEATURES

- Externally mounted (no intrusion)
- Mounts in multi-unit array for incremental capacity
- Mounts in any orientation (condensate control may not work properly in all orientations)
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Dual voltage (120/240 VAC)
- Custom finishes
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Agency approvals: UL1995, CSA22.2, CE
- Weight 55 LBS.

POWER INPUTS

Voltage 120/240 VAC
Current, Active 8.0/5.5 AMPS

PERFORMANCE RATINGS

Cooling (Traditional) 950 BTU/HR
Cooling (Din 3168) 278 WATTS
Cooling COP (at L35 L35) 0.29

INCLUDES

- Integral power supply
- Mounting gasket and hardware
- Power input cord
- Condensate control system

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35



CONFIGURATIONS

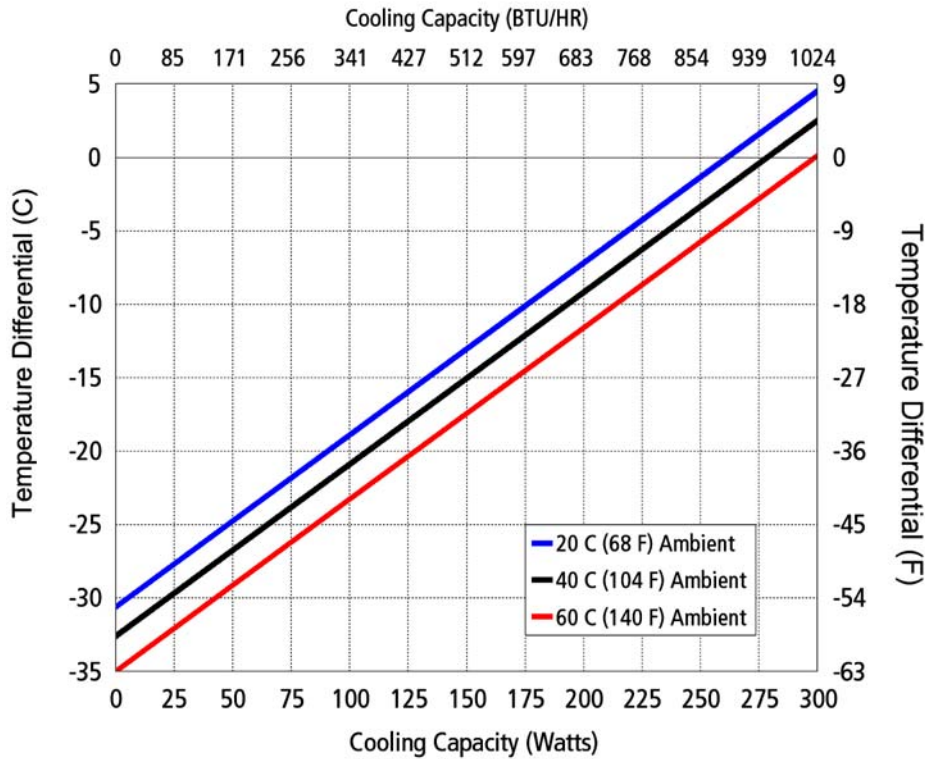
MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-1501	7-2181-0-000	Cool only, industrial fans	TC-6F	NEMA-12, IP 52
FHP-1501	7-21F1-0-000	Cool only, industrial fans	TC-1F	NEMA-12, IP 52
FHP-1501	7-2151-0-000	Cool only, industrial fans	EXT*	NEMA-12, IP 52
FHP-1501HC	7-2131-1-000	Heat/Cool, industrial fans	TC-3F	NEMA-12, IP 52
FHP-1501HC	7-2151-1-000	Heat/Cool, industrial fans	EXT*	NEMA-12, IP 52
FHP-1501XE	7-2181-4-000	Cool only, sealed hot side fan	TC-6F	NEMA-4, IP 56
FHP-1501XE	7-21F1-4-000	Cool only, sealed hot side fan	TC-1F	NEMA-4, IP 56
FHP-1501XE	7-2151-4-000	Cool only, sealed hot side fan	EXT*	NEMA-4, IP 56
FHP-1501XEHC	7-2131-5-000	Heat/Cool, sealed hot side fan	TC-3F	NEMA-4, IP 56
FHP-1501XEHC	7-2151-5-000	Heat/Cool, sealed hot side fan	EXT*	NEMA-4, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included

TECA

1-888-TECA-USA (832-2872)

www.teca-usa.com

FHP-1501**PERFORMANCE CURVE**

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .117x - 30.6$	$y = .117x - 32.6$	$y = .117x - 35.0$
Cold Sink	$y = .093x - 30.6$	$y = .093x - 32.6$	$y = .093x - 35.0$

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

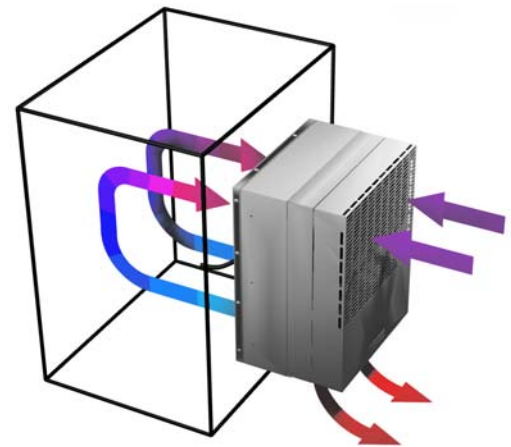
NEMA-12 IP 52

NEMA-4 IP 56

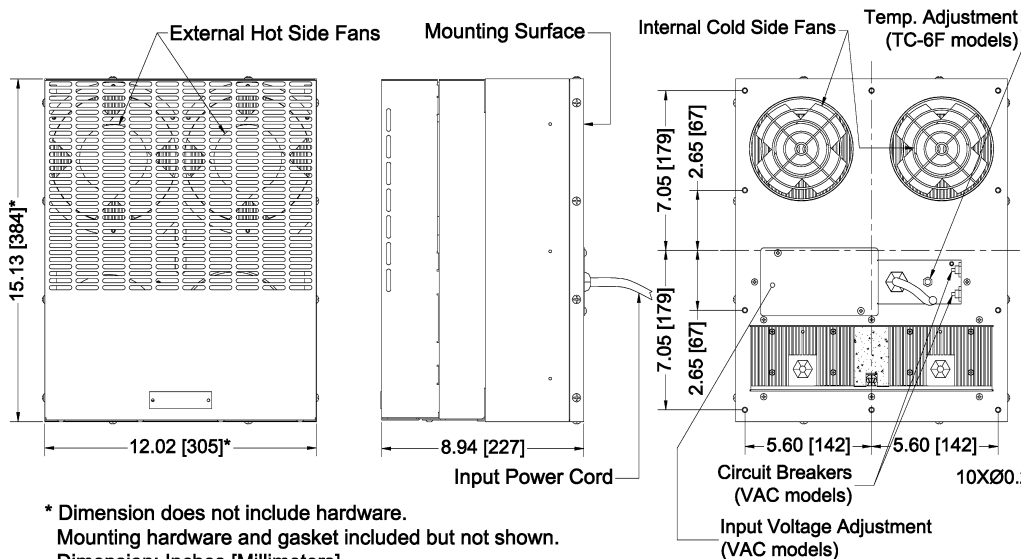
RATING (TRADITIONAL)950 BTU/hr @ 0 °F ΔT 1270 BTU/hr @ +20 °F ΔT **RATING (DIN 3168)**

278 Watts L35 L35

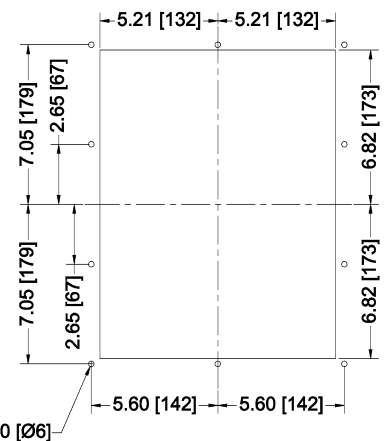
162 Watts L35 L50



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware.
Mounting hardware and gasket included but not shown.
Dimension: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

FHP-1501

Air Conditioner

Air Cooled
Flush Mounted
NEMA-12, NEMA-4

24 VDC Input
950 BTU/HR

FEATURES

- Externally mounted (no intrusion)
- Mounts in multi-unit array for incremental capacity
- Compact (only 15" X 12" X 9")
- Mounts in any orientation (condensate control may not work properly in all orientations)
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Custom finishes
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 55 LBS.

POWER INPUTS

Voltage	24 VDC
Current, Active	18 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	950 BTU/HR
Cooling (Din 3168)	278 WATTS
Cooling COP (at L35 L35)	0.64
Heating (Traditional)	1470 BTU/HR
Heating (Din 3168)	430 WATTS
Heating COP (at L35 L35)	> 1.0



CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35
TC-7F	10	25	35

INCLUDES

- Mounting gasket and hardware
- Power input leads
- Condensate control system

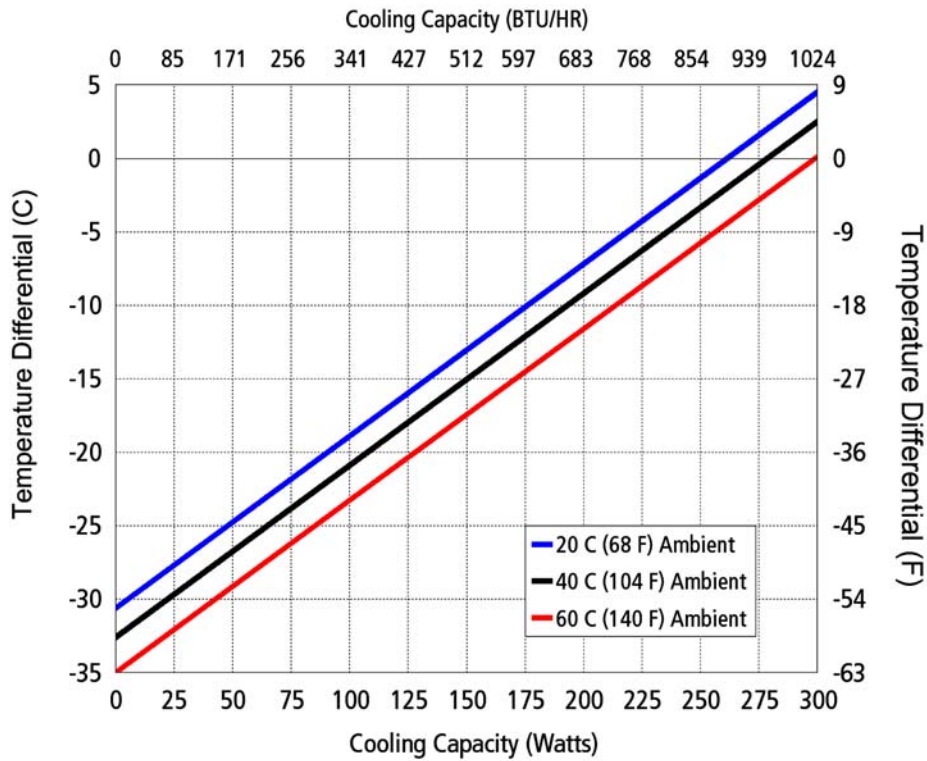
250 VDC configuration for crane applications available

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-1501	7-2185-0-000	Cool only	TC-6F	NEMA-12, IP 52
FHP-1501	7-21F5-0-000	Cool only	TC-1F	NEMA-12, IP 52
FHP-1501	7-2155-0-000	Cool only	EXT*	NEMA-12, IP 52
FHP-1501HC	7-2135-1-000	Cool only	TC-3F	NEMA-12, IP 52
FHP-1501HC	7-2115-1-000	Heat/Cool	TC-7F	NEMA-12, IP 52
FHP-1501HC	7-2155-1-000	Heat/Cool	EXT*	NEMA-12, IP 52
FHP-1501HC	7-21H5-1-000	Heat/Cool	TC-4600	NEMA-12, IP 52

* Unit is set for 5-32 VC external signal, relay(s) included

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-1501XE	7-2185-4-000	Cool only	TC-6F	NEMA-4, IP 56
FHP-1501XE	7-21F5-4-000	Cool only	TC-1F	NEMA-4, IP 56
FHP-1501XE	7-2155-4-000	Cool only	EXT*	NEMA-4, IP 56
FHP-1501XEHC	7-2135-5-000	Cool only	TC-3F	NEMA-4, IP 56
FHP-1501XEHC	7-2115-5-000	Heat/Cool	TC-7F	NEMA-4, IP 56
FHP-1501XEHC	7-2155-5-000	Heat/Cool	EXT*	NEMA-4, IP 56
FHP-1501XEHC	7-21H5-5-000	Heat/Cool	TC-4600	NEMA-4, IP 56

FHP-1501**PERFORMANCE CURVE**

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .117x - 30.6$	$y = .117x - 32.6$	$y = .117x - 35.0$
Cold Sink	$y = .093x - 30.6$	$y = .093x - 32.6$	$y = .093x - 35.0$

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

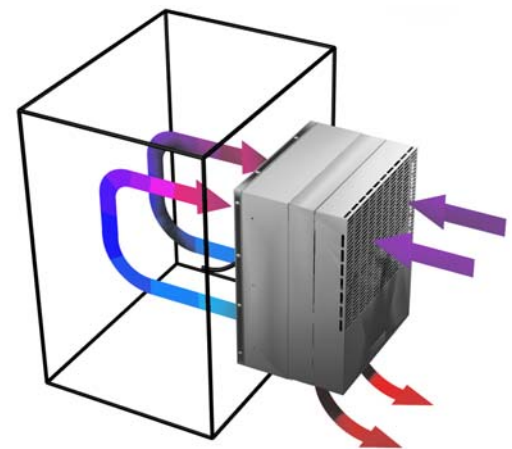
NEMA-12 IP 52

NEMA-4 IP 56

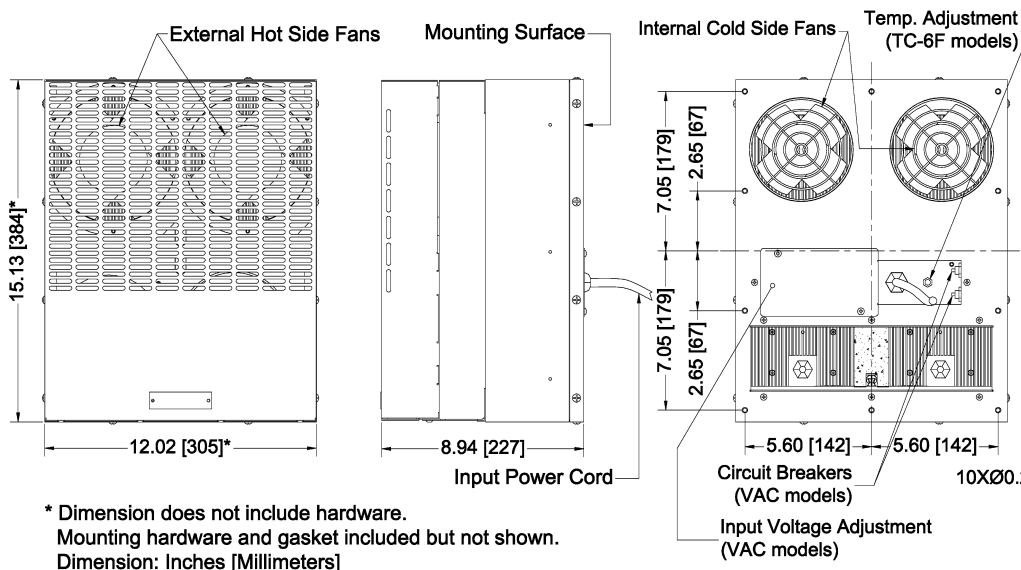
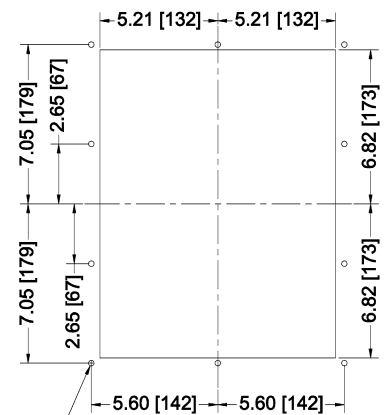
RATING (TRADITIONAL)950 BTU/hr @ 0 °F ΔT 1270 BTU/hr @ +20 °F ΔT **RATING (DIN 3168)**

278 Watts L35 L35

162 Watts L35 L50



Air Flow Pattern

DIMENSIONS**MOUNTING CUTOUT DIMENSIONS**

FHP-750 Air Conditioner

Air Cooled
Flush Mounted
NEMA-12, NEMA-4

120 VAC, 240 VAC Input
430 BTU/HR

FEATURES

- Externally mounted, no intrusion
- Compact (only 12" L X 6" W X 9" D)
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- NEMA-4 and NEMA-12 versions
- Both 120 VAC and 240 VAC available
- Mounts in any orientation (condensate control may not work properly in all orientations)
- Custom finishes
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Agency approvals: UL1995, CSA22.2, CE
- Weight: (FHP-750 16 LBS.) (FHP-752 23 LBS.)



CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35

POWER INPUTS

Voltage	120/240 VAC
Current, Active (Nema-12)	4.0/2.5 AMPS
Current, Active XE (Nema-4)	5.0/2.5 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	430 BTU/HR
Cooling (Din 3168)	125 WATTS
Cooling COP (at L35 L35)	0.26

INCLUDES

- Integral power supply
- Mounting gasket and hardware
- Power input cord
- Condensate control system



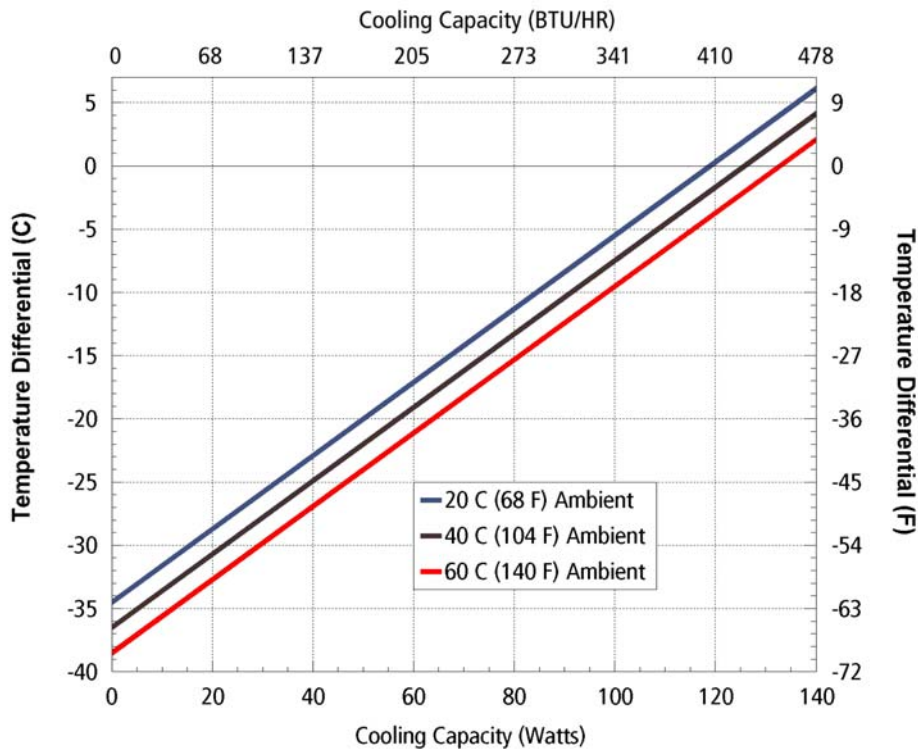
CONFIGURATIONS

MODEL	PART NUMBER	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL	ENVIRONMENT
FHP-750	7-A580-0-000	120	4.0	TC-6F	NEMA-12, IP 52
FHP-750	7-A5F0-0-000	120	4.0	TC-1F	NEMA-12, IP 52
FHP-750	7-A550-0-000	120	4.0	EXT*	NEMA-12, IP 52
FHP-752	7-A582-0-000	240	2.5	TC-6F	NEMA-12, IP 52
FHP-752	7-A5F2-0-000	240	2.5	TC-1F	NEMA-12, IP 52
FHP-752	7-A552-0-000	240	2.5	EXT*	NEMA-12, IP 52

MODEL	PART NUMBER	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL	ENVIRONMENT
FHP-750XE	7-A580-4-000	120	5.0	TC-6F	NEMA-4, IP 56
FHP-750XE	7-A5F0-4-000	120	5.0	TC-1F	NEMA-4, IP 56
FHP-750XE	7-A550-4-000	120	5.0	EXT*	NEMA-4, IP 56
FHP-752XE	7-A582-4-000	240	2.5	TC-6F	NEMA-4, IP 56
FHP-752XE	7-A5F2-4-000	240	2.5	TC-1F	NEMA-4, IP 56
FHP-752XE	7-A552-4-000	240	2.5	EXT*	NEMA-4, IP 56

* Unit is set for 5-32 VC external signal, relay(s) included

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .29x - 34.5$	$y = .29x - 36.5$	$y = .29x - 38.5$
Cold Sink	$y = .18x - 34.5$	$y = .18x - 36.5$	$y = .18x - 38.5$

FHP-750

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

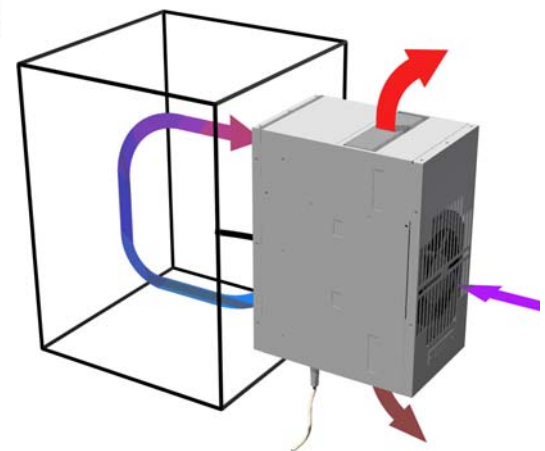
RATING (TRADITIONAL)

430 BTU/hr @ 0 °F ΔT 560 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

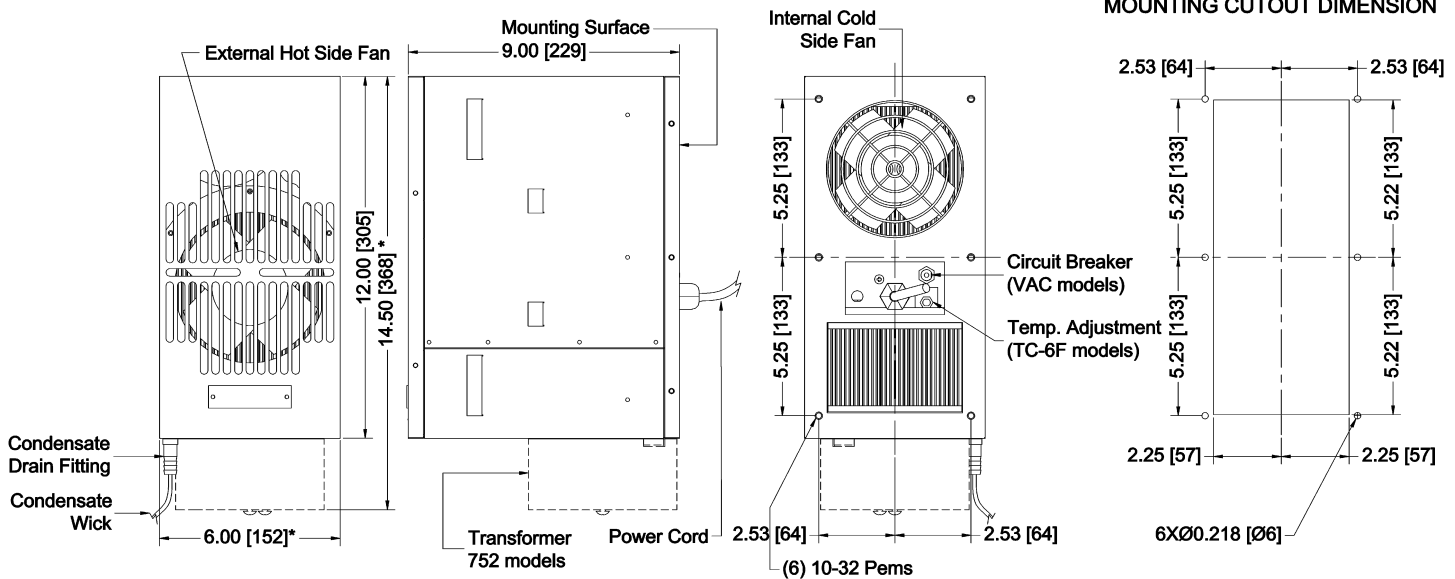
125 Watts L35 L35

78 Watts L35 L50



Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware.
Mounting hardware and gasket included but not shown.
Dimension: Inches [Millimeters]

FHP-750 Air Conditioner

Air Cooled
Flush Mounted
NEMA-12, NEMA-4

24 VDC Input
430 BTU/HR



FEATURES

- Externally mounted, no intrusion
- Compact (only 12"L X 6"W X 9"D)
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- NEMA-4 and NEMA-12 versions
- Both 120 VAC and 240 VAC available
- Mounts in any orientation (condensate control may not work properly in all orientations)
- Custom finishes
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 16 LBS.

POWER INPUTS

Voltage	24 VDC
Current, Active	9.0 AMPS

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35

PERFORMANCE RATINGS

Cooling (Traditional)	430 BTU/HR
Cooling (Din 3168)	125 WATTS
Cooling COP (at L35 L35)	0.58
Heating (Traditional)	735 BTU/HR
Cooling (Din 3168)	216 WATTS
Heating COP (at L35 L35)	> 1.0

INCLUDES

- Mounting gasket and hardware
- Power input leads
- Condensate control system

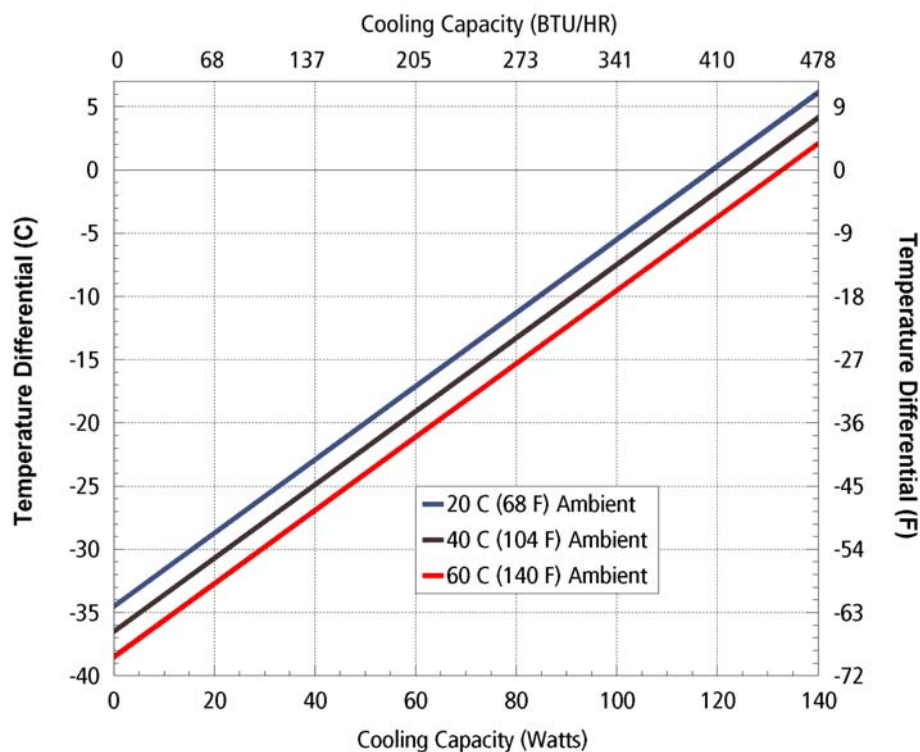
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-750	7-A585-0-000	Cool only, industrial fans	TC-6F	NEMA-12, IP 52
FHP-750	7-A5F5-0-000	Cool only, industrial fans	TC-1F	NEMA-12, IP 52
FHP-750	7-A555-0-000	Cool only, industrial fans	EXT*	NEMA-12, IP 52
FHP-750HC	7-A595-1-000	Heat/Cool, industrial fans	EXT†	NEMA-12, IP 52
FHP-750XE	7-A585-4-000	Cool only, sealed hot side fan	TC-6F	NEMA-4, IP 56
FHP-750XE	7-A5F5-4-000	Cool only, sealed hot side fan	TC-1F	NEMA-4, IP 56
FHP-750XE	7-A555-4-000	Cool only, sealed hot side fan	EXT*	NEMA-4, IP 56
FHP-750XEHC	7-A595-5-000	Heat/Cool, sealed hot side fan	EXT†	NEMA-4, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included

† Unit can be used with external H-Bridge and controller

PERFORMANCE CURVE



Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	40°C	60°C
Enclosure Air	$y = .29x - 34.5$	$y = .29x - 36.5$	$y = .29x - 38.5$
Cold Sink	$y = .18x - 34.5$	$y = .18x - 36.5$	$y = .18x - 38.5$

FHP-750

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

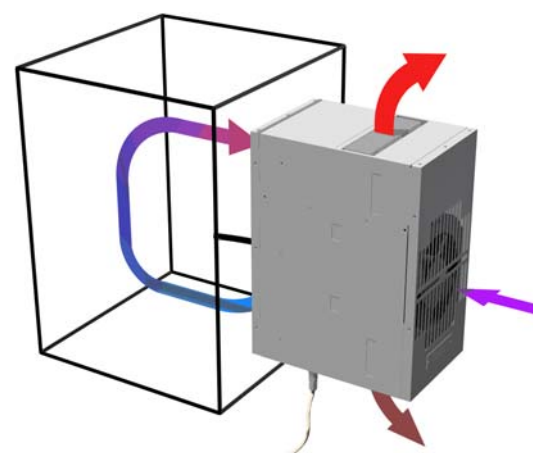
RATING (TRADITIONAL)

430 BTU/hr @ 0 °F ΔT 560 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

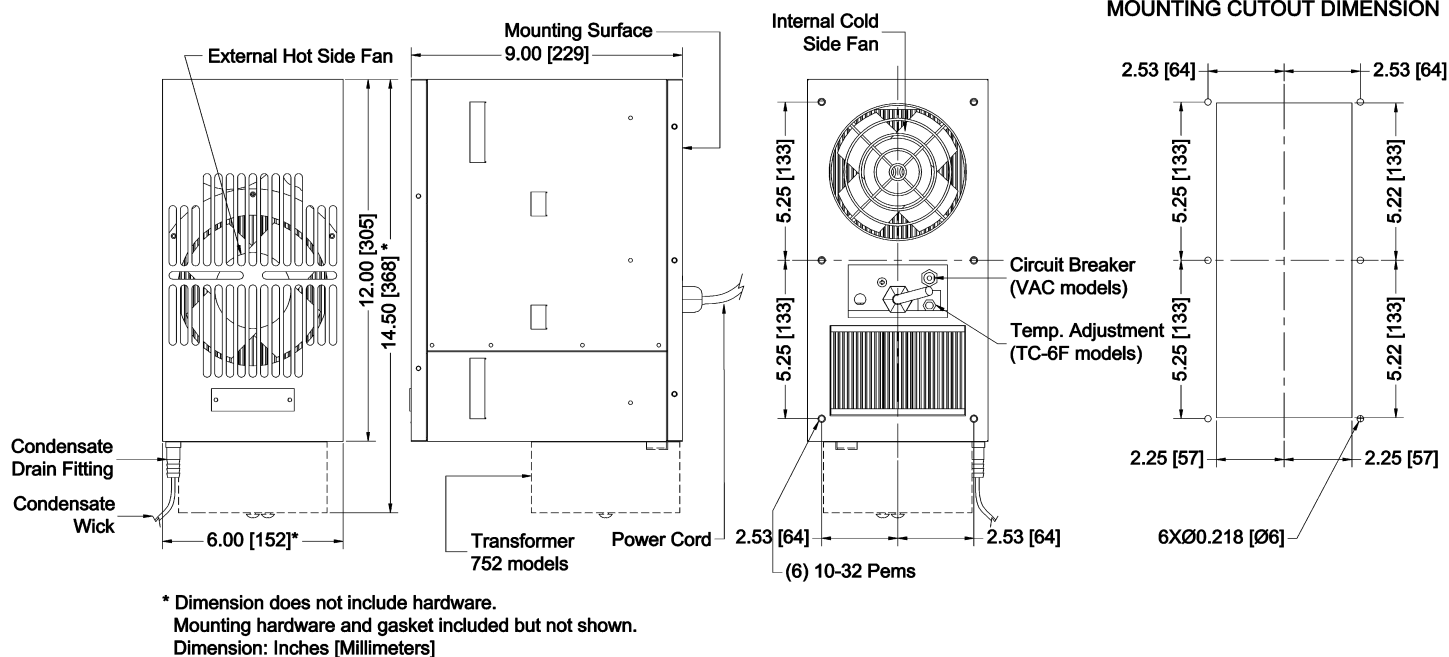
125 Watts L35 L35

78 Watts L35 L50



Air Flow Pattern

DIMENSIONS





FHP-590

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
415 BTU/HR



FEATURES

- Compact (only 10" X 5.86" X 7.97")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

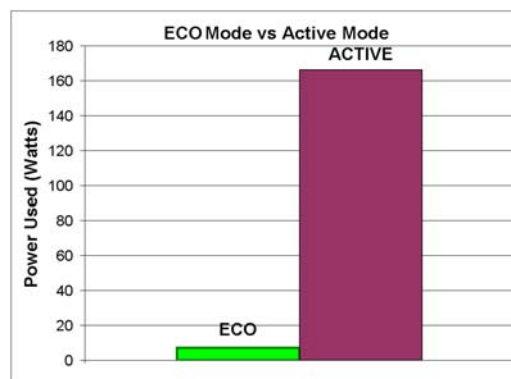
Voltage	24 VDC
Current, Active	6.9 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	416 BTU/HR
Cooling (Din 3168)	124 WATTS
Cooling COP (at L35 L35)	0.75
Heating (Traditional)	> 562 BTU/HR
Heating (Din 3168)	> 165 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-590	7-G0J5-0-001	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
FHP-590HC	7-G095-1-001	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
FHP-590HC	7-G0I5-1-001	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
FHP-590XE	7-G0J5-4-001	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
FHP-590XEHC	7-G095-5-001	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
FHP-590XEHC	7-G0I5-5-001	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
FHP-590X	7-G0J5-2-001	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
FHP-590XHC	7-G095-3-001	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
FHP-590XHC	7-G0I5-3-001	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

FHP-590**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

RATING (TRADITIONAL)

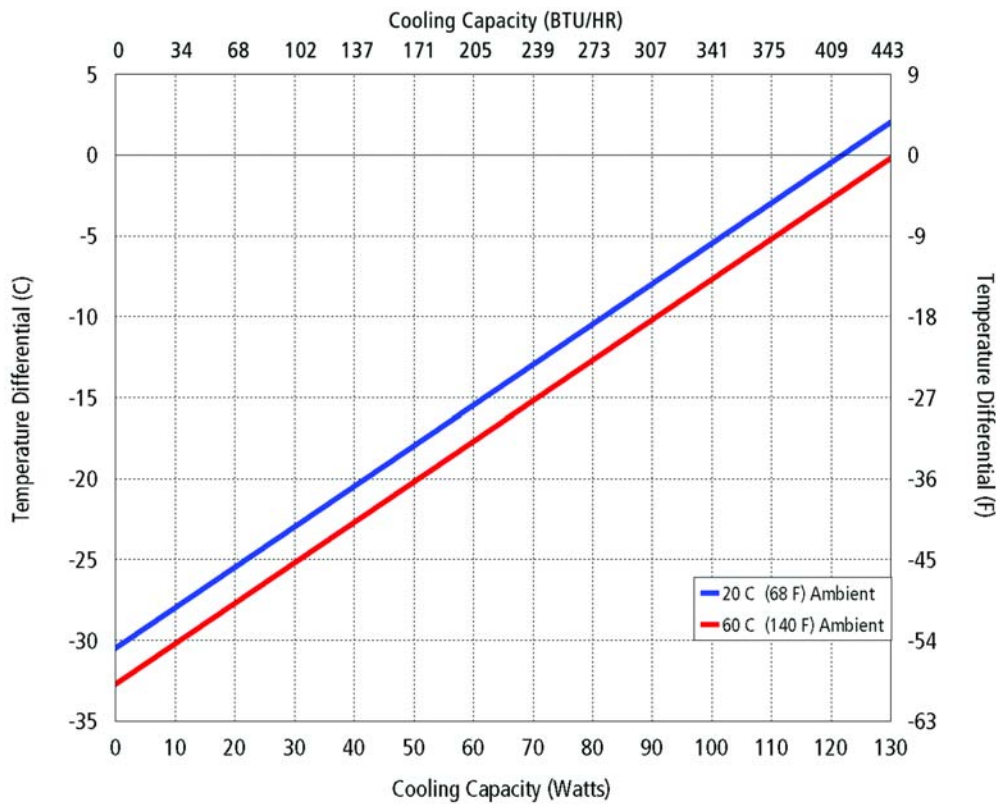
415 BTU/hr @ 0 °F ΔT

563 BTU/hr @ +20 °F ΔT

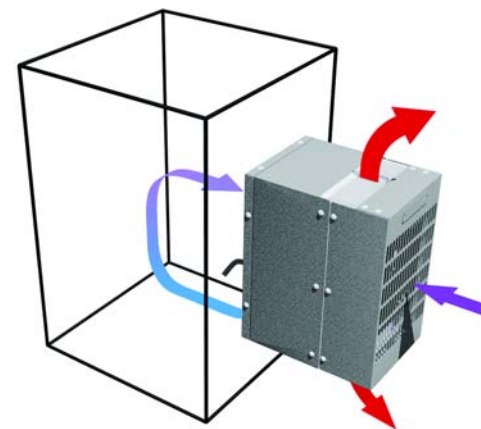
RATING (DIN 3168)

124 Watts L35 L35

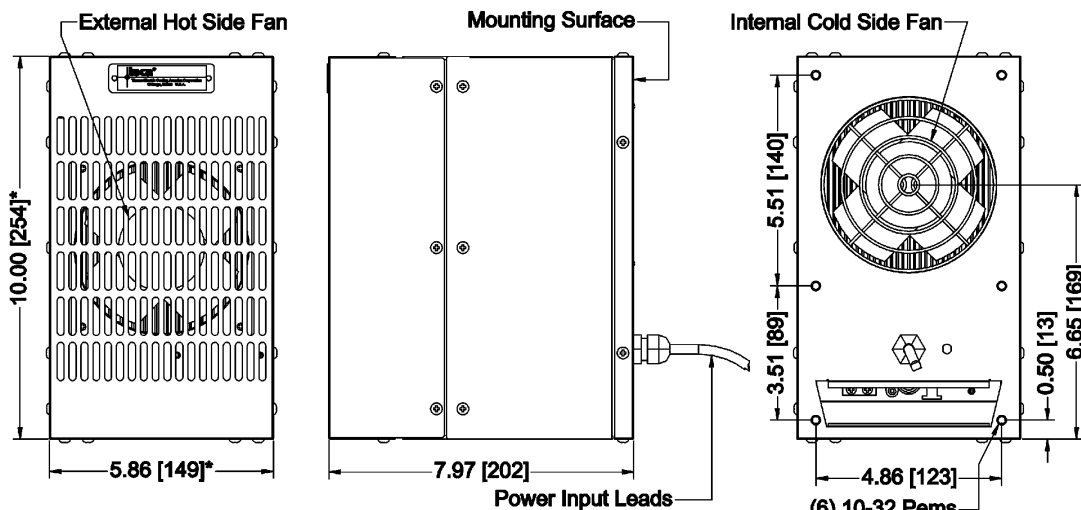
68 Watts L35 L50



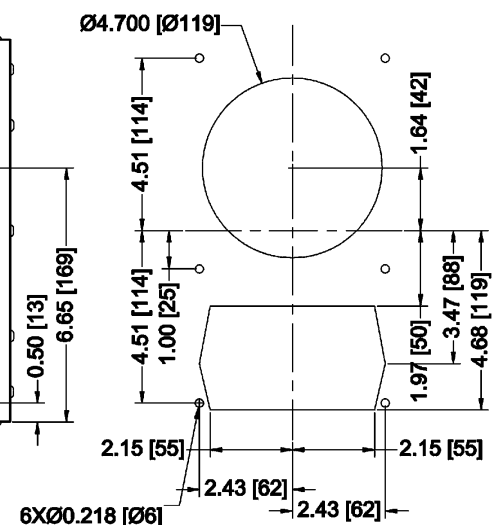
Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
FHP-590	$y = .25x - 30.5$	$y = .25x - 32.7$



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware and gasket
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS



FHP-570

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
250 BTU/HR



FEATURES

- Compact (only 10" X 5.86" X 7.97")
- Mounts and operates in any orientation: horizontal, vertical, etc
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

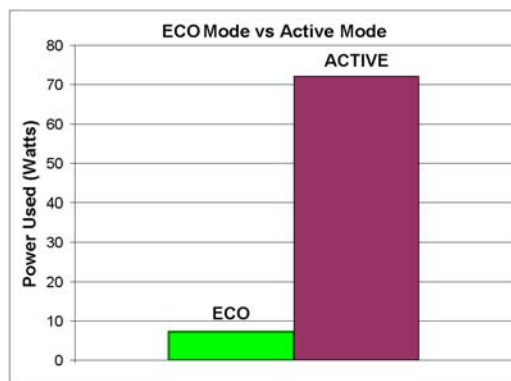
Voltage	24 VDC
Current, Active	3.0 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	251 BTU/HR
Cooling (Din 3168)	75 WATTS
Cooling COP (at L35 L35)	1.04
Heating (Traditional)	> 245 BTU/HR
Heating (Din 3168)	> 72 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-570	7-G0J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
FHP-570HC	7-G095-1-000	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
FHP-570HC	7-G0I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
FHP-570XE	7-G0J5-4-000	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
FHP-570XEHC	7-G095-5-000	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
FHP-570XEHC	7-G0I5-5-000	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
FHP-570X	7-G0J5-2-000	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
FHP-570XHC	7-G095-3-000	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
FHP-570XHC	7-G0I5-3-000	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

FHP-570**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

RATING (TRADITIONAL)

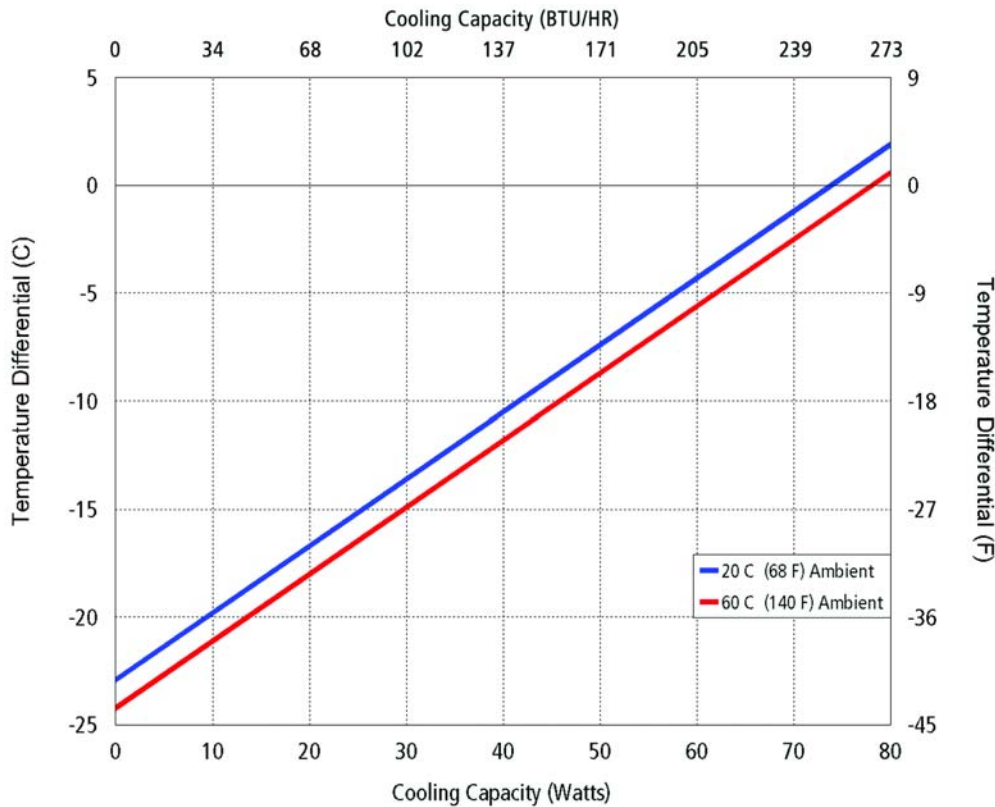
250 BTU/hr @ 0 °F ΔT

372 BTU/hr @ +20 °F ΔT

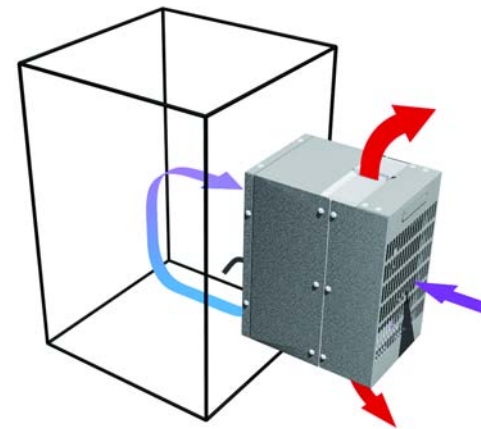
RATING (DIN 3168)

75 Watts L35 L35

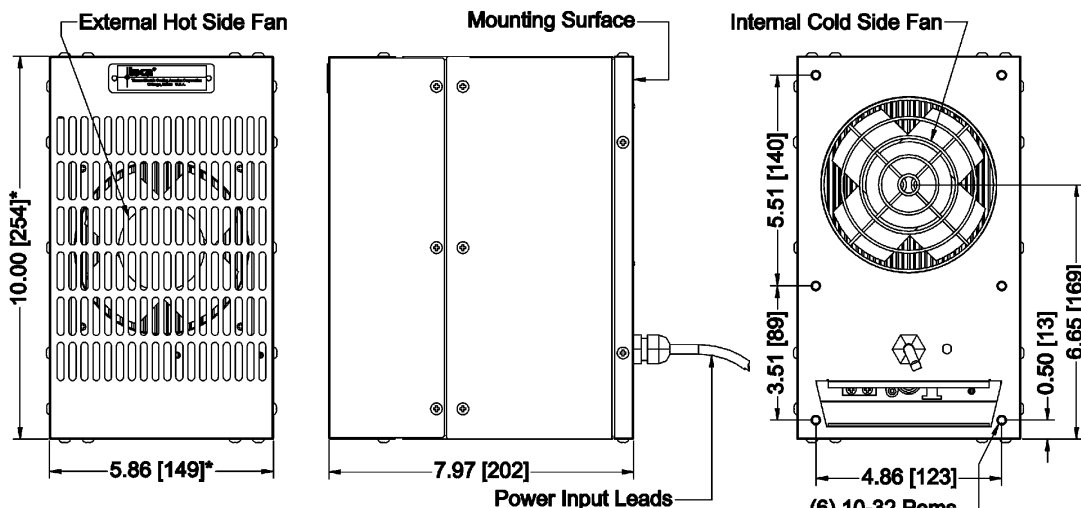
27 Watts L35 L50

PERFORMANCE CURVE

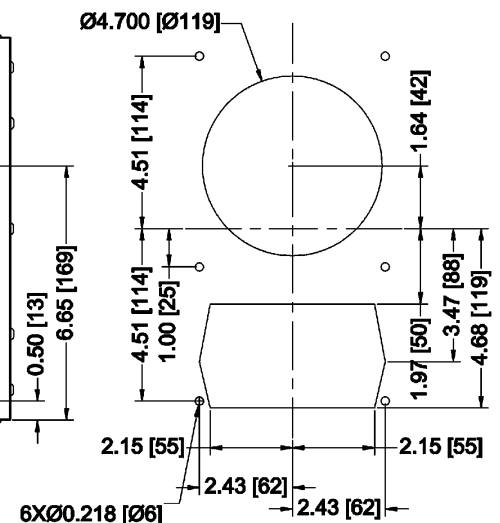
Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
FHP-570	$y = .31x - 22.9$	$y = .31x - 24.2$



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware and gasket
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

FHP-451 Air Conditioner

Air Cooled
Flush Mounted
Nema-12

120 VAC or 240 VAC
300 BTU/HR



FEATURES

- Compact (only 10" X 5.86" X 9")
- Mounts and operates in any orientation: horizontal, vertical, etc
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Suitable for NEMA-12 (IP 52) environment
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 18 LBS.

CONTROL TEMPERATURES

Active Cooling (TC-1F, TC-3F)	35 °C
Active Heating (TC-3F)	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

PERFORMANCE RATINGS

Cooling (Traditional)	342 BTU/HR
Cooling (Din 3168)	102 WATTS
Cooling COP (at L35 L35)	0.65

POWER INPUTS

Voltage	120 or 240 VAC
Current, Active	1.3 / 0.71 AMPS

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Integral power input cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL
FHP-451	7-F090-0-000	Cool only	120	1.3	None
FHP-451	7-F080-0-000	Cool only	120	1.3	TC-6F
FHP-451	7-F0F0-0-000	Cool only	120	1.3	TC-1F
FHP-451	7-F050-0-000	Cool only	120	1.3	EXT*
FHP-451HC	7-F030-1-000	Heat/Cool	120	1.3	TC-3F
FHP-452	7-F092-0-000	Cool only	240	0.70	None
FHP-452	7-F082-0-000	Cool only	240	0.70	TC-6F
FHP-452	7-F0F2-0-000	Cool only	240	0.70	TC-1F
FHP-452	7-F052-0-000	Cool only	240	0.70	EXT*
FHP-452HC	7-F032-1-000	Heat/Cool	240	0.70	TC-3F

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

FHP-451**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

RATING (TRADITIONAL)

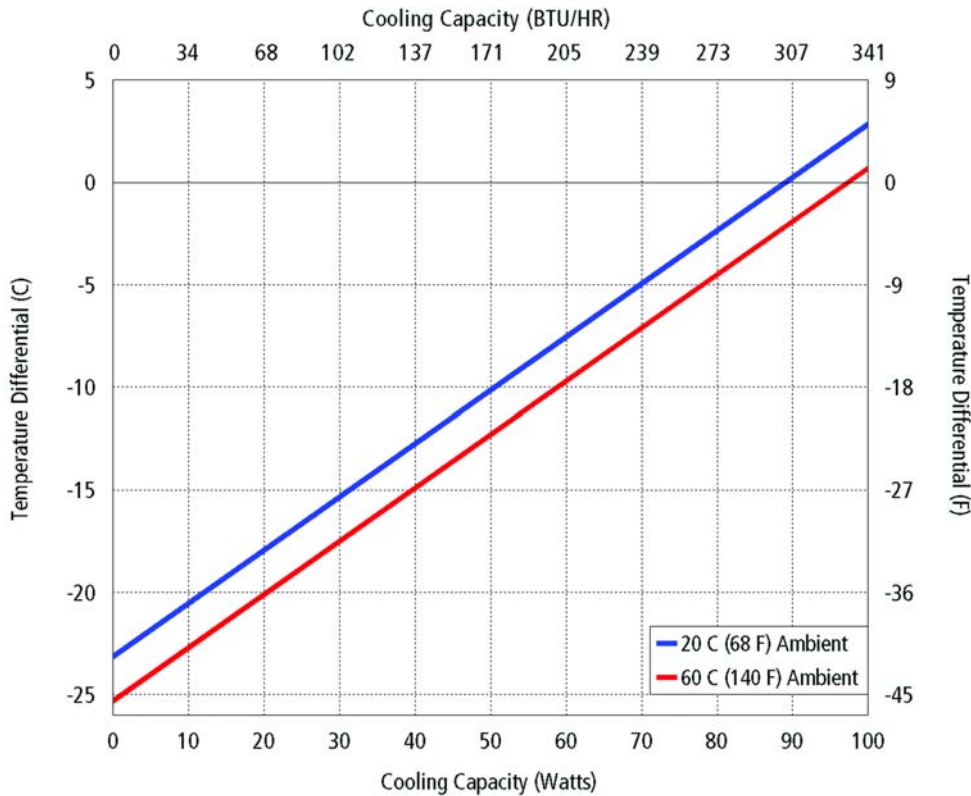
300 BTU/hr @ 0 °F ΔT

447 BTU/hr @ +20 °F ΔT

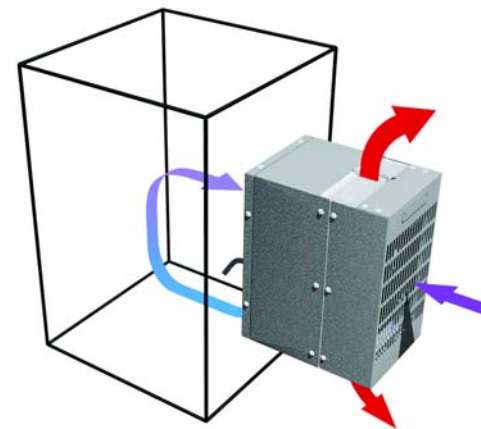
RATING (DIN 3168)

91 Watts L35 L35

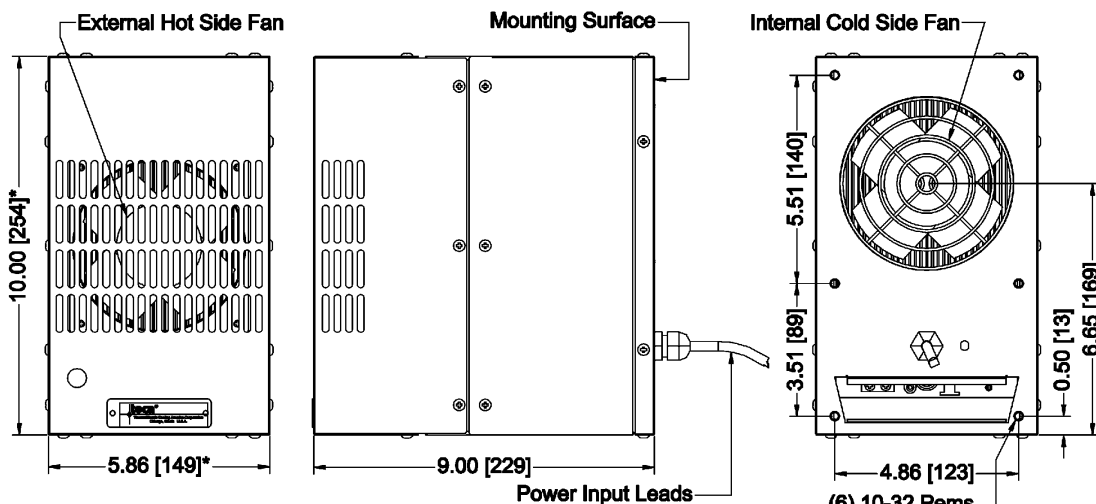
38 Watts L35 L50

PERFORMANCE CURVE

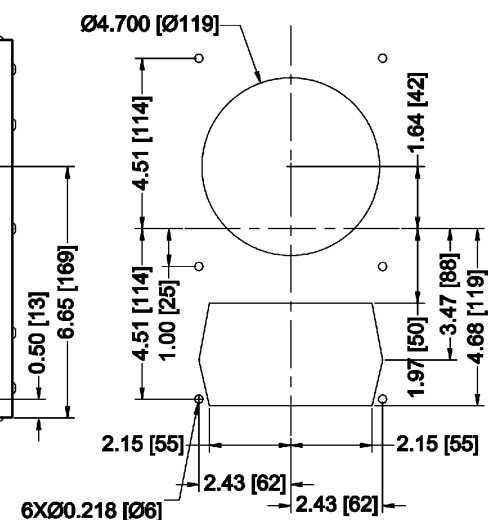
Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Ambient Temp	20°C	60°C	
Enclosure Air	$y = .26x - 23.1$	$y = .26x - 25.3$	



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware and gasket
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

FHP-401

Air Conditioner

Air Cooled
Flush Mounted
Nema-12

120 VAC or 240 VAC
190 BTU/HR

FEATURES

- Compact (only 10" X 5.86" X 9")
- Mounts and operates in any orientation: horizontal, vertical, etc
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Suitable for NEMA-12 (IP 52) environment
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 18 LBS.



CONTROL TEMPERATURES

Active Cooling (TC-1F, TC-3F)	35 °C
Active Heating (TC-3F)	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

Voltage	120 or 240 VAC
Current, Active	1.2 / 0.65 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	190 BTU/HR
Cooling (Din 3168)	56 WATTS
Cooling COP (at L35 L35)	0.38

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Integral power input cord

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	VOLTAGE VAC	CURRENT AMPS	TEMPERATURE CONTROL
FHP-401	7-F090-0-001	Cool only	120	1.2	None
FHP-401	7-F080-0-001	Cool only	120	1.2	TC-6F
FHP-401	7-F0F0-0-001	Cool only	120	1.2	TC-1F
FHP-401	7-F050-0-001	Cool only	120	1.2	EXT*
FHP-401HC	7-F030-1-001	Heat/Cool	120	1.2	TC-3F
FHP-402	7-F092-0-001	Cool only	240	0.65	None
FHP-402	7-F082-0-001	Cool only	240	0.65	TC-6F
FHP-402	7-F0F2-0-001	Cool only	240	0.65	TC-1F
FHP-402	7-F052-0-001	Cool only	240	0.65	EXT*
FHP-402HC	7-F032-1-001	Heat/Cool	240	0.65	TC-3F

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

FHP-401**MOUNTING STYLE**

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

RATING (TRADITIONAL)

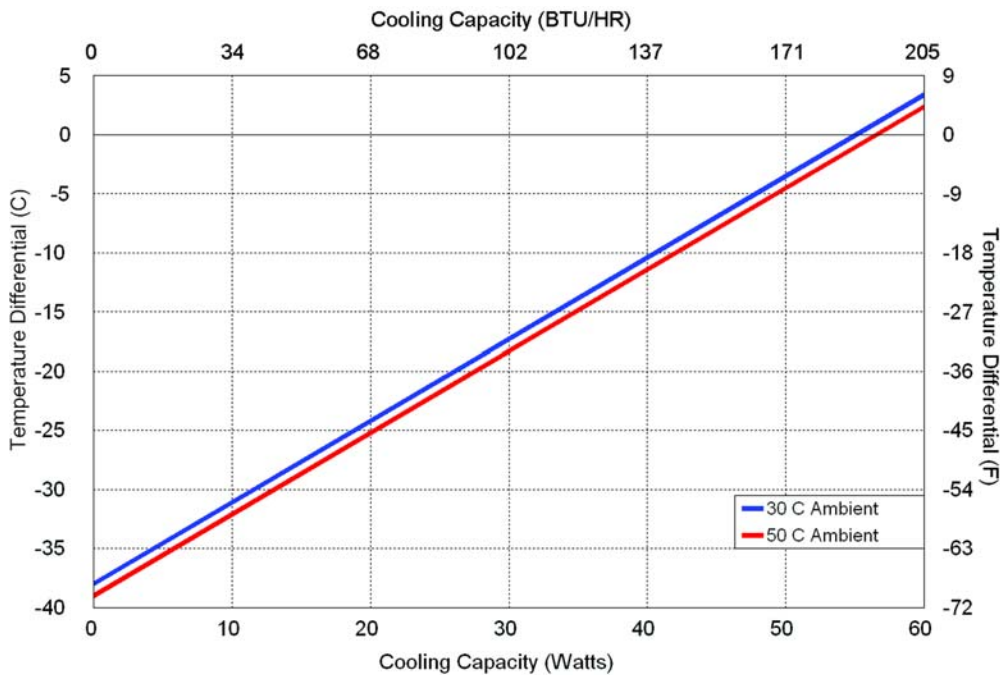
190 BTU/hr @ 0 °F ΔT

240 BTU/hr @ +20 °F ΔT

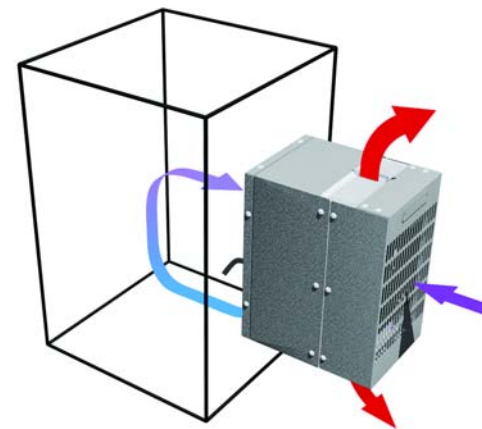
RATING (DIN 3168)

56 Watts L35 L35

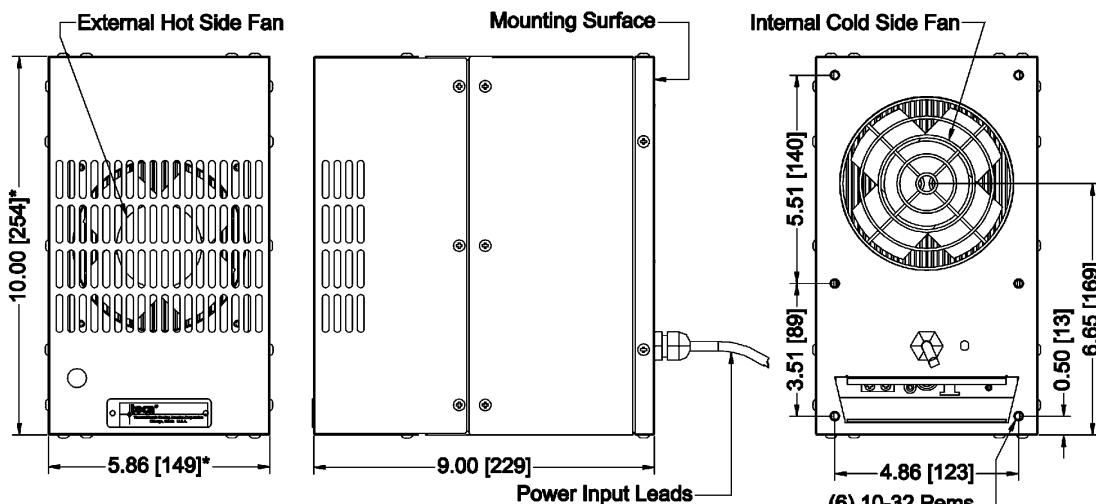
35 Watts L35 L50



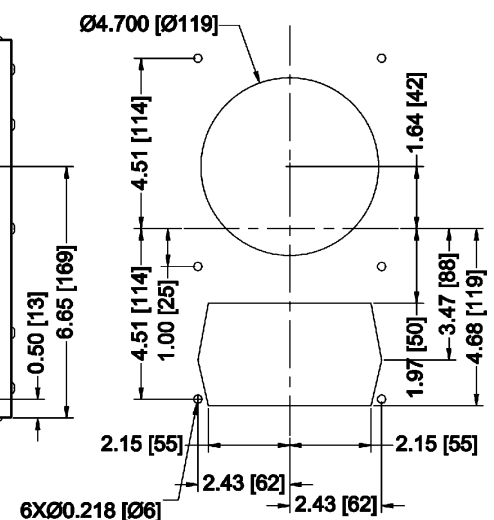
Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	30°C	50°C
Enclosure Air	$y = -.69x - 38$	$y = -.69x - 39$



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware and gasket
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS

FHP-470

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

24 VDC
260 BTU/HR



FEATURES

- Compact (only 10" X 5.86" X 7.97")
- Mounts and operates in any orientation: horizontal, vertical, etc
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

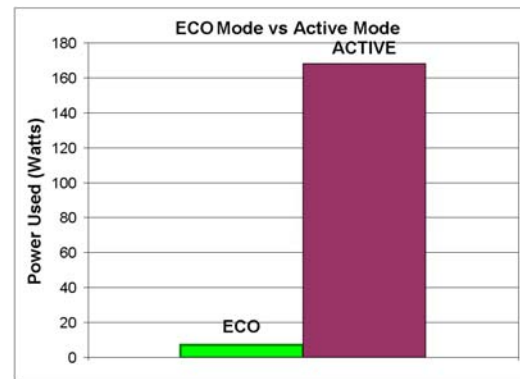
Voltage	24 VDC
Current, Active	7.0 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	259 BTU/HR
Cooling (Din 3168)	80 WATTS
Cooling COP (at L35 L35)	0.48
Heating (Traditional)	> 572 BTU/HR
Heating (Din 3168)	> 168 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)

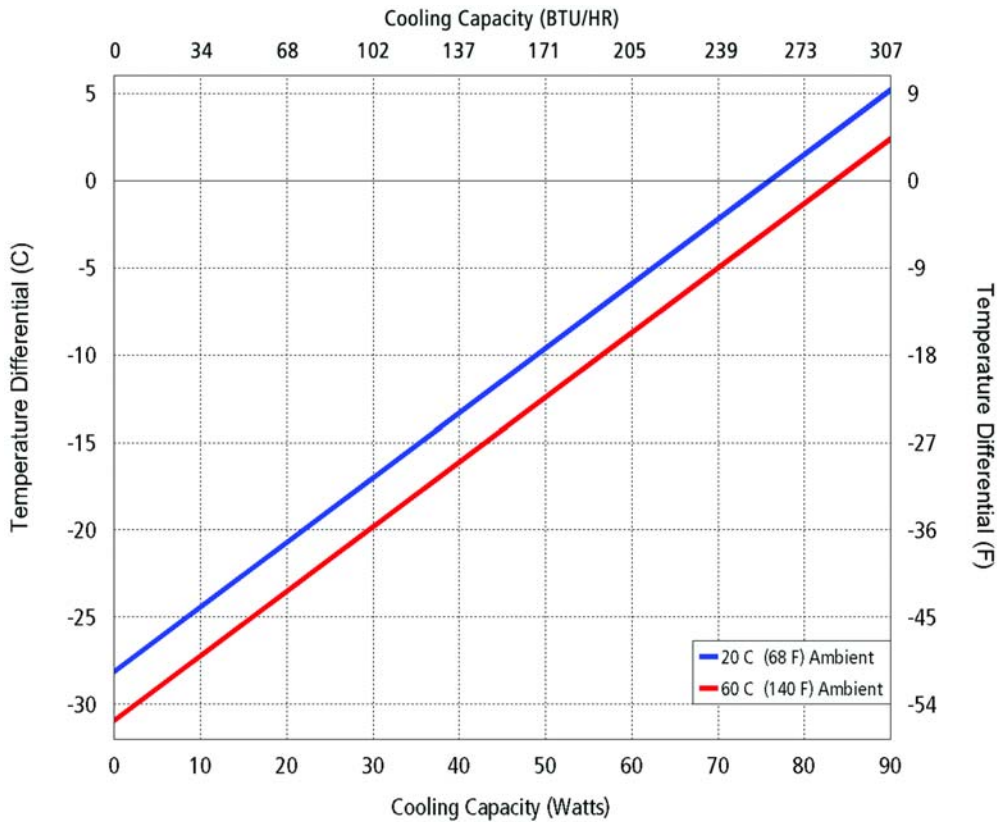


CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-470	7-F0J5-0-001	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
FHP-470HC	7-F095-1-001	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
FHP-470HC	7-F0I5-1-001	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
FHP-470XE	7-F0J5-4-001	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
FHP-470XEHC	7-F095-5-001	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
FHP-470XEHC	7-F0I5-5-001	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
FHP-470X	7-F0J5-2-001	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
FHP-470XHC	7-F095-3-001	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
FHP-470XHC	7-F0I5-3-001	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
FHP-470	$y = .37x - 28.1$	$y = .37x - 30.9$

Air Conditioner - Air Cooled

FHP-470

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

RATING (TRADITIONAL)

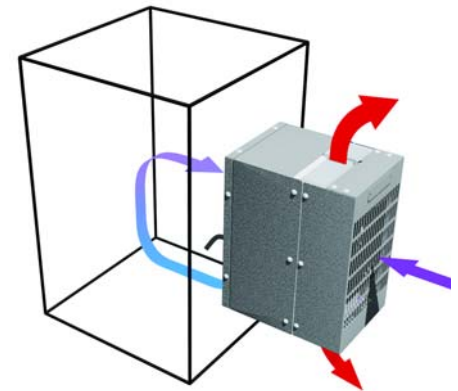
260 BTU/hr @ 0 °F ΔT

360 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

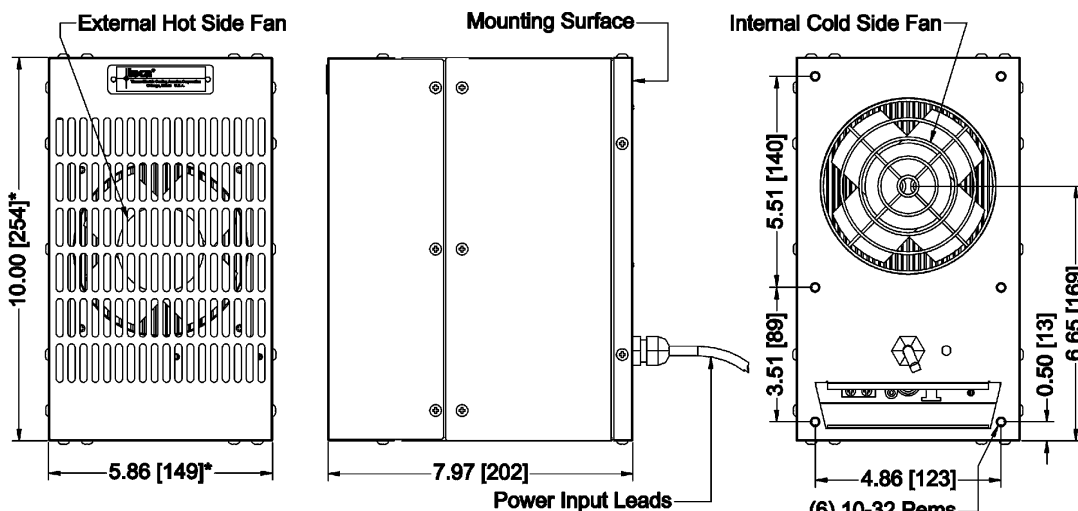
80 Watts L35 L35

40 Watts L35 L50



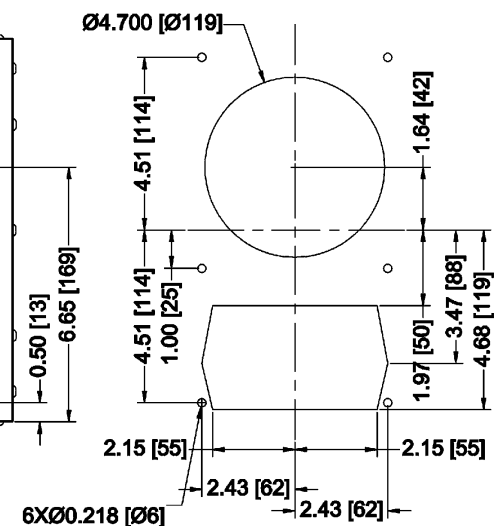
Air Flow Pattern

DIMENSIONS



* Dimension does not include hardware and gasket
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

MOUNTING CUTOUT DIMENSIONS





FHP-450

Air Conditioner/Heat Exchanger

Air Cooled
Flush Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
180 BTU/HR



FEATURES

- Compact (only 10" X 5.84" X 7.97")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

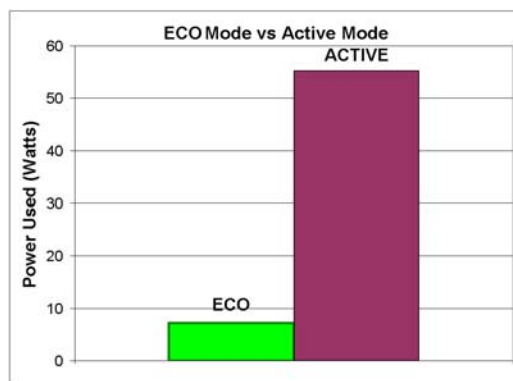
Voltage	24 VDC
Current, Active	2.3 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	197 BTU/HR
Cooling (Din 3168)	53 WATTS
Cooling COP (at L35 L35)	0.96
Heating (Traditional)	> 188 BTU/HR
Heating (Din 3168)	> 55 WATTS
Heating COP	> 1.0

INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)

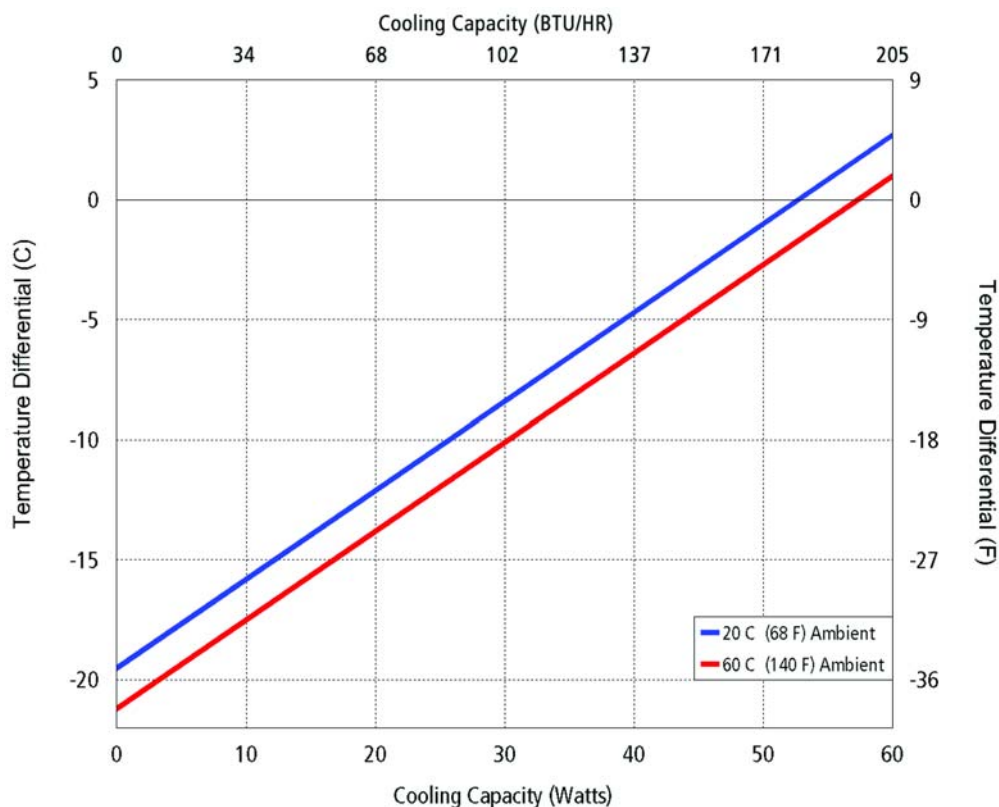


CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
FHP-450	7-F0J5-0-000	Cool only, industrial fans	TC-4F	NEMA-12, IP 52
FHP-450HC	7-F095-1-000	Heat/Cool, industrial fans	None*	NEMA-12, IP 52
FHP-450HC	7-F0I5-1-000	Heat/Cool, industrial fans	TC-7F	NEMA-12, IP 52
FHP-450XE	7-F0J5-4-000	Cool only, sealed hot side fan	TC-4F	NEMA-4, IP 56
FHP-450XEHC	7-F095-5-000	Heat/Cool, sealed hot side fan	None*	NEMA-4, IP 56
FHP-450XEHC	7-F0I5-5-000	Heat/Cool, sealed hot side fan	TC-7F	NEMA-4, IP 56
FHP-450X	7-F0J5-2-000	Cool only, Mil. grade hot side fan	TC-4F	NEMA-4X, IP 56
FHP-450XHC	7-F095-3-000	Heat/Cool, Mil. grade hot side fan	None*	NEMA-4X, IP 56
FHP-450XHC	7-F0I5-3-000	Heat/Cool, Mil. grade hot side fan	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	20°C	60°C
FHP-450	$y = .37x - 19.5$	$y = .37x - 21.2$

Air Conditioner - Air Cooled

FHP-450

MOUNTING STYLE

Flush Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

RATING (TRADITIONAL)

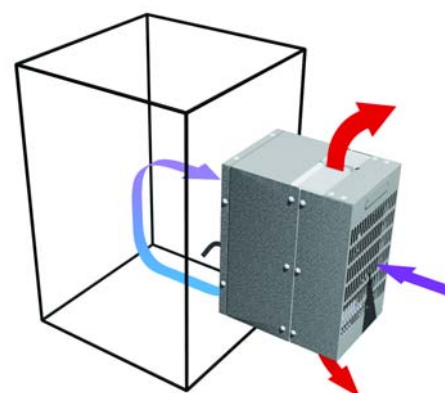
180 BTU/hr @ 0 °F ΔT

280 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

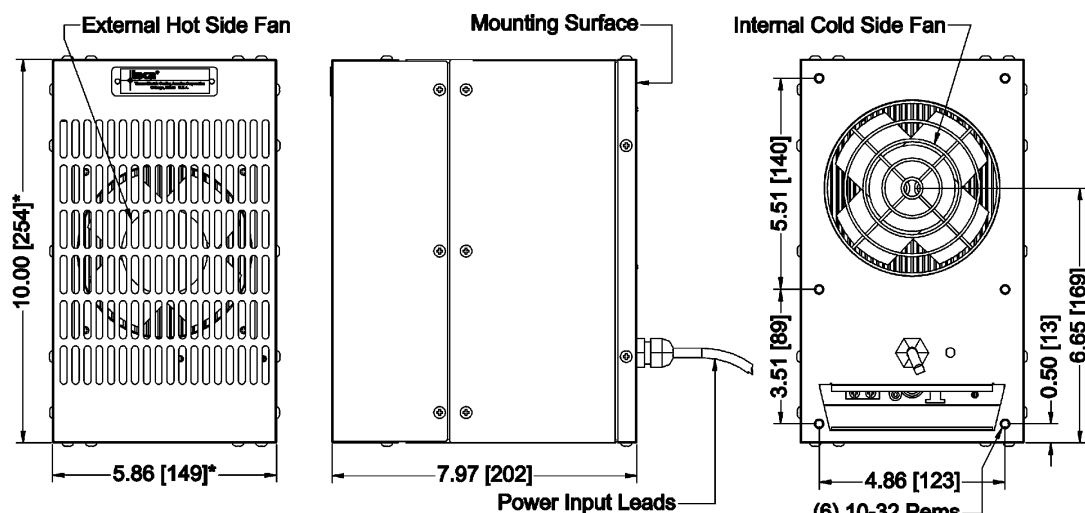
53 Watts L35 L35

15 Watts L35 L5

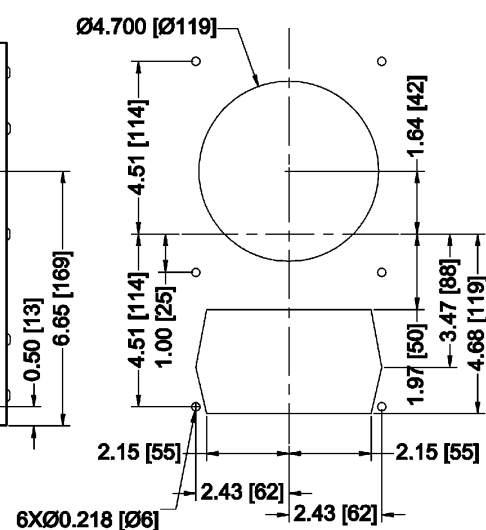


Air Flow Pattern

DIMENSIONS



MOUNTING CUTOUT DIMENSIONS



* Dimension does not include hardware and gasket
Mounting hardware and gasket included but not shown
Dimensions: Inches [Millimeters]

IHP-690

Air Cooled
Internal Mounted
Nema-12, 4, 4X

Internal Mount Air Conditioner/Heat Exchanger

24 VDC
390 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 17 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

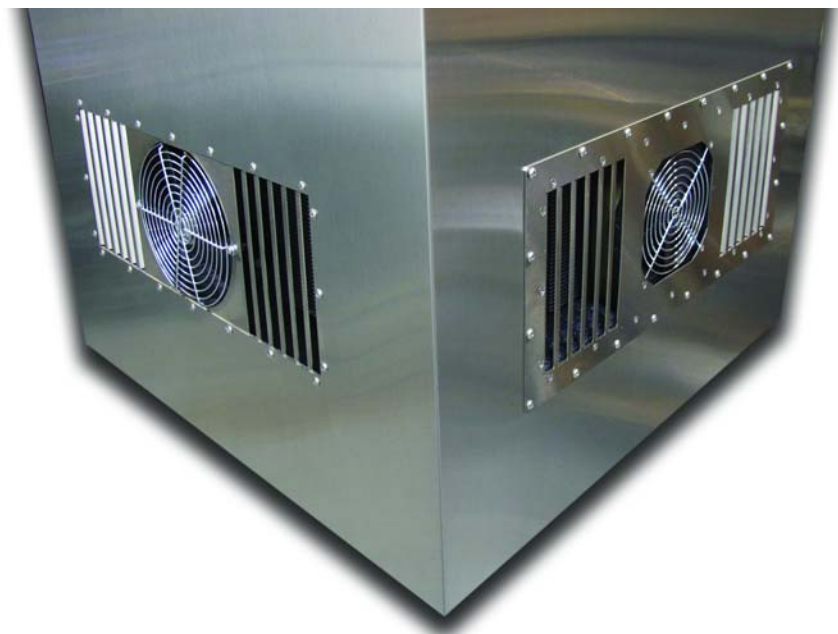
Voltage	24 VDC
Current, Active	15 AMPS
Current, ECO-Mode	0.5 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	392 BTU/HR
Cooling (Din 3168)	115 WATTS
Cooling COP (at L35 L35)	0.44
Heating (Traditional)	> 900 BTU/HR
Heating (Din 3168)	> 264 WATTS
Heating COP	> 1.0

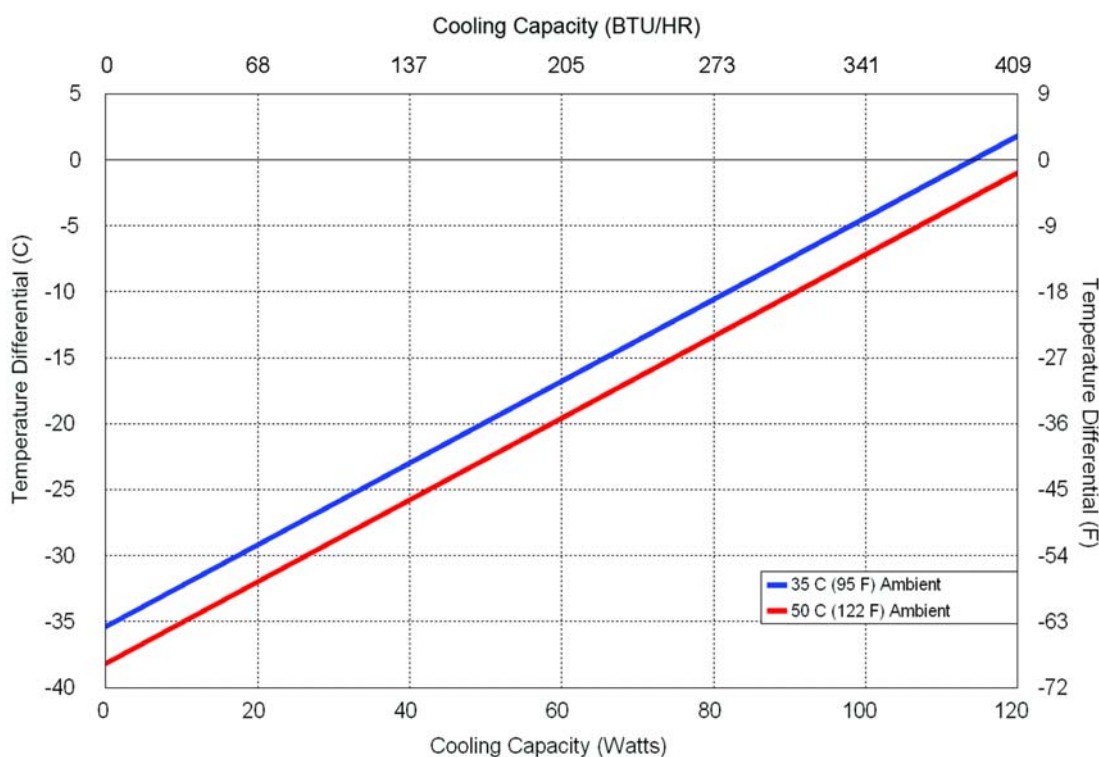
INCLUDES

- Temperature controller
- Mounting gasket and hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
IHP-690	$y = .31x - 35.4$	$y = .31x - 38.2$

Air Conditioner - Air Cooled

IHP-690

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

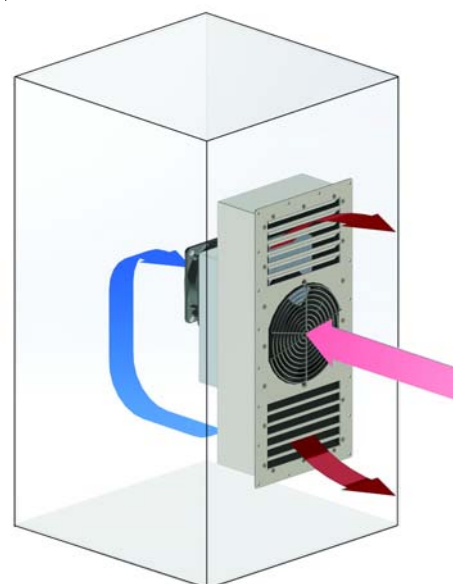
NEMA-12 IP 52
NEMA-4 IP 56

RATING (TRADITIONAL)

392 BTU/hr @ 0 °F ΔT
511 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

115 Watts L35 L35
75 Watts L35 L50

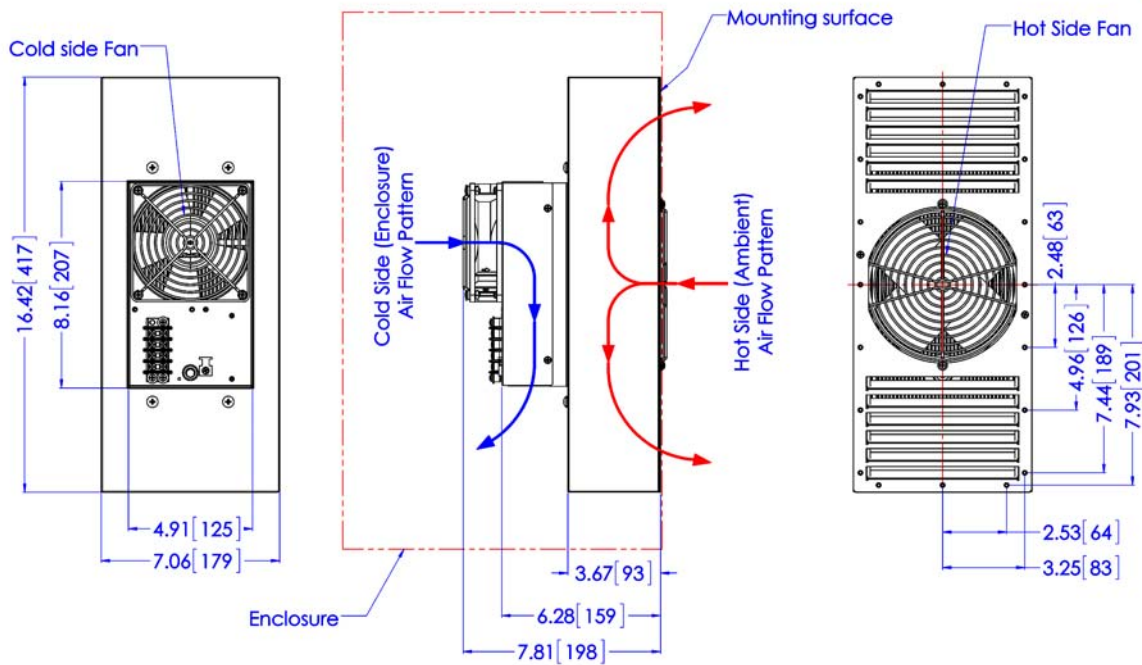
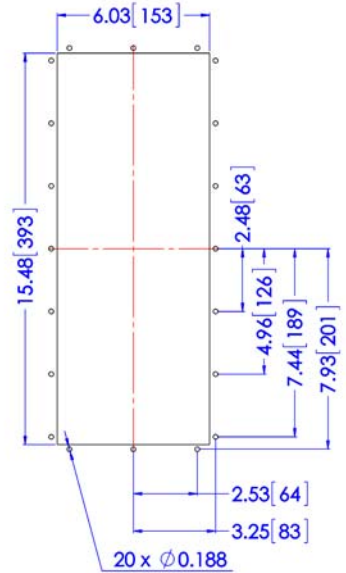


Air Flow Pattern

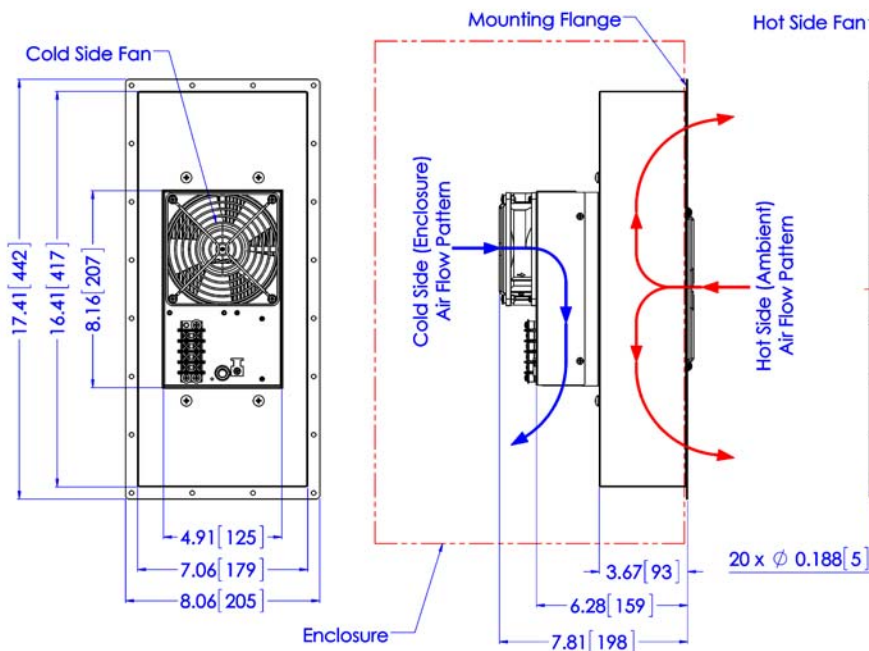
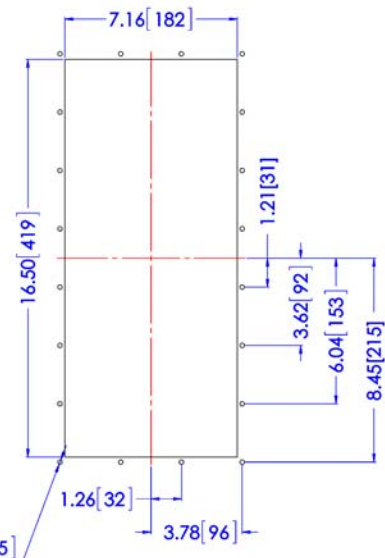
SPECIFICATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-690	B-M0J5-0-000	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-690HC	B-M095-1-000	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-690HC	B-M0I5-1-000	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-690XE	B-M0J5-4-000	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-690XEHC	B-M095-5-000	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-690XEHC	B-M0I5-5-000	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-690	B-M0J5-0-100	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-690HC	B-M095-1-100	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 52
IHP-690HC	B-M0I5-1-100	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-690XE	B-M0J5-4-100	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-690XEHC	B-M095-5-100	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-690XEHC	B-M0I5-5-100	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

DIMENSIONS (Style A: Installs from inside of the enclosure)**MOUNTING CUTOUT DIMENSIONS**

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

DIMENSIONS (Style B: Installs from outside of the enclosure)**MOUNTING CUTOUT DIMENSIONS**

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

IHP-590

Air Cooled
Internal Mounted
Nema-12, 4, 4X

Internal Mount Air Conditioner/Heat Exchanger

24 VDC
315 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

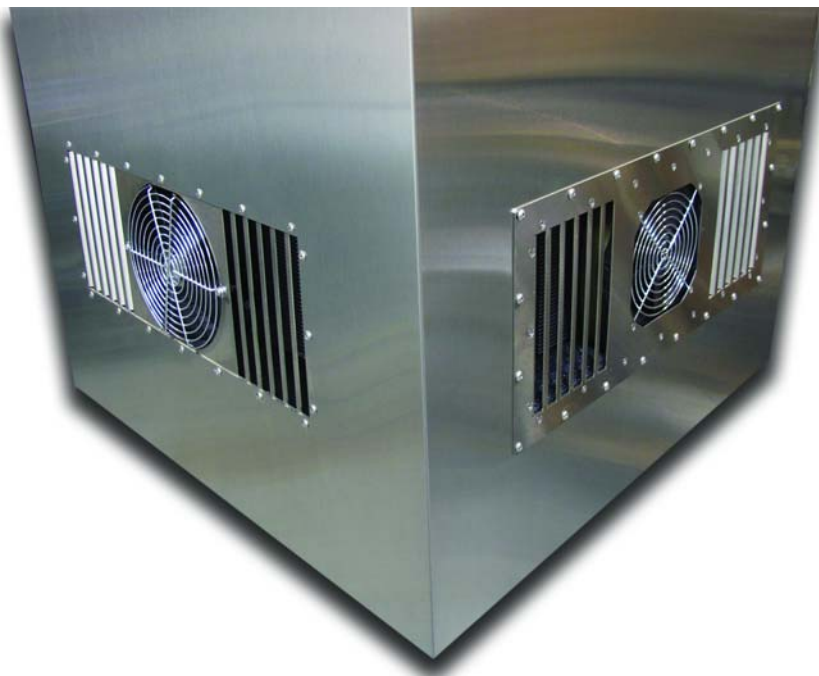
Voltage	24 VDC
Current, Active	6.9 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	315 BTU/HR
Cooling (Din 3168)	92 WATTS
Cooling COP (at L35 L35)	0.56
Heating (Traditional)	> 562 BTU/HR
Heating (Din 3168)	> 165 WATTS
Heating COP	> 1.0

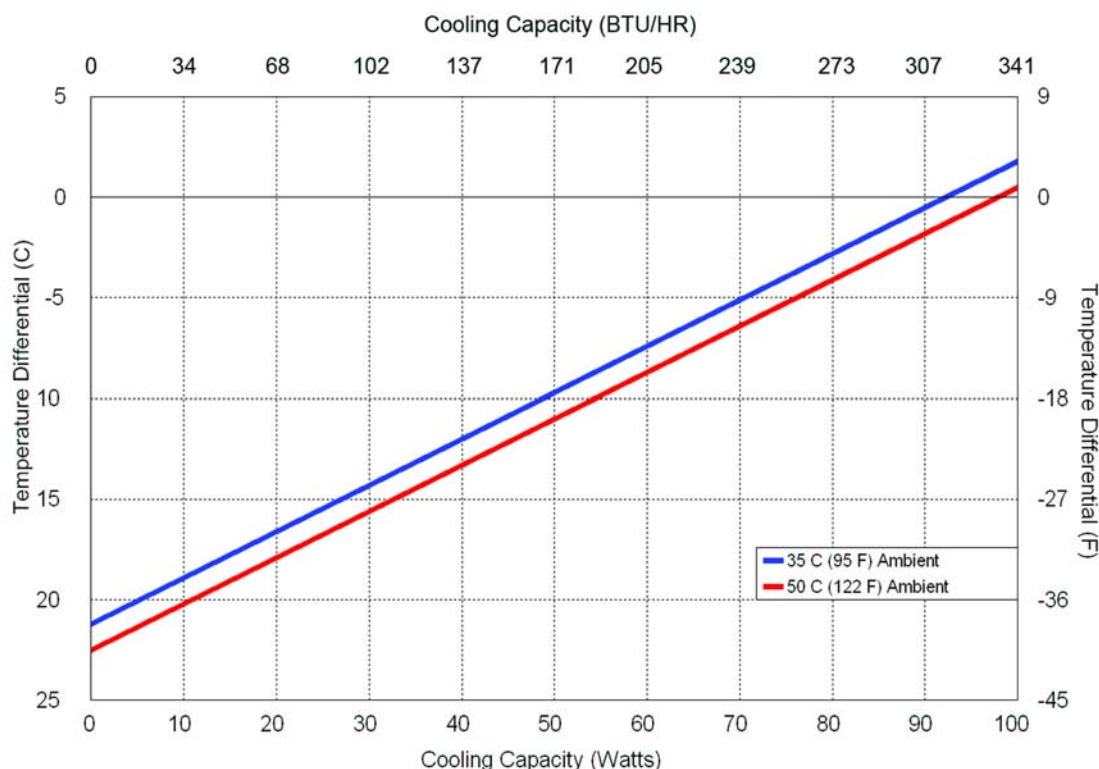
INCLUDES

- Temperature controller
- Mounting gasket and hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
IHP-590	$y = .23x - 21.2$	$y = .23x - 22.5$

Air Conditioner - Air Cooled

IHP-590

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

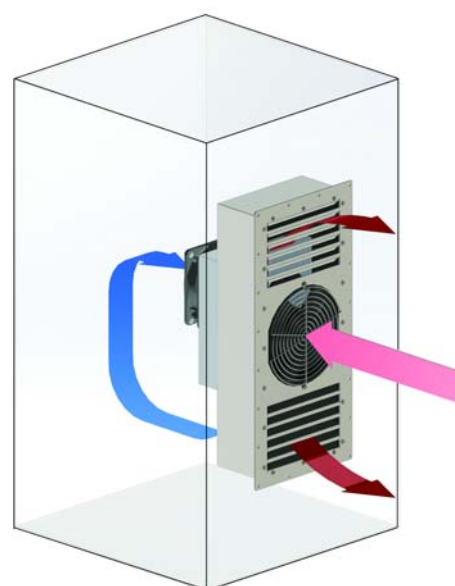
315 BTU/hr @ 0 °F ΔT

479 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

92 Watts L35 L35

32 Watts L35 L50

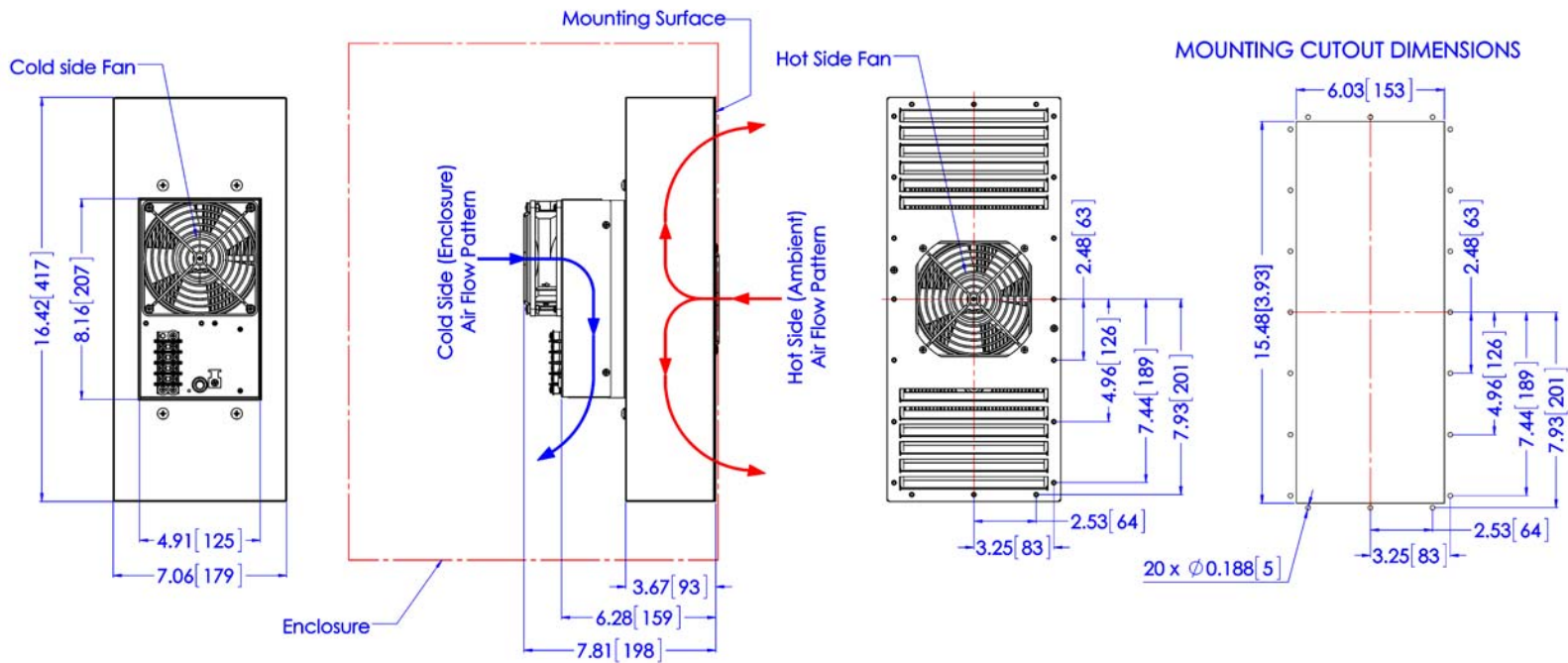


Air Flow Pattern

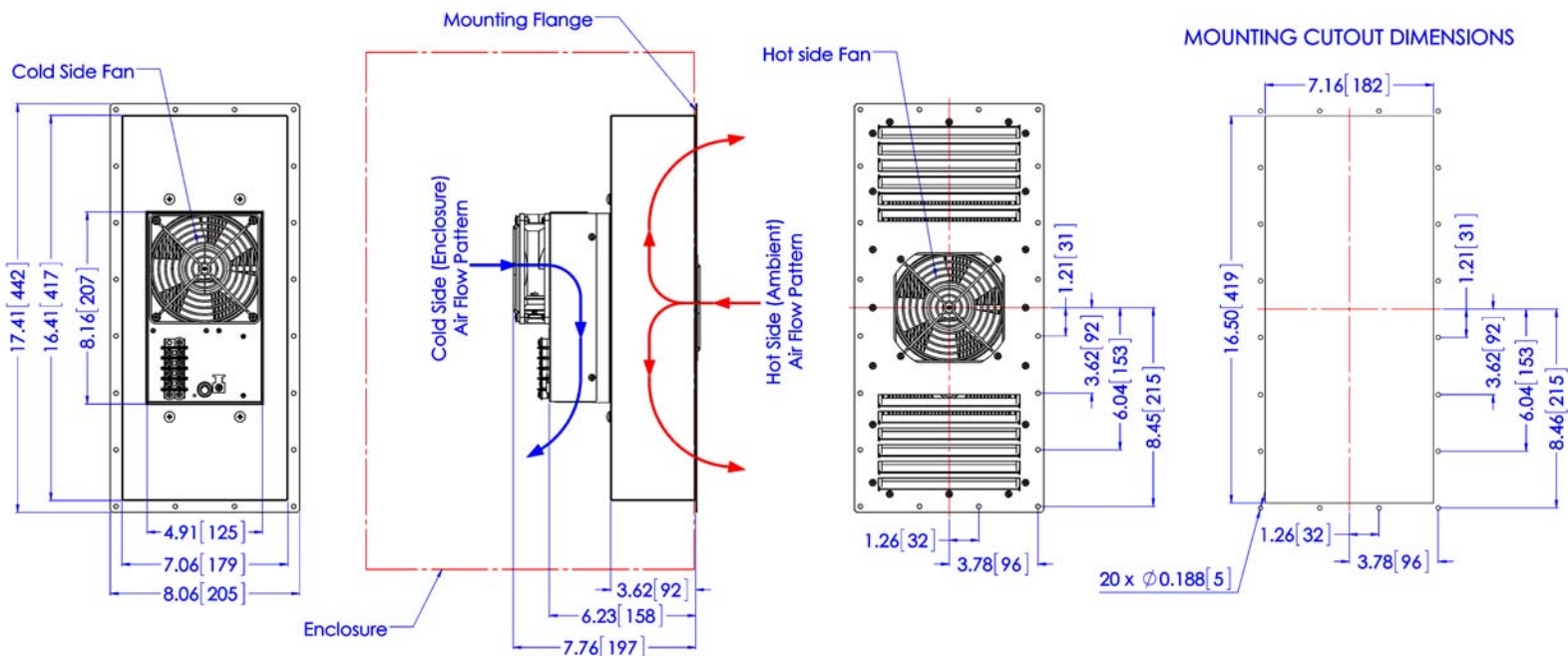
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-590	B-G0J5-0-001	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-590HC	B-G095-1-001	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-590HC	B-G0I5-1-001	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-590XE	B-G0J5-4-001	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-590XEHC	B-G095-5-001	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-590XEHC	B-G0I5-5-001	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-590X	B-G0J5-2-001	Cool only, Mil. grade hot side fan	A	TC-4F	NEMA-4X, IP 56
IHP-590XHC	B-G095-3-001	Heat/Cool, Mil. grade hot side fan	A	None*	NEMA-4X, IP 56
IHP-590XHC	B-G0I5-3-001	Heat/Cool, Mil. grade hot side fan	A	TC-7F	NEMA-4X, IP 56
IHP-590	B-G0J5-0-101	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-590HC	B-G095-1-101	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 52
IHP-590HC	B-G0I5-1-101	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-590XE	B-G0J5-4-101	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-590XEHC	B-G095-5-101	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-590XEHC	B-G0I5-5-101	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56
IHP-590X	B-G0J5-2-101	Cool only, Mil. grade hot side fan	B	TC-4F	NEMA-4X, IP 56
IHP-590XHC	B-G095-3-101	Heat/Cool, Mil. grade hot side fan	B	None*	NEMA-4X, IP 56
IHP-590XHC	B-G0I5-3-101	Heat/Cool, Mil. grade hot side fan	B	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

DIMENSIONS (Style A: Installs from inside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

DIMENSIONS (Style B: Installs from outside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]



IHP-570

Internal Mount Air Conditioner/Heat Exchanger

Air Cooled
Internal Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
240 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

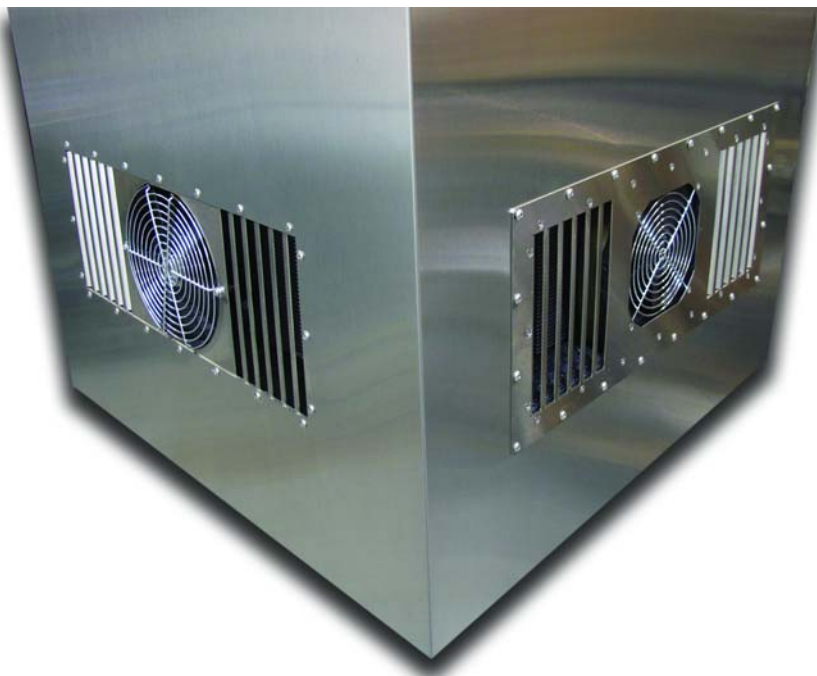
Voltage	24 VDC
Current, Active	3.0 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	240 BTU/HR
Cooling (Din 3168)	70 WATTS
Cooling COP (at L35 L35)	0.97
Heating (Traditional)	> 245 BTU/HR
Heating (Din 3168)	> 72 WATTS
Heating COP	> 1.0

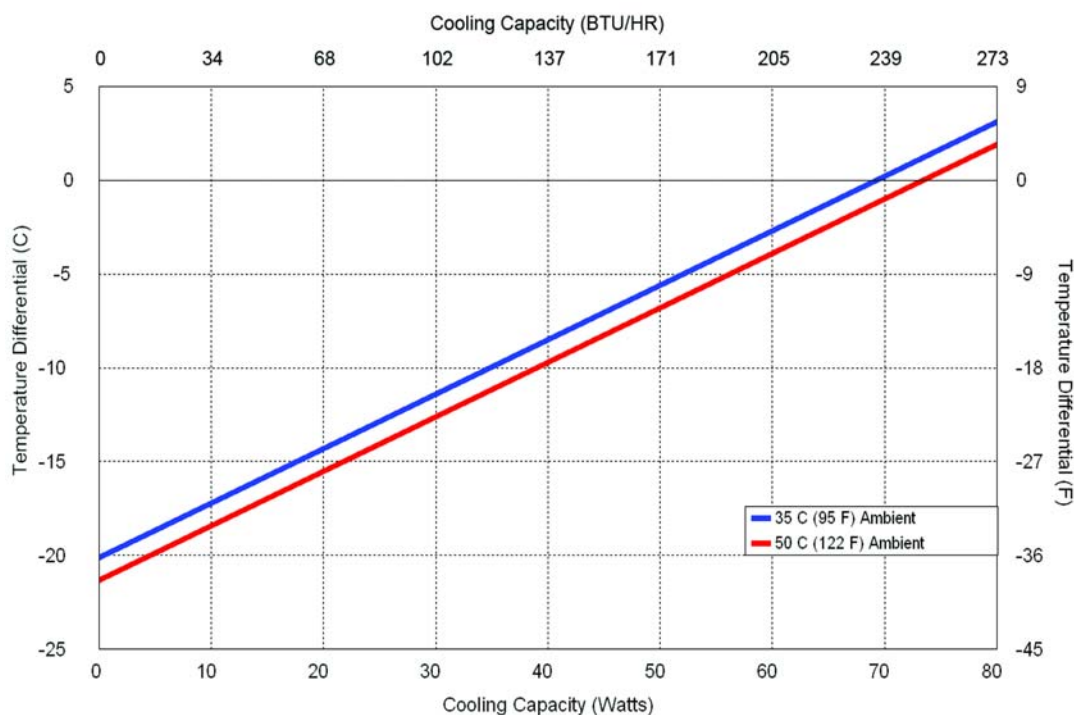
INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
IHP-570	$y = .29x - 20.1$	$y = .29x - 21.3$

Air Conditioner - Air Cooled

IHP-570

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

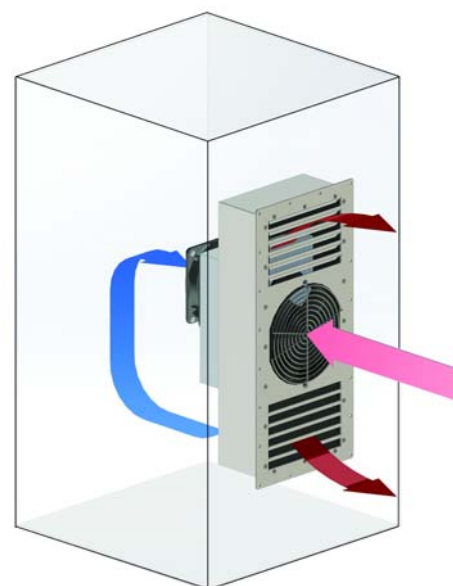
240 BTU/hr @ 0 °F ΔT

367 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

70 Watts L35 L35

22 Watts L35 L50

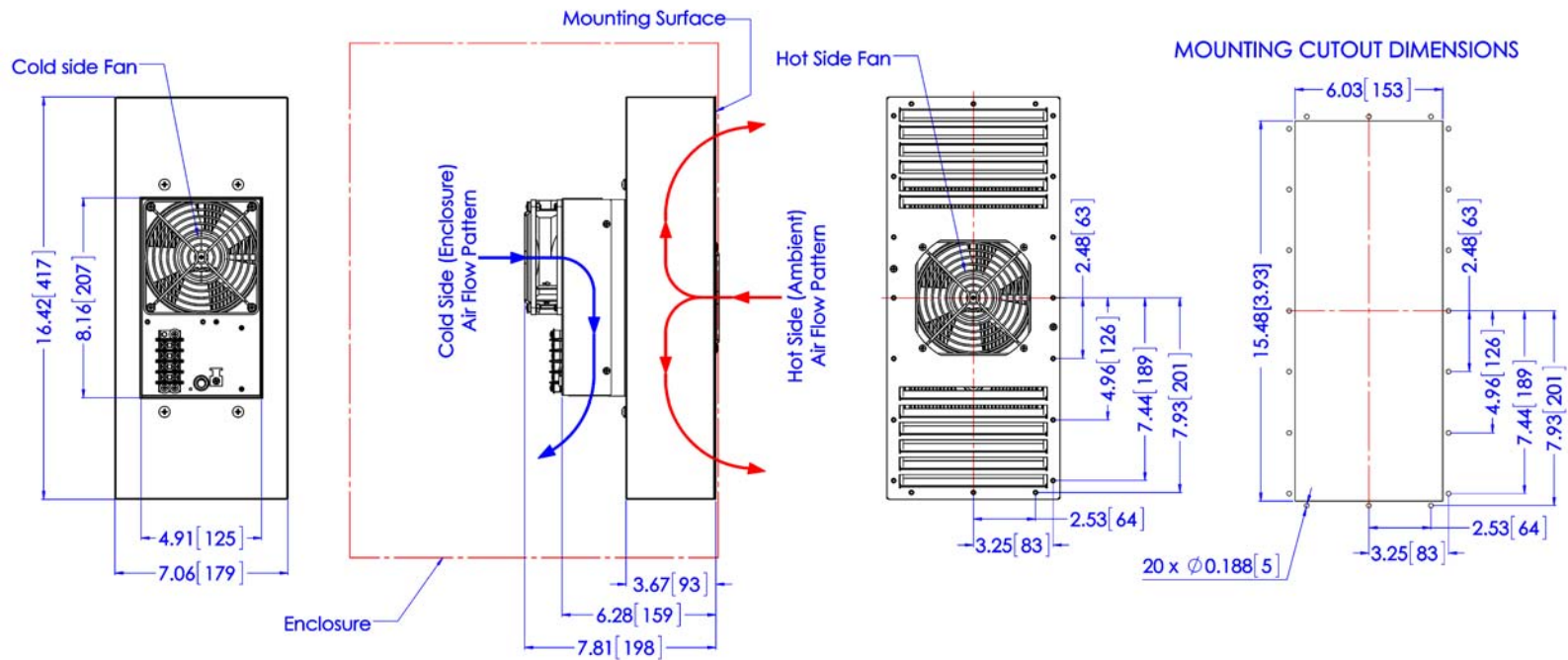


Air Flow Pattern

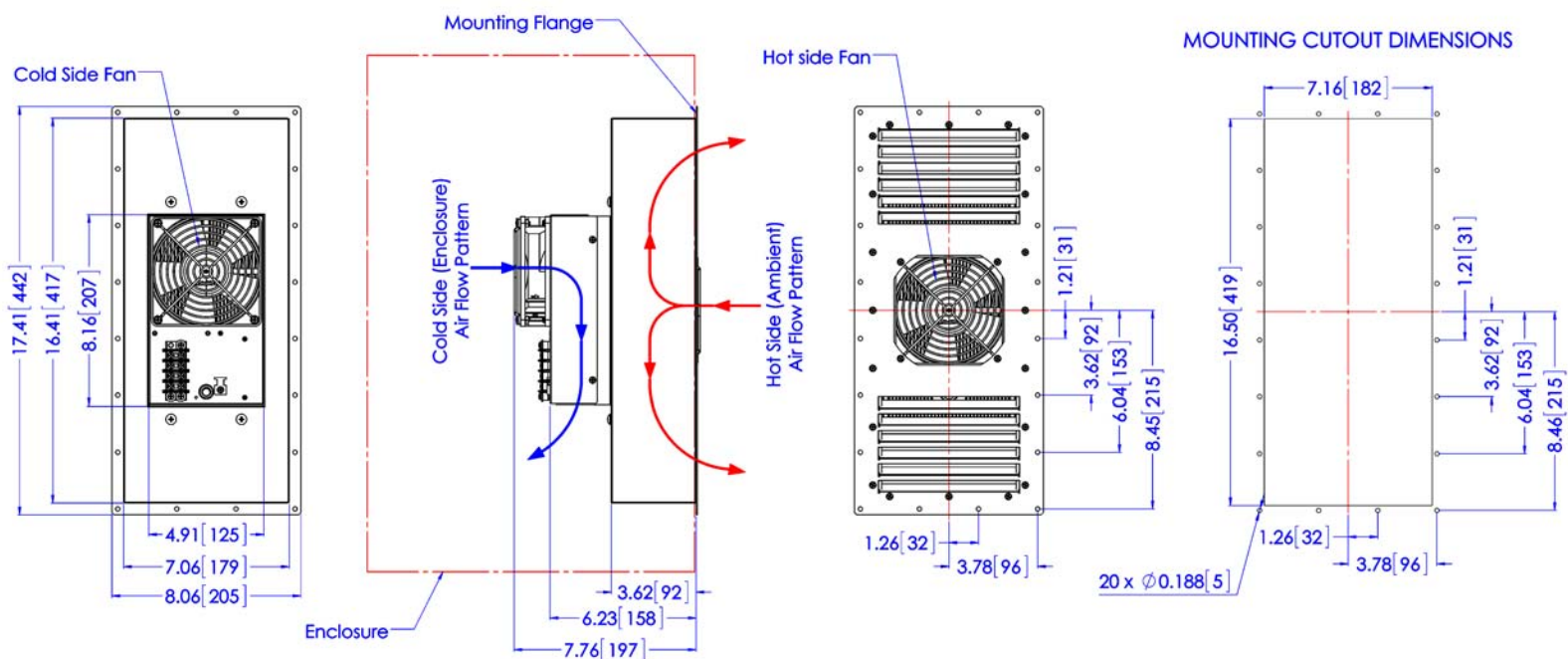
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-570	B-G0J5-0-000	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-570HC	B-G095-1-000	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-570HC	B-G0I5-1-000	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-570XE	B-G0J5-4-000	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-570XEHC	B-G095-5-000	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-570XEHC	B-G0I5-5-000	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-570X	B-G0J5-2-000	Cool only, Mil. grade hot side fan	A	TC-4F	NEMA-4X, IP 56
IHP-570XHC	B-G095-3-000	Heat/Cool, Mil. grade hot side fan	A	None*	NEMA-4X, IP 56
IHP-570XHC	B-G0I5-3-000	Heat/Cool, Mil. grade hot side fan	A	TC-7F	NEMA-4X, IP 56
IHP-570	B-G0J5-0-100	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-570HC	B-G095-1-100	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 52
IHP-570HC	B-G0I5-1-100	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-570XE	B-G0J5-4-100	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-570XEHC	B-G095-5-100	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-570XEHC	B-G0I5-5-100	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56
IHP-570X	B-G0J5-2-100	Cool only, Mil. grade hot side fan	B	TC-4F	NEMA-4X, IP 56
IHP-570XHC	B-G095-3-100	Heat/Cool, Mil. grade hot side fan	B	None*	NEMA-4X, IP 56
IHP-570XHC	B-G0I5-3-100	Heat/Cool, Mil. grade hot side fan	B	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

DIMENSIONS (Style A: Installs from inside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

DIMENSIONS (Style B: Installs from outside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

IHP-470

Air Cooled
Internal Mounted
Nema-12, 4, 4X

Internal Mount Air Conditioner/Heat Exchanger

24 VDC
228 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

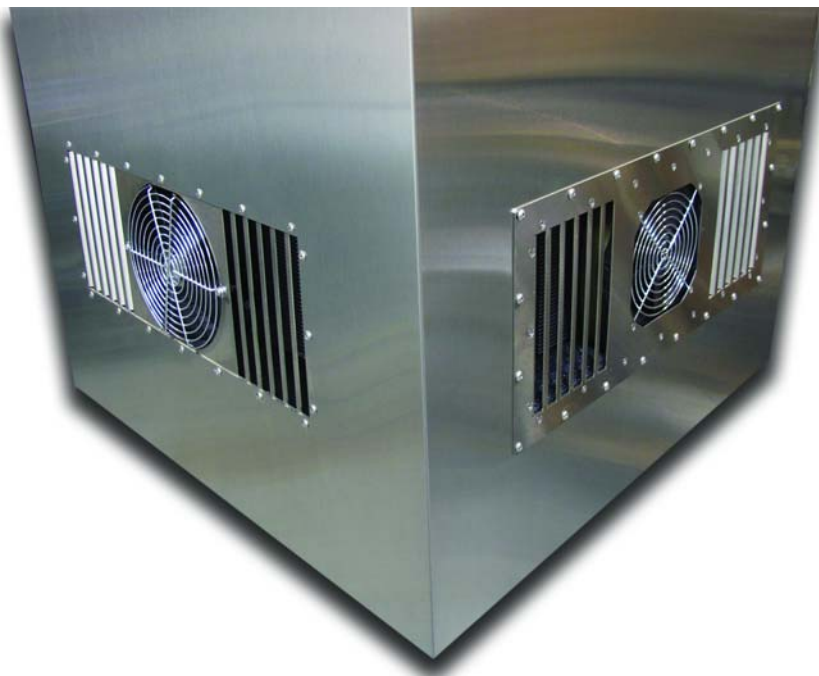
Voltage	24 VDC
Current, Active	7.0 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	228 BTU/HR
Cooling (Din 3168)	67 WATTS
Cooling COP (at L35 L35)	0.40
Heating (Traditional)	> 572 BTU/HR
Heating (Din 3168)	> 168 WATTS
Heating COP	> 1.0

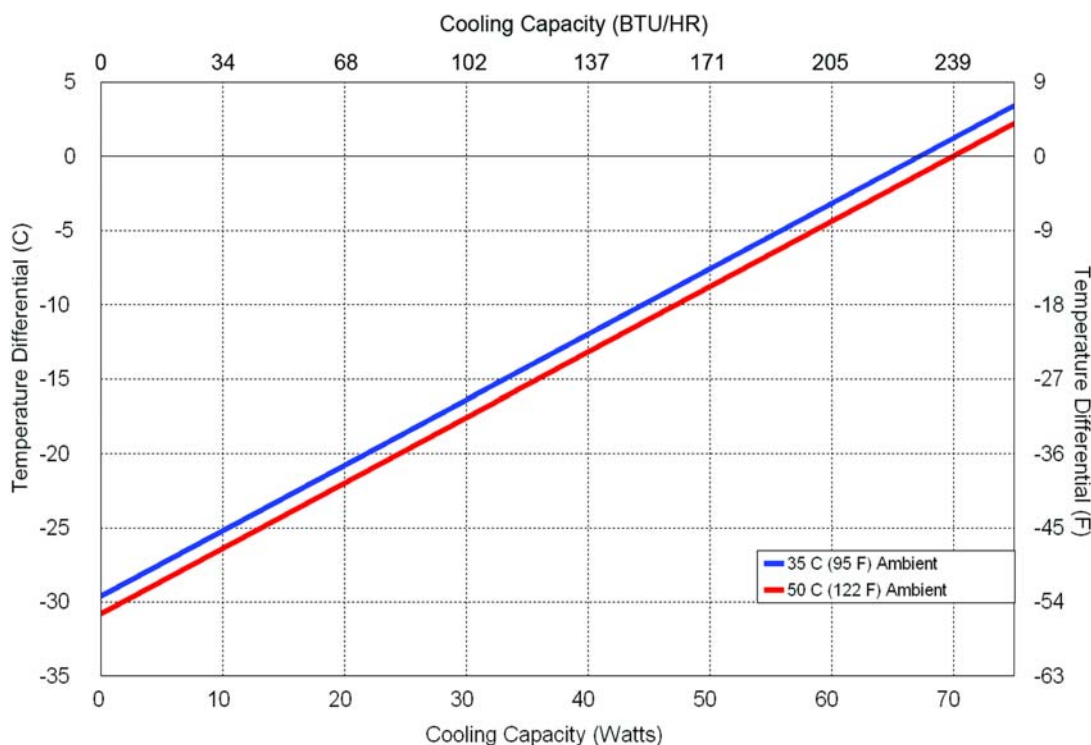
INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
IHP-470	$y = .44x - 29.6$	$y = .44x - 30.8$

Air Conditioner - Air Cooled

IHP-470

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

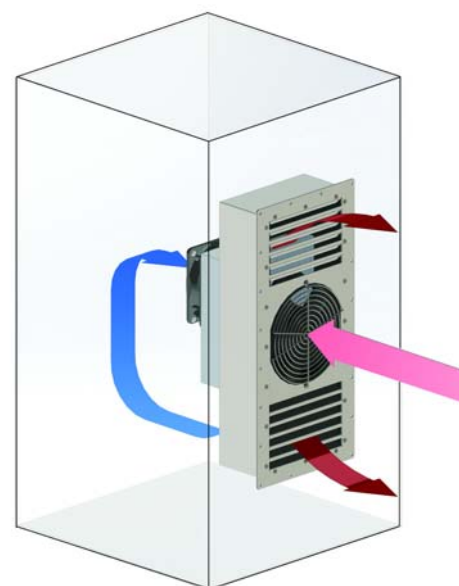
228 BTU/hr @ 0 °F ΔT

315 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

67 Watts L35 L35

36 Watts L35 L50

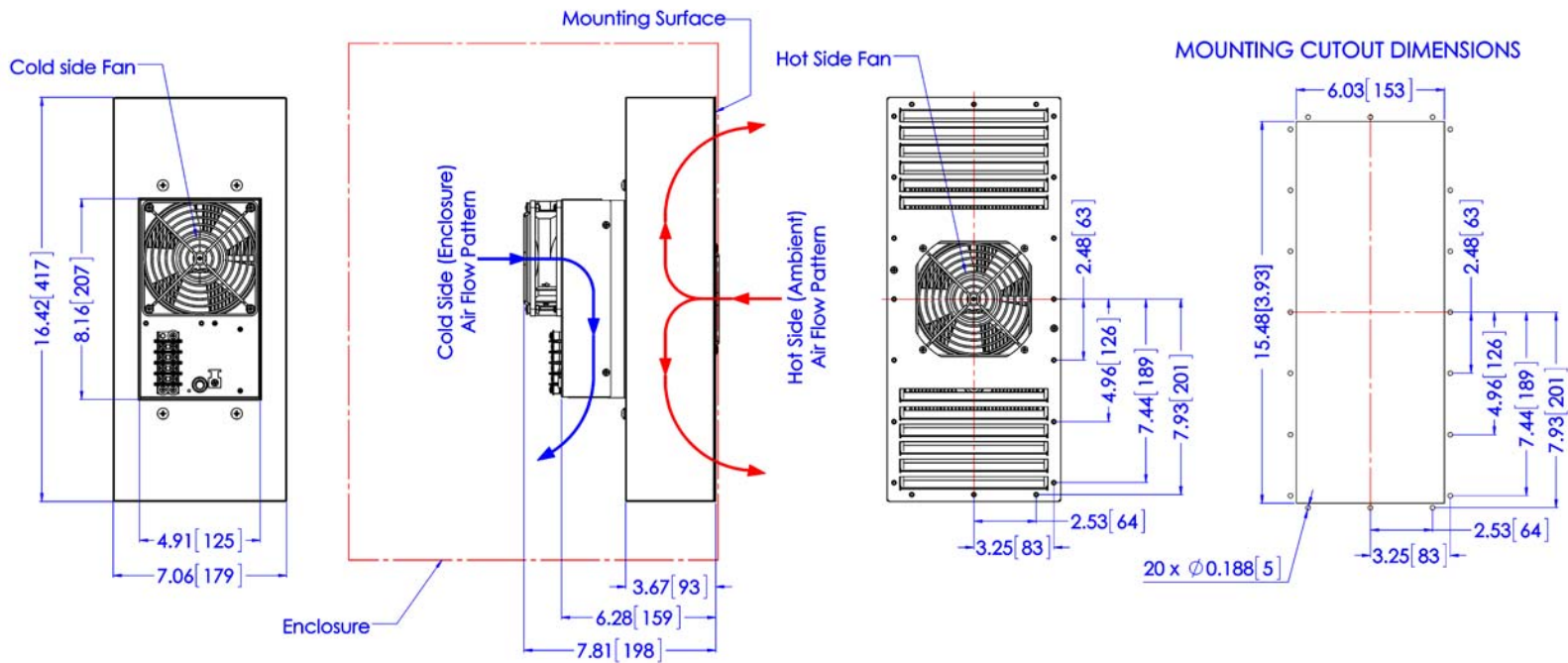


Air Flow Pattern

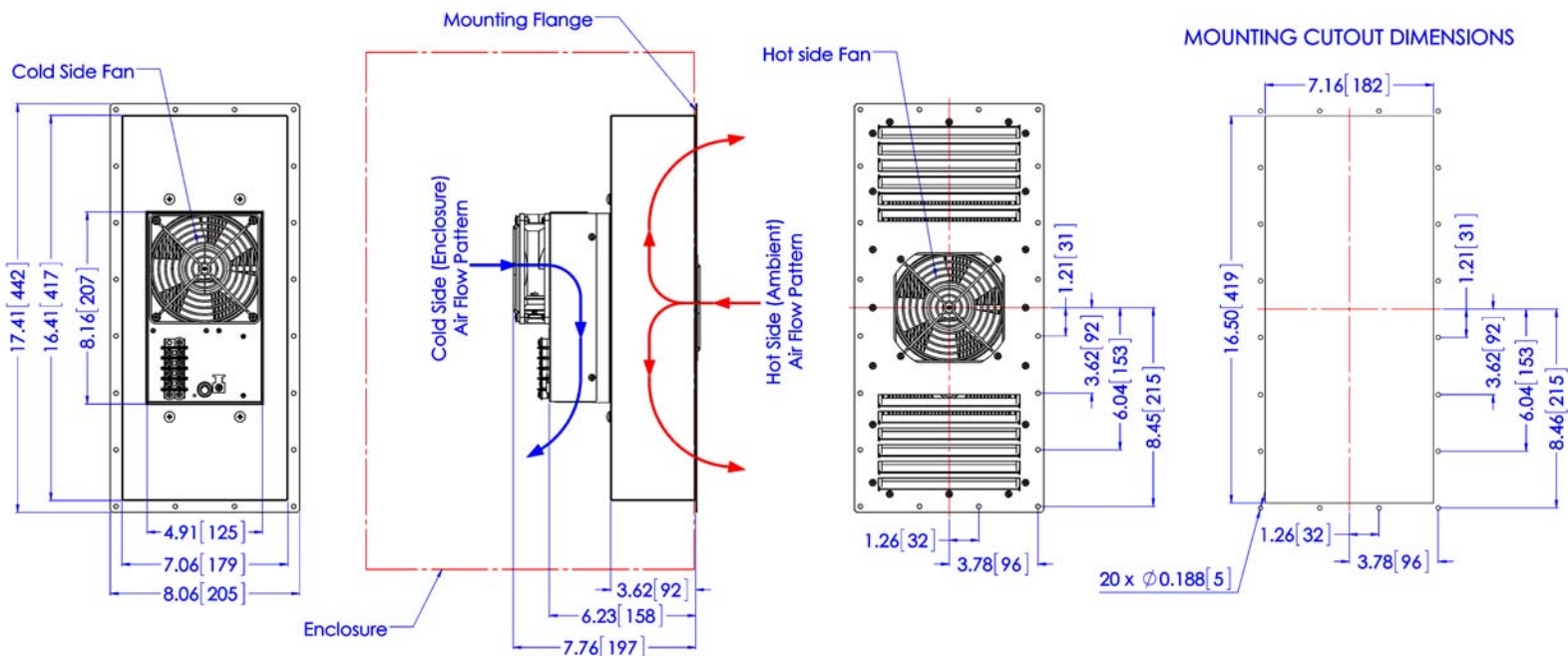
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-470	B-F0J5-0-001	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-470HC	B-F095-1-001	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-470HC	B-F0I5-1-001	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-470XE	B-F0J5-4-001	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-470XEHC	B-F095-5-001	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-470XEHC	B-F0I5-5-001	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-470X	B-F0J5-2-001	Cool only, Mil. grade hot side fan	A	TC-4F	NEMA-4X, IP 56
IHP-470XHC	B-F095-3-001	Heat/Cool, Mil. grade hot side fan	A	None*	NEMA-4X, IP 56
IHP-470XHC	B-F0I5-3-001	Heat/Cool, Mil. grade hot side fan	A	TC-7F	NEMA-4X, IP 56
IHP-470	B-F0J5-0-101	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-470HC	B-F095-1-101	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 5
IHP-470HC	B-F0I5-1-101	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-470XE	B-F0J5-4-101	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-470XEHC	B-F095-5-101	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-470XEHC	B-F0I5-5-101	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56
IHP-470X	B-F0J5-2-101	Cool only, Mil. grade hot side fan	B	TC-4F	NEMA-4X, IP 56
IHP-470XHC	B-F095-3-101	Heat/Cool, Mil. grade hot side fan	B	None*	NEMA-4X, IP 56
IHP-470XHC	B-F0I5-3-101	Heat/Cool, Mil. grade hot side fan	B	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

DIMENSIONS (Style A: Installs from inside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

DIMENSIONS (Style B: Installs from outside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]



IHP-450

Internal Mount Air Conditioner/Heat Exchanger

Air Cooled
Internal Mounted
Nema-12, 4, 4X

24 VDC
High Efficiency
157 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

Active Cooling	35 °C
Heat Exchanger (ECO-Mode)	25 °C
Active Heating	10 °C
Typical Hysteresis	5 °C
Operating Ambient	-40/+70 °C
Operating Enclosure	-10/+60 °C

POWER INPUTS

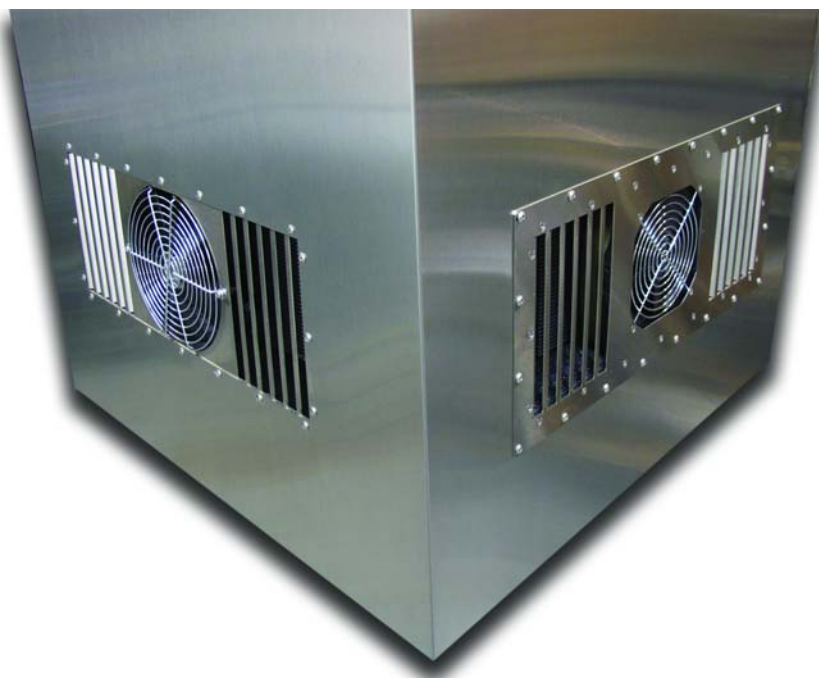
Voltage	24 VDC
Current, Active	2.3 AMPS
Current, ECO-Mode	0.3 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	157 BTU/HR
Cooling (Din 3168)	46 WATTS
Cooling COP (at L35 L35)	0.83
Heating (Traditional)	> 188 BTU/HR
Heating (Din 3168)	> 55 WATTS
Heating COP	> 1.0

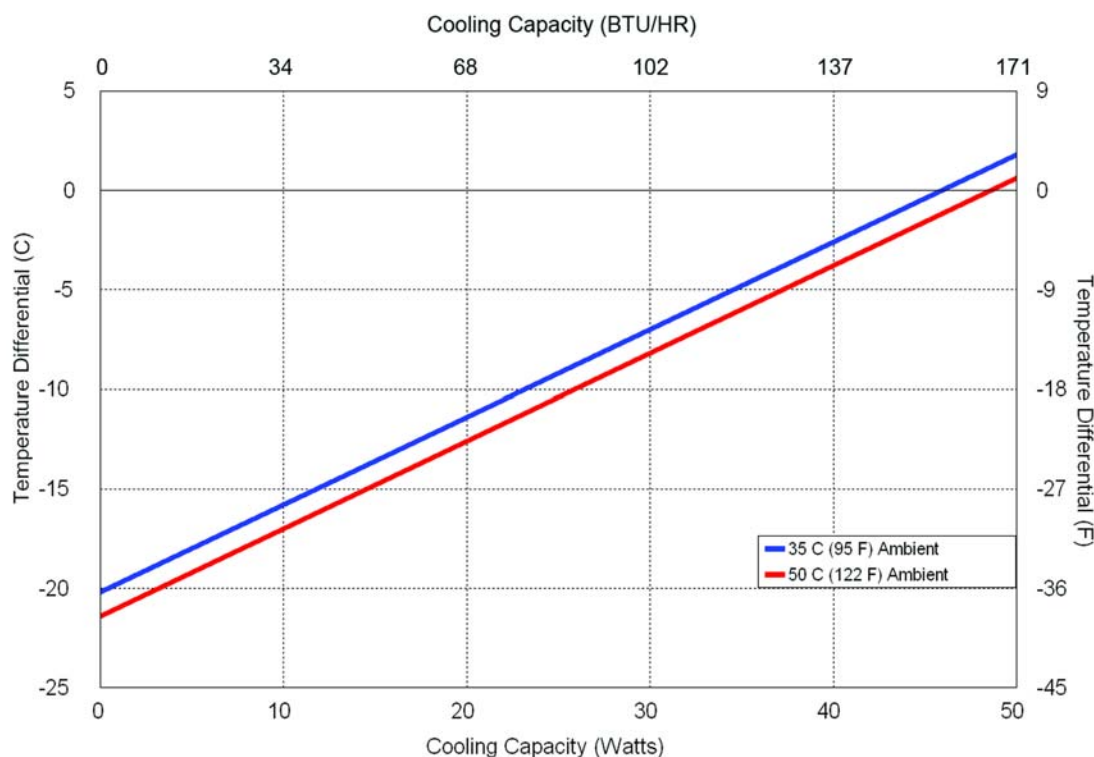
INCLUDES

- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

PERFORMANCE CURVE



Equation of Line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$		
Ambient Temp	35°C	50°C
IHP-450	$y = .44x - 20.2$	$y = .44x - 21.4$

Air Conditioner - Air Cooled

IHP-450

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4,4X IP 56

RATING (TRADITIONAL)

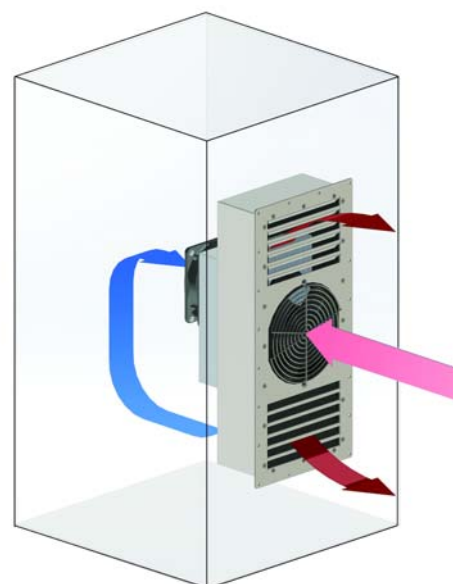
157 BTU/hr @ 0 °F ΔT

243 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

46 Watts L35 L35

14 Watts L35 L50

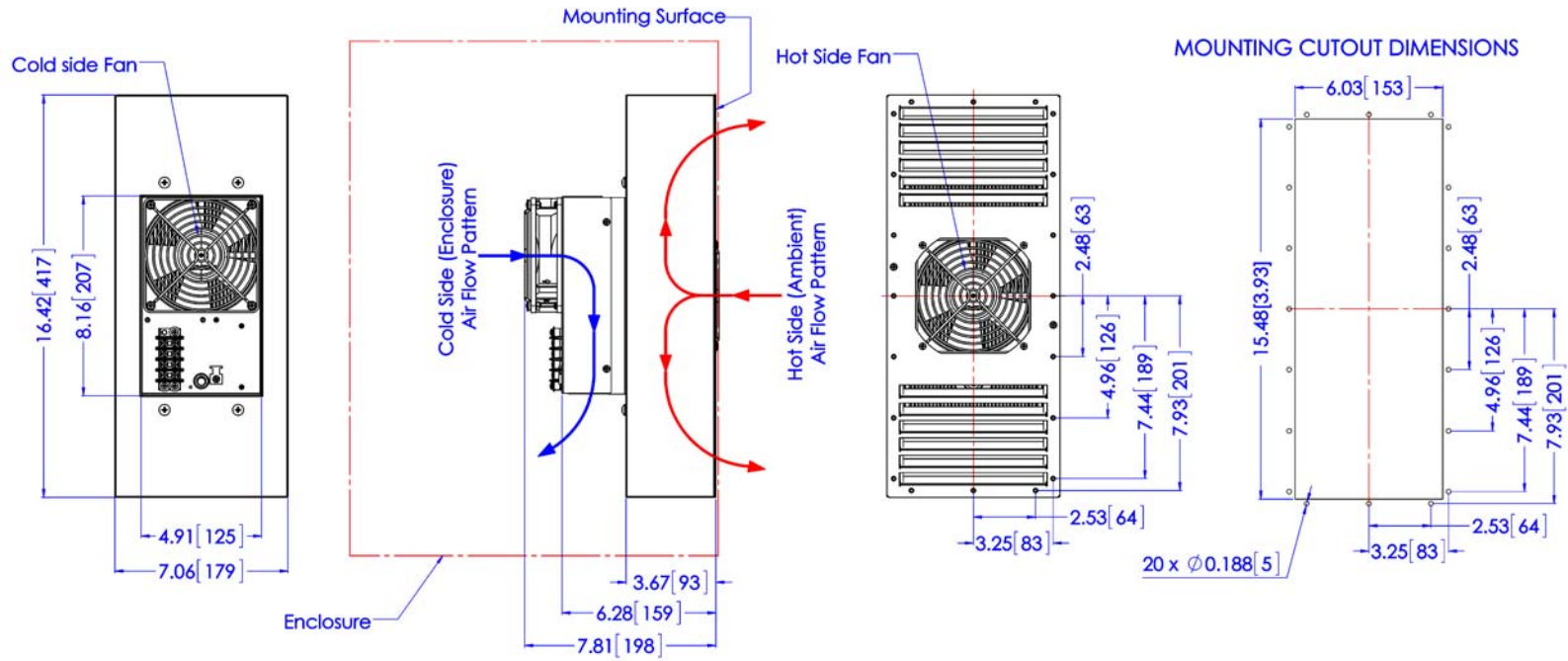


Air Flow Pattern

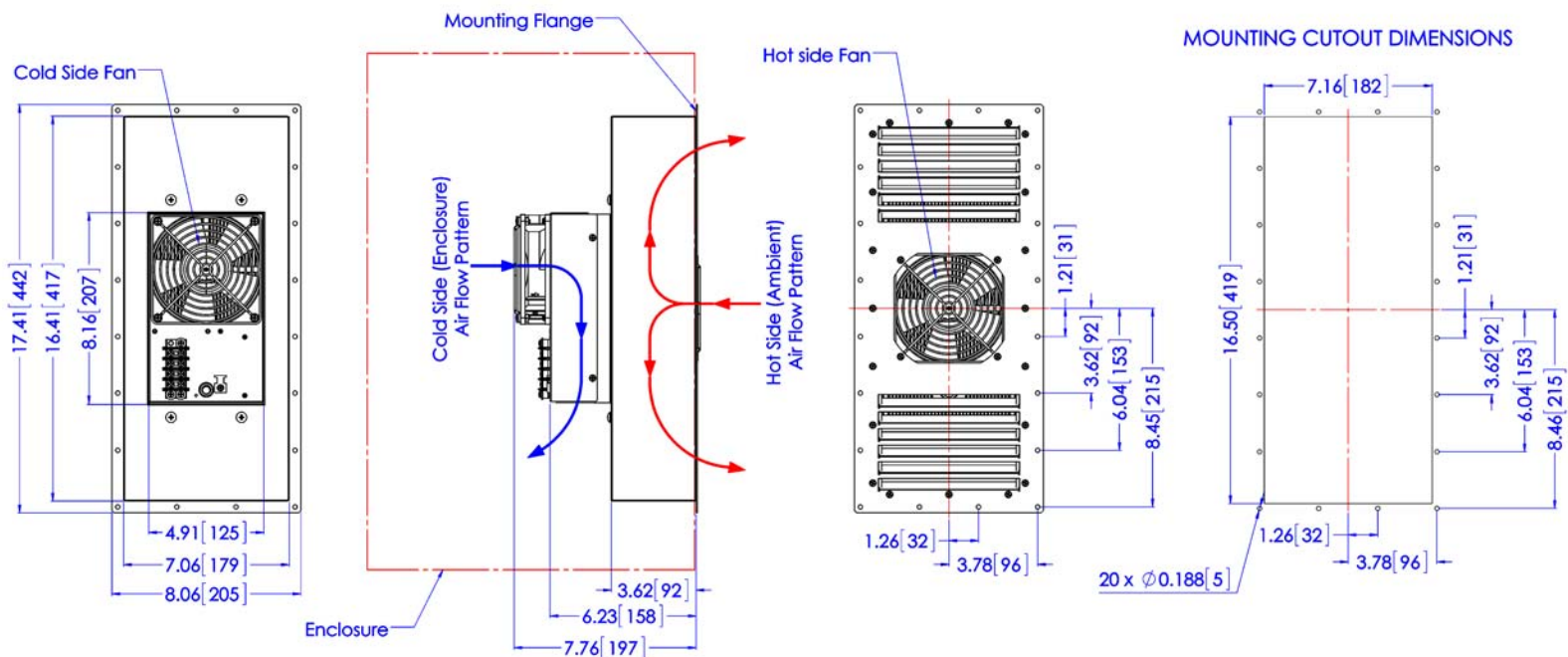
CONFIGURATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-450	B-F0J5-0-000	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-450HC	B-F095-1-000	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-450HC	B-F0I5-1-000	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-450XE	B-F0J5-4-000	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-450XEHC	B-F095-5-000	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-450XEHC	B-F0I5-5-000	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-450X	B-F0J5-2-000	Cool only, Mil. grade hot side fan	A	TC-4F	NEMA-4X, IP 56
IHP-450XHC	B-F095-3-000	Heat/Cool, Mil. grade hot side fan	A	None*	NEMA-4X, IP 56
IHP-450XHC	B-F0I5-3-000	Heat/Cool, Mil. grade hot side fan	A	TC-7F	NEMA-4X, IP 56
IHP-450	B-F0J5-0-100	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-450HC	B-F095-1-100	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 52
IHP-450HC	B-F0I5-1-100	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-450XE	B-F0J5-4-100	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-450XEHC	B-F095-5-100	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-450XEHC	B-F0I5-5-100	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56
IHP-450X	B-F0J5-2-100	Cool only, Mil. grade hot side fan	B	TC-4F	NEMA-4X, IP 56
IHP-450XHC	B-F095-3-100	Heat/Cool, Mil. grade hot side fan	B	None*	NEMA-4X, IP 56
IHP-450XHC	B-F0I5-3-100	Heat/Cool, Mil. grade hot side fan	B	TC-7F	NEMA-4X, IP 56

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

DIMENSIONS (Style A: Installs from inside of the enclosure)

Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

DIMENSIONS (Style B: Installs from outside of the enclosure)

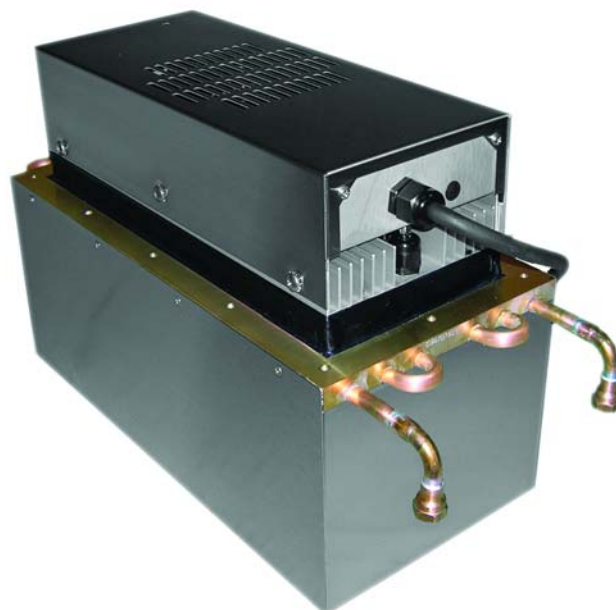
Dimensions do not include hardware
 Mounting hardware and gasket included but not shown
 Dimensions: Inches [Millimeters]

LHP-1200XE

Liquid Cooled Air Conditioner

Liquid Cooled
Through Mounted
NEMA-4, 4X

120 VAC Input
615 BTU/HR



FEATURES

- Compact, (only 15" L X 8" W X 7.3" D)
- Can be mounted entirely inside purged enclosure or maintain purge when wall mounted
- Mounts and operates in any orientation: horizontal, vertical, etc.
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Operating ambient/coolant temperature range 0/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 21 LBS.

INPUTS

Voltage	120 VAC
Current, Active	3.7 AMPS
Coolant Flow	> 0.3 GPM (1.0 LPM)

PERFORMANCE RATINGS

Cooling (Traditional)	613 BTU/HR
Cooling (Din 3168)	180 WATTS
Cooling COP (at L35 L35)	0.41
Weight	21 LBS.

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35

INCLUDES

- Integral power supply
- Mounting gasket and hardware
- Power input cord
- In/Out 1/4-18 NPT connectors for coolant

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
LHP-1200XE	2-3090-4-000	Cool only	None	NEMA-4X, IP 56
LHP-1200XE	2-3080-4-000	Cool only	TC-6F	NEMA-4X, IP 56
LHP-1200XE	2-30F0-4-000	Cool only	TC-1F	NEMA-4X, IP 56
LHP-1200XE	2-3050-4-000	Cool only	EXT*	NEMA-4X, IP 56
LHP-1200XEHC	2-3030-5-000	Heat/Cool	TC-3F	NEMA-4X, IP 56
LHP-1200XEHC	2-3050-5-000	Cool only	EXT*	NEMA-4X, IP 56

* Unit is set for 5-32 VDC external signal, relay(s) included

LHP-1200XE**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-4X IP 56

RATING (TRADITIONAL)

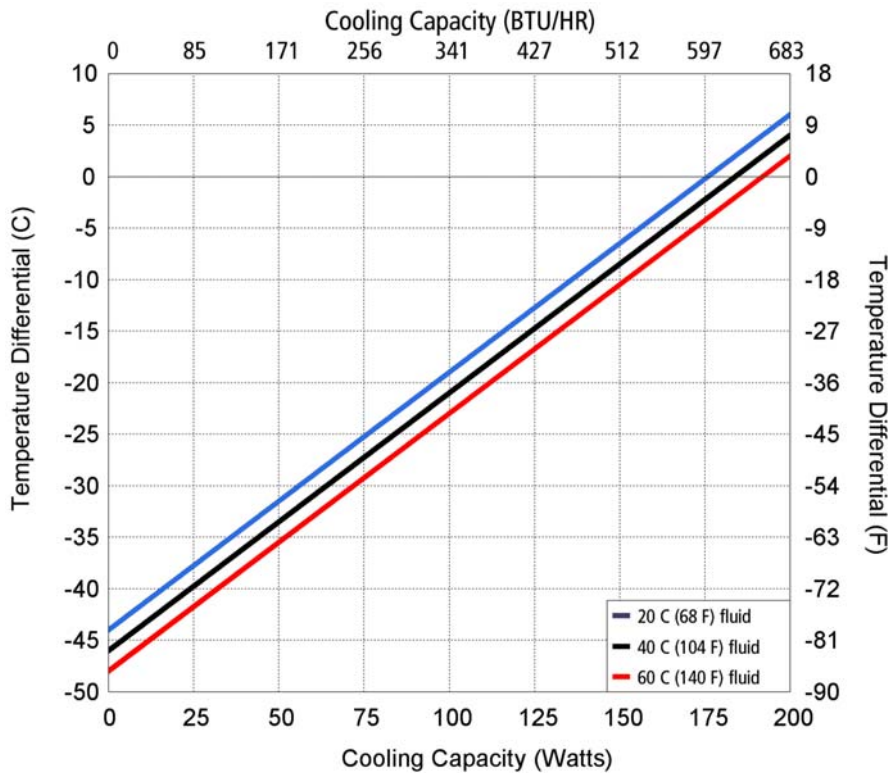
615 BTU/hr @ 0 °F ΔT

770 BTU/hr @ +20 °F ΔT

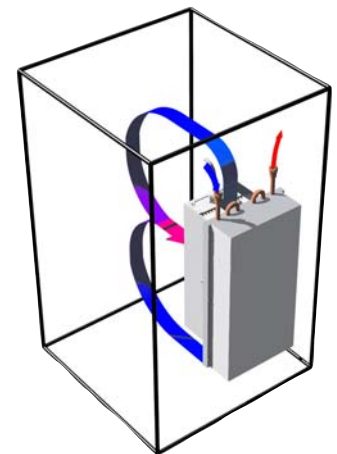
RATING (DIN 3168)

180 Watts L35 L35

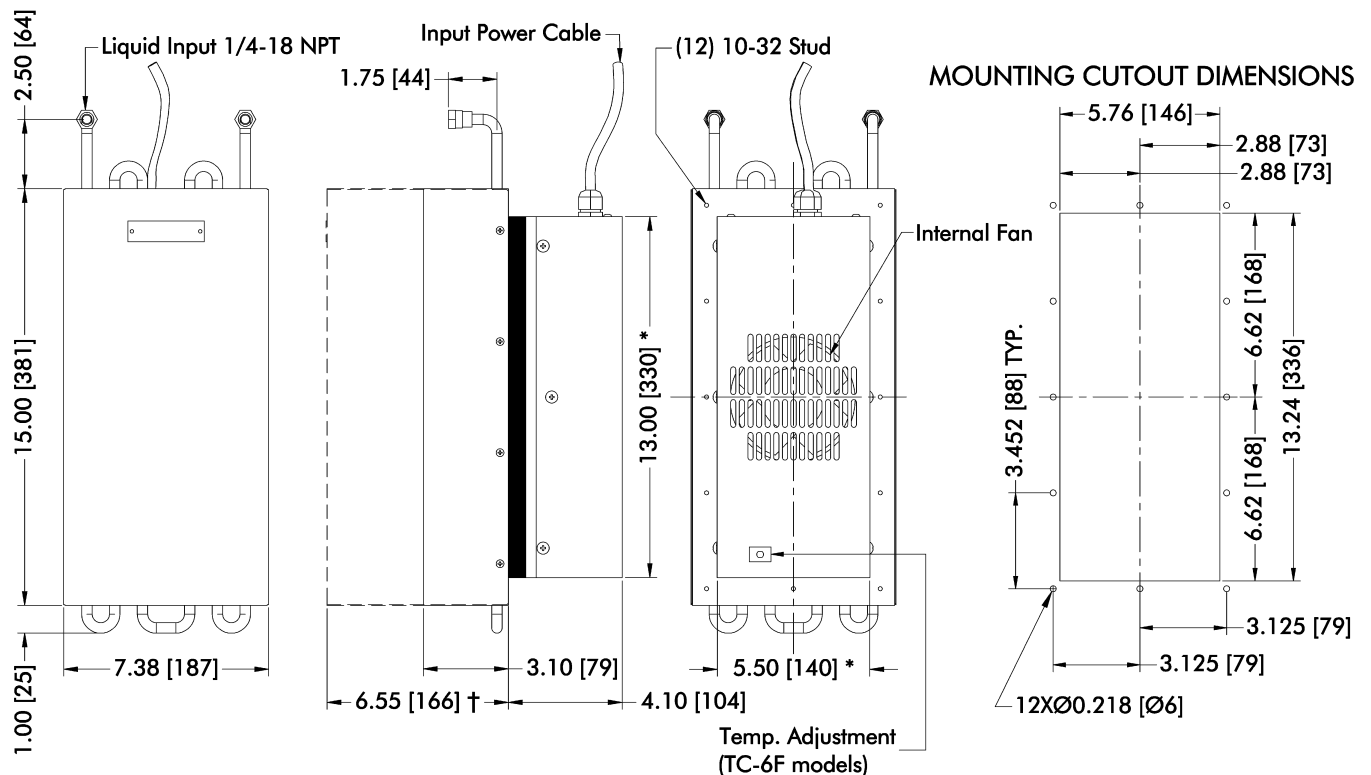
125 Watts L35 L50

PERFORMANCE CURVE

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Fluid Temp	20°C	40°C	60°C
Enclosure Air	$y = .25x - 44.0$	$y = .25x - 46.0$	$y = .25x - 48.0$
Cold Sink	$y = .19x - 44.0$	$y = .19x - 46.0$	$y = .19x - 48.0$



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware. Mounting hardware and gasket included but not shown.

† Dimension applies to XP versions.

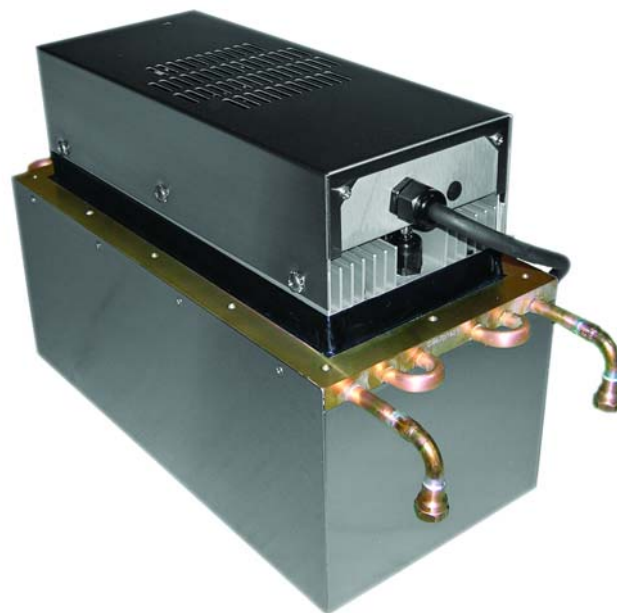
Dimensions: Inches [Millimeters]

LHP-1200XP

Liquid Cooled Air Conditioner

Liquid Cooled
Through Mounted
NEMA-4, 4X, CID2, CID1 & ATEX Zone 1
(No Agency Approvals)

120 VAC Input
613 BTU/HR



FEATURES

- Compact, (only 15" L X 8" W X 7.3" D)
- Can be mounted entirely inside purged enclosure or maintain purge when wall mounted
- Mounts and operates in any orientation: horizontal, vertical, etc.
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Operating ambient/coolant temperature range 0/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Weight 21 LBS.

INPUTS

Voltage	120 VAC
Current, Active	3.7 AMPS
Coolant Flow	> 0.3 GPM (1.0 LPM)

PERFORMANCE RATINGS

Cooling (Traditional)	613 BTU/HR
Cooling (Din 3168)	180 WATTS
Cooling COP (at L35 L35)	0.41
Weight	21 LBS.

CONTROL TEMPERATURES

Temp. Control	Active Heat °C	ECO-Mode °C	Active Cool °C
TC-1F	-	-	35
TC-6F	-	-	25 or 35
TC-3F	10	-	35

INCLUDES

- Integral power supply
- Mounting gasket and hardware
- Power input cord
- In/Out 1/4-18 NPT connectors for coolant

CONFIGURATIONS

MODEL	PART NUMBER	NOTES	TEMPERATURE CONTROL	ENVIRONMENT
LHP-1200XP	2-3090-2-027	Cool only	None	NEMA-4X IP 56, CI D2
LHP-1200XP	2-3080-2-028	Cool only	TC-6F	NEMA-4X IP 56, CI D2
LHP-1200XP	2-30F0-2-029	Cool only	TC-1F	NEMA-4X IP 56, CID2
LHP-1200XP	2-3050-2-030	Cool only	EXT*	NEMA-4X IP 56, CI D2
LHP-1200XPHC	2-3030-3-031	Heat/Cool	TC-3F	NEMA-4X IP 56, CI D2
LHP-1200XPHC	2-3050-3-032	Heat/Cool	EXT*	NEMA-4X IP 56, CI D2
LHP-1200XP	2-3090-2-021	Cool only	None	NEMA-4X IP 56, CI D1 ATEX Zone 1
LHP-1200XP	2-3080-2-022	Cool only	TC-6F	NEMA-4X IP 56, CI D1 ATEX Zone 1
LHP-1200XP	2-30F0-2-023	Cool only	TC-1F	NEMA-4X IP 56, CI D1 ATEX Zone 1
LHP-1200XP	2-3050-2-024	Cool only	EXT*	NEMA-4X IP 56, CI D1 ATEX Zone 1
LHP-1200XPHC	2-3030-3-025	Heat/Cool	TC-3F	NEMA-4X IP 56, CI D1 ATEX Zone 1
LHP-1200XPHC	2-3050-3-026	Heat/Cool	EXT*	NEMA-4X IP 56, CI D1 ATEX Zone 1

* Unit is set for 5-32 VDC external signal, relay(s) included

Designed for Nema-4, Nema-4X, CID2, CID1 and ATEX Zone 1, **not certified**. ATEX certification will require full system approvals.
All specifications subject to change without notice

LHP-1200X**MOUNTING STYLE**

Through Mounted

ENVIRONMENTS SERVED

NEMA-4X IP 56, CID2, CID1, Zone 1

RATING (TRADITIONAL)

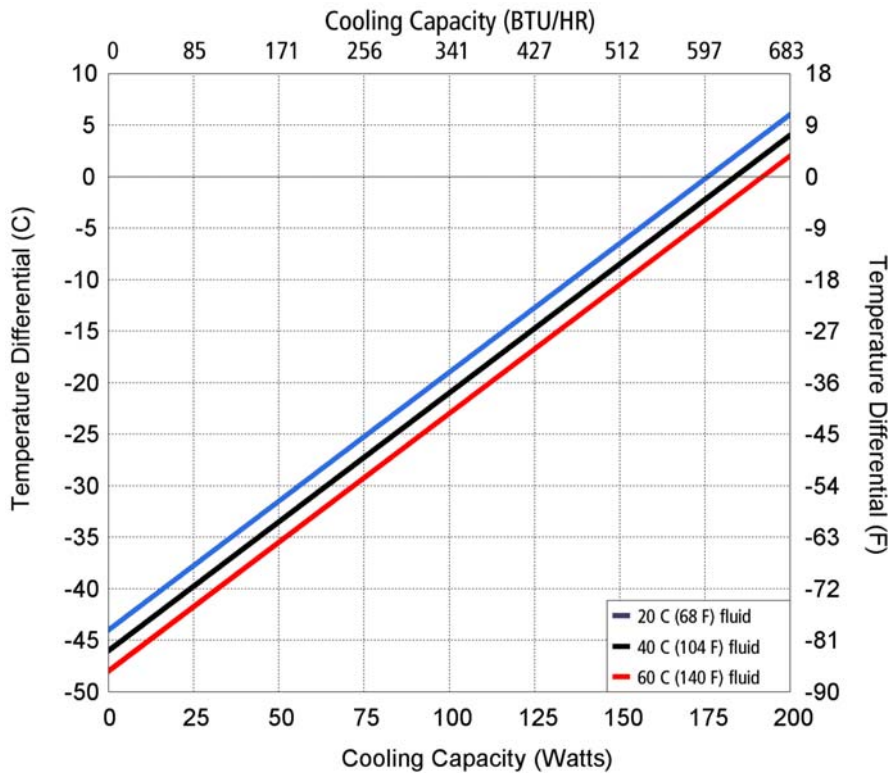
613 BTU/hr @ 0 °F ΔT

770 BTU/hr @ +20 °F ΔT

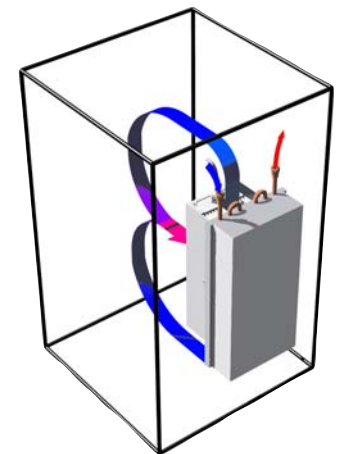
RATING (DIN 3168)

180 Watts L35 L35

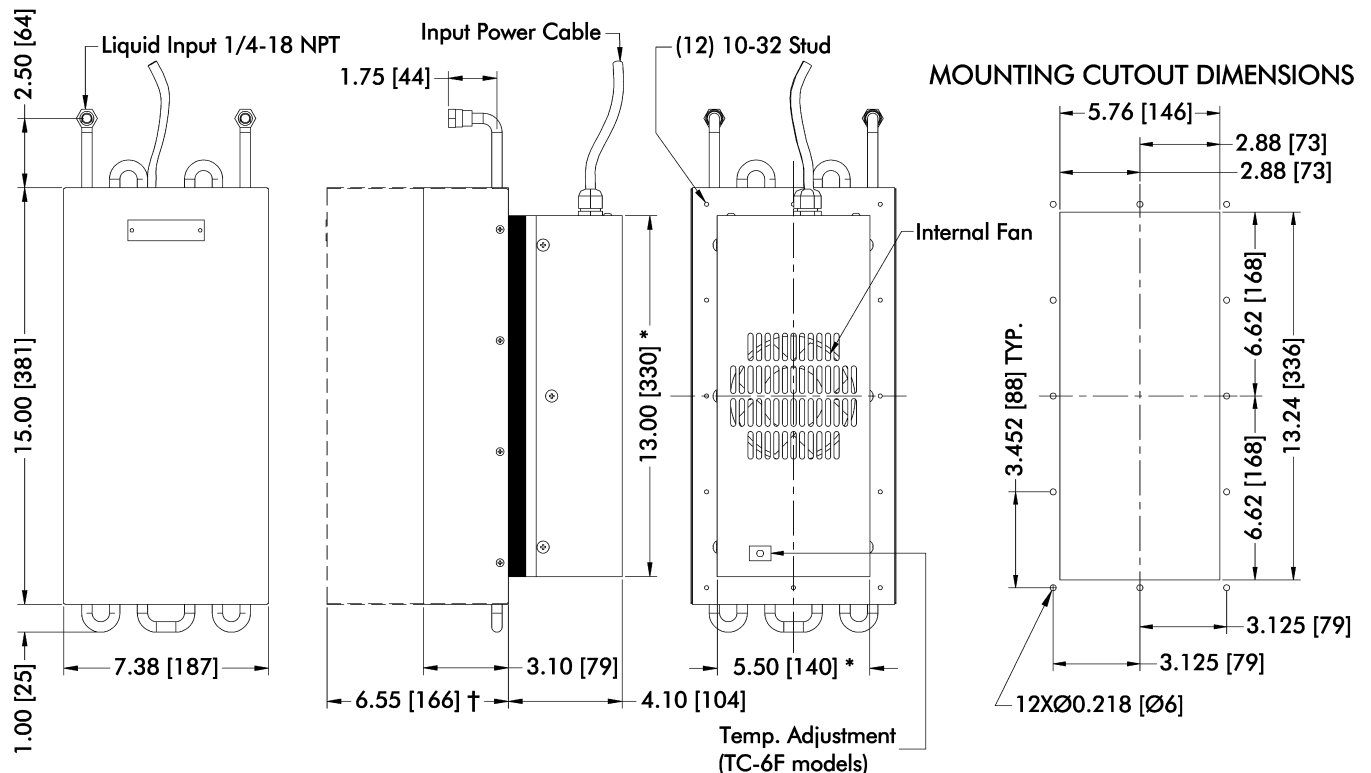
125 Watts L35 L50

PERFORMANCE CURVE

Equation of line: $y = \Delta T(^{\circ}\text{C})$ $x = \text{Capacity (Watts)}$			
Fluid Temp	20°C	40°C	60°C
Enclosure Air	$y = .25x - 44.0$	$y = .25x - 46.0$	$y = .25x - 48.0$
Cold Sink	$y = .19x - 44.0$	$y = .19x - 46.0$	$y = .19x - 48.0$



Air Flow Pattern

DIMENSIONS

* Dimension does not include hardware. Mounting hardware and gasket included but not shown.

† Dimension applies to XP versions.

Dimensions: Inches [Millimeters]

EH-2000/4000

Enclosure Heater

Enclosure Heaters
Internal Mounted

120 VAC, 240 VAC
200 Watts, 400 Watts

ENCLOSURE HEATERS

TECA Enclosure heaters are the easiest and most cost effective way to add needed heat to enclosures.

These heaters come in 120 VAC and 240 VAC configurations in both 200 WATTS and 400 WATTS versions.

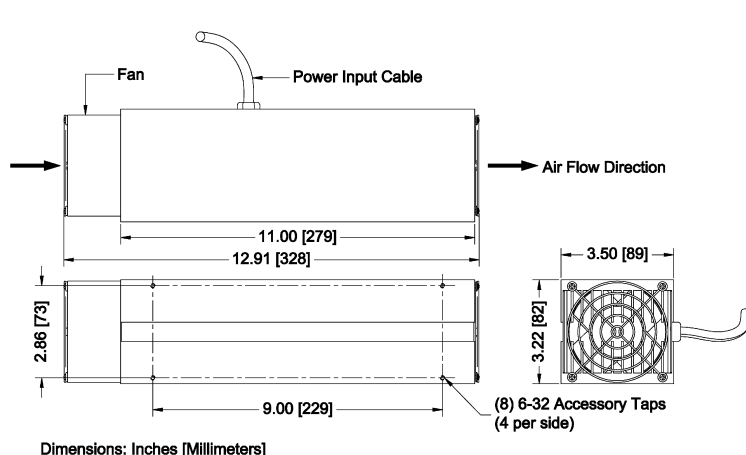
The integral thermostat reduces the complexity and the integral overheat safety ensures that the temperature rise is kept within safe margin.

FEATURES

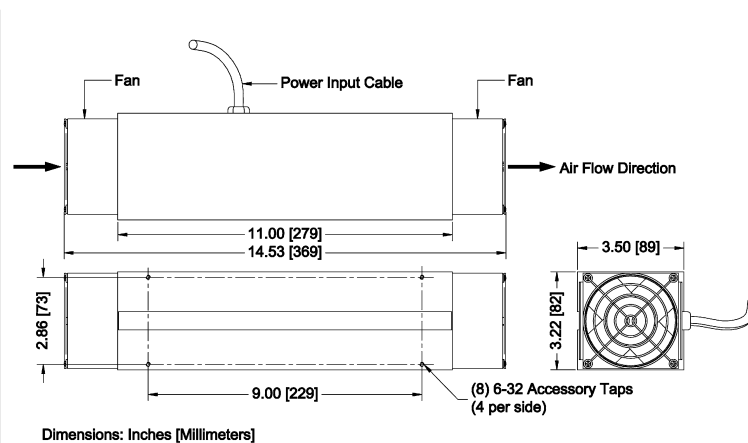
- Power input cord
- Integral fan(s)
- Integral thermostatic control (temperature = 15 °C)
- Overheat safety circuit (temperature = 75 °C)
- Accessory threaded holes for installation



DIMENSIONS



EH-2001, EH-2002

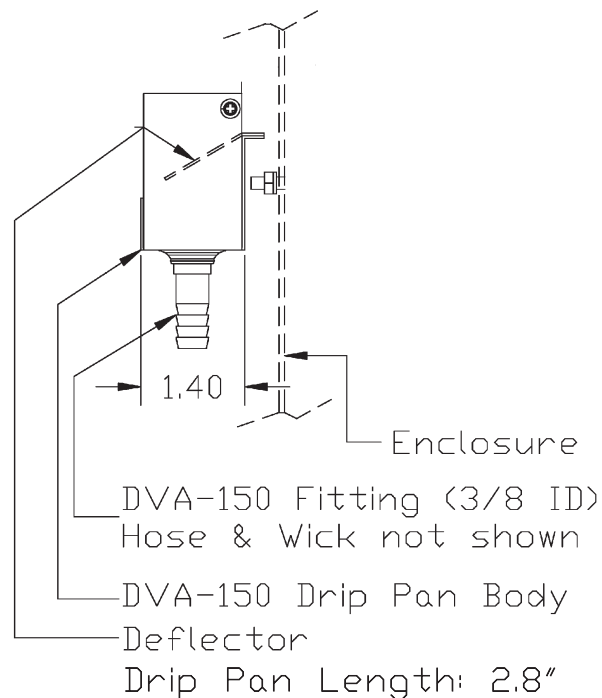
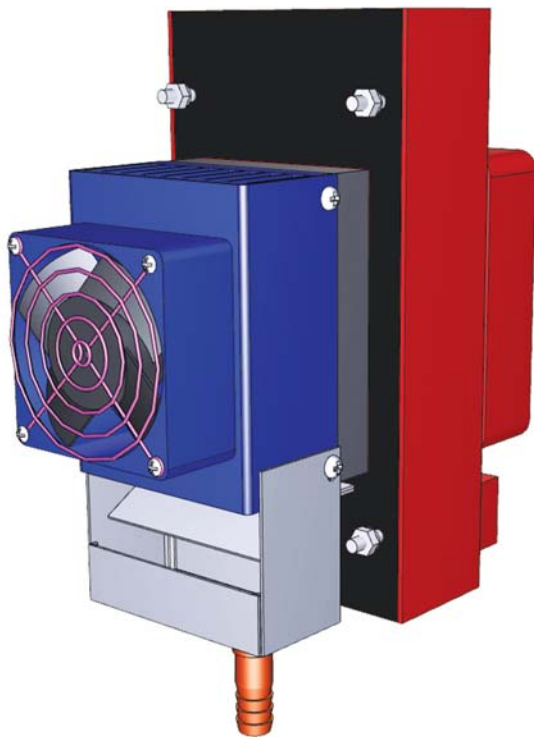
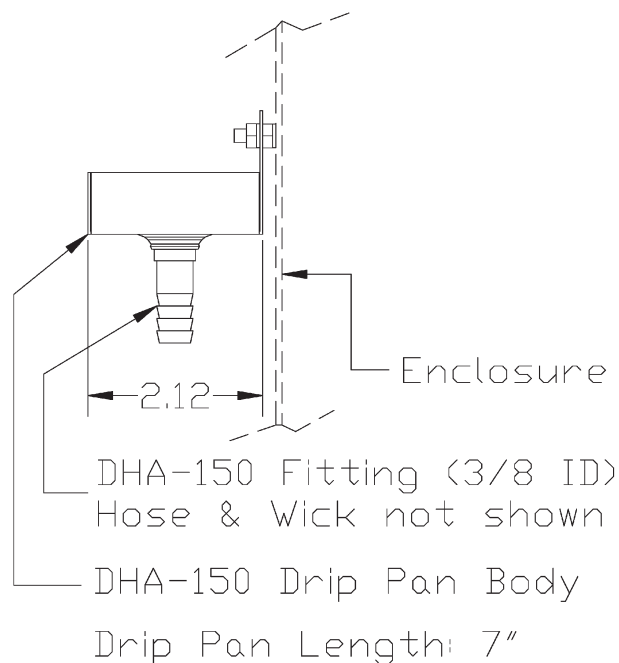


EH-4001, EH-4002

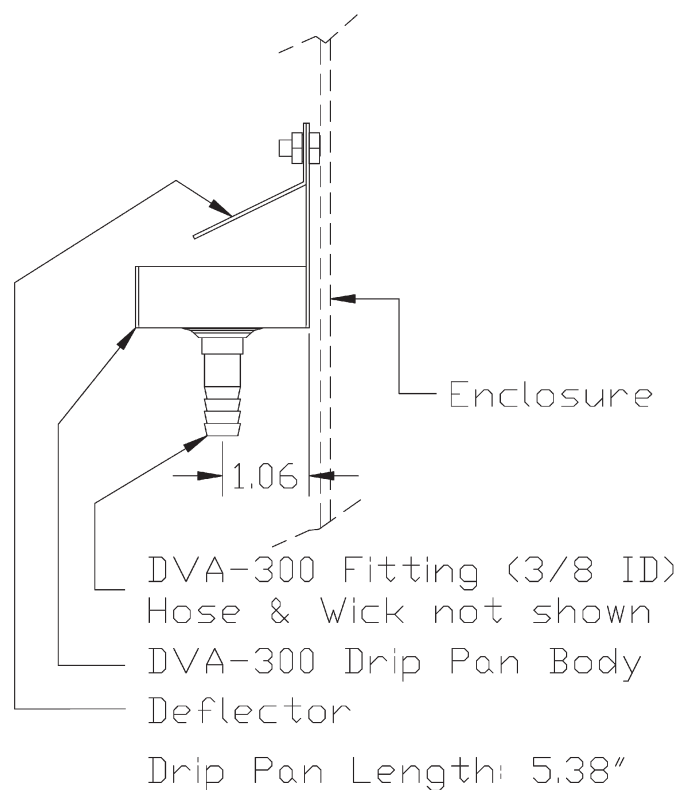
SPECIFICATIONS

MODEL	NOTES	POWER RATING WATTS	VOLTAGE VAC 50/60 HZ	CURRENT AMPS.	WEIGHT LBS. (kg)	TEMP. CONTROL	OVERHEAT SAFETY
EH-2001	Single Fan	200	120	1.7	7 (3.2)	15 °C	75 °C
EH-2002	Single Fan	200	240	0.83	7 (3.2)	15 °C	75 °C
EH-4001	Dual Fan	400	120	3.4	7 (3.2)	15 °C	75 °C
EH-4002	Dual Fan	400	240	1.7	7 (3.2)	15 °C	75 °C

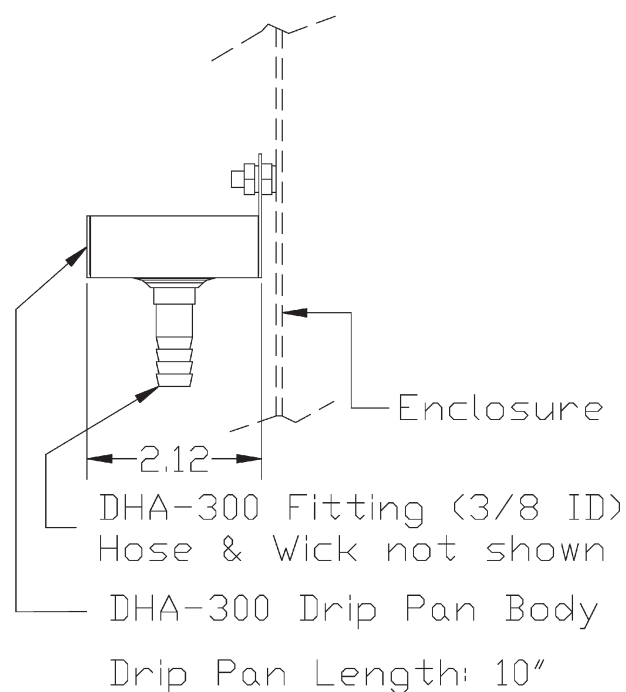
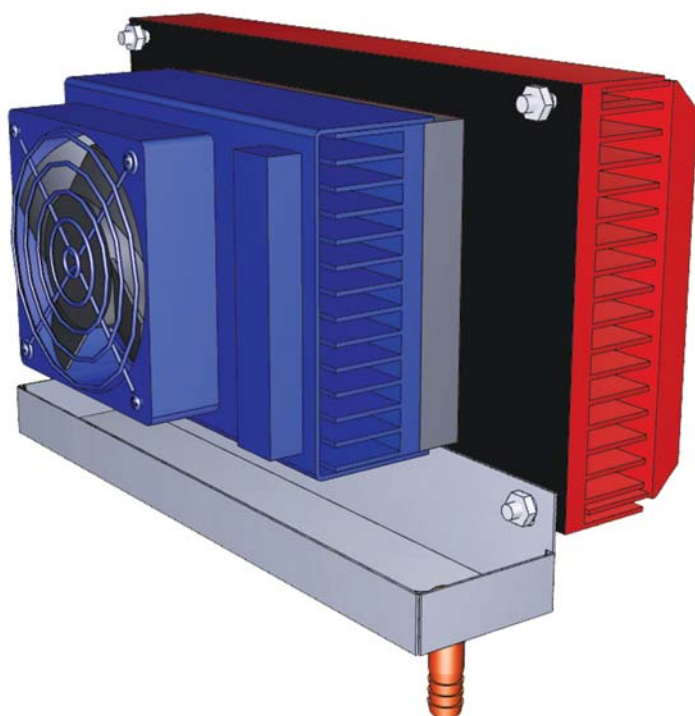
Drip pans are available for various air conditioners offered by TECA. These drip pans are made from Type 304 Stainless Steel and are available for either vertical or horizontal cold side fins. The drip pans include 3/8" ID hose, wicking cord and hose clamp.

DVA-150**DHA-150**

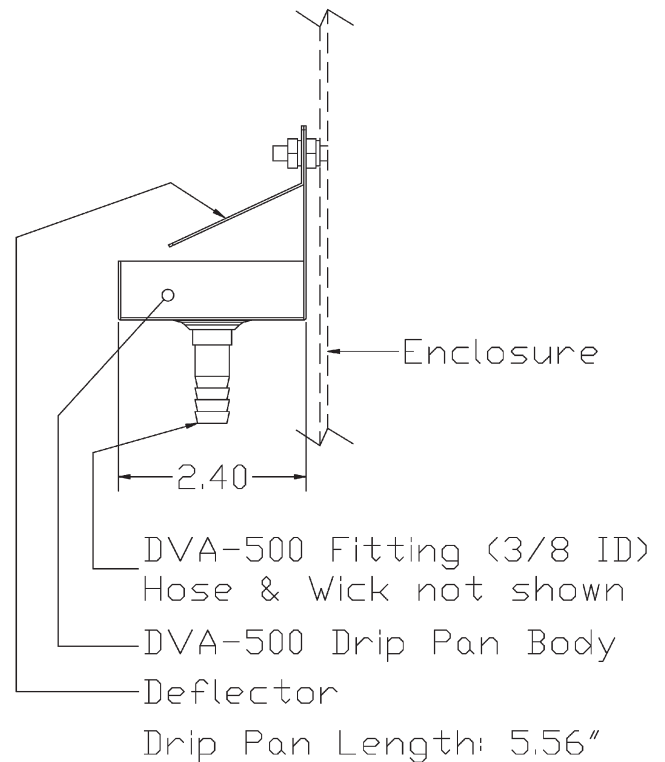
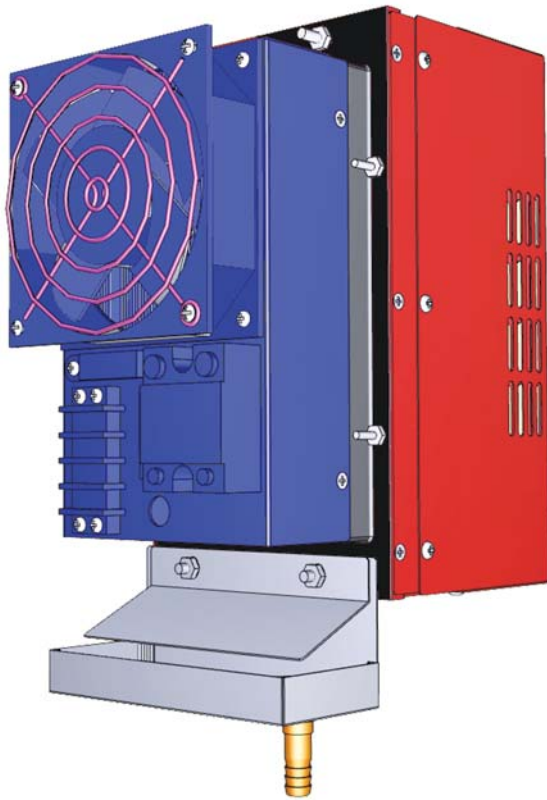
DVA-300



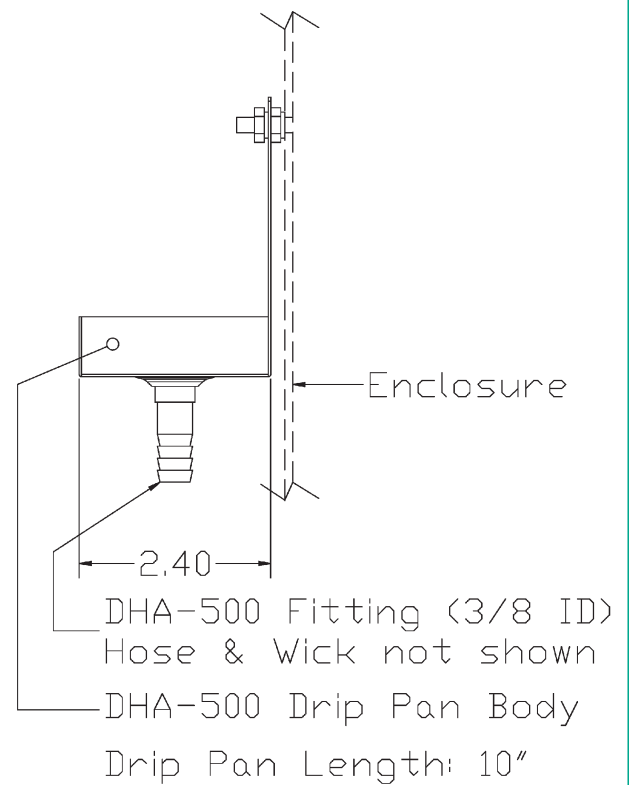
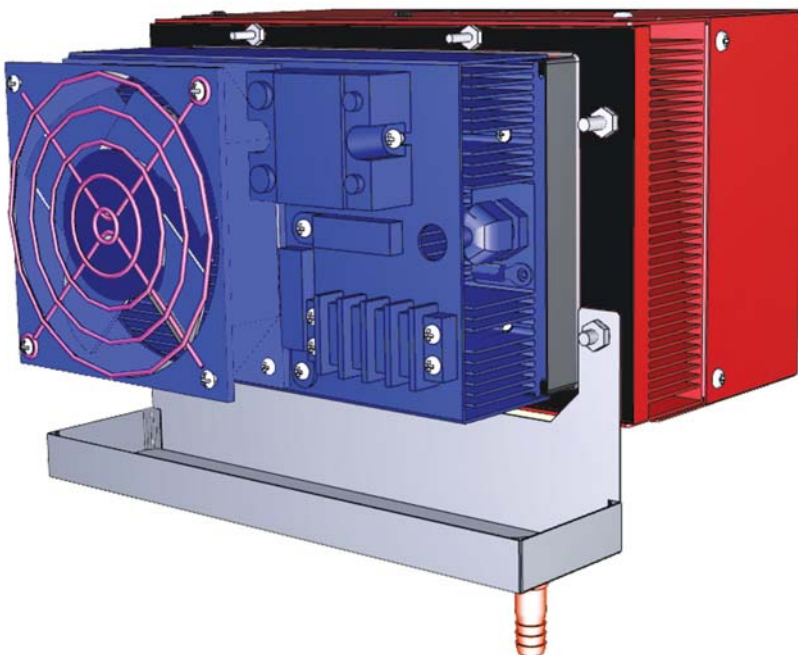
DHA-300



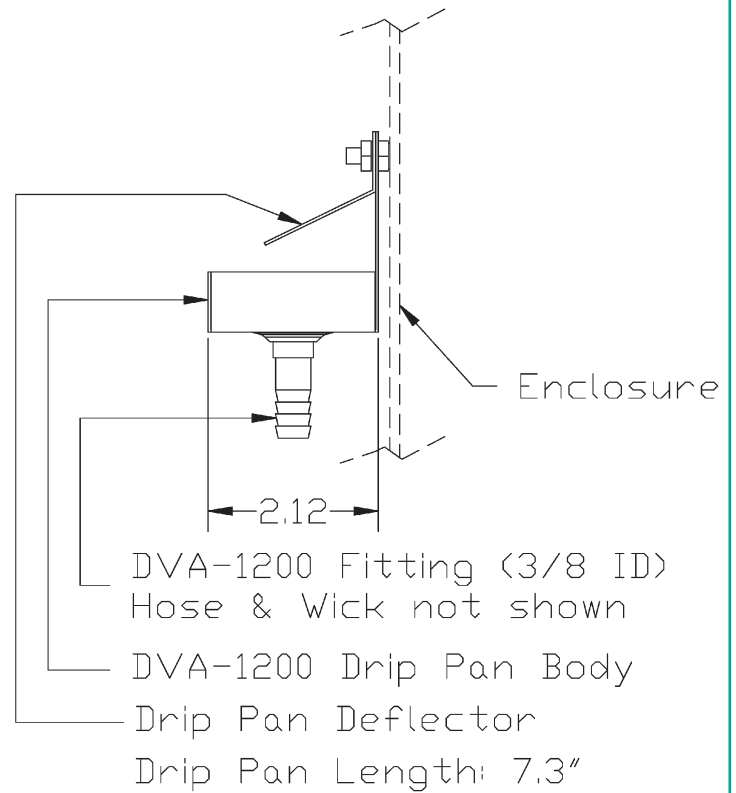
DVA-500



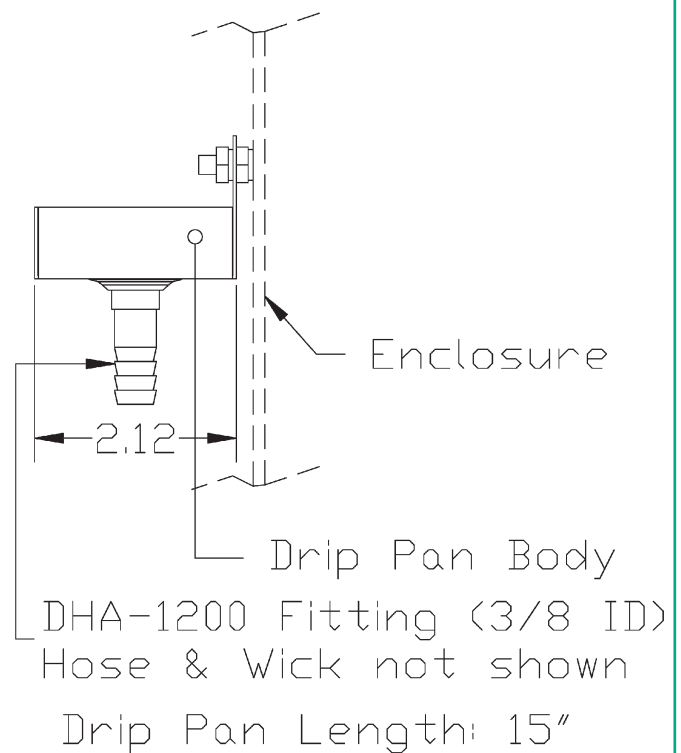
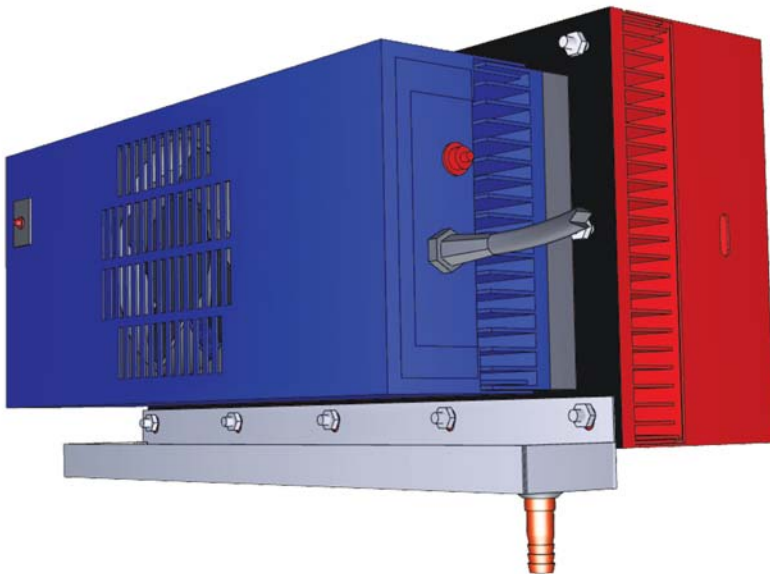
DHA-500



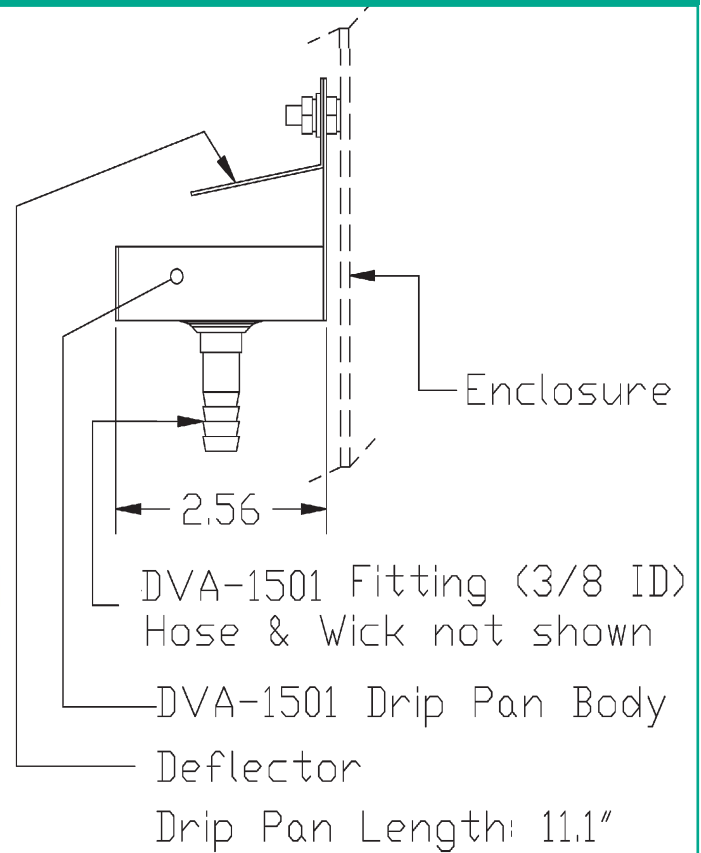
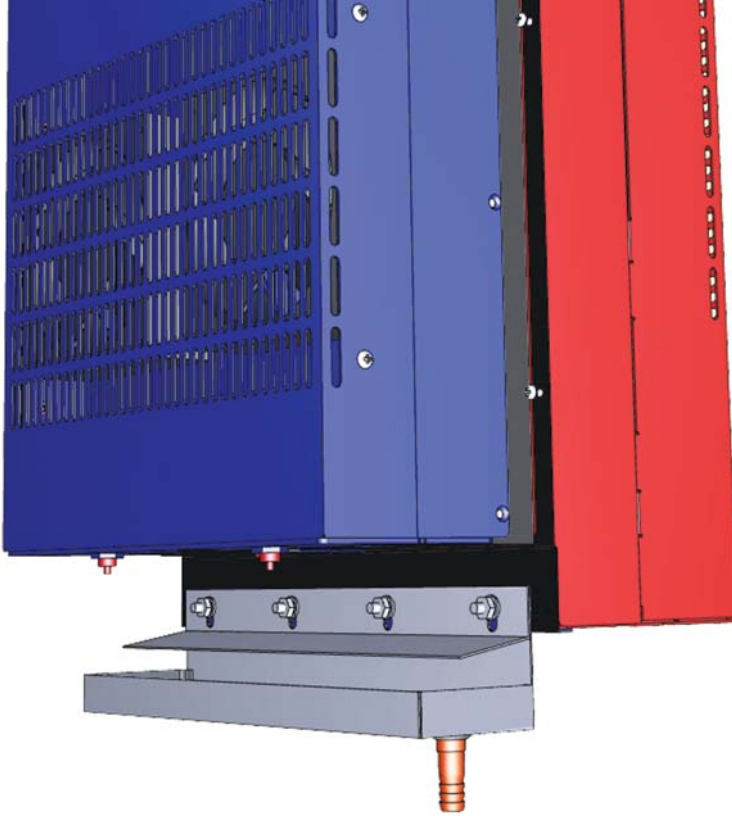
DVA-1200



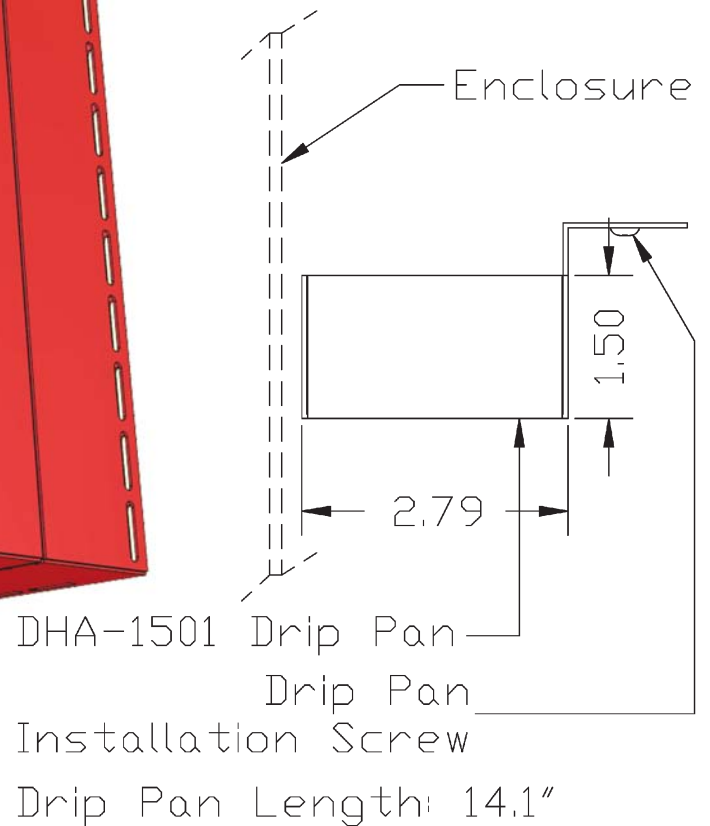
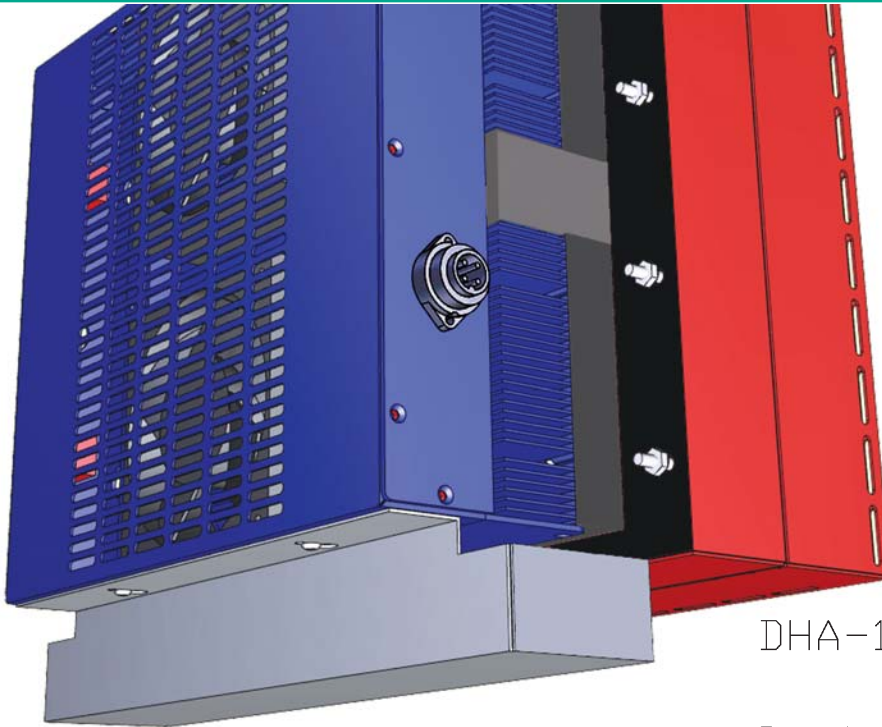
DHA-1200



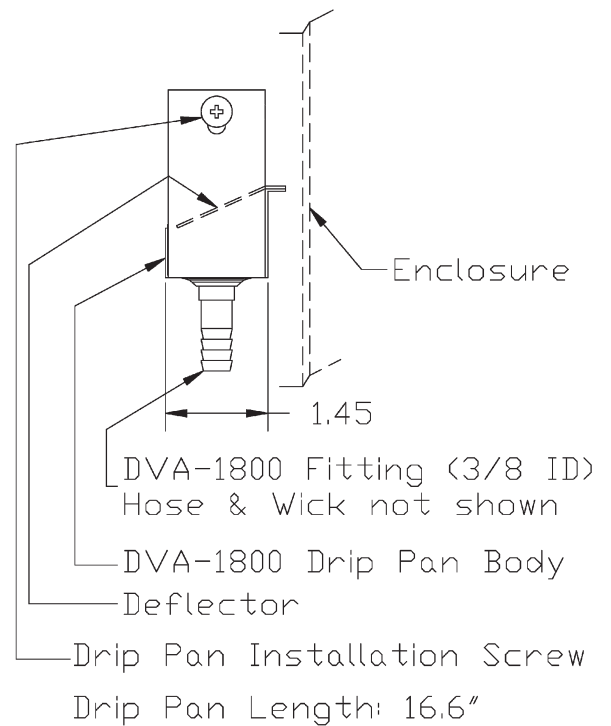
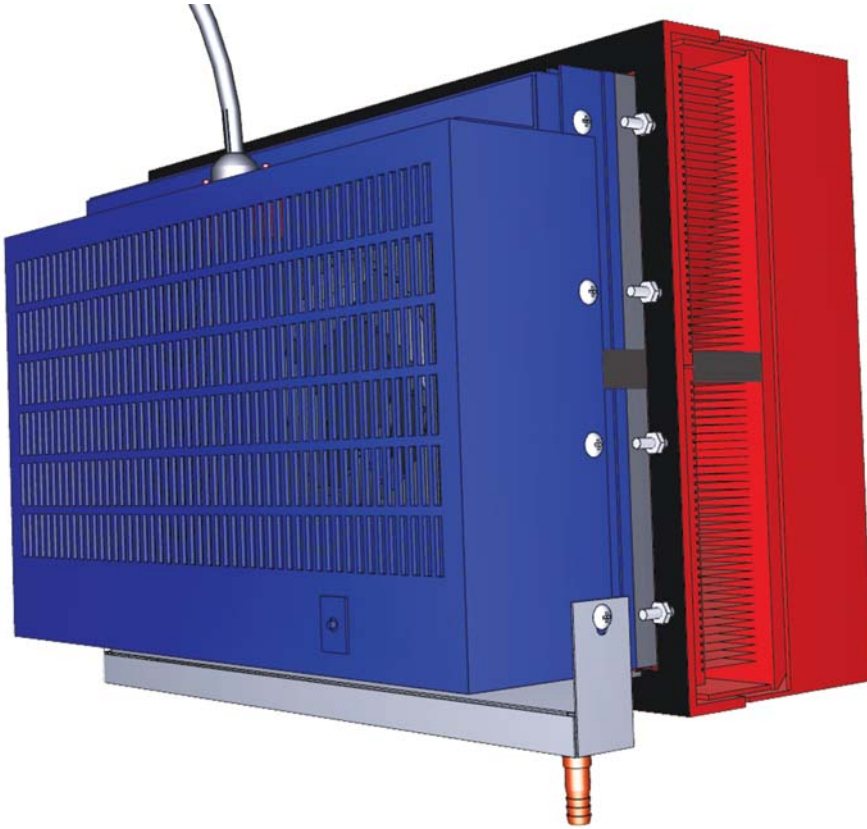
DVA-1501



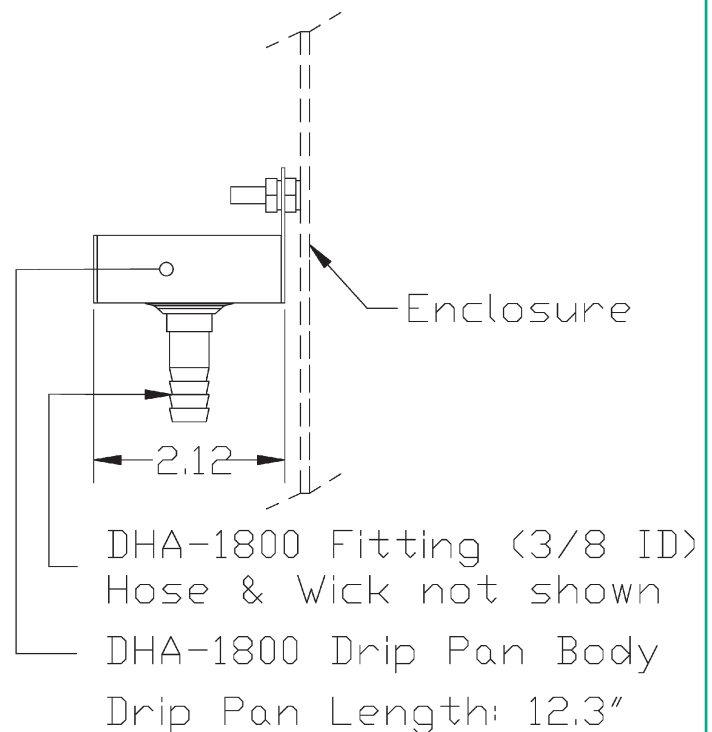
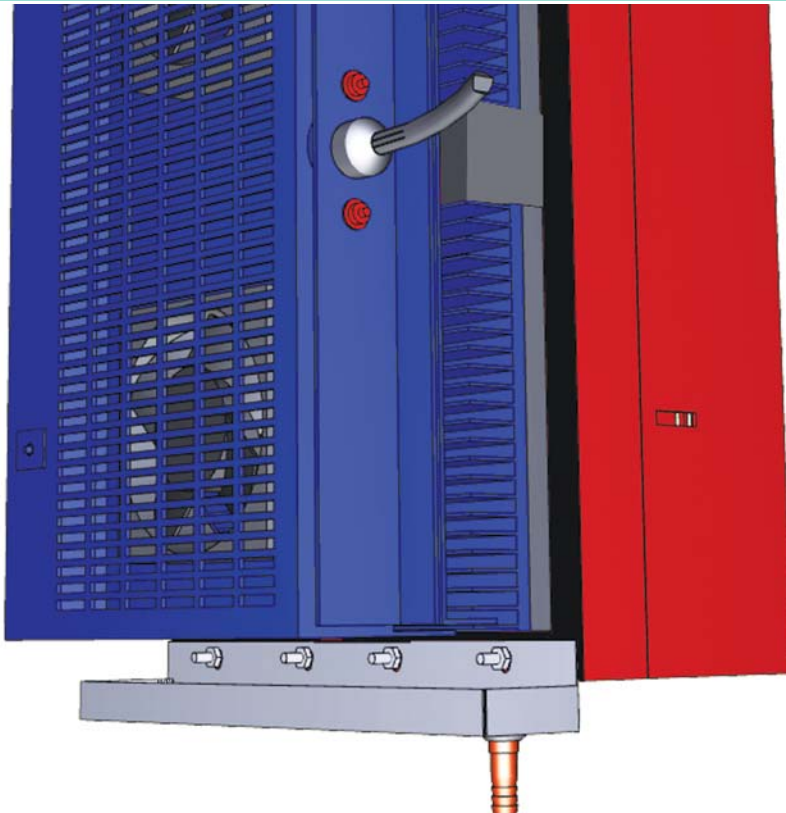
DHA-1501



DVA-1200

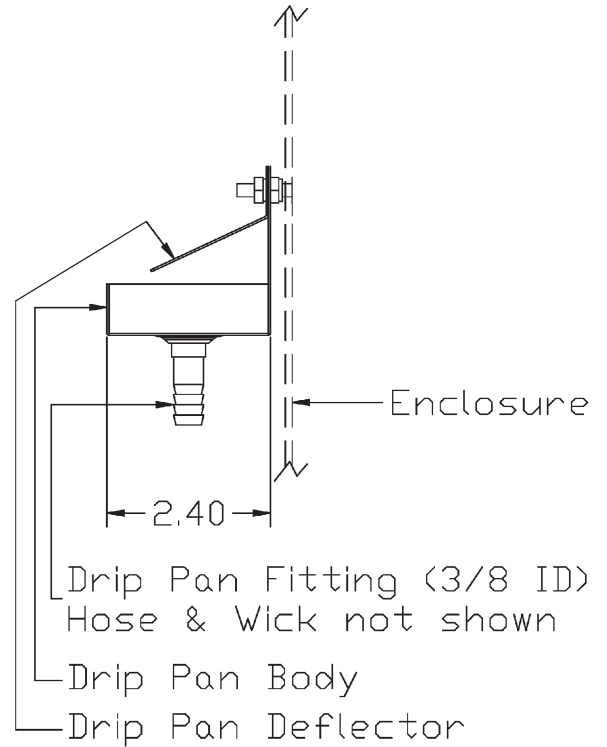
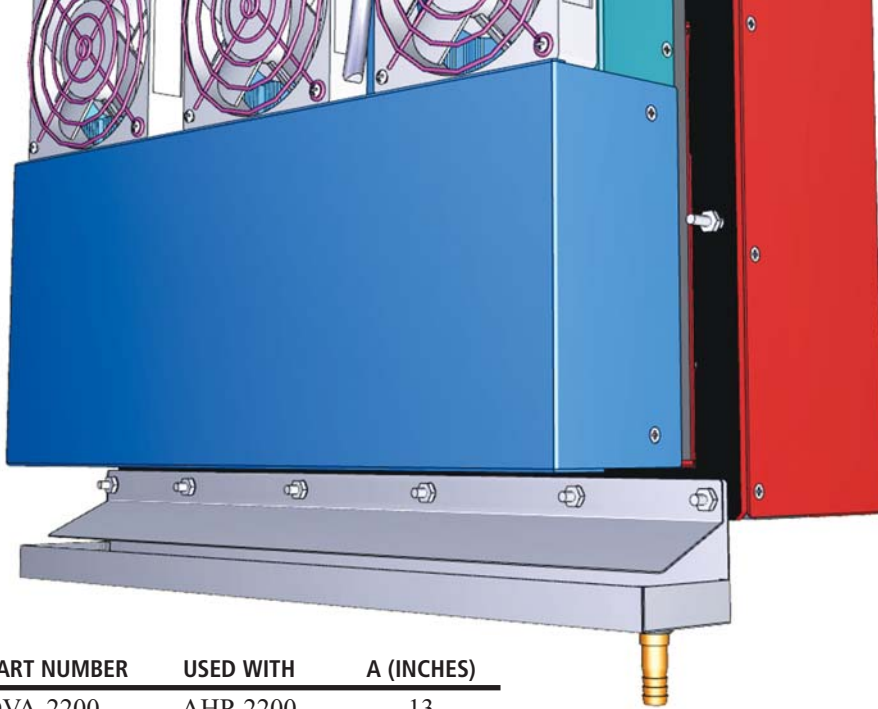


DHA-1200



Accessories Drip Pans AHP-2200/3200/4200/6200 Series

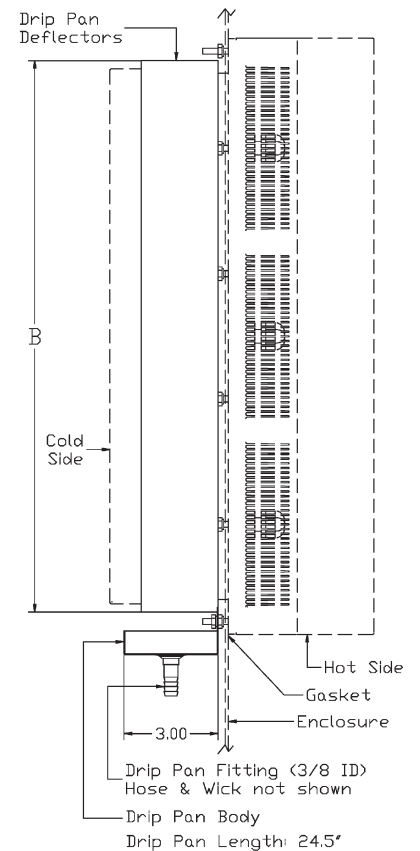
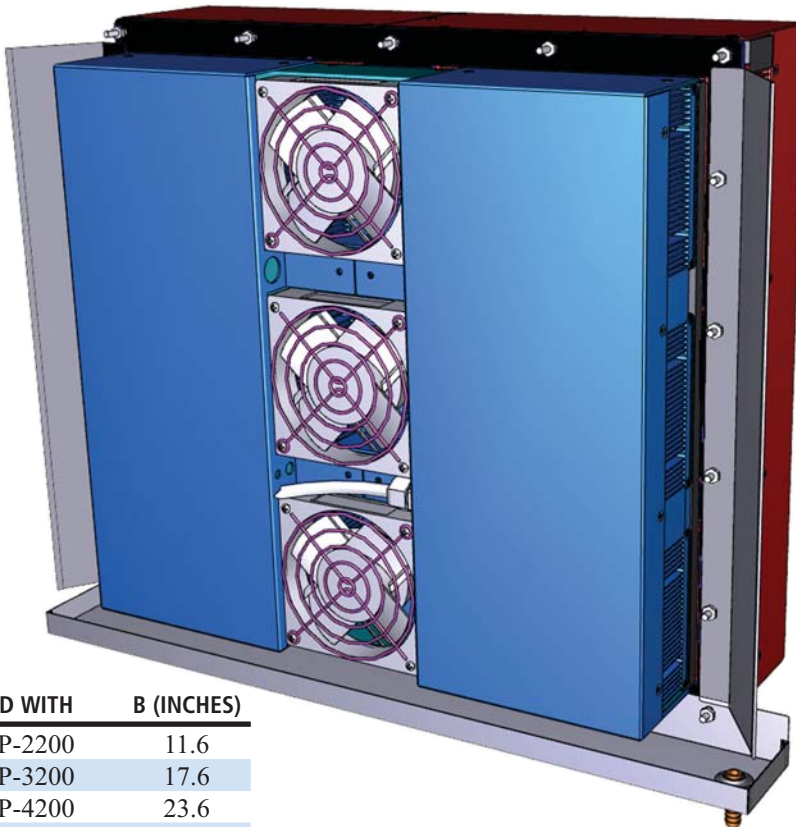
DVA-2200. 3200. 4200. 6200



PART NUMBER	USED WITH	A (INCHES)
DVA-2200	AHP-2200	13
DVA-3200	AHP-3200	19
DVA-4200	AHP-4200	25
DVA-6200	AHP-6200	37

Drip Pan Length: A (inches)

DHA-2200. 3200. 4200. 6200



PART NUMBER	USED WITH	B (INCHES)
DHA-2200	AHP-2200	11.6
DHA-3200	AHP-3200	17.6
DHA-4200	AHP-4200	23.6
DHA-6200	AHP-6200	35.6

D-100, D-200

NEMA-4, 4X

Condensate Discharge

OVERVIEW

The D100 and D200 Condensate Discharge units allow accumulated water to drain out the bottom of an enclosure. The UL-approved discharge units also function as an air pressure equalizer, reducing the harmful effects of temperature-induced vacuums that could pull water and moisture into the enclosure.

FEATURES

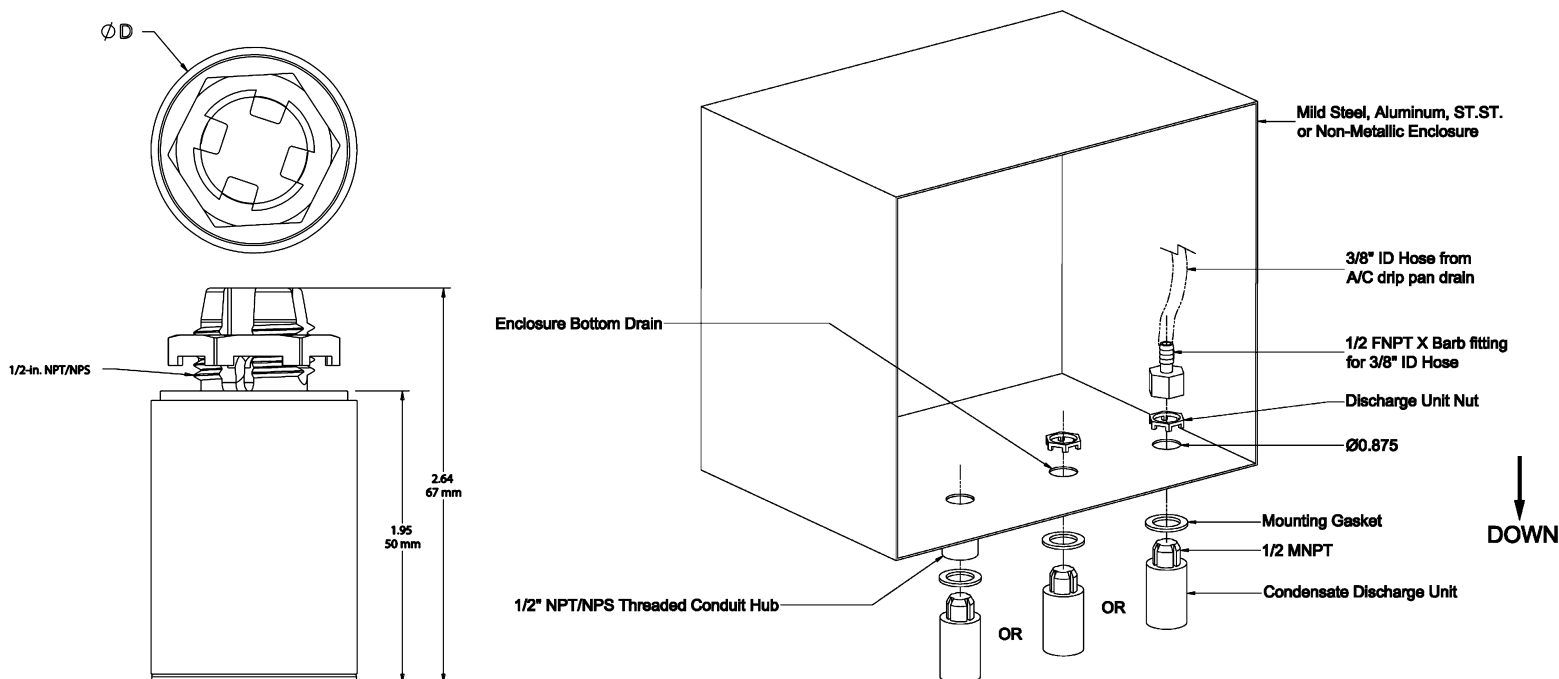
- Uses gravity to remove collected liquids
- One-way mechanical shut-off when pressure is equalized prevents water and contaminants from entering the enclosure
- Helps reduce corrosion that can limit the life of internal electrical and electronic components
- Installs in a 7/8-in. hole in the bottom of enclosure with provided nut or in a 1/2-in. NPT/NPS threaded conduit hub
- Installs in the bottom of mild steel, aluminum, stainless steel or non-metallic enclosures
- Maintains enclosure's NEMA rating when properly installed
- Available in Stainless Steel and Non-Metalic Polyester material
- UL 508A Listed; Type 4, 4X; File No. E617

SPECIFICATIONS

MODEL	NOTE	D INCHES	D Millimeters
D-100	Non-Metalic	1.25	32
D-200	Stainless Steel	1.38	35



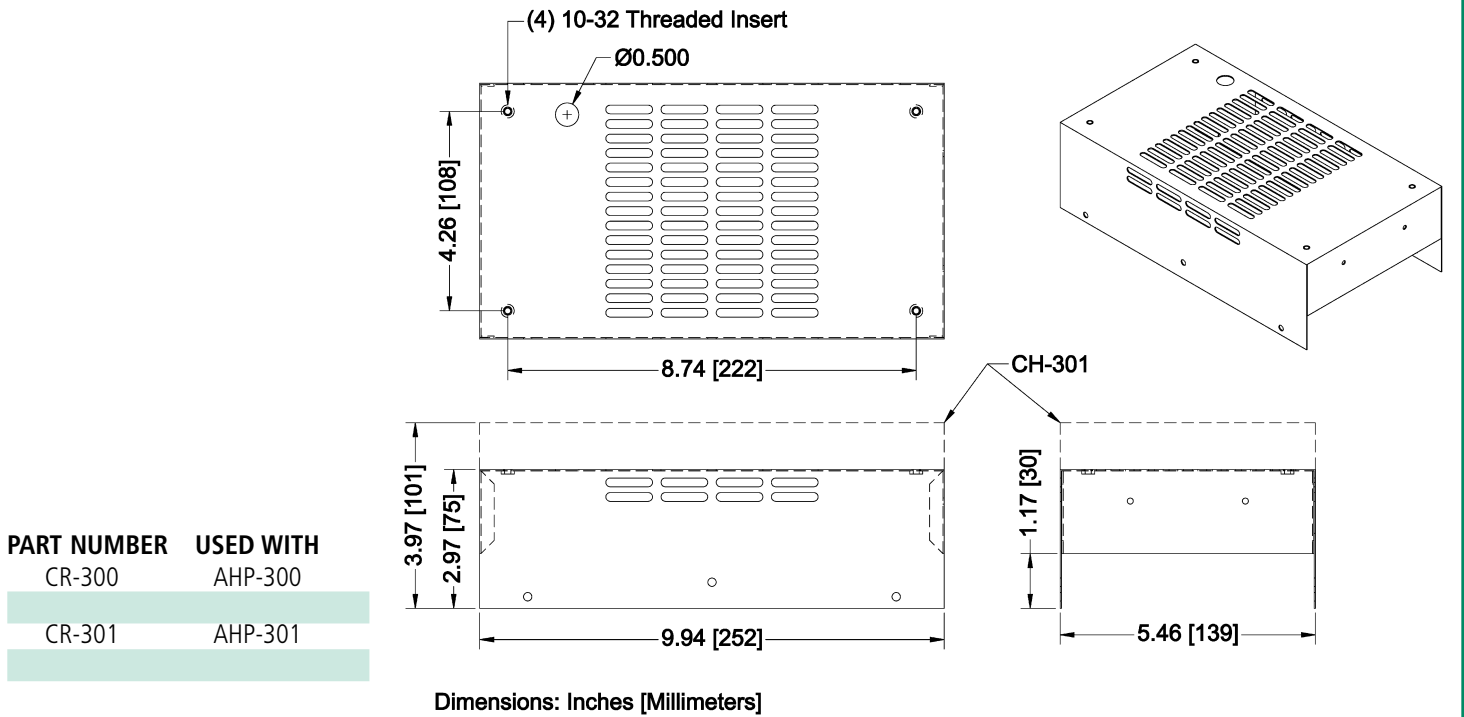
DIMENSIONS



Accessories Covers & Mounting Bracket

COVERS

Optional hot side covers are available for AHP-300 and AHP-301 series of thermoelectric air conditioners. These covers are made from **brush finished Stainless Steel Type 304**.

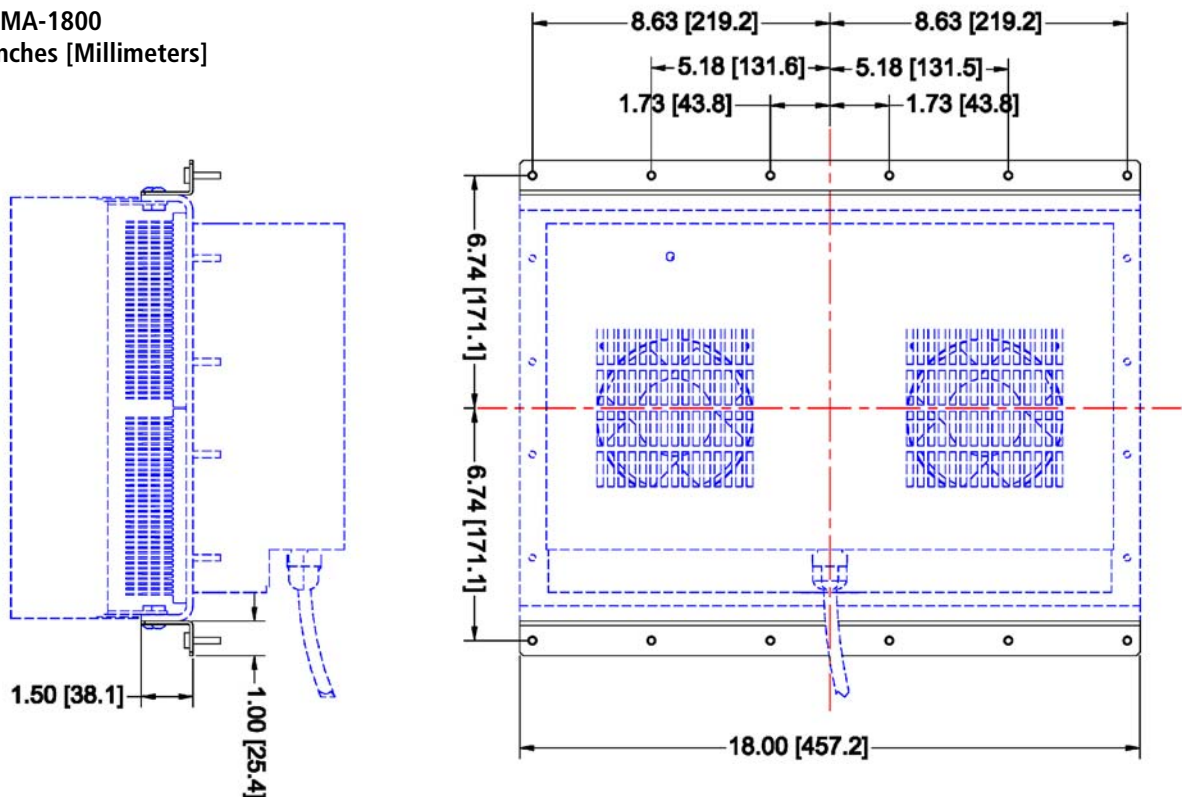


MOUNTING BRACKET

Optional mounting bracket is available for AHP-1800 series of thermoelectric air conditioners. This mounting bracket attaches to existing threaded holes on the side of the unit and improves the mounting of the air conditioner on non-metallic the enclosure.

Part Number: MA-1800

Dimensions: Inches [Millimeters]



TC-4600 Temperature Controller

PWM Temperature Control
RS-232 Comms.

Pulse Width Modulating Temperature Controller

OVERVIEW

The TC-4600 is a bi-directional (heat/cool), H-bridge controller designed to control thermoelectric cooling/heating units with the option to set as unidirectional. The controller accepts an input voltage of 12-36VDC. The output voltage can range from 0 to 36VDC if a split supply is used. The load circuit is pulse width modulated at 2.7KHz and delivers a load of 0.1 to 25 Amps. Temperature resolution for this controller is 0.01°C, providing exceptional control stability in a well designed thermal system.

The H-bridge configuration allows for a seamless transition between heating and cooling. Using a PC with an RS232 interface, the controller can be set for any of the following control configurations: On/Off control, differential temperature control, manual control or any combination of PID control. The user friendly software requires no programming experience to set up the controller. The RS232 interface has 1500 VAC isolation from all the electronic circuitry minimizing the interference from noise or errant signals. Once the controller is set up, the computer may be disconnected and the controller becomes a stand alone unit. If the computer is left connected, it can be used for data acquisition in a half duplex mode. The temperature may also be set through the optional display or through a remote potentiometer. The PC software also provides for several alarm types and the controller has 3 outputs for alarms with a 5VDC output rated for 25mA of current. In the set up menu the alarm function may be set as no alarm, tracking alarm, fixed value alarm or computer controlled alarm. The menu also offers selections for latching and for maintaining or cutting the power during an alarm. The alarm sensor may be the control temperature sensor or a secondary sensor.



FEATURES

- Full H-Bridge Control
- Fully PC Programmable
- P,I,D or On/Off Control
- PC Configurable Alarm Circuit
- 0-36VDC Output Using Split Power Supply
- RS232 Communications
- RoHS Compliant
- Set Temperature range of -40°C to 250°C dependent on sensor selection

ACCESSORIES

- Model TC-4600D Display: 4 Digit temperature readout for displaying set temperature or actual temperature with capability to adjust the set temperature.
- HS optional Heat Sink: Recommended for applications using 15A of load or greater.
- Thermistor-K: 2000 Ω +/- 2% at 25 °C, best for (-20 °C to 30 °C) range
- Thermistor-Z: 10000 Ω +/- 2% at 25 °C, best for (0 °C to 50 °C) range

SPECIFICATIONS

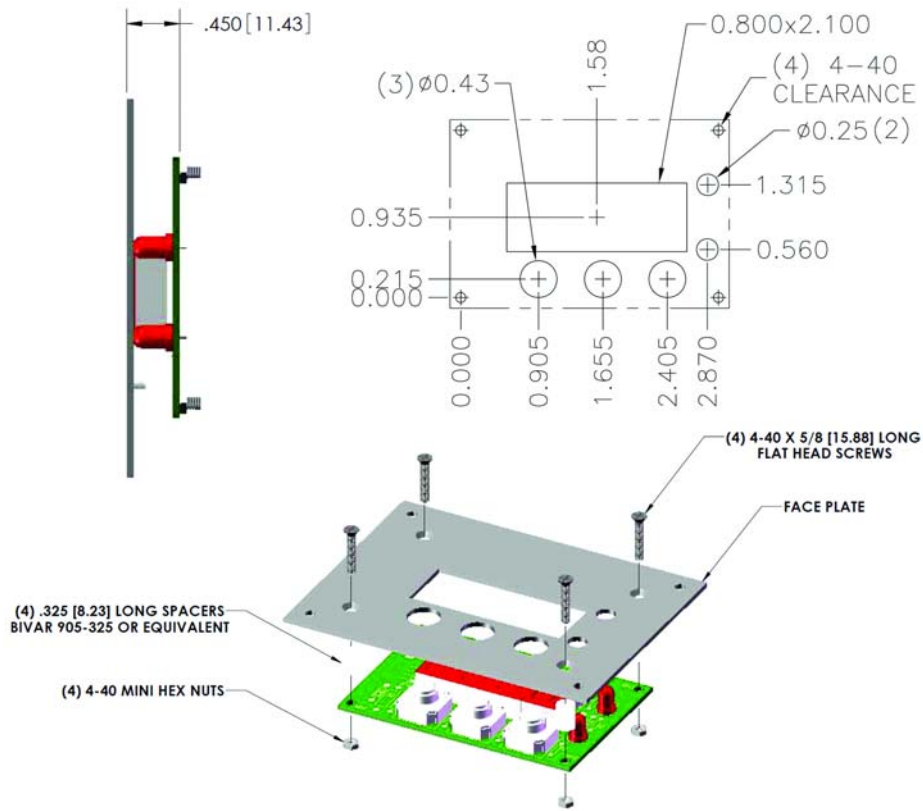
- Input Voltage: 12VDC to 36VDC
- Output Voltage: 0 to 36VDC with split supply
- Load Current: 0.1A to 25A
- Bandwidth: 0.1°C to 50°C
- Integral: 0 to 10 repeats per minute
- Derivative: 0 to 10 minutes
- PWM Base Frequency: 2.7 KHz
- Ambient Temperature range: -20°C to 70°C
- Power Dissipation: <10 Watts
- Process Control Rate: 90 times per second
- Output Power Resolution: $\pm 0.2\%$

PART NUMBER AND ORDERING

MODEL NUMBER	PART NUMBER	COMMS	OPERATING VOLTAGE VDC	SWITCHING VOLTAGE VDC	MAX. SWITCHING CURRENT AMPS.	HEAT SINK	SENSOR	SENSOR RANGE (°C)	DISPLAY
TC-4600	46-44O-41-000	RS-232	12-36	0-36	15*	none	Thermistor-K	-20 to 30	none
TC-4600	46-44O-41-001	RS-232	12-36	0-36	15*	none	Thermistor-K	-20 to 30	included
TC-4600	46-44O-51-000	RS-232	12-36	0-36	15*	none	Thermistor-Z	0 to 50	none
TC-4600	46-44O-51-001	RS-232	12-36	0-36	15*	none	Thermistor-Z	0 to 50	included
TC-4600	46-44P-41-000	RS-232	12-36	0-36	25	included	Thermistor-K	-20 to 30	none
TC-4600	46-44P-41-001	RS-232	12-36	0-36	25	included	Thermistor-K	-20 to 30	included
TC-4600	46-44P-51-000	RS-232	12-36	0-36	25	included	Thermistor-Z	0 to 50	none
TC-4600	46-44P-51-001	RS-232	12-36	0-36	25	included	Thermistor-Z	0 to 50	included

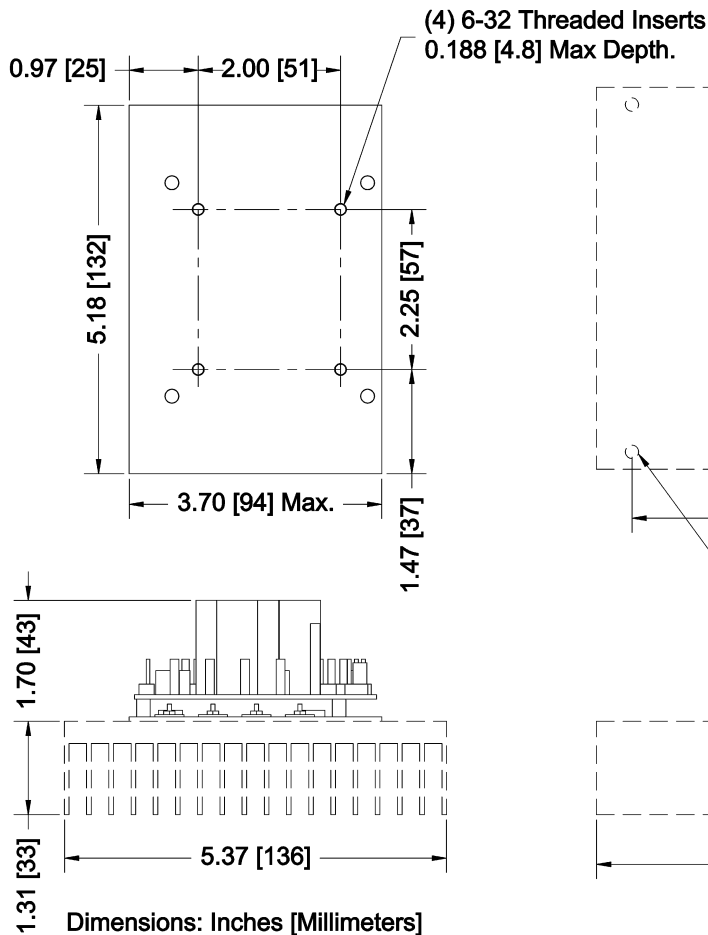
* Can switch up to 25 AMPS if used with heat sink

DISPLAY

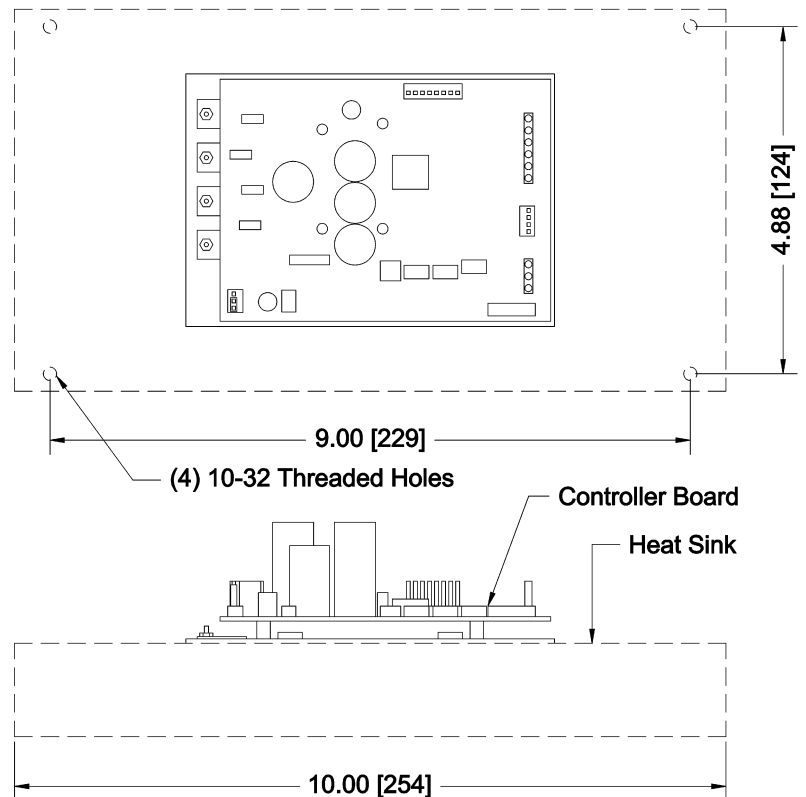


DIMENSIONS

Mounting Without Heat Sink



Mounting With Heat Sink



TC-3400 Temperature Controller

PID Temperature Control

OVERVIEW

The TC-3400 temperature controller series simplifies your temperature control requirements.

The controller options reduce system complexity and the cost of control loop ownership. The TC-3400 is a high performance PID temperature controller in space-saving, panel-mount 1/32 DIN size EIA 485 communications and standard NEMA-4X IP66 sealing make the TC-3400 versatile and suitable for wide range of environments.

FEATURES

Advanced PID Control Algorithm

- Offers TRU-Tune™ + adaptive control to provide tighter control for demanding applications
- Provides auto-tune for fast, efficient start up

Configuration

- Systems come preconfigured for PID cooling application
- "Canned" configuration for different applications available

Parameter Save and Restore Memory

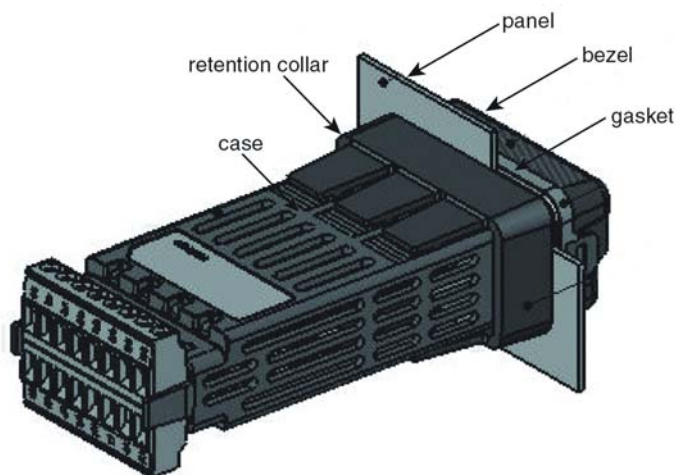
- Reduce service requirement and down time

Heat-Cool Operation

- Provides application flexibility with accurate temperature and process control

P3T Armor Sealing System

- NEMA-4X and IP66 offers water and dust resistance that can be cleaned and washed down
- Backed up by UL 50 independent certification to NEMA-4X specification



SPECIFICATIONS

Line Voltage/Power:

- 85 to 264V~(ac), 47 to 63Hz
- 12 to 40Vdc OR 20 to 28V~(ac), +10/-15 percent; 50/60Hz, ± 5 percent
- 10VA maximum power consumption
- Data retention upon power failure via nonvolatile memory
- Compliant with SEMI F47-0200, Figure R1-1 voltage sag requirements @ 24V~(ac) or higher

Environment:

- -18 to 65°C (0-149°F) operating temperature
- -40 to 85°C (-40-185°F) storage temperature
- 0 to 90 percent RH, non-condensing

Accuracy:

- Calibration accuracy and sensor conformity ± 0.1 percent of span, $\pm 1^\circ\text{C}$ @ the calibrated ambient temperature and rated line voltage
- Types R, S B; 0.2 percent

- Type T below -50°C ; 0.2 percent
- Calibration ambient temperature @ $25^\circ\text{C} \pm 3^\circ\text{C}$ ($77^\circ\text{F} \pm 5^\circ\text{F}$)
- Accuracy span 540°C (1000°F) minimum
- Temperature stability $\pm 0.1^\circ\text{C}/^\circ\text{C}$ ($\pm 0.1^\circ\text{F}/^\circ\text{F}$) rise in ambient maximum

Agency Approvals:

- UL®/EN 61010 Listed
- UL® 1604 Class 1 div. 2
- UL® 50, NEMA 4X, EN 60529 IP66
- CSA 610110 CE
- RoHS, W.E.E.E.

Controller:

- Auto-tune with TRU-TUNE™ + adaptive control algorithm
- Control sampling rates: input 10Hz, outputs 10Hz

Wiring Termination:

- Input, power and controller output terminals are touch safe removable 12 to 22 AWG

Universal Input:

- Thermocouple, grounded or ungrounded sensors
 $>20\text{M}\Omega$ input impedance
 $3\mu\text{A}$ open sensor detection
 Maximum of 200Ω source resistance
- RTD 2- or 3-wire, platinum, 100Ω and 1000Ω @ 0°C calibration to DIN curve ($0.00385\Omega / \Omega/^\circ\text{C}$)

Serial Communications:

- Isolated communications EIA 485
- Industry standard RS-485 Modbus® RTU
- RS-232 via RS-485/232 converter

PART NUMBER AND ORDERING

34	-	X	X	X	-	X	X	-	X	X	X
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Input voltage

0: Universal AC - 85 to 264Vac, 47 to 63 Hz
 4: 12/24Vdc - 12 to 40Vdc, 20 to 28Vac

Functions

2: Heat/Cool -No relay
 3: Cooling with relay (package defined below)
 4: Heating/Cooling with relays (package defined below)

Switching Volts & Amps

A: None, drive signal only - no relays
 B: Cool only, VAC switching, 120/240Vac, 10 Amps
 C: Cool Only, VDC switching, 0-100 VDC, 12 Amps
 D: Cool Only, VDC switching, 0-100 VDC, 20 Amps
 E: Cool Only, VDC switching, 0-100 VDC, 40 Amps
 F: Heat/Cool, VDC switching, 0-100 VDC, 12 Amps
 G: Heat/Cool, VDC switching, 0-100 VDC, 20 Amps
 H: Heat/Cool, VDC switching, 0-100 VDC, 40 Amps
 I: Heat/Cool, Heat: 120/240 VAC, 10 amps Cool: VDC switching, 0-100 VDC, 12 Amps
 J: Heat/Cool, Heat: 120/240 VAC, 10 amps Cool: VDC switching, 0-100 VDC, 20 Amps
 K: Heat/Cool, Heat: 120/240 VAC, 10 amps Cool: VDC switching, 0-100 VDC, 40 Amps
 L: Heat/Cool, Heat: 0-100 VDC, 12 Amps Cool: VAC switching, 120/240 VAC, 10 amps
 M: Heat/Cool, Heat: 0-100 VDC, 20 Amps Cool: VAC switching, 120/240 VAC, 10 amps
 N: Heat/Cool, Heat: 0-100 VDC, 40 Amps Cool: VAC switching, 120/240 VAC, 10 amps
 O: Heat/Cool, Reverse Polarity, 0-100 VDC, 12 Amps
 P: Heat/Cool, Reverse Polarity, 0-100 VDC, 20 Amps
 Q: Heat/Cool, Reverse Polarity, 0-100 VDC, 40 Amps
 R: Heat/Cool, VAC switching, 120/240 VAC, 10 amps

Sensor

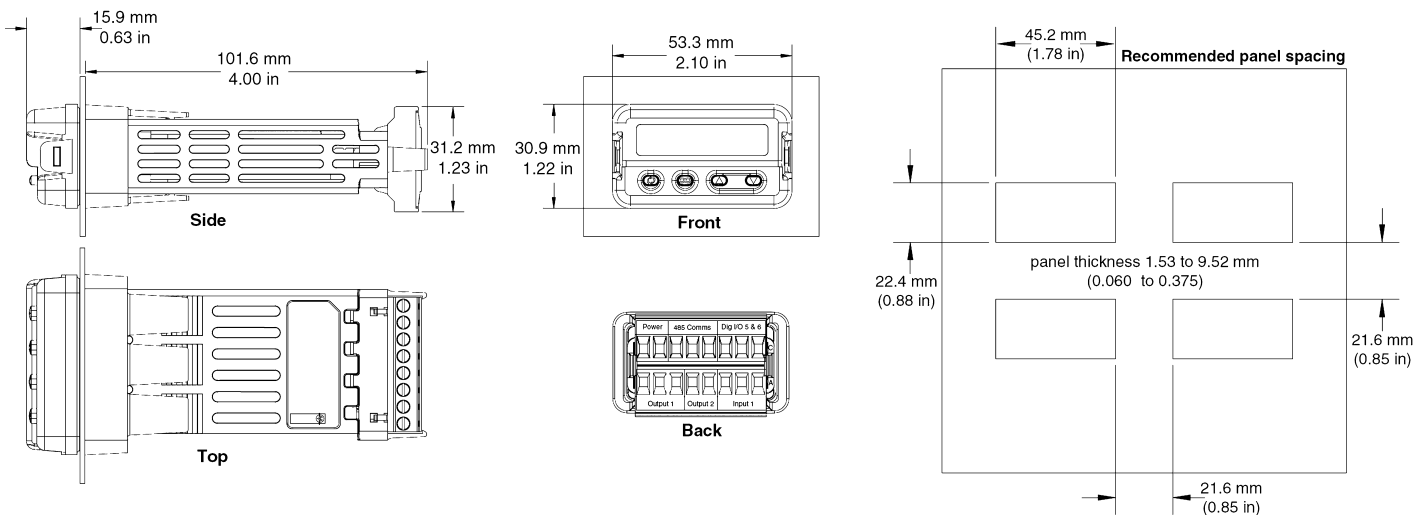
0: None
 1: 3- Wire RTD - RTD-Probe
 2: T type thermocouple (ring mount)

Communications

0: Basic communications used with standard **EZ Zone Configurator** allows the user to configure all the set up parameters including the ability to change set point, monitor the process temperature and initiate an Auto Tune
 1: RS-232 complete communication for use with standard EZ Zone Configurator and optional **SpecView** or third party software, includes RS-232/RS-485 adapter
 2: RS-485 complete communication for use with standard EZ Zone Configurator and optional **SpecView** or third party software

Options

DIMENSIONS AND CUTOUT



TC-3500 Temperature Controller

PID Temperature Control

OVERVIEW

The TC-3500 temperature controller series simplifies your temperature control requirements.

This controller reduces system complexity and set up cost. The TC-3500 is a high performance PID temperature controller in space-saving, panel-mount size. RS485 with MODBUS-RTU (JBUS) protocol and IP 65 mounted in panel with gasket suitable for wide range of environments.

For use with reverse polarity AHP-300FFHC, AHP-300XEHC, AHP-300XHC, AHP-150FFHC, AHP-150XEHC.



SPECIFICATIONS

Mechanical Data:

- Housing Self-extinguishing plastic, UL 94 V0
- Dimensions 35x78 mm - depth 75,5 mm
- Weight 130 g approx
- Connections 2,5 mm² screw terminal block
- Mounting Flush in panel in 29x71 mm hole
- Front panel protection IP 65 mounted in panel with gasket

Electrical Data:

- Power supply 12...24 VDC +/- 10
- Power consumption 4 VA approx.

Input Sensor:

- PTC Thermistor (included)

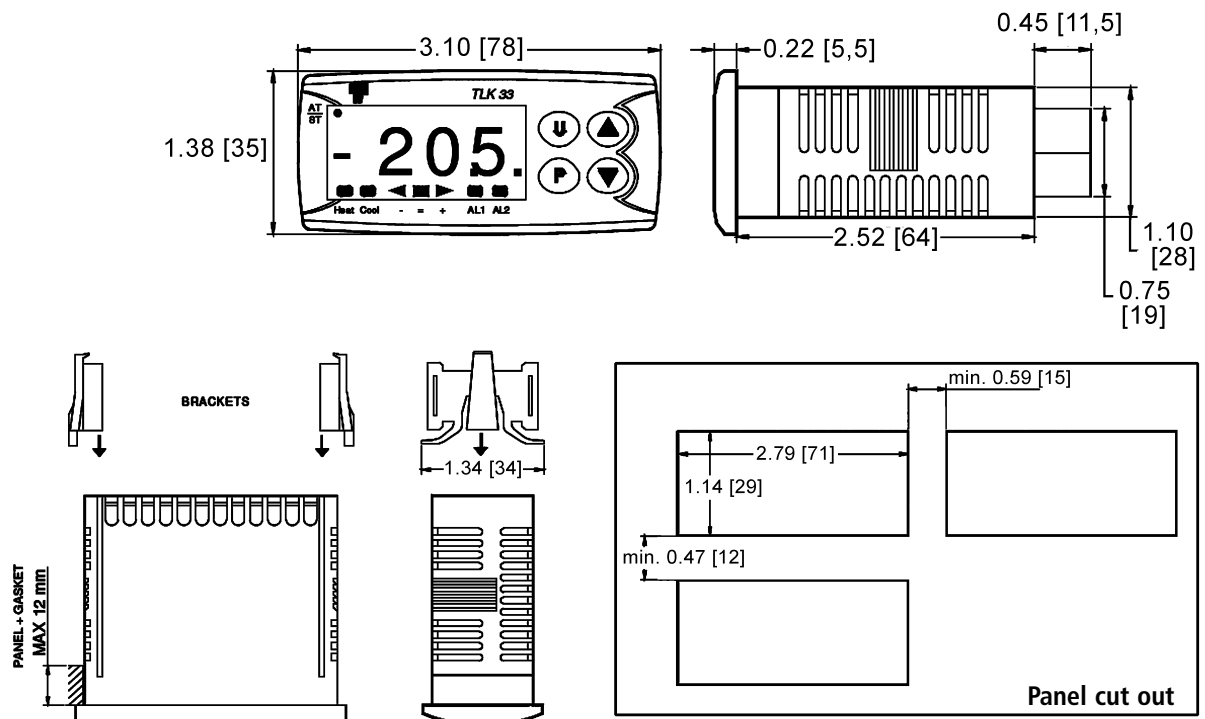
Functional Data:

- Control PID double action
- PID functions AUTO TUNING FAST, SELF TUNING, FUZZY OVERSHOOT CONTROL

- Multi Set Point Up to 4 programmable Set Points
- Overall accuracy +/-0,5% full scale (TC S : +/- 1% fs)
- Unit of measurement °C / °F, programmable
- Max. cold junction compensation drift 0,1°C/°C with operating temperature 0...50°C after warm-up time of 20 min.
- Sampling rate 8 sample per second
- Serial communication RS485 with MODBUS-RTU (JBUS) protocol
- Communication rate 1200...38400 baud, programmable
- Display 4 red digit h=12 mm
- Parameters access Protected by password
- Operating temperature 0...50°C
- Operating humidity 30...95 RH% without condensation

PART NUMBER AND ORDERING

MODEL NUMBER	PART NUMBER	SWITCHING VOLTAGE VDC	SWITCHING CURRENT AMPS (MAX.)	COMMUNICATIONS
TC-3500	35-44S-30-000	12/24	7	None
TC-3500	35-44S-32-000	12/24	7	RS-485

DIMENSIONS AND CUTOUT

Dimensions: Inches [Millimeters]

Power Temperature Controllers

TC-1F POWER TEMPERATURE SWITCHES

Models TC-1F power temperature controller, with small tolerance and reset differential, are the simplest and most cost effective way to control a cooling or heating device (VAC or VDC) without a need for a relay. For circuits that have higher current draw simply use them in conjunction with a solid state relay.

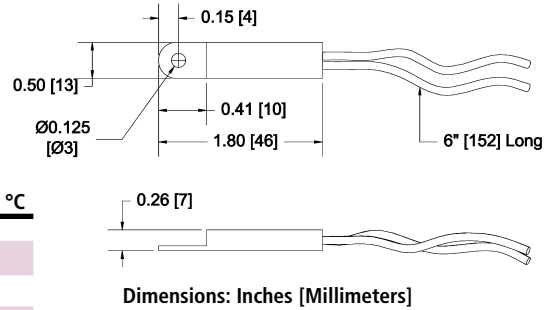
Part Numbers:

Mode	Part Number	Note
Cool	TC-1C-XX	switch closes on temperature rise
Heat	TC-1H-XX	switch closes on temperature drop

XX: Specify temperatures 20 °C, 25 °C, 30 °C, 35 °C for cool mode and 10°C, 15 °C for heat mode

Example: TC-1C-20 and TC-1H-10

VOLTAGE	CURRENT AMPS	SET POINT TOLERANCE °C	RESET DIFFERENTIAL °C
125 VAC	2	+/- 3	3 - 6
250 VAC	1.3	+/- 3	3 - 6
12 VDC	2	+/- 3	3 - 6
24 VDC	1.3	+/- 3	3 - 6



TC-4F COOL ONLY WITH ECO-MODE

Model TC-4F is similar to TC-1F plus it has a 2nd power switch for heat exchanger mode (ECO-Mode). The active cool set point for TC-4F is 35 °C and for heat exchanger mode (ECO-Mode) is 25 °C.

MODEL NUMBER	PART NUMBER	NOTES	HX TEMP. °C	COOL TEMP. °C	RESET (MAX) °C	RESET (TYP) °C	OPERATING VOLTAGE	SWITCHING VOLTAGE	ACTIVE MODE SWITCHING CURRENT	ECO-MODE SWITCHING CURRENT
TC-4F-DC	4F-24G-00-000	24 VDC	25 +/- 3	35 +/- 3	6.5	3	24 VDC	24 VDC	.02 - 20 ADC	1.3 ADC

TC-6F COOL ONLY

Model TC-6F (Cool Only) thermostat is designed using two temperature power switches in conjunction with a solid state relay. A three position switch is provided to adjust temperature settings.

MODEL NUMBER	PART NUMBER	NOTES	TEMP @ T1 °C	TEMP @ T2 °C	T1-T2 (MAX) °C	RESET (TYP) °C	RESET °C	TEMP @ T3	OPERATING VOLTAGE	SWITCHING VOLTAGE	SWITCHING CURRENT
TC-6F	6F-00A-00-000	No Relay	35 +/- 5	25 +/- 5	10 +/- 3	6.5	3	Continuous On	NA	NA	NA
TC-6F-AC	6F-03T-00-000	VAC Version	35 +/- 5	25 +/- 5	10 +/- 3	6.5	3	Continuous On	85-250 VAC	24-280 VAC	10
TC-6F-DC	6F-43D-00-000	12/24 VDC	35 +/- 5	25 +/- 5	10 +/- 3	6.5	3	Continuous On	12/24 VDC	0-100 VDC	.02-20 ADC
TC-6F-DC	6F-33D-00-000	48 VDC	35 +/- 5	25 +/- 5	10 +/- 3	6.5	3	Continuous On	48 VDC	0-100 VDC	.02-20 ADC

TC-3F HEAT AND COOL

Model TC-3F (Heat/Cool) thermostat incorporates the same technology as the TC-6F. It contains a single setting each for both heating and cooling as referenced below:

MODEL NUMBER	PART NUMBER	NOTES	COOL TEMP. °C	HEAT TEMP. °C	RESET (MAX) °C	RESET (TYP) °C	OPERATING VOLTAGE	SWITCHING VOLTAGE	SWITCHING CURRENT
TC-3F-AC	3F-04R-00-000	VAC Version	35 +/- 5	15 +/- 5	6.5	3	85-280 VAC	24-280 VAC	10 AMPS
TC-3F-DC	3F-44G-00-000	12/24 VDC	35 +/- 5	15 +/- 5	6.5	3	3.5-32 VDC	0-100 VDC	.02 - 20 ADC
TC-3F-DC*	3F-44P-00-000	12/24 VDC	35 +/- 5	15 +/- 5	6.5	3	3.5-32 VDC	0-100 VDC	.02 - 20 ADC

* H-Bridge relays included

TC-7F HEAT/COOL WITH ECO-MODE

Model TC-7F (Heat/Cool) thermostat incorporates the same technology as the TC-3F. It contains a single setting each for both heating and cooling and a heat exchanger mode (ECO-Mode).

MODEL NUMBER	PART NUMBER	NOTES	COOL TEMP. °C	HX TEMP. °C	HEAT TEMP. °C	RESET (MAX) °C	RESET (TYP) °C	OPERATING VOLTAGE	SWITCHING VOLTAGE	SWITCHING CURRENT
TC-7F-DC	7F-24G-00-000	24 VDC	35 +/- 3	25 +/- 3	10 +/- 3	6.5	3	24 VDC	24 VDC	.02 - 20 ADC

H-Bridge relays included

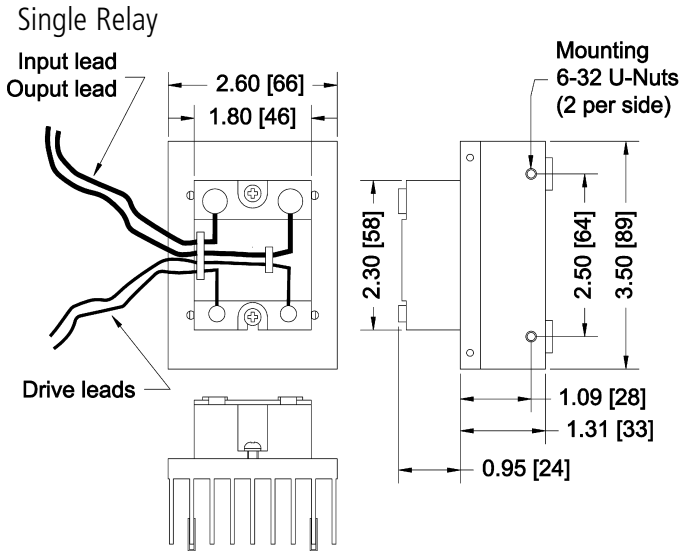
For custom variations of any of the controls, contact TECA.

SINGLE RELAY

RELAYS

Relays

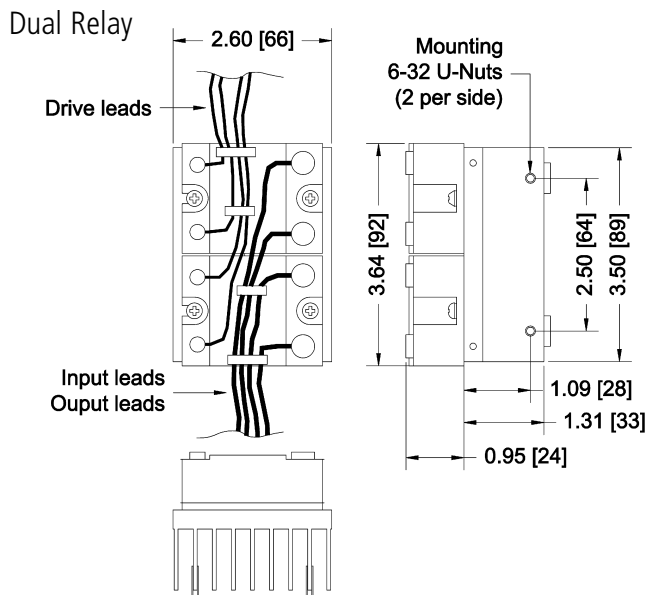
H-Bridges



DESCRIPTION

PART

Cool only, DC Drive, VAC switching, 120/240 VAC, 10 AMPS	RELAY - B
Cool only, DC Drive, VDC switching, 0-100 VDC, 12 AMPS	RELAY - C
Cool only, DC Drive, VDC switching, 0-100 VDC, 20 AMPS	RELAY - D
Cool only, DC Drive, VDC switching, 0-100 VDC, 40 AMPS	RELAY - E
Cool only AC Drive, VAC switching, 120/240 VAC, 10 AMPS	RELAY - T

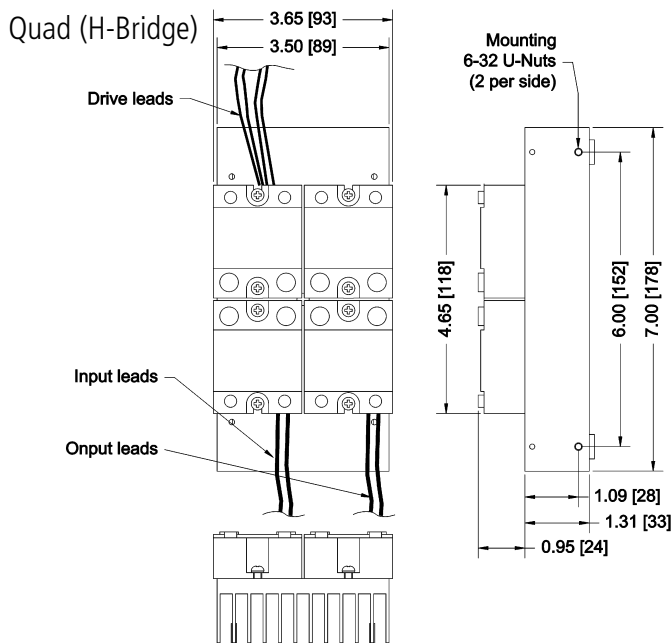


DESCRIPTION

(3-32 VDC DRIVE)

PART

Heat/Cool, VDC switching, 0-100 VDC, 12 AMPS	RELAY - F
Heat/Cool, VDC switching, 0-100 VDC, 20 AMPS	RELAY - G
Heat/Cool, VDC switching, 0-100 VDC, 40 AMPS	RELAY - H
Heat/Cool, Heat: 120/240 VAC, 10 AMPS Cool: 0-100 VDC, 12 AMPS	RELAY - I
Heat/Cool, Heat: 120/240 VAC, 10 AMPS Cool: 0-100 VDC, 20 AMPS	RELAY - J
Heat/Cool, Heat: 120/240 VAC, 10 AMPS Cool: 0-100 VDC, 40 AMPS	RELAY - K
Heat/Cool, Heat: 0-100 VDC, 12 AMPS Cool: 120/240 VAC, 10 AMPS	RELAY - L
Heat/Cool, Heat: 0-100 VDC, 20 AMPS Cool: 120/240 VAC, 10 AMPS	RELAY - M
Heat/Cool, Heat: 0-100 VDC, 40 AMPS Cool: 120/240 VAC, 10 AMPS	RELAY - N
Heat/Cool, VAC switching, 120/240 VAC, 10 AMPS	RELAY - R



DESCRIPTION






(3-32 VDC DRIVE)

PART

Heat/Cool, reverse polarity, 0-100 VDC, 12 AMPS	RELAY - O
Heat/Cool, reverse polarity, 0-100 VDC, 20 AMPS	RELAY - P
Heat/Cool, reverse polarity, 0-100 VDC, 40 AMPS	RELAY - Q

Temperature Controller Accessories

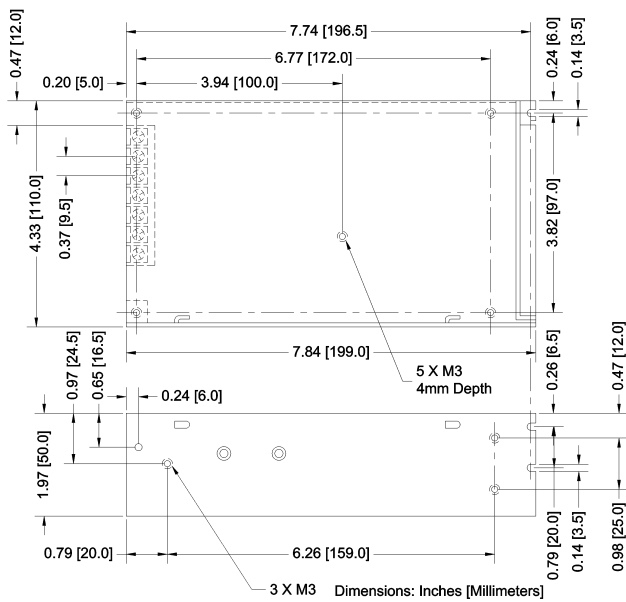
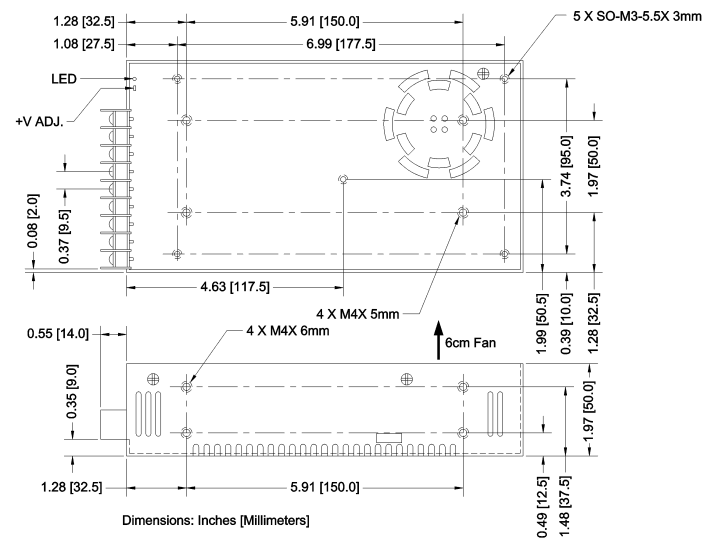
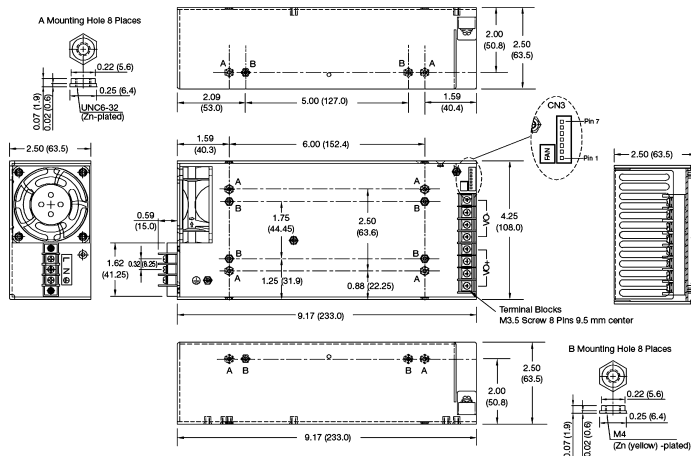
SENSORS, CABLES, ADAPTERS

TTYPE-Ring Surface mounting "T" type thermocouple with connector	
RTD-Surface Surface mounting 3 wire RTD with connector	
RTD-Probe 6" long, 1/8 DIA, 3 wire RTD with connector	
Probe-1/4NPT RTD-Probe with male 1/4 NPT compression fitting	
Probe-3/8NPT RTD-Probe with male 3/8 NPT compression fitting	
Thermocouple Wire (specify length in feet) "T" type WIRE-T-XXX "J" type WIRE-J-XXX	
RTD Wire (specify length in feet) 3 conductor cable WIRE-RTD-XXX	
C-USB RS-232 to USB converter	
C-485/232 RS-485 to RS-232 and RS-232 to RS-485 converter	
C-RS232 RS-232 cable	

SPECIFICATION

MODEL	INPUT VOLTAGE VAC 47-63 HZ	OUTPUT VOLTAGE VDC	DC OUTPUT POWER WATTS	OUTPUT CURRENT AMPS.	WEIGHT LBS.	WORKING TEMPERATURE °C 20-90%RH	DIMENSIONS L X W X H INCHES
AS150F-12	88-132 OR 176-264*	12	150	12.5	1.76	-10 - 60	7.96X4.4X2
AS150F-24	88-132 OR 176-264*	24	150	6.5	1.76	-10 - 60	7.96X4.4X2
SP300-12	90-264	12	300	24	2.6	-10 - 50	8.6X4.6X2
SP300-24	90-264	24	300	12.5	2.6	-10 - 50	8.6X4.6X2
SP500-24	90-264	24	500	20.8	3.3	0 - 70	9.2X4.25X2.5
SP800-24	90-264	24	800	33	3.3	0 - 70	9.2X4.25X2.5

* Input voltage range is switch selectable.

DIMENSIONS**AS-150F****SP-300****SP-500, SP-800**

Helpful Information

Ordering information:

- By telephone during business hours, **773-342-4900** and **888-832-2872**.
Monday – Friday 8 AM to 4:30 PM, Central Time.
- By fax or email 24 hours a day.
Fax: **773-342-0191**
email: **sales@thermoelectric.com**
- By mail on your purchase order or company letterhead.
Thermoelectric Cooling America Corporation
4048 West Schubert, Chicago, Illinois 60639

All orders are subject to written acceptance on our form "Acceptance of Order" with our required terms and conditions, depending upon quantity, price, availability of parts and other considerations.

Prices:

- Prices are quoted F.O.B. Chicago and do not include sales or other taxes. Applicable taxes will be shown as a separate item on the invoice, as will charges for freight.
- Prices are in US Dollars and are subject to change without notice.

Terms:

- Terms of payment are 30 days after shipment, subject to approved credit. New accounts must furnish necessary credit references. Until credit has been established, payment in full with order or C.O.D. may be requested. American Express, Visa and Mastercard are accepted.



Cancellation, Schedule Changes:

- A charge of 15% of net price will be assessed for cancellation of formally accepted orders. Special part numbers containing a (CD or P) prefix are non-cancelable, non-returnable (NCNR). A 100% cancellation charge applies.
- Requests for schedule changes which defer delivery may be subject to price adjustments or other charges.

Returned Goods, Restocking Charges:

- In order to return merchandise for any reason (repair, replacement or credit), a return authorization number must be issued by TECA.
- New merchandise may not be returned for credit beyond 60 days from shipment. Charges for incidental or other damages may also be made.
- All returned goods must be sent freight prepaid. A restocking charge of 15% will apply.

Limited Warranty

In the event a claimed defect in material or workmanship is discovered in any of TECA's products within one year after the date they are delivered to Buyer, and if TECA is notified of the defect in writing by certified mail within 14 days of the date of discovery, then TECA may either, at its sole discretion; a) inspect the product at the Buyer's location, or; b) require that the product be made available at Buyer's expense at TECA's premises for TECA's inspection within 14 days of notification. If after such inspection TECA deems that the products are defective and the defects result from faulty materials and/or workmanship and not in any way from accident, misuse, misapplication, mishandling, modification or alteration by the Buyer or the shipper, then TECA shall, at its sole option, repair or exchange defective products free of charge to Buyer, and return same to Buyer at Buyer's expense, or credit the Buyer the net price of the defective products. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE EXCLUDED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL TECA BE LIABLE FOR ANY CLAIM BASED ON BREACH OF EXPRESS OR IMPLIED WARRANTY OR OTHER DAMAGES WHETHER SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOST PROFITS, BUSINESS INTERRUPTION, OR LOSS OF BUSINESS OR CUSTOMER RELATIONSHIPS.

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