

Wiegmann has always recognized that our customers in the electrical and electronic marketplace need reliable, high quality enclosures and environmental control products to meet their protection requirements. Protection Requirements today not only mandate NEMA TYPE 12, 3R, 4, & 4X, but also require a broad mix of BTU & size selections. Wiegmann is proud to offer those choices via a whole new line of A/C products. They are: Advantage Series, Trim Line Series, Micro-Mini Series, Integrity Series, and the Top Mount Series.

### Three Basic Cooling Methods

When selecting a cooling method there are three types to consider.

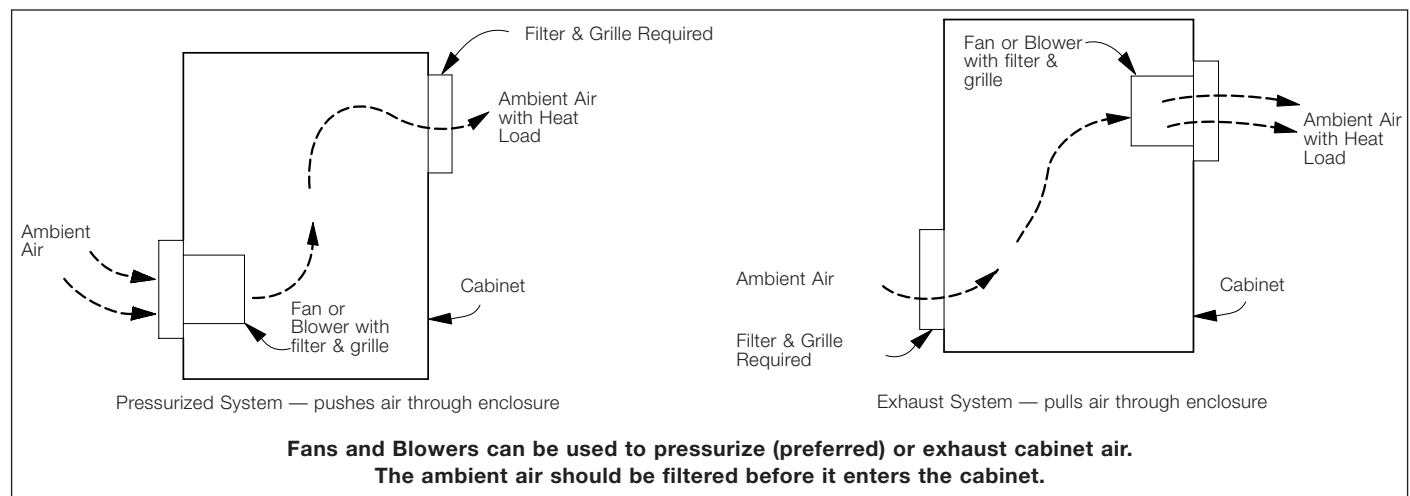
1 *Passive Ventilation* — If there is only a minimal heat gain in your circum-

stance, use of louvers or grilles with filters can be effective. This method, however, usually provides less cooling effect than is necessary with today's components.

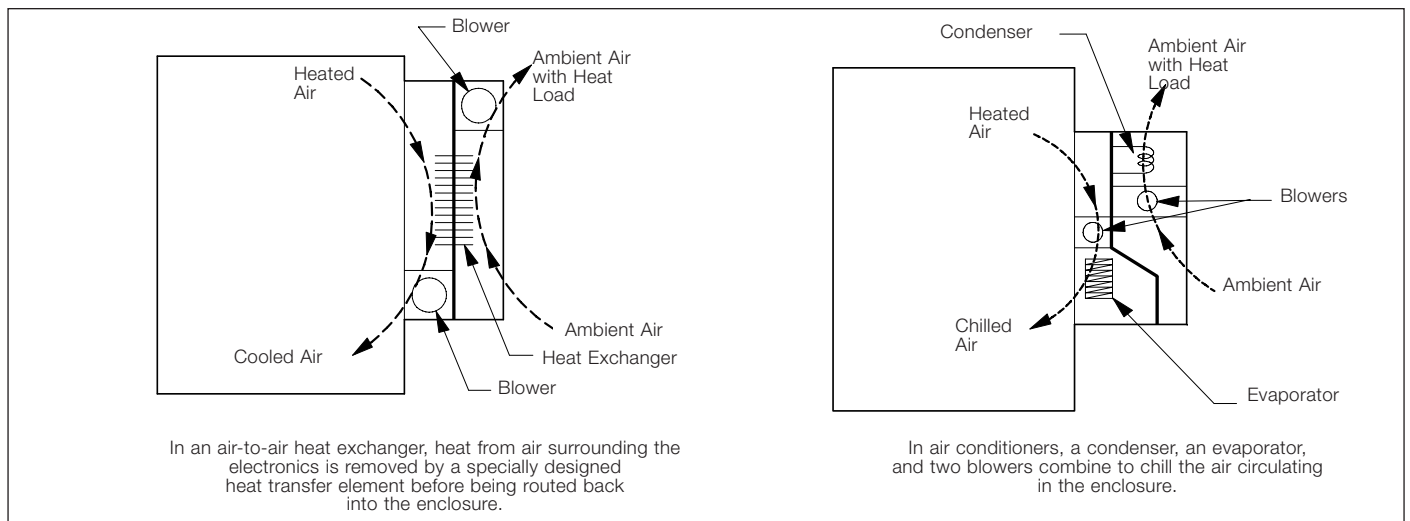
2 *Forced Convection Air Cooling* — If the installation will be in a clean, non-hazardous environment with an acceptable ambient (outside the enclosure) temperature range, a simple forced-air cooling system utilizing outside air is usually adequate. Combined with an air filter, such devices generally meet the heat removal needs of typical electronic equipment and many electrical applications (Fig. 1). Examples of forced convection air cooling are filtered fans, fan trays, and blowers of various types.

3 *Closed-Loop Cooling* — In harsh environments involving high temperatures, wash-down requirements, heavy particulate matter or the presence of chemicals capable of damaging components (NEMA 4 or 12 environments), ambient air must be kept out of the enclosure. Closed-loop cooling consists of two separate circulation systems. One system, sealed against the ambient air, cools and recirculates the clean cool air throughout the enclosure. The second system uses ambient air or water to remove and discharge the heat. Examples of closed-loop cooling equipment employed with electronics and process controls are heat exchangers and air conditioners.

**FIGURE 1 — Forced Convection Method**



**FIGURE 2 - Closed Loop Cooling Method**



### Cooling Control Cabinets

Most electrical & electronic control systems generate a substantial amount of heat during operation. This heat factor is intensified as controls are made more compact, perform more functions, and are placed in more confined areas. Additional problems are encountered when the electronic process control system is located on-site in an industrial setting, rather than in a clean computer room. The factory environment can be hostile to the point that performance and effective life of the electronic components are materially reduced, or the control system fails completely. Ambient temperature might be excessively high, as that found in a steel mill. Moisture-laden air and air-borne particulate matter might be present to adversely affect the electronic components, as in the paper manufacturing industry.

Air conditioners are designed to perform reliably under many of these harsh conditions and to provide the cooling and environmental protection required by sensitive electronic production control systems.

### Factors Affecting Model Selection

This selection is presented as a basic outline or checklist of the various conditions to be considered when choosing a cooling unit for a certain application. The following are factors which must be considered when selecting a cooling unit:

**Internal Heat Load** — This is the heat dissipated by the electronic controls. It is expressed in watts. One watt equals 3.413 BTU/HR. Thus, to obtain the approximate cooling capacity required to remove a specific heat load, the following formula can be used:

$$\text{Watts} \times 3.413 = \text{BTU/HR}$$

For example, a heat load of 800 watts requires an air conditioner capable of removing at least 2,730 BTU/HR.

### Resistance to Air Flow in the Enclosure

Air Flow is measured in cubic feet per minute (CFM). To create an air flow of any desired velocity requires that pressure be produced by the blower in the air conditioner. Resistance to this blower-produced air flow is created by obstruction within the cabinet in the air flow path. The resistance itself is called pressure drop (P.D.) and is measured in inches of water column.

The effect of significant restrictions in the cabinet air flow path are as follows: The obstructions cause pressure drops, which leads to cool air flow reduction. This reduction in cool air flow will decrease the effective capacity of the cooling unit. When selecting the proper cooling unit, allowance must be made for pressure drop.

### Heat Load From The Surroundings

Ambient conditions can cause a heat gain in the enclosure. The rated capacity of the cooling unit must be sufficient to handle this heat gain. When evaluating the additional heat load gained from the surroundings, the subject more or less breaks down into two situations: (1) the cabinet is insulated and well sealed, or (2) the cabinet is not insulated (most cabinets are uninsulated.)

(1) Cabinet Insulated — Normally, well insulated cabinets will not gain sufficient ambient heat to affect air conditioner's operation. Maximum operating temperature for our air conditioners is 125°F. When the air conditioner operates in ambient temperatures below 125°F, the cooling capacity of the air conditioner substantially increases.

(2) Cabinet Not Insulated — Obviously, this design placed more of a burden on the cooling unit. Heat is conducted to the cool side. Thus, high ambient heat will be readily transmitted into the cooler enclosure.

To determine the additional capacity required of our air conditioner installed in an uninsulated cabinet, the surface square footage of the enclosure must be

calculated to obtain the total effective heat transfer area. For this calculation, use the surface area of the sides, plus the area of the top, and omit the bottom area of the cabinet.

Air movement outside the uninsulated cabinet will increase the heat conducted from the ambient into the enclosure. When there is little or no air circulation outside the cabinet, the layer of air immediately adjacent to the exterior cabinet walls acts as an insulating film. Exterior air movement dissipates this insulating layer of air in proportion to the velocity of the air flow. Substantial ambient air circulation will increase the transmitted heat load imposed on the cooling unit.

If the cabinet being cooled is not air tight, then high ambient relative humidity will adversely affect the cooling effectiveness of the air conditioner. When humid air infiltrates a poorly sealed enclosure, the air conditioner is required to use up valuable BTU/HR capacity just to condense the moisture from the internal air. Conversely, if the cabinet is well sealed, high ambient relative humidity, has very little effect on the heat capacity of the air conditioner.

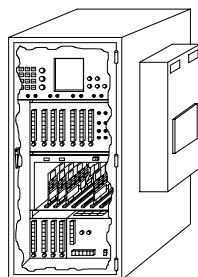
### Steps For Sizing an Air Conditioner

Proper selection of an air conditioner is determined by the following criteria:

- Required cooling capacity BTU/hr. (complete Steps #1-4)
- Mounting requirements (top or side mounting options)
- Dimension of air conditioner and enclosure

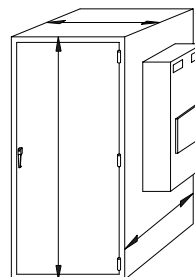
## Cooling And Control Cabinets

### STEP ONE



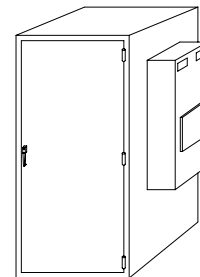
1 Watt = 3.413 BTU/HR.  
 Determine the internal heat load in Watts that must be dissipated.

### STEP TWO



1 m<sup>2</sup> = 10.76 ft.<sup>2</sup>  
 Calculate the exposed surface area of the enclosure:  $2(h' \times w') + 2(h' \times d') + (w' \times d') = \text{Area (ft}^2\text{)}$

### STEP THREE



10C or 10K  $\Delta T = 1.80F \Delta T$   
 Determine the temperature differential by subtracting the maximum allowable temperature inside the enclosure (Ti) from the maximum ambient temperature outside the enclosure (To)  $To - Ti = \Delta T$

### STEP FOUR

$$(\text{Watts} \times 3.413) + [1.25 \times \text{Area ft.}^2 \times \Delta T (^\circ\text{F})] = \text{BTU/HR.}$$

Capacity Required  
 BTU/HR. Capacity  
 Rating



**WIEGMANN®**



### Description

A highlight of the Panel-Mounted TrimLine Series is an easy, revolutionary system for installing Panel-Mounted Air Conditioners and Heat Exchangers onto electronic or electrical enclosures. The M/TAB is standard on all TrimLine Air Conditioners. This integral system functions as a mounting template, pre-installation hanger and final assembly bracket.

The M/TAB was specifically designed to assist in the difficult job of installing enclosure Air Conditioners. It simplifies

### FEATURES-SPECIFICATIONS

the installation process by eliminating the problem of handling flange-mounted Air Conditioners. The solution is provided by following these installation steps...

- Use the M/TAB as a template to drill holes for mounting to the enclosure
- Bolt M/TAB to enclosure
- Cut out the Supply and Return openings
- Hang the Air Conditioner or Heat Exchanger on the M/TAB
- Secure the unit to the M/TAB

The M/TAB also allows for the quick removal and transportation of the Air Conditioner or Heat Exchanger, separate from the equipment, for servicing or change to a different capacity same-

size Air Conditioner or to a same-size Heat Exchanger.

### Features

- No exposed rails or mounting flanges; aesthetically pleasing while conserving cabinet space
- Reduction in installation time and labor, with significant cost savings
- Ease of installation and one piece design reduce mounting errors
- Allows the installer to operate independently
- Functions as a pre-installation hanger and final assembly bracket
- Installation is totally outside the enclosure; no clumsy mounting from inside the enclosure


**WIEGMANN®**



**NEMA**  
TYPE 3R & 12  
MAINTAINED

## FEATURES-SPECIFICATIONS

### Description

At last - air conditioners designed specifically for cooling electronic enclosures that can be used for both indoor and outdoor applications right out of the box!

No more bulky unattractive weather-hoods... No more worries over what options to specify for outdoor applications.

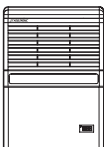

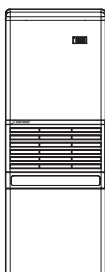
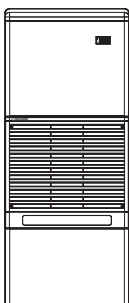
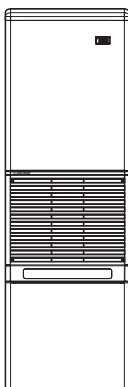
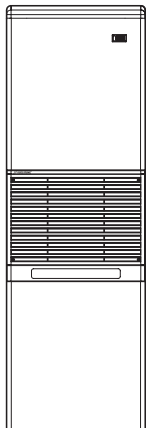
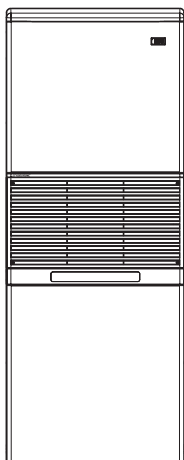
Expertly designed and crafted, the ADVANTAGE Series boasts a stylish appearance with rounded edges, no visible hardware and a textured baked powder finish to blend easily with contemporary enclosure designs.

Serviceability has been made easier by incorporating a "knock-down" sheet-metal design which provides quick access to internal components.

These air conditioners are available in capacities from 2,000 to 22,000 BTU/H in seven heights, all utilizing the exclusive M/TAB integral mounting system.

### Features

- Capacities: 2,000 to 22,000 BTU/H
- Textured Beige Powder Finish
- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- Closed-Loop Cooling
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Heavy-duty Steel Enclosure
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R and 12 Ratings Maintained (UL50)
- Filters
- Six Foot [1.8m] (minimum) SJT 3-wire Cord
- UL/CUL Recognized
- Complete line of accessories

						
<b>RP17</b> 2,000 BTU/H 17"H x 12"W x 11"D	<b>RP28</b> 3,000 BTU/H 28"H x 12"W x 11"D	<b>RP33</b> 4,000 BTU/H 33"H x 12"W x 11"D	<b>RP36</b> 6,000 BTU/H 36"H x 15"W x 11"D	<b>RP47</b> 8,000 & 12,000 BTU/H 47"H x 15"W x 13"D	<b>RP52</b> 18,000 BTU/H 52"H x 17"W x 16"D	<b>RP55</b> 22,000 BTU/H 55"H x 22"W x 17"D



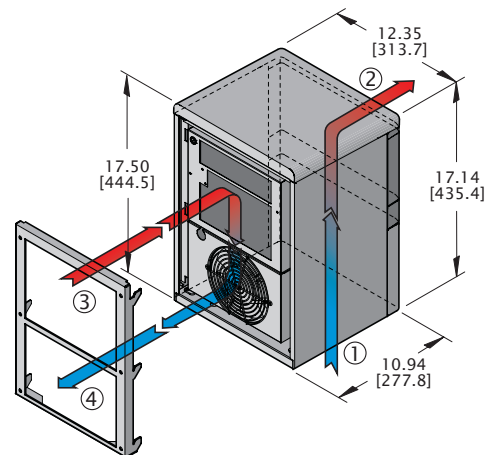
**WIEGMANN®**

# ENVIRONMENTAL CONTROLS ADVANTAGE "RP17" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS



**NEMA**  
TYPE 3R & 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## FEATURES-SPECIFICATIONS

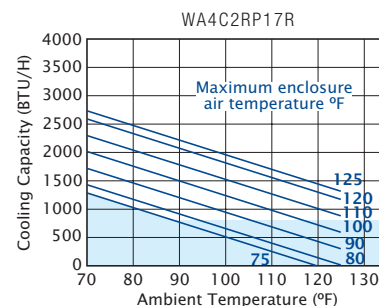
### Standard Features

- Condensate Evaporator
- CFC-Free Refrigerant
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Filters
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R & 12 Rating Maintained
- UL/CUL Recognized\*
- Textured Beige Powder Finish

### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Painted Metal Grille
- Power Loss Delayed Compressor Start
- Short Cycle Protector
- Special paint finishes

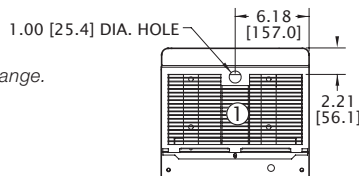
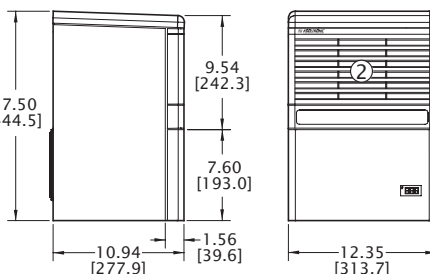
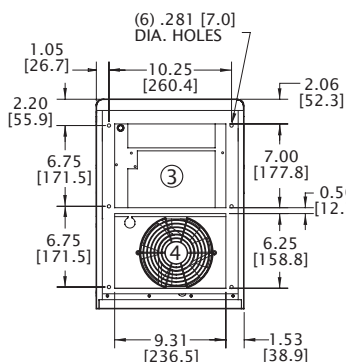
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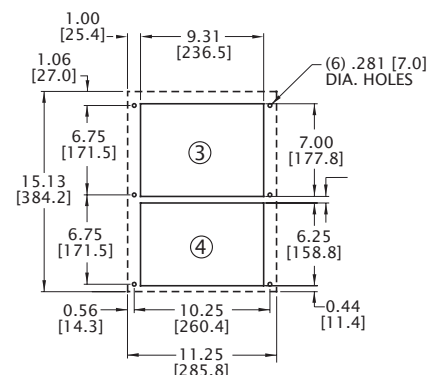
### ADVANTAGE SERIES RP17 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C2RP17R ◀	2000	1200	120/50	115/100	60/50	7.0/7.5	64
W2A4C2RP17R ◀	2000	1200	120/50	230/200	60/50	4.0	64

◀ NEW PRODUCT IN 2003



### MOUNTING PLAN



Dimensions, inches [metric], are for reference only and subject to change.

\*UL/CUL Recognized models are available as Listed at added cost.

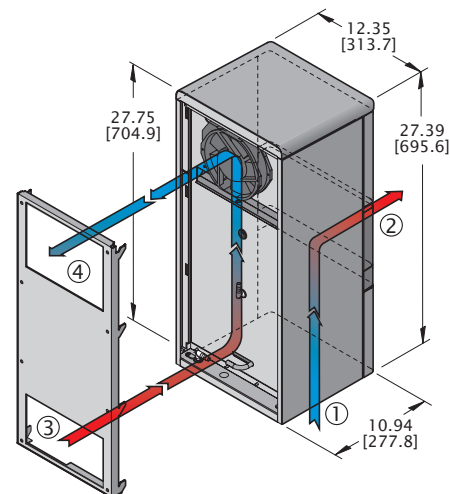


**WIEGMANN**



**UL** **US** **NEMA**  
TYPE 3R & 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## FEATURES-SPECIFICATIONS

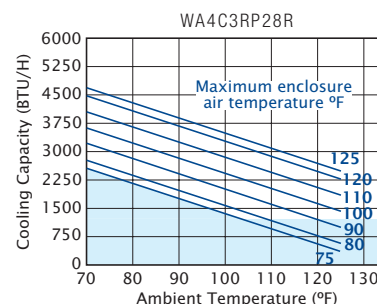
### Standard Features

- Condensate Evaporator
- CFC-Free Refrigerant
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Filters
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R & 12 Rating Maintained
- UL/CUL Recognized\*
- Textured Beige Powder Finish

### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Painted Metal Grille
- Power Loss Delayed Compressor Start
- Short Cycle Protector
- Special paint finishes

### PERFORMANCE CHART



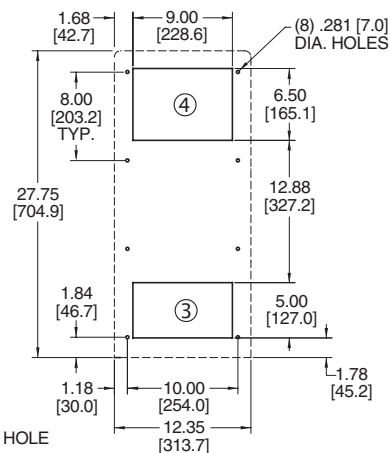
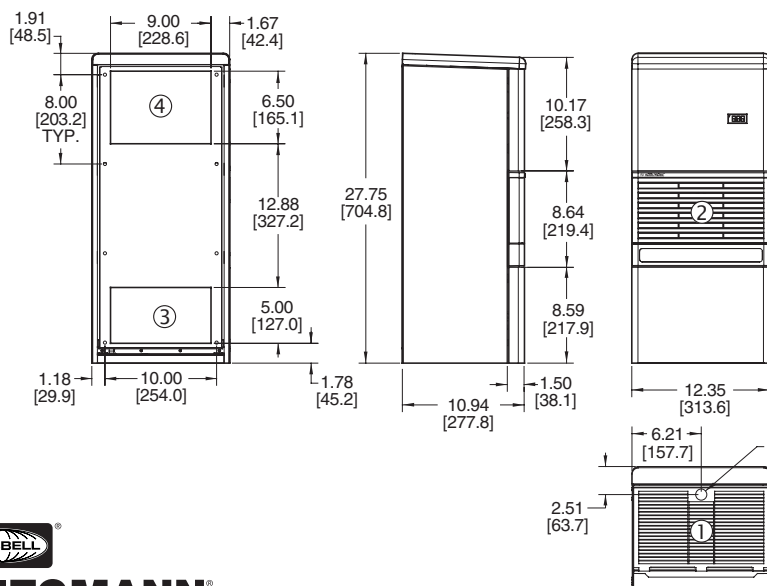
Operation within shaded area not recommended.

### ADVANTAGE SERIES RP17 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C3RP28R ◀	3000	2220	125/50	115/100	60/50	9.8/9.7	86
W2A4C3RP28R ◀	3000	2220	115/50	230/200	60/50	5.5/5.6	86

◀ NEW PRODUCT IN 2003

### MOUNTING PLAN



UNIT MUST BE 4" [100mm]  
MINIMUM ABOVE FLOOR  
FOR FILTER ACCESS



**WIEGMANN**

Dimensions, inches [metric], are for reference only and subject to change.

\*UL/CUL Recognized models are available as Listed at added cost.

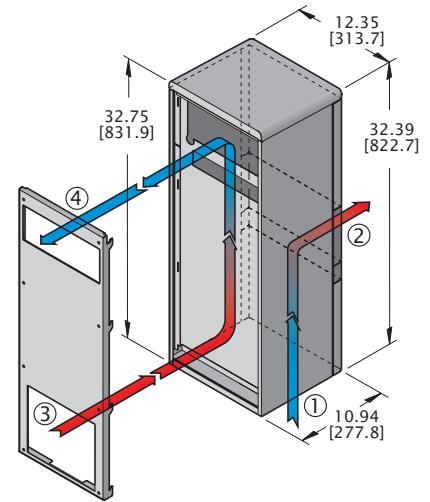
DATA SUBJECT TO CHANGE WITHOUT NOTICE

# ENVIRONMENTAL CONTROLS ADVANTAGE "RP33" SERIES AIR-COOLED SIDE MOUNT AIR CONDITIONERS



**NEMA**  
TYPE 3R & 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## FEATURES-SPECIFICATIONS

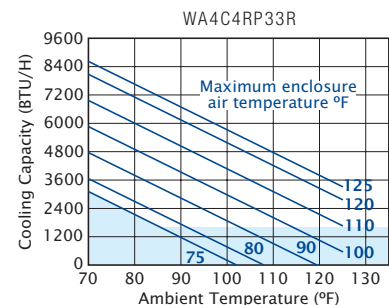
### Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Filters
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R & 12 Rating Maintained
- UL/CUL Recognized\*
- Textured Beige Powder Finish

### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Painted Metal Grille
- Power Loss Delayed Compressor Start
- Short Cycle Protector
- Special paint finishes

### PERFORMANCE CHART

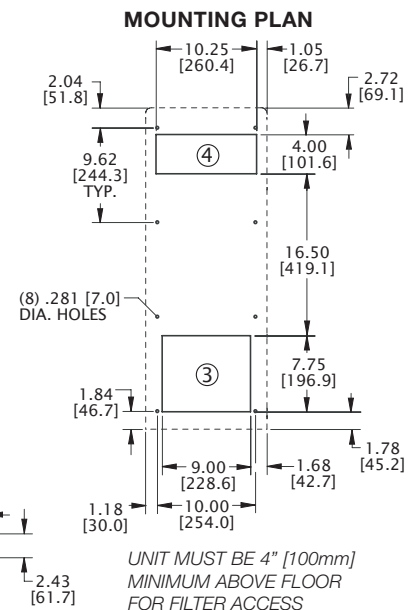
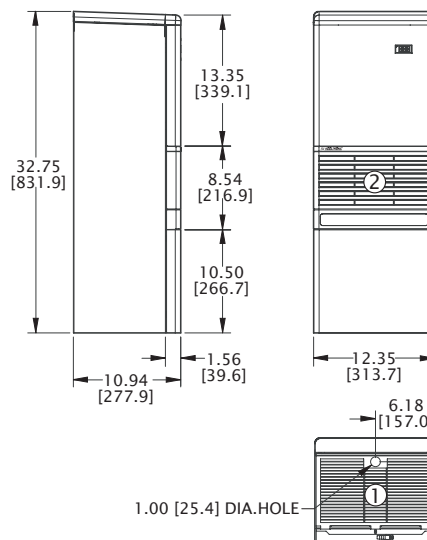
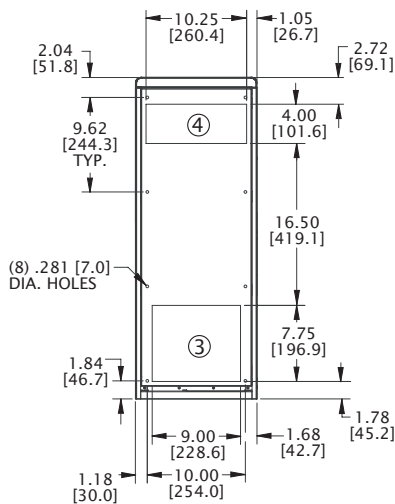


Operation within shaded area not recommended.

### WDTS SERIES ENVIRONMENTAL CONTROLS 3500 BTU SIDE MOUNT AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C4RP33R ◀	4000	2850	125/50	115/100	60/50	13.6/13.3	98
W2A4C4RP33R ◀	4000	2850	125/50	230/200	60/50	5.8	98

### ◀ NEW PRODUCT IN 2003



**WIEGMANN**

Dimensions, inches [metric], are for reference only and subject to change.

\*UL/CUL Recognized models are available as Listed at added cost.

DATA SUBJECT TO CHANGE WITHOUT NOTICE

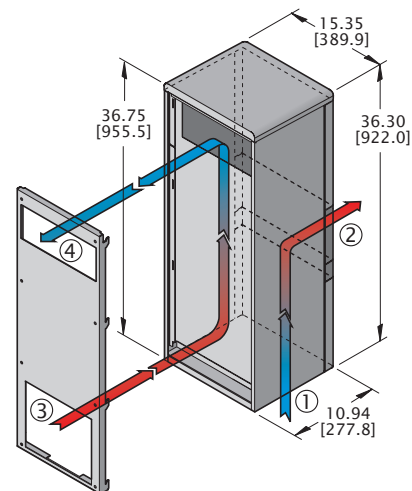
# ENVIRONMENTAL CONTROLS ADVANTAGE "RP36" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS

K9



**NEMA**  
TYPE 3R & 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## FEATURES-SPECIFICATIONS

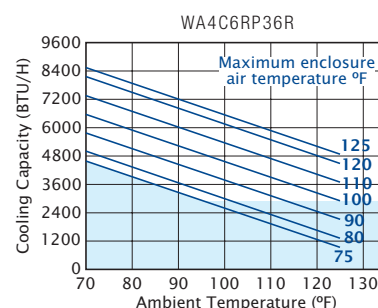
### Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Filters
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R & 12 Rating Maintained
- UL/CUL Recognized\*
- Textured Beige Powder Finish

### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Painted Metal Grille
- Power Loss Delayed Compressor Start
- Short Cycle Protector
- Special paint finishes

### PERFORMANCE CHART



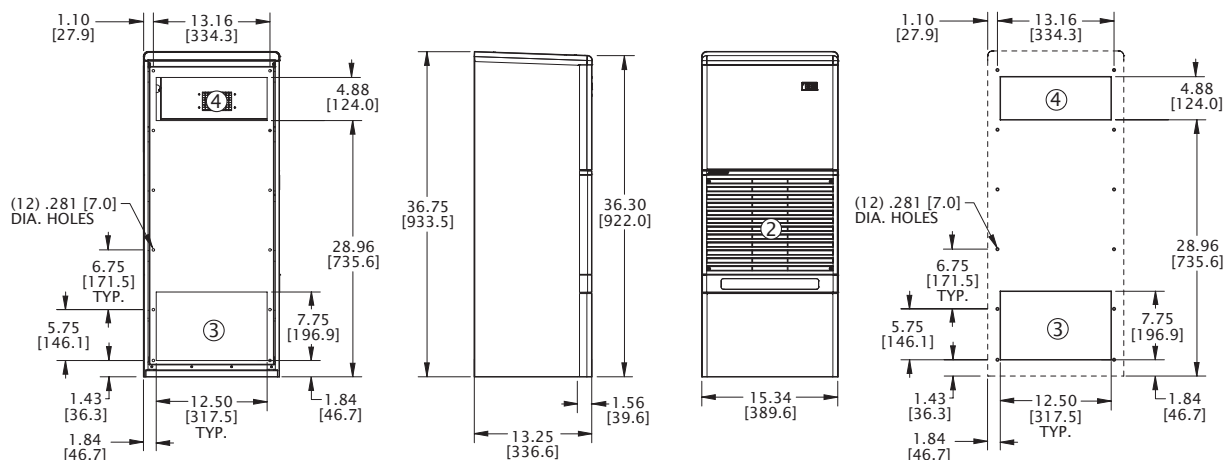
Operation within shaded area not recommended.

### ADVANTAGE SERIES RP36 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C6RP36R ◀	6000	4500	125/50	115/100	60/50	19.5/20.0	123
W2A4C6RP36R ◀	6000	4500	115/50	230/200	60/50	19.5/20.0	123

◀ NEW PRODUCT IN 2003

### MOUNTING PLAN



UNIT MUST BE 4" [100mm]  
MINIMUM ABOVE FLOOR  
FOR FILTER ACCESS



**WIEGMANN**

Dimensions, inches [metric], are for reference only and subject to change.

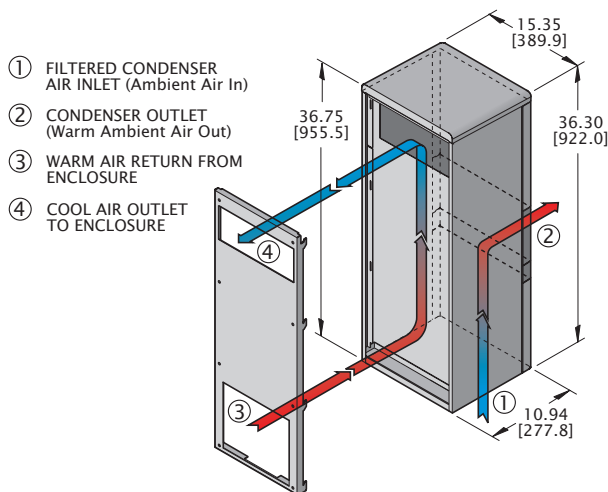
\*UL/CUL Recognized models are available as Listed at added cost.

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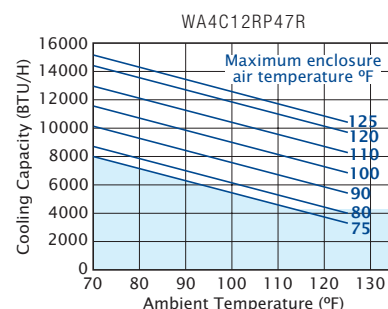
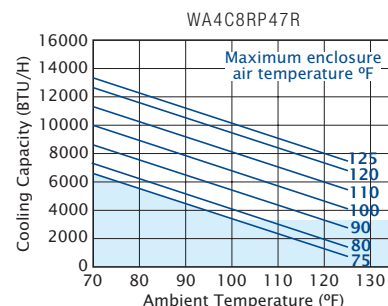
## ENVIRONMENTAL CONTROLS ADVANTAGE "RP47" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS



**NEMA**  
TYPE 3R & 12  
MAINTAINED



### PERFORMANCE CHART



Operation within shaded area not recommended.

### Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- Crankcase Compressor Heater
- Digital Temperature Display
- EMI/RFI Suppressor
- Head Pressure Control Switch
- Filters
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 3R & 12 Rating Maintained
- UL/CUL Recognized\*
- Textured Beige Powder Finish

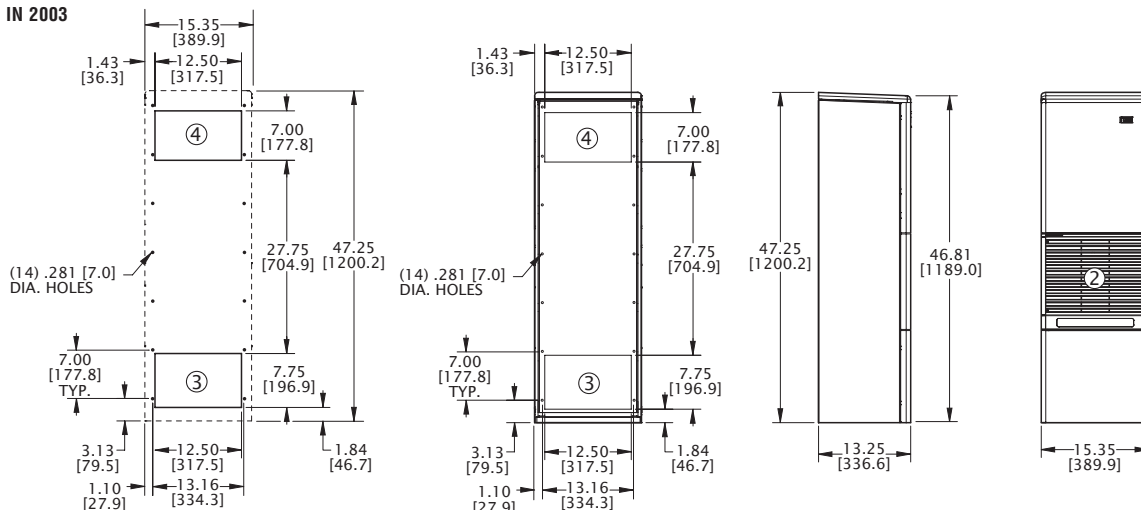
### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Painted Metal Grille
- Power Loss Delayed Compressor Start
- Short Cycle Protector
- Special paint finishes

### ADVANTAGE SERIES RP47 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA3C8RP47R ◀	8000	6600	125/50	115/100	60/50	12.2/12.7	150
W2A3C8RP47R ◀	8000	6600	125/50	230/200	60/50	5.7/5.9	150
WA3C12RP47R ◀	12000	8500	125/50	115/100	60/50	19.8/19.1	150
W2A3C12RP47R ◀	12000	8500	125/50	230/200	60/50	9.1/9.0	150

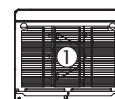
### ◀ NEW PRODUCT IN 2003



Dimensions, inches [metric], are for reference only and subject to change.

\*UL/CUL Recognized models are available as Listed at added cost.

UNIT MUST BE 4" [100mm] MINIMUM ABOVE FLOOR FOR FILTER ACCESS



**WIEGMANN®**



## FEATURES-SPECIFICATIONS

### Description

Innovations in technology have resulted in much denser components packaging and smaller available panel sizes on which to mount Air Conditioners. The TrimLine Series is the response to these new packaging demands with the Narrow 10", 12", 15" and 17" width panel-mount air conditioners. In addition to being narrower than traditional Air Conditioner units, the TrimLine Series include the Condensate Evaporator, Low Temperature Control Thermostat and EMI/RFI Suppressor as standard features and are available in all popular voltages and frequencies.

The TrimLine Series consists of compact models in 2,000-2,500 BTU/H capacities, mid-size models, 28", 33" and 36" WITH up to 4,000, 5,000 and 6,000 BTU/H respectively and the full-size model at 47" with 10,000 BTU/H. Each model series is designed with a minimum width to take up less cabinet space on the exterior panel or door.

Integral to the TrimLine Series is the M/TAB (Mounting Template and Assembly Bracket) system which

makes installing Air Conditioners simple and fast and interchangeable with corresponding TrimLine Heat Exchangers.

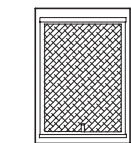
Outdoor or corrosive environments require weather protection and/or special internal and external protective features. For outdoor applications see the Advantage and Integrity Outdoor Series.

For extreme ambient temperatures and/or severely contaminated environments, the use of TrimLine or other Water-Cooled Air Conditioners are recommended.

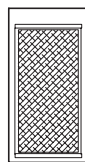
### Features

- Capacities: 2,000 to 10,000 BTU/H; six heights available
- CFC-free or Low ODP Refrigerant
- All models UL/CUL Listed or Recognized
- Tested and approved by UL for NEMA 12 Enclosures
- Compact design with slim 10", 12", 15" and 17" wide mounting foot-prints

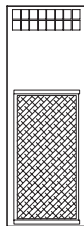
- Exclusive KOOLTRONIC M/TAB integral mounting system for quick, easy installation
- Built-in Condensate Evaporator eliminates need for draining normal condensate
- Thermostatic Low Temperature Control prevents over-cooling and provides energy-efficient operation
- EMI/RFI Suppressor minimizes transient line spikes during on/off cycling
- Field-reversible condenser outlet blower provides choice of horizontal or vertical air discharge
- Heavy-duty steel enclosures with gray baked powder finish
- Six foot (minimum) SJT 3-wire power cord
- Complete line of accessories



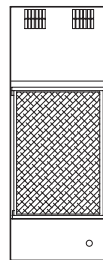
NP17  
2,000 BTU/H  
17"H x 12"W x 9"D



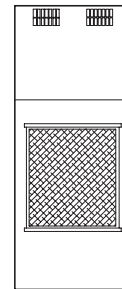
Narrow-Mini  
2,500 BTU/H  
20"H x 10"W x 10"D



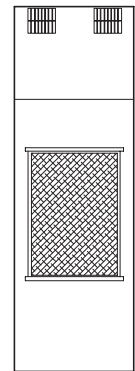
NP28  
4,000 BTU/H  
28"H x 11"W x 12"D



NP33  
4,000 BTU/H  
33"H x 12"W x 9"D



NP36  
4,000 & 6,000 BTU/H  
36"H x 15"W x 12"D



NP47  
7,000, 8,000,  
10,000 12,000  
BTU/H  
47"H x 15"W x 12"D

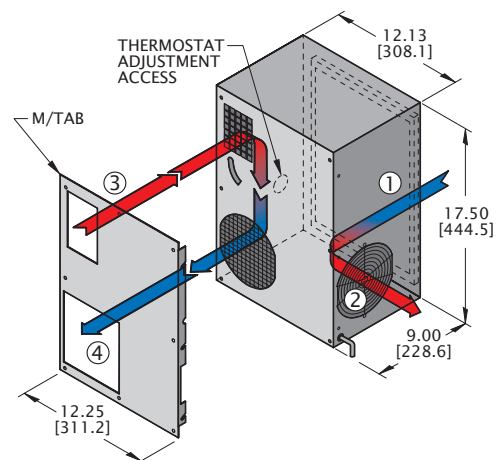


**WIEGMANN®**



**NEMA**  
TYPE 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE

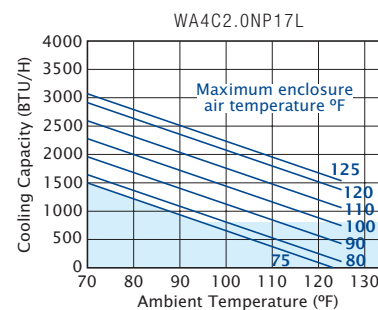


### Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained (UL50)\*
- UL/CUL Listed
- Gray Powder Finish

- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Ambient Kit
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit

### PERFORMANCE CHART



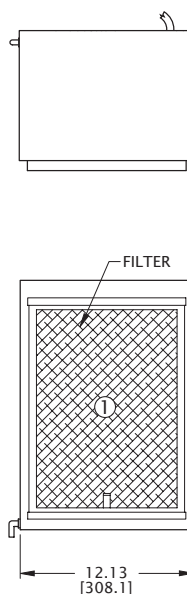
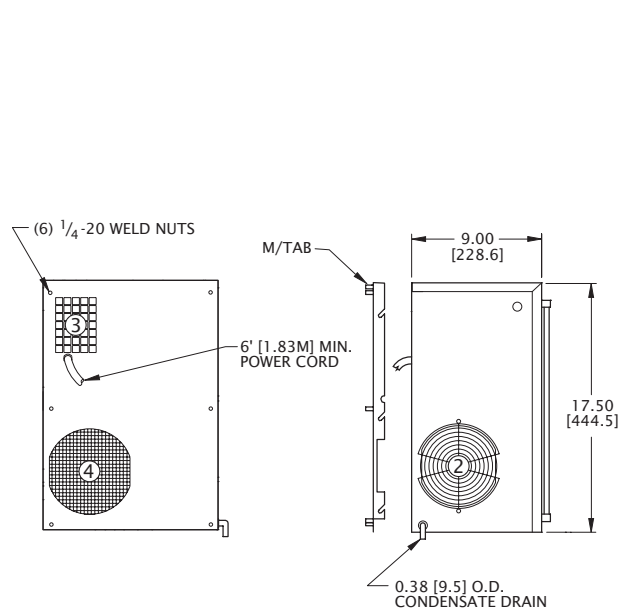
Operation within shaded area not recommended.

### Accessories and Options

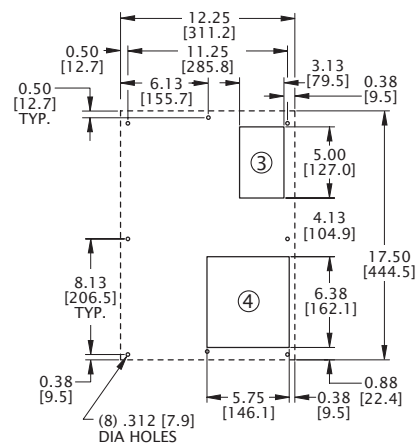
- Cooling Effect Detector

TRIMLINE SERIES NP17 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS							
MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C20NP17L ◀	2000	1420	125/50	115/100	60/50	6.7/6.5	59
W2A4C20NP17L ◀	2000	1420	125/50	230/200	60/50	4.3	59

### ◀ NEW PRODUCT IN 2003



### MOUNTING PLAN



Weld nuts supplied for alternate mounting method to maintain NEMA 12. Mounting Plans furnished on request.

Dimensions, inches [metric], are for reference only and subject to change.

\*Weld-nut mounting method, without M/TAB



**WIEGMANN**

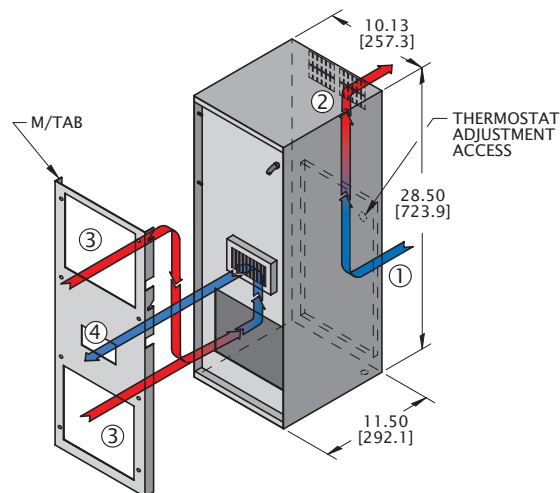
# ENVIRONMENTAL CONTROLS TRIMLINE "NP28" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS

# K13

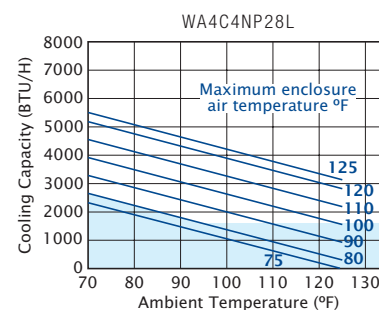


**NEMA**  
TYPE 12  
MAINTAINED

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## PERFORMANCE CHART



Operation within shaded area not recommended.

## Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained (UL50)
- UL/CUL Listed
- Gray Powder Finish

- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Ambient Kit
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit

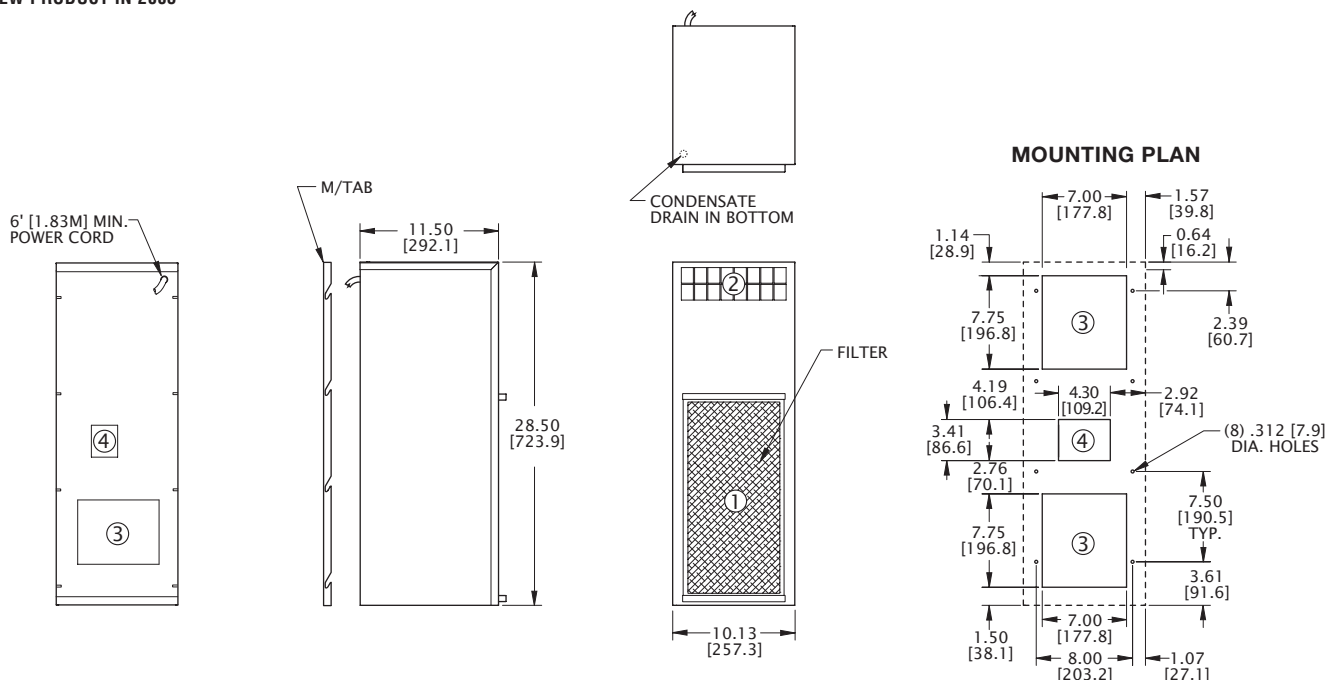
## Accessories and Options

- Cooling Effect Detector

## TRIMLINE SERIES NP28 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C4NP28L ◀	4000	2520	125/50	115/100	60/50	13.0/12.0	85
W2A4C4NP28L ◀	4000	2520	120/50	230/200	60/50	6.0	85

◀ NEW PRODUCT IN 2003



# WIEGMANN®

Dimensions, inches [metric], are for reference only and subject to change.

DATA SUBJECT TO CHANGE WITHOUT NOTICE

# ENVIRONMENTAL CONTROLS TRIMLINE "NP33" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS



**NEMA**  
TYPE 12  
MAINTAINED

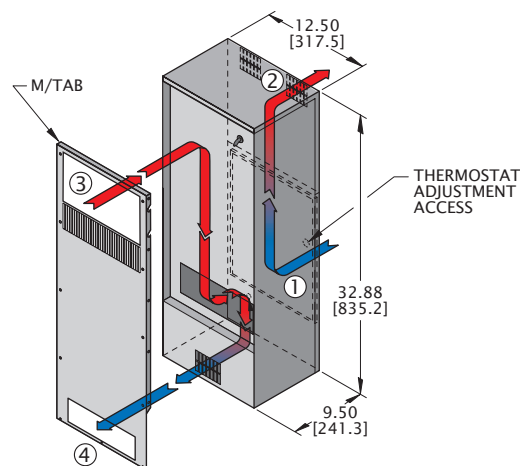
## Standard Features

- Built-in Condensate Evaporator
- CFC-Free or Low ODP Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained (UL50)
- Reversible Condenser Outlet Blower
- UL/CUL Listed
- Gray Powder Finish

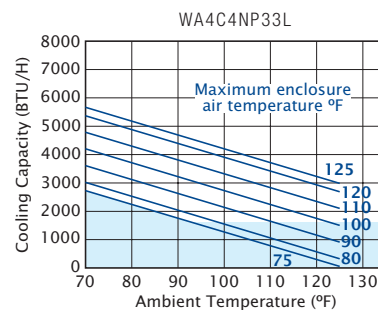
## Accessories and Options

- Cooling Effect Detector
- Enclosure Heater

- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Airflow Detector
- Low Ambient Kit
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit



## PERFORMANCE CHART



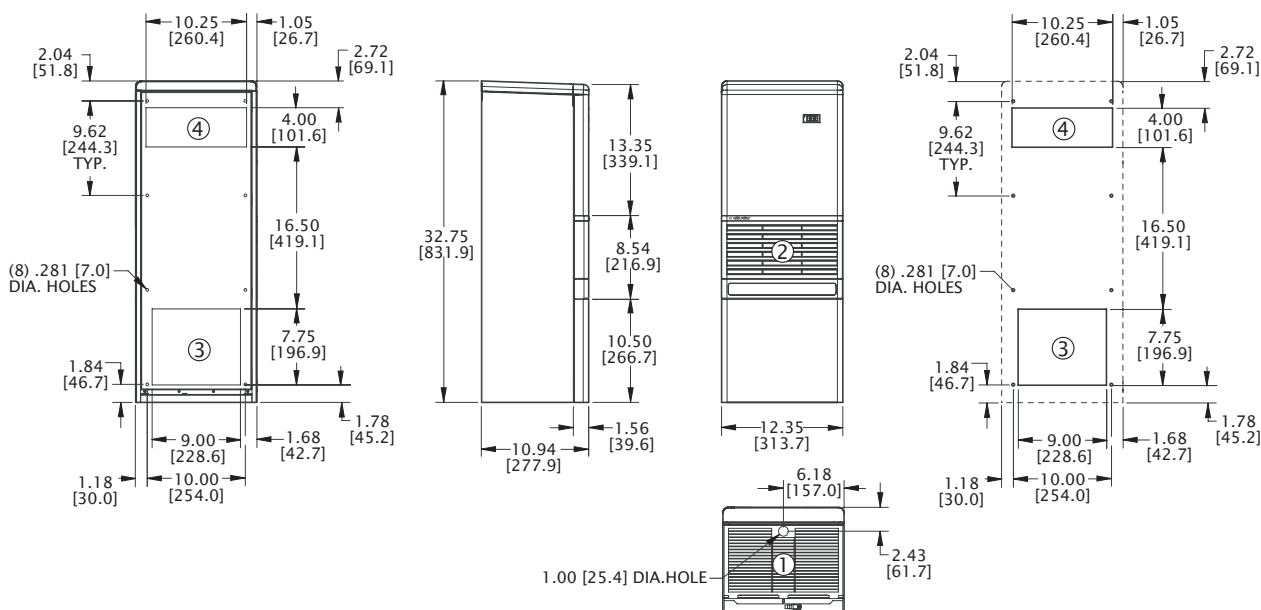
Operation within shaded area not recommended.

## TRIMLINE SERIES NP33 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C4NP33L ◀	4000	2680	125/50	115/100	60/50	12.8	90
W2A4C4NP33L ◀	4000	2680	125/50	230/200	60/50	7.0	90

## ◀ NEW PRODUCT IN 2003

## MOUNTING PLAN



**WIEGMANN**

Dimensions, inches [metric], are for reference only and subject to change.

DATA SUBJECT TO CHANGE WITHOUT NOTICE

# ENVIRONMENTAL CONTROLS TRIMLINE "NP36" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS

# K15



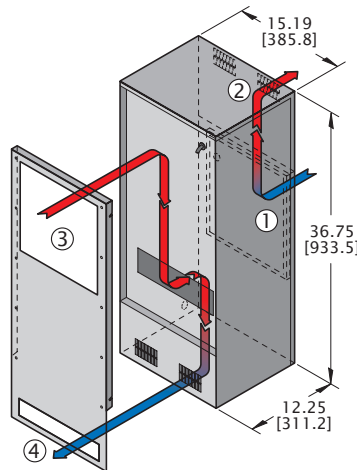
## Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained(UL50)
- Reversible Condenser Outlet Blower
- UL/CUL Listed/Recognized\*
- Gray Powder Finish

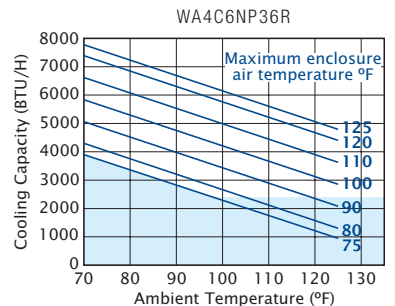
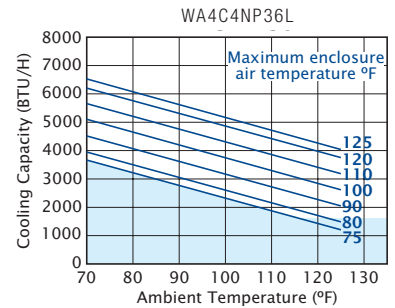
## Accessories and Options

- Cooling Effect Detector

- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Ambient Kit
- Low Airflow Detector
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit



## PERFORMANCE CHARTS

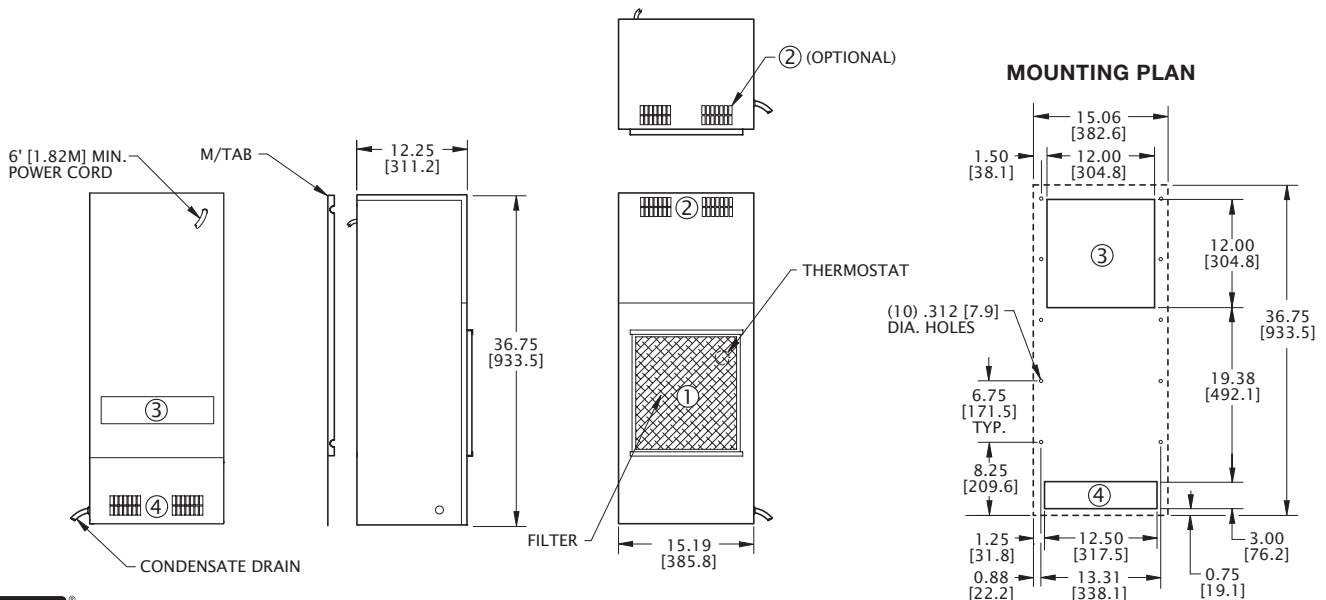


Operation within shaded areas not recommended.

## TRIMLINE SERIES NP36 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C4NP36L ◀	4000	3700	125/50	115/100	60/50	13.5	125
W2A4C4NP36L ◀	4000	3700	125/50	230/200	60/50	7.5	125
WA4C6NP36R ◀	6000	4100	125/50	115/100	60/50	16.5/17.0	125
W2A4C6NP36L ◀	6000	4100	125/50	230/200	60/50	8.2	125

◀ NEW PRODUCT IN 2003



Dimensions, inches (metric), are for reference only and subject to change.

\*UL/CUL Recognized models are available as Listed at added cost.

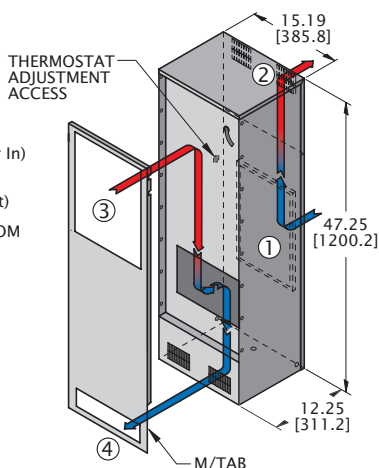
DATA SUBJECT TO CHANGE WITHOUT NOTICE

# ENVIRONMENTAL CONTROLS TRIMLINE "NP47" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS



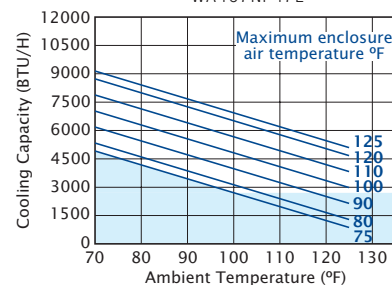
**NEMA  
TYPE 12  
MAINTAINED**

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE

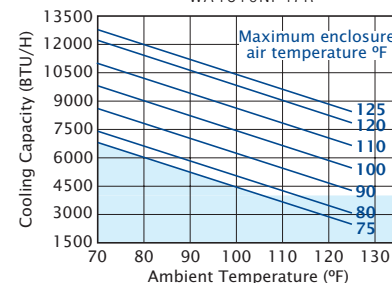


## PERFORMANCE CHARTS

WA4C7NP47L



WA4C10NP47R



Operation within shaded areas not recommended.

## Standard Features

- Built-in Condensate Evaporator
- CFC-Free or Low ODP Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained (UL50)
- Reversible Condenser Outlet Blower
- UL/CUL Listed/Recognized\*
- Gray Powder Finish

- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Airflow Detector
- Low Ambient Kit
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit

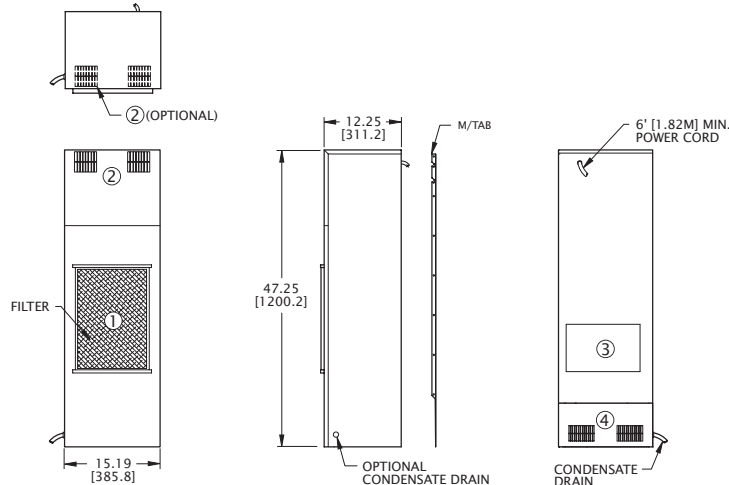
## Accessories and Options

- Cooling Effect Detector
- Deep Drain Pan Kit

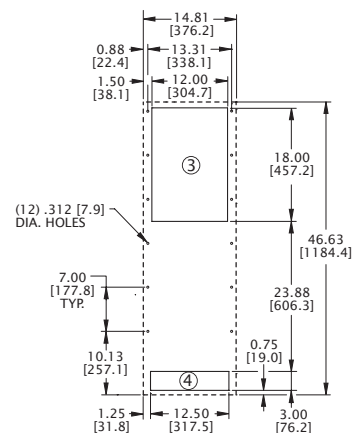
## TRIMLINE SERIES NP47 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C6NP47L ◀	6000	3600	125/50	115/100	60/50	16.5	150
W2A4C6NP47L ◀	6000	3600	125/50	230/200	60/50	8.6	150
WA4C7NP47L ◀	7000	4750	125/50	115/100	60/50	16.5	150
W2A4C7NP47L ◀	7000	4750	125/50	230/200	60/50	8.6	150
WA4C8NP47L ◀	8000	4750	125/50	115/100	60/50	16.5	150
W2A4C8NP47L ◀	8000	4750	125/50	230/200	60/50	8.6	150
WA3C10NP47R ◀	10000	7250	120/50	115/100	60/50	19.2/18.6	160
W2A4C10NP47L ◀	10000	7250	125/50	230/200	60/50	11.8	160
WA3C12NP47R ◀	12000	7250	120/50	115/100	60/50	19.2/18.6	160
W2A4C12NP47L ◀	12000	7250	125/50	230/200	60/50	11.8	160

◀ NEW PRODUCT IN 2003



## MOUNTING PLAN



**WIEGMANN**

Dimensions, inches [metric], are for reference only and subject to change.

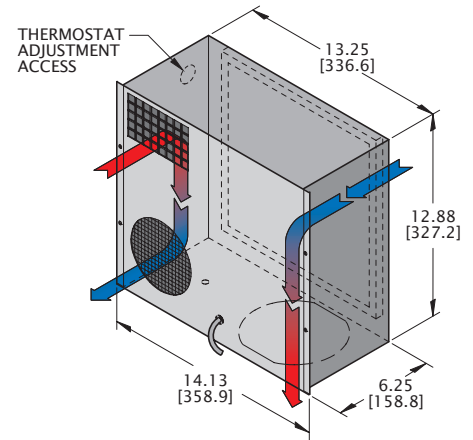
\*UL/CUL Recognized models are available as Listed at added cost.

DATA SUBJECT TO CHANGE WITHOUT NOTICE



**NEMA  
TYPE 12  
MAINTAINED**

- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE



## FEATURES-SPECIFICATIONS

### Standard Features

- Ball-bearing Motors
- CFC-Free Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- NEMA 12 Rating Maintained (UL50)
- UL/CUL Listed
- Gray Powder Finish

### Accessories and Options

- Adapter Plate for rack mounting
- Compressor Heater
- Condensate Evaporator
- Cooling Effect Detector
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes

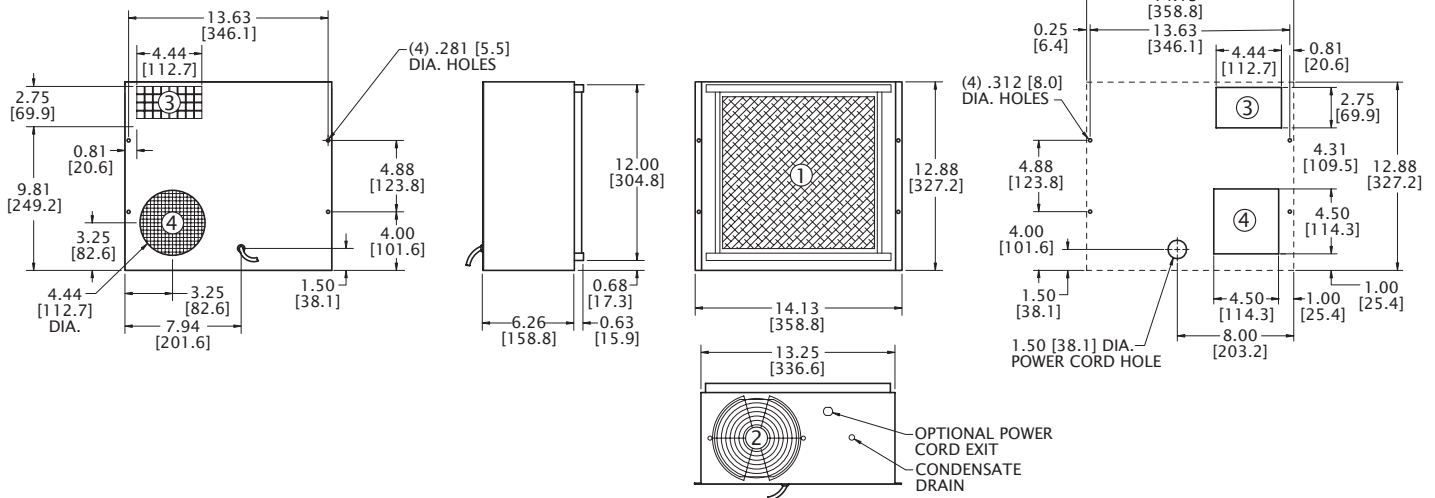
- Low Ambient Kit and Compressor Heater
- Mounting Hinge
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords, or connectors
- Stainless or Aluminum Cabinet
- Weather Protection Kit

### MICRO-MINI SERIES AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C10MML ◀	1000	600	125/50	115/100	60/50	4.5	43
W2A4C10MML ◀	1000	600	125/50	230/200	60/50	2.3	43
WA4C12MML ◀	1200	720	125/50	115/100	60/50	4.5	43
W2A4C12MML ◀	1200	720	125/50	230/200	60/50	2.3	43

◀ NEW PRODUCT IN 2003

### MOUNTING PLAN



**WIEGMANN®**

DATA SUBJECT TO CHANGE WITHOUT NOTICE



**NEMA**  
TYPE 4/4X  
MAINTAINED

## FEATURES-SPECIFICATIONS

### Description

Designed specifically for NEMA 4 and 4X Enclosure applications that require washdown or are subject to outdoor storm conditions, Integrity NEMA 4/4X Air Conditioners protect the ratings of NEMA 4 or 4X Enclosures.

These exclusive patented UL/CUL Recognized Panel-Mounted Air Conditioners provide superior closed-loop cooling and also protect against the hazards specified for both Indoor and Outdoor NEMA 4 and 4X Enclosures. Tested and rated by universally recognized Underwriters Laboratories, these uniquely-designed 304-2B Stainless Steel Air Conditioners prevent unwanted environmental penetration of NEMA 4 and 4X Enclosures as they provide a clean, cool internal environment.

With the design advantages of the Integrity NEMA 4/4X Series and the inclusion of the unique Mounting Template and Assembly Bracket (M/TAB), modified for this design, this series offers the finest in cooling innovation and technology.

### Features

- Capacities range from 2,000 to 10,000 BTU/H in 32", 38", 47" and 59" heights
- UL/CUL Listed or Recognized®
- Tested and approved by UL for NEMA 4 and 4X Enclosures
- CFC-free Refrigerant
- Gasketed flanges on all four mounting edges for positive leakproof seal
- Exclusive modified integral Mounting Template and Assembly Bracket (M/TAB) for quick, easy installation.
- Thermostatic Low Temperature Control prevents over-cooling and provides energy-efficient operation
- Internal Corrosion Protection
- EMI/RFI Suppressor minimizes transient line spikes during on/off cycling
- Separate blower-driven evaporator and condenser air systems penetrate high static pressure applications
- Rugged heavy duty stainless steel exterior



**WIEGMANN®**

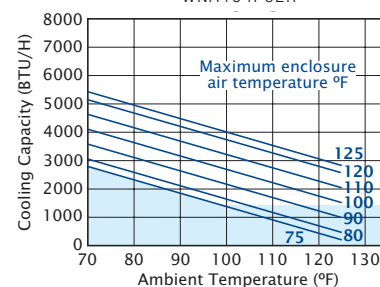
# K19



- 
- Technical drawing of the thermostat unit showing dimensions and components:
- Dimensions:
    - Top width: 13.12 [333.2]
    - Right height: 31.50 [800.1]
    - Left height: 32.25 [819.2]
    - Bottom width: 14.50 [368.3]
    - Bottom depth: 13.00 [330.2]
  - Components:
    - M/TAB
    - ①
    - ②
    - ③
    - ④
  - Label: THERMOSTAT ADJUSTMENT ACCESS

- Cooling Effect Detector
- Filter Recoating Adhesive
- Filters for replacement
- Lifting Eyes
- Low Ambient Kit & Compressor Heater
- Short Cycle Protector
- Special materials or finishes

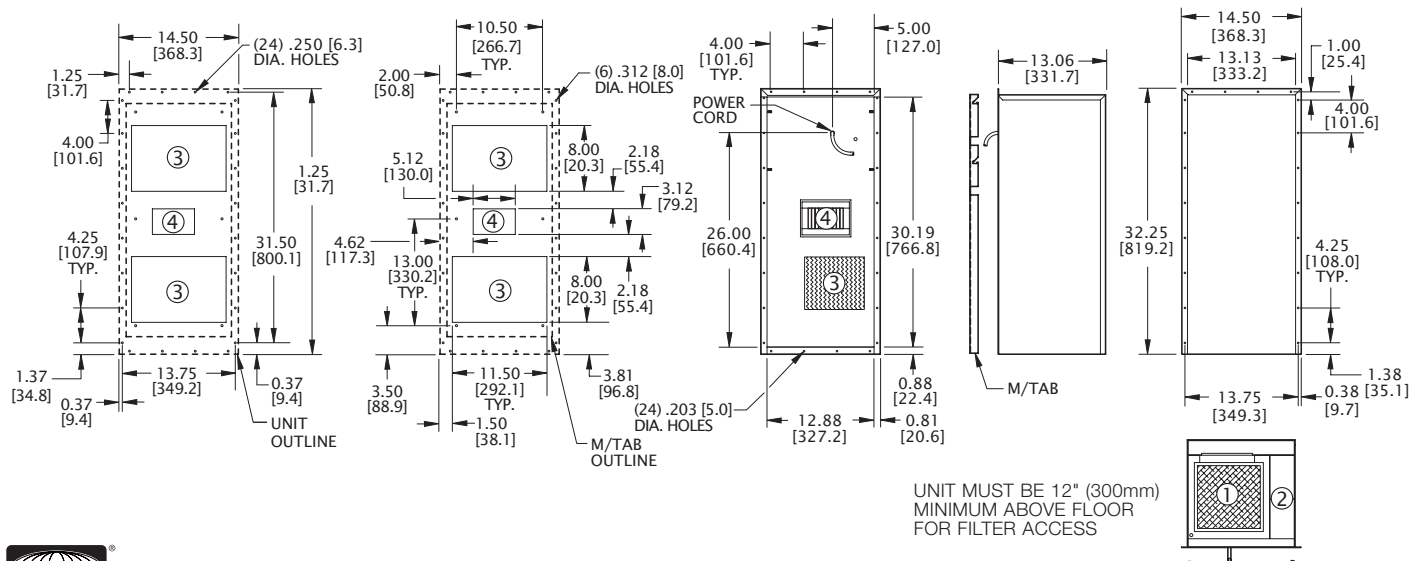
## WNA4C4P32R



Operation within shaded areas not recommended.

◀ NEW PRODUCT IN 2003

## M/TAB & CUTOUTS



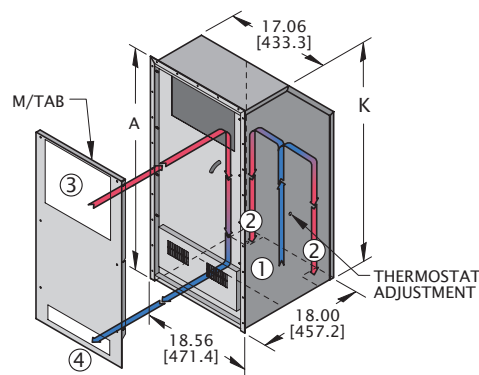
♦ *UL/CUL Recognized models are available as Listed at added cost.*

DATA SUBJECT TO CHANGE WITHOUT NOTICE

# ENVIRONMENTAL CONTROLS INTEGRITY "38 & 47" SERIES AIR-COOLED SIDE-MOUNTED AIR CONDITIONERS



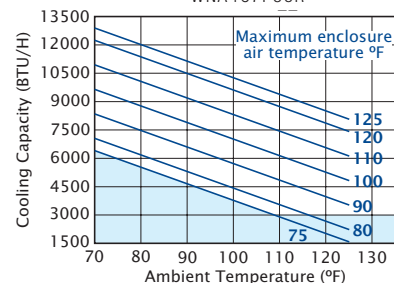
**NEMA**  
TYPE 4/4X  
MAINTAINED



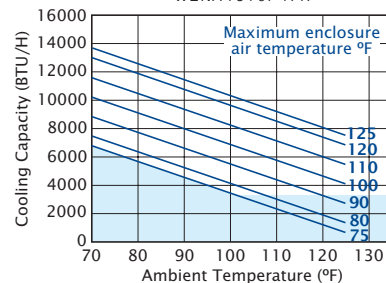
- ① FILTERED CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE

## PERFORMANCE CHARTS

WNA4C7P38R



W2NA4C10P47R



Operation within shaded areas not recommended.

## INTEGRITY SERIES 38 & 47 AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WNA4C6P38R ◀	6000	5150	131/50	115/100	60/50	20	180
W2NA4C6P38R ◀	6000	5150	131/50	230/200	60/50	9.3/9.9	180
WNA4C7P38R ◀	7000	6000	131/50	115/100	60/50	20	180
W2NA4C7P38R ◀	7000	6000	131/50	230/200	60/50	9.3/9.9	180
W2NA4C8P47R ◀	8000	6500	131/50	230/200	60/50	10.9/12.5	205
W2NA4C10P47R ◀	10000	7750	131/50	230/200	60/50	10.9/12.5	205

## DIMENSIONS INCHES (METRIC)

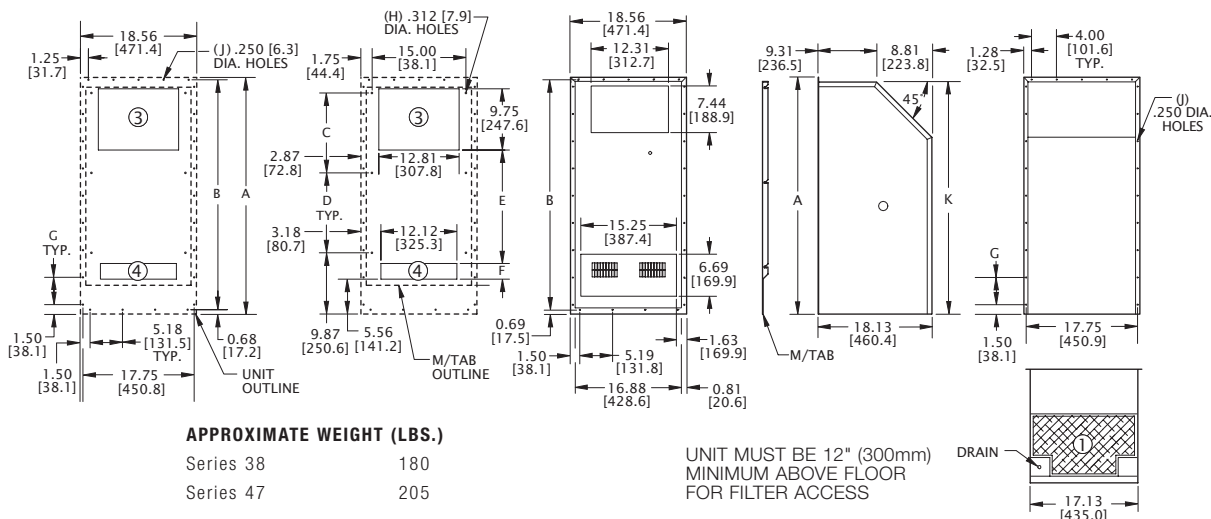
MODEL	A	B	C	D	E
SERIES 38	37.75 (958.8)	36.69 (931.9)	12.75 (323.8)	12.75 (323.8)	18.12 (463.5)
SERIES 47	47.00 (1193.8)	45.93 (1166.6)	12.25 (311.1)	11.25 (285.7)	27.37 (695.1)
MODEL	F	G	H	J	K
SERIES 38	2.50 (63.5)	4.34 (110.2)	6.00 (152.4)	27.00 (685.8)	37.00 (939.8)
SERIES 47	2.50 (63.5)	4.00 (101.6)	8.00 (203.2)	33.00 (838.2)	46.25 (1174.7)

◀ NEW PRODUCT IN 2003

## MOUNTING PLAN

### UNIT

### M/TAB & CUTOUTS



## APPROXIMATE WEIGHT (LBS.)

Series 38	180
Series 47	205

UNIT MUST BE 12" (300mm)  
MINIMUM ABOVE FLOOR  
FOR FILTER ACCESS



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Dimensions, inches [metric], are for reference only and subject to change.

♦UL/CUL Recognized models are available as Listed at added cost.

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WDTS2000115N4X

#### Industry Standards

UR, cUR, and CE recognized  
 NEMA 3, 4, 4X

### FEATURES-SPECIFICATIONS

#### Applications

- Designed for side mounting on any enclosure surface where hot spot cooling or low capacity cooling is required
- Meets NEMA 3, 4, 4X protection against water and corrosive material
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing the contaminated ambient air
- Clean stainless steel design

#### Features

- R134a refrigerant
- Thermostat control (must remove cover)

- Expansion valve permits increased efficiency through improved evaporator heat transfer and less frequent compressor operation
- Built in condensate evaporator
- Continuous air circulation from high capacity fans
- EMI/RFI suppression meets CE requirements
- 8' line cord with plug on 115V versions. 8' line cord with no plug on 230V versions
- Aluminum filter provided with easy access for cleaning
- Gasket, mounting kit, and template for enclosure cutout and drilling are included

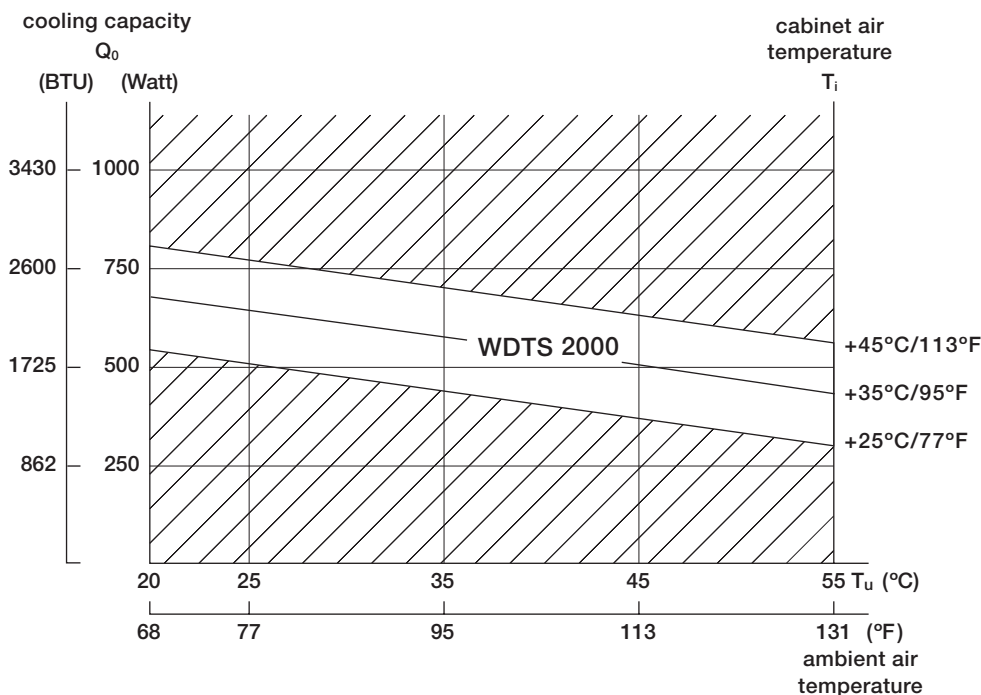
- Exterior case easily removable for field service
- Q Mount allows unit to hang in place for easy installation

#### Accessories

- Replacement Filters

#### Operation Notes

- In extremely humid environments, condensation may accumulate and is drained-off through the overflow outlet. A hose may be attached to the 12mm outlet to drain the water in a controlled manner



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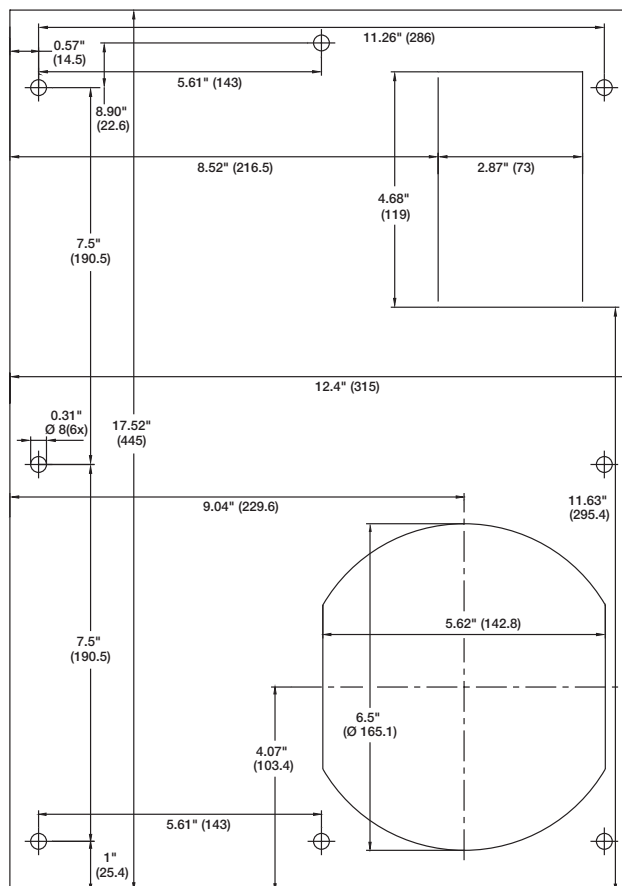
**FEATURES-SPECIFICATIONS**
**WDTS 2000 SERIES NEMA 4X SIDE MOUNT AIR CONDITIONER**

CATALOG NUMBER	RATED CAPACITY (BTU/H)	RATED VOLTAGE	WATTS	RANGE OF OPERATION	POWER CONSUMPTION	RUNNING AMPS	STARTING CURRENT	8' LINE CORD
WDTS2000115N4X	2000	115V 60Hz – 110V 50Hz	580	103-127V	270W	2.9A	13.8A	w/plug
WDTS2000230N4X	2000	230V 50/60 Hz	580	198-253V	230W	1.3A	7.4A	w/out plug

**EMI/RFI Suppression:** According to CE  
**Type of Refrigerant:** R134a  
**Refrigerant Charge:** 300g  
**Adjustable Thermostat:** Factory set at +95° F (+35° C)  
**Max. Ambient Air Temp.:** +125° F (+52° C)  
**Min. Ambient Air Temp.:** +46° F (+8° C)  
**Air Capacity Circulation:** 230 CFM Internal, 230 CFM External (unrestricted)

**Condensate Discharge:** Condensate evaporator  
**Filter Mat:** 150 g/m<sup>2</sup>  
**Db Noise Level:** ≤ 62 dB (A)  
**Unit Weight:** 72 lbs. (32.7kg)  
**Exterior Housing:** 304 stainless steel

*\*Special order product.*  
*Consult factory for lead time.*


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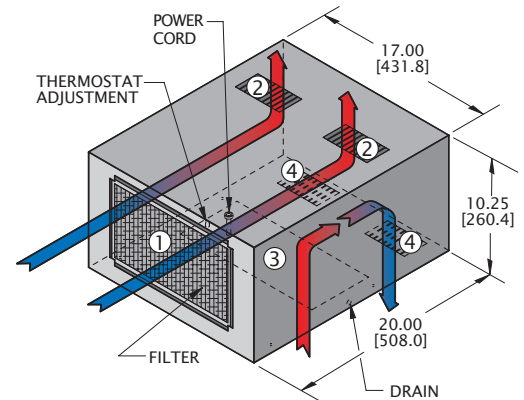
### Standard Features

- Built-in Condensate Evaporator
- CFC-Free Refrigerant
- EMI/RFI Suppressor
- Low Temperature Control Thermostat
- UL/CUL Listed
- Gray Powder Finish

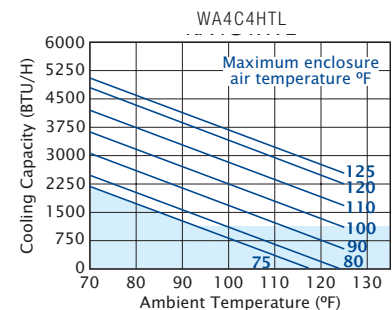
### Accessories and Options

- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive

- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Airflow Detector
- Low Ambient Kit
- Short Cycle Protector
- Special materials or finishes
- Special motors, linecords or protectors
- Stainless or Aluminum Cabinet



### PERFORMANCE CHART



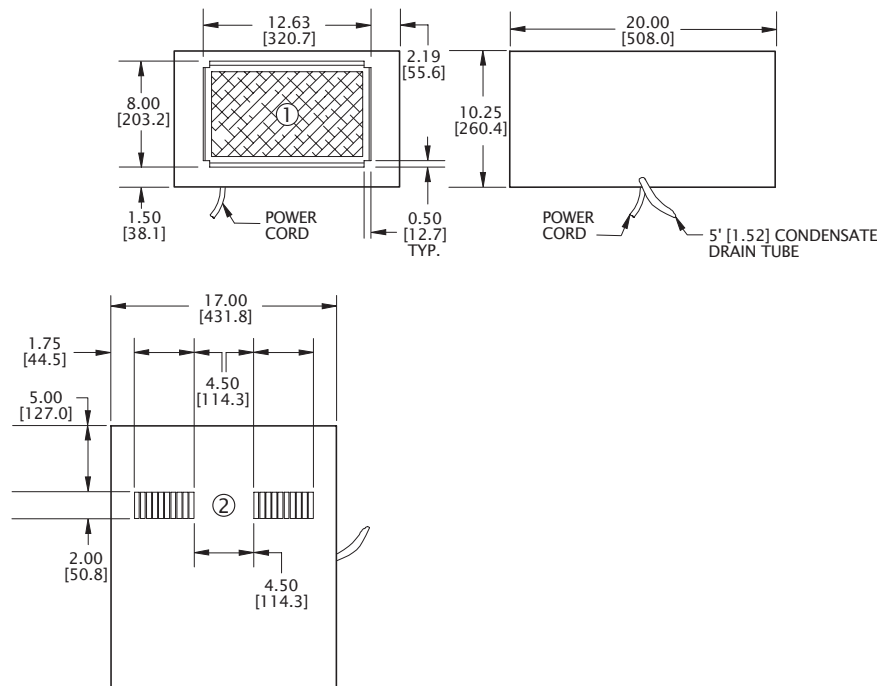
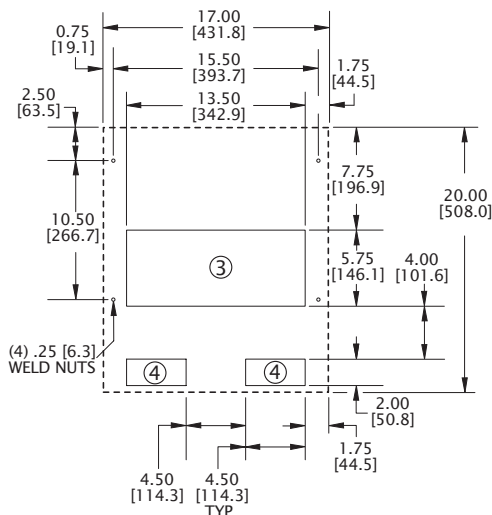
Operation within shaded areas not recommended.

### COMPACT SERIES AIR-COOLED TOP-MOUNTED AIR CONDITIONERS

MODEL	RATED CAPACITY (BTU/H)	95/95 RATING (BTU/H)	AMBIENT TEMP. °F MAX./MIN.	VOLTS	HZ	RUNNING AMPS	APPROX. WEIGHT (LBS.)
WA4C2HTL ◀	2000	1100	125/50	115/100	60/50	13.1	85
W2A4C2HTL ◀	2000	1100	115/50	230/200	60/50	5.9	85
WA4C4HTL ◀	4000	2200	125/50	115/100	60/50	13.1	85
W2A4C4HTL ◀	4000	2200	115/50	230/200	60/50	5.9	85

### NEW PRODUCT IN 2003

### MOUNTING PLAN





NEMA 4/4X



NEMA 12

**Industry Standards**

UL Listed

NEMA 12, 4 or 4X

 UL File E32576
**FEATURES-SPECIFICATIONS****Applications**

Compressed air cooling is used where conventional enclosure cooling (air conditioners or heat exchangers) is not possible. Example: Small to medium size enclosures; nonmetallic enclosures; areas where the size of cooling devices is restricted.

**Features**

- Suitable for harsh environments
- Small physical size
- Creates cool air without refrigerants (no CFC's, HFC's)
- Exceptionally reliable—no moving parts
- Virtually no maintenance

**Requirements**

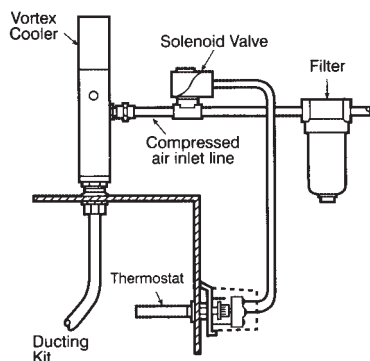
- Clean, dry, oil-free compressed air (100 PSIG/70°F or below) required

to achieve published BTU/hr. ratings. Lower pressures and higher temperatures will reduce BTU/hr. ratings

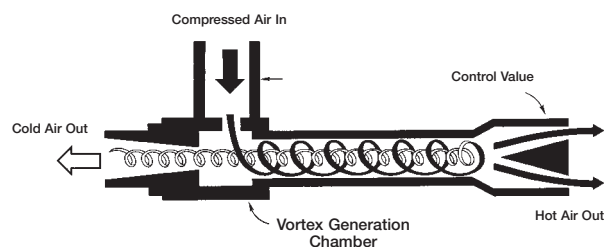
- A 5 micron water and particulate removal filter must be installed prior to operating any Vortex Cooler (included in kits)
- An oil removable filter can be installed between the 5 micron filter and the Vortex cooler if oil is present in the compressed air line
- Mounting holes:
  - NEMA 12 kits — (1) 1-3/32" (28mm) or 3/4" knockout hole for cooling tube and (1) 11/16" hole for thermostat
  - NEMA 4 & NEMA 4X kits — (1) 1-5/16" (49mm) or 1-1/2" knockout hole for cooling tube and (2) #8 holes for thermostat

**Kit Includes the Following**

- Vortex Cooling Tube
- Solenoid Valve 120V 60Hz – 110V 50 Hz (230V available)
- 5 micron water and particulate removal filter
- Ducting Kit
- Thermostat

**How Enclosure Coolers Create Cold Air**

Vortex Coolers are powered by a vortex tube – a unique device that creates a vortex from compressed air and separates it into hot and cold airstreams. Here's how it works. The vortex tube's cylindrical generator causes the input compressed air to rotate, reaching speeds up to 1,000,000 rpm as it is forced down the inner walls of the hot, or longer end of the vortex tube. At the end of the hot tube, as small portion of this air exits through a needle valve as hot air exhaust. The remaining air is forced back through the center of the incoming air stream at a slower speed. The heat in the slower moving air is transferred to the faster moving incoming air. This super-cooled air flows through the center of the generator and exits through the cold air exhaust port.

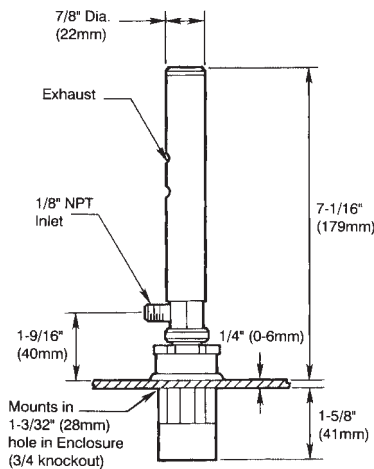
**WIEGMANN®**

**VORTEX COOLERS**

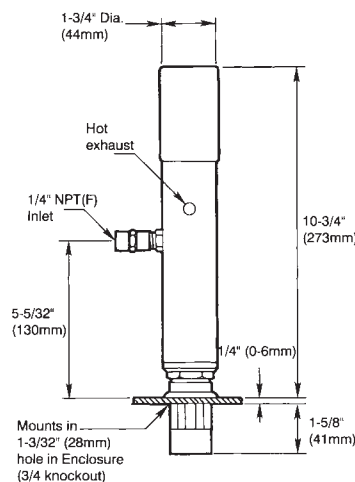
CATALOG NUMBER	CAPACITY		AIR CONSUMPTION			TUBE SURFACE TEMP AT BTU	THERMOSTAT MOUNTING	NEMA TYPE	UL TYPE	COOLING TUBE MATERIAL
	BTUH	KCAL/H	SCFM	SLPM	THERMOSTAT (FACTORY SET)					
W750400	400	101	8	227	90°F ± 2°	150°F	External	12	12	Aluminum
W740900	900	225	15	425	90°F ± 2°	150°F	External	12	12	Aluminum
W7901500	1500	378	25	708	90°F ± 2°	150°F	External	12	12	Aluminum
W7971700	1700	425	25	708	90°F ± 2°	150°F	Internal	4	4	Aluminum
W797SS1700	1700	425	25	708	90°F ± 2°	150°F	Internal	4X	4X	Stainless Steel

**ACCESSORIES**

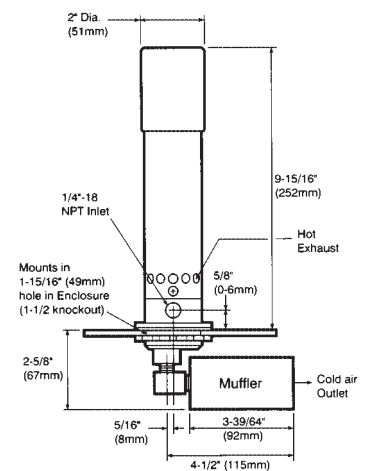
CATALOG NUMBER	FILTER TYPE AND SIZE
W380ILFILTER	Auto-drain oil removal filter, 3/8" NPT (F), rated to 25 SCFM/708 SLPM
W120ILFILTER	Auto-drain oil removal filter, 1/2" NPT (F), rated to 50 SCFM/1415 SLPM



**Model W750400**



**Model W740900 & W7901500**



**Model W7971700 & W797SS1700**



## FEATURES-SPECIFICATIONS

### Applications

Used for enclosure cooling in low static pressure applications.

### Features

- High airflow with low noise operation makes these versatile cooling fans very popular in a wide range of applications
- Reliable cooling is achieved particularly in areas with minimum space requirements
- The cooling system incorporates the filtered fan boxes as its air inlet, while the exhaust grille is the air outlet
- The washable aluminum filter grille and air filter is easily accessible and can be removed for cleaning
- Available in 115 VAC or 230 VAC 50/60 Hz versions
- Heavy gauge steel construction
- Attractive, aesthetically appealing grille design
- All models can pressurize or exhaust
- Aluminum filter is coated with adhesive baffle surfaces for dust and dirt collection. Can be recoated after cleaning for optimum performance

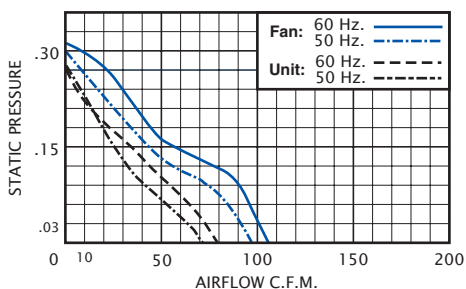
Note: One grille and filter are included with each fan package. Normally, an additional exhaust grille and filter required for each installation and must be ordered separately.

### Accessories

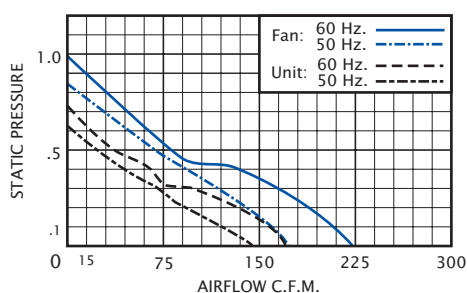
- Exhaust Grille and Filters (see page L23)
- Filter Coat

## PERFORMANCE GRAPHS

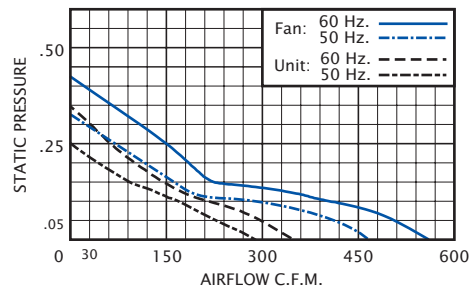
**WPFB100**



**WPFB200**



**WPFB500**



Static pressure is in inches of water.



**WIEGMANN®**



“WPFB” Box Fan



“WPFBE” Exhaust Grille with Filter



Filter Coat

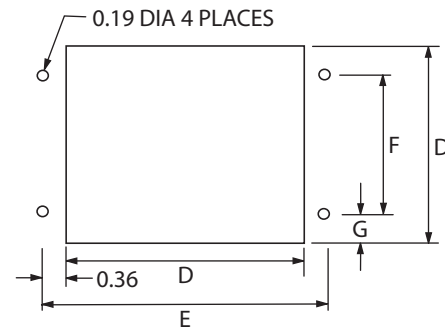
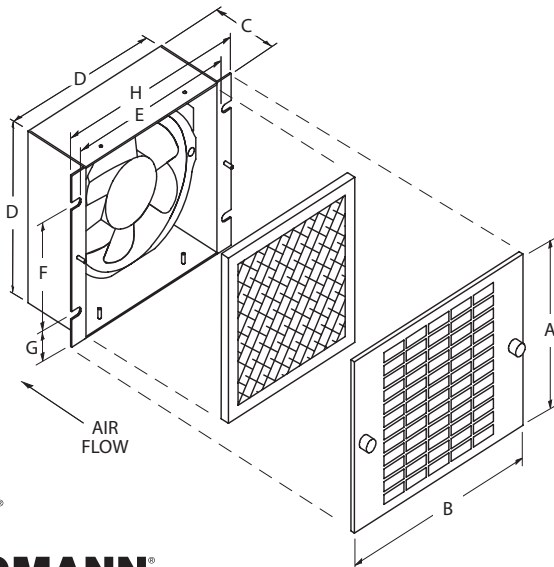
**Industry Standards**  
 UR, cUR, and CE recognized

**FEATURES-SPECIFICATIONS**

WPFB SERIES BOX FANS													
CATALOG NUMBER	FREE-FLOW AIR DELIVERY (CFM)	RATED VOLTAGE	NOMINAL (RPM)	RUNNING AMPS	WATTS	A	B	C	D	E	F	G	H
WPFB100115	105	115	3000	0.18	15	6.13 (156)	7.38 (188)	2.38 (61)	5.62 (143)	6.38 (162)	4.13 (105)	0.75 (19)	7.00 (178)
WPFB100230	105	230	3000	0.18	15	6.13 (156)	7.38 (188)	2.38 (61)	5.62 (143)	6.38 (162)	4.13 (105)	0.75 (19)	7.00 (178)
WPFB200115	210	115	3300	0.29	33	7.63 (194)	8.88 (226)	3.00 (76)	7.12 (181)	7.88 (200)	4.50 (114)	1.31 (33)	8.50 (216)
WPFB200230	210	230	3300	0.29	33	7.63 (194)	8.88 (226)	3.00 (76)	7.12 (181)	7.88 (200)	4.50 (114)	1.31 (33)	8.50 (216)
WPFB500115	560	115	1600	0.87	60	11.62 (295)	13.00 (330)	4.56 (116)	11.13 (283)	11.88 (302)	6.88 (175)	2.13 (54)	12.50 (318)
WPFB500230	560	230	1600	0.87	60	11.62 (295)	13.00 (330)	4.56 (116)	11.13 (283)	11.88 (302)	6.88 (175)	2.13 (54)	12.50 (318)

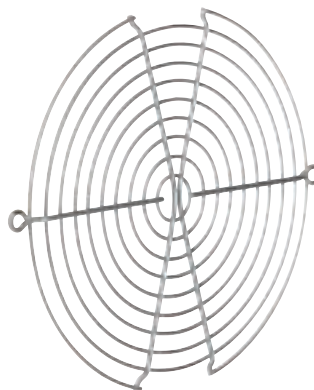
WPFBE SERIES EXHAUST GRILLES WITH FILTERS								
CATALOG NUMBER		A	B	D	E	F	G	W*
WITH FILTER	FILTER ONLY							
WPFBE100	WPFBM100	6.13 (156)	7.38 (188)	5.62 (143)	6.38 (162)	4.13 (105)	0.75 (19)	5.66 (144)
WPFBE200	WPFBM200	7.63 (194)	8.88 (226)	7.12 (181)	7.88 (200)	4.50 (114)	1.31 (33)	7.16 (182)
WPFBE500	WPFBM500	11.62 (295)	13.00 (330)	11.13 (283)	11.88 (302)	6.88 (175)	2.13 (54)	11.16 (283)

FILTER COAT	
CATALOG NUMBER	DESCRIPTION
WAX10	10 oz pump spray bottle





WA4AXFN



WAGARD6

## FEATURES-SPECIFICATIONS

MUFFIN FANS &  
FINGER GUARDS

## Applications

Designed for use in enclosures where space is limited and reliable cooling is required.

## Features

- Fan furnished standard with 24" lead wire. 90 degree plug attached
- Black color
- Impeller and frame are glass reinforced thermoplastic, UL94-VO
- Die cast aluminum housing

- Finger guards are welded electroplated nickel chrome steel wire. Guards withstand 200 lbs. separation force to meet UL, CSA standards
- One finger guard and all mounting hardware is provided. Additional finger guards can be mounted on either side for maximum safety

## WAXFN SERIES MUFFIN FANS &amp; WAGARD SERIES FINGER GUARDS

CATALOG NUMBER		VOLTAGE RATING	RATED INPUT (WATTS)	FREQ (Hz)	RATED SPEED (RPM)	NOISE LEVEL	MAXIMUM AIR FLOW		MAXIMUM STATIC PRESSURE/H <sub>2</sub> O	DIMENSIONS H X W X D
FAN	FAN GUARD						(M <sup>3</sup> /MIN)	CFM		
WA4AXFN	WAGARD4	115	17/15	50/60	2500/3000	37 ± 2	2.5/3.1	88/110	5.8/7.0	4.71x4.71x1.50 (120x120x38)
WA4AXFN2	WAGARD4	230	17/15	50/60	3500/3000	37 ± 2	2.5/3.1	88/110	5.8/7.0	4.71x4.71x1.50 (120x120x38)
WA6AXFN	WAGARD6	115	26/35	50/60	2800/3500	46 ± 2	5.4/6.6	190/235	5.4/6.6	6.77x6.77x2.01 (172x172x51)
WA6AXFN2	WAGARD6	230	26/35	50/60	2800/3500	46 ± 2	5.4/6.6	190/235	5.4/6.6	6.77x6.77x2.01 (172x172x51)
WA10AXFN	WAGARD10	115	35	50/60	1650	55		547	10	10.00x10.00x3.50 (254x254x89)
WA10AXFN2	WAGARD10	230	33	50/60	1650	55		547	10	10.00x10.00x3.50 (254x254x89)





**WAVK0303SSA**



**WAFLT33**

## FEATURES-SPECIFICATIONS

### LOUVER PLATE KITS

#### Description

Designed to provide ventilation or cooling in enclosures where excessive moisture or excessive internal heat is a problem. These kits are fabricated from 14 gauge steel and include all hardware for mounting. Kits are easily field installed by making a cutout of the proper size and attaching the louver plate in place. Finish is ANSI 61 gray polyester powder finish over phosphatized surfaces or 316 stainless steel. Filter kit must be ordered separately.

### FILTER KITS FOR LOUVER PLATES KITS

#### Description

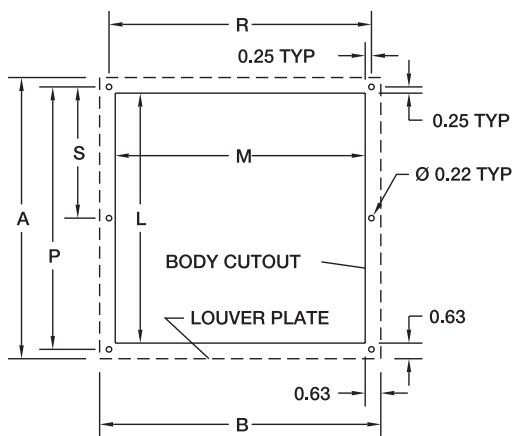
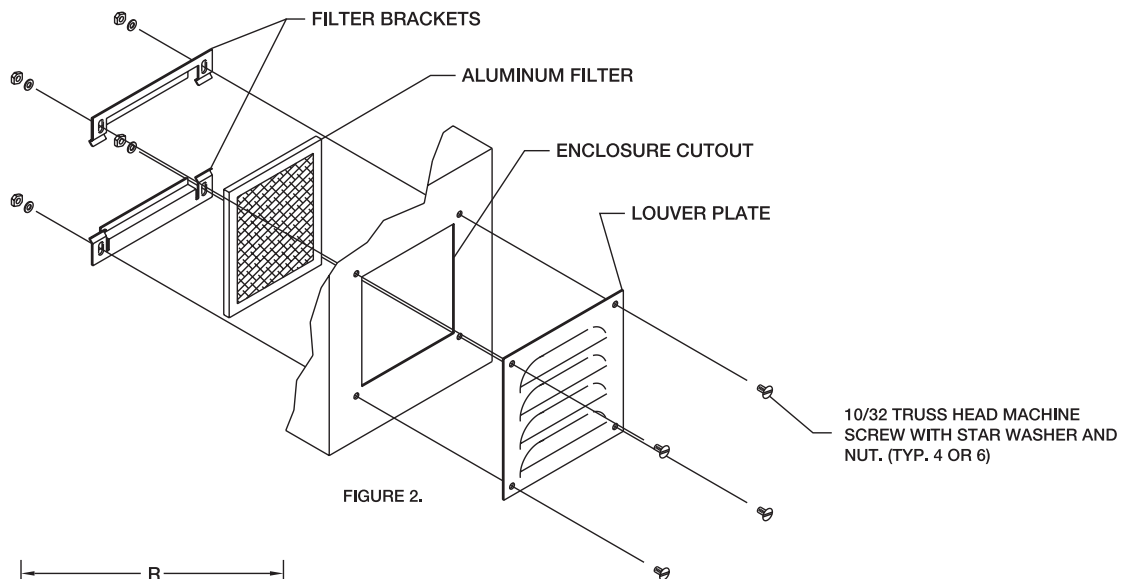
Designed for use with Louver Plate Kit. Mounting holes on filter brackets align with mounting holes on louver kits. Aluminum filters are good for stopping dust and dirt from penetrating the enclosures. Filters are designed to mount behind louver kits. Kit consists of aluminum filter, brackets and all necessary hardware for installation. Louver kit must be ordered separately.

WAVK SERIES LOUVER PLATE KIT AND WAFLT SERIES FILTER KITS FOR LOUVER PLATES												
CATALOG NUMBER			NUMBER OF LOUVERS	NUMBER OF LOUVER ROWS	LOUVER LENGTH	A	B	L	M	P	R	S
LOUVER KIT PAINTED	LOUVER KIT 316 S.S.	FILTER KIT										
WAVK0203	WAVK0203SSA ◀	—	3	1	2.00 (51)	3.25 (83)	3.25 (83)	2.00 (51)	2.00 (51)	2.50 (64)	2.50 (64)	—
WAVK0303	WAVK0303SSA ◀	WAFLT33	3	1	3.00 (76)	3.87 (98)	4.50 (114)	2.62 (67)	3.25 (83)	3.12 (79)	3.75 (95)	—
WAVK0304	WAVK0304SSA ◀	WAFLT34	4	1	3.00 (76)	4.75 (121)	4.50 (114)	3.50 (89)	3.25 (83)	4.00 (102)	3.75 (95)	—
WAVK0404	WAVK0404SSA ◀	WAFLT44	4	1	4.00 (102)	5.62 (143)	5.50 (140)	4.37 (111)	4.25 (108)	4.87 (124)	4.75 (121)	—
WAVK0604	WAVK0604SSA ◀	WAFLT64	4	1	6.00 (152)	5.62 (143)	7.50 (191)	4.37 (111)	6.25 (159)	4.87 (124)	6.75 (171)	—
WAVK0606	WAVK0606SSA ◀	WAFLT66	6	1	6.00 (152)	7.87 (200)	7.50 (191)	6.62 (168)	6.25 (159)	7.12 (181)	6.75 (171)	3.56 (90)
WAVK0806	WAVK0806SSA ◀	WAFLT86	12	2	4.00 (102)	8.18 (208)	9.50 (241)	6.93 (176)	8.25 (210)	7.43 (189)	8.75 (222)	3.71 (94)
WAVK0808	WAVK0808SSA ◀	WAFLT88	16	2	4.00 (102)	10.56 (268)	9.50 (241)	9.31 (236)	8.25 (210)	9.81 (249)	8.75 (222)	4.90 (124)
WAVK0812	WAVK0812SSA ◀	WAFLT812	24	2	4.00 (102)	9.31 (236)	9.50 (241)	14.06 (357)	8.25 (210)	14.56 (370)	8.75 (222)	7.28 (185)

#### ◀ NEW PRODUCT IN 2003

Note: Center holes (dimension "S") are not needed on any filter kits. Only 6 x 6 and larger louver kits require center holes.




**Notes:**
**Installation Instructions**

1. Make sure the proper louver kit and/or filter kit has been ordered.
2. Locate and mark holes and cutout as shown in figure 1.
3. Drill holes using a 7/32" drill bit making sure there are no electrical wires or internal components in the way.
4. Assemble louver kits and/or filter kits as shown in figure 2.

Note: After installation is complete, make sure louver and filter kits do not interfere with any internal or external equipment.



EHG030

#### Industry Standards

UL Recognized Component  
cUL Recognized Component  
CE Recognized

### FEATURES-SPECIFICATIONS

#### Applications

Designed to provide enclosed electronic, pneumatic, hydraulic, and mechanical equipment with protection from low temperatures, condensation, and corrosion.

#### Features

- Positive Temperature Coefficient heater unit maintains a stable temperature environment within enclosures,

allowing critical components to perform with consistent reliability for longer periods

- Expanded voltage range of 110V to 230V
- Heating body is extruded, black anodized, aluminum
- Easily installed by clip mounting on 35mm DIN rails
- Connection: Push-type terminals

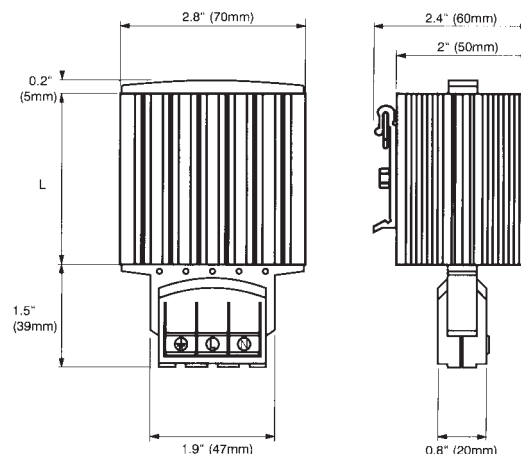
- Protection Class: 1 (tested for grounding at 1,600V)
- CAUTION—Do not mount on wooden structures. Avoid placement near heat-sensitive components

#### Accessories

- Thermostats (see pages K33-K34)

EHG SERIES ENCLOSURE RADIANT HEATERS				
CATALOG NUMBER	WATTS*	RATED VOLTAGE	Hz	DIMENSIONS H X W X D
EHG015	15	110 - 250	50/60	2.60x2.80x2.00 (65x70x50)
EHG030	30	110 - 250	50/60	2.60x2.80x2.00 (65x70x50)
EHG045	45	110 - 250	50/60	2.60x2.80x2.00 (65x70x50)
EHG060	60	110 - 250	50/60	5.50x2.80x2.00 (140x70x50)
EHG075	75	110 - 250	50/60	5.50x2.80x2.00 (140x70x50)
EHG100	100	110 - 250	50/60	5.50x2.80x2.00 (140x70x50)
EHG150	150	110 - 250	50/60	8.70x2.80x2.00 (220x70x50)

\*Due to the nature of PTC heaters, the actual power rating of the heater can be up to 10% lower, or 5% higher than the nominal power rating at 68°F (20°C) ambient temperature.



WIEGMANN®



WHVLO31100120

**Industry Standards**

UL Recognized Component  
 cUL Recognized Component  
 CE Recognized

**FEATURES-SPECIFICATIONS**
**Applications**

Used when larger heating capacities or internal forced air circulation is required and space is limited.

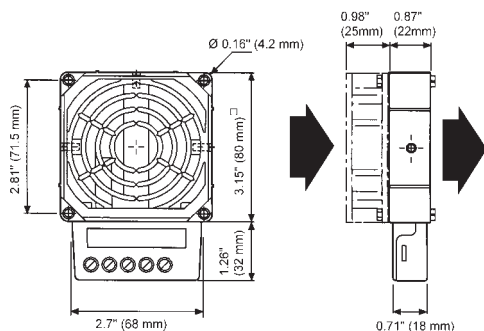
**Features**

- Compact design to prevent condensation or maintain minimum temperature in enclosures
- Cartridge heater heating element
- 30,000 hour life expectancy at 68°F ambient
- Connection: 5 pole terminal for max. 14 AWG
- Easily installed by clip mounting on 35mm DIN rails
- Protection class 1 (tested for grounding at 1,250 V)
- Heater comes fully assembled with fan
- CAUTION—Do not mount on wooden structures. Avoid placement near heat-sensitive components. Note that fan must be used in conjunction with heating element

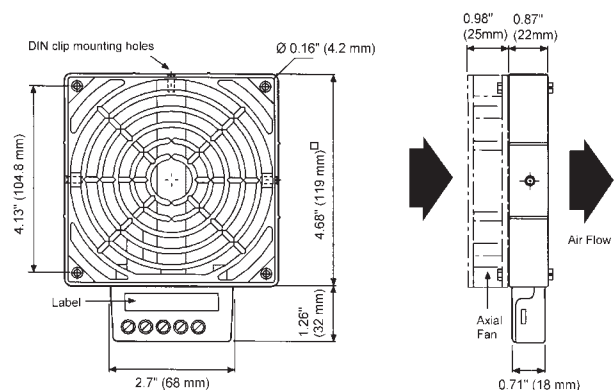
**Accessories**

- Thermostats (see pages K33-K34)

WHVL SERIES ENCLOSURE FAN HEATERS					
CATALOG NUMBER	RATED VOLTAGE	WATTS	OPERATING CURRENT (AMPS)	MAXIMUM TEMPERATURE WITH FAN	DIMENSIONS H X W X D
WHVLO31100120	120	100	0.89	250°F (120°C)	1.85x3.15x4.41(47x80x112)
WHVLO31150120	120	150	1.30	320°F (160°C)	1.85x3.15x4.41(47x80x112)
WHVLO31200120	120	200	1.79	250°F (120°C)	1.85x4.68x5.94(47x119x151)
WHVLO31300120	120	300	2.62	320°F (160°C)	1.85x4.68x5.94(47x119x151)
WHVLO31400120	120	400	3.45	360°F (180°C)	1.85x4.68x5.94(47x119x151)



100 &amp; 150W Heaters



200, 300 &amp; 400W Heaters


**WIEGMANN®**



WCR027350120

Industry Standards

UL Recognized Component  
cUL Recognized Component  
CE Recognized

FEATURES-SPECIFICATIONS

Applications

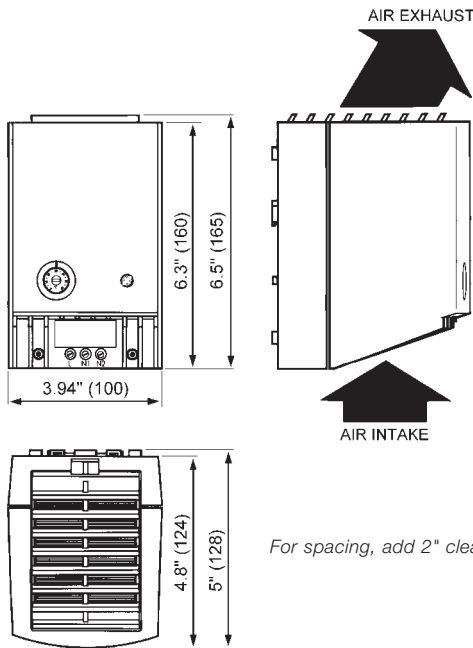
Designed to protect sensitive mechanical, electrical, and electronic equipment from the harmful effects of condensation, corrosion, and low temperatures. Thermostatically controlled fan-driven heater units maintain a stable temperature with enclosure so critical components can perform more reliably over a longer period of time.

Features

- Positive Temperature Coefficient (PTC) semiconductor heating element, self regulating and temperature limiting
- Adjustable thermostat
- LED lamp for optical indication of function
- Durable, non-metallic plastic housing, UL94-VO

- Connection: 3 - pole terminal, max. AWG 14
- Easily installed by clip-mounting on 35mm DIN rail
- CAUTION—Do not mount on wooden structures. Avoid placement near heat-sensitive components

WCR SERIES FAN HEATERS							
CATALOG NUMBER	RATED VOLTAGE	WATTS	MAX. AMPS (INRUSH CURRENT)	THERMOSTAT ADJUSTABLE FROM	AXIAL FAN BALL BEARING	TEMPERATURE SCALE	DIMENSIONS H X W X D
WCR027350120	120	550	8.5A	32-140°F (0-60°C)	20 CFM	Fahrenheit	6.50x3.94x5.00 (165x100x128)
WCR027350230	230	400	7.5A	32-140°F (0-60°C)	20 CFM	Celsius	6.50x3.94x5.00 (165x100x128)
WCR027550120	120	650	12.0A	32-140°F (0-60°C)	26 CFM	Fahrenheit	6.50x3.94x5.00 (165x100x128)
WCR027550230	230	550	11.0A	32-140°F (0-60°C)	26 CFM	Celsius	6.50x3.94x5.00 (165x100x128)



For spacing, add 2" clearance for heat sensitive parts



EGL250-120

**Industry Standards**

UL Recognized Component  
cUL Recognized Component  
CE Recognized

**FEATURES-SPECIFICATIONS****Applications**

- Use when larger heating capacities or internal forced air circulation is required.
- Designed to prevent condensation or maintain minimum temperature in enclosures.

**Features**

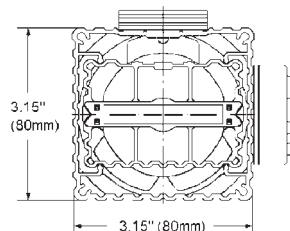
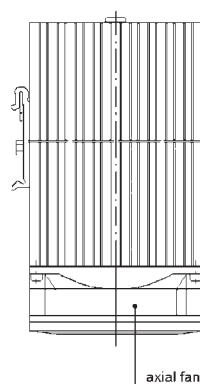
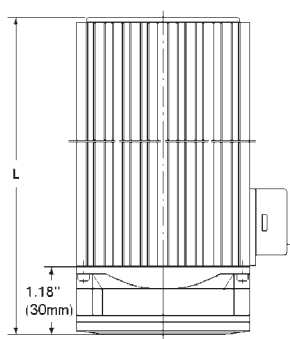
- Heating element is micanite with fail safe thermostat
- Black, anodized aluminum extruded body
- Ball bearing life expectancy is 30,000 hrs. at 70°F (20°C)
- Connection: 3 pole terminal for AWG 12—18

- Easily installed by clip mounting on 35mm DIN rails
- CAUTION—Do not mount on wooden structures. Avoid placement near heat-sensitive components

**Accessories**

- Thermostats (see pages K33-K34)

EGL SERIES FAN HEATERS							
CATALOG NUMBER	RATED VOLTAGE	WATTS	STARTING AMPS	SURFACE TEMPERATURE	AXIAL FAN	CIRCULATION POWER	DIMENSIONS H X W X D
EGL250-120	120	250	2.2	167°F	Ball Bearing	20 CFM Free Blowing	7.00x3.15x3.15 (178x80x80)
EGL250	230	250	1.1	167°F	Ball Bearing	20 CFM Free Blowing	7.00x3.15x3.15 (178x80x80)
EGL400-120	120	400	3.5	167°F	Ball Bearing	20 CFM Free Blowing	9.76x3.15x3.15 (252x80x80)
EGL400	230	400	1.7	167°F	Ball Bearing	20 CFM Free Blowing	9.76x3.15x3.15 (252x80x80)



For spacing, add 2" clearance for heat sensitive parts

**WIEGMANN®**



**ETR202**



**ETR202F**

**Industry Standards**

UL Recognized Component  
cUL Recognized Component  
CE Recognized  
CSA Rated

**FEATURES-SPECIFICATIONS**

**Applications**

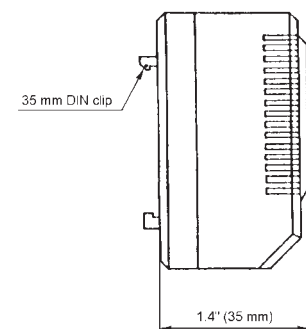
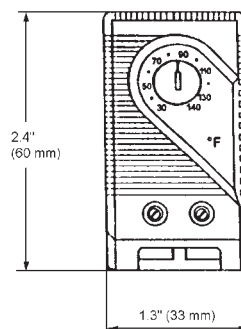
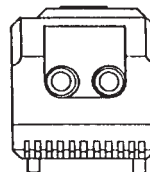
- Designed to provide air temperature control and monitoring in switch gear enclosures that are set up to operate with heaters, fans, filter ventilators, heat exchangers, and/or signal transmitters.
- When the enclosure reaches the pre-determined set point, temperature contacts in the thermostat are activated and the fan or heater automatically begins to operate.
- Thermostats prolong the life expectancy of heaters and fans by curtailing their operating hours and also increase the working efficiency of electrical components by exposing them to fewer contaminants from the surrounding environment.

**Features**

- Normally Closed Thermostat—For the control of fan heaters and heaters
- Normally Open Thermostat—For the control of cooling units, fans, filter ventilators or switching, or signal transmitters in the event of overheating
- Available in Fahrenheit or Celsius scale
- Thermostatic bi-metallic sensor element
- Easily installed by clip mounting on 35mm or 38mm DIN rails

- Housing made from gray flame retardant UL94-VO plastic
- Connection: 2 pole terminal for max. 14 AWG
- Switching Difference (hysteresis): 12°F (7°C)
- Switching Capacity: 15 A (1) AC 120V, 10 A (1) AC 250V, 10A 12V DC, 5A 24V DC

ETR SERIES THERMOSTATS					
CATALOG NUMBER	TEMP. SCALE	TEMP. RANGE	SWITCHING	FOR PRODUCT TYPE	DIMENSIONS H X W X D
ETR202F	Fahrenheit	32-140°F	Normally Closed	Heating	2.40x1.30x1.40 (60x33x35)
ETR202	Celsius	0-60°C	Normally Closed	Heating	2.40x1.30x1.40 (60x33x35)
ETR201F	Fahrenheit	32-140°F	Normally Open	Cooling	2.40x1.30x1.40 (60x33x35)
ETR201	Celsius	0-60°C	Normally Open	Cooling	2.40x1.30x1.40 (60x33x35)



**WIEGMANN®**



ETF3000

**Industry Standards**

UL Recognized Component  
cUL Recognized Component  
CE recognized

**FEATURES-SPECIFICATIONS****Applications**

- Designed to provide both air temperature and humidity control as well as monitoring in electrical and electronic enclosures.
- Highly effective in ATM's, parking control gates, ticket dispensers and traffic control systems where equipment is exposed to wide range of outdoor elements.

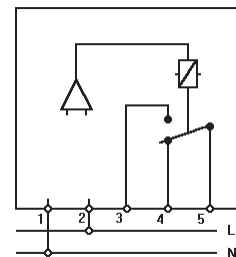
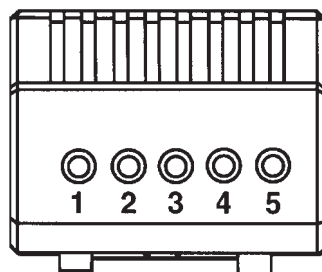
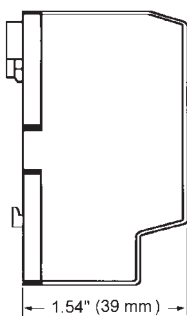
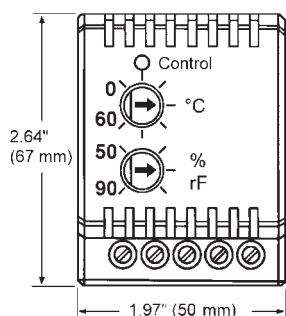
**Features**

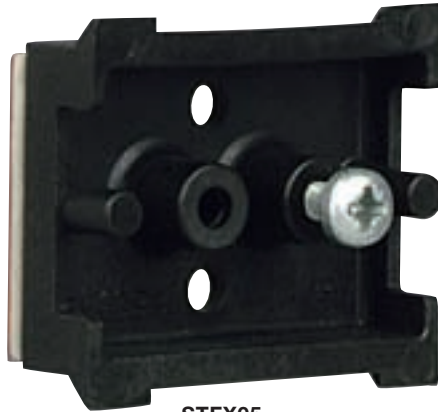
- Independently senses the relative humidity and temperature. Resistive and inductive loads (heaters or Filterfans™) can be switched
- 100,000 cycle life expectancy
- LED lamp for optical indication of function

- Durable, non metallic plastic gray housing, UL94-VO
- Easily installed by clip mounting on 35mm DIN rail
- Switching capacity: 8A(4) AC 240V, 0.8A DC 48V, 8A DC 24V

**ETF SERIES FAN HEATERS**

CATALOG NUMBER	OPERATING VOLTAGE	TEMPERATURE SCALE	SWITCHING DIFFERENCE (HYSTERESIS)	RESPONSE TIME (SECONDS)	TEMPERATURE RANGE	RELATIVE HUMIDITY RANGE	DIMENSIONS H X W X D
ETF3000120F	120	Fahrenheit	Approx. 3.6°F (2°K)	Approx. 160	32-140°F	50 to 90%	2.64x1.97x1.54 (67x50x39)
ETF3000	230	Celsius	Approx. 3.6°F (2°K)	Approx. 160	0-60°C	50 to 90%	2.64x1.97x1.54 (67x50x39)

**WIEGMANN®**



STFX05

## FEATURES-SPECIFICATIONS

### Applications

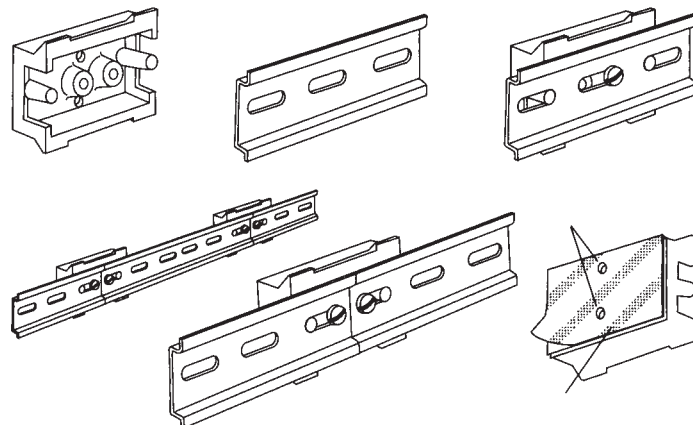
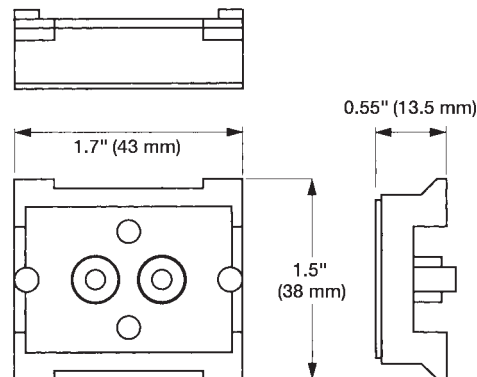
Effective substitute for DIN rail or "Unistrut". Multipurpose mounting device which allow the mounting of small DIN rail mountable appliances reducing time and labor.

### Features

- Provides direct snap-in mounting for thermostats, time relays, small heaters, terminals, and other appliances with DIN rail mounting or by the use of screw holes
- Manufactured from black UL94-VO polyamide material
- Included self adhesive bears continuous loads of 1.1 lbs. (after 24 hours)
- Holes for screw mounting are provided for heavy applications

STFX SERIES UNIVERSAL THERMOSTAT MOUNT				
CATALOG NUMBER	HOLDING CAPACITY	PACKAGE QUANTITY*	TEMP. RANGE OF MOUNTING MATERIAL	DIMENSIONS H X W X D
STFX05	.44 lbs. (200g) initially 1.1 lbs. (500g) after 24 hour curing period	5	-22-131°F (-30-55°C)	1.50x1.70x.55 (38x43x14)

\*Sold in package quantity only



WIEGMANN®



WAFMP4

## FEATURES-SPECIFICATIONS

## Fan Mounting Plate

## Description

Designed to mount a fan and louver kit together. This fan mounting plate kit consists of a fan mounting plate, filter and all necessary hardware for installation. When ordering a fan mounting plate, you will need to order a fan, louver kit and a fan guard. Fans, louver kits and fan guards must be ordered separately.

WAFMP SERIES FAN MOUNTING PLATE			
CATALOG NUMBER			
FAN, FILTER & LOUVER MOUNTING PLATE KIT	FAN*	LOUVER KIT PAINTED**	FAN GUARD ***
WAFMP4	WA4AXFN	WAVK0606	WAGARD4
WAFMP4	WA4AXFN2	WAVK0606	WAGARD4
WAFMP6	WA6AXFN	WAVK0808	WAGARD6
WAFMP6	WA6AXFN2	WAVK0808	WAGARD6
WAFMP10	WA10AXFN	WAVK0809	WAGARD10
WAFMP10	WA10AXFN2	WAVK0809	WAGARD10

\*See page K26 for information on fans.

\*\*See page K27 for information on louver kits.

\*\*\*See page K26 for information on guards.

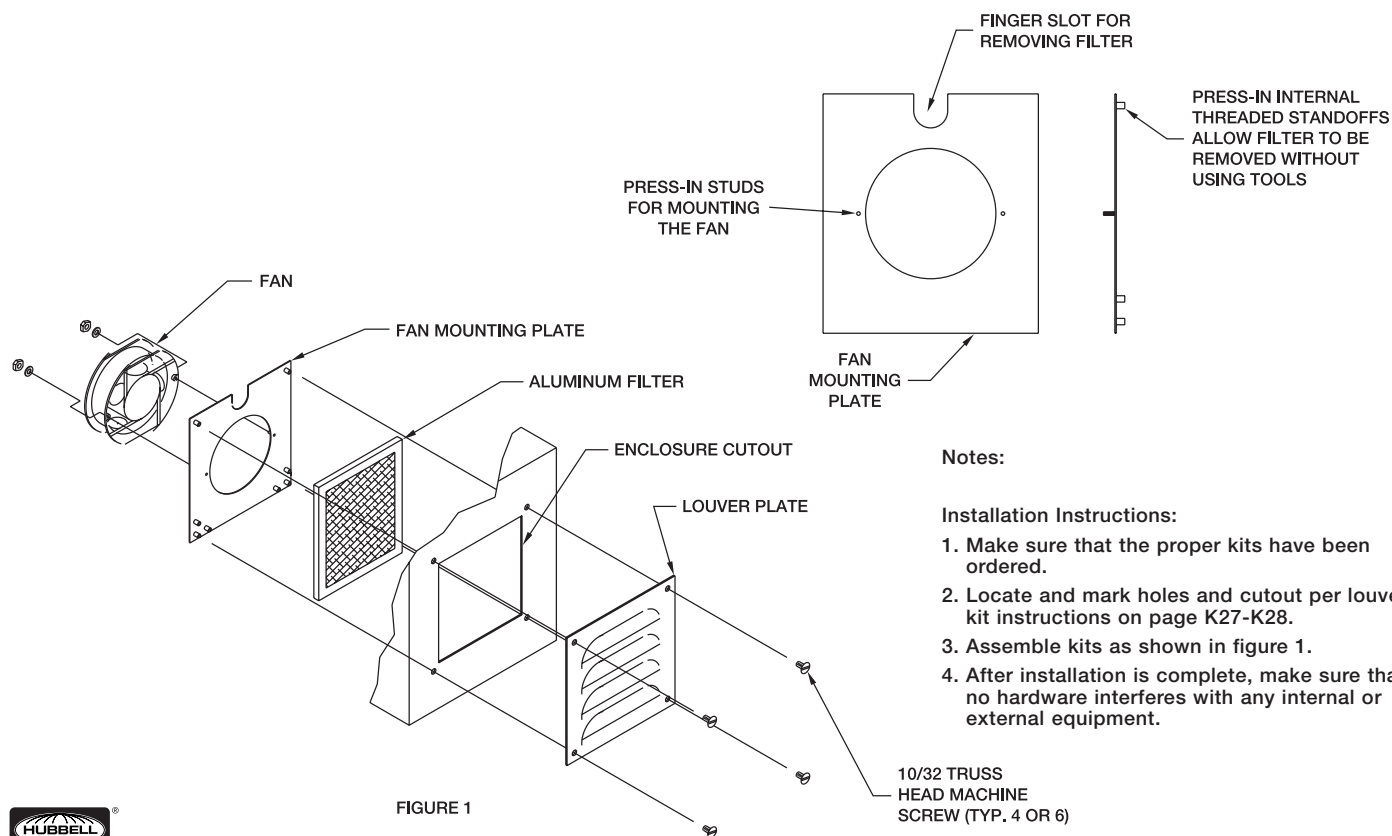


FIGURE 1

## Notes:

## Installation Instructions:

1. Make sure that the proper kits have been ordered.
2. Locate and mark holes and cutout per louver kit instructions on page K27-K28.
3. Assemble kits as shown in figure 1.
4. After installation is complete, make sure that no hardware interferes with any internal or external equipment.





**SERIES 1803**



**SERIES 1800, 1801, 1802**



**Industry standards**

IP54



IP55 (with fine filter mat)

## FEATURES-SPECIFICATIONS

### Application

- The latest passive technology for fan cooling and pressurizing of industrial enclosures
- Filtered passive ventilation can be provided by an exhaust filter for either convection cooling or in combination with a fan in forced air cooling

### Features

- All four models are available in 120 and 230 volt with an expected service life of 50,000 hours
- Self-adhesive seal on mounting frame prevents dust and water from entering the enclosure

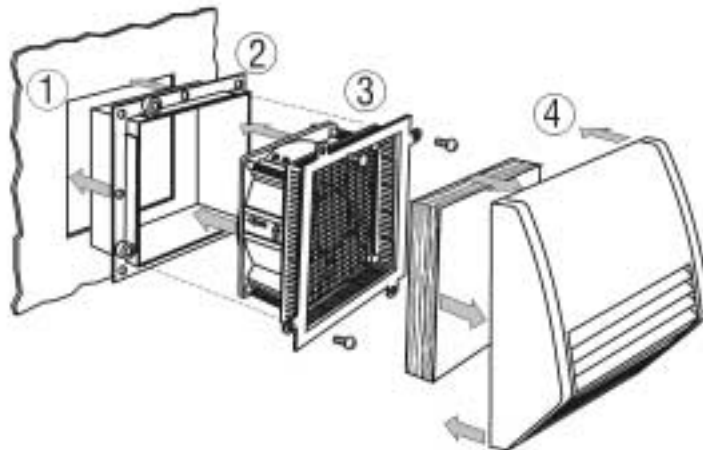
- The functional design of the intake exhaust fan hoods minimize direct infiltration of falling water
- By simply turning the axial fan, the direction of the airflow can be changed by 180 degrees
- Air Channeling makes the filter fan particularly quiet in operation
- Plastic self-extinguishing UL94-V0 and temperature resistant -31F to 158F
- Durable, reusable medium filter mat included
- RAL7035 Light Gray Finish
- Ball Bearing Axial Fan with plastic impeller UL94V-01. 2 lead wires 4" long (pressure clamps inclusive)

### Time-Saving Steps

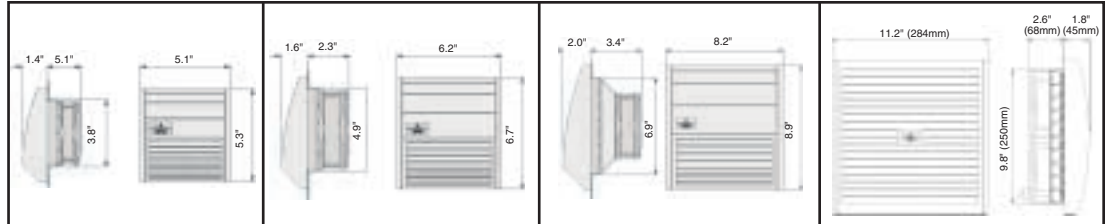
1800 Series Fans can be easily connected and installed from the outside of the cabinet.

1. Remove protective film from the sealing strips provided on the mounting frame
2. Insert mounting frame into enclosure cutout.
3. Terminate the axial fan with push type connectors and slide the unit into the mounting frame.
4. Insert the Filter Mat and snap on the protective Hood.

### Time-Saving Assembly and Maintenance



**WIEGMANN®**


**1800 SERIES FILTER FAN**

Catalog No.	(for 120V 60Hz)	W01800120-4	W01801120-5	W01802120-7	W01803120-10
Catalog No.	(for 230V 50Hz)	W01800230-4	W01801230-5	W01802230-7	W01803230-10
Filter mat: Medium grade 350 g/m <sup>2</sup> , filtering degree 83%, Particle < 10 µm, G4(EN779)					
<b>Air volume</b>					
free blowing:		12 cfm (21 m <sup>3</sup> /h)	39 cfm (55 m <sup>3</sup> /h)	60 cfm (102 m <sup>3</sup> /h)	176 cfm (300 m <sup>3</sup> /h)
with exhaust filter:		9 cfm (16 m <sup>3</sup> /h)	24 cfm (42 m <sup>3</sup> /h)	40 cfm (68 m <sup>3</sup> /h)	135 cfm (230 m <sup>3</sup> /h)
<b>Current consumption</b>	120V	160 mA	180 mA	180 mA	400 mA
	230V	80 mA	100 mA	100 mA	700 mA
<b>Power consumption</b>	120V	13W	15W	15W	60W
	230V	13W	15W	15W	60W
<b>Average noise level at 3 ft</b>					
DIN EN ISO 9614-2		31 dB (A)	40 dB (A)	39 dB (A)	45 dB (A)
<b>Mounting depth</b>		1.8" (45 mm)	2.3" (58 mm)	3.4" (86 mm)	2.6" (65 mm)
<b>Enclosure cut-out</b>		3.8" x 3.8" (97 x 97mm +0.4)	4.9" x 4.9" (125 x 125mm +0.4)	6.9" x 6.9" (176 x 176mm +0.4)	9.84" x 9.84" (250 x 250mm)
<b>Weight</b>		1.2 lbs (0.54 kg)	2.2 lbs (1.0 kg)	4.2 lbs (1.9 kg)	7.7 lbs (3.5 kg)
120V / 60Hz models have increased air volume performance of approx. 15%					

**1800 SERIES EXHAUST GRILLE & FILTER**

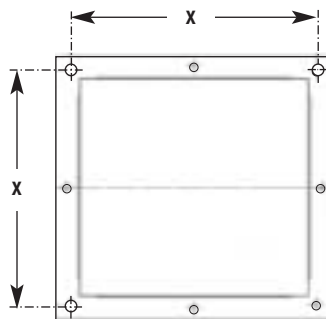
Catalog No.	W11800F-4	W11801F-5	W11802F-7	W11803F-10
Filter mat: Medium grade 350 g/m <sup>2</sup> , filtering degree 83%, Particle Ø to 10 µm, G4 (DIN 24185)				
<b>Mounting depth</b>	0.6" (16 mm)	0.6" (16 mm)	0.6" (16 mm)	9" (22 mm)
<b>Enclosure cut-out</b>	3.8" x 3.8" (97 x 97mm +0.4)	4.9" x 4.9" (125 x 125mm +0.4)	6.9" x 6.9" (176 x 176mm +0.4)	9.8" x 9.8" (250 x 250mm +.4)
<b>Weight</b>	0.6 lbs (0.27 kg)	0.8 lbs (0.38 kg)	1.3 lbs (0.60 kg)	2.1 lbs (95 kg)

**REPLACEMENT FILTER MATS**

Medium filter (G4)	MM08600-4	MM08601-5	MM08602-7	MM08608-10
Fine filter (F5)	FM08603-4	FM08604-5	FM08605-7	FM08609-10

**MOUNTING FRAME**
**HOLE CENTERS FOR ATTACHING WITH SCREWS - HOLE Ø 1/8" (3MM)**

X = 4.3" (109 mm)	X = 5.4" (137 mm)	X = 7.4" (188 mm)	X = 10.4" (264 mm)
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**WPF10-115BK**

**Industry Standards**

UR, cUR, and CE recognized

IP43

(IP54 with optional WPFG Series gasket)

**FEATURES-SPECIFICATIONS**

**Applications**

- Most innovative technology for fan cooling and pressurizing of industrial enclosures
- Provides a high quality, economical method of cooling enclosures
- Filtered passive ventilation can be provided by an exhaust filter for either convection cooling or in combination with a fan in forced air cooling
- Slim line design allows grille to protrude from enclosure surface less than one quarter inch
- Maintains aesthetics of enclosure

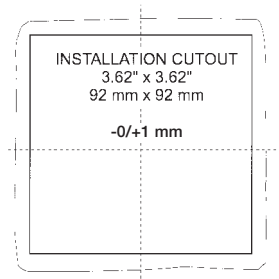
**Features**

- All models are 115V with an expected service life of 30,000 hours
- High performance fan motors and finger guards
- Polycarbonate fire retardant plastic grilles, UL94-VO
- Durable, reusable filter mat included
- Grilles are available in black or beige
- Patented "Click and Fit" system allows for rapid filter fan and exhaust filter installation without screws; this time saving feature will cut installation time by up to 30 minutes from traditional box fan packages

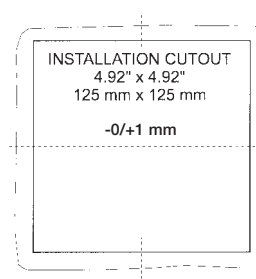
- Cutout template provided with every unit
- Fan or exhaust filter simply snaps into cutout opening
- Connector type: WPF10 Series 2, 12" wires. WPF20 – WPF60 Series terminal strip

**Accessories**

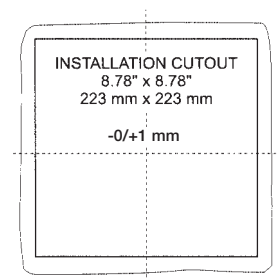
- Exhaust Filters
- Gaskets (WPFG Series) recommended if installing on enclosure with textured finish (only WPF10)
- Replacement Filters



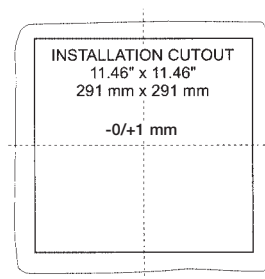
**WPF10**



**WPF20**



**WPF25  
WPF30**



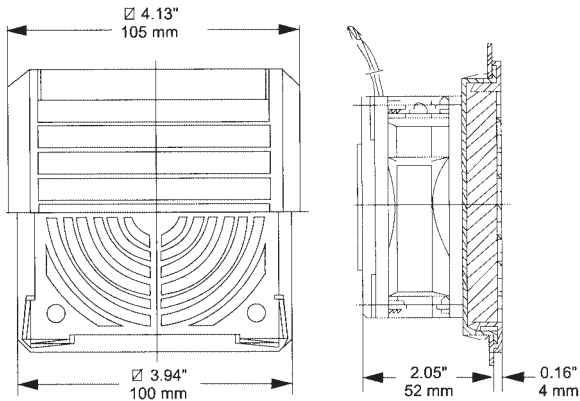
**WPF50  
WPF60**



**WIEGMANN®**

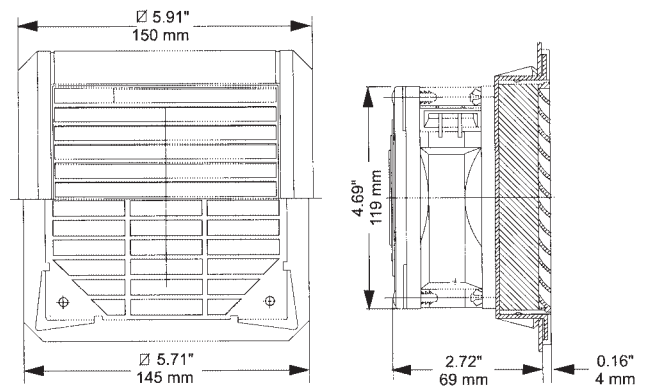
WPF SERIES FILTERFANS™										
CATALOG NUMBER		RATED VOLTAGE	FREE FLOW AIR DELIVERY (CFM)*	AIR DELIVERY W/EXHAUST (CFM)	MAX. STATIC PRESSURE (PA)	AMBIENT TEMP. DEGREE F MAX/MIN	FILTER DENSITY (G/M2)	FILTERING LEVEL	SOUND LEVEL (DB)	REQUIRED CUT OUT DIMENSION
BLACK GRILLE	BEIGE GRILLE									
WPF10-115BK	WPF10-115	115V	16.22	10.12	29.00	140/14	150.00	67%	39	3.62x3.62 (92x92)
WPF20-115BK	WPF20-115	115V	37.95	28.41	69.00	122/14	350.00	83%	49	4.92x4.92 (125x125)
WPF25-115BK	WPF25-115	115V	88.67	62.29	57.00	122/14	350.00	83%	55	8.78x8.78 (223x223)
WPF30-115BK	WPF30-115	115V	168.59	142.14	89.00	122/14	350.00	83%	55	8.78x8.78 (223x223)
WPF50-115BK	WPF50-115	115V	312.11	236.90	205.00	122/14	350.00	83%	69	11.46x11.46 (291x291)
WPF60-115BK	WPF60-115	115V	423.09	304.64	225.00	122/14	350.00	83%	71	11.46x11.46 (291x291)

\*Add 15% for operation @ 60Hz



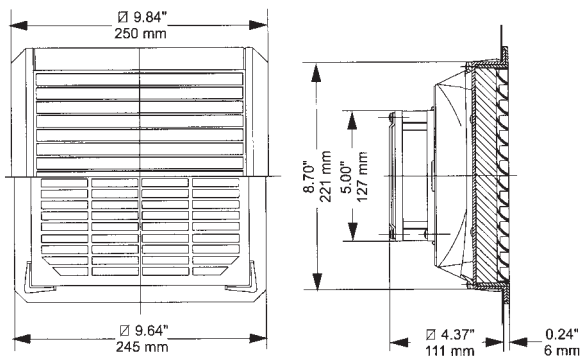
WPF10

Air Flow



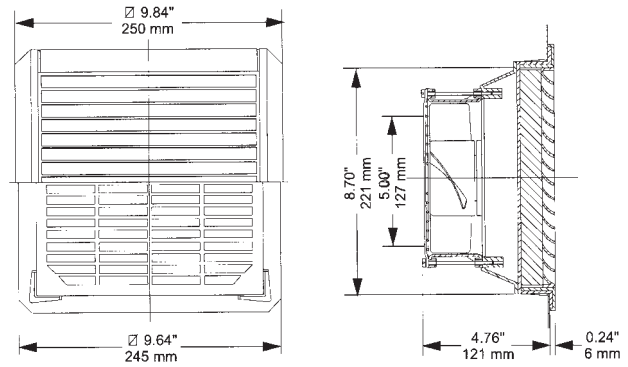
WPF20

Air Flow



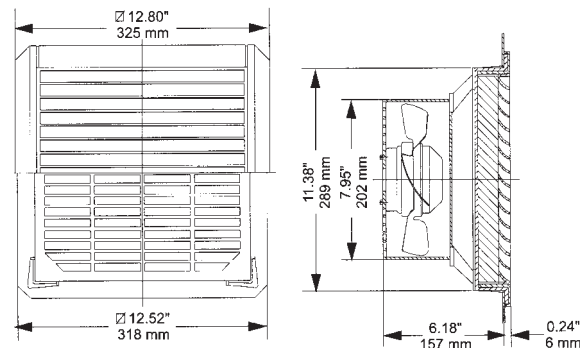
WPF25

Air Flow



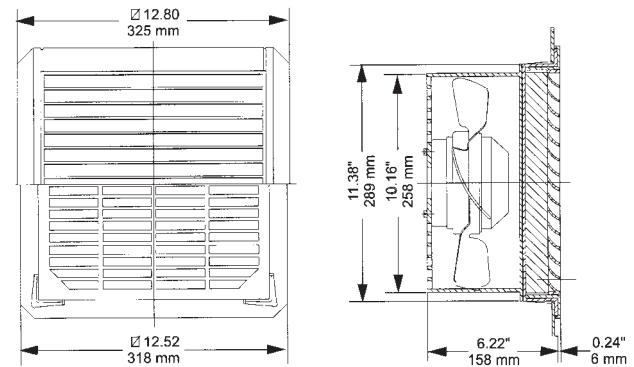
WPF30

Air Flow



WPF50

Air Flow



WPF60

Air Flow





**WPFA10BK**



**WPFA10**

**Industry Standards**

IP43

(IP54 with optional WPFG Series gasket)

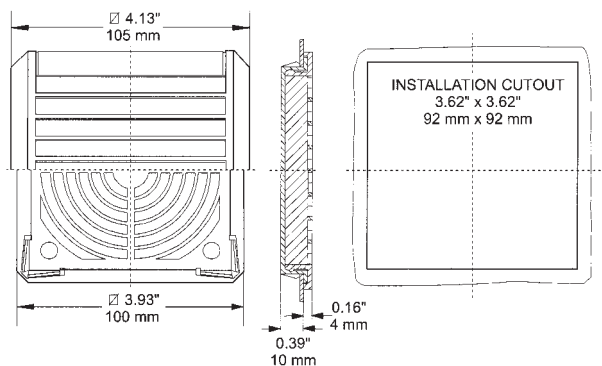
**Applications**

- Polycarbonate fire retardant plastic grilles, UL94-VO
- Durable, reusable filter mat included
- Grilles are available in black or beige

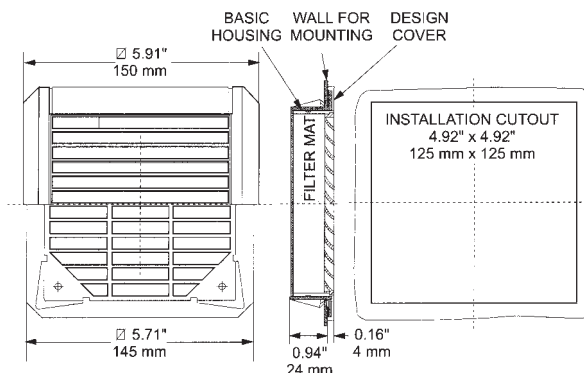
**Accessories**

- Gaskets (WPFG series) recommended if installing on enclosure with textured finish

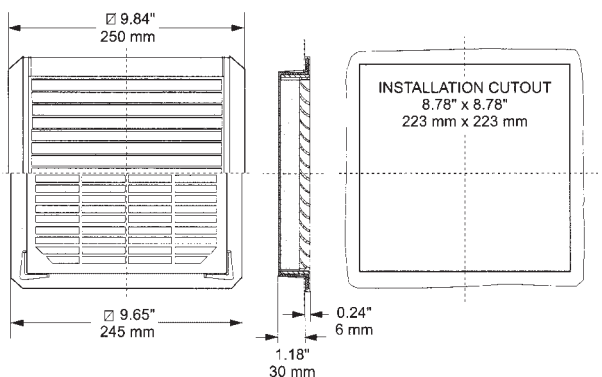
EXHAUST GRILLE WITH FILTER				
CATALOG NUMBER		FILTER DENSITY (G/M2)	FILTERING LEVEL	REQUIRED CUT OUT DIMENSIONS
BLACK GRILLE	BEIGE GRILLE			
WPFA10BK	WPFA10	150	67%	3.60x3.60/92x92
WPFA20BK	WPFA20	350	83%	4.90x4.90/125x125
WPFA25/30BK	WPFA25/30	350	83%	8.80x8.80/223x223
WPFA50/60BK	WPFA50/60	350	83%	11.50x11.50/291x291



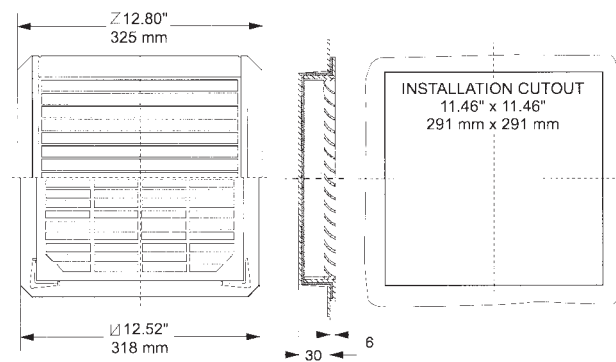
**WPFA 10**



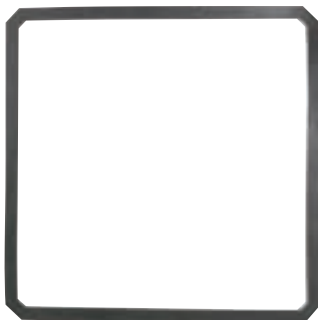
**WPFA 20**



**WPFA 25/30**



**WPFA 50/60**



WPFG25/30



WPFM20



WPG1BK



WPG25/30BE

## FEATURES-SPECIFICATIONS

### GASKETS FOR FILTERFANS™

#### Applications

- Packaged individually
- Provides added sealing protection
- Recommended when fans or exhaust grilles are installed on enclosures with textured finishes
- Changes Filter Fan rating from IP43 to IP 54 when installed

WPFG SERIES GASKET FOR FILTERFANS™		
CATALOG NUMBER		
GASKET	USE WITH FILTER FAN NO.	USE WITH EXHAUST GRILL NO.
WPFG10	WPF10-115BK WPF10-115	WPFA10BK WPFA10
WPFG20	WPF20-115BK WPF20-115	WPFA20BK WPFA20
WPFG25/30	WPF25-115BK WPF30-115BK WPF25-115 WPF30-115	WPFA25BK WPFA30BK WPFA25 WPFA30
WPFG50/60	WPF50-115BK WPF60-115BK WPF50-115 WPF60-115	WPFA50BK WPFA60BK WPFA50 WPFA60

### AC & FILTERFAN™ REPLACEMENT FILTER MATS

#### Applications

Replacement filter mat for WPF-115 Series Filterfans and WPFA Series Exhaust Grilles.

#### Features

- Packaged in quantities of 5
- Made of synthetic fibers
- Re-usable up to 20 times
- 100% resistant to humidity

AC & FILTERFAN™ REPLACEMENT FILTER MATS						
FILTER CATALOG NUMBER	USE WITH FILTER FAN OR A/C SERIES	USE WITH EXHAUST GRILLE	MASS FILTER LEVEL %	FILTER DENSITY (G/M2)	H	W
WPFM10	WPF10-115	WPFA10	67	150	3.40 (85)	3.40 (85)
WPFM20	WPF20-115	WPFA20	83	350	4.50 (115)	4.50 (115)
WPFM25/30	WPF25-115 WPF30-115	WPFA30	83	350	8.30 (210)	8.30 (210)
WPFM50/60	WPF50-115 WPF60-115	WPFA50	83	350	11.00 (280)	11.00 (280)
WPFM25/30AC	WDTS1200-6000	—	83	150	8.30 (210)	8.3 (210)
WPFM50/60AC	WDTS8000-12000	—	83	150	11.00 (280)	11.00 (280)
WPFMDTTAC	WDTT3500-4500	—	83	150	11.81 (300)	11.81 (300)

### FILTERFAN™ REPLACEMENT GRILLES

#### Features

- Packaged individually
- Grille only replacement for filter fans
- Available in black or beige

FILTERFAN™ REPLACEMENT GRILLES						
CATALOG NUMBER						
BLACK GRILLE	BEIGE GRILLE	USE WITH A/C UNIT GRILLE	BLACK GRILLE FOR FILTER FAN	BEIGE GRILLE FOR FILTER FAN	BLACK GRILLE FOR EXHAUST GRILLE W/FILTER	BEIGE GRILLE FOR EXHAUST GRILLE W/FILTER
WPG1BK	WPG1BE	—	WPF10-115BK	WPF10-115	WPFA10BK	WPFA10
WPG2BK	WPG2BE	—	WPF20-115BK	WPF20-115	WPFA20BK	WPFA20
WPG3BK	WPG3BE	WDTS1200-6000	WPF25-115BK WPF30-115BK	WPF25-115 WPF30-115	WPFA25BK WPFA30BK	WPFA25 WPFA30
WPG5BK	WPG5BE	WDTS6000-12000	WPF50-115BK WPF60-115BK	WPF50-115 WPF60-115	WPFA50BK WPFA60BK	WPFA50 WPFA60

