



CONNECT AND PROTECT

## Industrial Cooling

 **nVent**  
**HOFFMAN**

# Dependable Automation and Electronics Cooling

Keeping your electronics cool is essential for extending their life and keeping your business running. Heat can have a significant impact on electronics, causing damage and voiding manufacturers' warranties. Cooling sensitive electronics increase service life and reduces capital expenses. nVent HOFFMAN offers a full selection of cooling units covering most industrial applications including machine tool, automotive, packaging systems, wood forming, factory robotics, material handling and more.



# Industrial Cooling

## CHAPTER CONTENTS

Quick References .....	4
Local Service and Support.....	5
How to select the right cooling solution.....	6
<b>AIR CONDITIONERS.....</b>	<b>10</b>
SpectraCool Slim Fit Indoor .....	10
SpectraCool Slim Fit 300 Watt Model .....	12
SpectraCool Slim Fit 500 Watt Model .....	16
SpectraCool Slim Fit 1000 Watt Model .....	20
SpectraCool Slim Fit 1500 Watt Model .....	24
SpectraCool Slim Fit 2000 Watt Model.....	28
SpectraCool Slim Fit 2500 Watt Model .....	32
SpectraCool Slim Fit 4000 Watt Model.....	36
SpectraCool Indoor/Outdoor G-Series.....	40
G28 .....	41
G52 .....	52
G57 .....	60
V-Series Indoor/Outdoor.....	66
Genesis Top Mount Indoor M-Series .....	78
ProAir Harsh Environments .....	84
CR23.....	85
CR29.....	90
CR43.....	96
T-Series Compact Outdoor .....	102
T-Series Mid-Size Outdoor .....	110
T-Series Large Capacity Outdoor.....	130
<b>THERMOELECTRIC COOLERS.....</b>	<b>142</b>
TE09 60 Watt .....	144
TE12 100 Watt .....	146
TE16 200 Watt .....	148
Thermoelectric Temperature Controller.....	152
Thermoelectric Condense Manager .....	153
<b>HEAT EXCHANGERS CLIMAGUARD AIR-TO-WATER INDOOR .....</b>	<b>154</b>
WCHE01 870 Watt .....	155
WCHE04 2200 Watt.....	158
WCHE06 3100 Watt.....	160
WCHE14 6700 Watt.....	162
WCHE27 12500 Watt.....	164
<b>AIR FILTERED FANS.....</b>	<b>166</b>
Air Filtered Fans FL 100 .....	168
Air Filtered Fans FL 200.....	169
Air Filtered Fans FL 225.....	170
Air Filtered Fans FL 250.....	171
Air Filtered Fans FL 300.....	172
Air Filtered Fans FL 500.....	173
Air Filtered Fans FL 600.....	174

# Cooling General Information: Quick Reference

Use this handy table to match your electronic cooling requirements with the most effective nVent HOFFMAN protective cooling solution.

	SpectraCool	SLIM FIT	V-Series	ProAir	T-Series	A2W HEX WCHE-Series	HazLoc Air Conditioner	TEC Thermoelectric
<b>SYSTEM APPLICATION</b>								
For indoor industrial								
For harsh/corrosive environments							■	
For washdown applications								
For outdoor enclosures								■
For telecommunications shelters								
<b>TEMPERATURE OF THE ELECTRONICS</b>								
Cooler than outside the enclosure							■	
Warmer than outside the enclosure								
<b>AIR CONDITIONER COOLING CAPACITY</b>								
1000-2000 BTU/Hr (300-700 Watt)								
4000-6000 BTU/Hr (1200-2000 Watt)							■	
8000-12000 BTU/Hr (2300-3500 Watt)							■	
20000 BTU/Hr (5900 Watt)								
2-ton 23500 BTU/Hr (6900 Watt)								
3-ton 42000 BTU/Hr (12300 Watt)								
5-ton 59000 BTU/Hr (17300 Watt)								
<b>THERMOELECTRIC COOLING CAPACITY</b>								
60 Watt (178 BTU/Hr.)								
100 Watt (321 BTU/Hr.)								
200 Watt (567 BTU/Hr.)								■
<b>POWER INPUT</b>								
230 VAC 50 Hz								
115 & 230 VAC 50/60 Hz							■	
400/460 VAC 50/60 Hz 1-phase							■	
400/460 VAC 50/60 Hz 3-phase							■	
24 & 48 VAC								■
<b>MOUNTING</b>								
Side							■	
Top								
Rack								
<b>CABINET PROTECTION</b>								
Type 12								
Type 3R							■	
Type 4								
Type 4X							■	
<b>CABINET DIMENSION</b>								
Fits 8"/203 mm								
Fits 12"/305 mm							■	
Fits 16"/406 mm								
Fits 20"/508 mm or larger								

# Cooling General Information: Local Service and Parts

## TECHNICAL SUPPORT

cooling.service@nVent.com

**+49 (0) 7082.794.0**

- Technical assistance
- Service and warranty support
- On-line resources
- Specifications and drawings

## AFTERMARKET SUPPORT – REGIONAL LOCATIONS

### NORTH AMERICA

2100 HOFFMAN Way  
Minneapolis, Minnesota 55303-1745 U.S.A.  
Tel: +1-763-422-2211

### BRAZIL

Rua Joao Marcon, 165  
18550.000 – Centro  
Boituva – SP  
Tel: +55 15 3363 9100

### EUROPE

Langenalber Straße 96-100  
75334 Straubenhardt, Germany  
Tel: +49 (0) 7082 794-0

### CHINA

21st Floor of Cloud Nine Plaza  
No. 1118 West Yan'an Road  
Changning District, Shanghai  
P.R. China  
Tel: +86 400 820 1133

### SINGAPORE

18 Boon Lay Way  
TradeHub 21, #04-110/111  
Singapore 609966  
Tel: +65.6768.5800

**6,700**  
AUTHORIZED  
TECHNICIANS  
WORLDWIDE

Factory-authorized  
service available  
around the globe

## LOCAL SERVICE AND PARTS

COVERAGE YOU CAN COUNT ON

## Local Availability Means Parts in Hours, Not Weeks

In each global region, our local distributors have access to large inventories of service parts. Repair technicians worldwide can place parts orders regionally, eliminating communication barriers and ordering delays. HOFFMAN parts are usually available in-stock or shipped within hours, versus shipping delays that can last weeks.

OVER  
**1,000**  
COOLING  
SPARE PARTS  
WHEN YOU  
NEED THEM



## AN UNRIValed STRATEGIC PARTNERSHIP FOR THE MOST RESPONSIVE LOCAL SERVICE

Through partnership with Johnson-Northwest, HOFFMAN offers unsurpassed service presence and response with expertise that reaches worldwide. JNW delivers full-service capabilities and complete in- and out-of-warranty service for HOFFMAN cooling products from over 700 local service locations around the globe.

Through JNW, HOFFMAN offers

- 24/7/365 service availability
- Online service requests
- Factory-authorized expertise to service all HOFFMAN models and many competitor models
- Local service in hundreds of North American cities and around the globe

- In-stock availability for selected cooling parts
- Global coordination of service and maintenance programs
- Expedited service and parts availability
- Extensive reporting capabilities including up-to-date status monitoring
- Automatic emails about change-to-repair-order status

# Cooling General Information: How To Select The Right Cooling Solution

## WHY COOL ELECTRONICS IN THE FIRST PLACE?

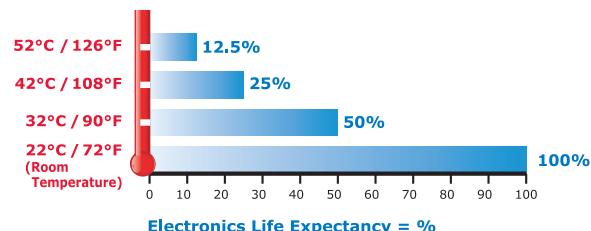
Keeping your electronics cool is essential to extending their life and keeping your business running.

## HEAT RUINS ELECTRONICS

The life expectancy of electronics is cut in half every 10°C/18°F they operate above room temperature.

Operating electronics above certain temperatures can void manufacturers' warranties, making proper cooling essential. Cooling vital electronics increases service life and reduces capital expenses over the long-term.

Electronics Life Expectancy with Every 10° C Rise over Room Temperature



## SOURCES OF HEAT

Damaging heat can come from a variety of sources. Inside the cabinet, heat can come from:

- AC power supplies
- Controllers, drives and servos
- Transformers and rectifiers
- Processors and server racks
- Radio equipment
- And other electronic components

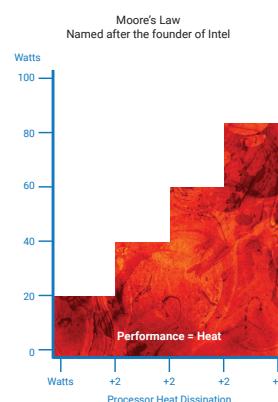
Heat also comes from sources outside the enclosure such as:

- Solar heat gain
- Welding processes
- Paint oven
- Blast furnace
- Foundry equipment

## TREND TOWARD MORE DAMAGING HEAT

For the foreseeable future, the trend is toward increasing levels of heat in electronics, not less, because the market's thirst for more information processing capacity and speed continues to grow. This trend is known as "Moore's Law."

More powerful data-processing electronics generate extra heat with virtually every new system that is designed. There is no guarantee that an application which did not require much, if any, cooling in the past will not need cooling in the future. The new system likely has more functionality and will probably require some form of cooling as a result.



## THE CONSEQUENCES OF DAMAGING HEAT

Heat build-up can adversely affect industrial controls and sensitive electronic systems as follows:

- De-rated drive performance
- I/C-based devices experience intermittent fluctuations
- MTBF decreases exponentially
- Catastrophic failure

The costs when a factory line or electronic system fails can include:

- Productivity losses
- Component replacement costs
- Late shipments
- Customer dissatisfaction
- Lost revenue
- Cell phone tower outage
- Breach in homeland security

Direct costs to a business can be as much as \$50,000 per hour of system downtime.

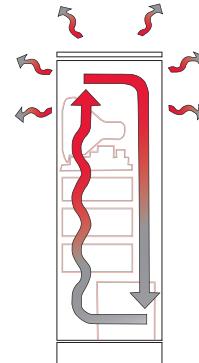
# Cooling General Information: How To Select The Right Cooling Solution

## CONDUCTIVE ENCLOSURE COOLING

This is a passive way to cool electronics. It simply allows the heat to radiate through the cabinet walls.

Conductive enclosure cooling works well with electronics systems that have small heat loads (<50 W) and cool air around the enclosure <78°F/25°C.

If heat is an issue, one option within this type of cooling is to increase cabinet size to create more surface area to speed the transfer of heat. However, growing cabinet size is often not a practical solution because of space limitations and the greater heat loads associated with today's high-power electronics.

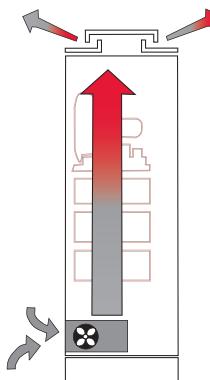


## FRESH AIR ENCLOSURE COOLING

This is an active way to manage heat in electronics applications. This type of cooling ventilates fresh air through the cabinet, exhausting heat away from the hot components.

Fresh air enclosure cooling may be used when the electronics system is deployed in a relatively clean and cool environment such as an office building, data networking center or light-duty factory. Options for cooling electronic enclosures with fresh air include filter fans, fan trays, motorized impellers and packaged blowers.

Fresh air enclosure cooling is known as an "open-loop system" because no significant seal is maintained to protect electronic components from harmful elements such as dirt, water, metal filings and corrosive fumes.



## SEALED ENCLOSURE COOLING

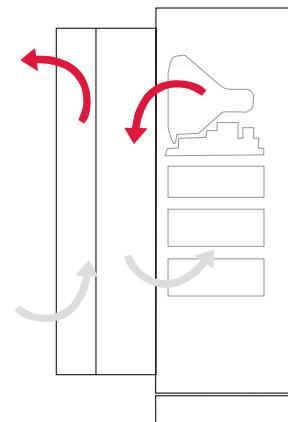
This is another active way to cool electrical components. This type of cooling maintains the seal of the enclosure—using an air conditioner or heat exchanger as examples—to remove heat from inside the electronics cabinet.

Protective cooling is generally required when the electronics application:

- (1) operates in high temperatures, typically over 95°F/35°C,
- (2) is deployed in a harsh environment such as an outdoor telecom base station, wastewater treatment plant, metal working operation, oil rig platform, paper mill, foundry and/or
- (3) generates a high heat load from its own components, usually more than 500 W.

Options for sealed enclosure cooling include air conditioners, air-to-air heat exchangers, air-to-water heat exchangers, thermoelectric coolers and vortex coolers.

Sealed enclosure cooling is known as a "closed-loop system" because the seal of the electrical cabinet is maintained, allowing no elements which can damage the electronics inside the enclosure.



# Cooling General Information: How To Select The Right Cooling Solution

## SEALED VS. FRESH AIR ENCLOSURE COOLING

Since heat dissipation is often not a solution, we will limit our choices to sealed vs. fresh air enclosure cooling.

Use the environmental and electronic system criteria in the table below to determine whether sealed or fresh air enclosure cooling is most appropriate for your application.

### Choosing Sealed vs. Fresh Air Enclosure Cooling

Specifying protective cooling that keeps your electronics components sealed from the outside environment versus using fresh air cooling to remove damaging heat depends on the following profile of your system application (check one side or the other for each of the six criteria):

FRESH AIR	CRITERIA	SEALED
Clean Air / Some Dust / Dripping Water	<input type="checkbox"/> <b>SYSTEM OPERATING ENVIRONMENT</b>	<input type="checkbox"/> Dirty / Wet / Metal Filings / Outdoors / Corrosive Fumes
Moderate to Low (typically under 35° C / 95° F)	<input type="checkbox"/> <b>TEMPERATURE OUTSIDE OF THE ENCLOSURE</b>	<input type="checkbox"/> Hot (typically over 35° C / 95° F)
Somewhat to Well-Above Ambient Temperature	<input type="checkbox"/> <b>TEMPERATURE RATING OF THE ELECTRONICS</b>	<input type="checkbox"/> Below to Somewhat Above Ambient Temperature
Moderate to Low	<input type="checkbox"/> <b>HUMIDITY OUTSIDE OF THE ENCLOSURE</b>	<input type="checkbox"/> High Relative Humidity
Wide	<input type="checkbox"/> <b>TEMPERATURE RANGE FOR THE ELECTRONICS</b>	<input type="checkbox"/> Narrow / Precise
Moderate to Low (typically under 3000 Watts)	<input type="checkbox"/> <b>SYSTEM POWER DRAW / HEAT LOAD</b>	<input type="checkbox"/> Moderate to High (typically over 3000 Watts)

If most of your assessments fell on the fresh air side, then a filter fan, fan tray, motorized impeller or blower is probably the correct cooling solution for your application. However, if most of your assessments were on the protective side, then an air conditioner or heat exchanger is likely the right cooling solution for your electronics system.

**NOTES:**

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# SpectraCool Slim Fit



## INDUSTRY STANDARDS

UL/cUL Listed; Type 12; File No. SA6453

CE, EAC, RoHS

Cooling performance tested by TÜV SÜD Germany,  
according to DIN EN 14511

IP 54 internal loop, IP 34 external loop



## APPLICATIONS

- Automation
- Machine Tool
- Automotive
- Packaging Systems, Material Handling
- MRO (Maintenance Repair Operation)

## SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Instruction manual
- Quick start guide

## FEATURES

- Protection class: IP 54 (internal loop)/UL Type 12
- Standardized dimensions and cutouts – easy exchange by cutouts and mounting points

- Slim depth with 3 mounting options: surface, partial recess and full recess mount; mounting options all in the same model; easy changeable
- Attractive design plastic cover with high, optimized airflow
- Dust resistant coils for filterless operation
- High efficiency rotary compressor
- Active condensate management with heater strip
- Smart controller with easy setup, status codes and alarm output
- Master Slave option - reduce down time
- Door switch capability and alarm output
- Terminal block
- Remote access control - Worldwide monitoring with SNMP, Ethernet/IP, Modbus-TCP and Profinet

## SPECIFICATIONS

- Cooling capacity: 300 Watt to 4000 Watt
- Voltage: 230 V (50/60 Hz), 115 V (50/60 Hz) and 400/460 V 3-phase (50/60 Hz)
- Operating temperature range: 10 °C to 55 °C

## OPTIONS

- Filter
- Drain tube kit
- Remote access control by Comm-Board

## FINISH

- Standard RAL 7035 light grey paint color
- Other colors and textures on request

For product general accessories, please refer to the chapter "Accessories".

**NOTES:**

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# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 300 WATT MODEL

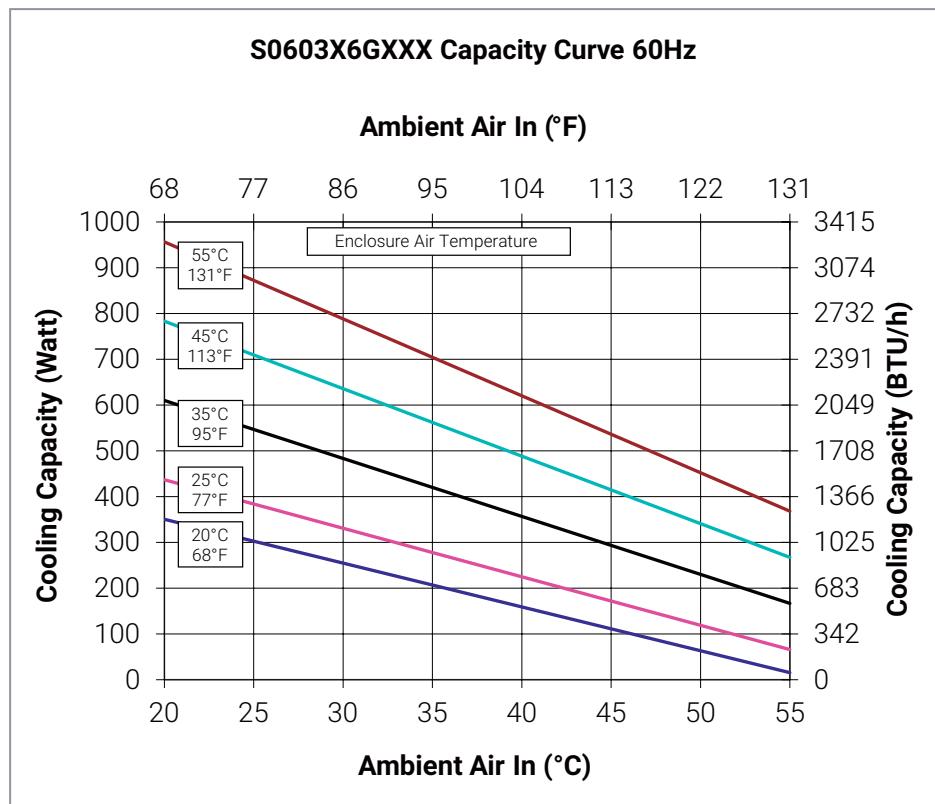
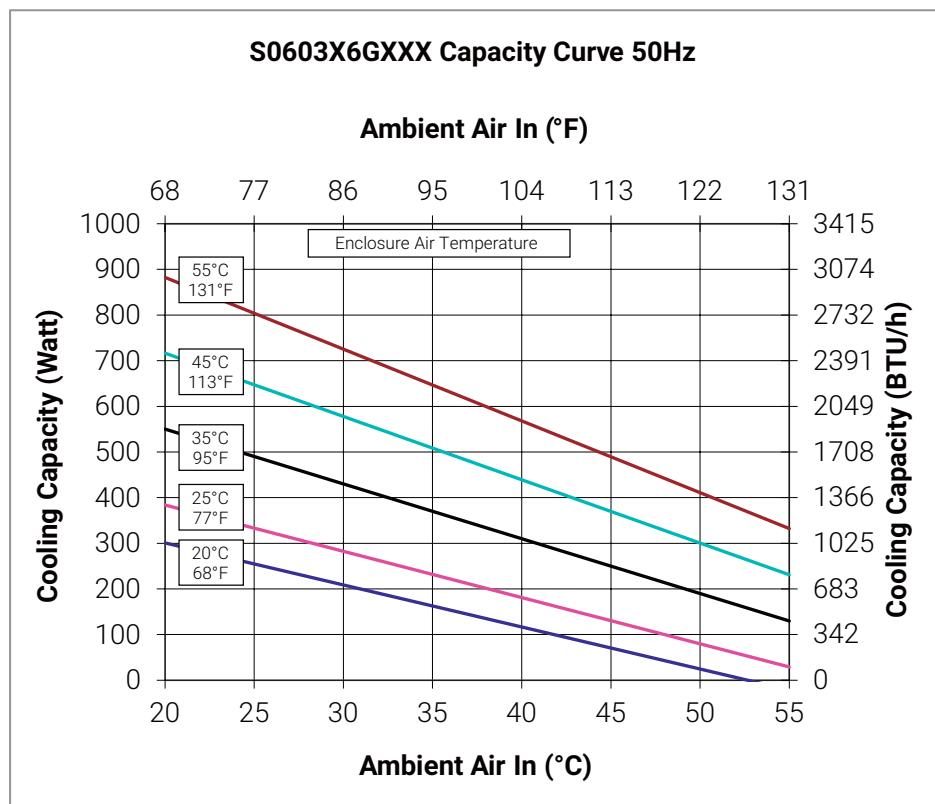
### TWO MOUNTING OPTIONS: SURFACE AND FULL RECESS MOUNT

Unit Reference	300W 115V	300W 230V
Item number		
Indoor Model without Comm-Board	<b>S060316G031</b>	<b>S060326G031</b>
Indoor Model with Comm-Board	<b>S060316G041</b>	<b>S060326G041</b>
<b>COOLING PERFORMANCE</b>		
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>370</b>	<b>370</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	<b>370/420</b>	<b>370/420</b>
Cooling Performance L35 L50 (Watt) 50/60Hz	190/230	190/230
Refrigerant	R134a	R134a
Refrigerant Charge (g)	133	128
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28
Operating Temperature Range Min./Max. °C	10/52	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	109/124	109/124
External Loop (m³/h)	129/156	129/156
Duty Cycle	100%	100%
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage (Volt)</b>	<b>100/115</b>	<b>230</b>
Phase	1~	1~
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	270/300	300/320
Max Power Consumption L35 L50 (Watt) 50/60Hz	280/320	330/350
Max. Nominal Current (Amps)	4.0/3.8	1.8/1.7
Starting Current (Amps)	13/13	6/6
Pre-fuse T (Amps)	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>		
Cooling Performance L35 L35 50/60Hz	1.37/1.40	1.23/1.31
Cooling Performance L35 L50 50/60Hz	0.68/0.70	0.58/0.65
<b>ENCLOSURE PROTECTION</b>		
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54
Controller		
Description	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C
<b>Sound Level</b>		
At 1 M (dBA)	68	68
<b>UNIT CONSTRUCTION</b>		
Material	Steel	Steel
Finish	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>		
Height (mm)	550	550
Width (mm)	280	280
Depth (mm)	142	142
Weight (kg)	13	13

# SpectraCool Slim Fit

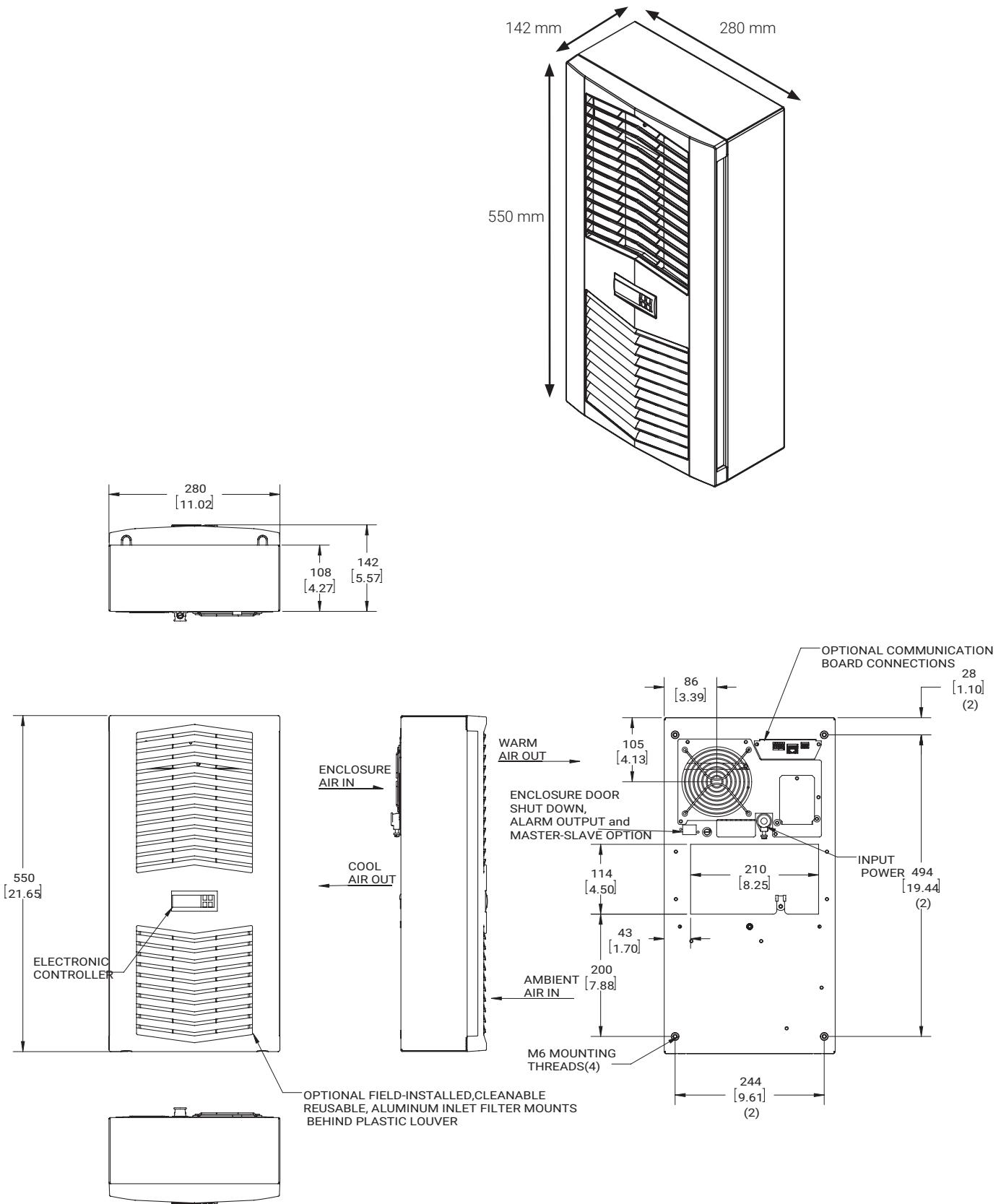
## SpectraCool SLIM FIT – 300 WATT MODEL

### PERFORMANCE CURVES FOR 300W MODELS ACCORDING TO EN 14511



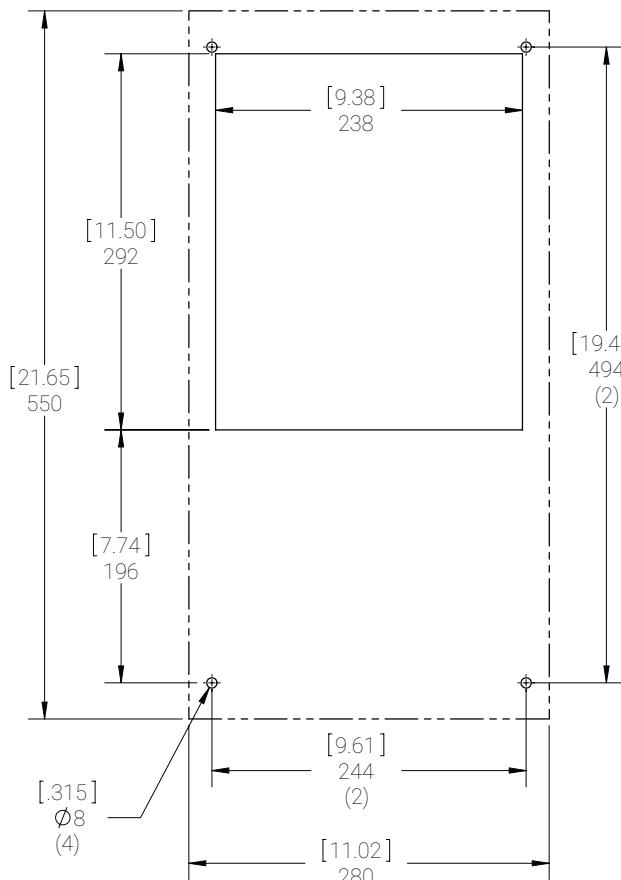
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 300 WATT MODEL

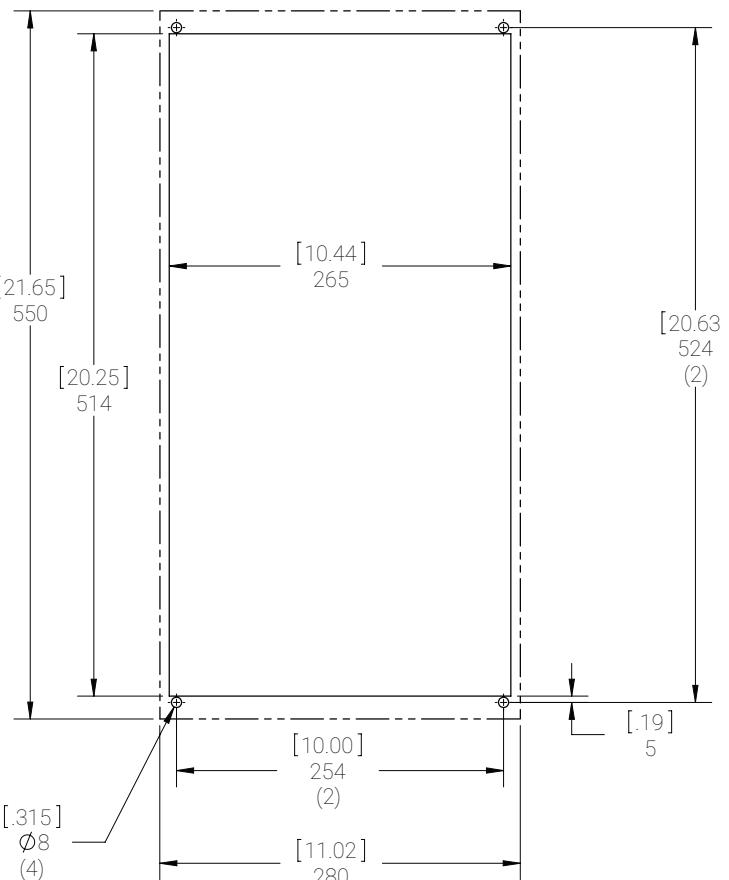


# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 300 WATT MODEL



**Surface Mount**



**Full Recess Mount**

### 300W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 500 WATT MODEL

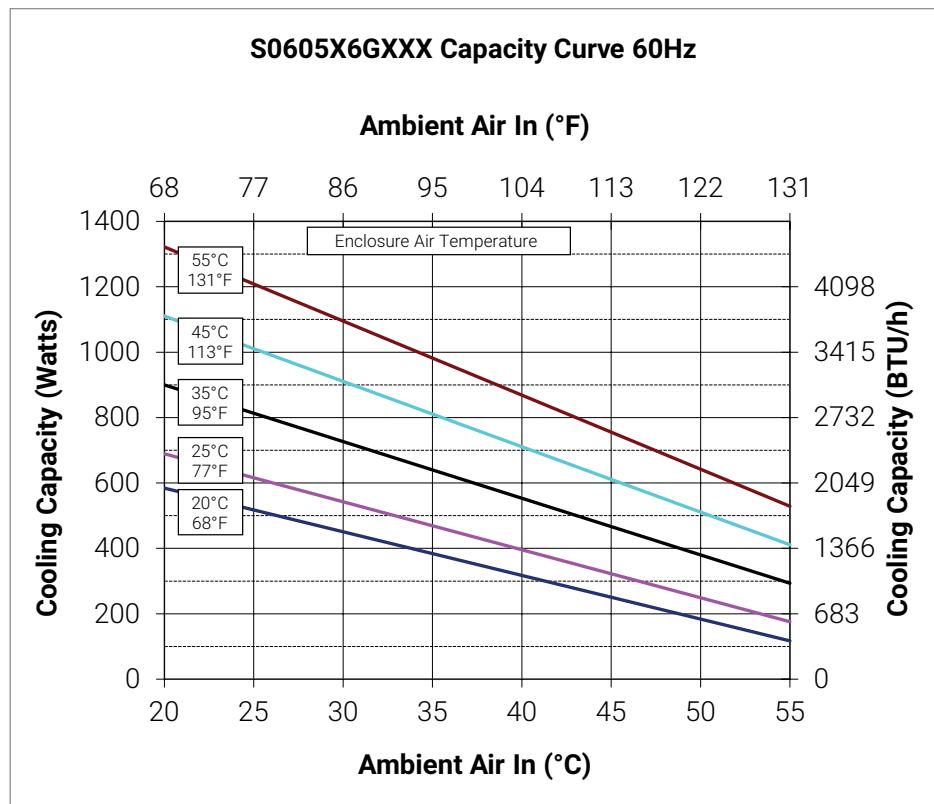
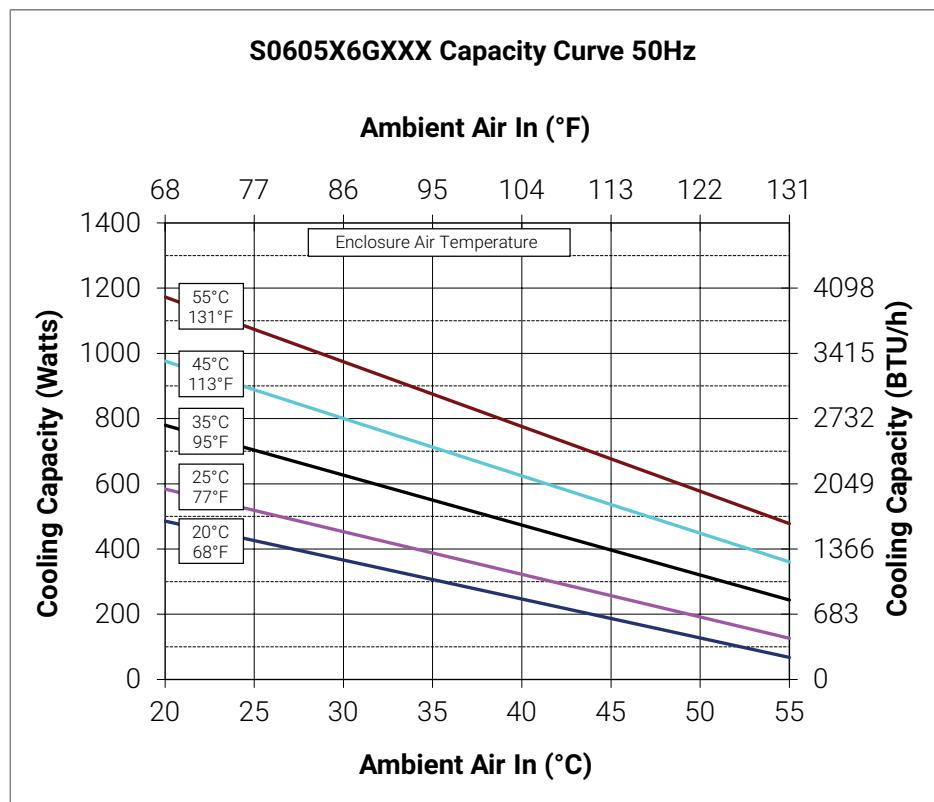
### THREE MOUNTING OPTIONS

<b>Unit Reference</b>	<b>500W 115V</b>	<b>500W 230V</b>
Item number		
Indoor Model without Comm-Board	<b>S060516G031</b>	<b>S060526G031</b>
Indoor Model with Comm-Board	<b>S060516G041</b>	<b>S060526G041</b>
<b>COOLING PERFORMANCE</b>		
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>550</b>	<b>550</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	550/640	550/640
Cooling Performance L35 L50 (Watt) 50/60Hz	320/380	320/380
Refrigerant	R134a	R134a
Refrigerant Charge (g)	162	162
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28
Operating Temperature Range Min./Max. °C	10/55	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	197/233	197/233
External Loop (m³/h)	189/219	189/219
Duty Cycle	100%	100%
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage (Volt)</b>	<b>115</b>	<b>230</b>
Phase	1~	1~
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	450/470	450/480
Max Power Consumption L35 L50 (Watt) 50/60Hz	490/540	510/540
Max. Nominal Current (Amps)	6.5/6.1	2.6/2.9
Starting Current (Amps)	21/20	9/10
Pre-fuse T (Amps)	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>		
Cooling Performance L35 L35 50/60Hz	1.22/1.36	1.24/1.35
Cooling Performance L35 L50 50/60Hz	0.64/0.70	0.62/0.70
<b>ENCLOSURE PROTECTION</b>		
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54
<b>CONTROLLER</b>		
Description	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C
<b>SOUND LEVEL</b>		
At 1 M (dBA)	68	68
<b>UNIT CONSTRUCTION</b>		
Material	Steel	Steel
Finish	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>		
Height (mm)	550	550
Width (mm)	280	280
Depth (mm)	199	199
Weight (kg)	15	15

# SpectraCool Slim Fit

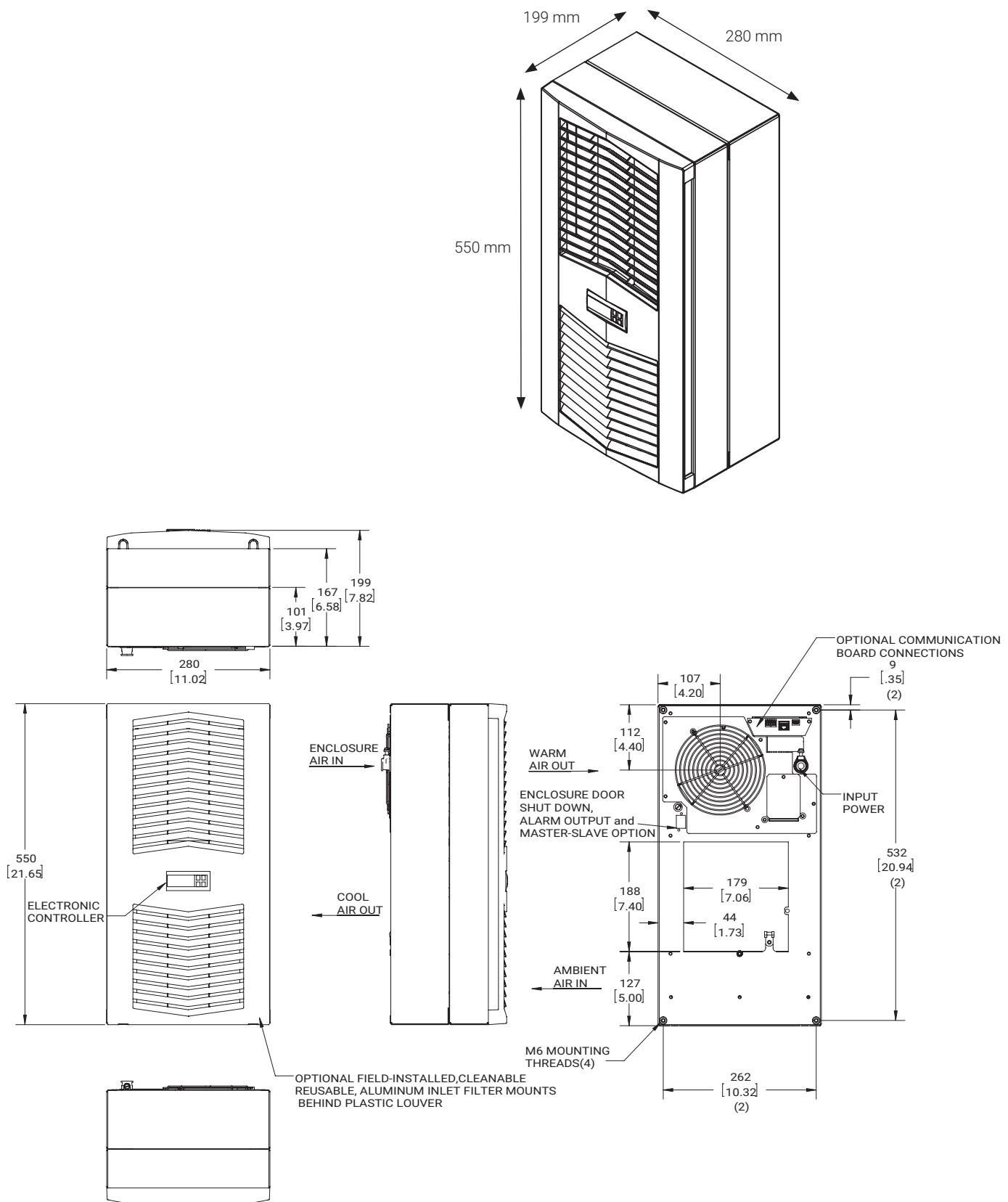
## SpectraCool SLIM FIT – 500 WATT MODEL

### PERFORMANCE CURVES FOR 500W MODELS ACCORDING TO EN 14511



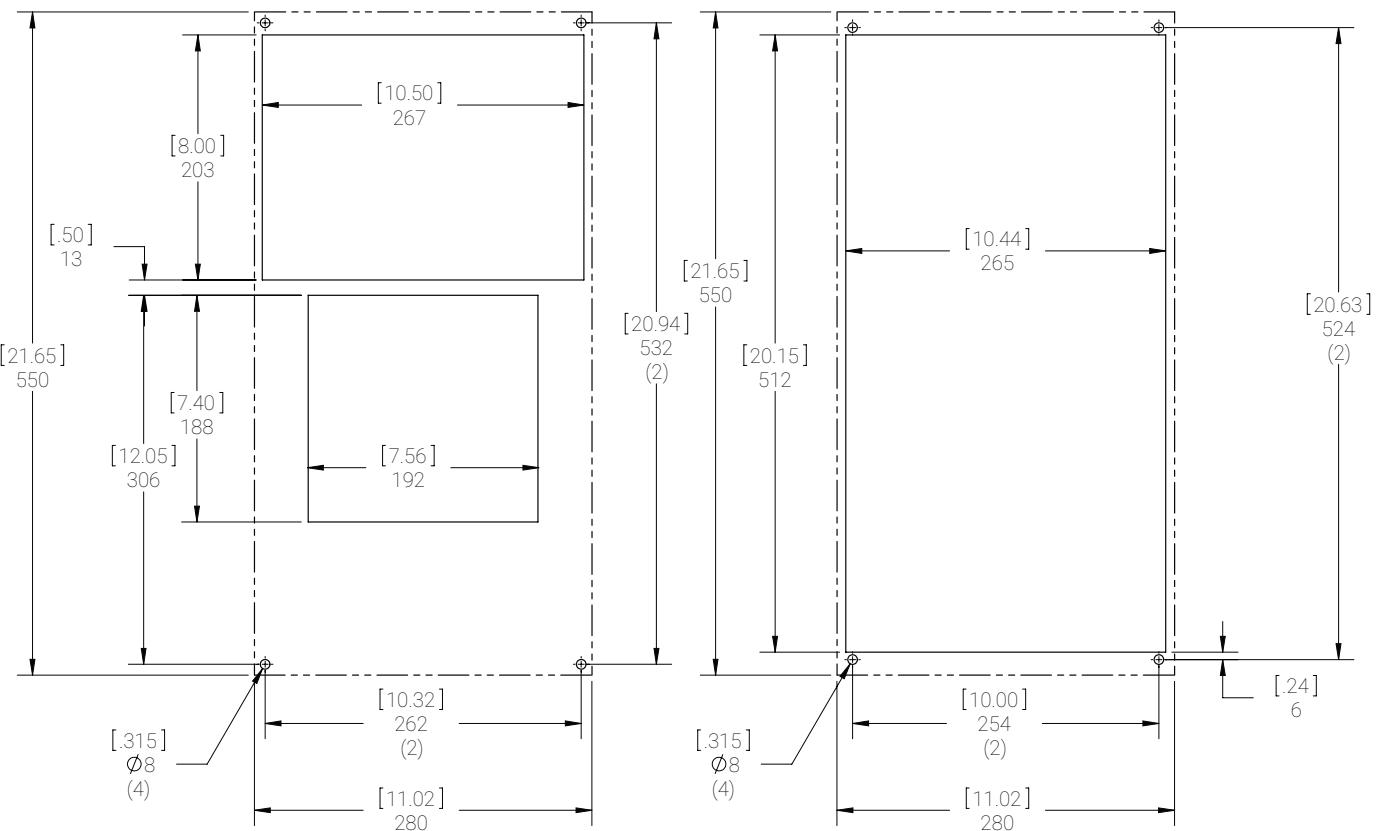
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 500 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 500 WATT MODEL



Surface Mount

Partial and Full Recess Mount

### 500W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1000 WATT MODEL

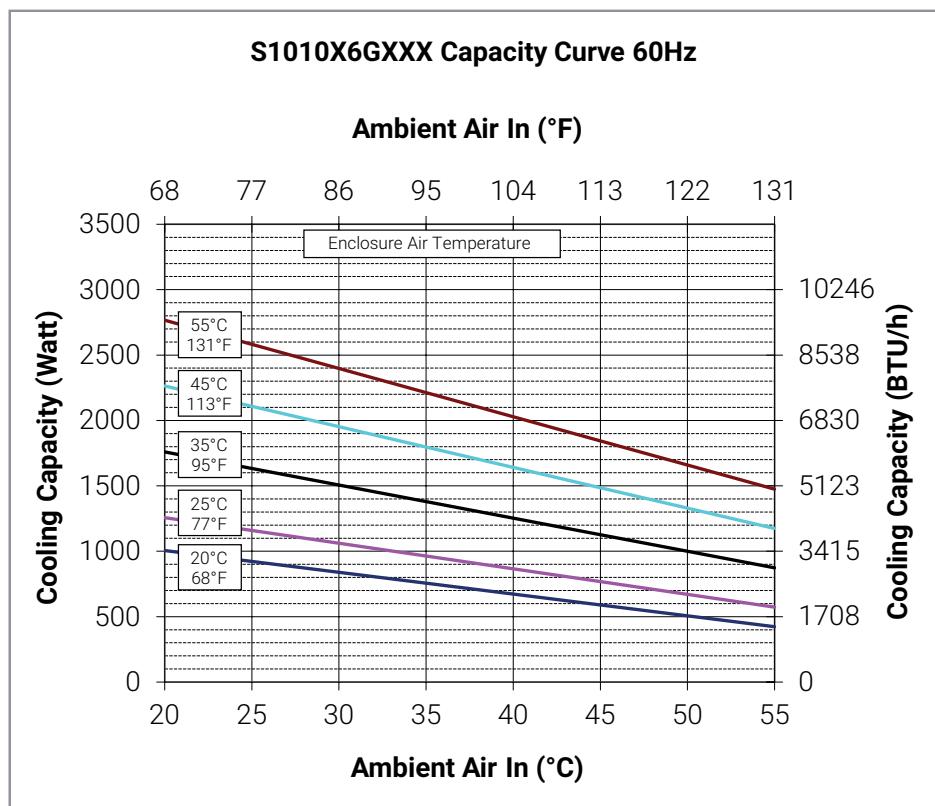
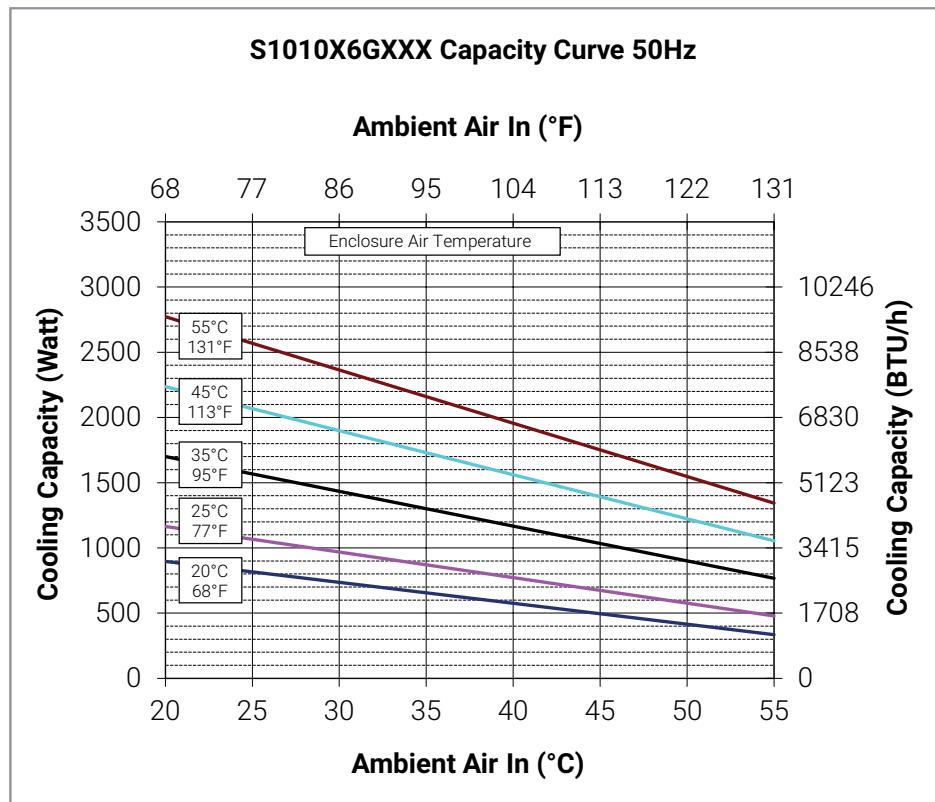
### THREE MOUNTING OPTIONS

Unit Reference	1000W 115V	1000W 230V	1000W 400/460V 1~
Item number			
Indoor Model without Comm-Board	<b>S101016G031</b>	<b>S101026G031</b>	<b>S101046G031</b>
Indoor Model with Comm-Board	<b>S101016G041</b>	<b>S101026G041</b>	<b>S101046G041</b>
<b>COOLING PERFORMANCE</b>			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>1300</b>	<b>1300</b>	<b>1300</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	1300/1380	1300/1380	1300/1380
Cooling Performance L35 L50 (Watt) 50/60Hz	900/1000	900/1000	900/1000
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	425	283	283
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28	28
Operating Temperature Range Min./Max. °C	10/55	10/55	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	350/391	350/391	350/391
External Loop (m³/h)	567/584	567/584	567/584
Duty Cycle	100%	100%	100%
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage (Volt)</b>	<b>115</b>	<b>230</b>	<b>400/460</b>
Phase	1~	1~	1~
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	810/1010	670/800	750/960
Max Power Consumption L35 L50 (Watt) 50/60Hz	950/1120	780/950	870/1090
Max. Nominal Current (Amps)	9.6/10.2	4.1/5.5	2.1/2.4
Starting Current (Amps)	32/34	14/18	7/8
Pre-fuse T (Amps)	15	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>			
Cooling Performance L35 L35 50/60Hz	1.60/1.37	1.94/1.73	1.73/1.44
Cooling Performance L35 L50 50/60Hz	0.95/0.89	1.15/1.05	1.03/0.92
<b>ENCLOSURE PROTECTION</b>			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
<b>CONTROLLER</b>			
Description	Smart controller with display	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C	35 °C
<b>SOUND LEVEL</b>			
At 1 M (dBA)	71	71	71
<b>UNIT CONSTRUCTION</b>			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>			
Height (mm)	951	951	951
Width (mm)	400	400	400
Depth (mm)	260	260	260
Weight (kg)	39	39	45

# SpectraCool Slim Fit

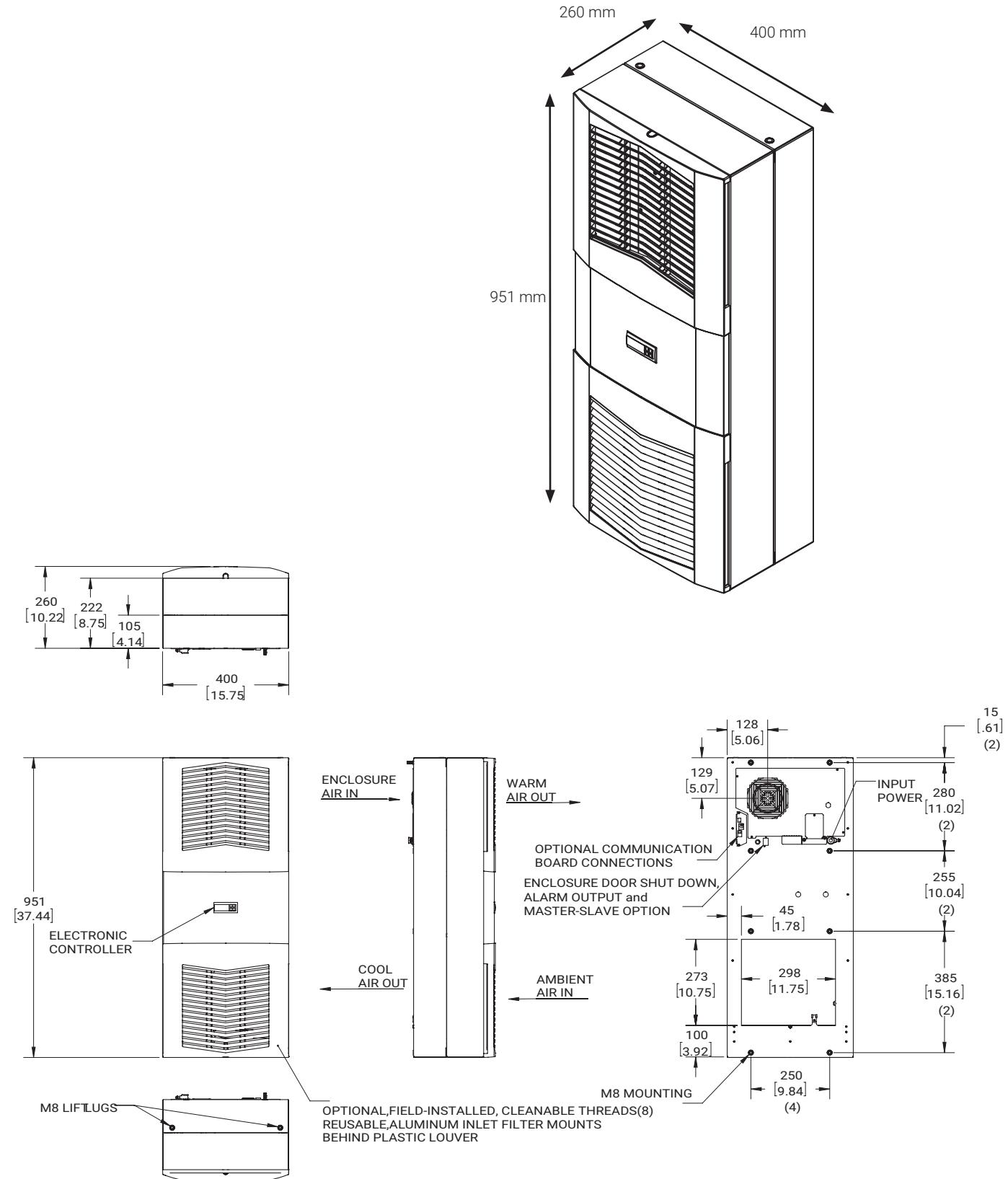
## SpectraCool SLIM FIT – 1000 WATT MODEL

### PERFORMANCE CURVES FOR 1000W MODELS ACCORDING TO EN 14511



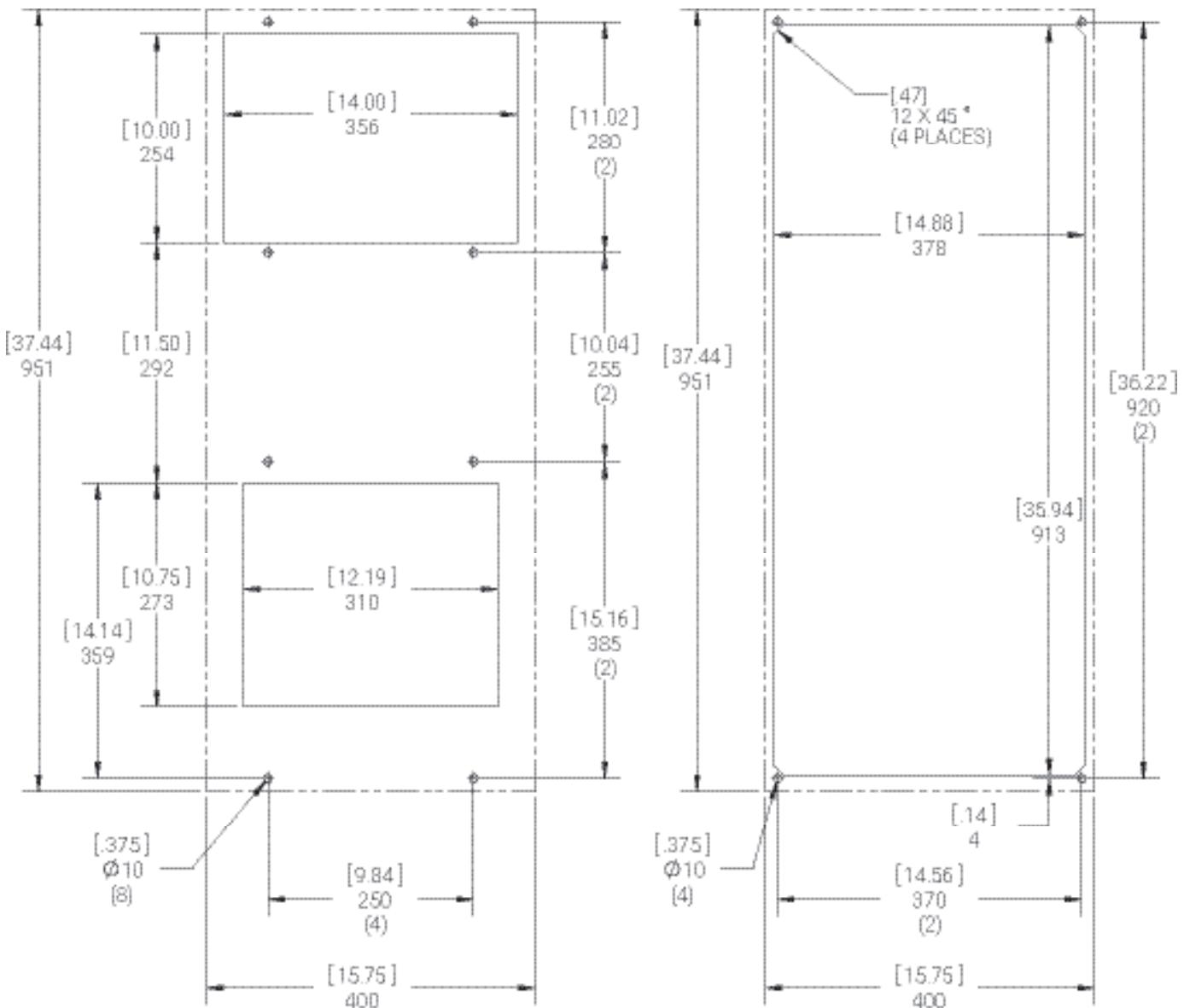
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1000 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1000 WATT MODEL



Surface Mount

Partial and Full Recess Mount

### 1000W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1500 WATT MODEL

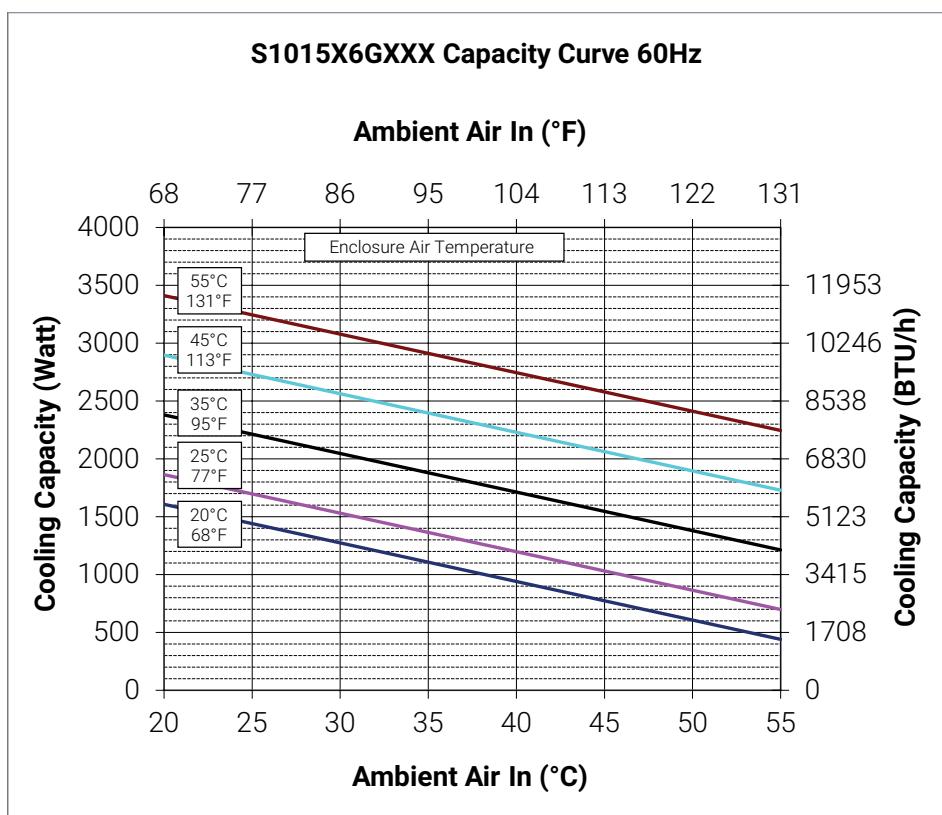
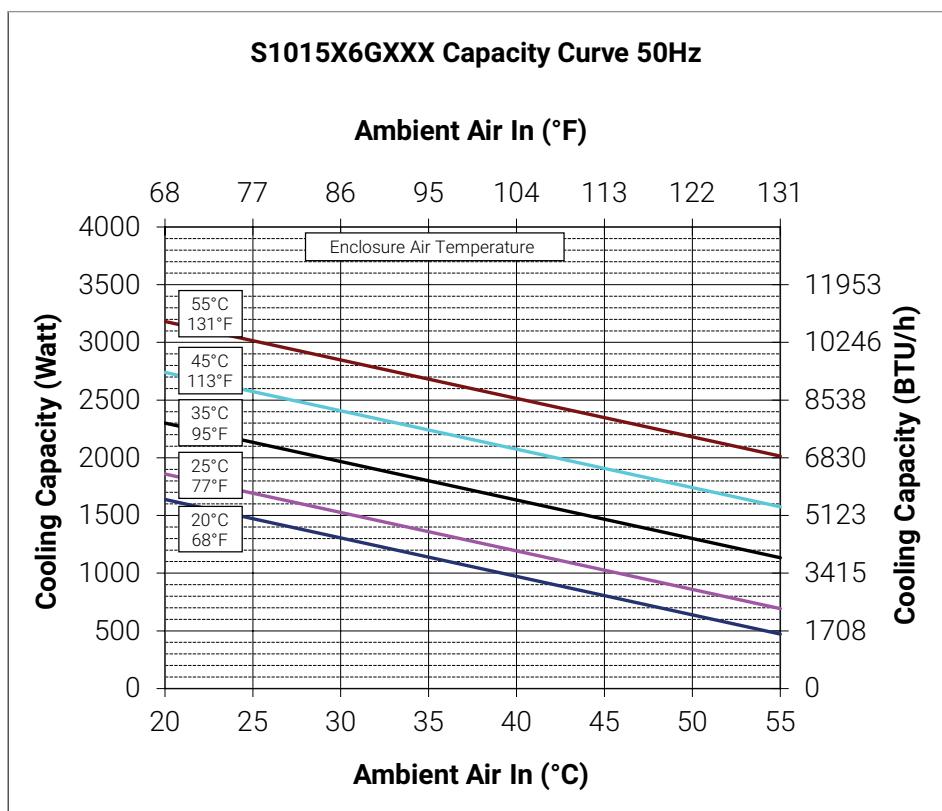
### THREE MOUNTING OPTIONS

Unit Reference	1500W 115V	1500W 230V	1500W 400/460V 3~
Item number			
Indoor Model without Comm-Board	<b>S101516G031</b>	<b>S101526G031</b>	<b>S101546G031</b>
Indoor Model with Comm-Board	<b>S101516G041</b>	<b>S101526G041</b>	<b>S101546G041</b>
<b>COOLING PERFORMANCE</b>			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>1800</b>	<b>1800</b>	<b>1800</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	1800/1880	1800/1880	1800/1880
Cooling Performance L35 L50 (Watt) 50/60Hz	1300/1380	1300/1380	1300/1380
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	425	425	510
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28	28
Operating Temperature Range Min./Max. °C	10/55	10/55	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	342/391	342/391	342/391
External Loop (m³/h)	576/579	576/579	576/579
Duty Cycle	100%	100%	100%
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage (Volt)</b>	<b>115</b>	<b>230</b>	<b>400/460</b>
Phase	1~	1~	3~
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	850/1040	850/1040	930/1130
Max Power Consumption L35 L50 (Watt) 50/60Hz	990/1160	960/1170	970/1210
Max. Nominal Current (Amps)	9.6/10.2	5.1/6.7	2.1/2.4
Starting Current (Amps)	32/34	17/22	7/8
Pre-fuse T (Amps)	15	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>			
Cooling Performance L35 L35 50/60Hz	2.12/1.81	2.12/1.81	1.94/1.66
Cooling Performance L35 L50 50/60Hz	1.31/1.19	1.35/1.18	1.34/1.14
<b>ENCLOSURE PROTECTION</b>			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
<b>CONTROLLER</b>			
Description	Smart controller with display	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C	35 °C
<b>SOUND LEVEL</b>			
At 1 M (dBA)	73	73	73
<b>UNIT CONSTRUCTION</b>			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>			
Height (mm)	951	951	951
Width (mm)	400	400	400
Depth (mm)	260	260	260
Weight (kg)	43	43	43

# SpectraCool Slim Fit

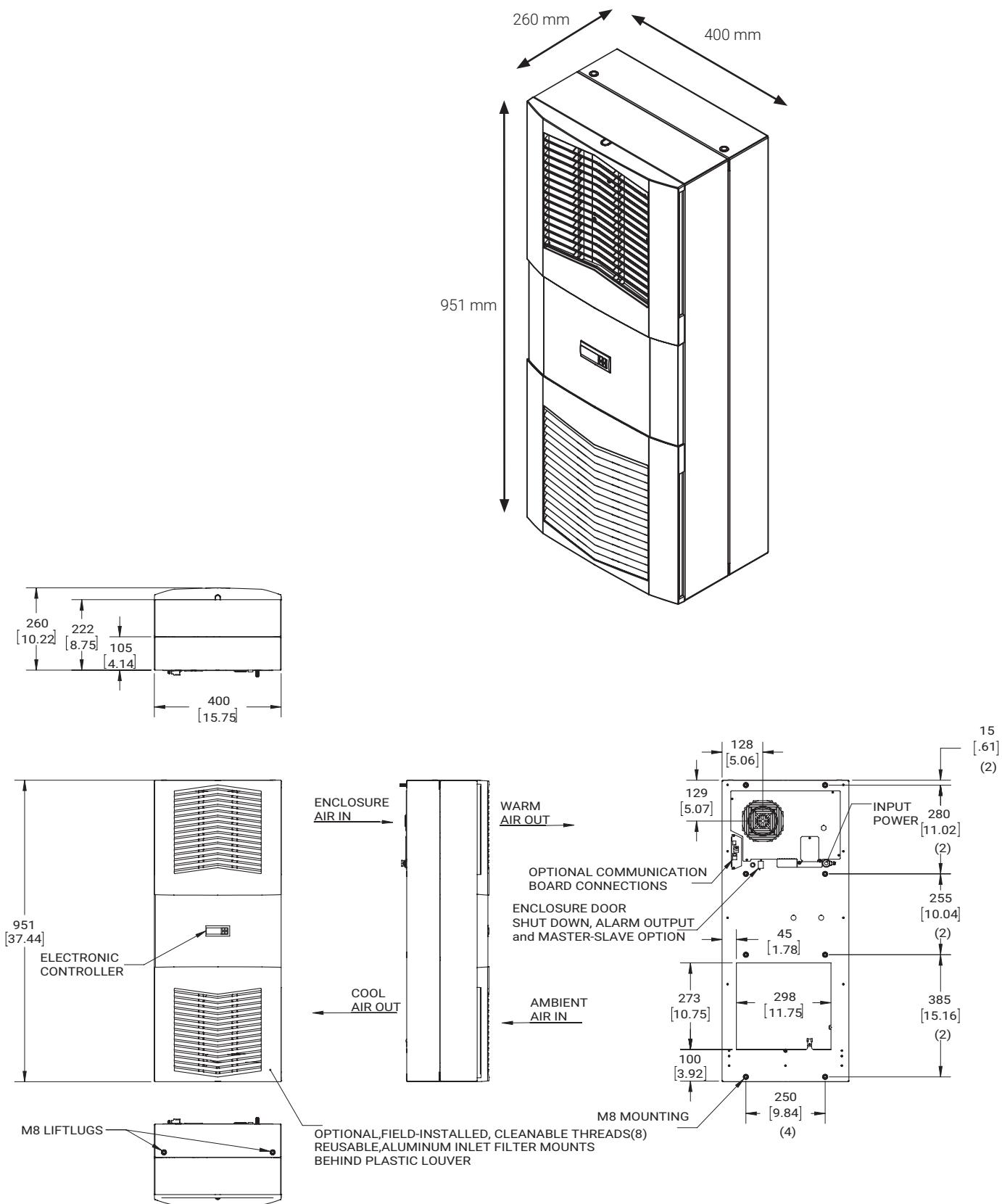
## SpectraCool SLIM FIT – 1500 WATT MODEL

PERFORMANCE CURVES FOR 1500W MODELS ACCORDING TO EN 14511



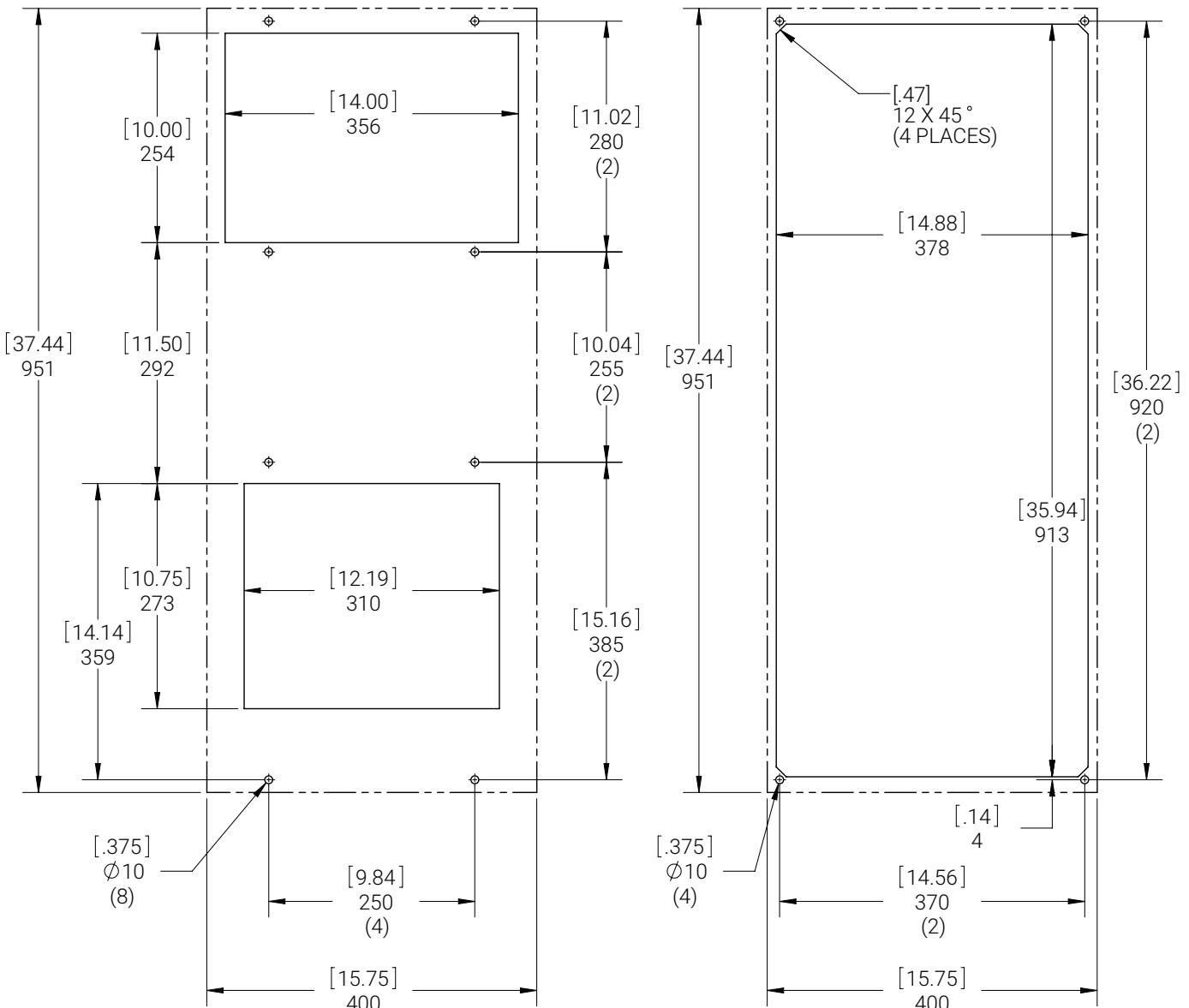
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1500 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 1500 WATT MODEL



Surface Mount

Partial and Full Recess Mount

### 1500W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2000 WATT MODEL

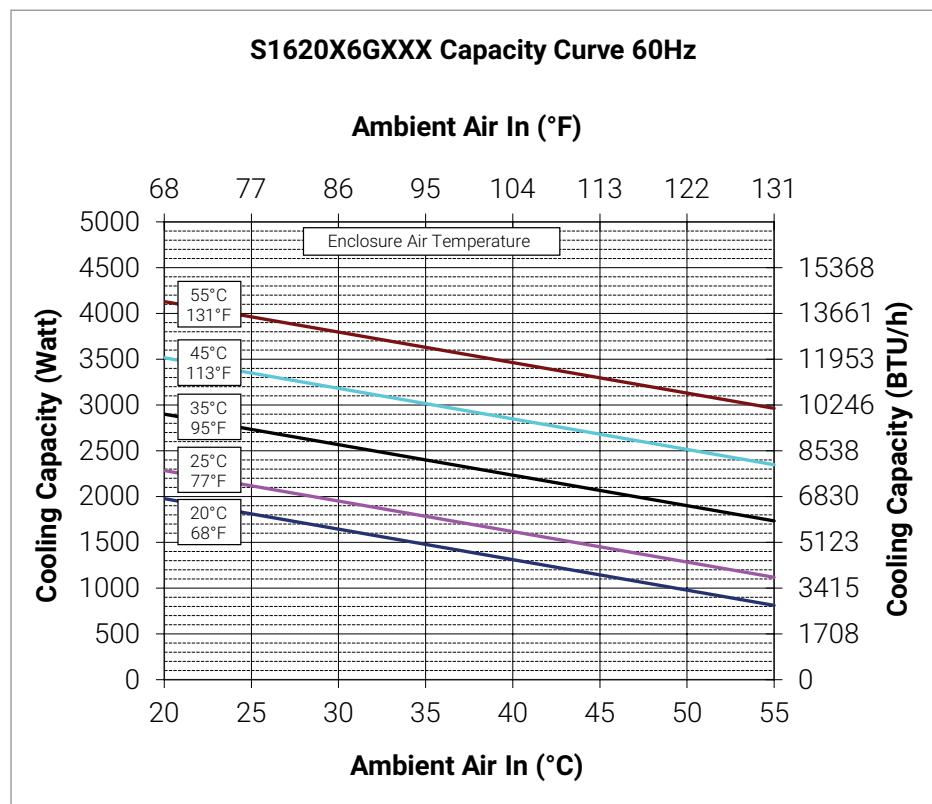
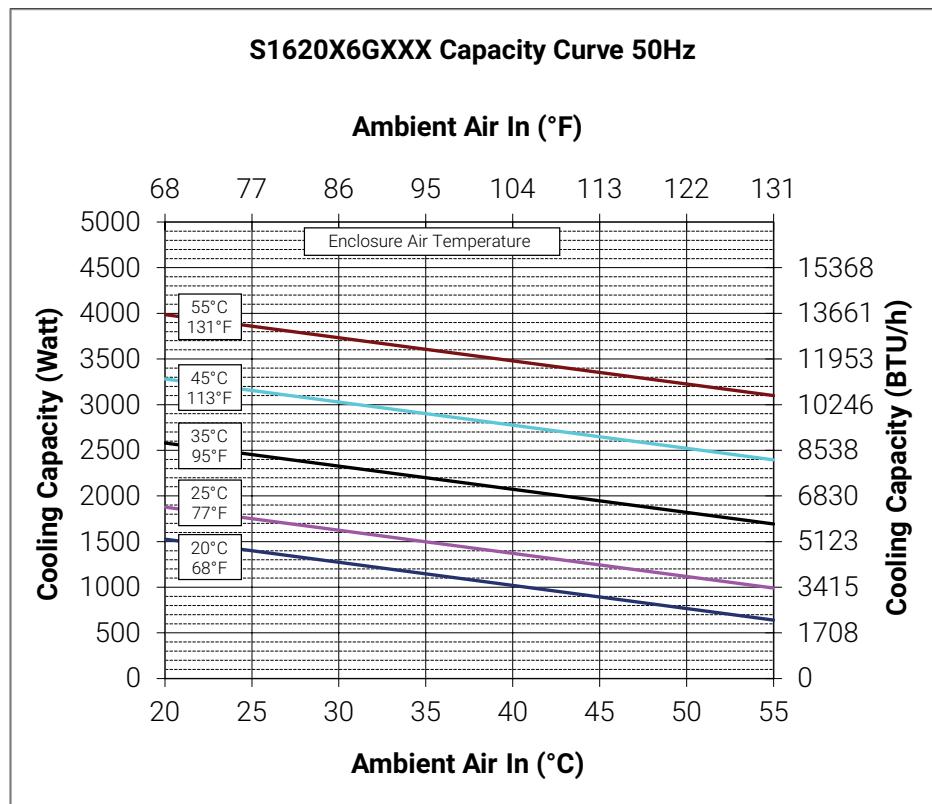
### THREE MOUNTING OPTIONS

Unit Reference	2000W 115V	2000W 230V	2000W 400/460V 3~
Item Number			
Indoor Model without Comm-Board	<b>S162016G031</b>	<b>S162026G031</b>	<b>S162046G031</b>
Indoor Model with Comm-Board	<b>S162016G041</b>	<b>S162026G041</b>	<b>S162046G041</b>
<b>COOLING PERFORMANCE</b>			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>2200</b>	<b>2200</b>	<b>2200</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	2200/2400	2200/2400	2200/2400
Cooling Performance L35 L50 (Watt) 50/60Hz	1820/1900	1820/1900	1820/1900
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	709	709	709
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28	28
Operating Temperature Range Min./Max. °C	10/55	10/55	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	454/484	454/484	454/484
External Loop (m³/h)	634/654	634/654	634/654
Duty Cycle	100%	100%	100%
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage (Volt)</b>	<b>115</b>	<b>230</b>	<b>400/460</b>
Phase	1~	1~	3~
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	930/1090	940/1140	900/1180
Max Power Consumption L35 L50 (Watt) 50/60Hz	1280/1410	1070/1320	1060/1340
Max. Nominal Current (Amps)	11.1/12.5	5.7/7.2	2.2/2.6
Starting Current (Amps)	37/41	19/24	7/9
Pre-fuse T (Amps)	15	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>			
Cooling Performance L35 L35 50/60Hz	2.37/2.20	2.34/2.11	2.44/2.03
Cooling Performance L35 L50 50/60Hz	1.42/1.35	1.70/1.44	1.72/1.42
<b>ENCLOSURE PROTECTION</b>			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
<b>CONTROLLER</b>			
Description	Smart controller with display	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C	35 °C
<b>SOUND LEVEL</b>			
At 1 M (dBA)	70	70	70
<b>UNIT CONSTRUCTION</b>			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>			
Height (mm)	1580	1580	1580
Width (mm)	400	400	400
Depth (mm)	295	295	295
Weight (kg)	68	68	68

# SpectraCool Slim Fit

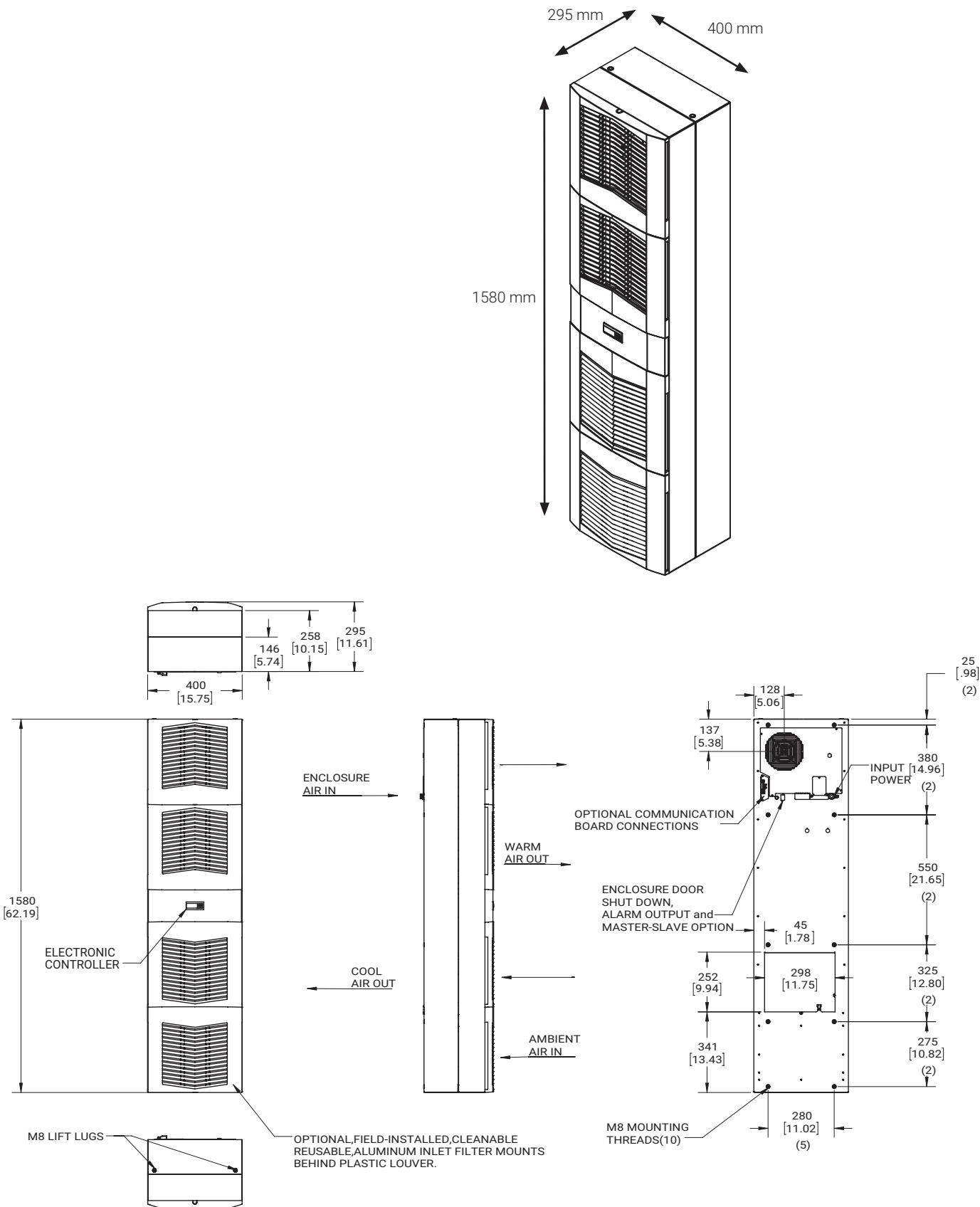
## SpectraCool SLIM FIT – 2000 WATT MODEL

PERFORMANCE CURVES FOR 2000W MODELS ACCORDING TO EN 14511



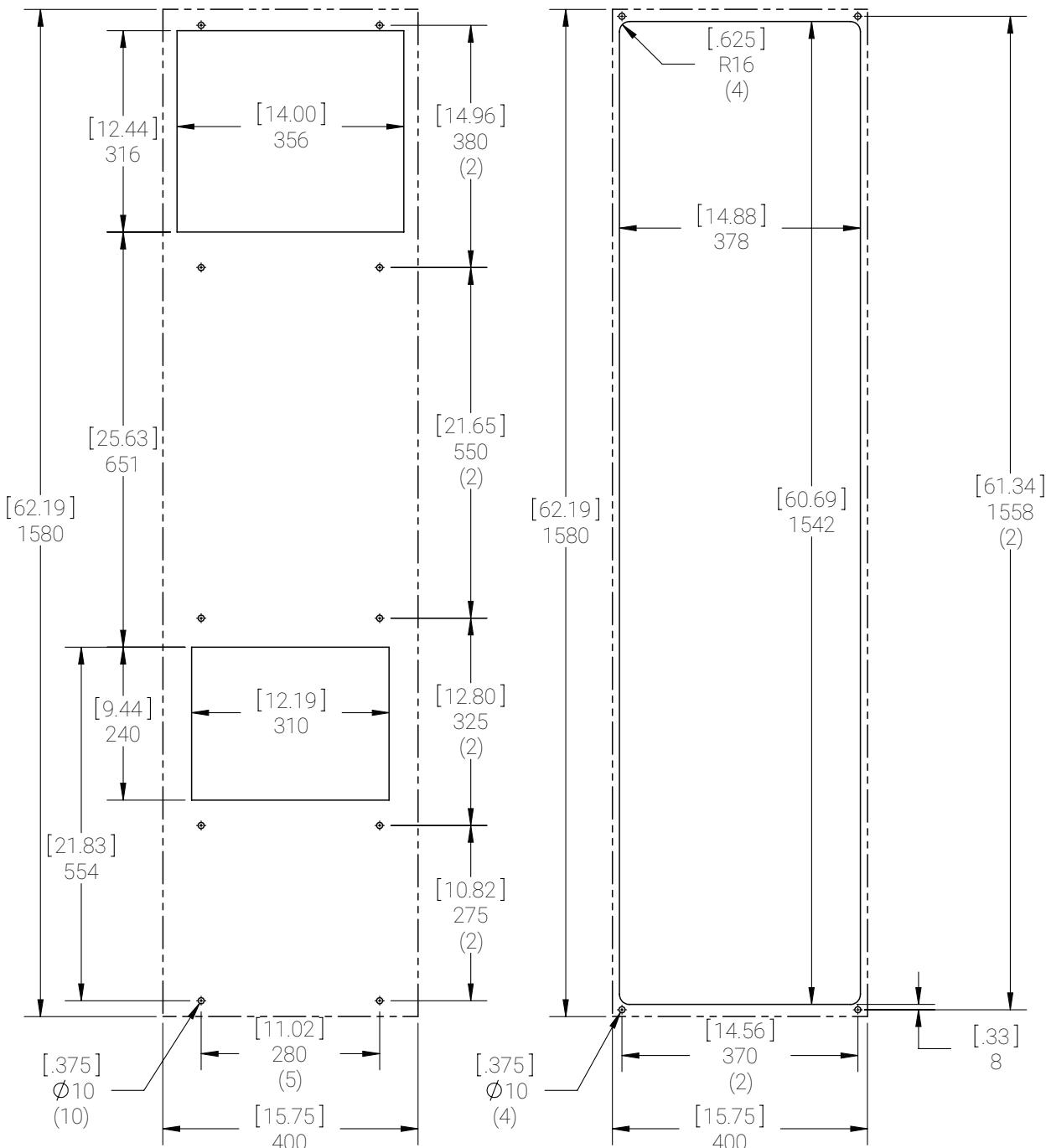
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2000 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2000 WATT MODEL



Surface Mount

Partial and Full Recess Mount

### 2000W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2500 WATT MODEL

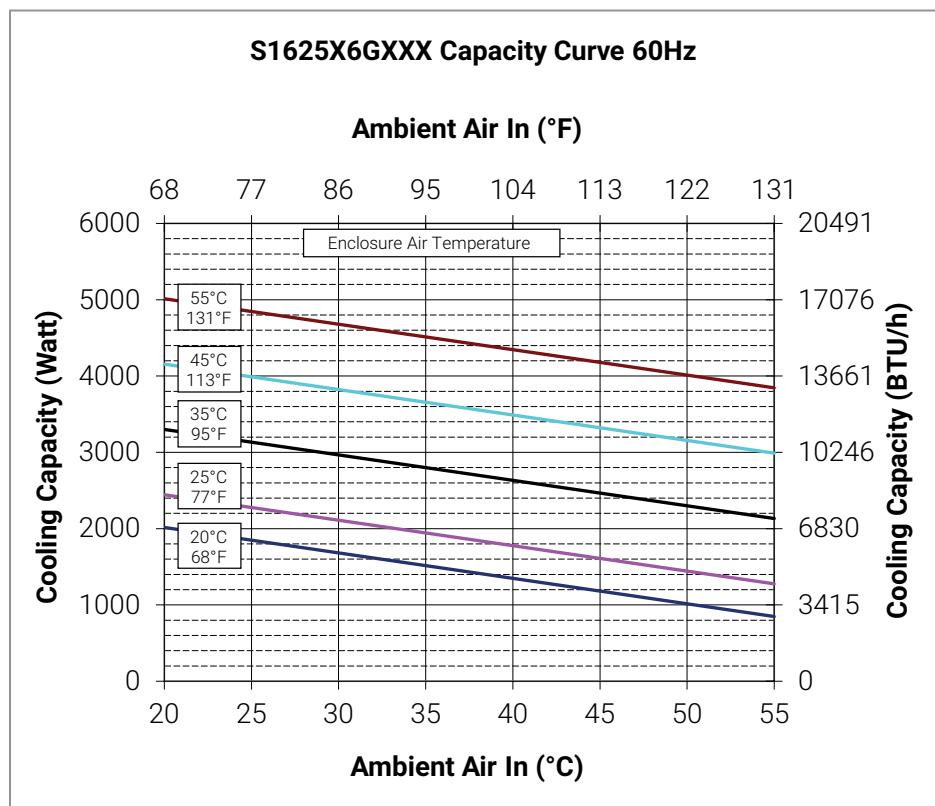
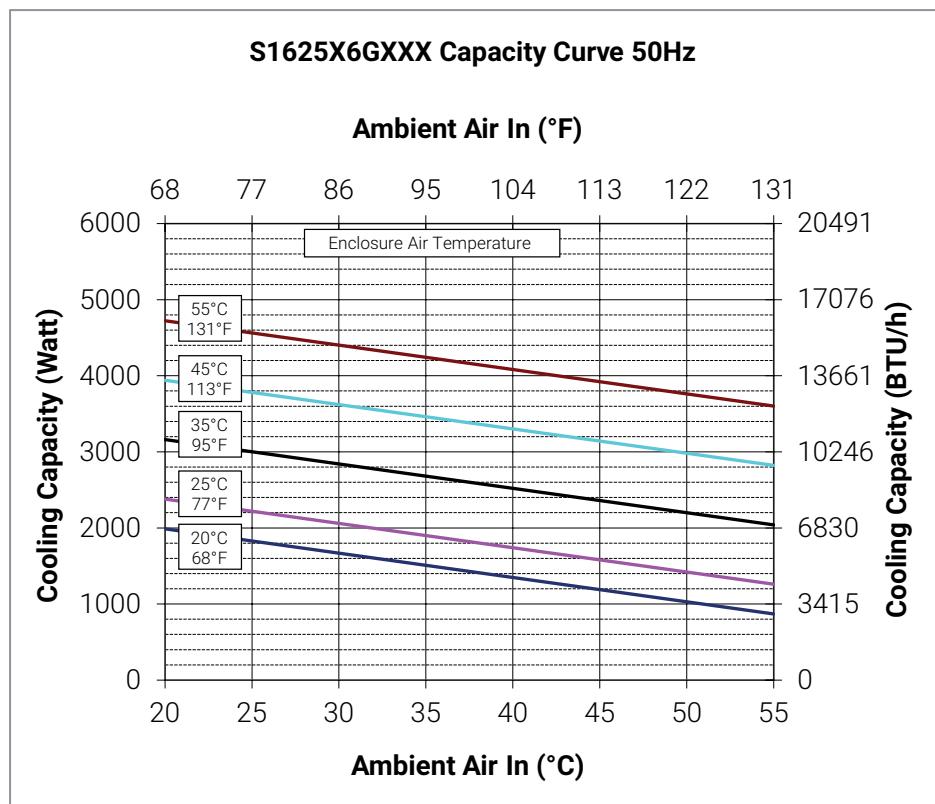
### THREE MOUNTING OPTIONS

Unit Reference	2500W 115V	2500W 230V	2500W 400/460V 3~
Item number			
Indoor Model without Comm-Board	<b>S162516G031</b>	<b>S162526G031</b>	<b>S162546G031</b>
<b>COOLING PERFORMANCE</b>			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>2680</b>	<b>2680</b>	<b>2680</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	2680/2800	2680/2800	2680/2800
Cooling Performance L35 L50 (Watt) 50/60Hz	2200/2300	2200/2300	2200/2300
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	737	737	850
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28	28	28
Operating Temperature Range Min./Max. °C	10/55	10/55	10/55
Setting Temperature Range Min./Max. °C	20/55	20/55	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	447/466	447/466	447/466
External Loop (m³/h)	1104/1143	1104/1143	1104/1143
Duty Cycle	100%	100%	100%
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage (Volt)</b>	<b>115</b>	<b>230</b>	<b>400/460</b>
Phase	1~	1~	3~
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	1230/1420	1320/1650	1150/1510
Max Power Consumption L35 L50 (Watt) 50/60Hz	1500/1970	1500/1910	1330/1770
Max. Nominal Current (Amps)	16.1/16.9	8.0/10.1	3.2/3.4
Starting Current (Amps)	53/56	26/33	11/11
Pre-fuse T (Amps)	20	15	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511</b>			
Cooling Performance L35 L35 50/60Hz	2.18/1.97	2.03/1.70	2.33/1.85
Cooling Performance L35 L50 50/60Hz	1.47/1.17	1.47/1.20	1.65/1.30
<b>ENCLOSURE PROTECTION</b>			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
<b>CONTROLLER</b>			
Description	Smart controller with display	Smart controller with display	Smart controller with display
Thermostat Location	Ambient side	Ambient side	Ambient side
Factory Thermostat Setting (°C)	35 °C	35 °C	35 °C
<b>SOUND LEVEL</b>			
At 1 M (dBA)	72	72	72
<b>UNIT CONSTRUCTION</b>			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
<b>UNIT DIMENSIONS</b>			
Height (mm)	1580	1580	1580
Width (mm)	400	400	400
Depth (mm)	295	295	295
Weight (kg)	70	70	70

# SpectraCool Slim Fit

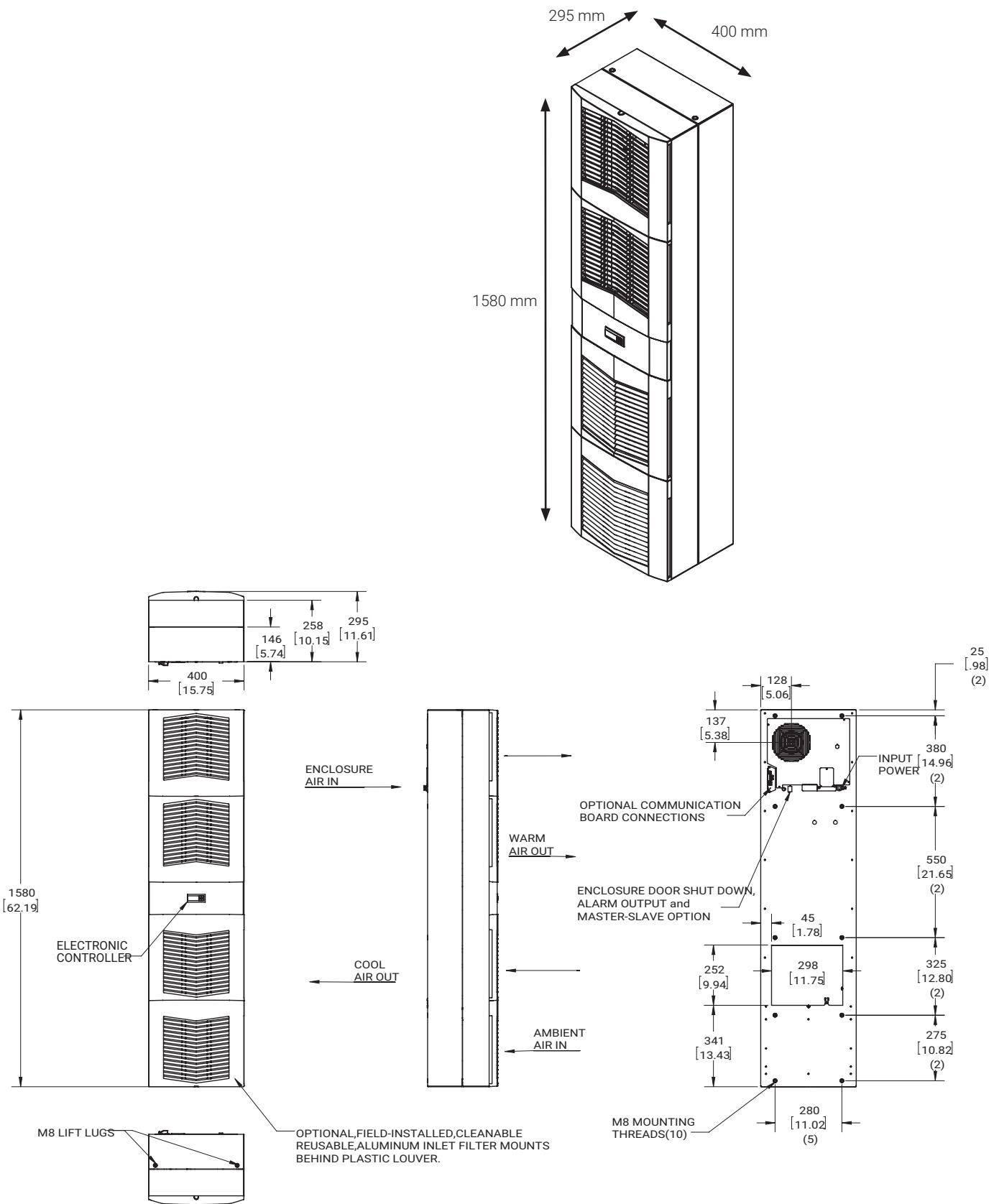
## SpectraCool SLIM FIT – 2500 WATT MODEL

PERFORMANCE CURVES FOR 2500W MODELS ACCORDING TO EN 14511



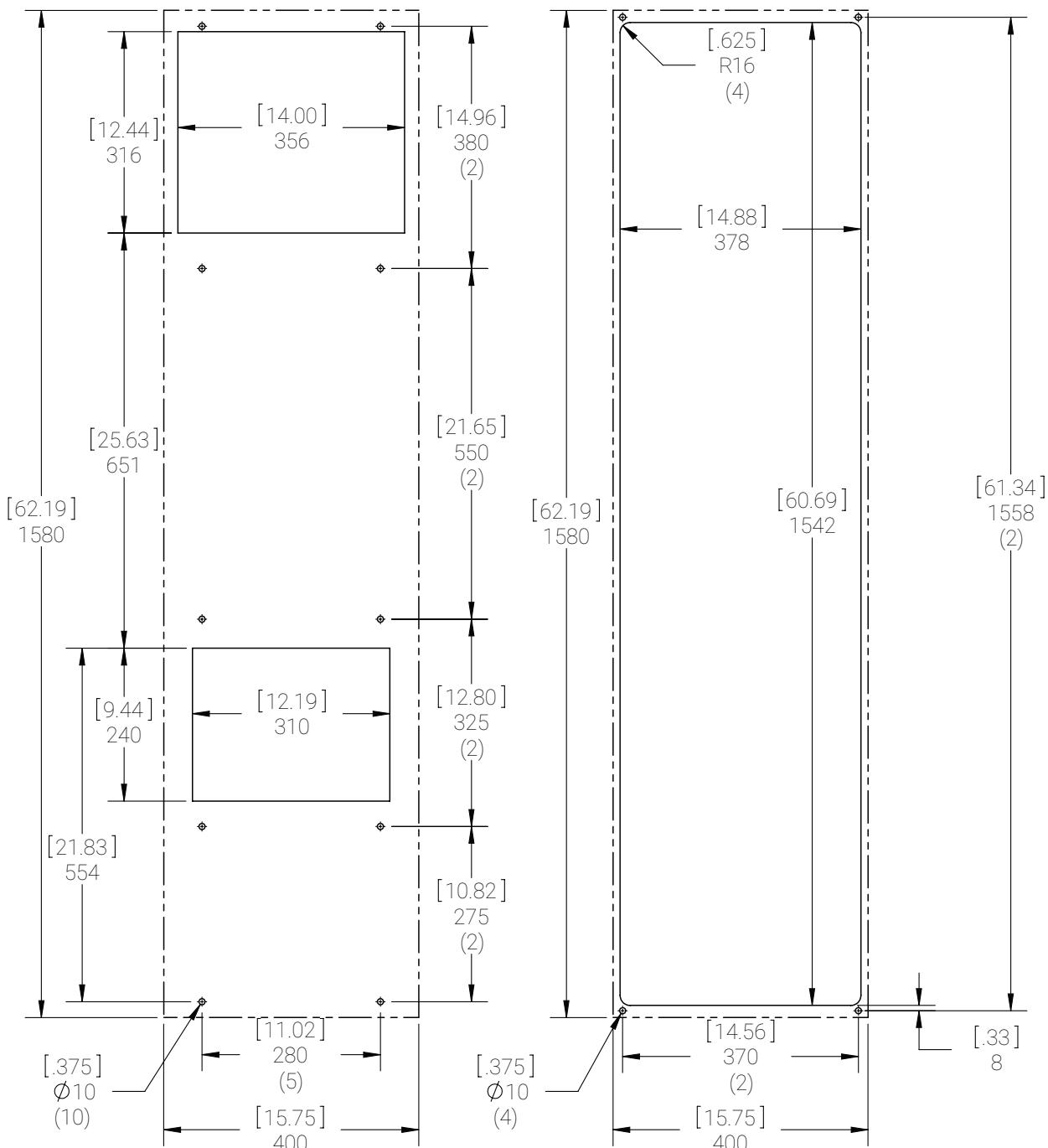
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2500 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 2500 WATT MODEL



Surface Mount

Partial and Full Recess Mount

### 2500W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 4000 WATT MODEL

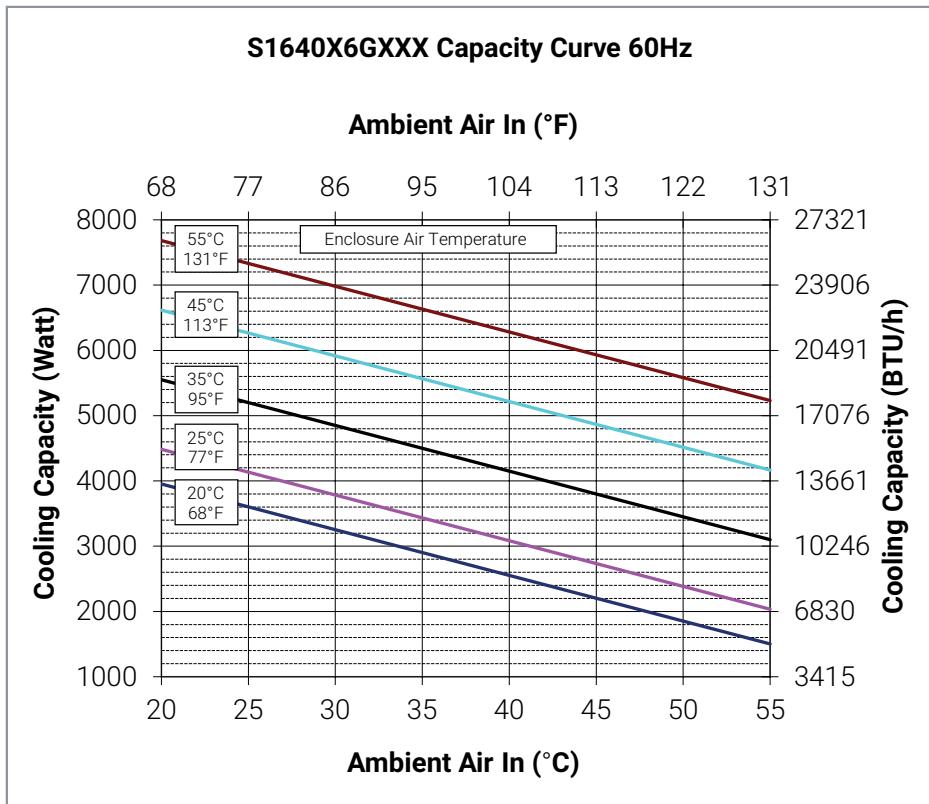
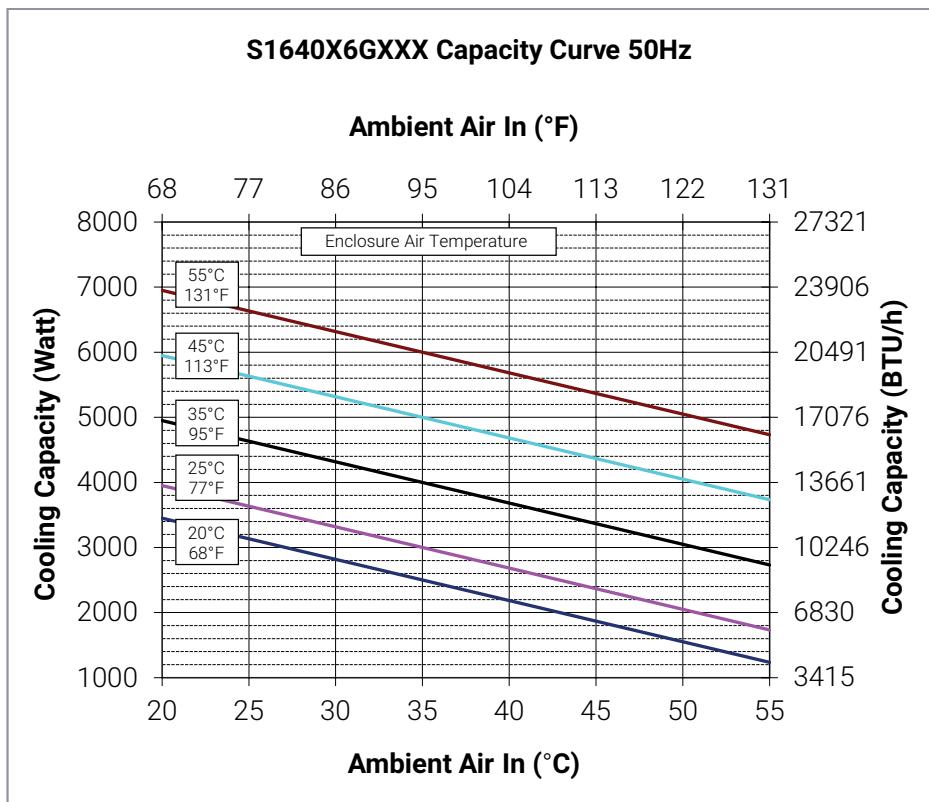
### TWO MOUNTING OPTIONS: SURFACE AND PARTIAL RECESS MOUNT

Unit Reference	4000W 400/460V 3~
Item number	
Indoor Model without Comm-Board	<b>S164046G031</b>
Indoor Model with Comm-Board	<b>S164046G041</b>
COOLING PERFORMANCE	
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	<b>4000</b>
Cooling Performance L35 L35 (Watt) 50/60Hz	4000/4500
Cooling Performance L35 L50 (Watt) 50/60Hz	3050/3450
Refrigerant	R134a
Refrigerant Charge (g)	1247
Allowable Operating Pressure Max. allowable operating pressure (p. max.) bar	28
Operating Temperature Range Min./Max. °C	10/55
Setting Temperature Range Min./Max. °C	20/55
Airflow at 0 Static Pressure Internal Loop (m³/h)	494/576
External Loop (m³/h)	1070/1184
Duty Cycle	100%
ELECTRICAL DATA	
Rated Voltage (Volt)	<b>400/460</b>
Phase	3~
Frequency (Hz)	50/60
Operating Range	+/- 10%
Max Power Consumption L35 L35 (Watt) 50/60Hz	1543/2073
Max Power Consumption L35 L50 (Watt) 50/60Hz	1719/2296
Max. Nominal Current (Amps)	4.2/4.4
Starting Current (Amps)	14/15
Pre-fuse T (Amps)	15
Agency Approvals	UL-listed, cUL-listed, EAC, CE
Power Input Description	Terminal Block
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511	
Cooling Performance L35 L35 50/60Hz	2.30/1.93
Cooling Performance L35 L50 50/60Hz	1.65/1.35
ENCLOSURE PROTECTION	
IP Code (External Loop/Internal Loop)	IP34/IP54
CONTROLLER	
Description	Smart controller with display
Thermostat Location	Ambient side
Factory Thermostat Setting (°C)	35 °C
SOUND LEVEL	
At 1 M (dBA)	72
UNIT CONSTRUCTION	
Material	Steel
Finish	RAL 7035
UNIT DIMENSIONS	
Height (mm)	1580
Width (mm)	500
Depth (mm)	340
Weight (kg)	92

# SpectraCool Slim Fit

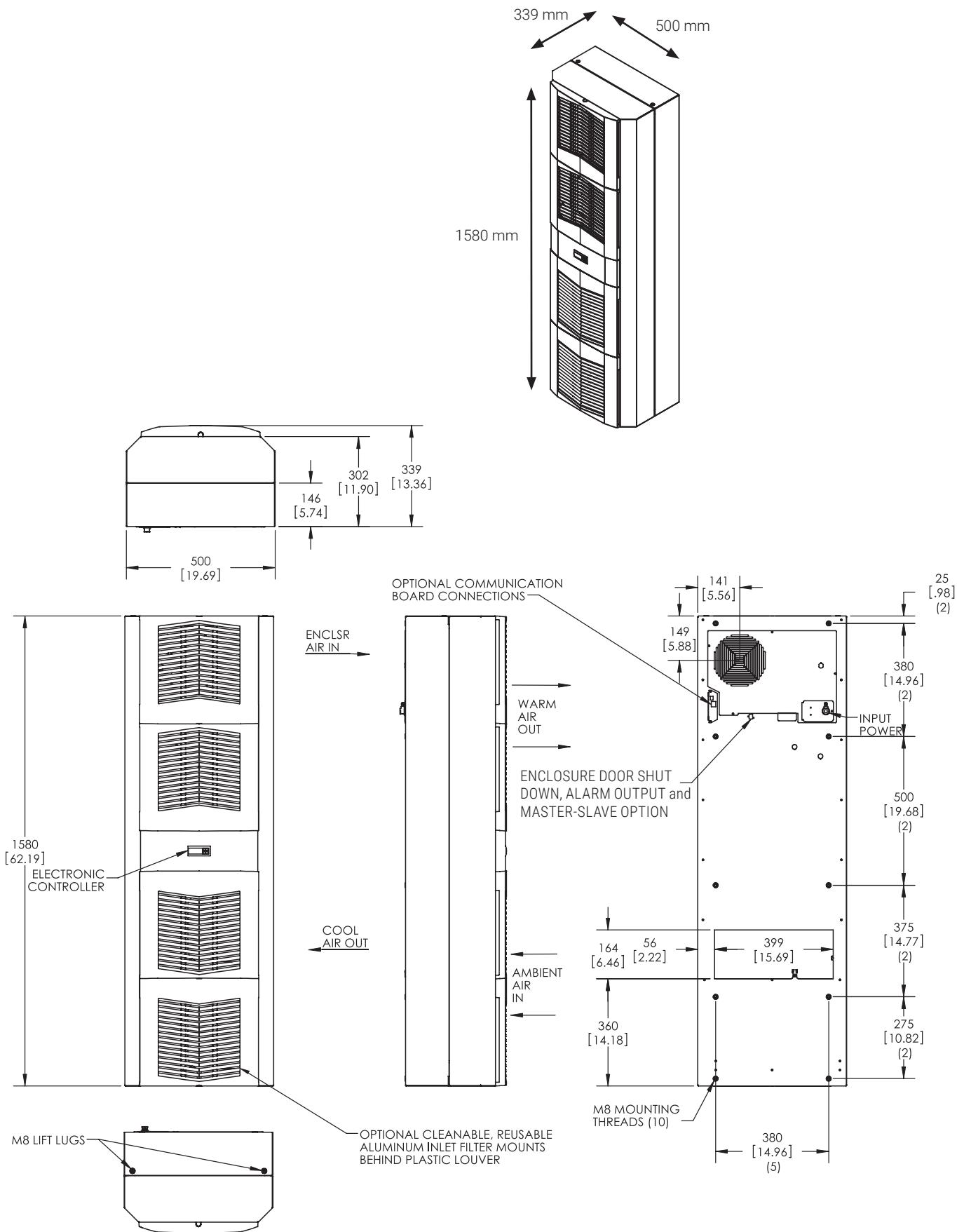
## SpectraCool SLIM FIT – 4000 WATT MODEL

PERFORMANCE CURVES FOR 4000W MODELS ACCORDING TO EN 14511



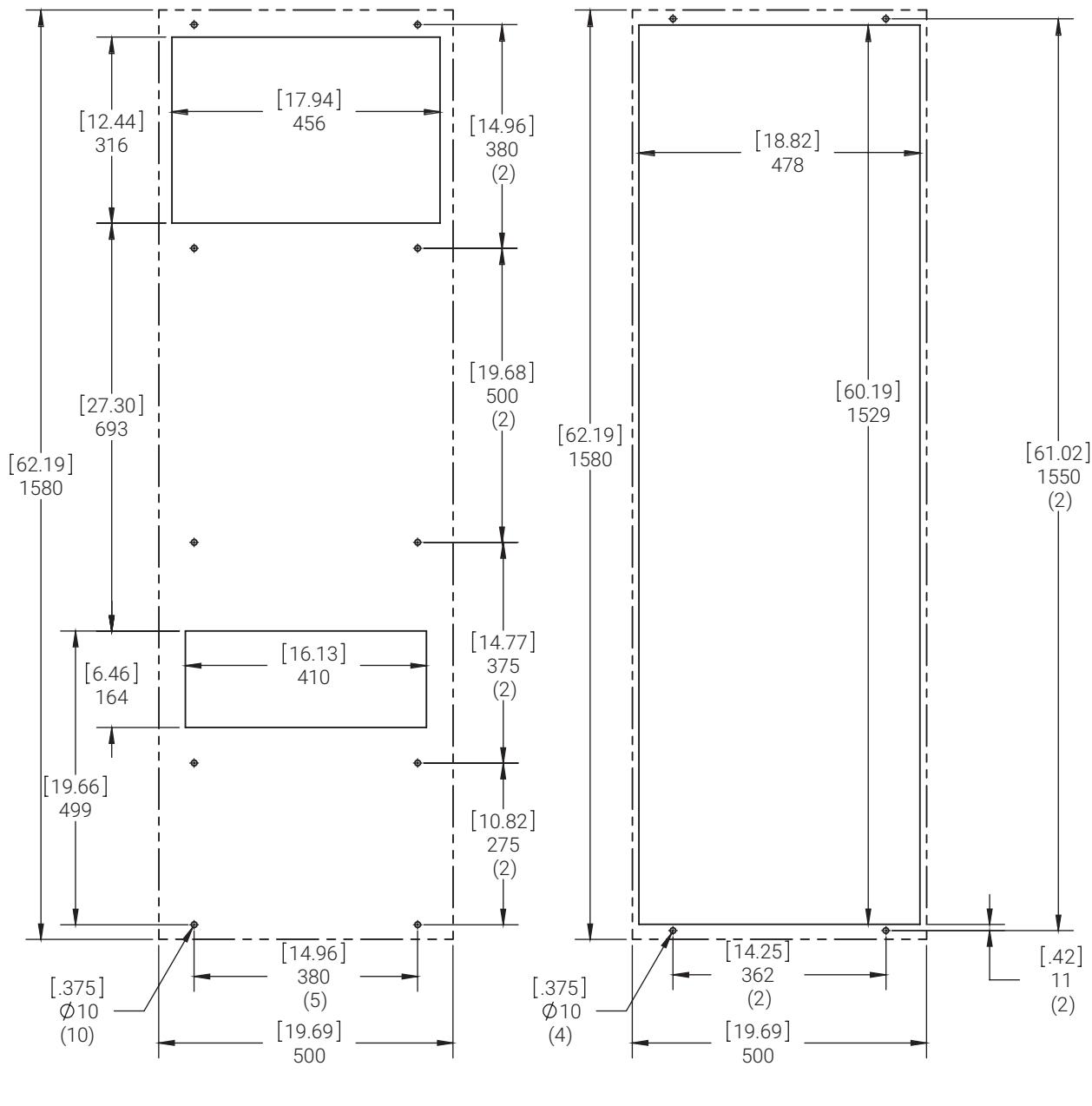
# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 4000 WATT MODEL



# SpectraCool Slim Fit

## SpectraCool SLIM FIT – 4000 WATT MODEL



Surface Mount

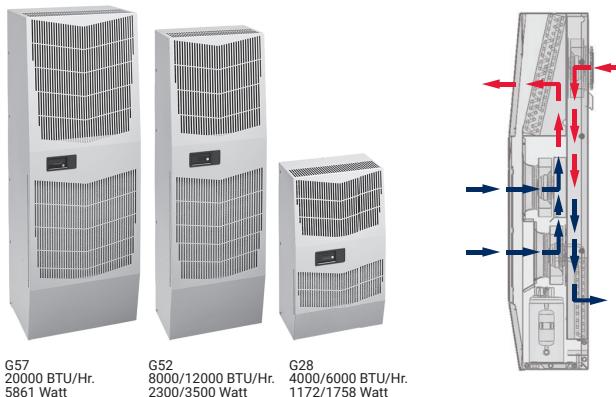
Partial Recess Mount

### 4000W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

# SpectraCool Indoor/Outdoor G-Series

## SpectraCool INDOOR/OUTDOOR



### INDUSTRY STANDARDS

UL/cUL Listed; Type 12, 3R, 4; 4X optional; File No. SA6453

CE  
EAC  
IP 56 Internal Loop  
IP 34 on External Loop  
Telcordia GR-487 capable (Outdoor)



### APPLICATION

- Industrial automation
- Telecommunications equipment
- Waste water treatment systems
- Package handling equipment
- Security and defense systems
- And more

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Energy-efficient rotary compressor on most models
- R407c and R134a earth-friendly refrigerants
- Outdoor model operating temperature range from -40°F/-40°C to 131°F/55°C
- Exterior and partially recessed mounting options
- Reliable mechanical thermostat on enclosure side of the unit; indoor air conditioner models include digital display on ambient side

For product general accessories, please refer to the chapter "Accessories".

- Dual condenser-side air movers for performance redundancy on G52 and G57 models
- Galvanized sheet-metal cover for rugged factory and outdoor environments
- Easy-mount flanges for simple installation
- Cutout adapter options for enclosures with GENESIS and T-Series air conditioners, enable users to easily transition to the new unit
- Dust-resistant condenser coil allows the unit to be run filterless in most applications
- Every unit functionally tested before shipping

### SPECIFICATIONS

- Standard Indoor Air Conditioner models also include:
  - Active condensate management with heater strip
  - Power-off relay for door switch and other system requirements
  - Malfunction switch
- 115, 230 and 400/460 VAC 3-phase power input on most models
- Standard Outdoor Air Conditioner models also include:
  - Telcordia GR-487 capable
  - Corrosion-resistant components
  - Malfunction switch
  - Compressor heater
  - Head pressure control
  - Up to 2000 Watt (G28, G52) and 3000 Watt (G57) enclosure heater
- Nominal cooling capacity:
  - G28 4000 & 6000 BTU/Hr. (1172 and 1758 W)
  - G52 8000 & 12000 BTU/Hr. (2344 and 3516 W)
  - G57 20000 BTU/Hr. (5861 W)
- Outdoor model operating temperature range from -40 °F/-40 °C to 131 °F/55 °C

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint
- Other colors and textures available

# SpectraCool Indoor/Outdoor G-Series

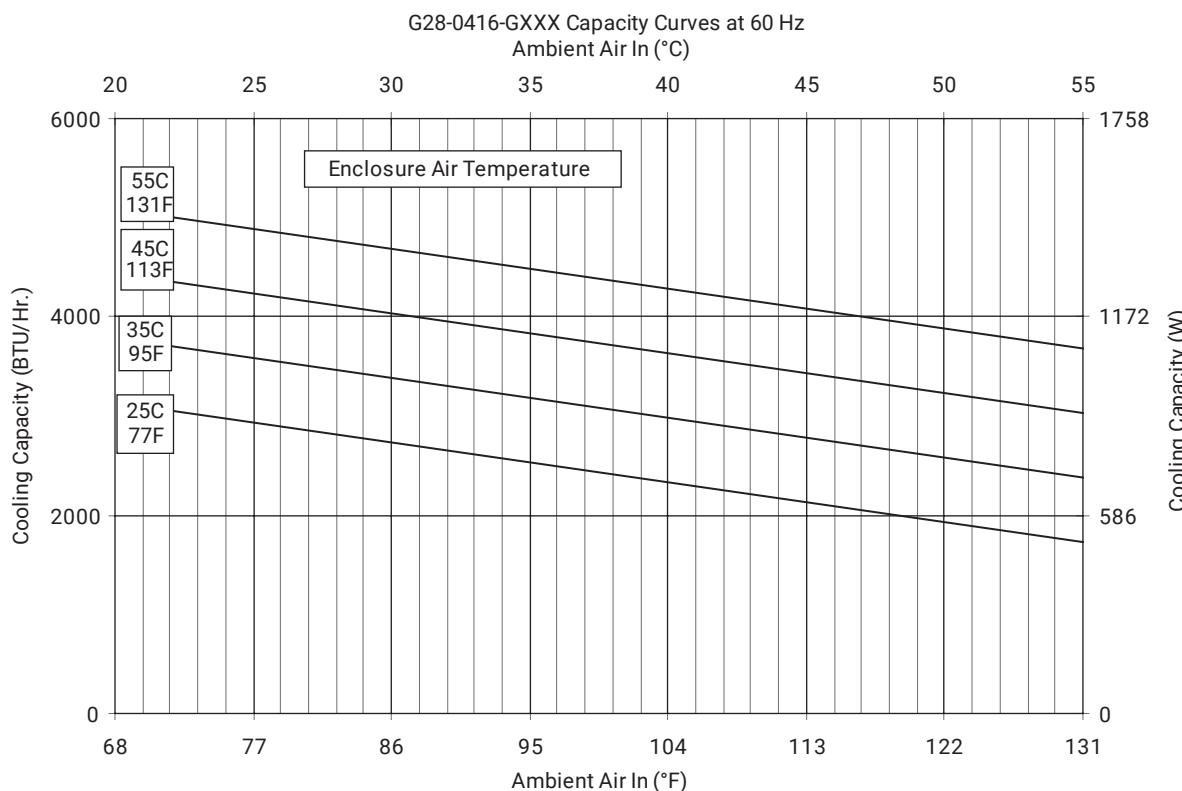
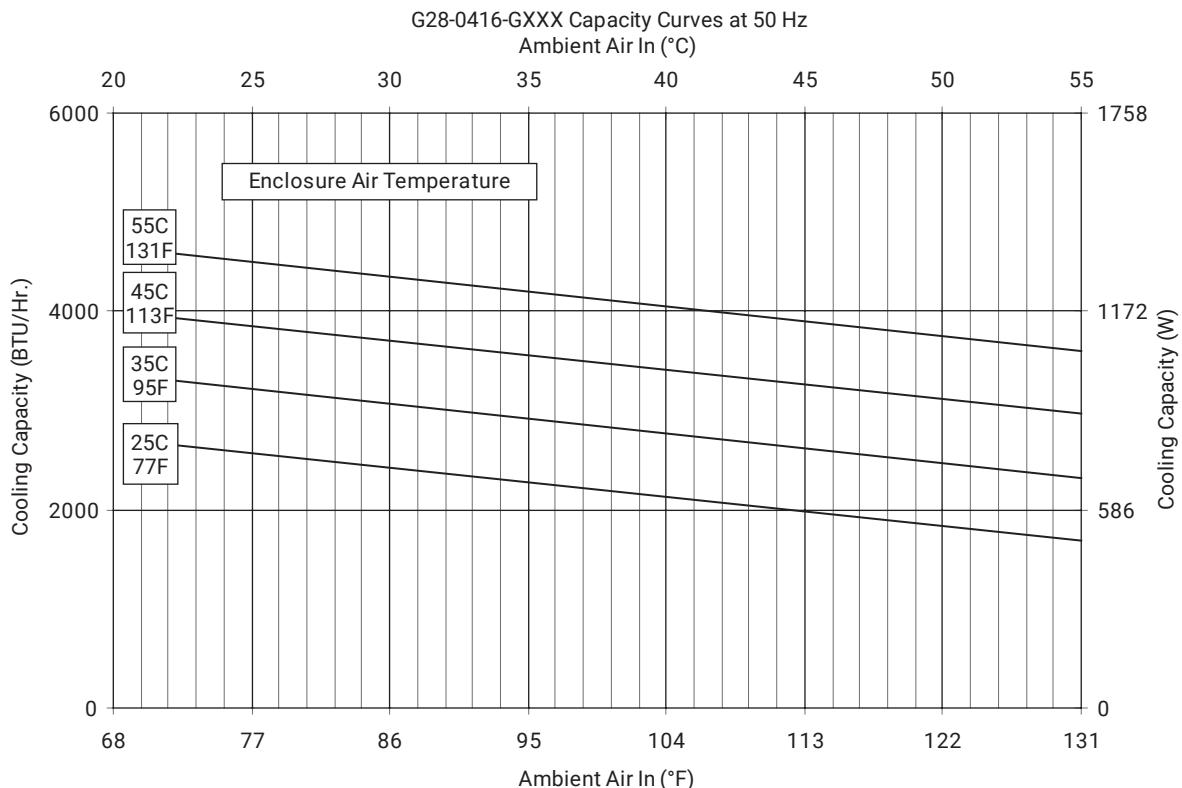
## PERFORMANCE DATA G28 MODELS 4000/6000 BTU/H.R. (1172/1758 WATT)

Item number						
Indoor Model	G280416G050	G280426G050	G280446G050	G280616G050	G280626G050	G280646G050
Indoor Model Stainless Steel Type 4X	G280416G051	G280426G051	G280446G051	G280616G051	G280626G051	G280646G051
Outdoor Model without Heat Pkg.	G280416G100	G280426G100	G280446G100	G280616G100	G280626G100	G280646G100
Outdoor Model Partial Recessed Mount	G280416G101	G280426G101	G280446G101	G280616G101	G280626G101	G280646G101
Outdoor Model without Heat Pkg.	G280416G102	G280426G102	G280446G102	G280616G102	G280626G102	G280646G102
Stainless Steel Type 4X	G280416G150	G280426G150	-	G280616G150	G280626G150	-
Outdoor Model with Heat Pkg. Stainless Steel Type 4X	G280416G151	G280426G151	-	G280616G151	G280626G151	-
COOLING PERFORMANCE						
Nominal:						
BTU/Hr.	4000	4600/4900	4600/4900	6000/6400	6000/6400	5400/6000
Watts	1172	1347/1435	1347/1435	1757/1874	1757/1874	1581/1757
At 131 °F/131 °F (55 °C/55 °C):						
BTU/Hr. (50/60 Hz)	3700	4600/4900	4600/4900	6000/6400	6000/6400	5400/6000
W (50/60 Hz)	1084	1347/1435	1347/1435	1757/1874	1757/1874	1581/1757
At 95 °F/95 °F (35 °C/35 °C):						
BTU/Hr. (50/60 Hz)	3300/3410	4300/4600	4324/4655	5600/6000	5600/6000	5054/5685
W (50/60 Hz)	967/1000	1260/1364	1267/1364	1641/1758	1641/1758	1481/1666
Refrigerant	R134A	R407C	R134A	R407C	R407C	R134A
Refrigerant Charge (ounces/grams)	12/340	20/567	16/454	20/567	20/567	16/454
Operating Temperature Range:						
Maximum (°F/°C)	131 °F/55 °C	131 °F/55 °C	131 °F/55 °C	131 °F/55 °C	131 °F/55 °C	131 °F/55 °C
Minimum (°F/°C)	-40°F/-40°C	-40°F/-40°C	-40°F/-40°C	-40°F/-40°C	-40°F/-40°C	-40°F/-40°C
Air Flow at 0 Static Pressure:						
Internal loop 50 Hz (CFM/m3/hr.)	151/256	189/321	189/321	189/321	189/321	189/321
External loop 50 Hz (CFM/m3/hr.)	284/482	291/494	291/494	291/494	291/494	291/494
Internal loop 60 Hz (CFM/m3/hr.)	183/310	221/375	221/375	221/375	221/375	221/375
External loop 60 Hz (CFM/m3/hr.)	290/492	300/509	300/509	300/509	300/509	300/509
Max. Heater W (Outdoor Models)	1000	2000		2000	2000	
ELECTRICAL DATA						
Rated Voltage	115	230	400/460 3~	115	230	400/460 3~
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	465/1055	1058/1334	680/874	1138.5/1311	1058/1334	680/874
Max. Nominal Current (A at 50/60 Hz)	10.4/10.1	4.6/5.8	1.7/1.9	9.9/11.4	4.6/5.8	1.7/1.9
Starting Current (A)	36.2	17.7	7.7	36.2	17.7	7.7
Agency Approvals			cUL Listed CE EAC			
Power Input Description				Terminal Block		
ENCLOSURE PROTECTION						
UL Type			Type 12, 3R, 4 Standard Type 4X Stainless Steel Optional			
CONTROLLER						
Description			Basic Mechanical Thermostat			
Thermostat Location			Enclosure Side on All Base Models			
Factory Thermostat Setting (°F/°C)	80/27	80/27	80/27	80/27	80/27	80/27
SOUND LEVEL						
At 1.5 Meters			68dB(A)			
UNIT CONSTRUCTION						
Material			Galvanized Sheet Metal Standard or Stainless Steel Typ 304			
Finish			Powder Coat RAL 7035 Light Gray Standard			
ACCESSORIES						
EASYSWAP Adaptor Plenum (GENESIS M28)			Enables SpectraCool to be mounted to GENESIS M28 air conditioner cutout Catalog Number PLM28G28			
EASYSWAP Adaptor Plenum (T-Series T29)			Enables SpectraCool to be mounted to T-Series T29 air conditioner cutout Catalog Number PLT29G28			
UNIT DIMENSIONS						
Height (in./mm)			28.55/725.1			
Width (in./mm)			16.97/431.1			
Depth (in./mm)			10.10/256.6			
Weight (lb./kg)	84/38	84/38	84/38	84/38	84/38	84/38

\*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

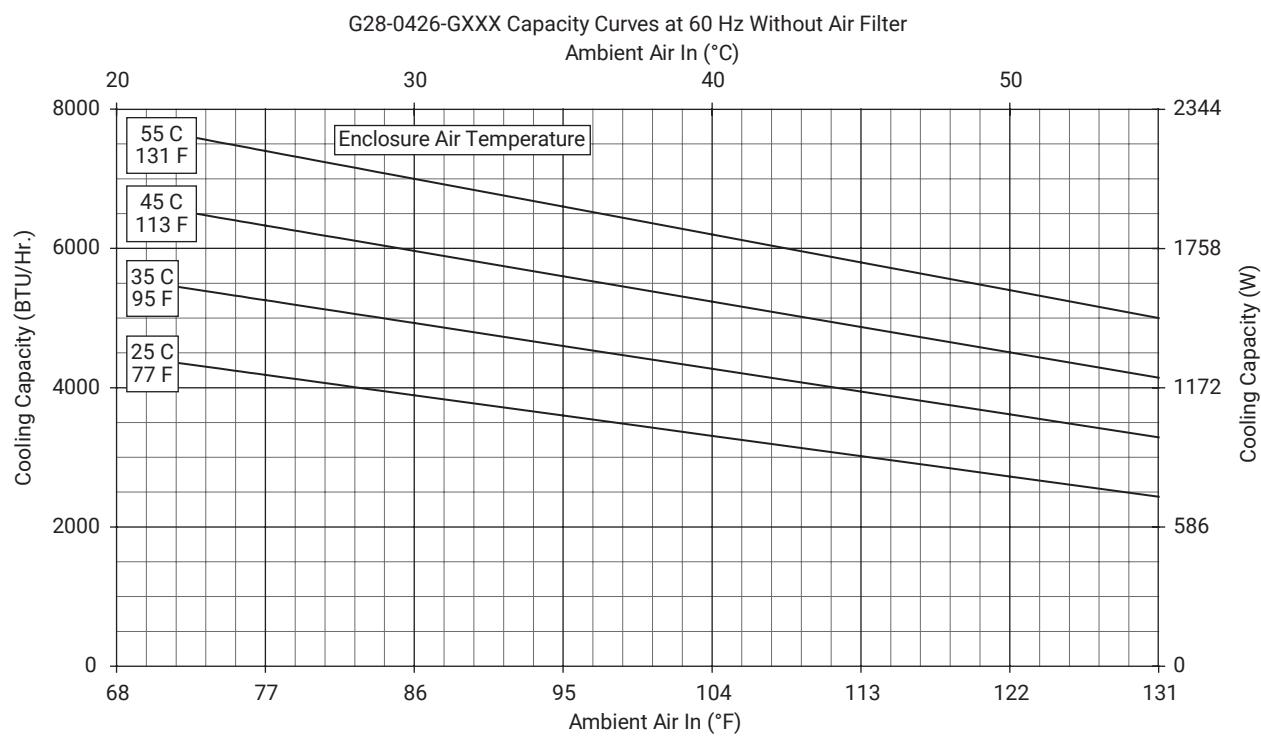
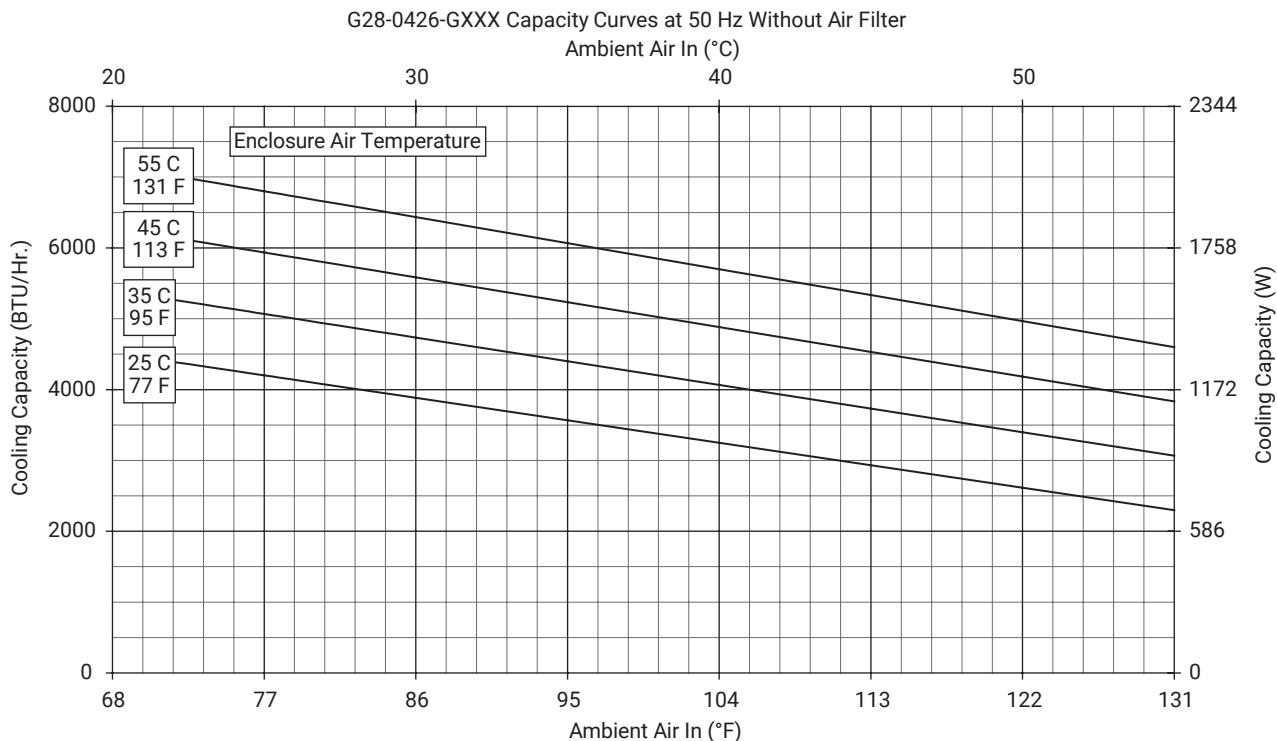
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G28 Models 4000 BTU/Hr. (1347/1435 Watt)



# SpectraCool Indoor/Outdoor G-Series

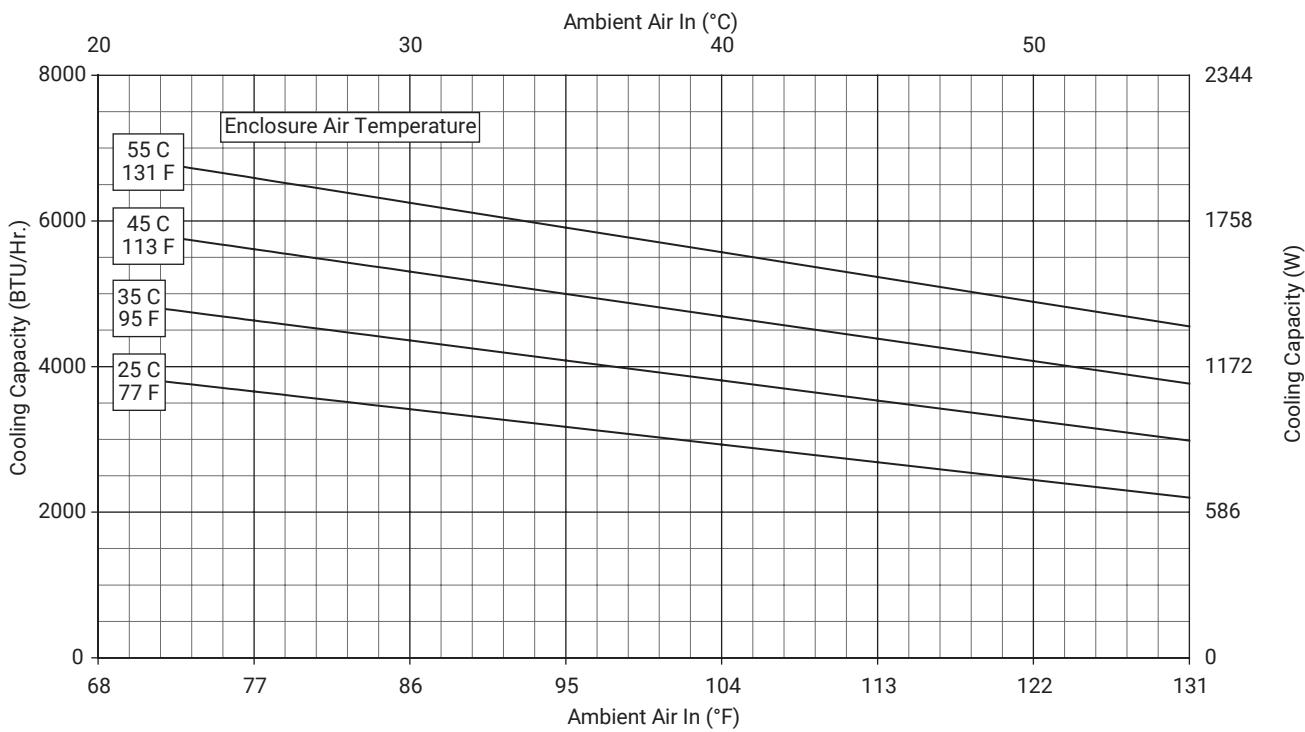
Performance Curves for G28 Models 4000 BTU/Hr. (1347/1435 Watt)



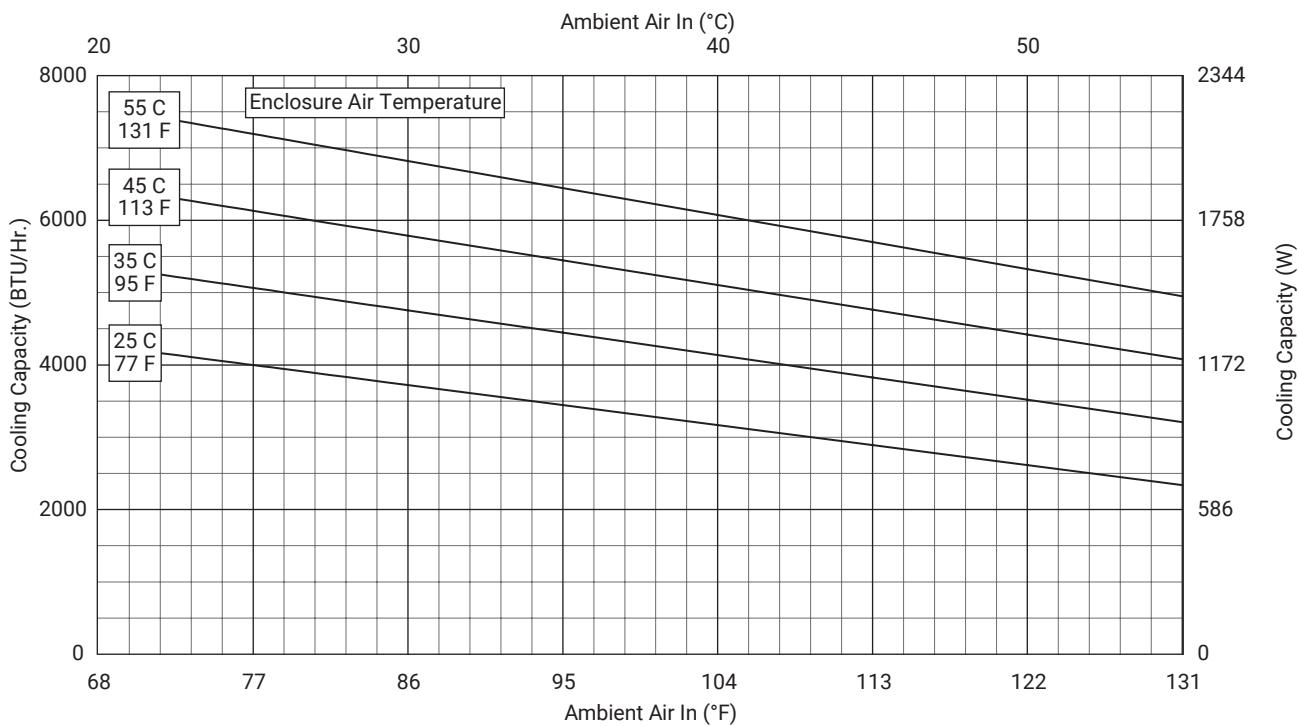
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G28 Models 4000 BTU/Hr. (1347/1435 Watt)

G28-0446-GXXX- Capacity Curves at 50 Hz; Without Filter



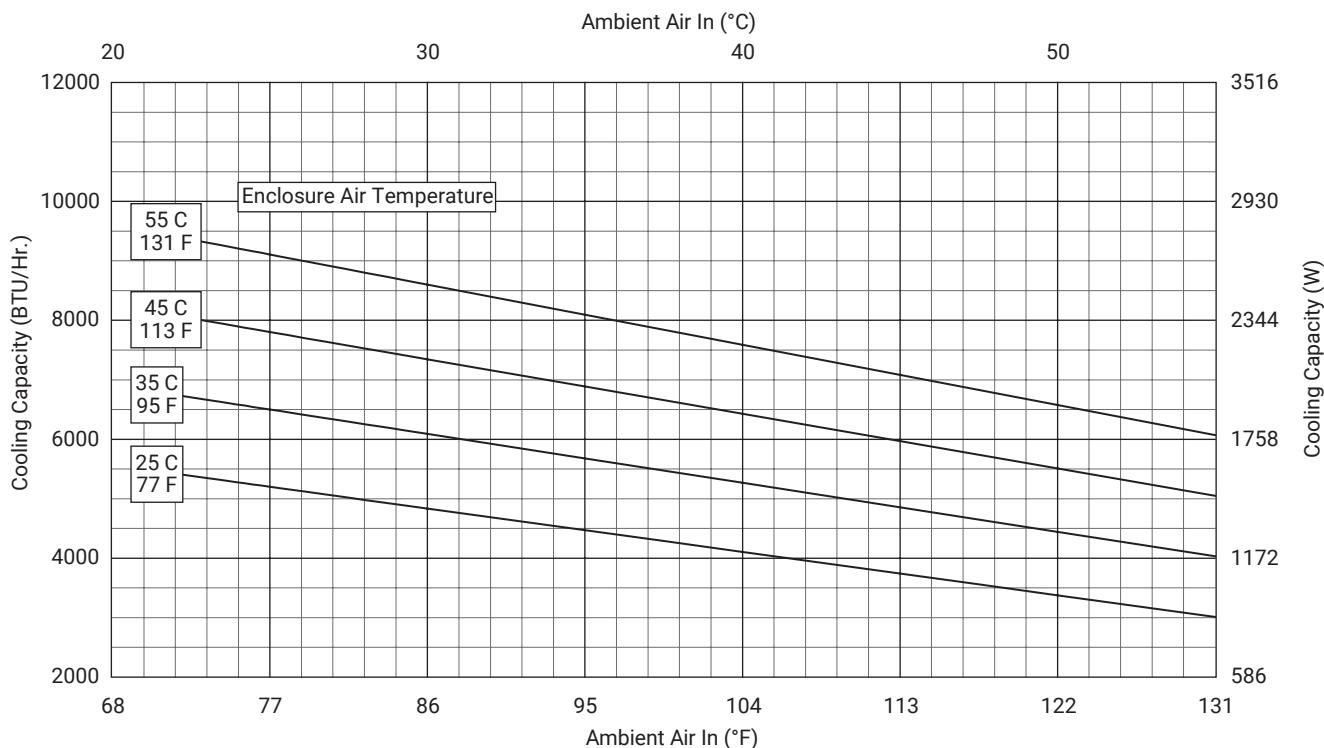
G28-0446-GXXX- Capacity Curves at 60 Hz; Without Filter



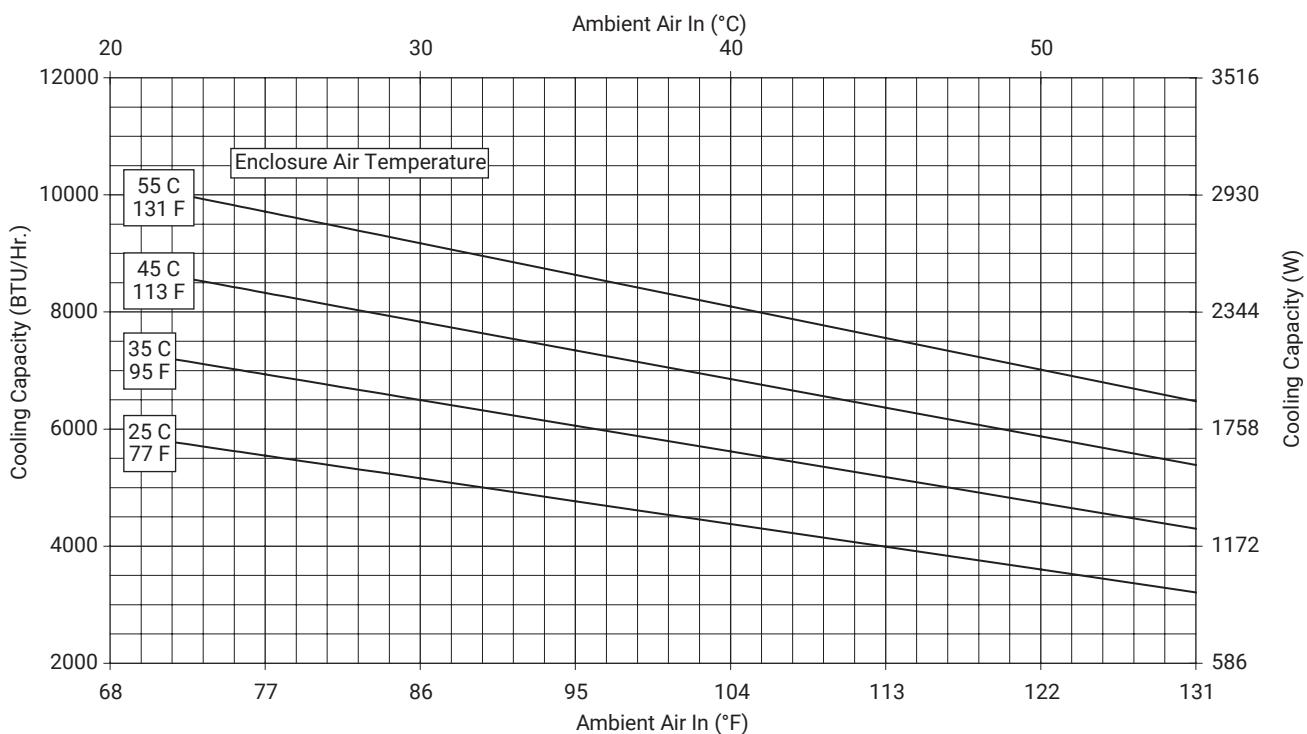
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G28 Models 4000/6000 BTU/Hr. (1172/1758 Watt)

G28-06(1/2)6-GXXX Capacity Curves at 50 Hz Without Filter

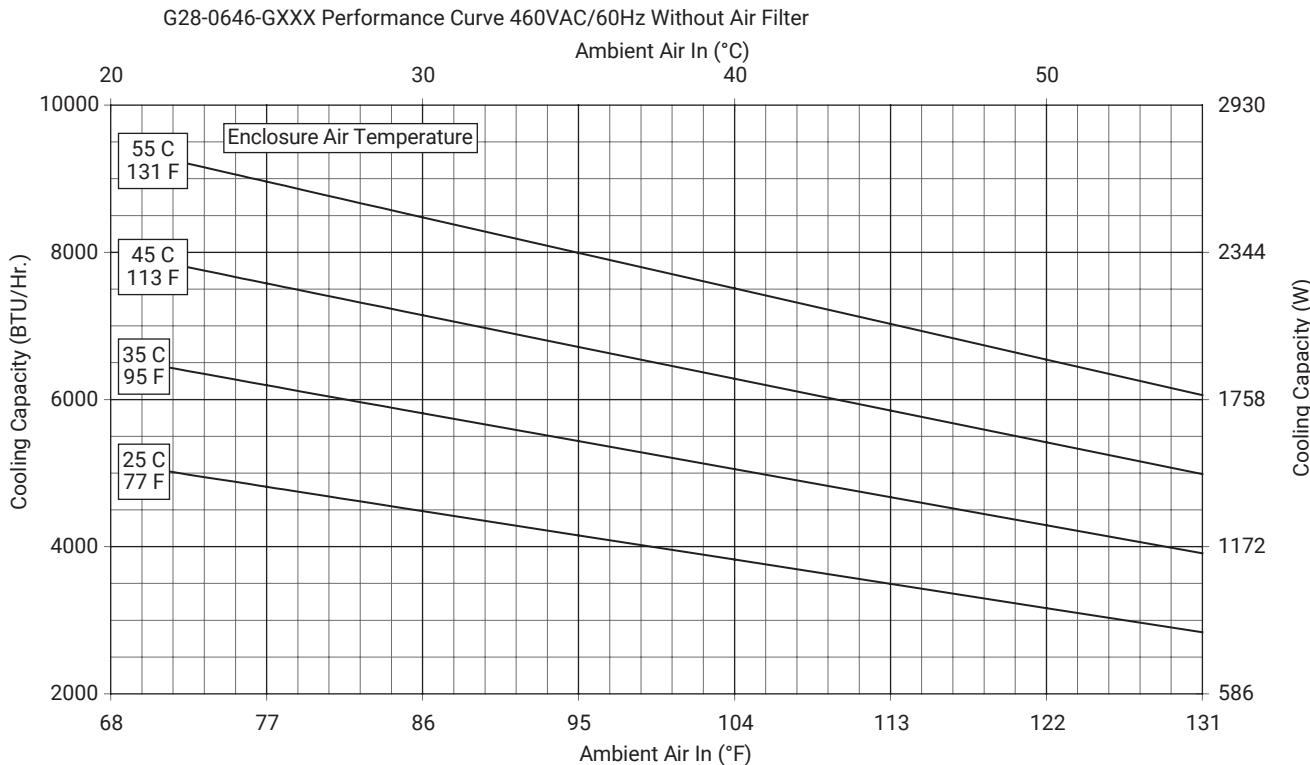
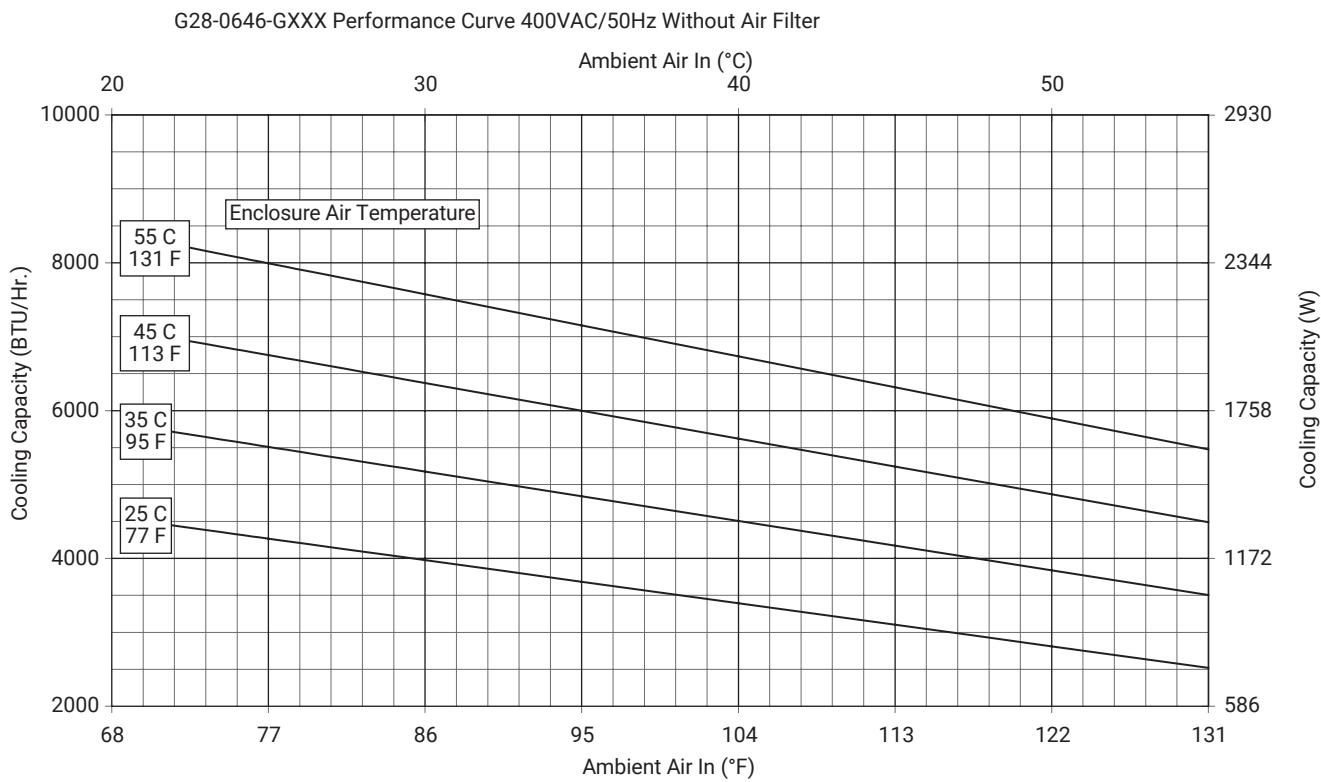


G28-06(1/2)6-G002-P#2 Capacity Curves at 60 Hz Without Filter



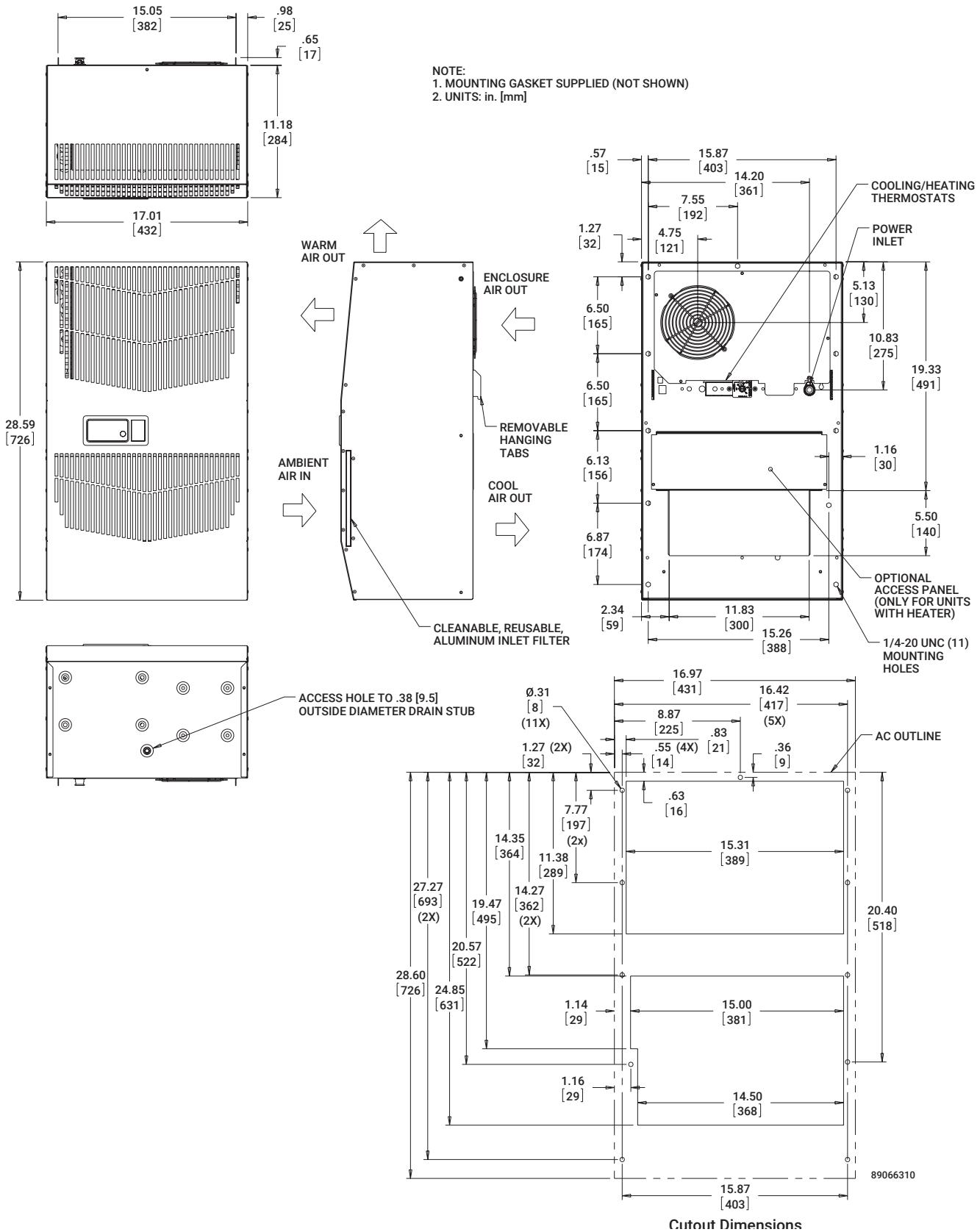
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G28 Models 6000 BTU/Hr. (1758 Watt)



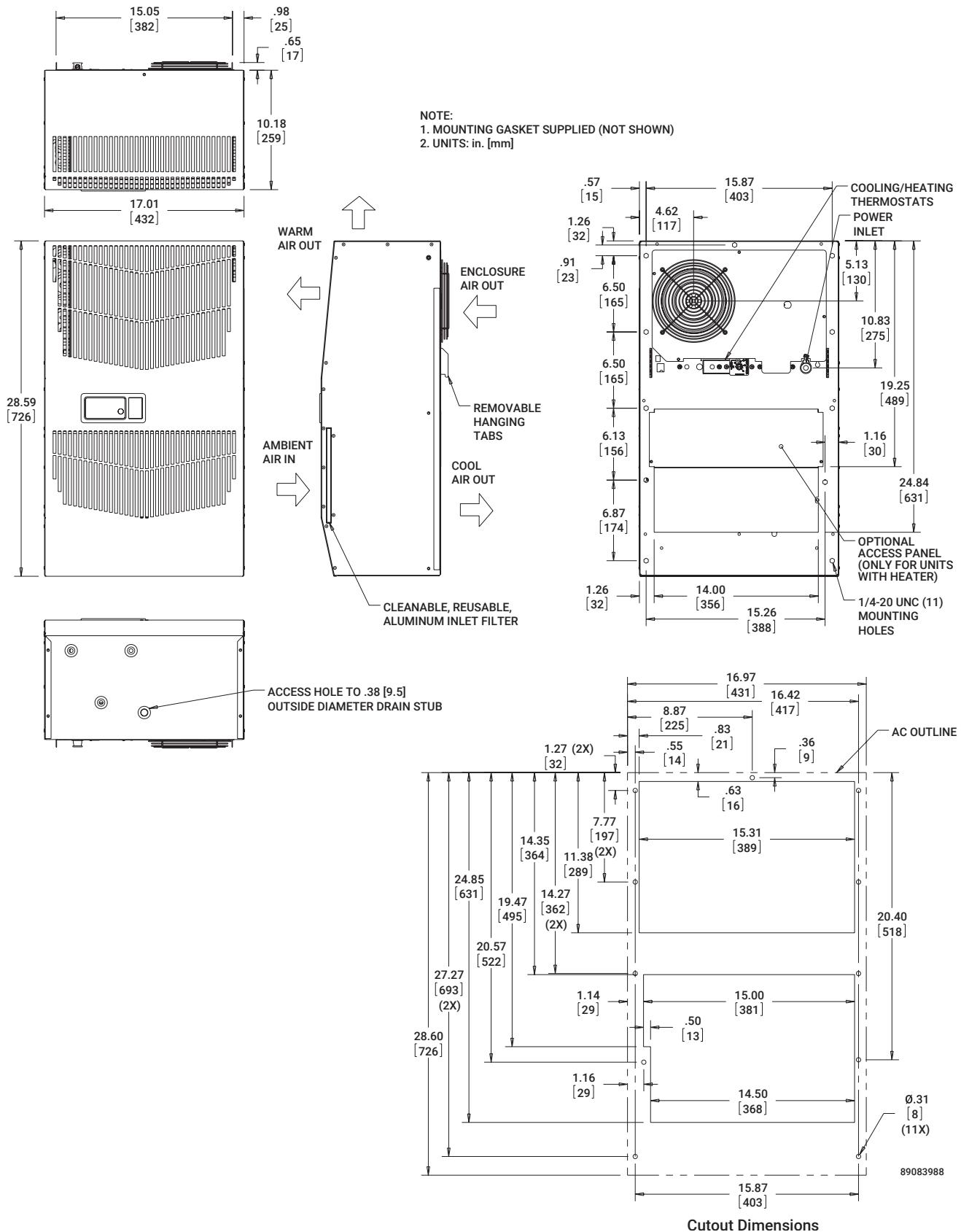
# SpectraCool Indoor/Outdoor G-Series

G28 Models 4000 BTU/Hr. 115 V (1172 Watt)



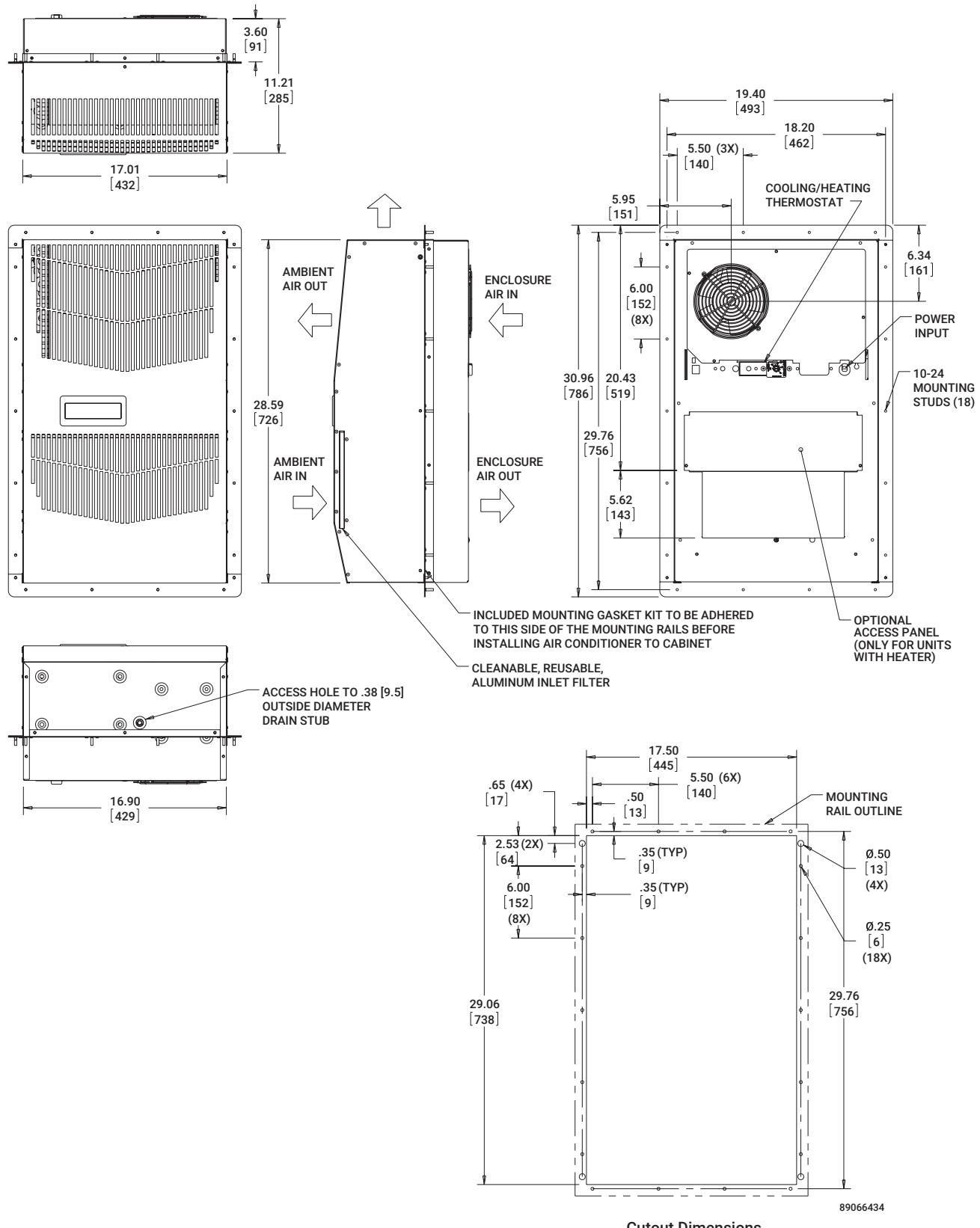
# SpectraCool Indoor/Outdoor G-Series

G28 Models 4000 BTU/Hr. 230/460 V, 6000 BTU/Hr. 115/230/460 V (1172/1757 Watt)



# SpectraCool Indoor/Outdoor G-Series

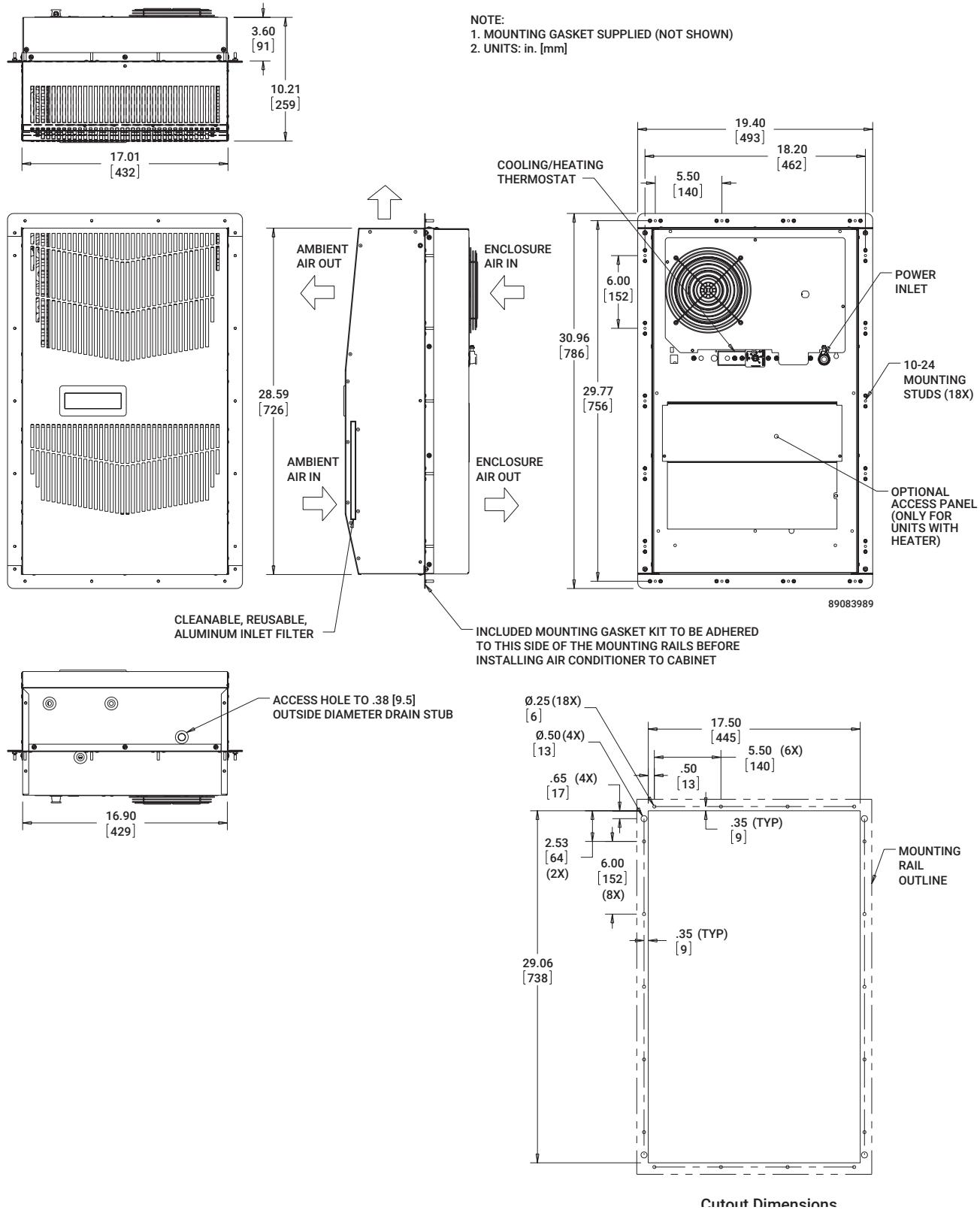
G28 Models 4000 BTU/Hr. 115 V (1172 Watt) Partial Recess



Cutout Dimensions

# SpectraCool Indoor/Outdoor G-Series

G28 Model 4000 BTU/Hr. 230/460 V, 6000 BTU/Hr. 115/230/460 V (1172/1758 Watt) Partial Recess



**NOTES :**

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# SpectraCool Indoor/Outdoor G-Series

## PERFORMANCE DATA G52 MODELS 8000/12000 BTU/Hr. (2300/3500 WATT)

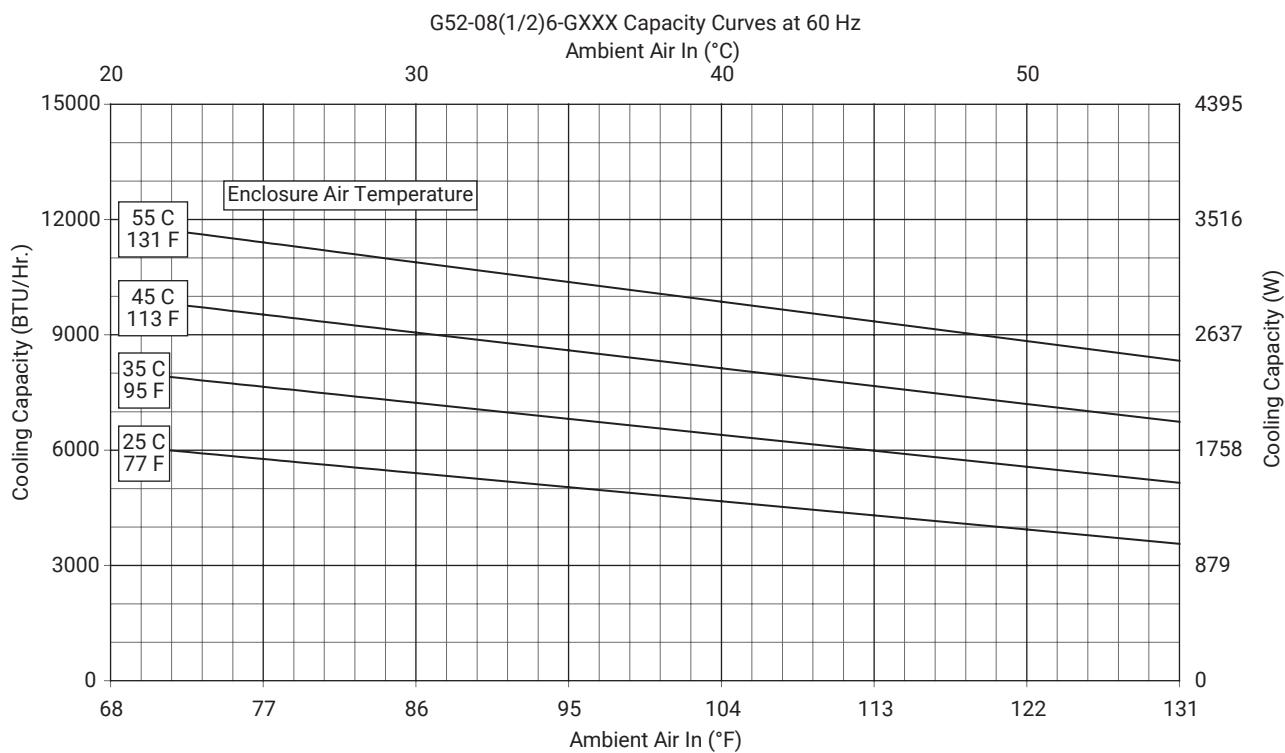
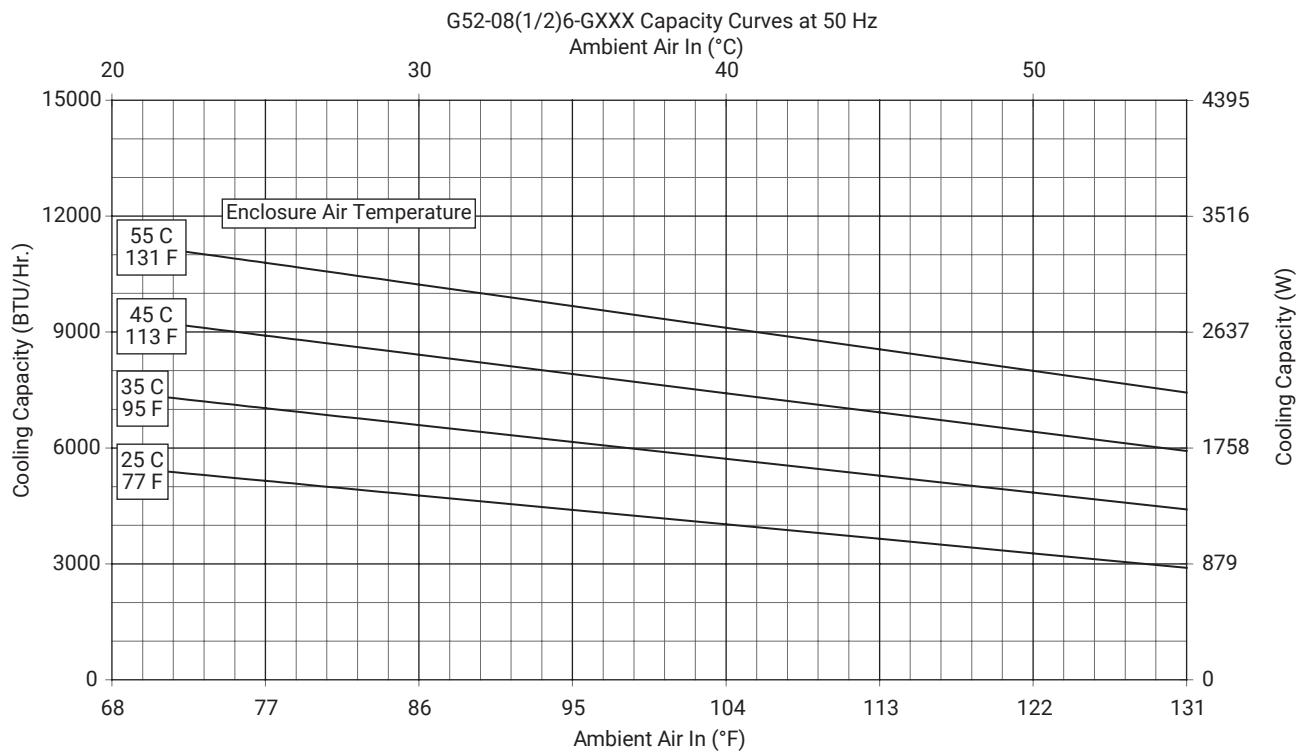
Item number	G520816G050	G520826G050	G520846G050	G521216G050	G521226G050	G521246G050
Indoor Model						
Indoor Model Stainless Steel Type 4X	G520816G051	G520826G051	G520846G051	G521216G051	G521226G051	G521246G051
Outdoor Model without Heat Pkg.	G520816G100	G520826G100	G520846G100	G521216G100	G521226G100	G521246G100
Outdoor Model Partial Recessed Mount	G520816G101	G520826G101	G520846G101	G521216G101	G521226G101	G521246G101
Outdoor Model without Heat Pkg. Stainless Steel Type 4X	G520816G102	G520826G102	G520846G102	G521216G102	G521226G102	G521246G102
Outdoor Model with Heat Pkg.	G520816G150	G520826G150	G520846G150	G521216G150	G521226G150	G521246G150
Outdoor Model with Heat Pkg. Stainless Steel Type 4X	G520816G151	G520826G151	G520846G151	G521216G151	G521226G151	G521246G151
COOLING PERFORMANCE						
Nominal:						
BTU/Hr.	8000	8000	8000	12000	12000	12000
Watts	2300	2300	2300	3500	3500	3500
At 131 °F/131 °F (55 °C/55 °C):						
BTU/Hr.	7300/8200	7300/8200	8800/9800	12000/12500	12000/12500	11100/12000
Watts	2139/2403	2139/2403	2578/2871	3516/3662	3516/3662	3252/3516
At 95 °F/95 °F (35 °C/35 °C):						
BTU/Hr.	6000/6800	6000/6800	7400/8200	9900/10700	9900/10700	9900/10700
Watt	1758/1992	1758/1992	2168/2402	2900/3135	2900/3135	2900/3135
Refrigerant	R134a	R134a	R134a	R134a	R134a	R134a
Refrigerant Charge (ounces/grams)	24/680	24/680	24/680	38/1077	38/1077	38/1077
Operating Temperature Range:						
Maximum (°F/°C)	131/55	131/55	131/55	131/55	131/55	131/55
Indoor Minimum (°F/°C)	50/10	50/10	50/10	50/10	50/10	50/10
Outdoor Minimum (°F/°C)	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:						
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	285/484	285/484	285/484	287/487	287/487	287/487
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	650/1104	650/1104	650/1104	635/1078	635/1078	635/1078
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	310/527	310/527	310/527	305/518	305/518	305/518
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	700/1189	700/1189	700/1189	650/1104	650/1104	650/1104
Max. Heater W (Outdoor Models):	2000	2000	NA	2000	2000	NA
ELECTRICAL DATA						
Rated Voltage	115	230/208-230	400/460 3~	115	230/208-230	400/460 3~
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W)	1250/1415	1250/1415	806/957**	2100/2427	1830/2130	910/1106**
Max. Nominal Current (A)	11.2/12.3	5.6/7.0-6.2	3.1/3.2	16.1/21.0	9.1/10.6-9.5	3.6/3.5
Starting Current (A)	48	27	16	57	38	16
Agency Approvals				cUL Listed CE EAC		
Power Input Description				Others available upon request		
ENCLOSURE PROTECTION				Terminal Block		
UL Type			Type 12, 3R, 4 standard Type 4X Stainless steel optional			
International Rating			IP56 internal loop IP34 external loop			
CONTROLLER						
Description			Basic mechanical thermostat with digital display			
Thermostat Location			Enclosure side on all base models			
Digital Display Location:						
Indoor Models			Ambient side			
Outdoor Models			Enclosure side			
Factory Thermostat Setting (°F/°C)			80/27			
SOUND LEVEL						
At 1.5 Meters			68 dB(A)			
UNIT CONSTRUCTION						
Material			Galvanized sheet metal standard or Stainless Steel Typ 304			
Finish			RAL 7035 light-gray, semi-textured powder-coat paint standard Other colors available			
ACCESSORIES						
Cleanable Re-usable Filter			Aluminum mesh Part #101000103			
EASYSWAP Adaptor Plenum (GENESIS M52)			Enables SpectraCool to be mounted to a GENESIS M52 air conditioner cutout Catalog Number PLM52G52			
UNIT DIMENSIONS						
Height (in./mm)			52.69/1338			
Width (in./mm)			17.12/435			
Depth (in./mm)			11.66/296			
Weight (lb./kg)	128/58.1	128/58.1	138/62.6	131/59.4	131/59.4	141/64.0

\*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

\*\*Watts based on .65 power factor.

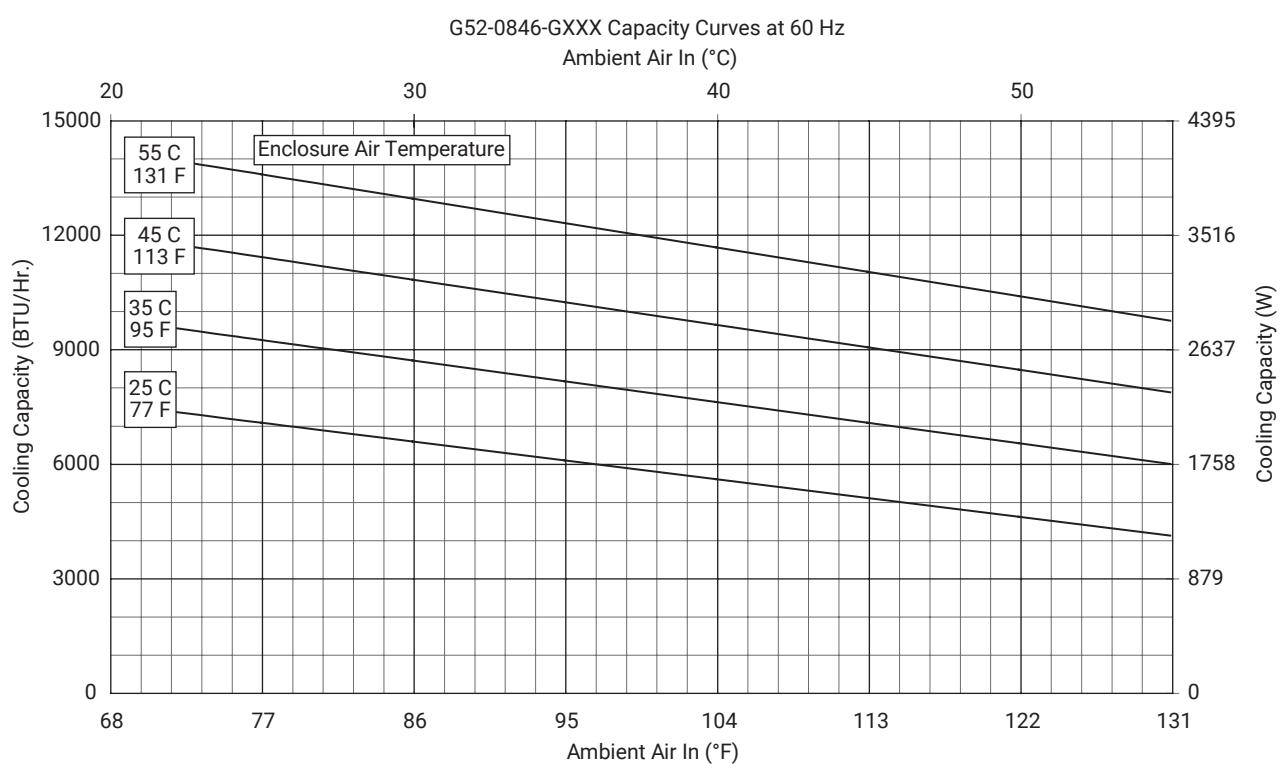
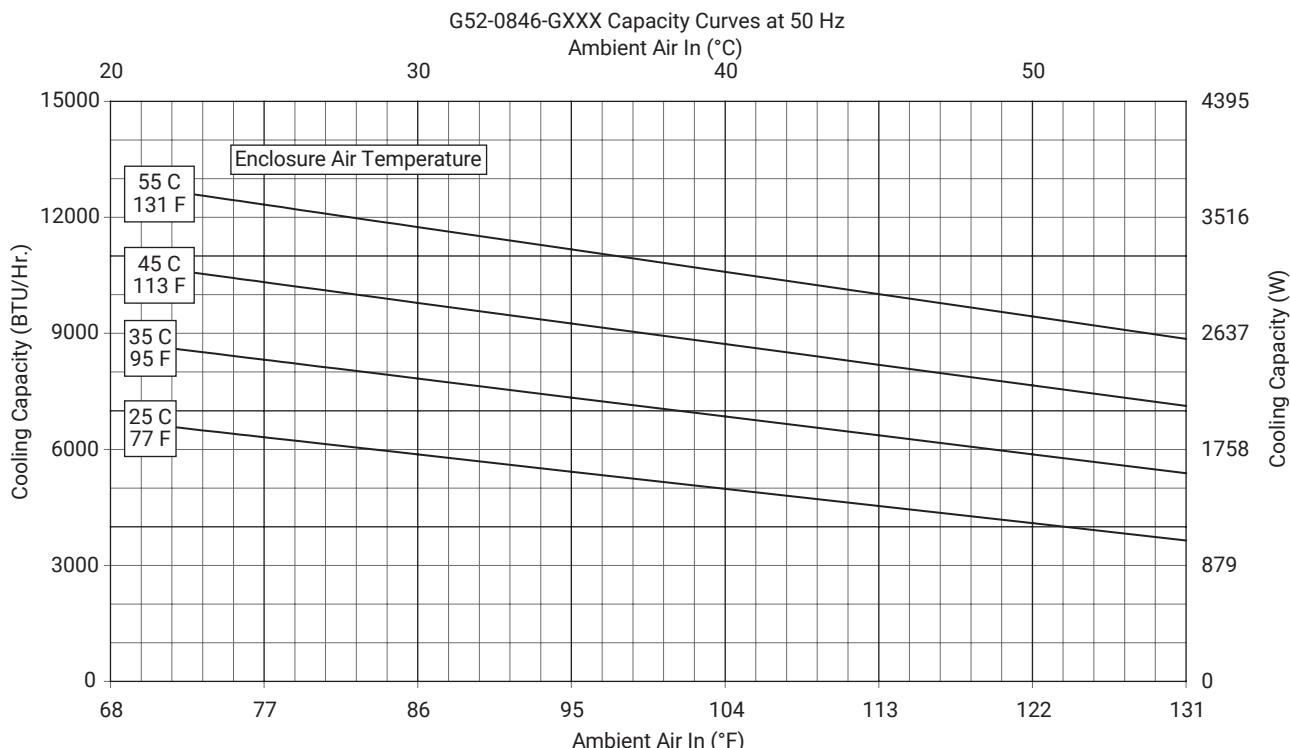
# SpectraCool Indoor/Outdoor G-Series

## PERFORMANCE CURVES FOR G52 MODELS 8000 BTU/H.R. (2300 WATT)



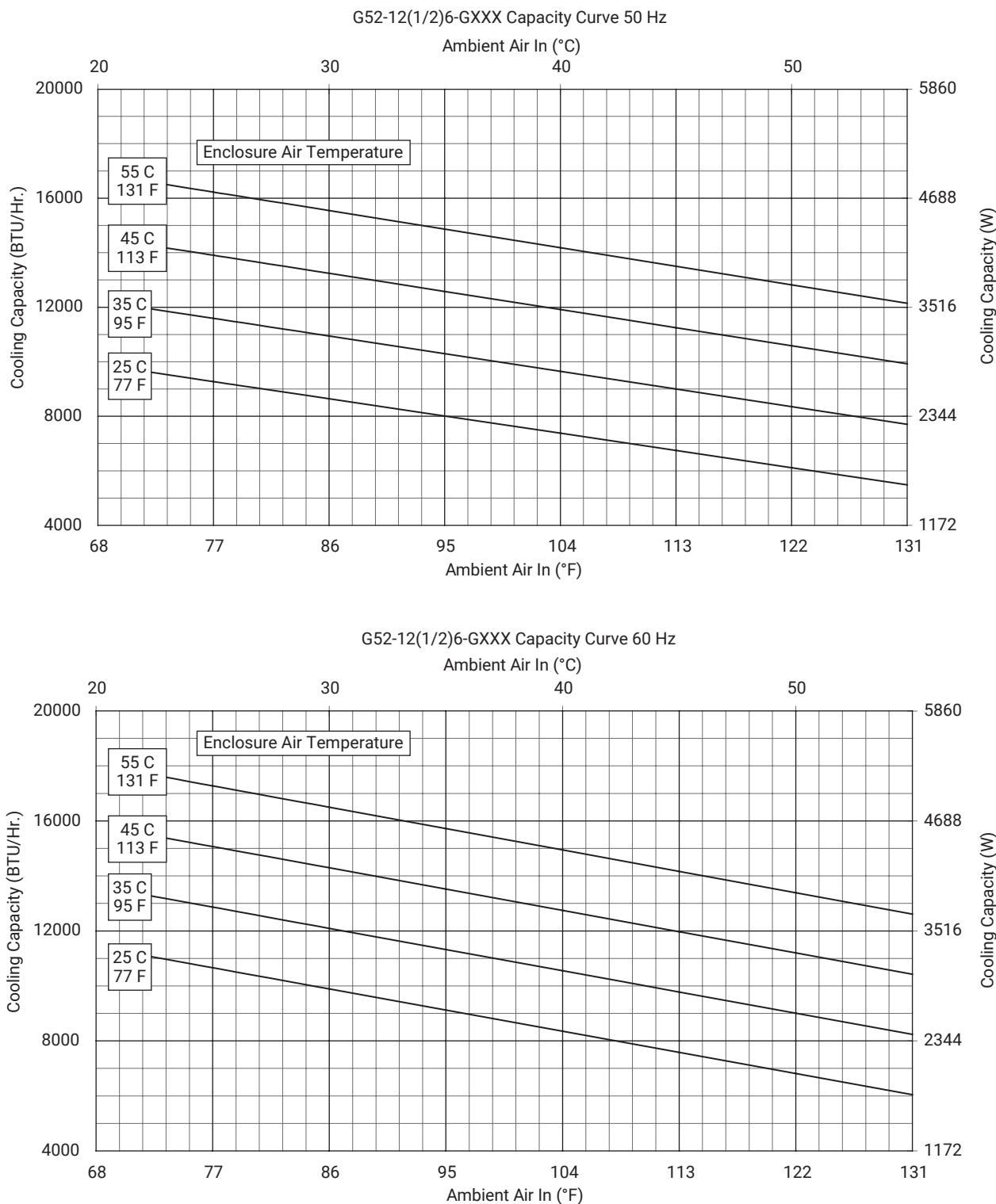
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G52 Models 8000 BTU/Hr. (2300 Watt)



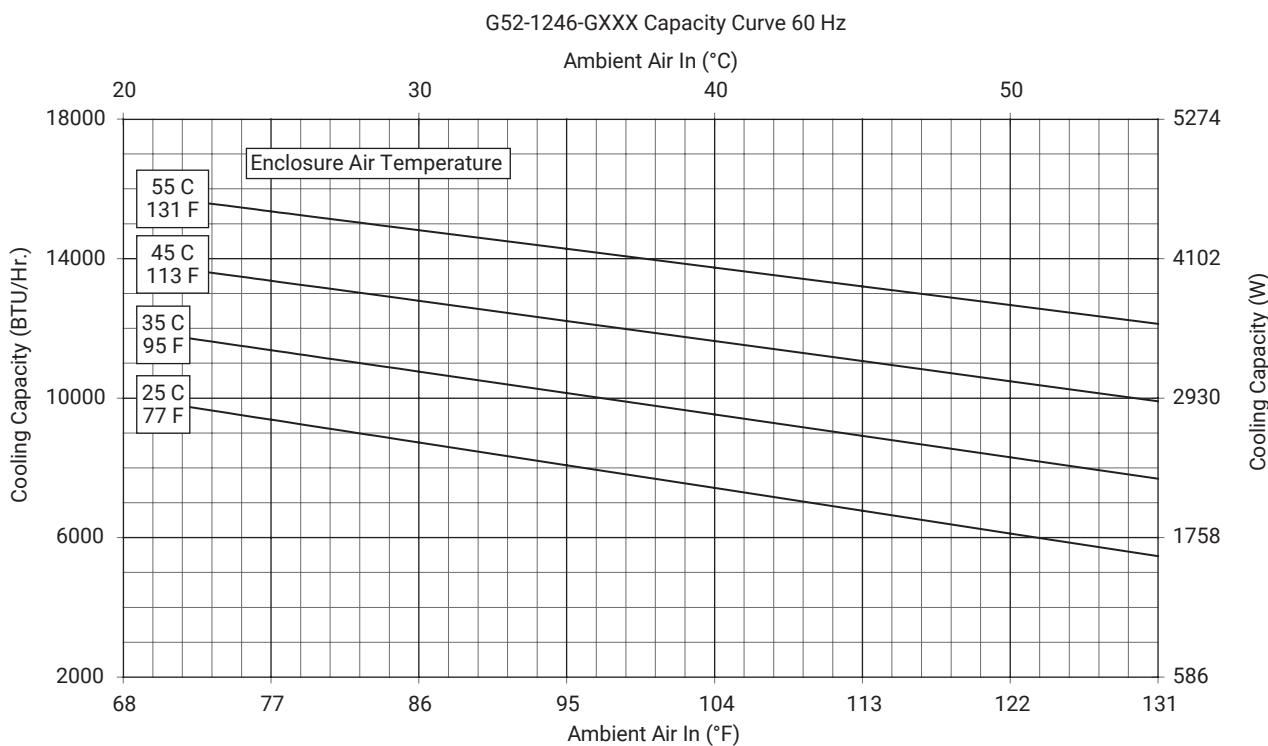
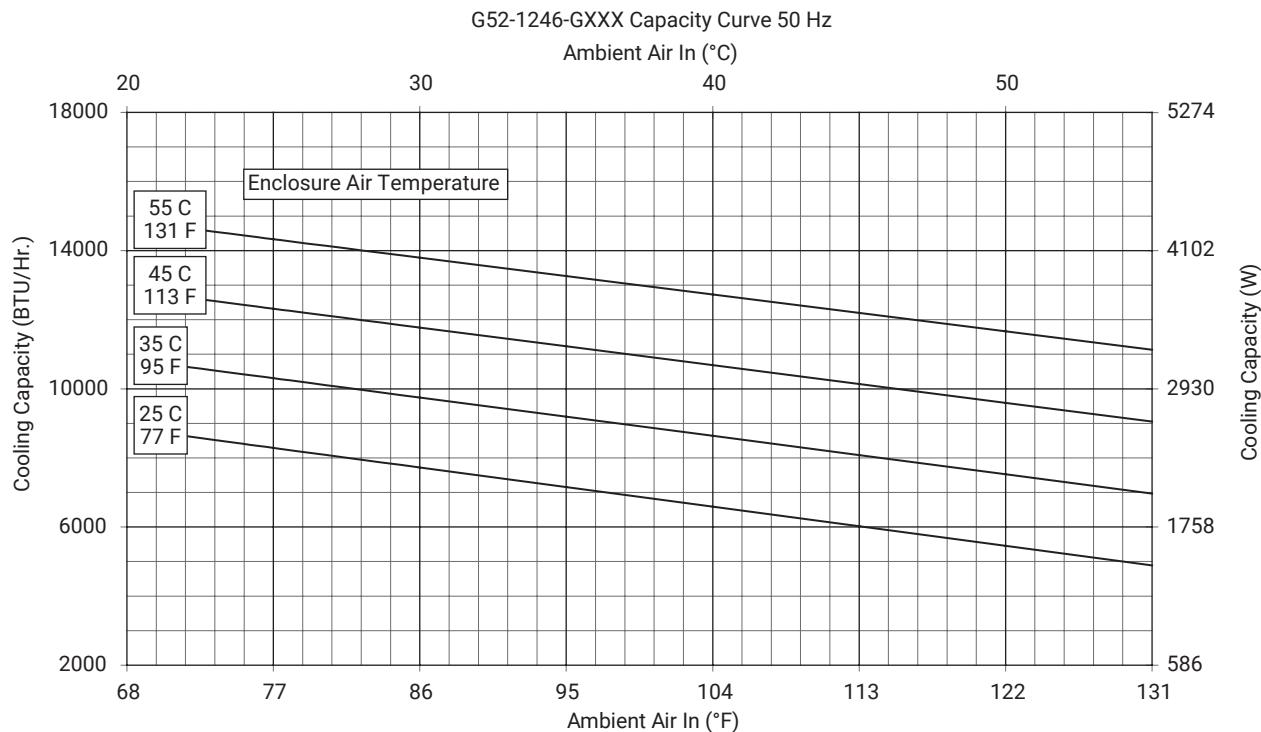
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G52 Models 12000 BTU/Hr. (3500 Watt)



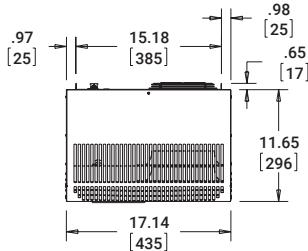
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G52 Models 12000 BTU/Hr. (3516 Watt)

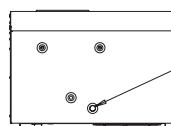
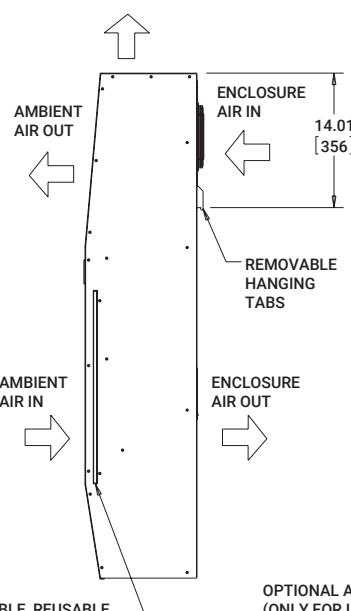
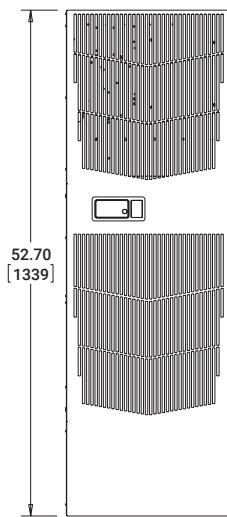


# SpectraCool Indoor/Outdoor G-Series

G52 Models 8000/12000 BTU/Hr. (2300/3500 Watt)

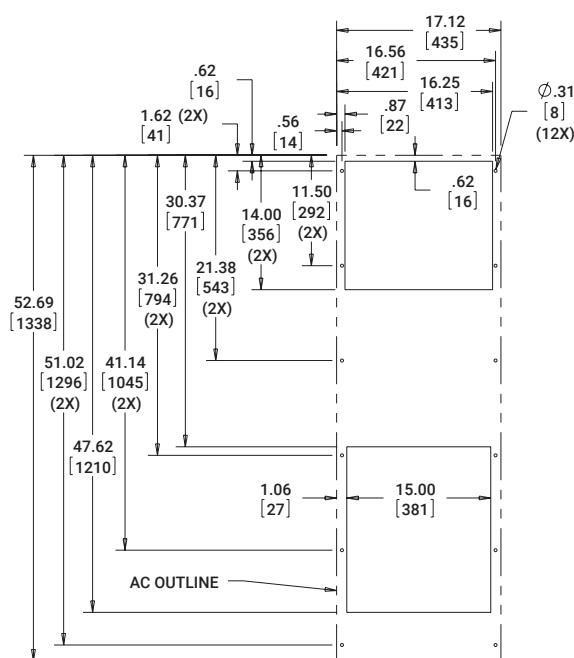
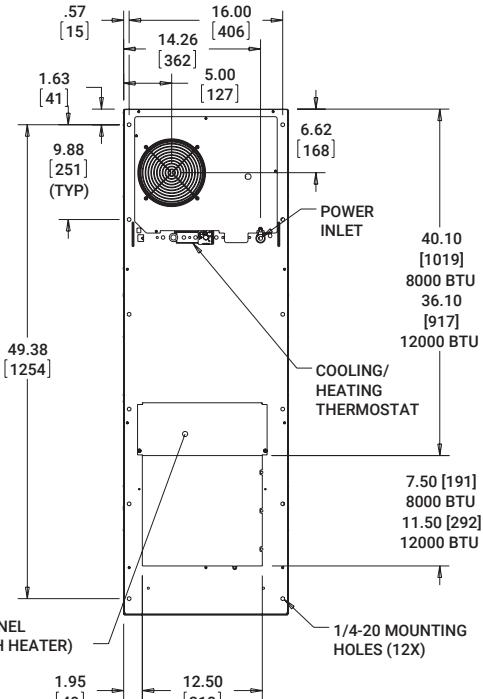


NOTE:  
1. MOUNTING GASKET SUPPLIED (NOT SHOWN)  
2. UNITS: in. [mm]

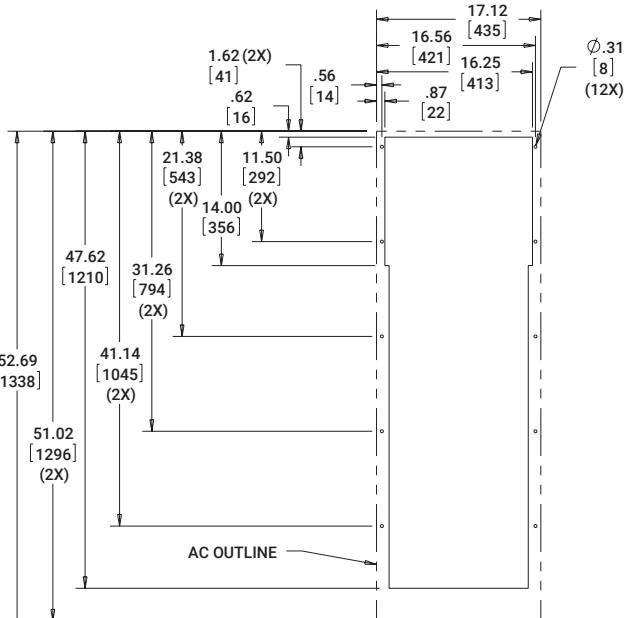


CLEANABLE, REUSABLE  
ALUMINUM INLET FILTER

ACCESS HOLE .38 [9.5]  
OUTSIDE DIAMETER  
DRAIN STUB



Cutout Dimensions  
(Standard)

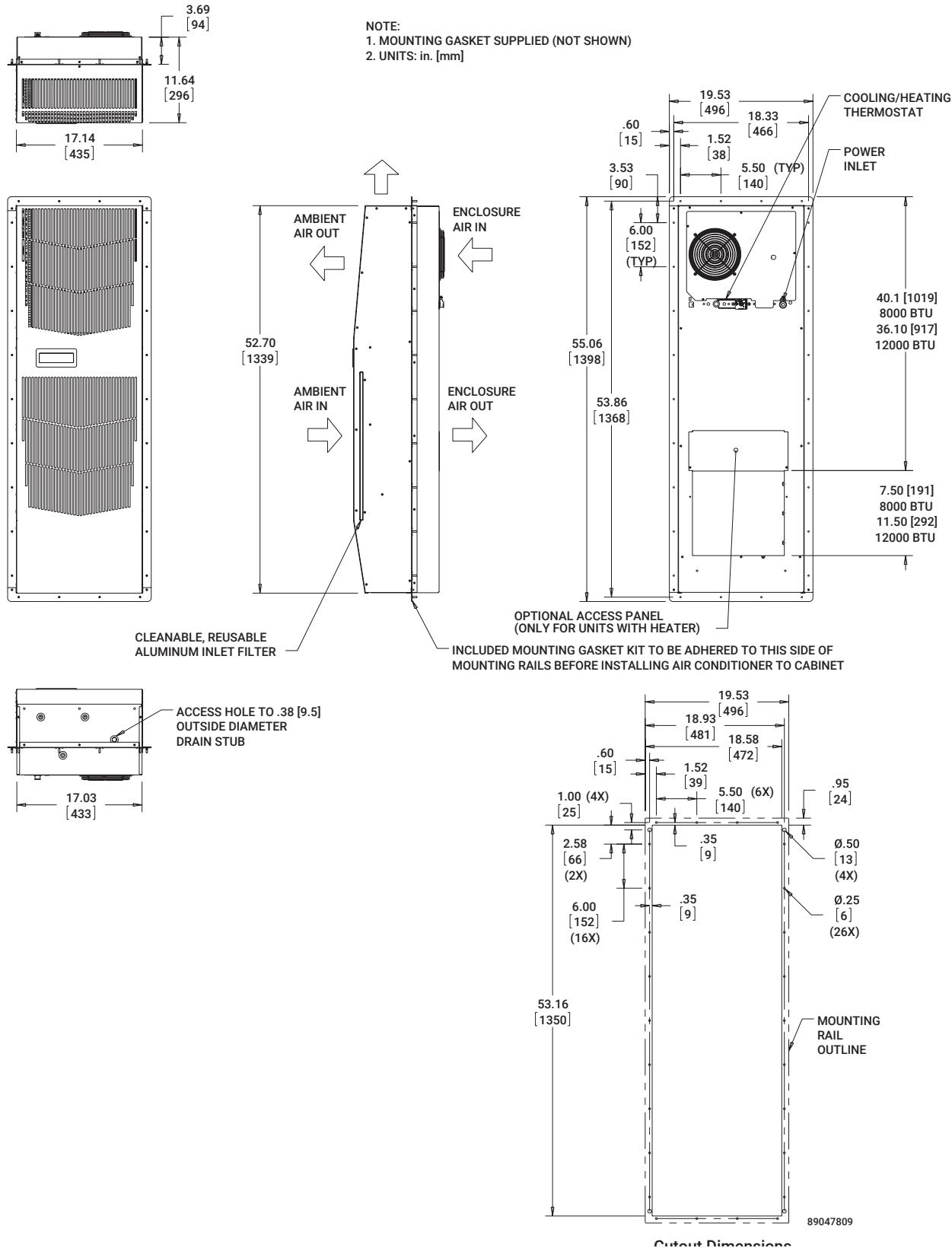


Cutout Dimensions  
(G520846G150, G520846G151,  
G521246G150, G521246G151 only)

89044798

# SpectraCool Indoor/Outdoor G-Series

G52 Models 8000/12000 BTU/Hr. (2344/3516 Watt) with Partial Recess



**NOTES:**

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# SpectraCool Indoor/Outdoor G-Series

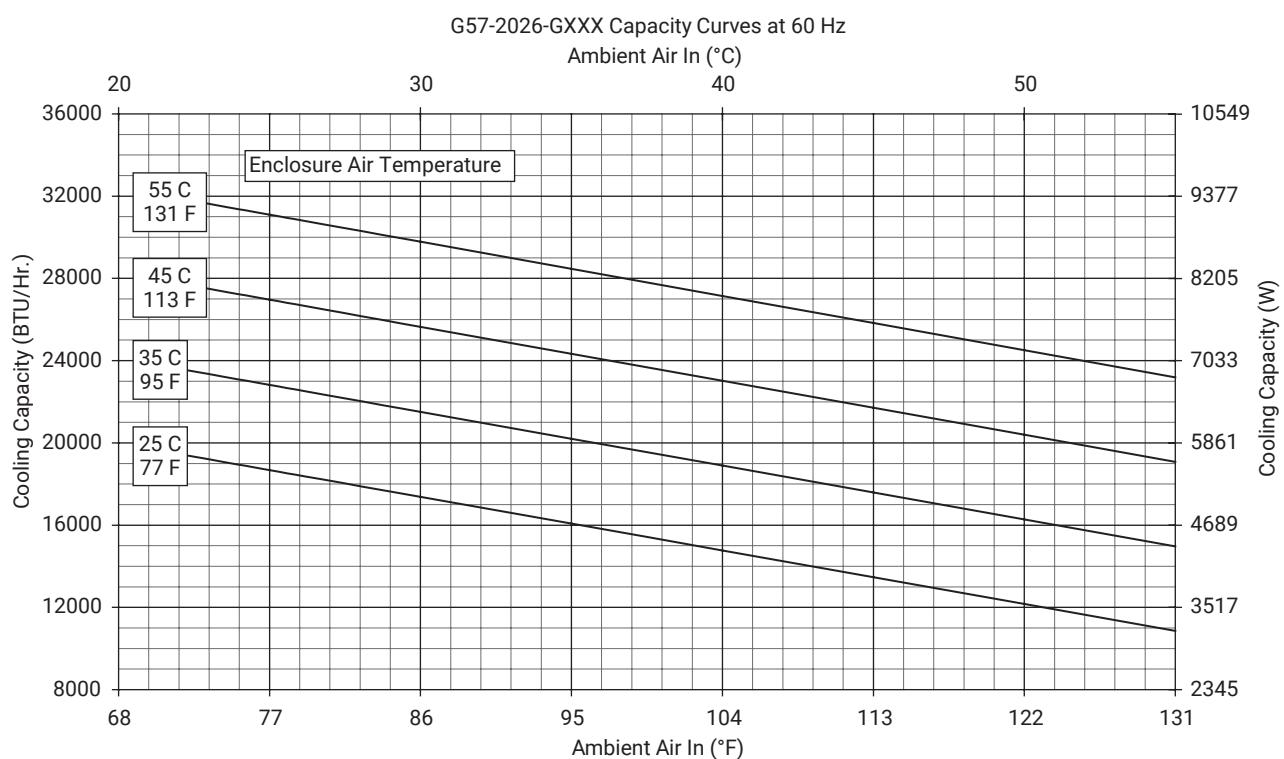
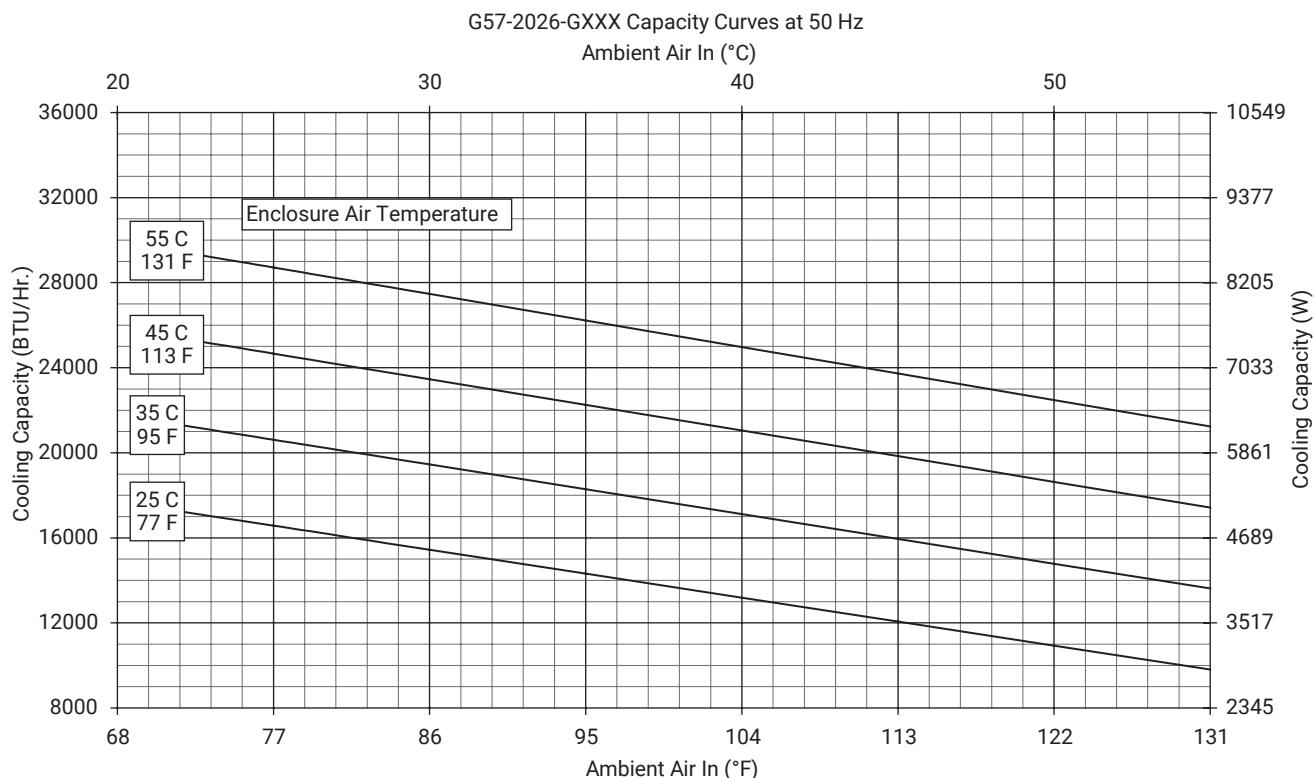
## PERFORMANCE DATA G57 MODELS 20000 BTU/HR. (5861 WATT)

Item number		
Indoor Model	G572026G050	G572046G050
Indoor Model Stainless Steel Type 4X	G572026G051	G572046G051
Outdoor Model without Heat Pkg.	G572026G100	G572046G100
Outdoor Model Partial Recessed Mount	G572026G101	G572046G101
Outdoor Model with Heat Pkg.	G572026G150	G572046G150
Outdoor Model without Heat Pkg. Stainless Steel Type 4X	G572026G102	G572046G102
Outdoor Model with Heat Pkg. Stainless Steel Type 4X	G572026G151	G572046G151
COOLING PERFORMANCE		
Nominal:		
<b>BTU/Hr.</b>	<b>20000</b>	<b>20000</b>
<b>Watt</b>	<b>5861</b>	<b>5861</b>
At 131 °F/131 °F (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	17500/19600	21400/23400
W (50/60 Hz)	5129/5744	6272/6857
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	16000/18000	19300/21400
W (50/60 Hz)	4689/5275	5656/6272
Refrigerant	R407c	R407c
Refrigerant Charge (ounces/grams)	50/1417	48/1361
Operating Temperature Range:		
Maximum (°F/°C)	131/55	131/55
Indoor Minimum (°F/°C)	50/10	50/10
Outdoor Minimum (°F/°C)	-40/-40	-40/-40
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m3/hr.)	513/872	513/872
External loop 50 Hz (CFM/m3/hr.)	919/1562	919/1562
Internal loop 60 Hz (CFM/m3/hr.)	587/998	587/998
External loop 60 Hz (CFM/m3/hr.)	1055/1794	1055/1794
Max. Heater W (Outdoor Models)	3000	3000
ELECTRICAL DATA		
<b>Rated Voltage</b>	<b>230/230</b>	<b>400/460 3~</b>
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	4508/5106	2400/3128
Max. Nominal Current (A at 50/60 Hz)	19.6/22.2	6.0/6.8
Starting Current (A)	63	27
Agency Approvals	cUL Listed CE EAC	Others available upon request
Power Input Description		Terminal Block
ENCLOSURE PROTECTION		
UL Type	Type 12, 3R, 4 standard Type 4X stainless steel optional	
International Rating	IP56 internal loop IP34 external loop	
CONTROLLER		
Description	Basic mechanical thermostat with digital display	
Thermostat Location	Enclosure side on all base models	
DIGITAL DISPLAY LOCATION:		
Indoor Models	Ambient side	
Outdoor Models	Enclosure side	
Factory Thermostat Setting (°F/°C)	80/27	
SOUND LEVEL		
At 1.5 Meters	74.1 dB(A)	
UNIT CONSTRUCTION		
Material	Galvanized sheet metal standard or Stainless Steel Typ 304	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
ACCESSORIES		
Cleanable Re-usable Filter	Aluminum mesh part #101000103 BA	
EASYSWAP Adaptor Plenum (T-Series T53)	Enables SpectraCool to be mounted to a T-Series T53 air conditioner cutout part #57721601SP	
UNIT DIMENSIONS		
Height (in./mm)	57.69/1465.4	
Width (in./mm)	20.87/530.1	
Depth (in./mm)	15.28/388.1	
Weight (lb./kg)	197/89	

\*Units with Remote Access Control utilize a digital controller and communicate via EtherNet/IP, Modbus TCP/IP and SNMP over ethernet or modbus RTU over USB.

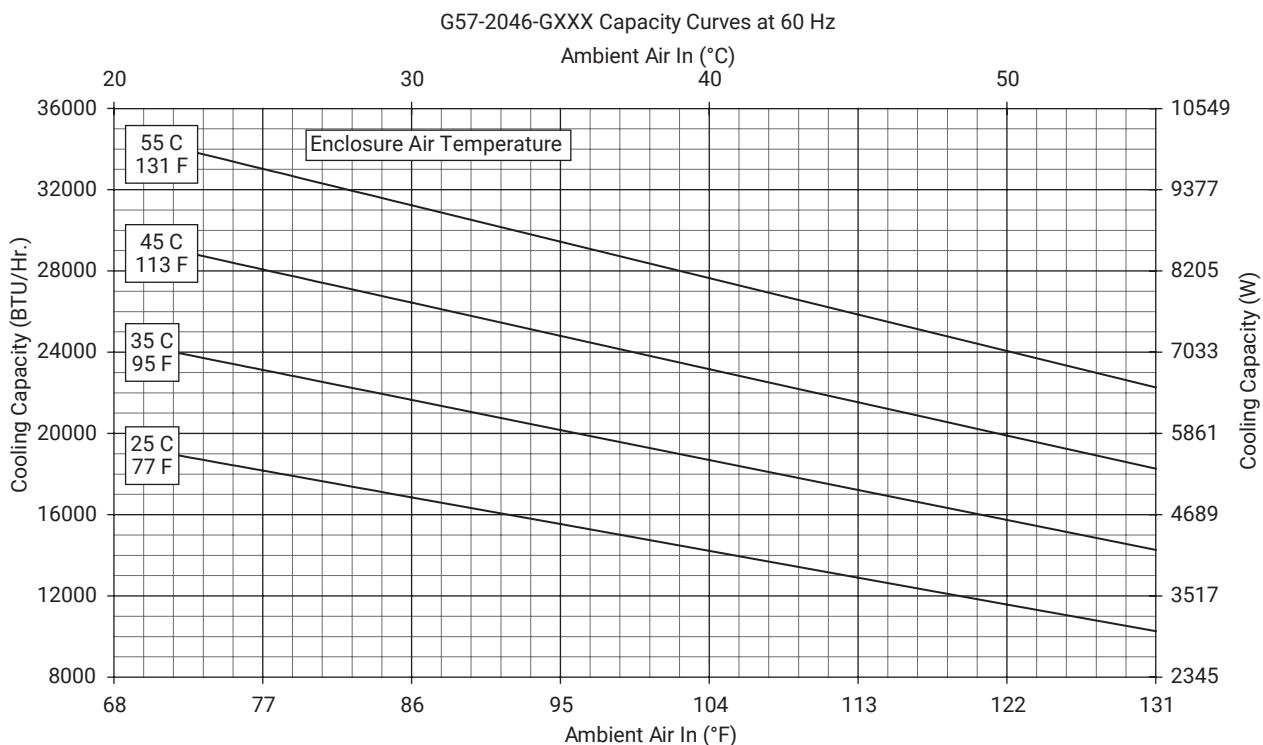
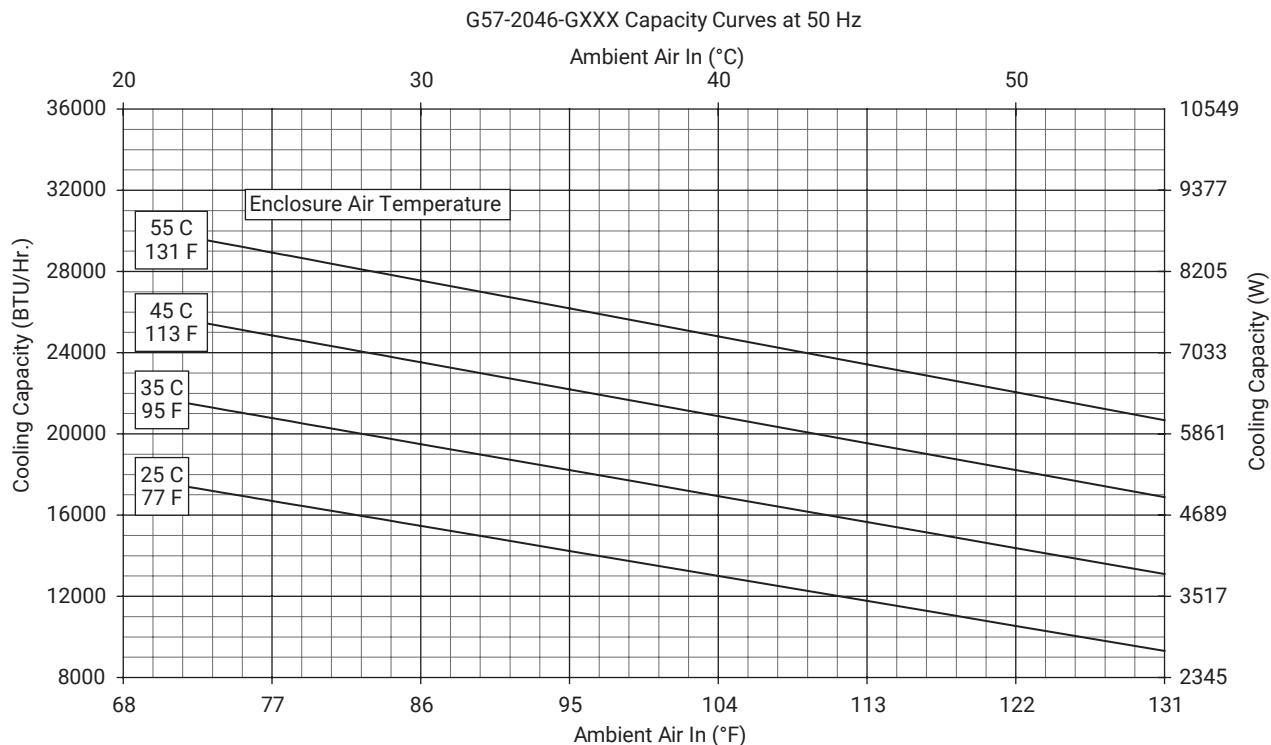
# SpectraCool Indoor/Outdoor G-Series

Performance Curves for G57 Models 20000 BTU/Hr. (5861 Watt)



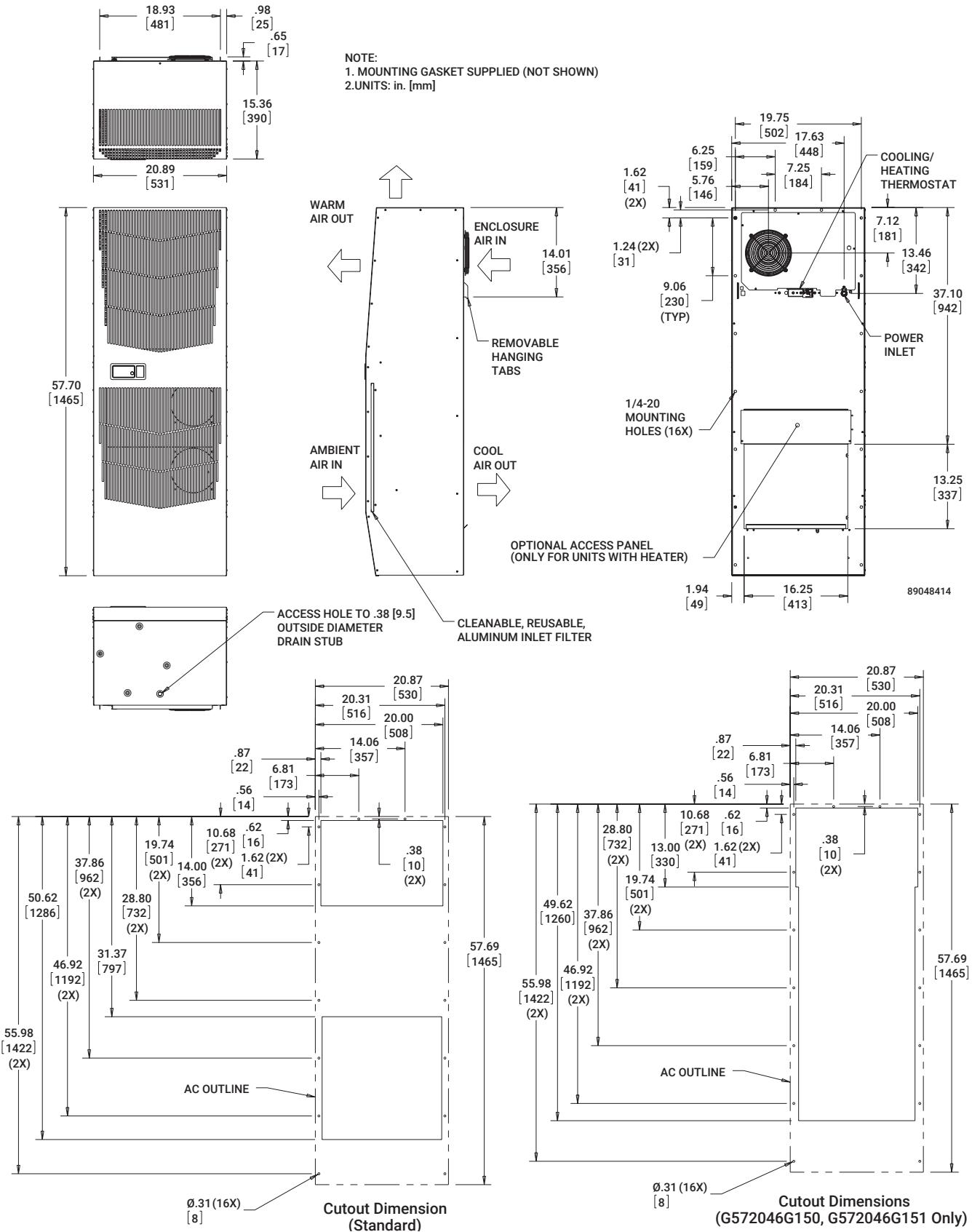
# SpectraCool Indoor/Outdoor G-Series

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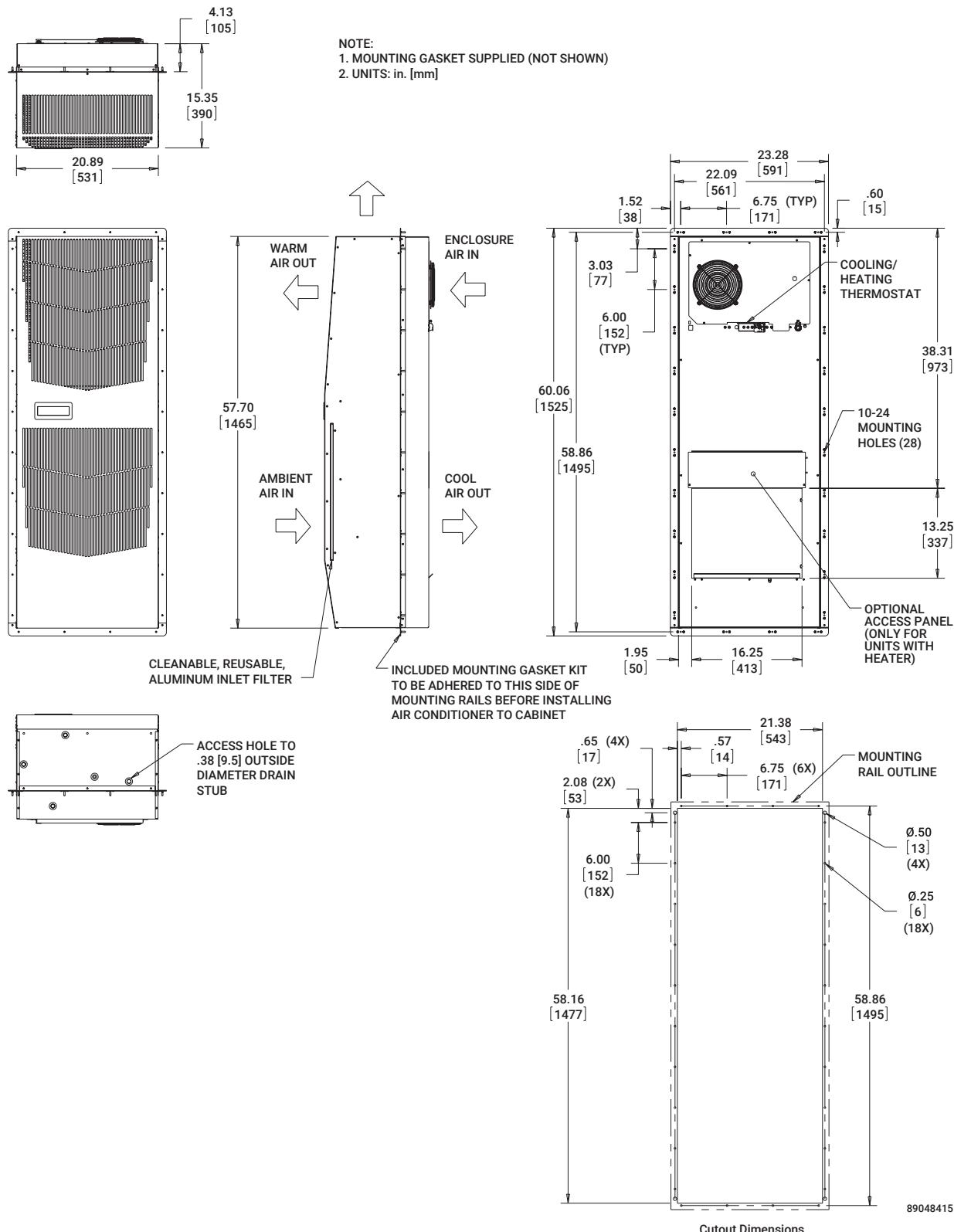
# SpectraCool Indoor/Outdoor G-Series

G57 Models 20000 BTU/Hr. (5861 Watt)



# SpectraCool Indoor/Outdoor G-Series

G57 Models 20000 BTU/Hr. (5861 Watt) With Partial Recess



**NOTES :**

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# V-Series Indoor/Outdoor

## V-SERIES COMPACT AIR CONDITIONERS



**VA06 Indoor Model**  
400 and 600 Watts

### INDUSTRY STANDARDS

IP 56 Internal Air Loop  
IP 34 External Air Loop  
CE  
EAC



### APPLICATION

- Industrial drive enclosures
- Automotive assembly systems
- Packaging equipment
- Material handling
- Other process control systems

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Coated coils for filterless operation in most manufacturing environments
- Convenient quick-fastening terminal block for easy power connections
- Built-in installation hooks on the back of the unit
- Passive condensate management system

- Indoor operating temperature range from 20°C to 55°C
- IP 56 protection against dust and water infiltration
- Reliable mechanical thermostat to reduce the chance of failure
- All-metal shroud for rugged factory conditions
- Partial-recessed and surface mount
- Full-size cutout print included with every unit
- Easy access to the optional aluminum filter and other components
- Every unit functionally tested prior to leaving the factory
- R134A earth-friendly refrigerant and RoHS compliant

### SPECIFICATIONS

- 400 and 600 nominal Watt
- 230 VAC 50 Hz power input with +/-10 percent operating range
- CE and EAC certifications
- Outdoor AC models also include:
  - Malfunction Switch
  - Compressor heater
  - Compressor head pressure control
  - Enclosure heater 500 W
  - Corrosion resistant components
  - Operating temperature range -40°C - 55°C

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint standard
- Other colors and textures available upon request

For product general accessories, please refer to the chapter "Accessories".

# V-Series Indoor/Outdoor

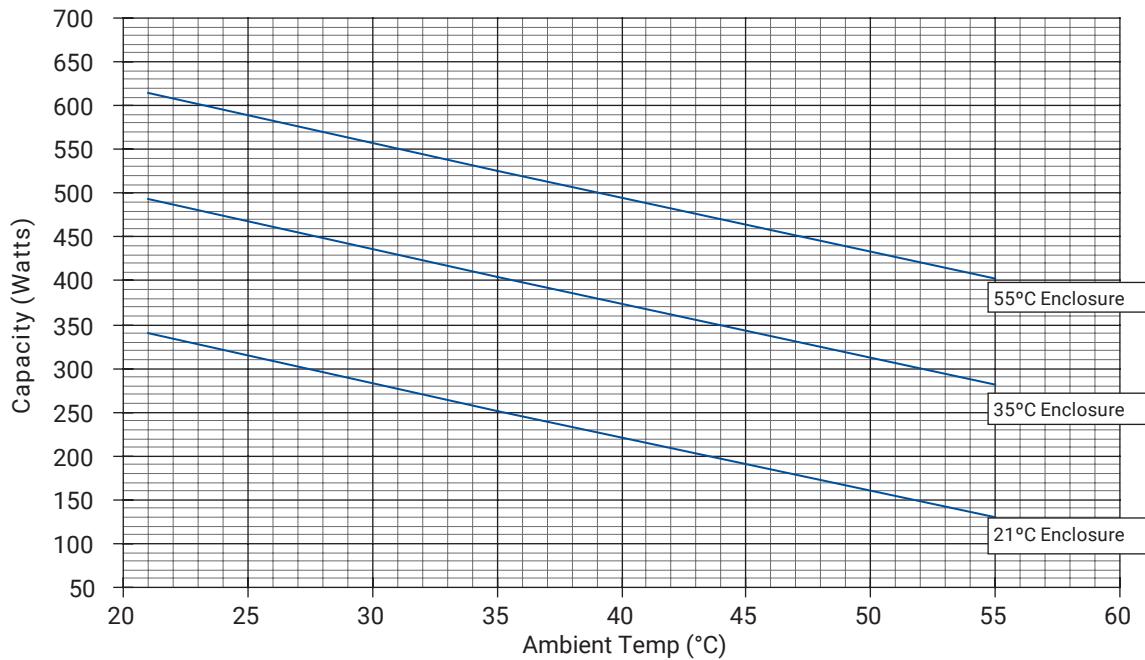
## PERFORMANCE DATA 400 W, 600 W

MODEL	400 Watt	600 Watt
<b>Item number</b>		
Indoor Model	<b>VA060325G052A</b>	<b>VA060625G052A</b>
Indoor Model Partial Recessed Mount	<b>VA060325G053A</b>	<b>VA060625G053A</b>
Indoor Model with Display and Malfunction Switch	<b>VA060325G059A</b>	<b>VA060625G059A</b>
Outdoor Model with Heat Package	<b>VA060325G152A</b>	<b>VA060625G152A</b>
Outdoor Model with Heater SS 316	<b>VA060325G156A</b>	<b>VA060625G156A</b>
<b>COOLING PERFORMANCE:</b>		
Nominal:		
L35 L35		
<b>Watt</b>	<b>400</b>	<b>590</b>
L35 L50		
Watt	310	510
Refrigerant	R134a	R134a
Refrigerant Charge (g)	100	150
Operating Temperature Range:		
Maximum (°C)	55	55
Minimum (°C)	-40/20	-40/20
Airflow at 0 Static Pressure:		
Internal loop (m <sup>3</sup> /h)	115	180
External loop (m <sup>3</sup> /h)	325	270
Duty Cycle	100%	100%
Encl. Heater max. Watt (Outdoor Models)	500	500
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>230</b>	<b>230</b>
Frequency (Hz)	50	50
Operating Range	+/-10%	+/-10%
Max. Power Consumption L35 L35 (Watt)	225	420
Max. Power Consumption L35 L50 (Watt)	285	505
Max. Nominal Current (Amp)	1.5	2.8
Starting Current (Amp)	7	16
Pre-fuse T (Amp)	10	10
Agency Approvals	CE	CE
EAC	EAC	EAC
Power Input Description	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR L35 L35</b>		
Cooling Performance (Watt)/ Power Consumption (Watt)	1.8	1.4
<b>PERFORMANCE FACTOR L35 L50</b>		
Cooling Performance (Watt)/ Power Consumption (Watt)	1.1	1.0
<b>ENCLOSURE PROTECTION</b>		
IP Code	IP 56 Internal loop IP34 External loop	IP 56 Internal loop IP34 External loop
<b>CONTROLLER</b>		
Description	Basic Mechanical Thermostat	Basic Mechanical Thermostat
Thermostat Location	Enclosure Side	Enclosure Side
Factory Thermostat Setting (°C)	35	35
<b>SOUND LEVEL</b>		
At 1 M	64 dBA	72 dBA
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized Sheet Metal Standard	Galvanized Sheet Metal Standard
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	RAL 7035 light-gray, semi-textured powder-coat paint standard
<b>UNIT DIMENSIONS</b>		
Height (mm)	508	508
Width (mm)	270	270
Depth (mm)	252	252
Weight (kg)	23	25

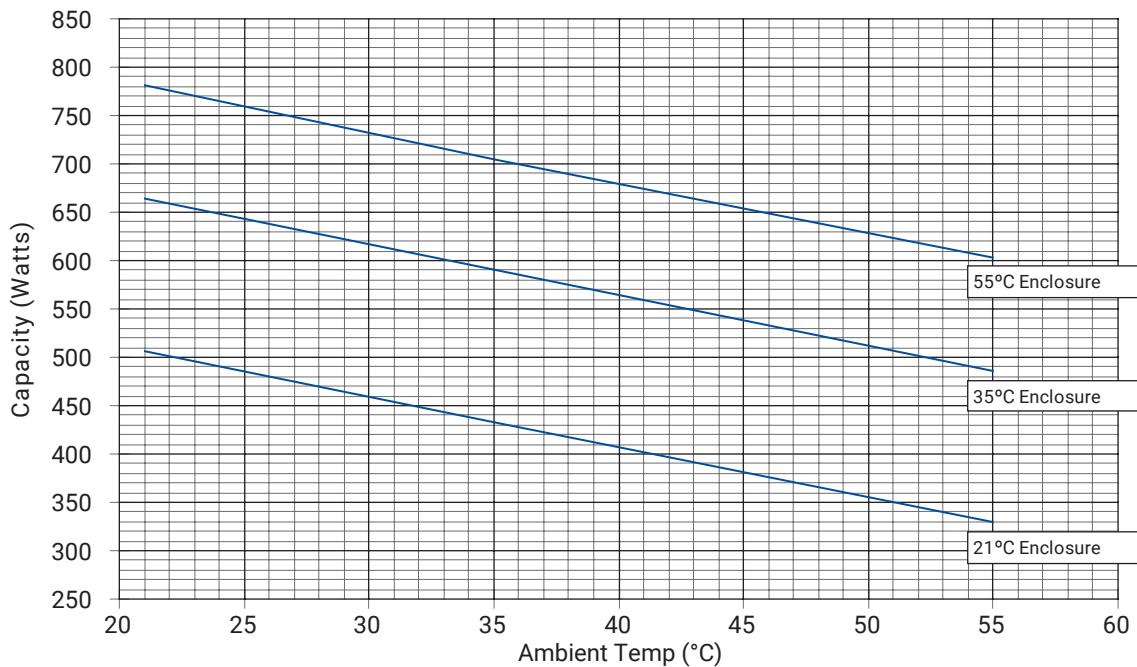
# V-Series Indoor/Outdoor

Performance Curves for 400 and 600 Watt Models

**VA060325GXXXA 400 Watt Capacity Curves 230V/50Hz**

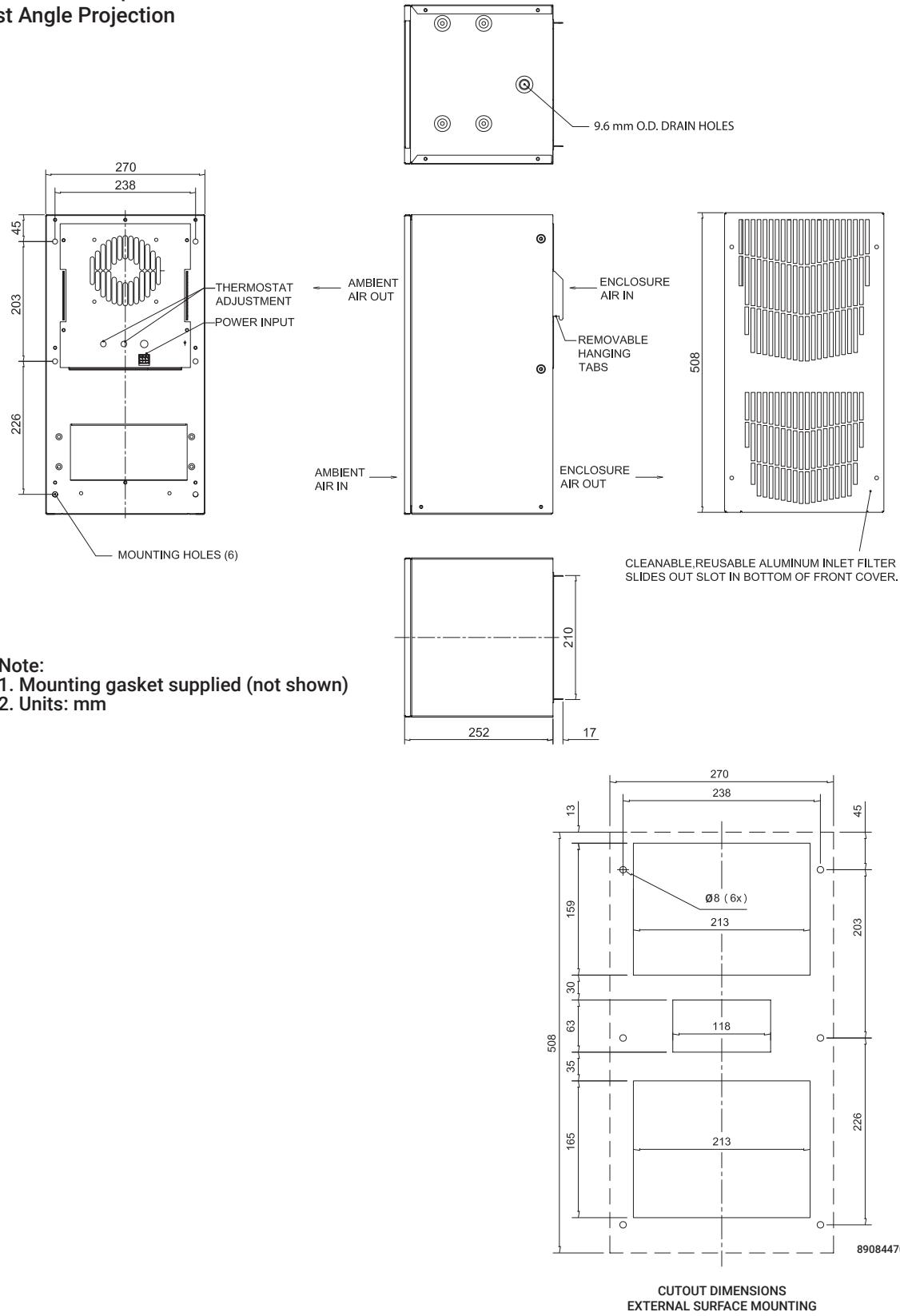


**VA060625GXXXA 600 Watt Capacity Curves 230V/50Hz**

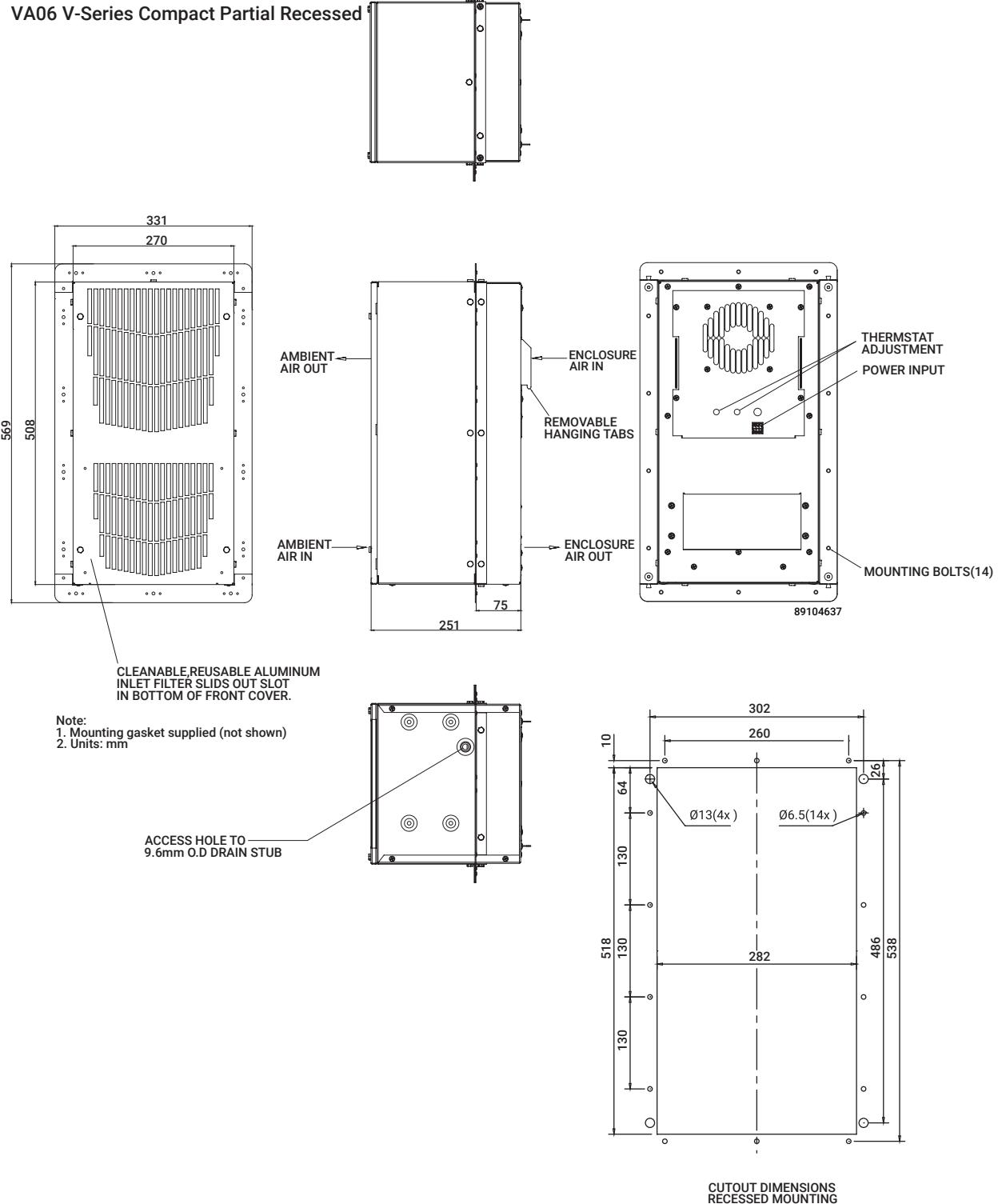


# V-Series Indoor/Outdoor

## V-SERIES Compact 1st Angle Projection



# V-Series Indoor/Outdoor



**NOTES :**

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# V-Series Indoor/Outdoor

## V-SERIES MID-SIZE AIR CONDITIONERS



**VA08 Indoor Model**  
1200, 1500 and 2000 Watts

### INDUSTRY STANDARDS

IP 56 Internal Air Loop  
IP 34 External Air Loop  
CE  
EAC



### APPLICATION

- Industrial drive enclosures
- Automotive assembly systems
- Packaging equipment
- Material handling
- Other process control systems

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Coated coils for filterless operation in most manufacturing environments
- Convenient quick-fastening terminal block for easy power connections
- Built-in installation hooks on the back of the unit
- Passive condensate management systems

- Indoor operating temperature range from 20°C to 55°C
- IP 56 protection against dust and water infiltration
- Reliable mechanical thermostat to reduce the chance of failure
- All-metal shroud for rugged factory conditions
- Partial recessed and surface mount
- Full-size cutout print included with every unit
- Easy access to the optional aluminum filter and other components
- Every unit functionally tested prior to leaving the factory
- Rotary compressor for energy efficiency
- R134A earth-friendly refrigerant and RoHS compliant

### SPECIFICATIONS

- 1200, 1500 and 2000 nominal Watt
- 230 VAC 50 Hz power input with +/-10 percent operating range
- CE and EAC certifications
- Malfunction switch
- Outdoor AC models also include:
  - Compressor heater
  - Compressor head pressure control
  - Enclosure heater 2000 W
  - Corrosion resistant components
  - Operating temperature range -40 °C - 55 °C

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint standard
- Other colors and textures available upon request

For product general accessories, please refer to the chapter "Accessories".

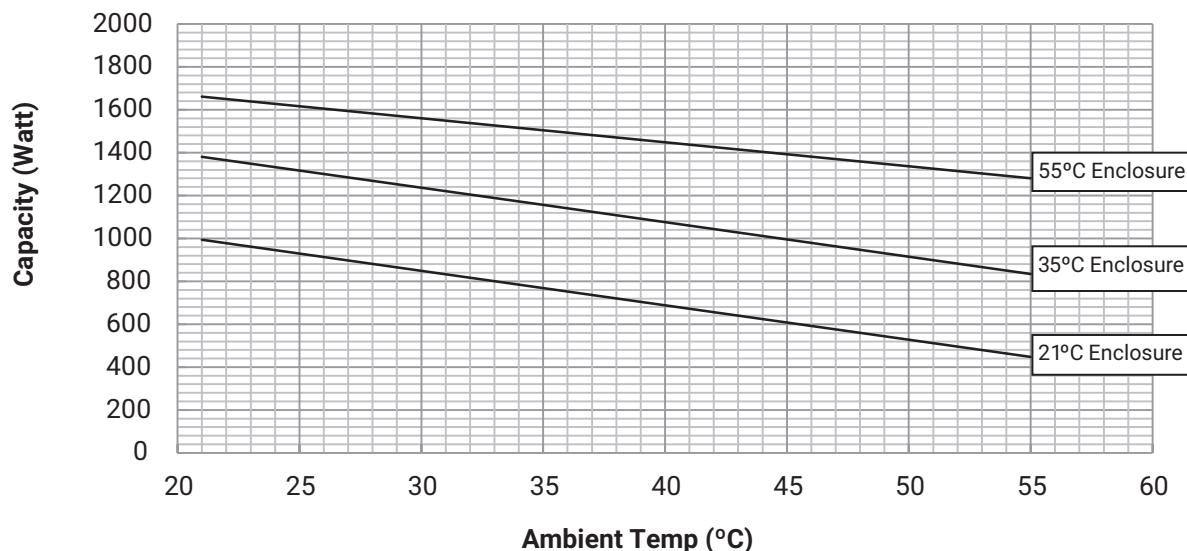
# V-Series Indoor/Outdoor

## PERFORMANCE DATA 1200 W, 1500 W, 2000 W

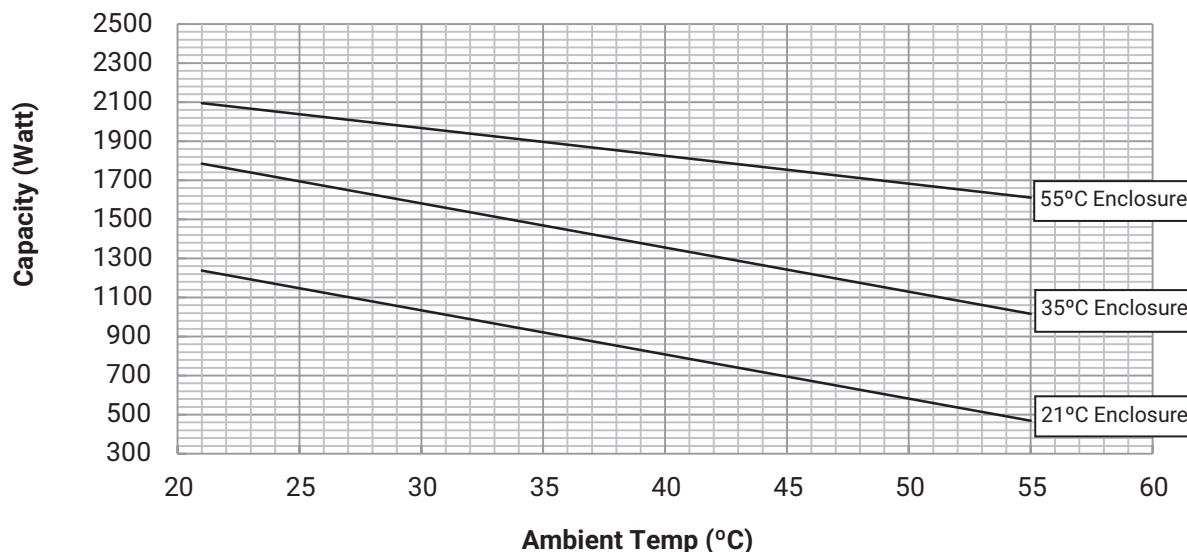
MODEL	1200 Watt	1500 Watt	2000 Watt
<b>Item Number</b>			
Indoor Model	<b>VA081225G052A</b>	<b>VA081525G052A</b>	<b>VA082025G052A</b>
Indoor Model Partial Recessed Mount	<b>VA081225G053A</b>	<b>VA081525G053A</b>	<b>VA082025G053A</b>
Indoor Model With Display and Malfunction Switch	<b>VA081225G059A</b>	<b>VA081525G059A</b>	<b>VA082025G059A</b>
Outdoor Model with Heat Package	<b>VA081225G152A</b>	<b>VA081525G152A</b>	<b>VA082025G152A</b>
Outdoor Model with Heater SS316	<b>VA081225G156A</b>	<b>VA081525G156A</b>	<b>VA082025G156A</b>
<b>COOLING PERFORMANCE:</b>			
Nominal:			
L35 L35			
<b>Watt</b>	<b>1160</b>	<b>1470</b>	<b>1910</b>
L35 L50	960		
<b>Watt</b>	<b>960</b>	<b>1170</b>	<b>1540</b>
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	550	605	660
Operating Temperature Range:			
Maximum (°C)	55	55	55
Minimum (°C)	-40/20	-40/20	-40/20
Airflow at 0 Static Pressure:			
Internal loop (m³/h)	388	571	571
External loop (m³/h)	571	571	688
Duty Cycle	100%	100%	100%
Encl. Heater max. Watt (Outdoor Models)	2000	2000	2000
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>230</b>	<b>230</b>	<b>230</b>
Frequency (Hz)	50	50	50
Operating Range	±10%	±10%	±10%
Max. Power Consumption L35 L35 (Watt)	540	606	913
Max. Nominal Current (Amp)	3,5	3,96	5,7
Starting Current (Amp)	13,5	13,5	22
Pre-fuse T (Amp)	10	10	10
Agency Approvals	CE EAC	CE EAC	CE EAC
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR L35 L35</b>			
Cooling Performance (Watt)/ Power Consumption (Watt)	2,1	2,4	2,1
<b>ENCLOSURE PROTECTION</b>			
IP Code	IP56 Internal loop IP34 External loop		
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat		
Thermostat Location	Enclosure Side		
Factory Thermostat Setting (°C)	35		
<b>SOUND LEVEL</b>			
At 1 M	71 dBA	71 dBA	71 dBA
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized Sheet Metal Standard		
Finish	RAL 7035 Light-Gray,semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (mm)	725	725	725
Width (mm)	431	431	431
Depth (mm)	237	237	272
Weight (kg)	34,3	34,8	44

# V-Series Indoor/Outdoor

## VA081225GXXXA Capacity Curves 230V/50Hz

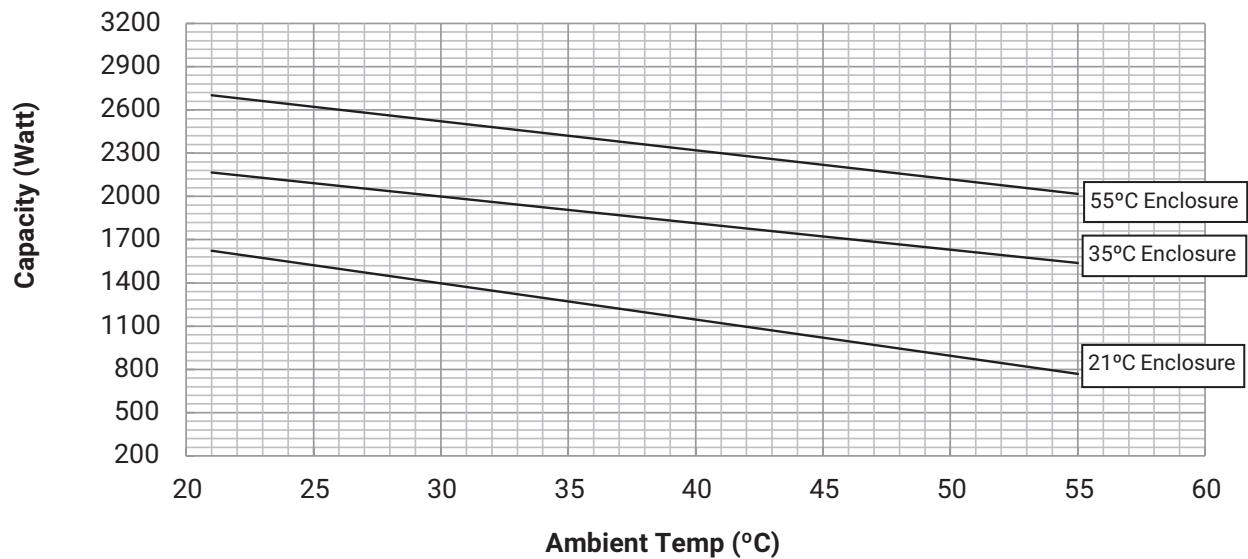


## VA081525GXXXA Capacity Curves 230V/50Hz



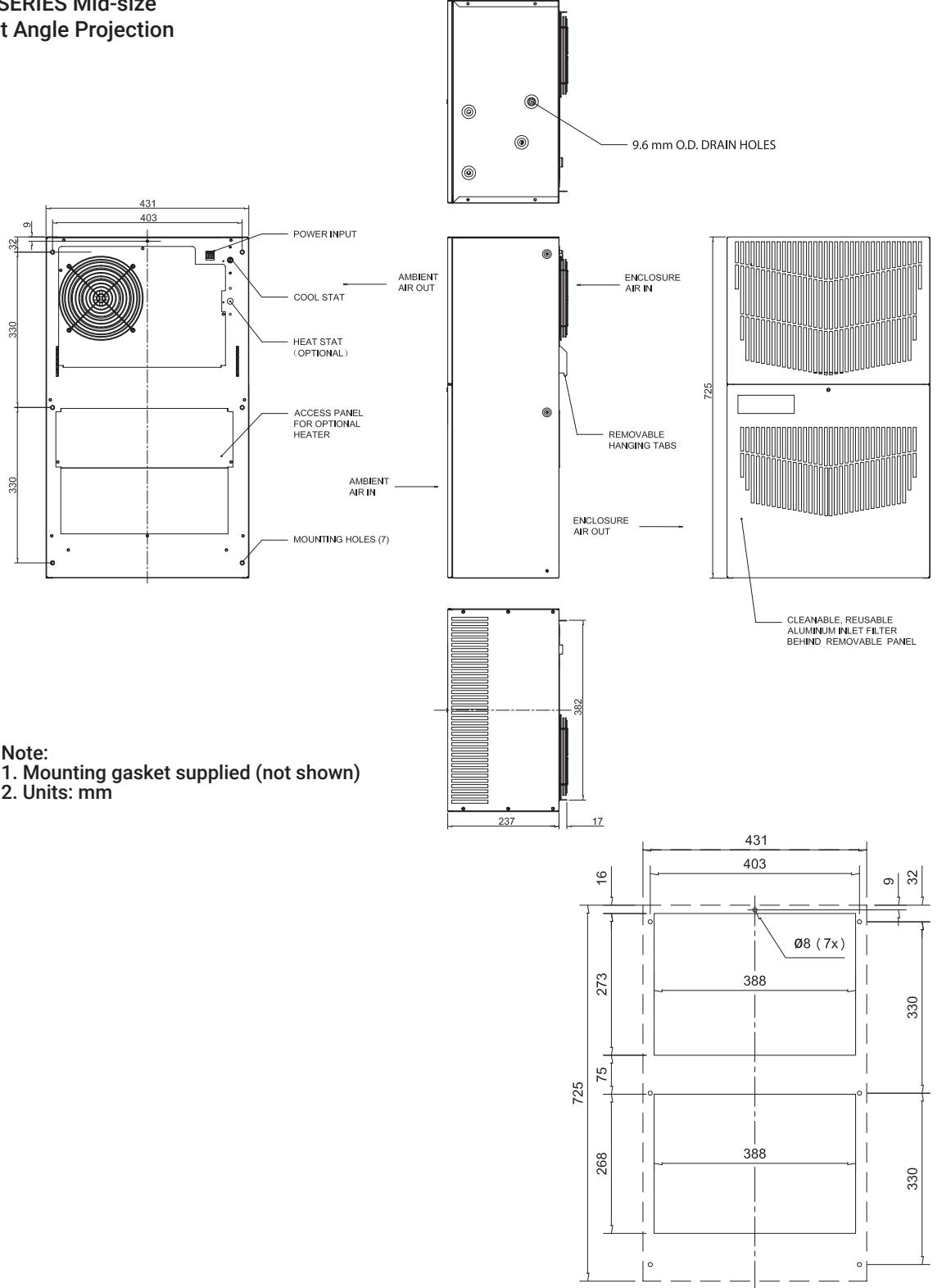
# V-Series Indoor/Outdoor

## VA082025GXXXA Capacity Curves 230V/50Hz



# V-Series Indoor/Outdoor

## V-SERIES Mid-size 1st Angle Projection

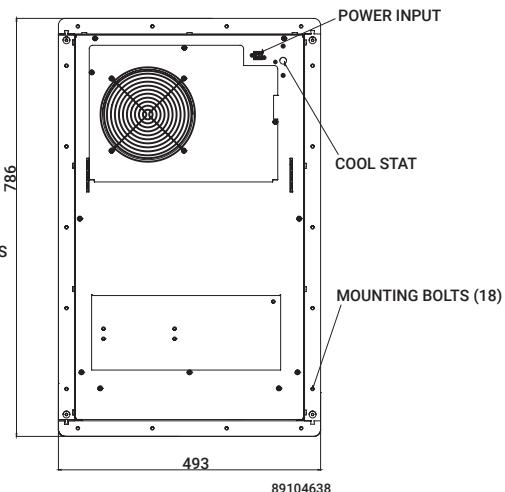
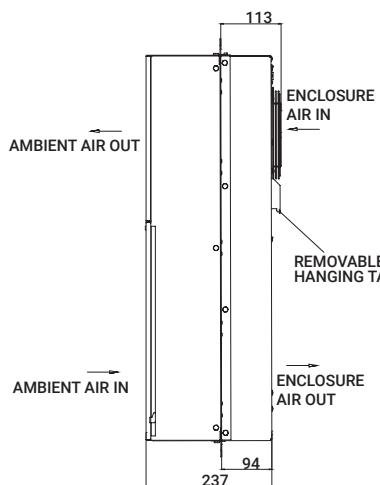
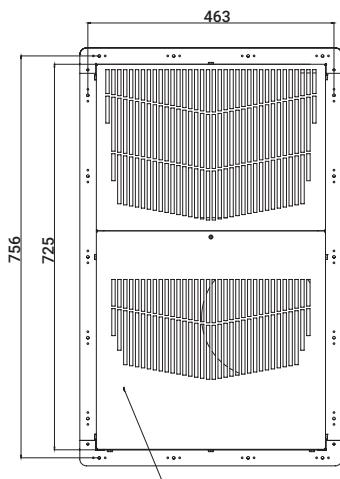
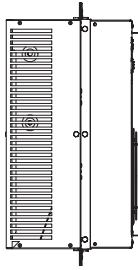


Cutout Dimensions  
External Surface Mount

89084471

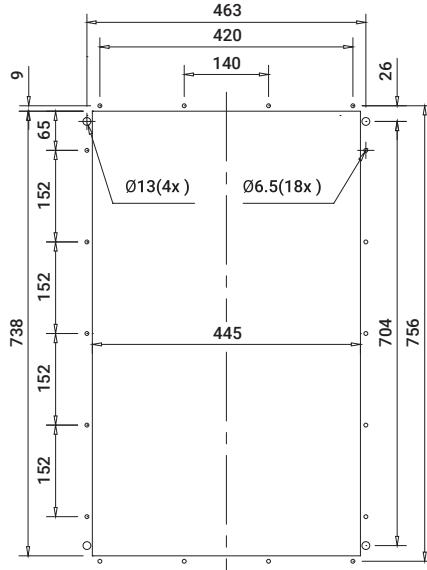
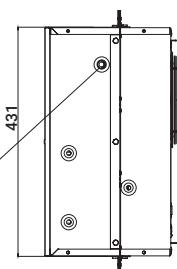
# V-Series Indoor/Outdoor

**VVA08 V-SERIES Mid-size Partial Recess  
1st Angle Projection**



Note:  
1. Mounting gasket supplied (not shown)  
2. Units: mm  
3. Depth of the 2000W model is 272mm

ACCESS HOLE TO 9.6mm O.D. DRAIN STUB



**Cutout Dimensions  
Recessed Mounting**

# Genesis Top-Mount Indoor M-Series

## GENESIS TOP-MOUNT INDOOR



**HB16**

8000 BTU/Hr.  
2051 Watt



**MHB11**

2200-4000 BTU/Hr.  
645-1172 Watt

### INDUSTRY STANDARDS

UL/cUL Listed; Type 12; File No. SA6453  
UR/cUR Recognized

Maintains U/cUL Type 12 rating when properly installed on a UL/cUL Type 12 enclosure.

UR/cUR recognized on select models, reference performance data tables.

CE  
EAC



### APPLICATION

- Industrial automation
- Package handling equipment
- Security and defense systems
- Ideal for use where there is little or no clearance around the enclosure

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Installation instruction

### FEATURES

- Robust reciprocating compressor
- Operating temperature range from 50°F/10°C to 125°F/52°C
- Reliable mechanical thermostat located behind the filter of the unit
- Every unit functionally tested before shipping

### SPECIFICATION

- Low-carbon mild-steel sheet-metal cover for rugged factory environments
- Models for 115, 230 and 460 single-phase VAC power input
- Standard Indoor Air Conditioner models also include:
  - Electro-Mechanical Thermostat
  - Surge Suppressor
  - Condensate Management System On MHB11 models

### FINISH

- RAL 7042 gray, semi-gloss powder-coat paint standard
- Other colors and textures available

### OPTIONS

- Thermostat Malfunction Package
  - Special Voltage Package
- \* Consult the factory for availability and catalog number

For product general accessories, please refer to the chapter "Accessories".

# Genesis Top-Mount Indoor M-Series

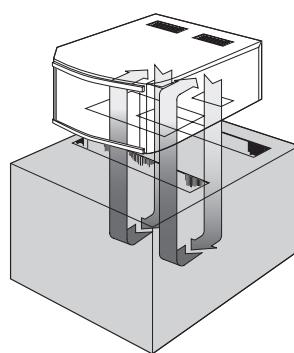
## PERFORMANCE DATA MHB11 MODELS 2200 BTU/HR. (645 WATT)

Item number	MHB110216G306	MHB110226G306	MHB110246G400
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>2200/2200</b>	<b>2200/2200</b>	<b>2200/2200</b>
<b>Watt</b>	<b>645/645</b>	<b>645/645</b>	<b>645/645</b>
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	11/312	11/312	11/312
Operating Temperature Range:			
Maximum (°F/°C)	125/52	125/52	125/52
Minimum (°F/°C)	50/10	50/10	50/10
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	158/268	170/289	170/289
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	222/377	218/370	218/370
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	177/301	192/326	192/326
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	252/428	245/416	245/416
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>220/230</b>	<b>440/460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1127/1035	1210/1058	1320/1150
Max. Nominal Current (A at 50/60 Hz)	9.8/9.0	5.5/4.6	3.0/2.5
Starting Current (A)	28	14.4	7.4
Agency Approvals	cUL Listed CE EAC Others available upon request		cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12 standard		
<b>CONTROLLER</b>			
Description	Basic mechanical thermostat		
Thermostat Location	Behind filter		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	62 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Mild steel sheet metal standard Stainless steel optional		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	10.25/260	10.25/260	10.25/260
Width (in./mm)	17/432	17/432	17/432
Depth (in./mm)	21.08/535	21.08/535	21.08/535
Weight (lb./kg)	90/41	90/41	110/50

# Genesis Top-Mount Indoor M-Series

## PERFORMANCE DATA MHB11 MODELS 4000 BTU/HR. (1172 WATT)

Item number	MHB110416G307	MHB110426G306	MHB110446G400
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>3300/4000</b>	<b>3300/4000</b>	<b>3300/4000</b>
Watt	967/1172	967/1172	967/1172
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	13/369	13/369	13/369
Operating Temperature Range:			
Maximum (°F/°C)	125/52	125/52	125/52
Minimum (°F/°C)	50/10	50/10	50/10
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	158/268	170/289	170/289
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	222/377	218/370	218/370
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	177/301	192/326	192/326
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	252/428	245/416	245/416
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>110/115</b>	<b>220/230</b>	<b>440/460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1617/1564	1760/1725	1936/1886
Max. Nominal Current (A at 50/60 Hz)	14.7/13.6	8.0/7.5	4.4/4.1
Starting Current (A)	48	23	12
Agency Approvals	cUL Listed CE EAC Others available upon request	cUR Recognized CE EAC	
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12 standard		
<b>CONTROLLER</b>			
Description	Basic mechanical thermostat		
Thermostat Location	Behind filter		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	62 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Mild steel sheet metal standard Stainless steel optional		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	10.25/260	10.25/260	10.25/260
Width (in./mm)	17/432	17/432	17/432
Depth (in./mm)	21.08/535	21.08/535	21.08/535
Weight (lb./kg)	108/49	108/49	128/58

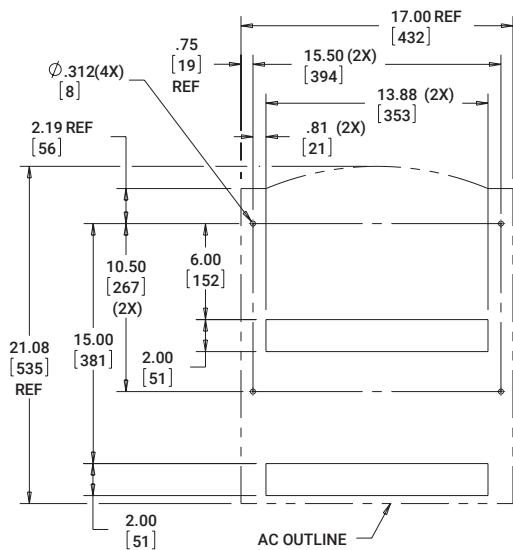
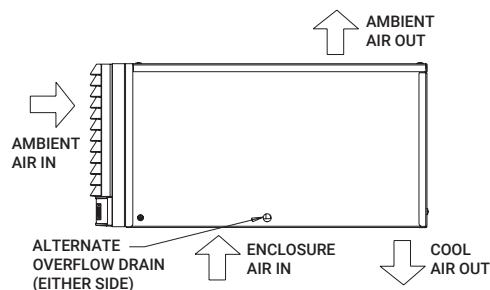
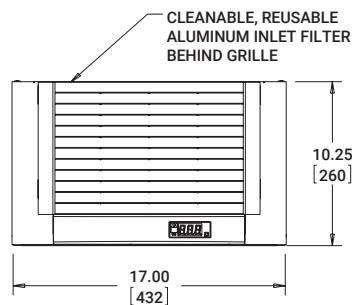
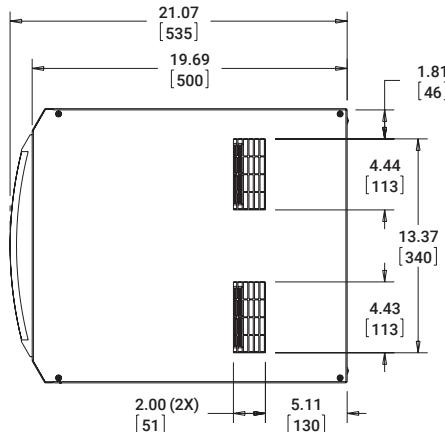


Top-Mount to Enclosure

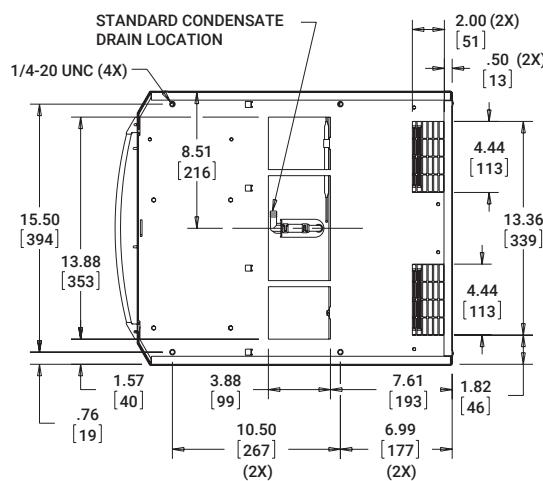
# Genesis Top-Mount Indoor M-Series

MHB11 Models 2200-4000 BTU/Hr. (645-1172 Watt)

**NOTE:**  
 1. MOUNTING GASKET SUPPLIED (NOT SHOWN)  
 2. UNITS: in. [mm]  
 3. CUTOUT DIMENSIONS FOR STANDARD UNITS ONLY



Cutout Dimensions



89045044

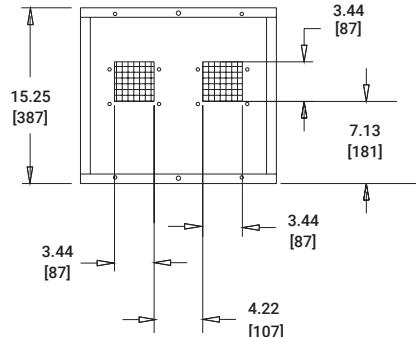
# Genesis Top-Mount Indoor M-Series

## PERFORMANCE DATA HB16 MODELS 8000 BTU/HR. (2051 WATT)

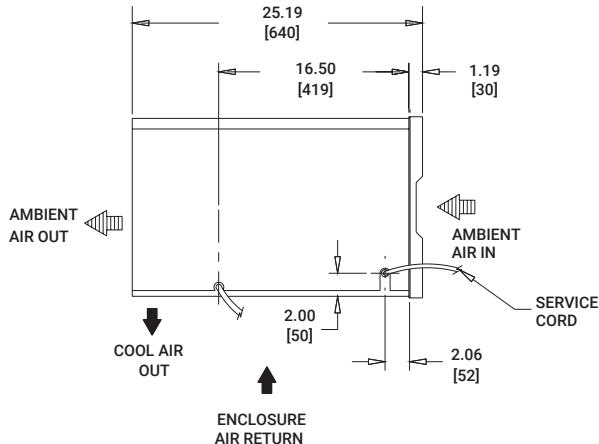
Item number	HB160816G040	HB160826G040	HB160846G040
Indoor Model			
<b>COOLING PERFORMANCE</b>			
Nominal:			
BTU/Hr.	7000/8000	7000/8000	7000/8000
Watt	2051/2344	2051/2344	2051/2344
At 125 °F/125 °F (52 °C/52 °C):			
BTU/Hr. (50/60 Hz)	6975/8137	7075/8133	7075/8133
Watt (50/60 Hz)	2044/2385	2073/2384	2073/2384
At 95 °F/95 °F (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	6959/8236	6958/7774	6958/7774
W (50/60 Hz)	2039/2414	2039/2278	2039/2278
Refrigerant	R-407C	R-407C	R-407C
Refrigerant Charge (ounces/grams)	24/680	24/680	24/680
Operating Temperature Range:			
Maximum (°F/°C)	125/52	125/52	125/52
Minimum (°F/°C)	50/10	50/10	50/10
<b>ELECTRICAL DATA</b>			
Rated Voltage	115	230	460
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1822/2223	1785/2105	2162
Max. Nominal Current (A at 50/60 Hz)	18.7/20.4	8.5/9.3	4.3/4.7
Starting Current (A)	67	29	15
Agency Approvals			
	cUL Listed CE EAC		
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA L8-20 plug
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12 Standard		
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat		
Thermostat Location	Enclosure Side on All Base Models		
Factory Thermostat Setting (°F/°C)	80/27	80/27	80/27
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized Sheet Metal Standard (Optional: Stainless Steel)		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard Other colors and textures available		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	15.25/387.35	15.25/387.35	15.25/387.35
Width (in./mm)	17.00/431.80	17.00/431.80	17.00/431.80
Depth (in./mm)	25.19/639.76	25.19/639.76	25.19/639.76
Weight (lb./kg)	145.00/69.78	145.00/69.78	170.00/77.00

# Genesis Top-Mount Indoor M-Series

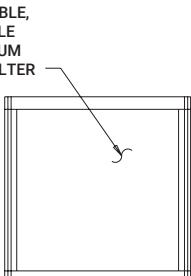
HB16 Models 8000 BTUs/Hr. (2051 Watts)



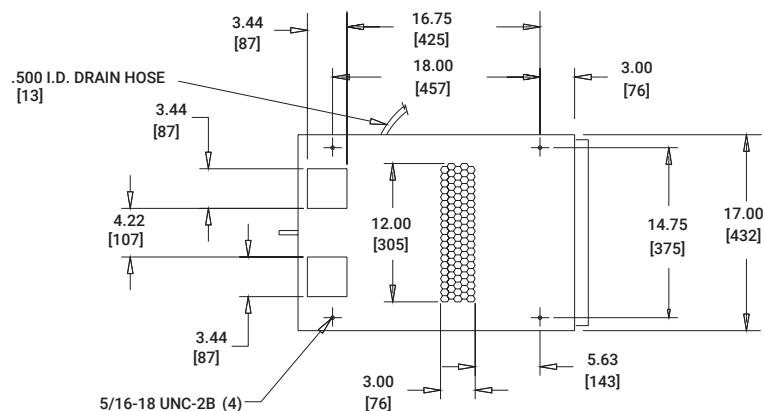
Rear View



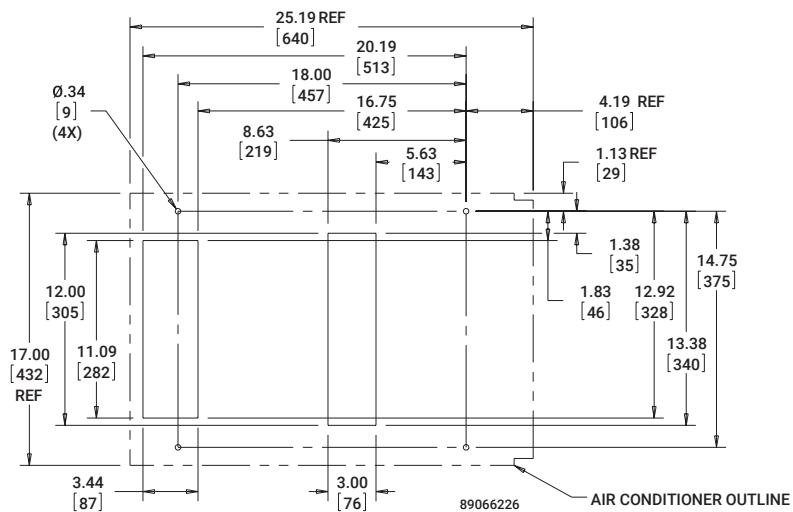
Side View



Front View



Bottom View



Cutout

# ProAir Harsh Environments CR23/CR29/CR43



**CR23**  
1600 BTU/Hr.  
469 Watt



**CR29**  
2700 and 4000 BTU/Hr.  
791 and 1172 Watts



**CR43**  
6000 & 8000 BTU/Hr.  
1758 and 2344 Watts

## INDUSTRY STANDARDS

UL/cUL Listed; Type 12, 3R, 4; 4X and IP66 optional;  
File No. SA6453  
UR/cUR Recognized

UR/cUR recognized on select models,  
reference performance data tables.

CE  
EAC



## APPLICATION

- Industrial automation
- Package handling equipment
- Food and beverage
- Wastewater treatment
- Security and defense systems
- And more

## SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Installation instruction

## FEATURES

- Robust reciprocating compressor
- Easy maintenance: hinged front cover allows quick access to all components; condenser coil can be cleaned while unit is still mounted to the cabinet

- Operating temperature range from -40 °F/-40 °C to 131 °F/55 °C
- Reliable mechanical thermostat located behind the filter of the unit
- Easy-mount flanges for simple installation
- Every unit functionally tested before shipping
- High-performance fans and blowers designed for densely packed enclosures

## SPECIFICATIONS

- Low-carbon mild-steel sheet-metal cover for rugged factory and outdoor environments
- Models for 115, 230 and 460 single phase VAC power input
- Standard Indoor Air Conditioner models also include:
  - Electro-Mechanical Thermostat
  - Surge Suppressor

## FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint standard
- Stainless steel Type 304
- Other colors and textures available

## OPTIONS

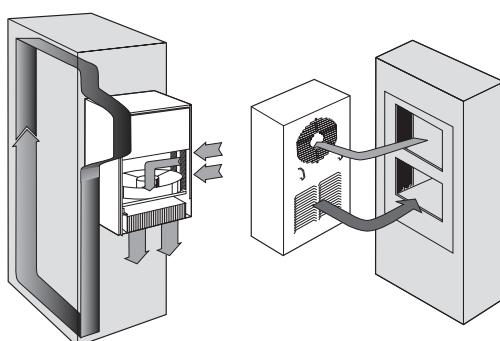
- Thermostat Malfunction Package
- Special Voltage Package
- Outdoor Package
- Harsh Environment Package
- Stainless Steel Package
- Heater Package

For product general accessories, please refer to the chapter "Accessories".

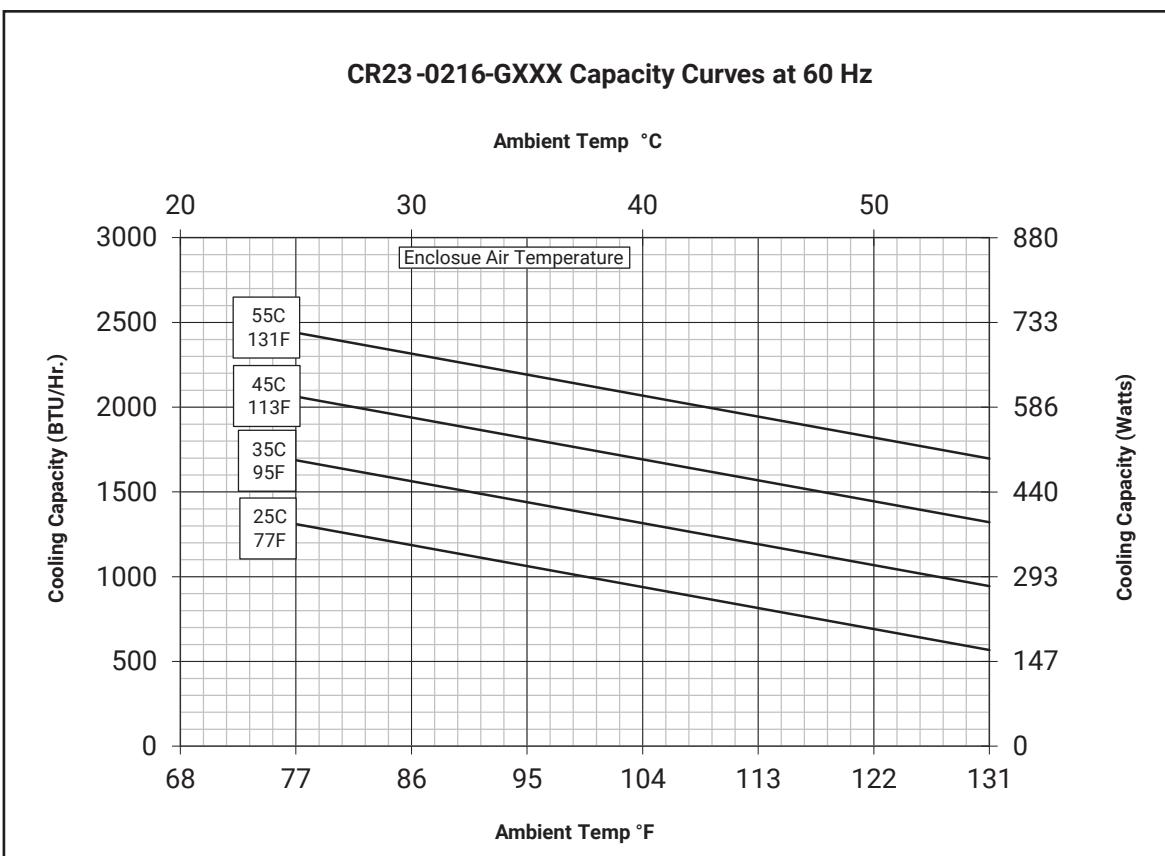
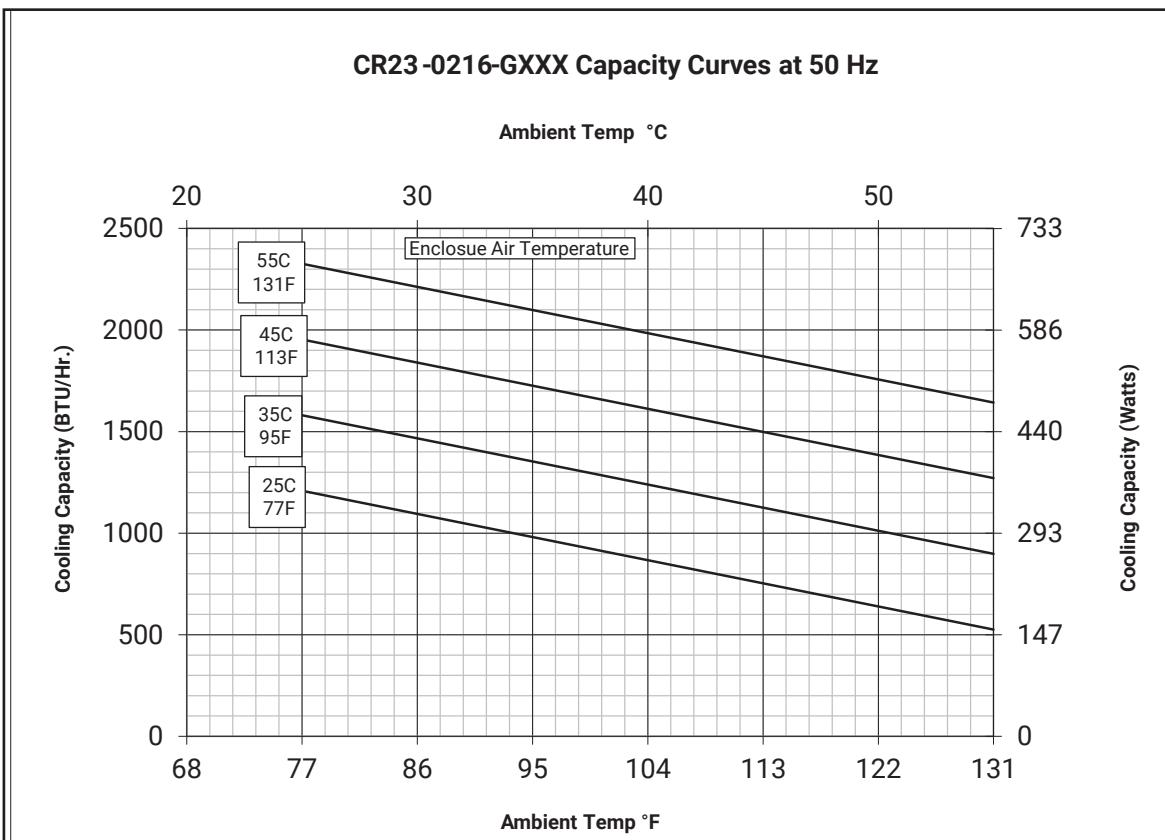
# ProAir Harsh Environments CR23/CR29/CR43

## PERFORMANCE DATA CR23 MODELS 1600 BTU/HR. (469 WATT)

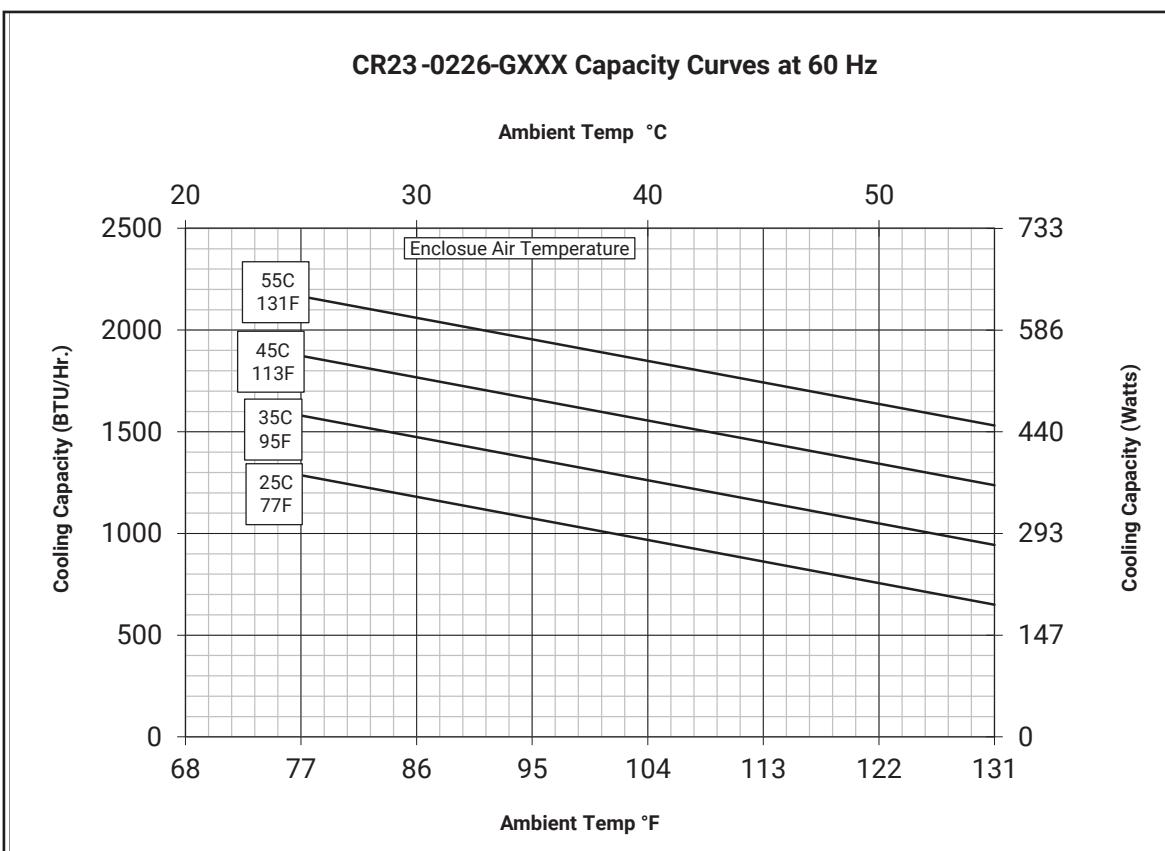
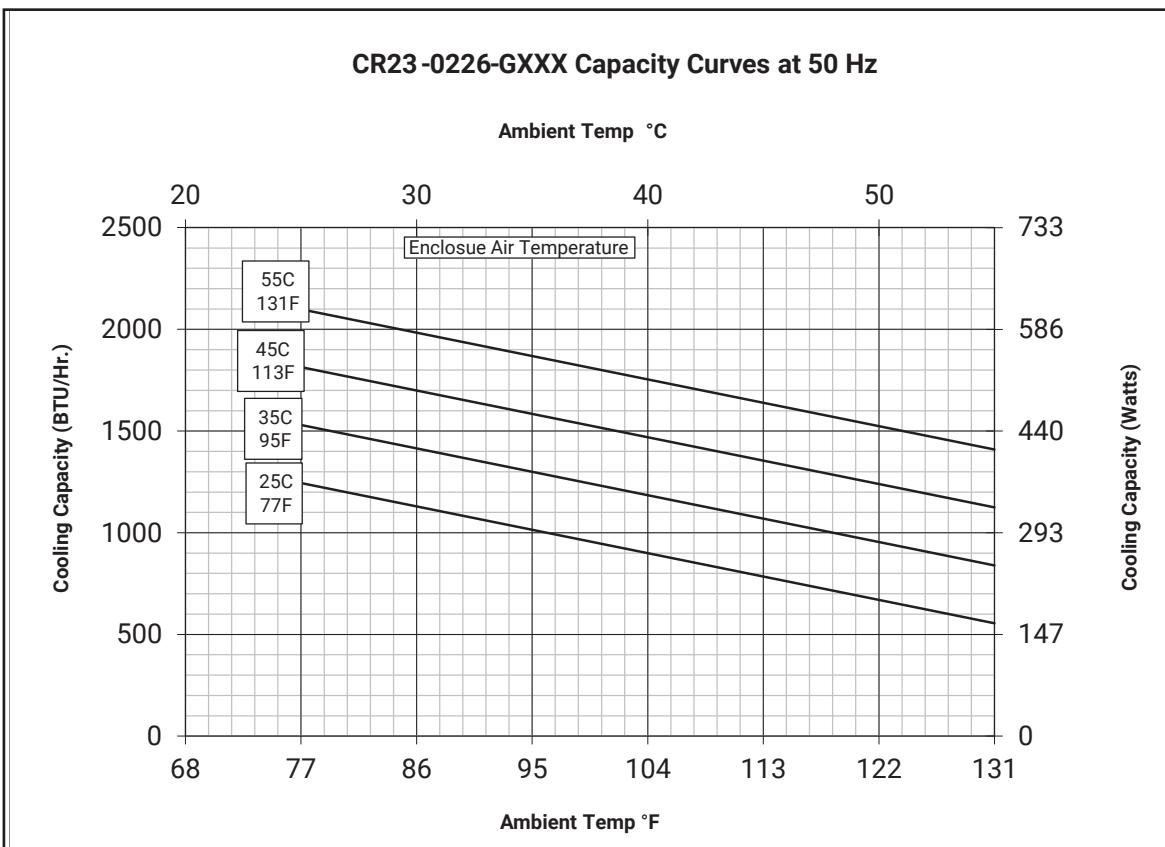
<b>Item number</b>			
Indoor Model	<b>CR230216G002</b>	<b>CR230226G002</b>	<b>CR230246G400</b>
Outdoor/SS/Corrosion Type 3R	<b>CR230216G007</b>	<b>CR230226G009</b>	—
Indoor/Outdoor/SS/Corrosion Type 4X/IP66	<b>CR230216G015</b>	<b>CR230226G014</b>	<b>CR230226G037</b>
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>1400/1600</b>	<b>1400/1600</b>	<b>1400/1600</b>
<b>Watt</b>	<b>410/469</b>	<b>410/469</b>	<b>410/469</b>
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	10/284	10/284	10/284
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C) (Low Ambient Pkg)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	117/199	117/199	117/199
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	86/146	86/146	86/146
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	130/221	130/221	130/221
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	95/161	95/161	95/161
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	471.5/517.5	506	552
Max. Nominal Current (A at 50/60 Hz)	4.1/4.0	2.7/2.5	1.4/1.3
Starting Current (A)	18	13.2	7.7
Agency Approvals	cUL Listed CE EAC		cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R standard Type 4, 4X Stainless steel		
<b>CONTROLLER</b>			
Description	Basic mechanical thermostat		
Thermostat Location	Behind cover		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	62 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Mild steel sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	23/584		
Width (in./mm)	10/254		
Depth (in./mm)	8.75/222		
Weight (lb./kg)	57/26		



# ProAir Harsh Environments CR23/CR29/CR43

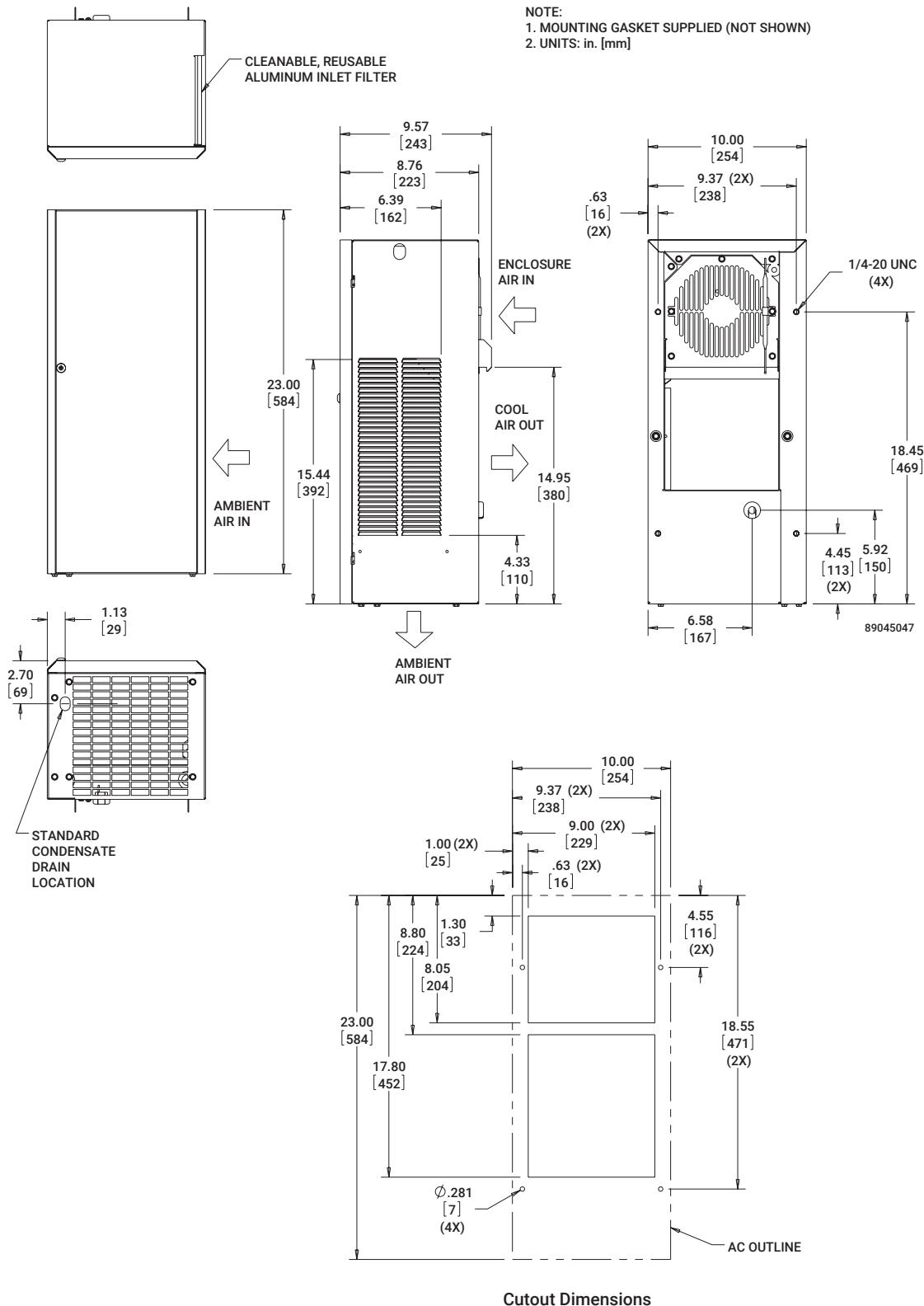


# ProAir Harsh Environments CR23/CR29/CR43



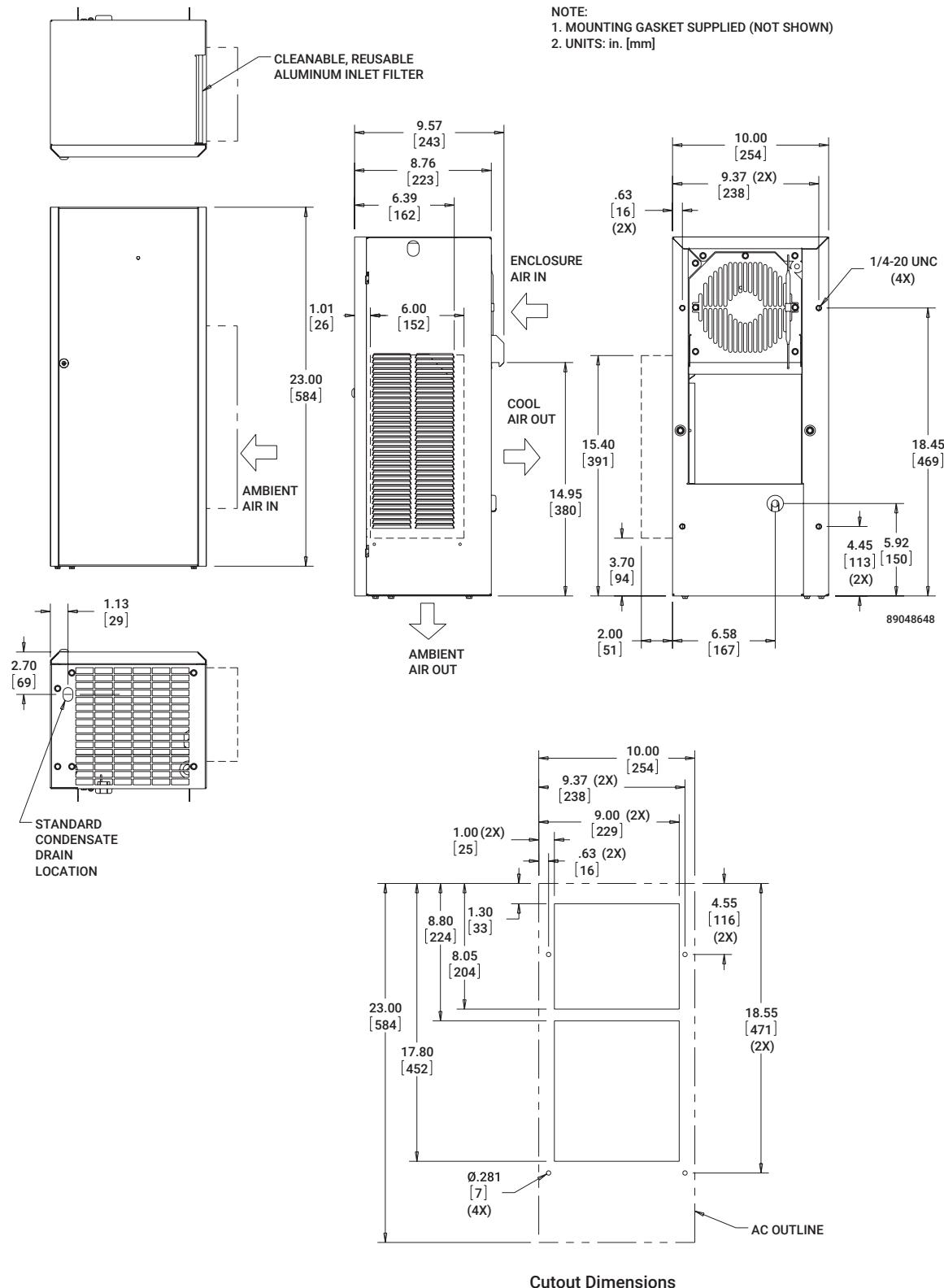
# ProAir Harsh Environments CR23/CR29/CR43

## CR23 Models 1600 BTU/Hr. (469 Watt)



# ProAir Harsh Environments CR23/CR29/CR43

## CR23 Models 1600 BTU/Hr. (469 Watt) With Type 4X Hood

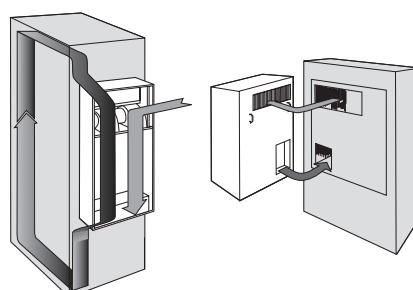


Cutout Dimensions

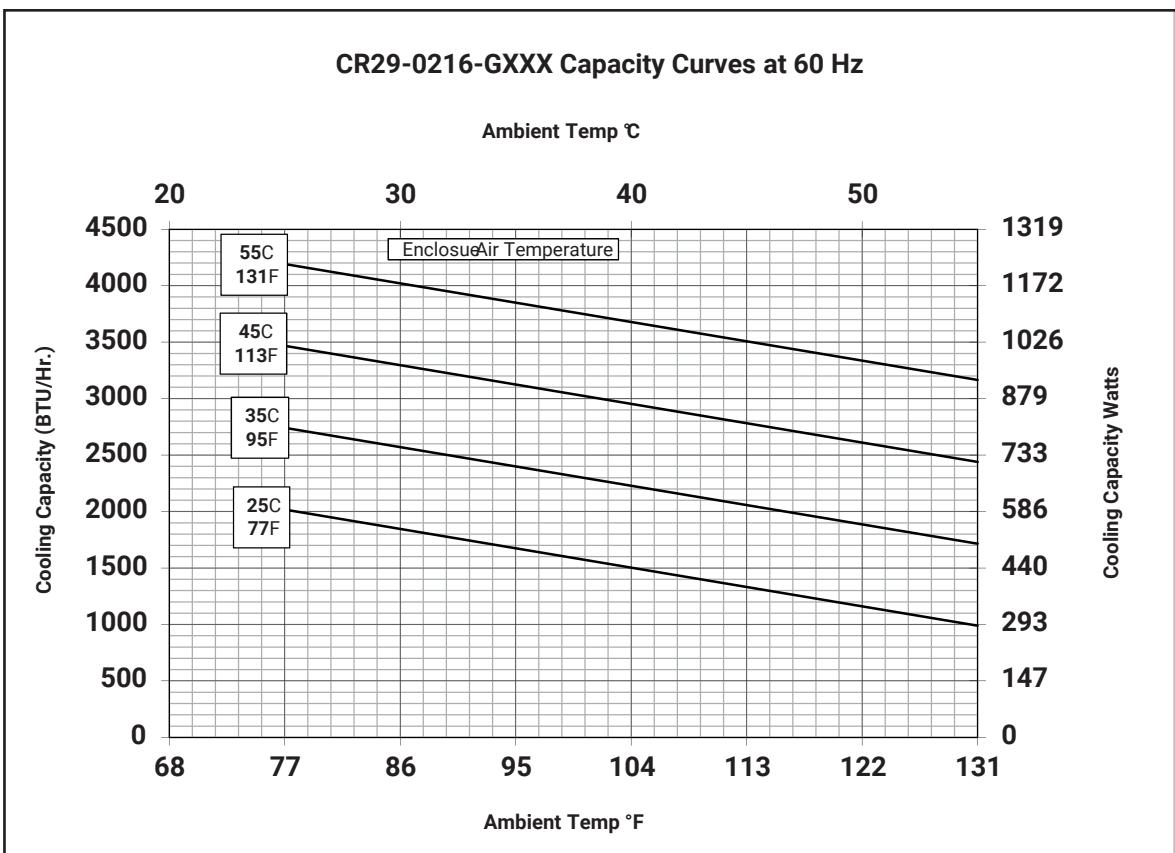
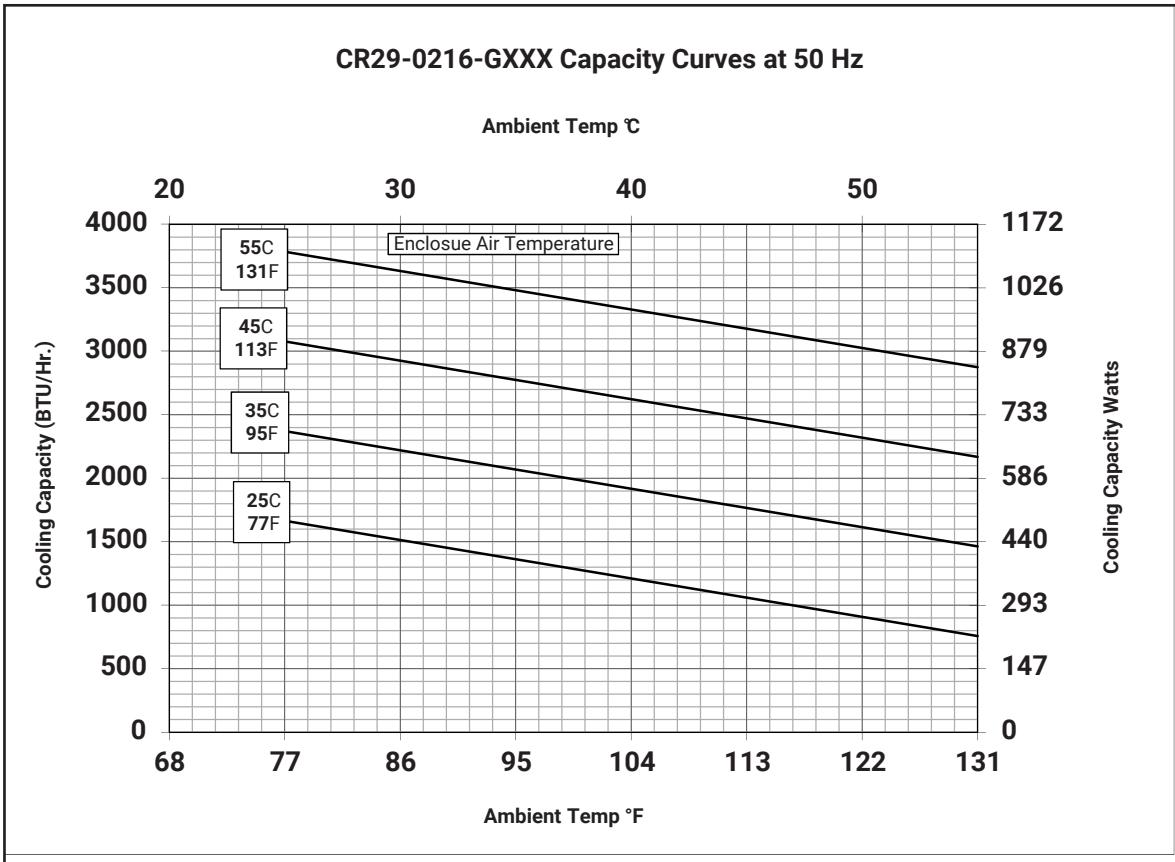
# ProAir Harsh Environments CR23/CR29/CR43

## PERFORMANCE DATA CR29 MODELS 2700/4000 BTU/HR. (791/1172 WATT)

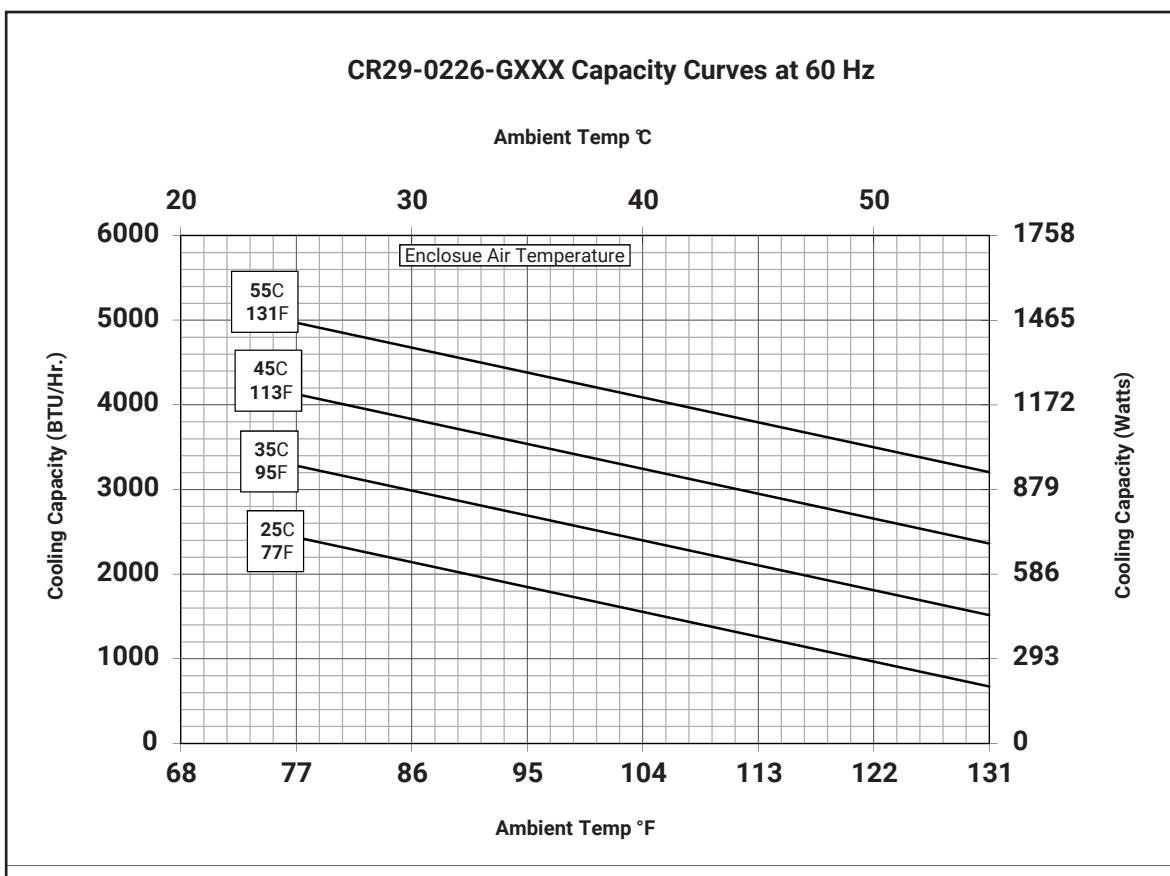
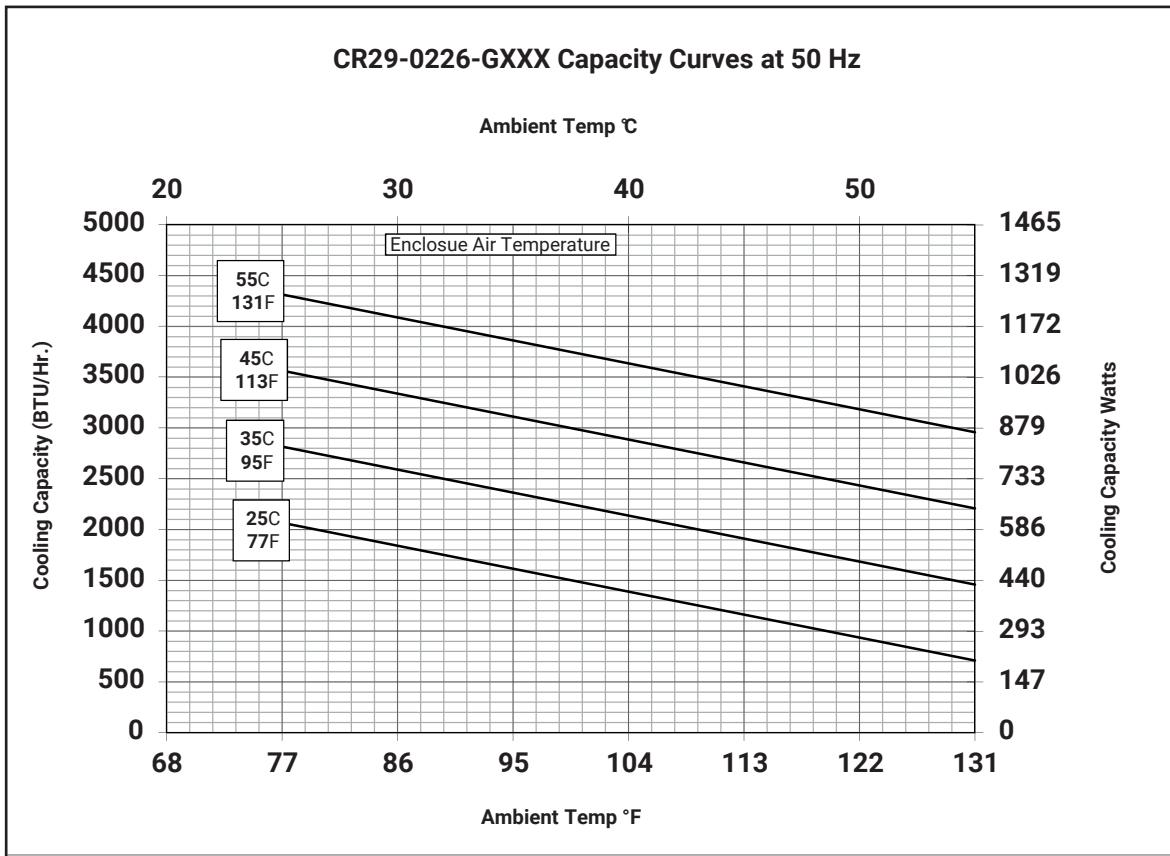
Item number	CR290216G002	CR290226G002	CR290246G400	CR290416G002	CR290426G002	CR290446G400
Indoor Model	CR290216G013	CR290226G010	CR290246G401	CR290416G030	CR290426G017	-
Outdoor/SS/Corrosion Type 3R	CR290216G036	CR290226G037	CR290226G045	CR290416G068	CR290426G054	CR290426G061
<b>COOLING PERFORMANCE</b>						
Nominal:						
<b>BTU/Hr.</b>	<b>2600/3000</b>	<b>2600/2700</b>	<b>2600/2700</b>	<b>3500/4000</b>	<b>3500/4000</b>	<b>3500/4000</b>
<b>Watt</b>	<b>761/879</b>	<b>761/791</b>	<b>761/791</b>	<b>1025/1172</b>	<b>1025/1172</b>	<b>1026/1172</b>
Refrigerant	R-134A	R-134A	R-134A	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	11/312	11/312	11/312	11/312	12/341	12/341
Operating Temperature Range:						
Maximum (°F/°C)	131/55	131/55	131/55	131/55	131/55	131/55
Minimum (°F/°C) (Low Ambient Pkg)	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:						
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	141/239	141/239	141/239	141/239	141/239	141/239
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	235/399	235/399	235/399	235/399	235/399	235/399
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	157/266	157/266	157/266	157/266	157/266	157/266
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	261/443	261/443	261/443	261/443	261/443	261/443
<b>ELECTRICAL DATA</b>						
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1058/897	851/828	920/874	1116/1253	1541/1518	1702/1656
Max. Nominal Current (A at 50/60 Hz)	9.2/7.8	3.7/3.6	2.0/1.9	12.7/12.1	6.7/6.6	3.7/3.6
Starting Current (A)	31.5	15	7.7	44.5	23	12
Agency Approvals	cUL Listed CE EAC	cUR Recognized CE EAC	cUL Listed CE EAC	cUR Recognized CE EAC		
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>						
UL Type	Type 12, 3R standard 4X/IP66 stainless steel				Type 12, 3R standard 4X/IP66 stainless steel	
<b>CONTROLLER</b>						
Description	Basic mechanical thermostat			Basic mechanical thermostat		
Thermostat Location	Behind cover			Behind cover		
Factory Thermostat Setting (°F/°C)	80/27			80/27		
<b>SOUND LEVEL</b>						
At 1.5 Meters	68 dB(A)			68 dB(A)		
<b>UNIT CONSTRUCTION</b>						
Material	Mild steel sheet metal standard Stainless Steel Typ 304 standard			Mild steel sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard			RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>						
Height (in./mm)	29.5/749			29.5/749		
Width (in./mm)	15.75/400			15.75/400		
Depth (in./mm)	8.63/219			8.63/219		
Weight (lb./kg)	98/44	98/44	108/49	118/54	118/54	128/58



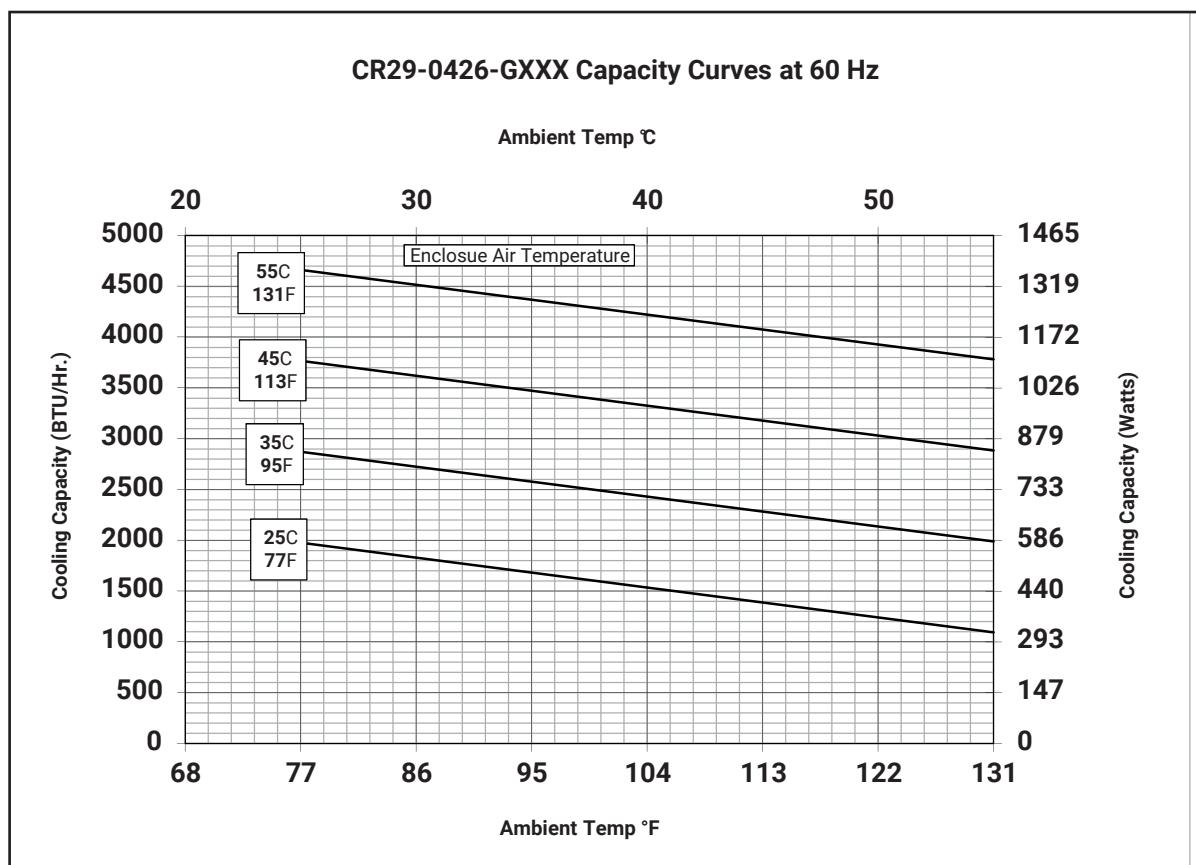
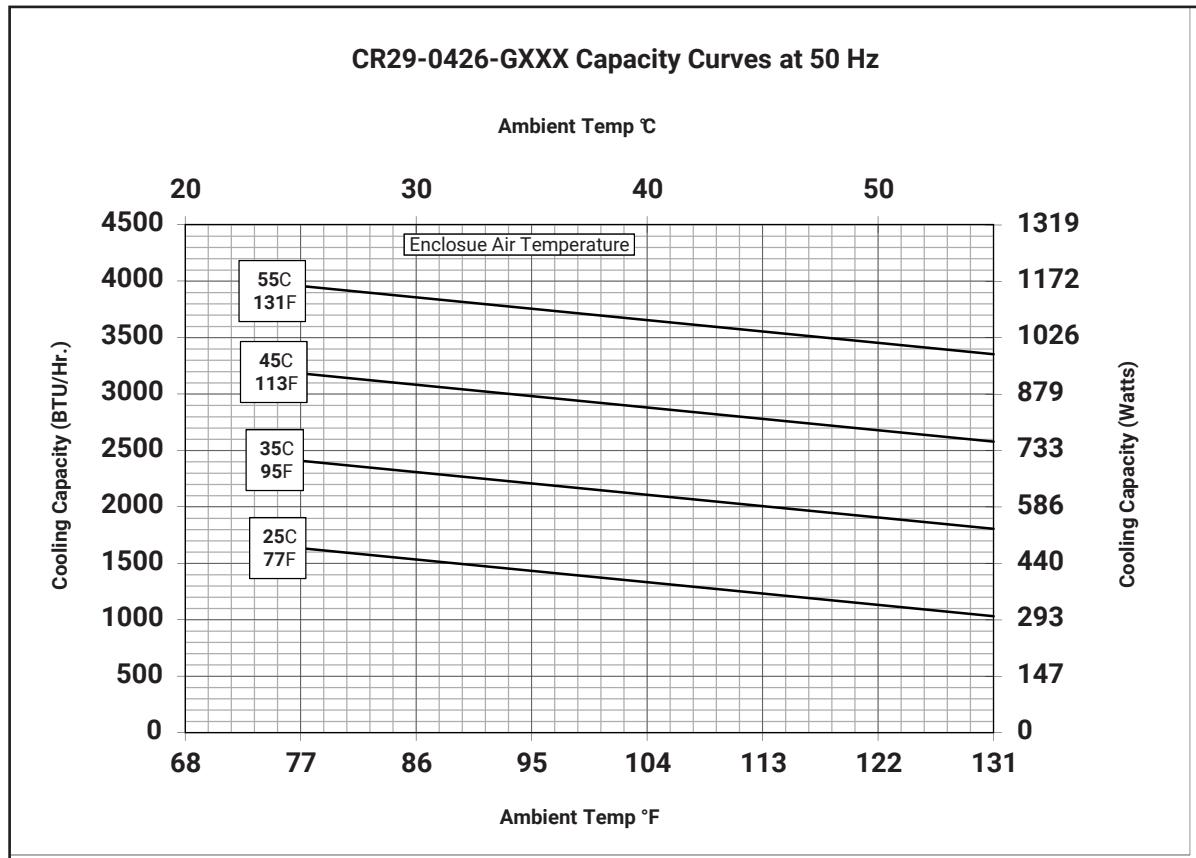
# ProAir Harsh Environments CR23/CR29/CR43



# ProAir Harsh Environments CR23/CR29/CR43



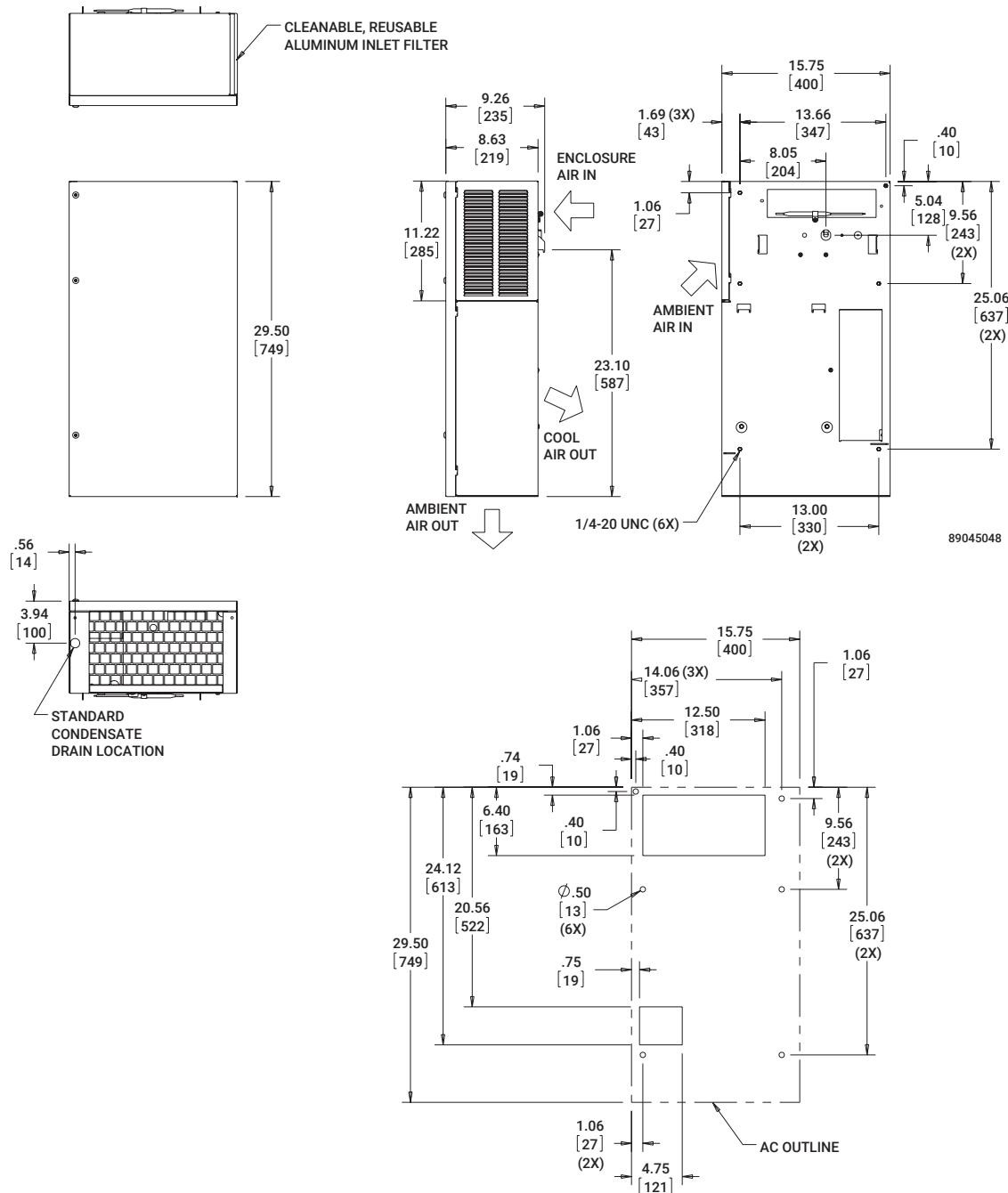
# ProAir Harsh Environments CR23/CR29/CR43



# ProAir Harsh Environments CR23/CR29/CR43

**CR29 Models 2700/4000 BTU/Hr. (791/1172 Watt)**

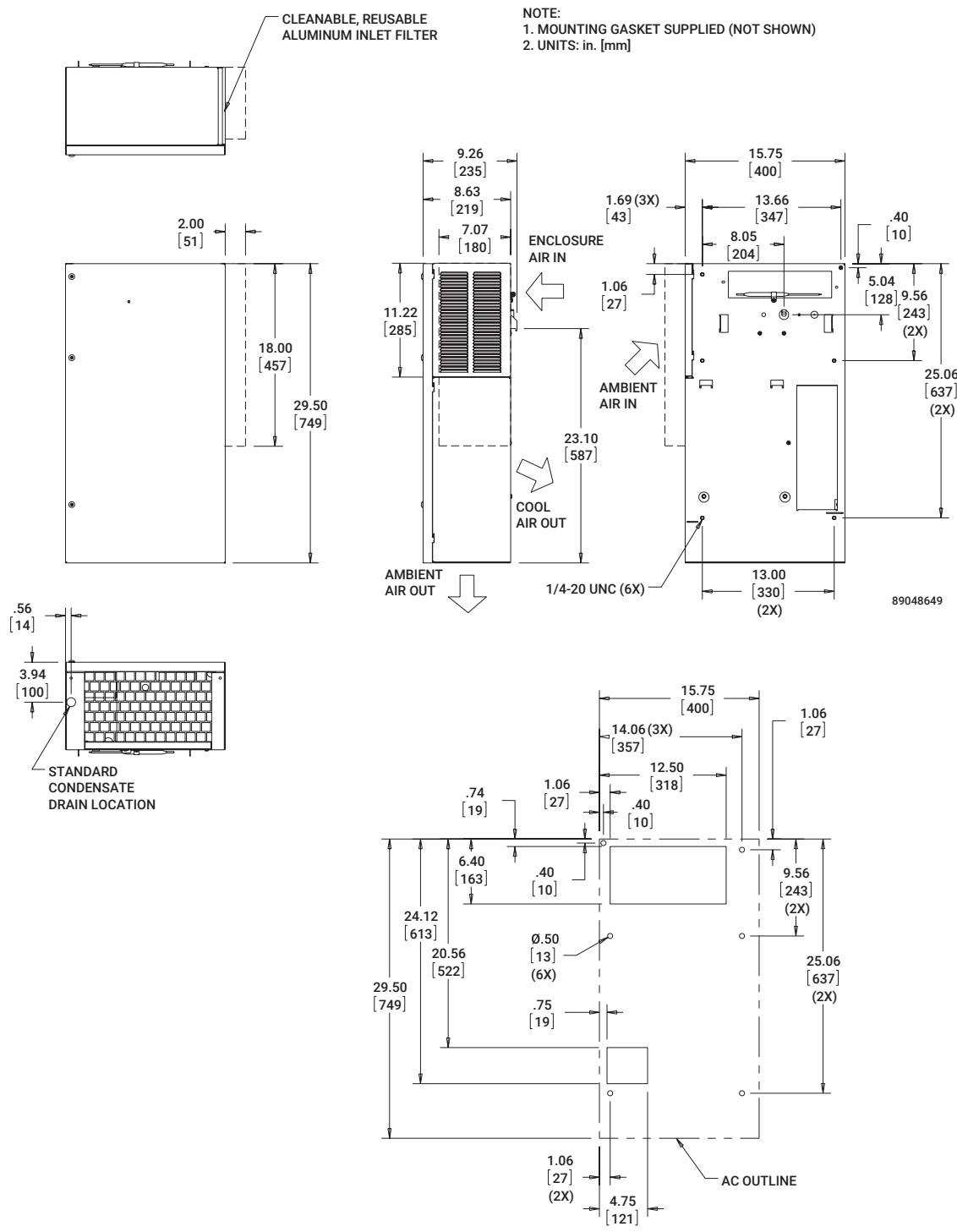
**NOTE:**  
1. MOUNTING GASKET SUPPLIED (NOT SHOWN)  
2. UNITS: in. [mm]



## Cutout Dimensions

# ProAir Harsh Environments CR23/CR29/CR43

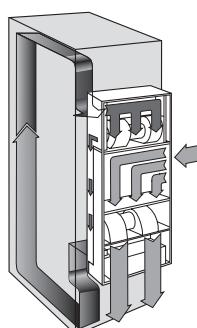
## CR29 Models 2700/4000 BTU/Hr. (791/1172 Watt) With Type 4X Hood



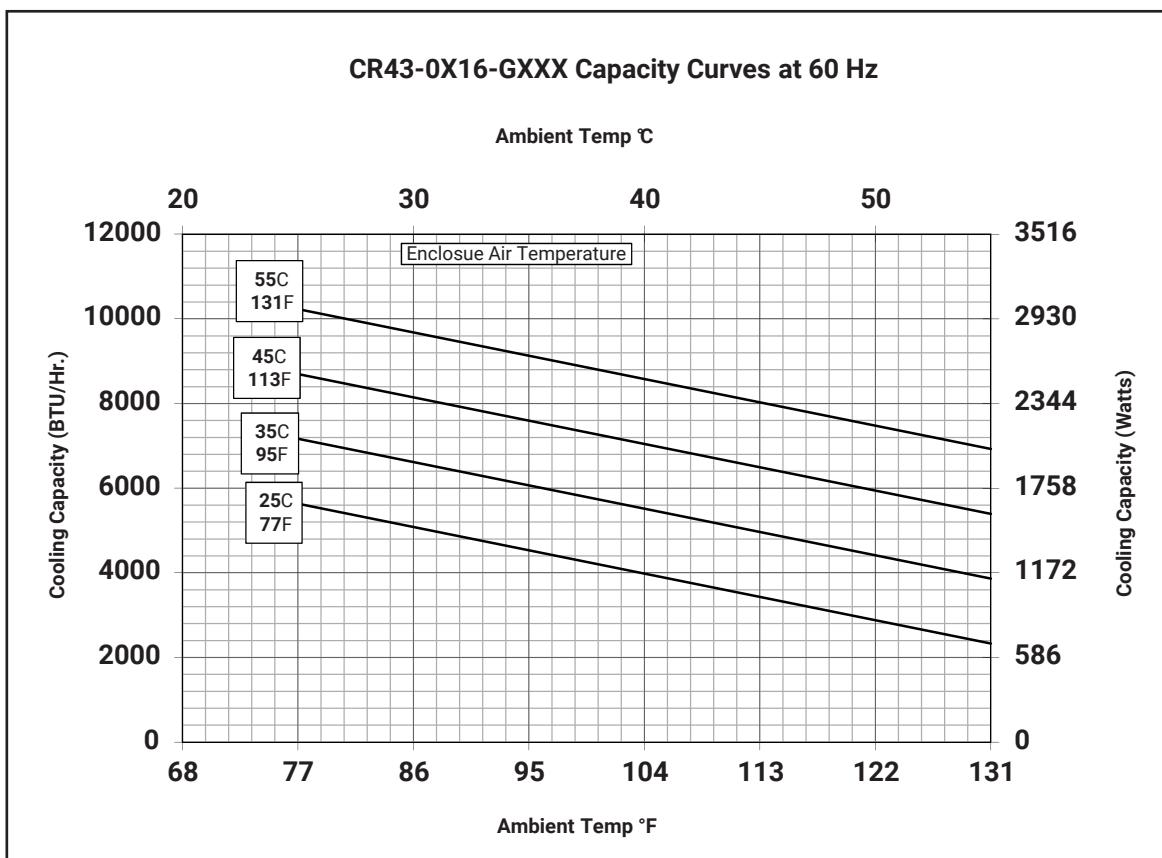
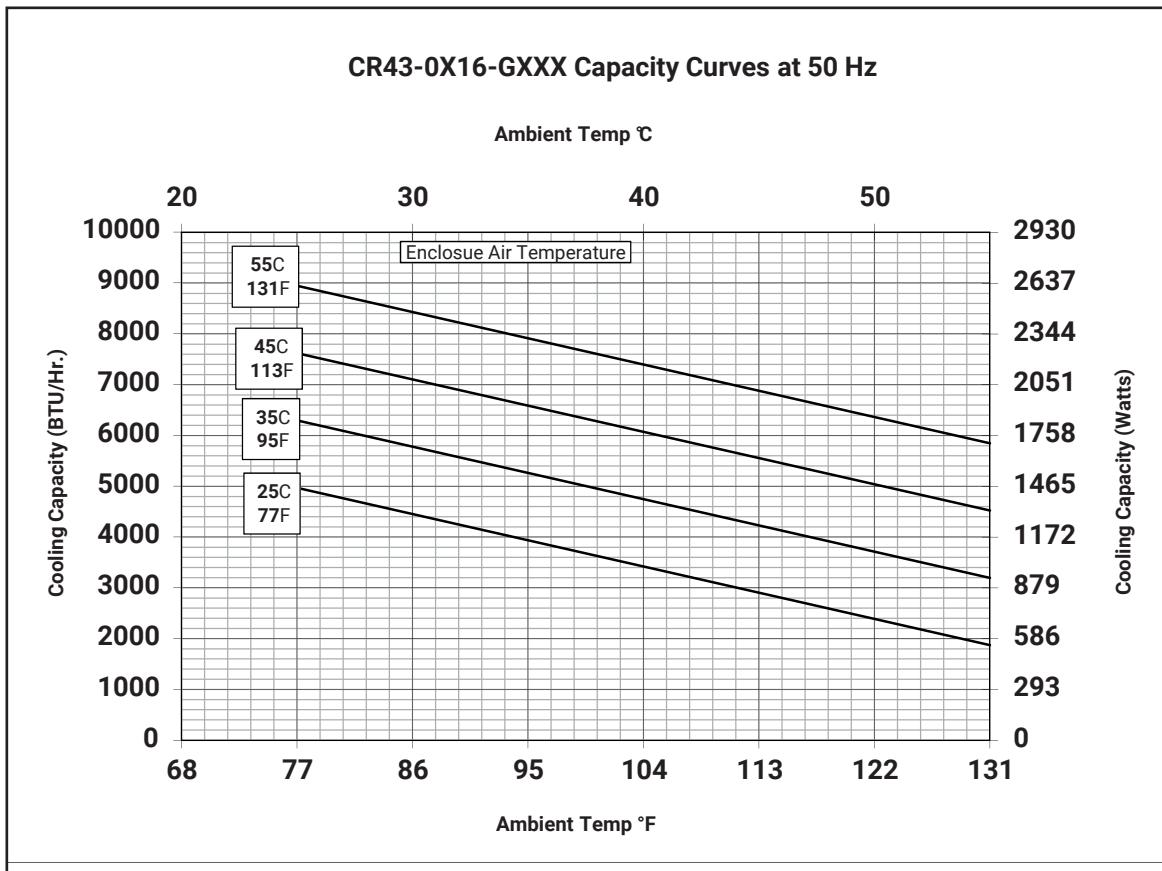
# ProAir Harsh Environments CR23/CR29/CR43

## PERFORMANCE DATA CR43 MODELS 6000/8000 BTU/HR. (1758/2344 WATT)

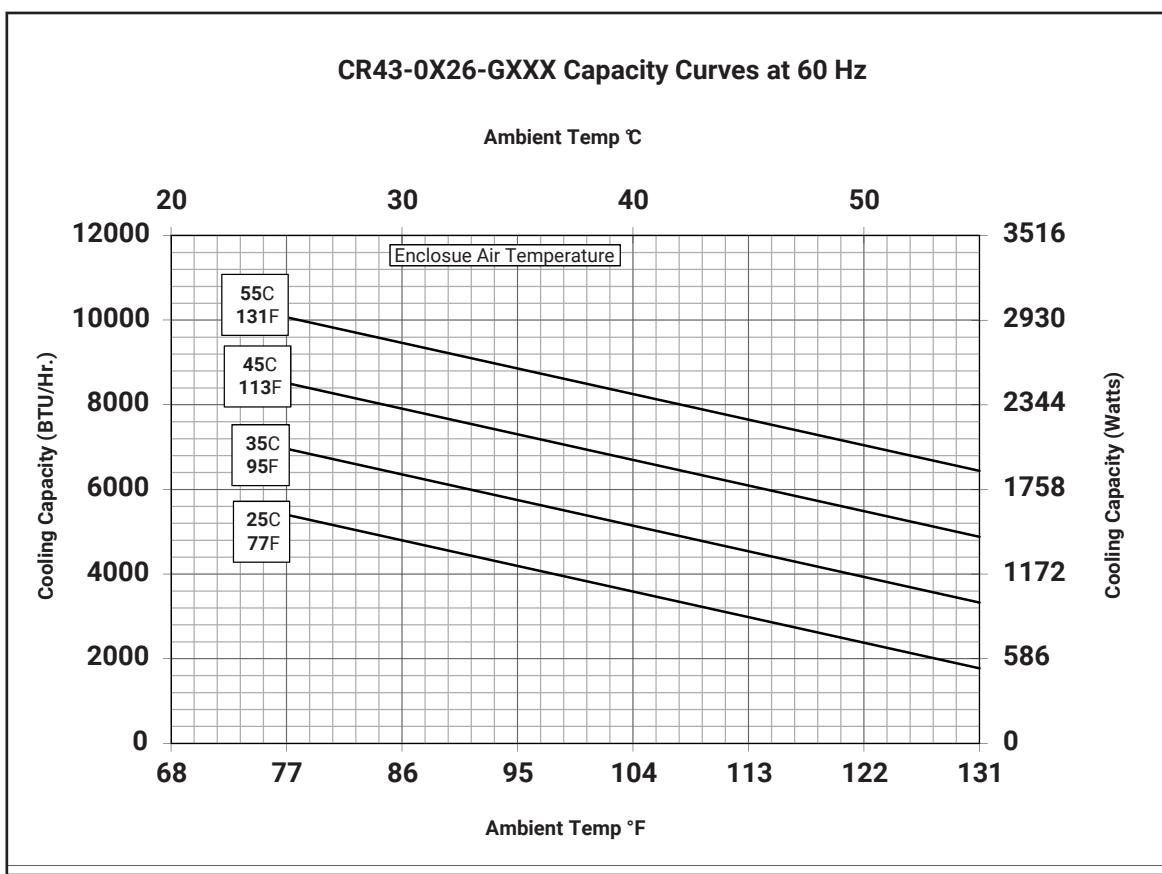
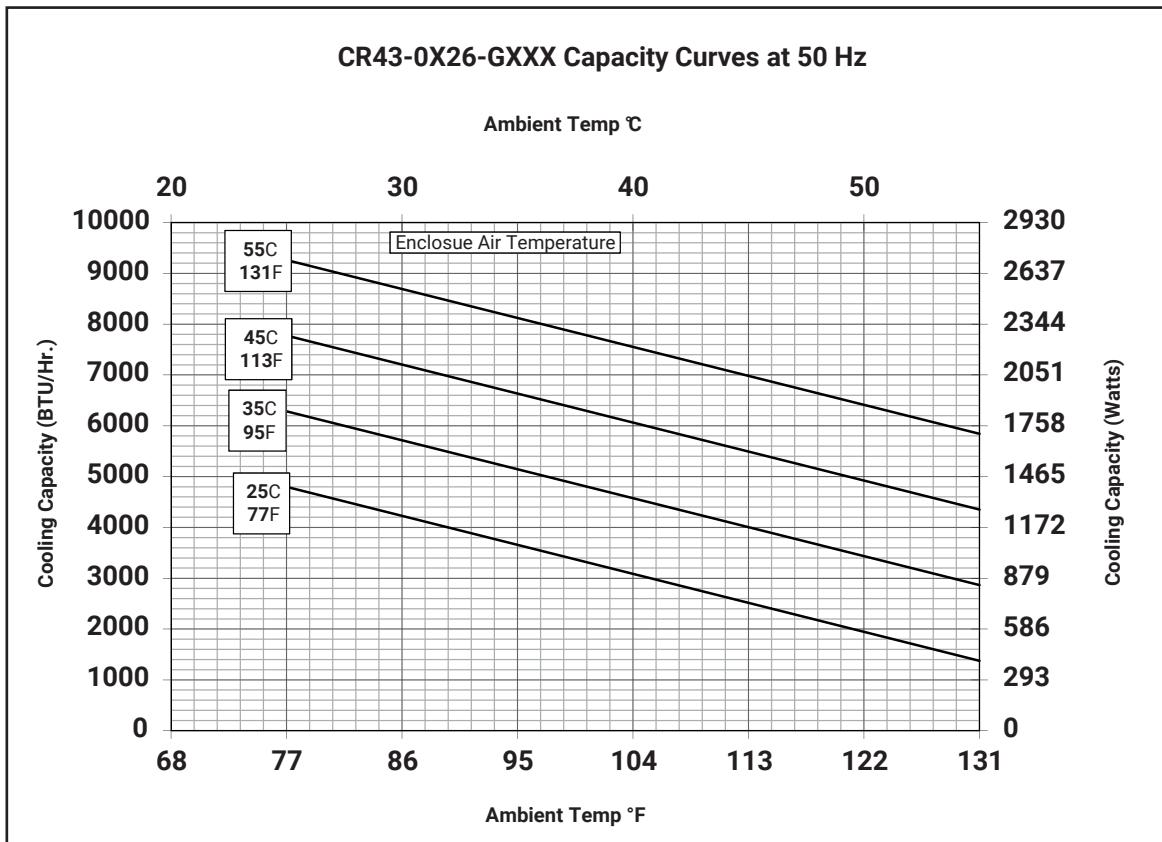
Item number	CR430616G002	CR430626G002	CR430646G004	CR430816G002	CR430826G002	CR430826G089	
Indoor Model	CR430616G004	—	—	CR430816G010	CR430826G037	—	
Outdoor/SS/Corrosion Type 3R	CR430616G031	CR430626G034	CR430626G074	CR430816G036	CR430826G038	CR430846G401	
<b>COOLING PERFORMANCE</b>							
Nominal:							
<b>BTU/Hr.</b>	<b>5500/6000</b>	<b>5500/6000</b>	<b>5500/6000</b>	<b>7100/8000</b>	<b>7100/8000</b>	<b>7100/8000</b>	
<b>Watt</b>	<b>1611/1758</b>	<b>1611/1758</b>	<b>1611/1758</b>	<b>2080/2344</b>	<b>2080/2344</b>	<b>2080/2344</b>	
Refrigerant	R-134A	R-134A	R-134A	R-134A	R-134A	R-134A	
Refrigerant Charge (ounces/grams)	19/538	19/538	19/538	19/538	19/538	19/538	
Operating Temperature Range:							
Maximum (°F/°C)	131/55	131/55	131/55	131/55	131/55	131/55	
Minimum (°F/°C) (Low Ambient Pkg.)	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40	
Airflow at 0 Static Pressure:							
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	320/543	226/384	226/384	320/543	226/384	226/384	
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	480/815	470/798	470/798	480/815	470/798	470/798	
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	368/625	255/433	255/433	368/625	255/433	255/433	
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	544/924	540/917	540/917	544/924	540/917	540/917	
<b>ELECTRICAL DATA</b>							
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>	
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	+/- 10%	
Max. Power Consumption (W at 50/60 Hz)	1460	1403/1518	1564/1656	1460	1403/1518	1564/1656	
Max. Nominal Current (A at 50/60 Hz)	12.7	6.1/6.6	3.4/3.6	12.7	6.1/6.6	3.4/3.6	
Starting Current (A)	48.3	27	14	48.3	27	14	
Agency Approvals		cUL Listed CE EAC	cUR Recognized CE EAC	cUL Listed CE EAC	cUR Recognized CE EAC	cUR Recognized CE EAC	
Others available upon request		Others available upon request		Others available upon request		Others available upon request	
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads	
<b>ENCLOSURE PROTECTION</b>							
UL Type	Type 12, 3R standard 4X/IP66 Stainless steel			Type 12, 3R standard 4X/IP66 Stainless steel			
<b>CONTROLLER</b>							
Description	Basic mechanical thermostat			Basic mechanical thermostat			
Thermostat Location	Enclosure side on all base models			Enclosure side on all base models			
Factory Thermostat Setting (°F/°C)	80/27			80/27			
<b>SOUND LEVEL</b>							
At 1.5 Meters	71 dB(A)			71 dB(A)			
<b>UNIT CONSTRUCTION</b>							
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard			Galvanized sheet metal standard Stainless Steel Typ 304 standard			
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard			RAL 7035 light-gray, semi-textured powder-coat paint standard			
<b>UNIT DIMENSIONS</b>							
Height (in./mm)	43.31/1100			43.31/1100			
Width (in./mm)	15.75/400			15.75/400			
Depth (in./mm)	10.25/260			10.25/260			
Weight (lb./kg)	125/57	125/57	155/70	125/57	125/57	155/70	



# ProAir Harsh Environments CR23/CR29/CR43

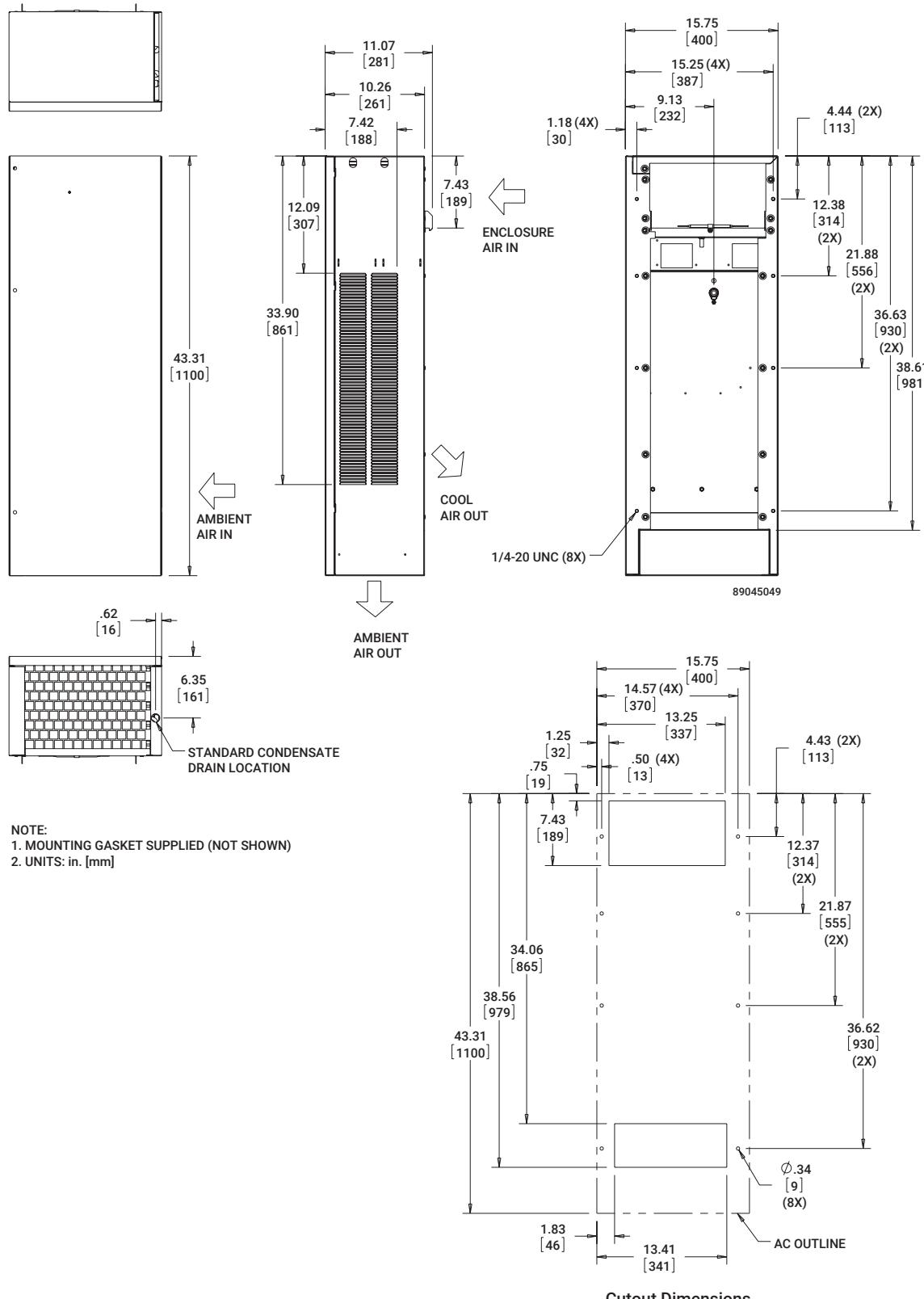


# ProAir Harsh Environments CR23/CR29/CR43



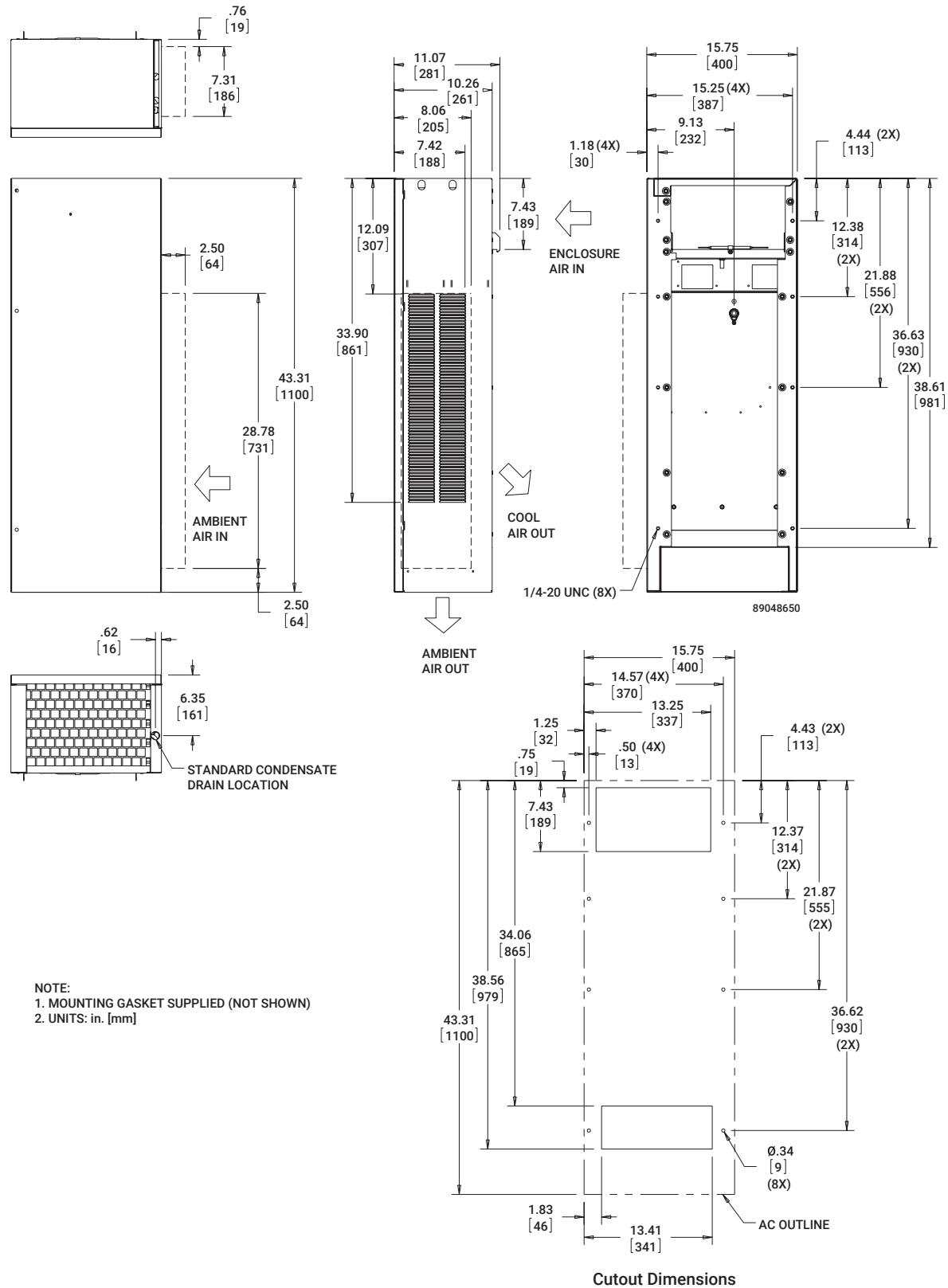
# ProAir Harsh Environments CR23/CR29/CR43

CR43 Models 6000/8000 BTU/Hr. (1758/2344 Watt)



# ProAir Harsh Environments CR23/CR29/CR43

CR43 Models 6000/8000 BTU/Hr. (1758/2344 Watt) With Type 4X Hood



**NOTES :**

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# T-Series Outdoor T15 to T70

## T-SERIES COMPACT OUTDOOR



**T15**  
800 BTU/Hr.  
234 Watts



**T20**  
2000 BTU/Hr.  
586 Watts

### INDUSTRY STANDARDS

UL/cUL Listed; Type 12, 3R, 4; 4X optional; File No. SA6453  
UR/cUR Recognized

UR/cUR recognized on select models, reference performance data tables.

CE  
EAC  
Telcordia GR-487 capable



### APPLICATION

- Industrial automation
- Telecommunications equipment
- Package handling equipment
- Security and defense systems
- And more

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Stock models equipped with head pressure control for low-ambient operation, compressor heater, coated condenser coil, malfunction switch, thermostat and heater package
- Outdoor model operating temperature range from -40°F/-40°C to 131°F/55°C
- Exterior and fully recessed mounting options

- Compact footprint to minimize real estate and maximize capacity
- Reliable mechanical thermostat on enclosure side of the unit
- Dual condenser-side air movers for performance redundancy
- Painted galvanized sheet-metal cover for rugged factory and outdoor environments
- Easy-mount flanges for simple installation
- Every unit functionally tested before shipping

### SPECIFICATIONS

- Models for 115, 230 and 460 VAC power input
- Stainless Steel Model in Typ 304 standard
- Standard Outdoor Air Conditioner models also include:
  - Telcordia GR-487 capable
  - Thermostat
  - Corrosion-resistant components
  - Malfunction switch
  - Compressor heater
  - Head pressure control
  - Enclosure heater

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint
- Other colors and textures available

### OPTIONS

- Thermostat Malfunction Package
- Special Voltage Package
- Outdoor Package
- Harsh Environment Package
- Stainless Steel Package
- Heater Package

For product general accessories, please refer to the chapter "Accessories".

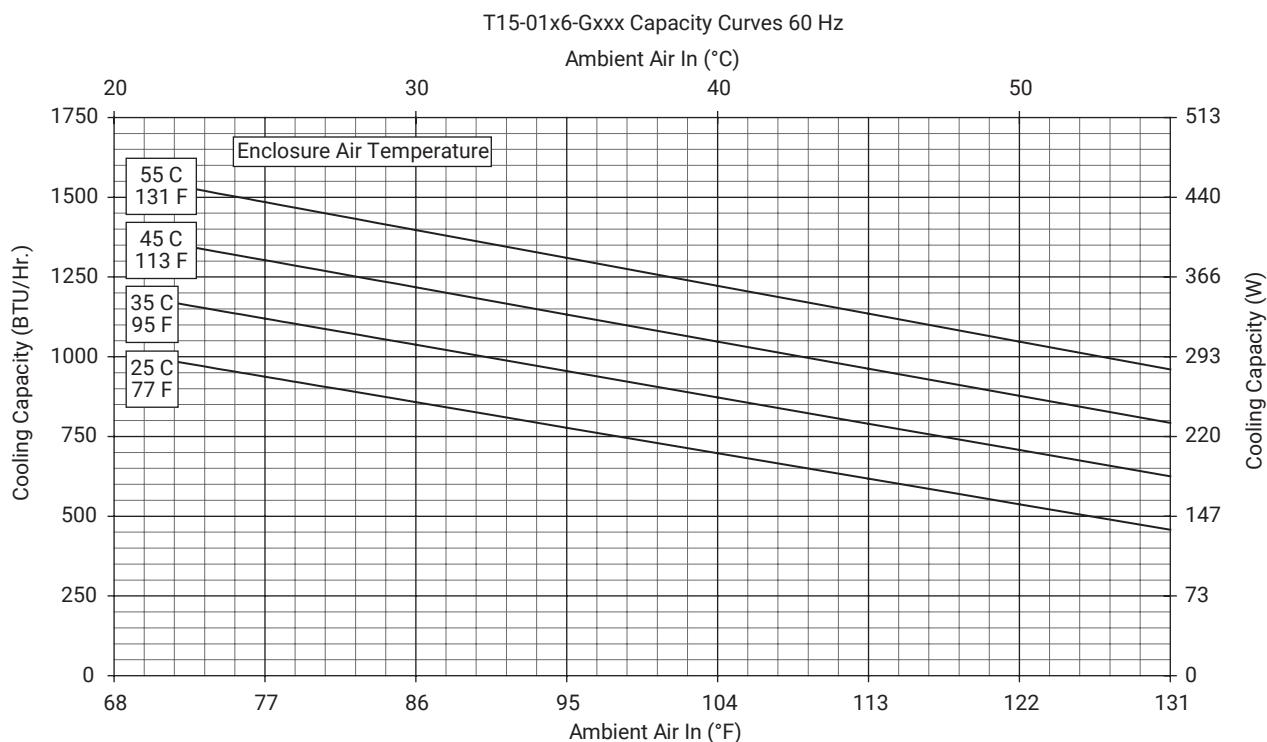
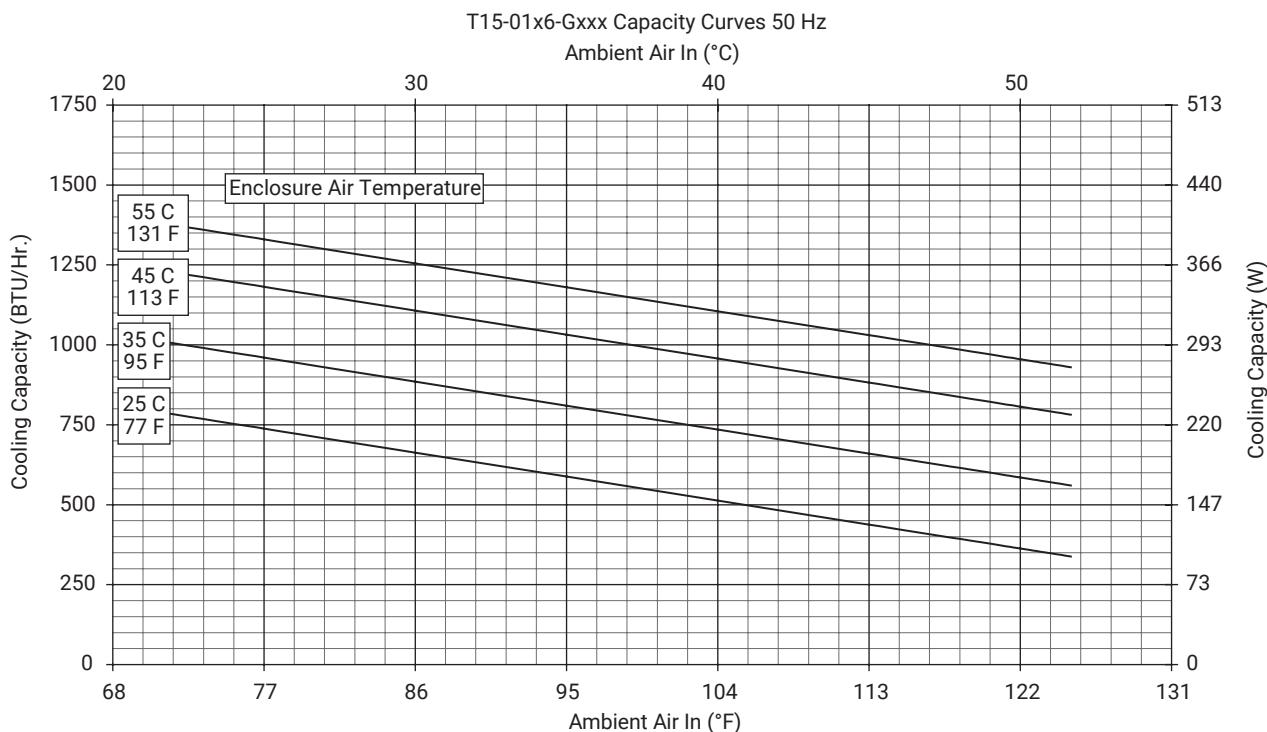
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T15 800 BTU/HR. (234 WATT) MODELS

<b>Item number</b>		
Indoor Model	<b>T150116G120</b>	<b>T150126G120</b>
Outdoor Model without Heat Pkg.	<b>T150116G100</b>	<b>T150126G100</b>
Outdoor Model with Heat Pkg.	<b>T150116G150</b>	<b>T150126G150</b>
Outdoor Model/SST/Corrosion/4X	<b>T150116G152</b>	<b>T150126G104</b>
Outdoor Model/SST/Corrosion/4X/Heater	—	—
<b>COOLING PERFORMANCE</b>		
Nominal:		
<b>BTU/Hr.</b>	<b>800/800</b>	<b>800/900</b>
<b>Watt</b>	<b>235/235</b>	<b>235/264</b>
At 131 °F/131 °F (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	819	920/960
W (50/60 Hz)	240	270/281
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	948	810/955
W (50/60 Hz)	278	237/280
Refrigerant	R-134A	R-134A
Refrigerant Charge (ounces/grams)	4/113	3.8/107
Operating Temperature Range:		
Maximum (°F/°C)	131/55	125/131/52/55
Minimum (°F/°C)	-40/-40	-40/-40
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m3/hr.)	25/42	25/42
External loop 50 Hz (CFM/m3/hr.)	48/82	48/82
Internal loop 60 Hz (CFM/m3/hr.)	30/51	30/51
External loop 60 Hz (CFM/m3/hr.)	53/90	53/90
Max. Heater W (Outdoor Models)	150	150
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>100/115</b>	<b>220/230</b>
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	360/403	330/345
Max. Nominal Current (A at 50/60 Hz)	3.6/3.5	1.5/1.5
Starting Current (A)	8.0/9.2	3.3/3.1
Agency Approvals	cUL Listed CE EAC	Others available upon request
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug
<b>ENCLOSURE PROTECTION</b>		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel optional	
<b>CONTROLLER</b>		
Description	Mechanical thermostat	
Thermostat Location	Enclosure behind front panel	
Factory Thermostat Setting (°F/°C)	80/27	
<b>SOUND LEVEL</b>		
At 1.5 Meters	63 dB(A)	
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	15.75/400	
Width (in./mm)	7.5/191	
Depth (in./mm)	6.3/160	
Weight (lb./kg)	27/12	

# T-Series Outdoor T15 to T70

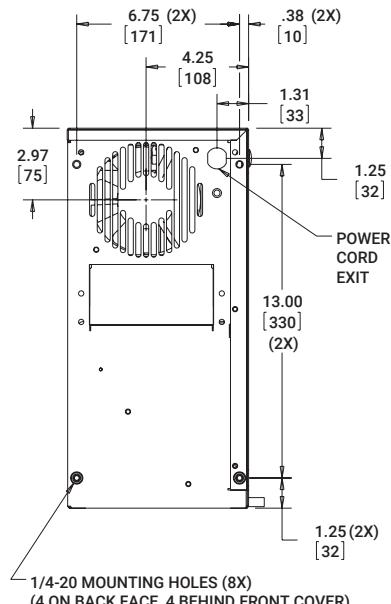
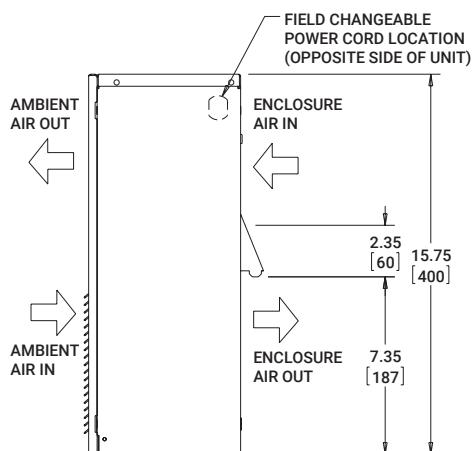
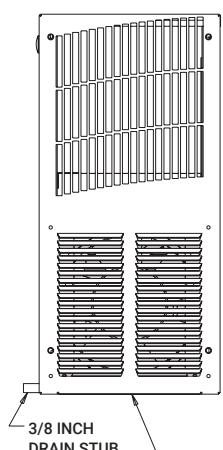
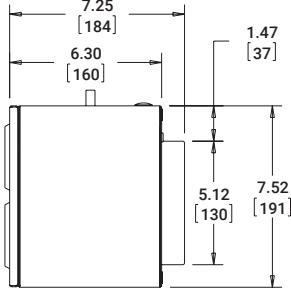
Performance Curves for T15 Models 800 BTU/Hr. (234 Watt)



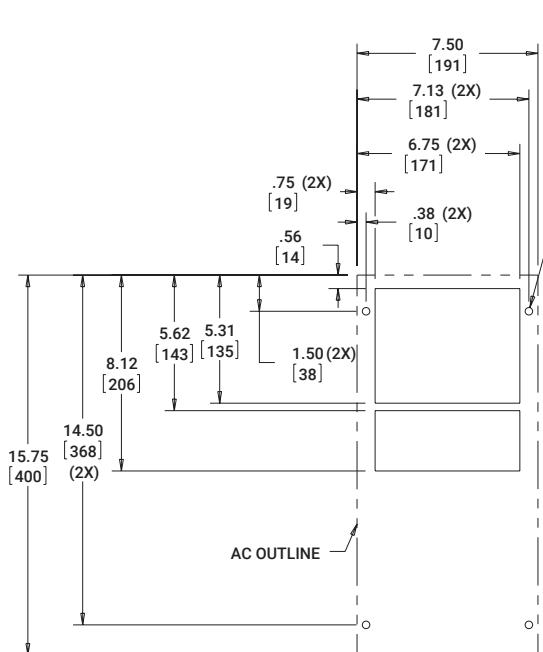
# T-Series Outdoor T15 to T70

## T15 Models 800 BTU/Hr. (234 Watt)

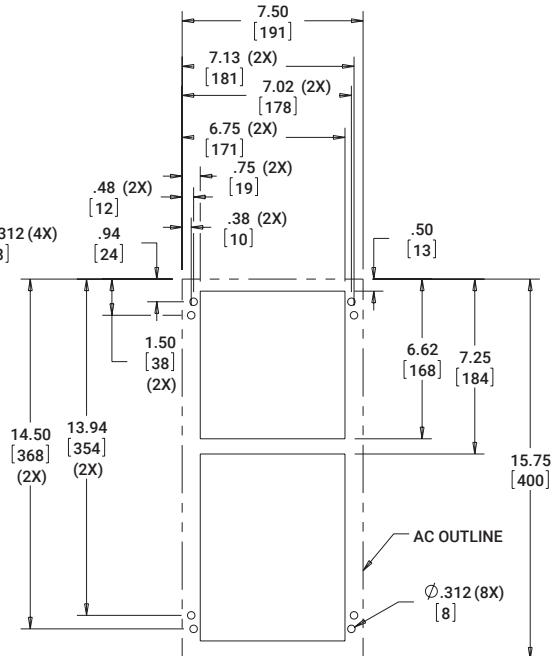
**NOTE:**  
 1. MOUNTING GASKET SUPPLIED (NOT SHOWN)  
 2. UNITS: in. [mm]



MOUNTING HARDWARE FOR FULLY RECESSED MOUNTING IS BEHIND REMOVABLE FRONT COVER. CLEANABLE, REUSABLE ALUMINUM INLET FILTER SLIDES OUT SLOT IN BOTTOM OF FRONT COVER.



Cutout Dimensions  
(Externally Mounted)



Cutout Dimensions  
(Internally Mounted)

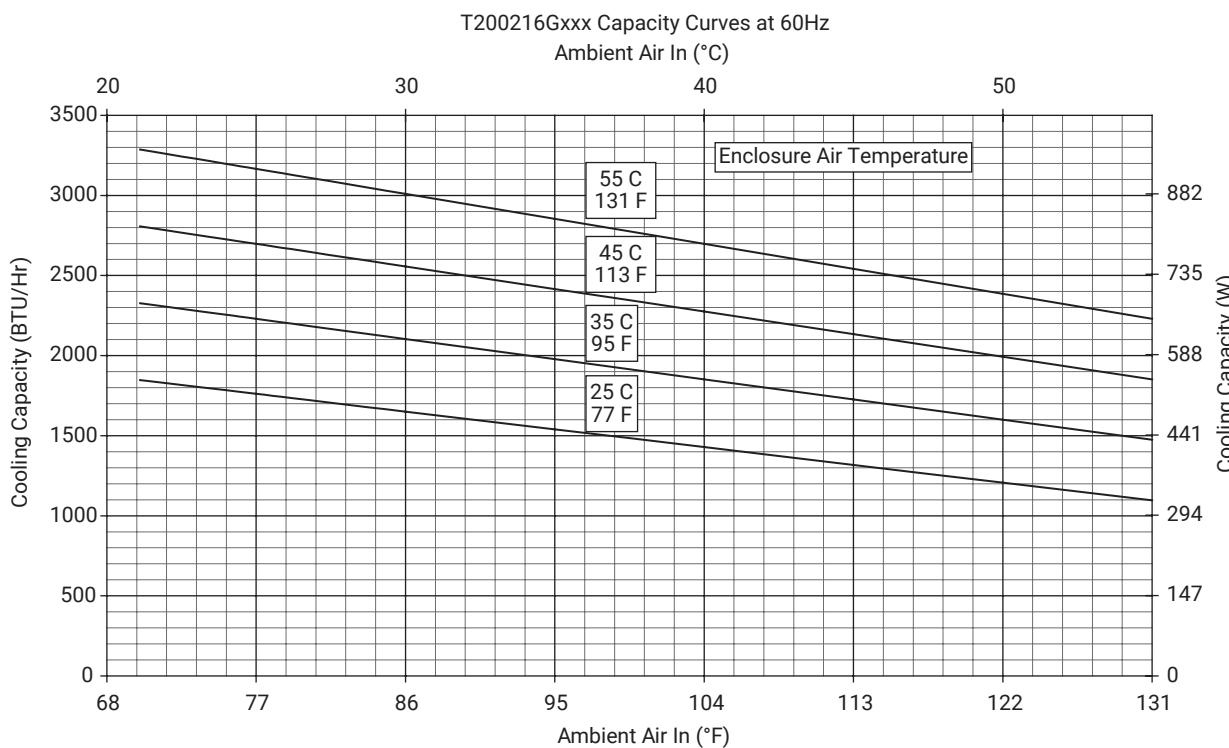
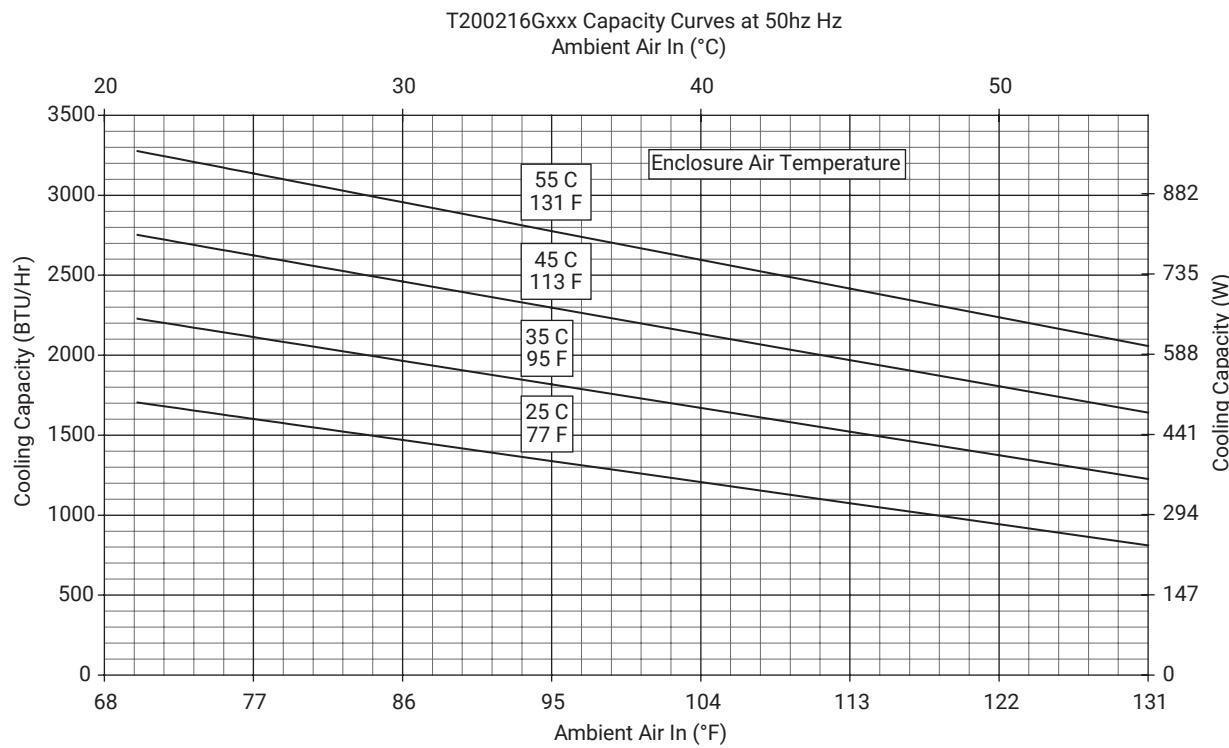
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T20 2000 BTU/HR. (586 WATT) MODELS

<b>Item number</b>			
Outdoor Model without Heat Pkg.	<b>T200216G100</b>	<b>T200226G100</b>	<b>T200246G400</b>
Outdoor Model with Heat Pkg.	<b>T200216G150</b>	<b>T200226G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T200216G155</b>	<b>T200226G103</b>	<b>T200246G401</b>
Outdoor Model/SS/Corrosion/4X/Heater	<b>T200216G157</b>	<b>T200226G158</b>	—
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>1800/2000</b>	<b>1800/2000</b>	<b>1800/2000</b>
<b>Watt</b>	<b>528/586</b>	<b>528/586</b>	<b>528/586</b>
At 131 °F/131 °C (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	2000/2175	2000/2175	2000/2175
W (50/60 Hz)	586/637	586/637	586/637
At 95 °F/95 °C (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	1950/2200	1950/2200	1950/2200
W (50/60 Hz)	571/645	571/645	571/645
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	6.5/184	6.5/184	6.5/184
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	77/131	77/131	77/131
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	150/255	150/255	150/255
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	91/155	91/155	91/155
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	165/280	165/280	165/280
Max. Heater W (Outdoor Models)	500	500	500
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	700/805	805	874
Max. Nominal Current (A at 50/60 Hz)	7.0/7.0	3.5/3.5	1.9
Starting Current (A)	19	7.6	7.2
Agency Approvals	cUL Listed CE EAC	Others available upon request	cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel optional		
<b>CONTROLLER</b>			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	66 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	20/508	20/508	24.25/615.95
Width (in./mm)	10/254	10/254	10/254
Depth (in./mm)	9.9/251	9.9/251	9.9/251
Weight (lb./kg)	56/25	56/25	66/30

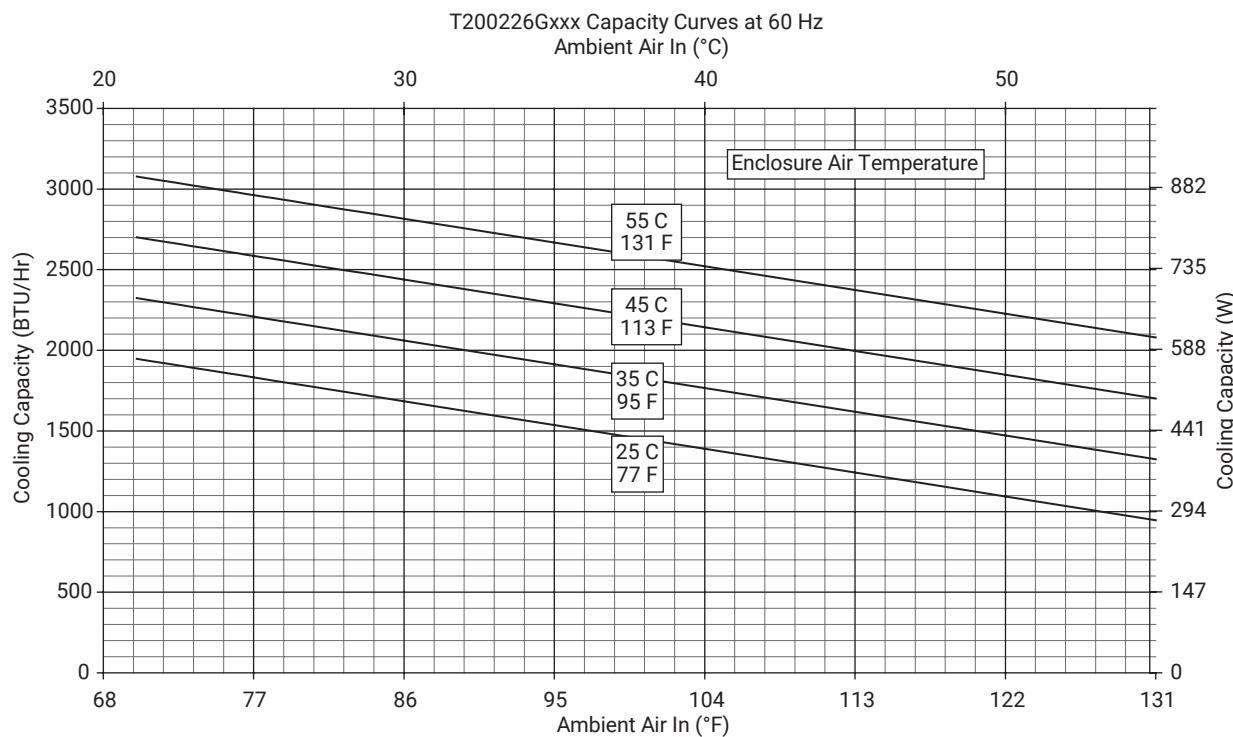
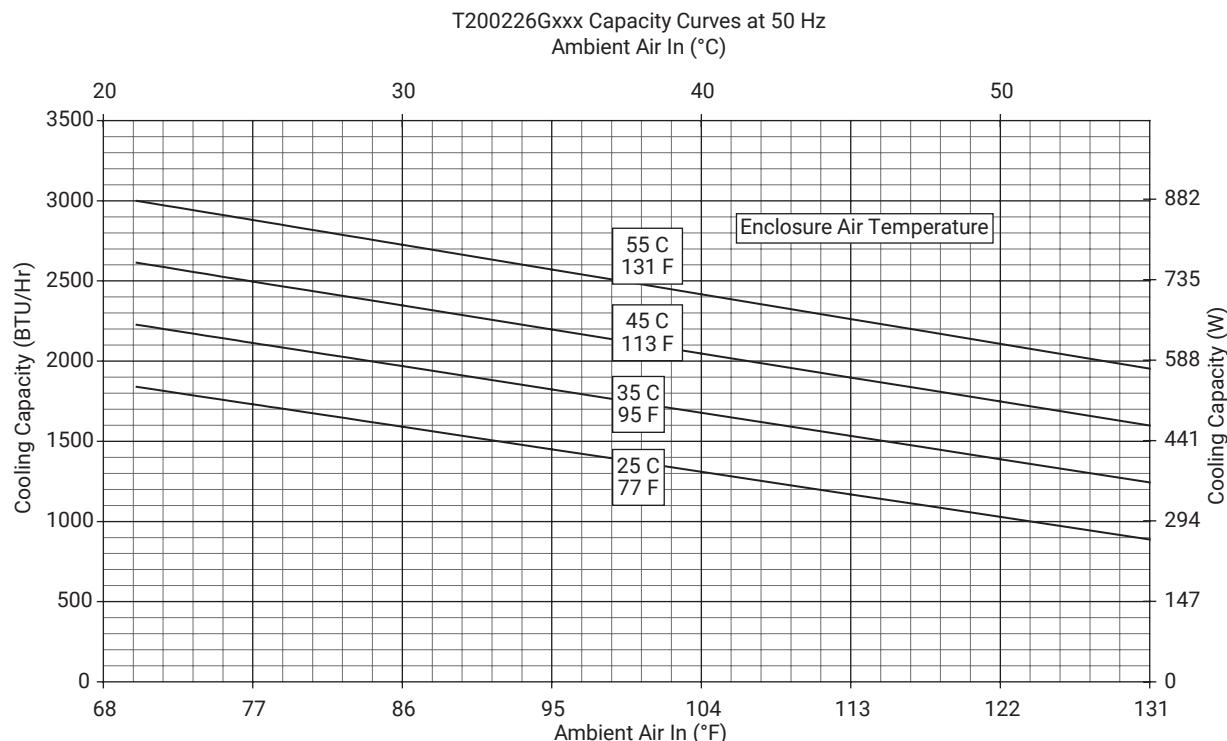
# T-Series Outdoor T15 to T70

Performance Curves for T20 Models 2000 BTU/Hr. (586 Watt)



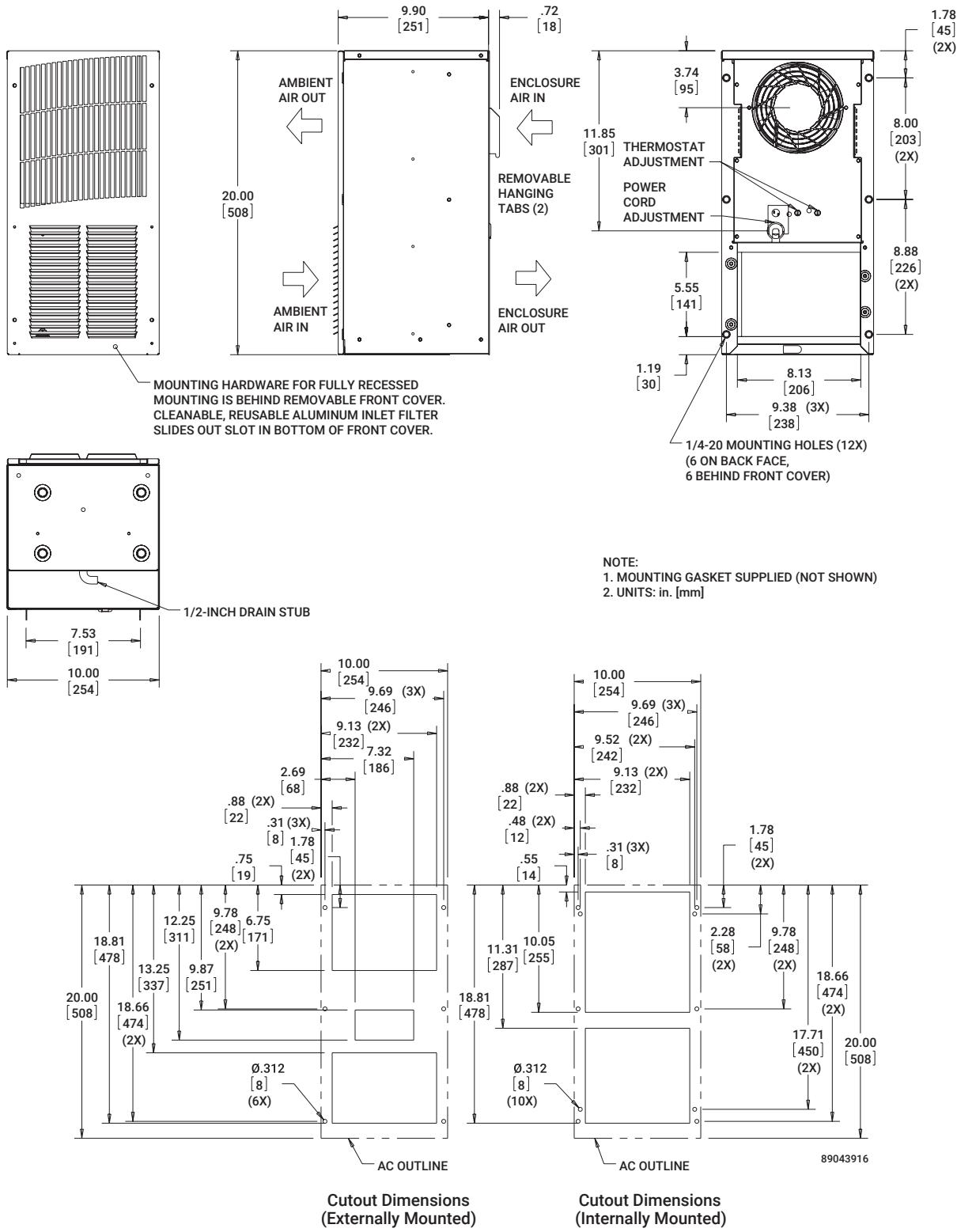
# T-Series Outdoor T15 to T70

Performance Curves for T20 Models 2000 BTU/Hr. (586 Watt)



# T-Series Outdoor T15 to T70

**T20 Models 2000 BTU/Hr. (586 Watt)**



Cutout Dimensions  
(Externally Mounted)

Cutout Dimensions  
(Internally Mounted)

# T-Series Outdoor T15 to T70

## T-SERIES MID-SIZE OUTDOOR



**T29**  
4000 BTU/Hr.  
1173 Watts

**T43**  
6000, 8000, 10000 BTU/Hr.  
1758, 2344, 2930 Watts

**T50**  
12000 BTU/Hr.  
3516 Watts

**T53**  
19000 BTU/Hr.  
5567 Watts

### INDUSTRY STANDARDS

UL/cUL Listed; Type 12, 3R, 4; 4X optional; File No. SA6453

UR/cUR Recognized

UR/cUR recognized on select models, reference performance data tables.

CE  
EAC  
Telcordia GR-487 capable



### APPLICATION

- Industrial automation
- Telecommunications equipment
- Package handling equipment
- Security and defense systems
- And more

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Stock models equipped with head pressure control for low-ambient operation, compressor heater, coated condenser coil, malfunction switch, thermostat and heater package
- Outdoor model operating temperature range from -40°F/-40°C to 131°F/55°C
- Exterior and fully recessed mounting options

- Compact footprint to minimize real estate and maximize capacity
- Reliable mechanical thermostat on enclosure side of the unit
- Dual condenser-side air movers for performance redundancy
- Painted galvanized sheet-metal cover for rugged factory and outdoor environments
- Easy-mount flanges for simple installation
- Every unit functionally tested before shipping

### SPECIFICATIONS

- Models for 115, 230 and 460 VAC power input
- Stainless Steel Model in Typ 304 standard
- Standard Outdoor Air Conditioner models also include:
  - Telcordia GR-487 capable
  - Thermostat
  - Corrosion-resistant components
  - Malfunction switch
  - Compressor heater
  - Head pressure control
  - Enclosure heater

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint
- Other colors and textures available

### OPTIONS

- Thermostat Malfunction Package
- Special Voltage Package
- Outdoor Package
- Harsh Environment Package
- Stainless Steel Package
- Heater Package

For product general accessories, please refer to the chapter "Accessories".

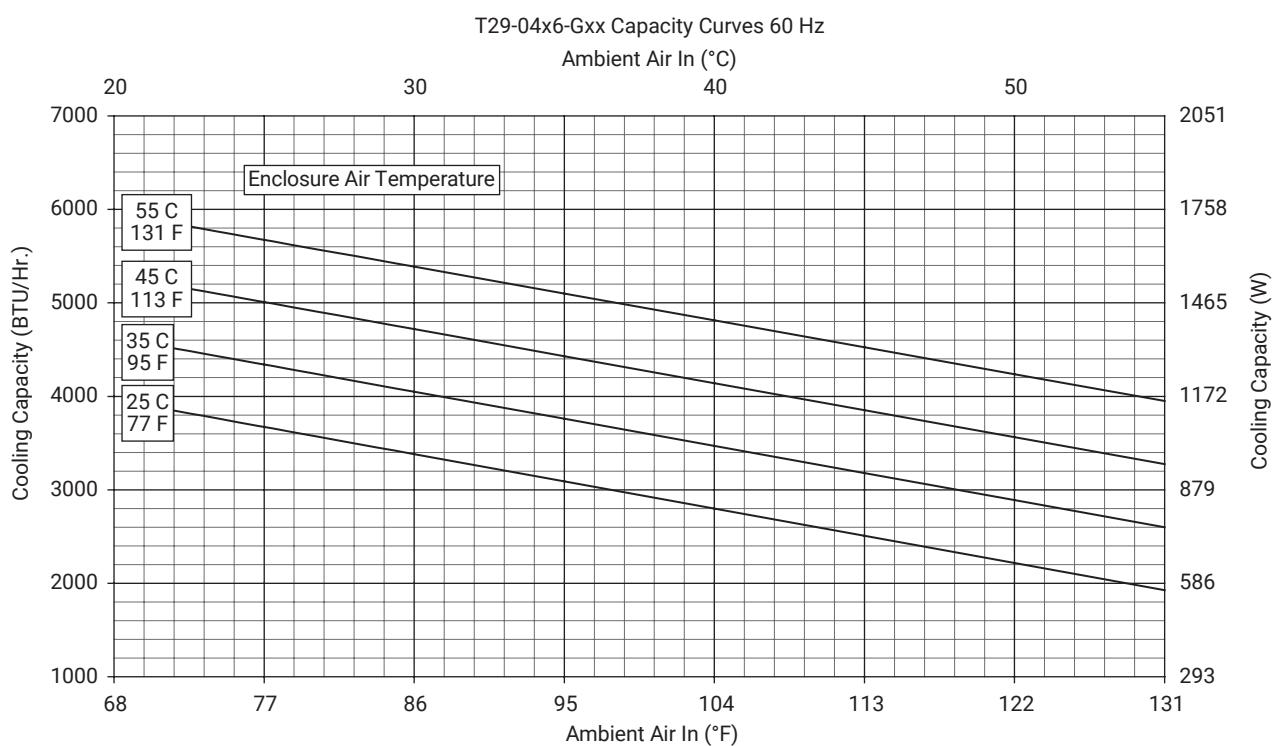
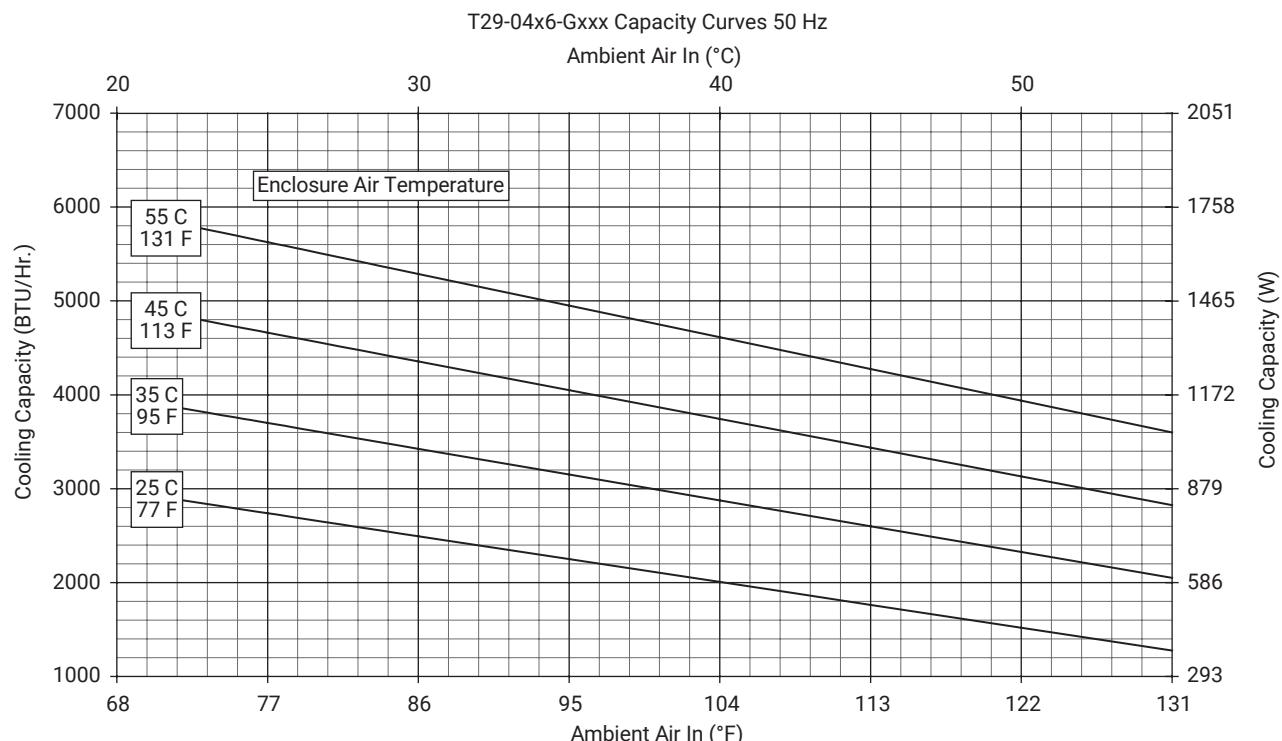
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T29 4000 BTU/HR. (1173 WATT) MODELS

<b>Item number</b>			
Outdoor Model without Heat Pkg.	<b>T290416G100</b>	<b>T290426G100</b>	—
Outdoor Model with Heat Pkg.	<b>T290416G150</b>	<b>T290426G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T290416G159</b>	<b>T290426G161</b>	—
Outdoor Model/SS/Corrosion/4X/Heater	<b>T290416G156</b>	<b>T290426G160</b>	—
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>3600/4000</b>	<b>3600/4000</b>	<b>3600/4000</b>
<b>Watt</b>	<b>1055/1172</b>	<b>1055/1172</b>	<b>1055/1172</b>
At 131 °F/131 °F (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	3950/4250	3950/4250	3950/4250
W (50/60 Hz)	1157/1245	1157/1245	1157/1245
At 95 °F/95 °F (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	3500/3900	3500/3900	3500/3900
W (50/60 Hz)	1025/1143	1025/1143	1025/1143
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	12.5/354	14.3/404	14.3/404
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m3/hr.)	172/292	172/292	172/292
External loop 50 Hz (CFM/m3/hr.)	195/331	195/331	195/331
Internal loop 60 Hz (CFM/m3/hr.)	205/348	205/348	205/348
External loop 60 Hz (CFM/m3/hr.)	235/399	235/399	235/399
Max. Heater W (Outdoor Models)	1000	1000	
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1163/1222	1587/1564	1748
Max. Nominal Current (A at 50/60 Hz)	13.8/12.8	6.9/6.8	3.8
Starting Current ()	48	23	12
Agency Approvals	cUL Listed CE EAC	cUR Recognized CE EAC	
	Others available upon request		
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
<b>CONTROLLER</b>			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	67 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	29/737	29/737	
Width (in./mm)	17/432	17/432	
Depth (in./mm)	11.3/287	11.3/287	
Weight (lb./kg)	107/48.6	127/58	

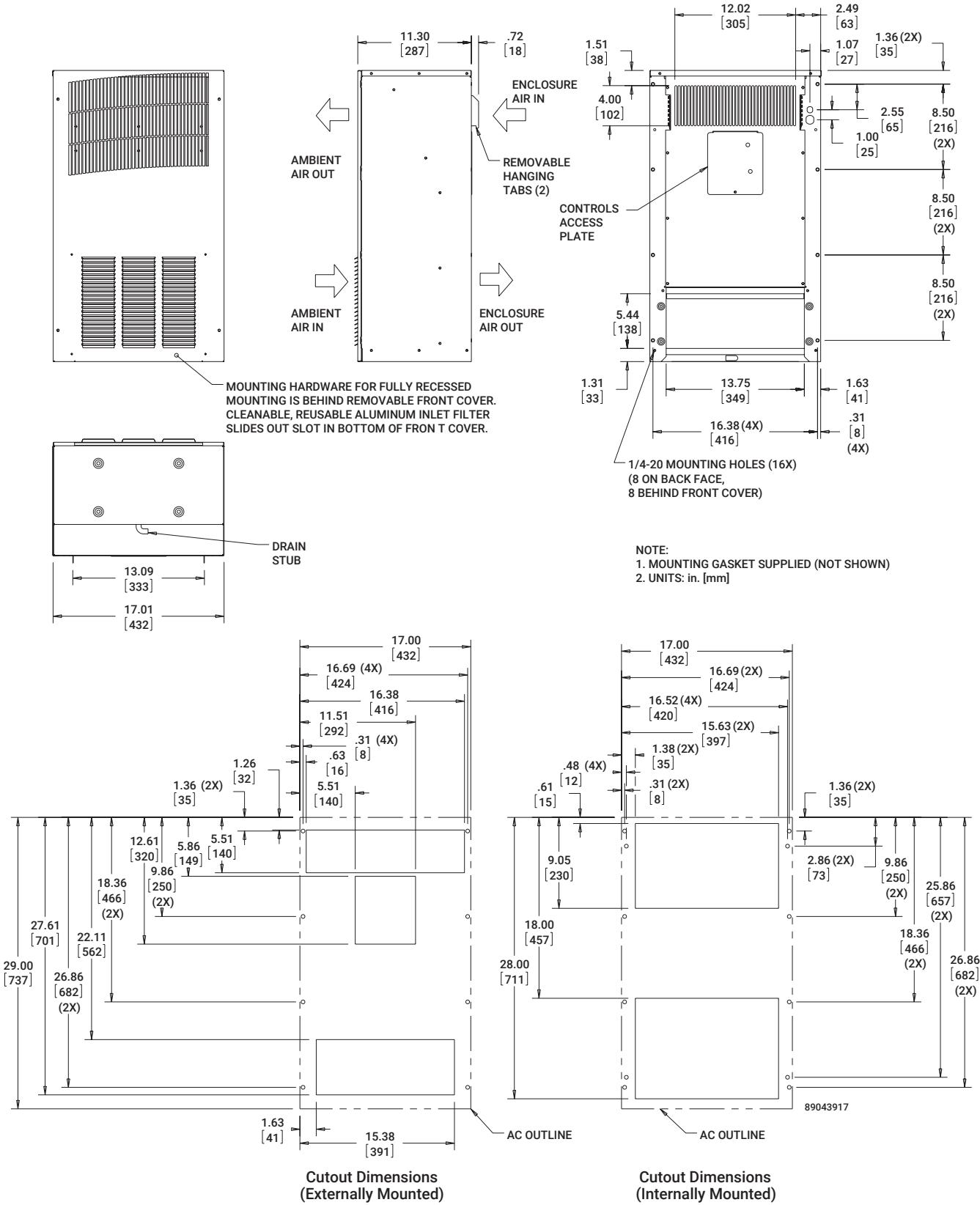
# T-Series Outdoor T15 to T70

Performance Curves for T29 Models 4000 BTU/Hr. (1173 Watt)



# T-Series Outdoor T15 to T70

**T29 Models 4000 BTU/Hr. (1173 Watt)**



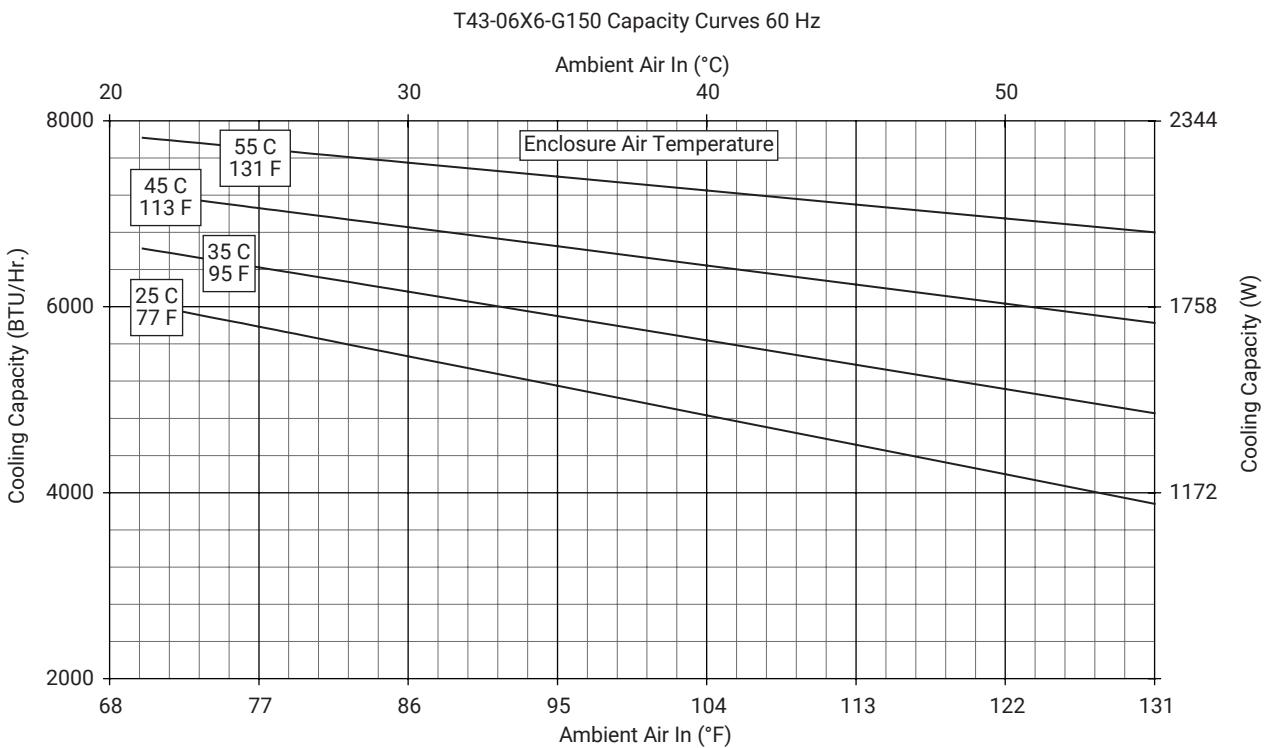
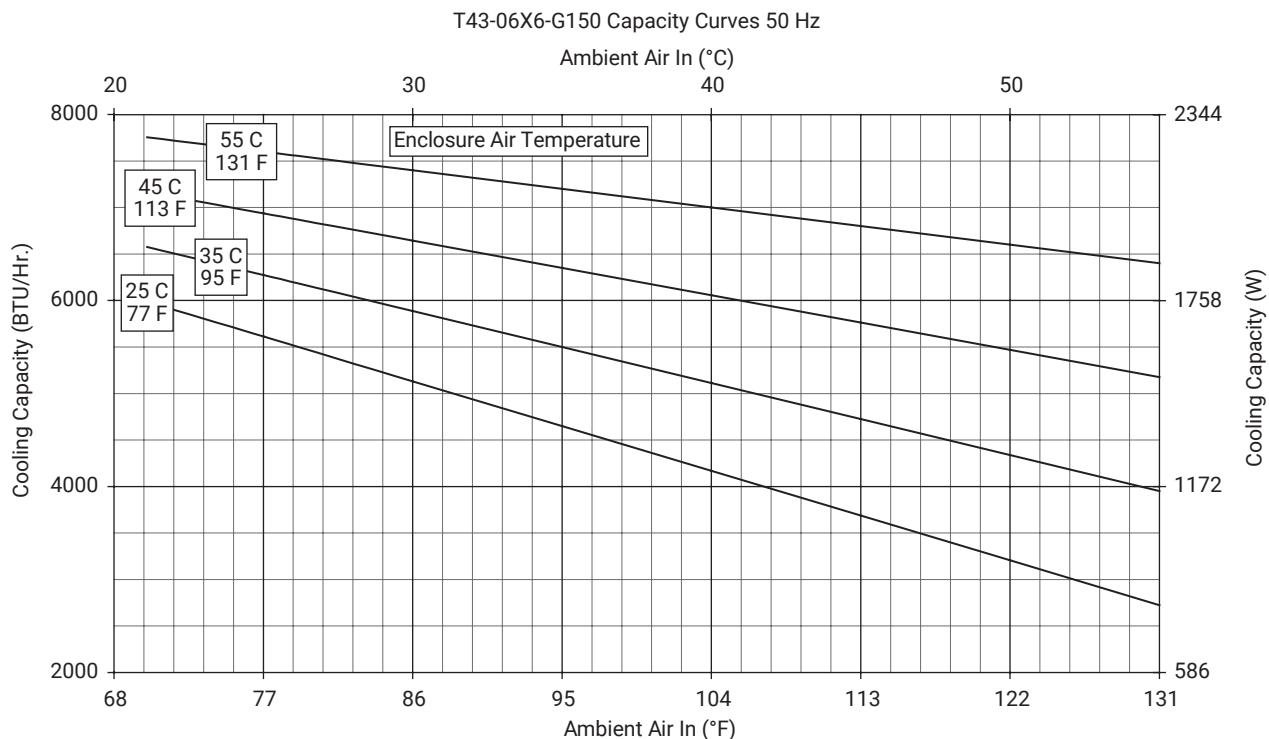
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T43 6000 BTU/HR. (1758 WATT) MODELS

<b>Item Number</b>			
Outdoor Model without Heat Pkg.	<b>T430616G100</b>	<b>T430626G100</b>	—
Outdoor Model with Heat Pkg.	<b>T430616G150</b>	<b>T430626G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T430616G102</b>	<b>T430626G159</b>	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—	—
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>6310/6680</b>	<b>6520/6770</b>	<b>6520/6770</b>
<b>Watt</b>	<b>1848/1958</b>	<b>1910/1985</b>	<b>1910/1985</b>
At 131 °F/131 °F (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	6400/6680	6520/6774	6520/6774
W (50/60 Hz)	1875/1957	1910/1985	1910/1985
At 95 °F/95 °F (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	5500/5900	5461/5846	5461/5846
W (50/60 Hz)	1611/1729	1600/1713	1600/1713
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	30/850	30/850	30/850
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m3/hr.)	310/527	310/527	310/527
External loop 50 Hz (CFM/m3/hr.)	345/586	345/586	345/586
Internal loop 60 Hz (CFM/m3/hr.)	320/544	320/544	320/544
External loop 60 Hz (CFM/m3/hr.)	355/603	355/603	355/603
Max. Heater W (Outdoor Models)	1000	1000	N/A
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1058/989	1012/874	1104/966
Max. Nominal Current (A at 50/60 Hz)	9.2/8.6	4.4/3.8	2.4/2.1
Starting Current (A)	57.2	27	14
Agency Approvals	cUL Listed CE EAC Others available upon request		cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
<b>CONTROLLER</b>			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	65.7 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	43/1092		
Width (in./mm)	15.75/400		
Depth (in./mm)	10.9/279		
Weight (lb./kg)	125/57		

# T-Series Outdoor T15 to T70

Performance Curves for T43 Models 6000 BTU/Hr. (1758 Watt)



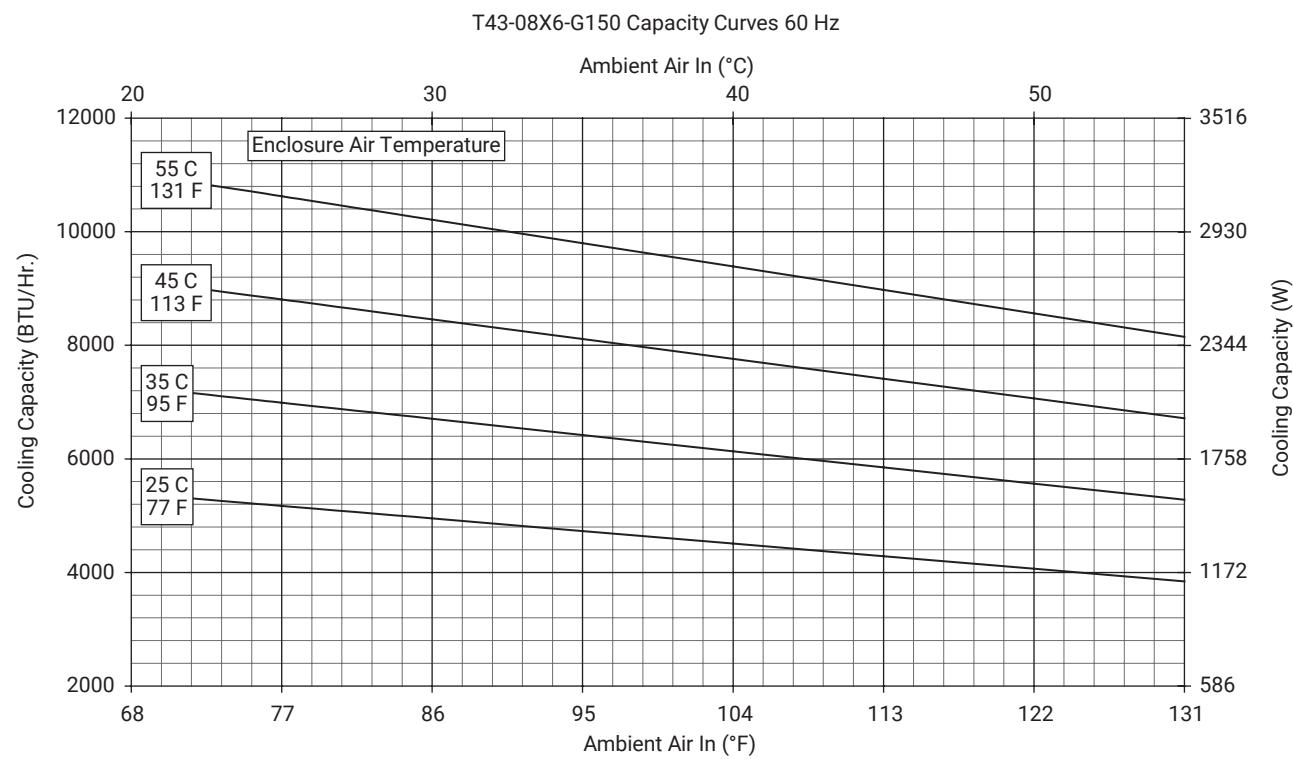
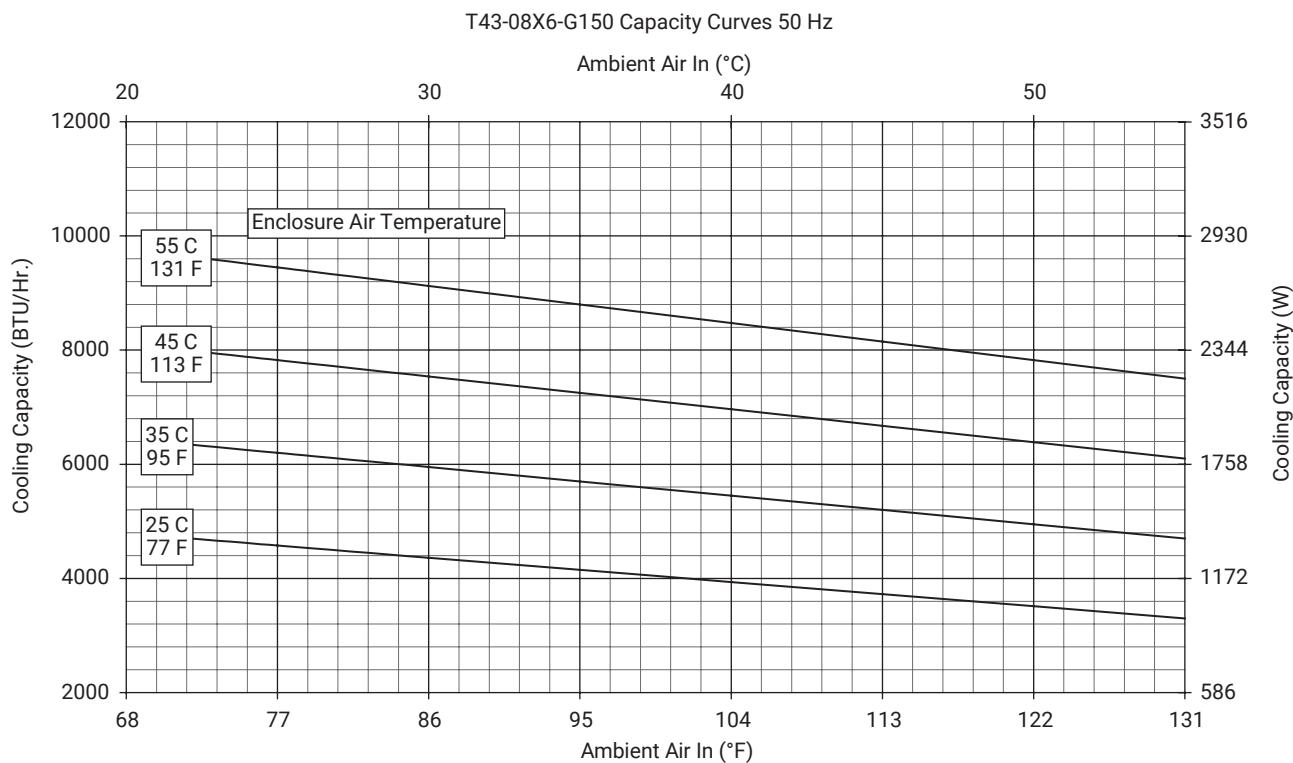
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T43 8000 BTU/HR. (2344 WATT) MODELS

<b>Item number</b>			
Outdoor Model without Heat Pkg.	<b>T430816G100</b>	<b>T430826G100</b>	—
Outdoor Model with Heat Pkg.	<b>T430816G150</b>	<b>T430826G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T430816G153</b>	<b>T430826G108</b>	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—	—
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>7900/8600</b>	<b>7400/8200</b>	<b>7400/8200</b>
<b>Watt</b>	<b>2310/2500</b>	<b>2160/2400</b>	<b>2160/2400</b>
At 131 °F/131 °F (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	7937/8629	7484/8215	7484/8215
W (50/60 Hz)	2326/2528	2193/2407	2193/2407
At 95 °F/95 °F (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	6401/7100	5940/6705	5940/6705
W (50/60 Hz)	1875/2080	1740/1965	1740/1965
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	36/1022	36/1022	36/1022
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	273/464	273/464	273/464
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	310/527	310/527	310/527
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	290/493	290/493	290/493
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	315/535	315/535	315/535
Max. Heater W (Outdoor Models)	1000	1000	N/A
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1196/1288	1196/1242	1334/1380
Max. Nominal Current (A at 50/60 Hz)	10.4/11.2	5.2/5.4	2.9/3.0
Starting Current (A)	48.3	27	14
Agency Approvals	cUL Listed CE EAC Others available upon request		cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
<b>CONTROLLER</b>			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	65.7 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	43/1092		
Width (in./mm)	15.75/400		
Depth (in./mm)	10.9/279		
Weight (lb./kg)	125/57		

# T-Series Outdoor T15 to T70

Performance Curves for T43 Models 8000 BTU/Hr. (2344 Watt)



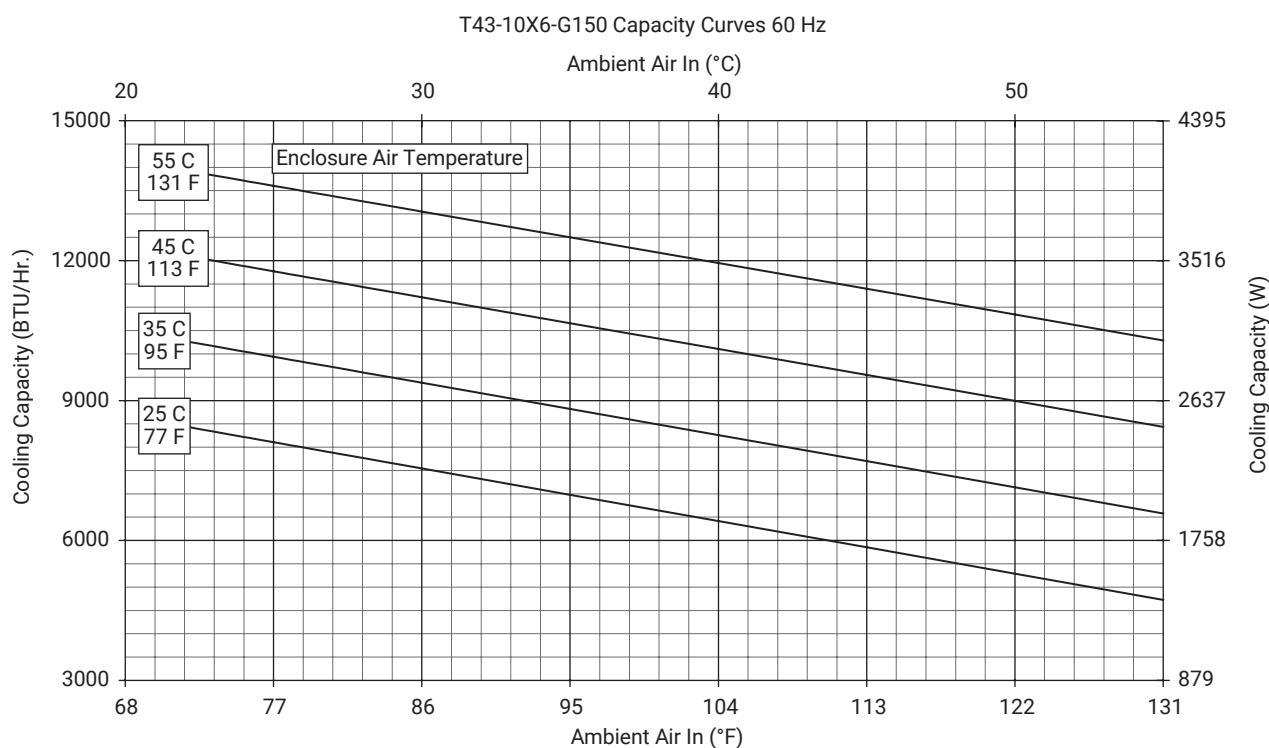
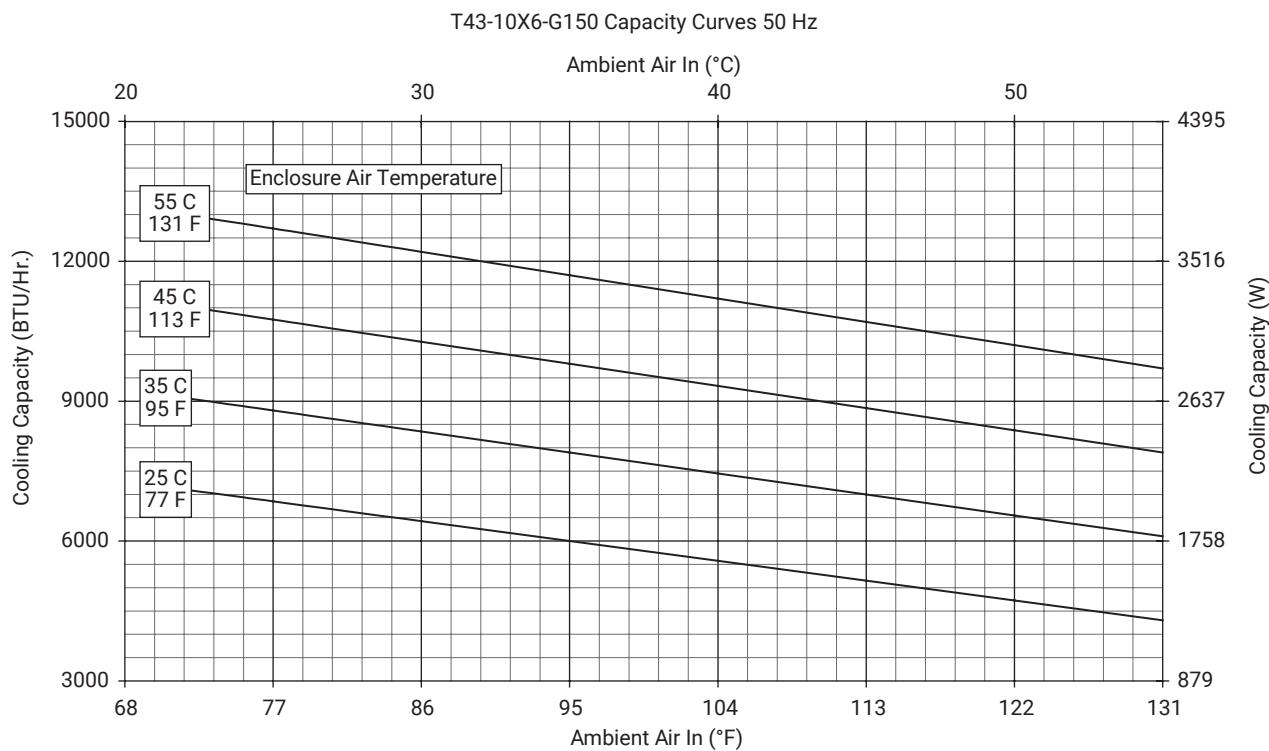
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T43 10000 BTU/HR. (2930 WATT) MODELS

<b>Item number</b>			
Outdoor Model without Heat Pkg.	<b>T431016G100</b>	<b>T431026G100</b>	—
Outdoor Model with Heat Pkg.	<b>T431016G150</b>	<b>T431026G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T431016G102</b>	<b>T431026G104</b>	—
Outdoor Model/SS/Corrosion/4X/Heater	<b>T431016G153</b>	<b>T431026G152</b>	—
<b>COOLING PERFORMANCE</b>			
Nominal:			
<b>BTU/Hr.</b>	<b>9670/10300</b>	<b>10100/10500</b>	<b>10100/10500</b>
<b>Watt</b>	<b>2831/3016</b>	<b>2957/3075</b>	<b>2957/3075</b>
At 131 °F/131 °F (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	9667/10290	10039/10669	10039/10669
W (50/60 Hz)	2832/3015	2941/3126	2941/3126
At 95 °F/95 °F (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	7663/8397	8458/8837	8458/8837
W (50/60 Hz)	2245/2460	2478/2589	2478/2589
Refrigerant	R-134A	R-134A	R-134A
Refrigerant Charge (ounces/grams)	32/907	32/907	32/907
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m3/hr.)	272/462	320/544	320/544
External loop 50 Hz (CFM/m3/hr.)	510/866	568/965	568/965
Internal loop 60 Hz (CFM/m3/hr.)	290/493	330/561	330/561
External loop 60 Hz (CFM/m3/hr.)	565/960	636/1081	636/1081
Max. Heater W (Outdoor Models)	1000	1000	N/A
<b>ELECTRICAL DATA</b>			
<b>Rated Voltage</b>	<b>115</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1828.5/2288.5	2070	1334/1380
Max. Nominal Current (A at 50/60 Hz)	15.9/19.9	9	5
Starting Current (A)	57	38	20
Agency Approvals	cUL Listed CE EAC	Others available upon request	cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 5-30 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
<b>CONTROLLER</b>			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
<b>SOUND LEVEL</b>			
At 1.5 Meters	73.3 dB(A)		
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	43/1092		
Width (in./mm)	15.75/400		
Depth (in./mm)	10.9/279		
Weight (lb./kg)	125/57		

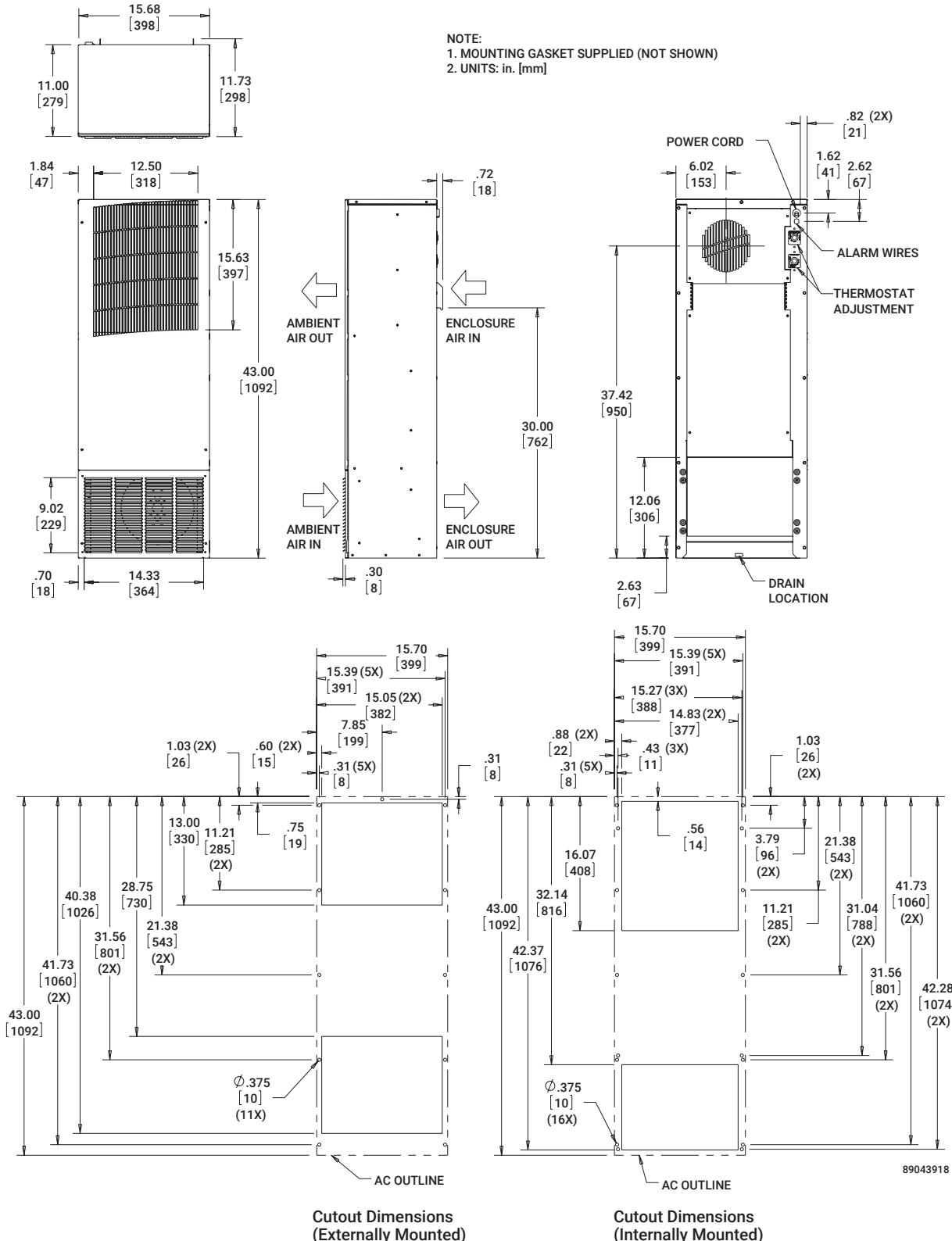
# T-Series Outdoor T15 to T70

Performance Curves for T43 Models 10000 BTU/Hr. (2930 Watt)



# T-Series Outdoor T15 to T70

**T43 6000-10000 Models BTU/HR. (1758 - 2930 Watt)**



**NOTES:**

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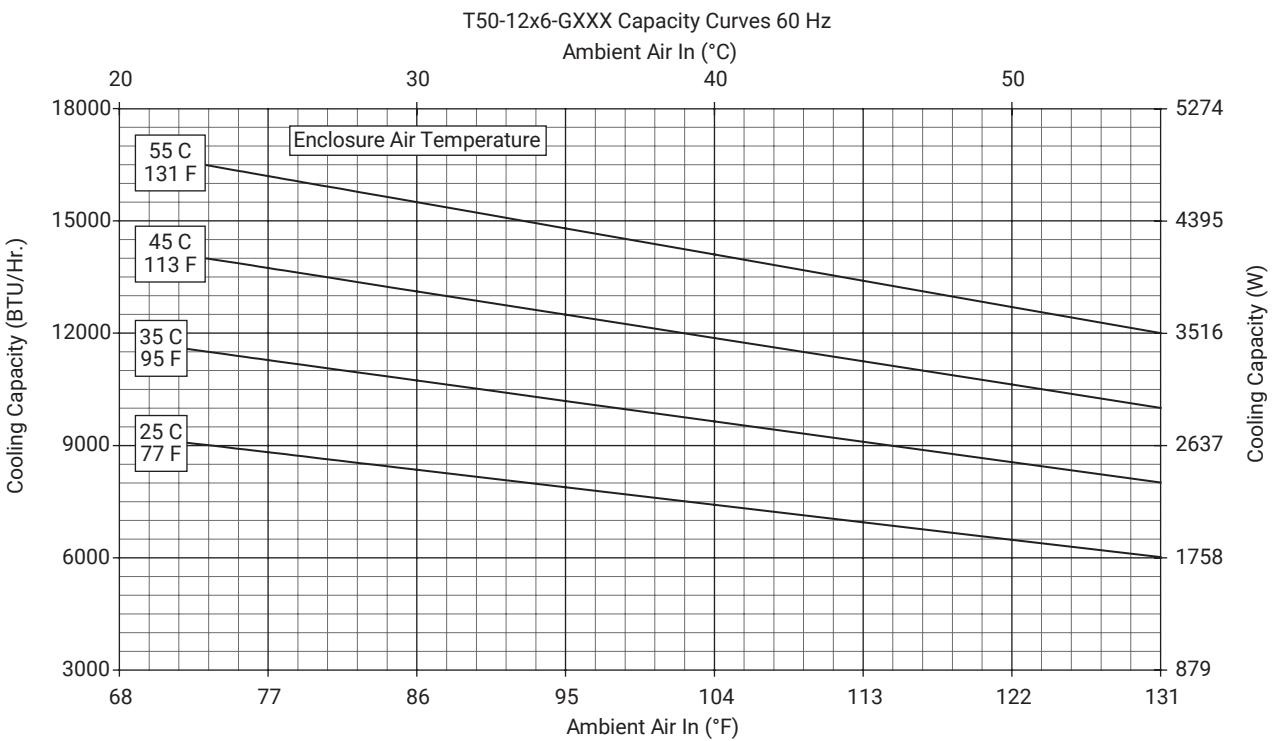
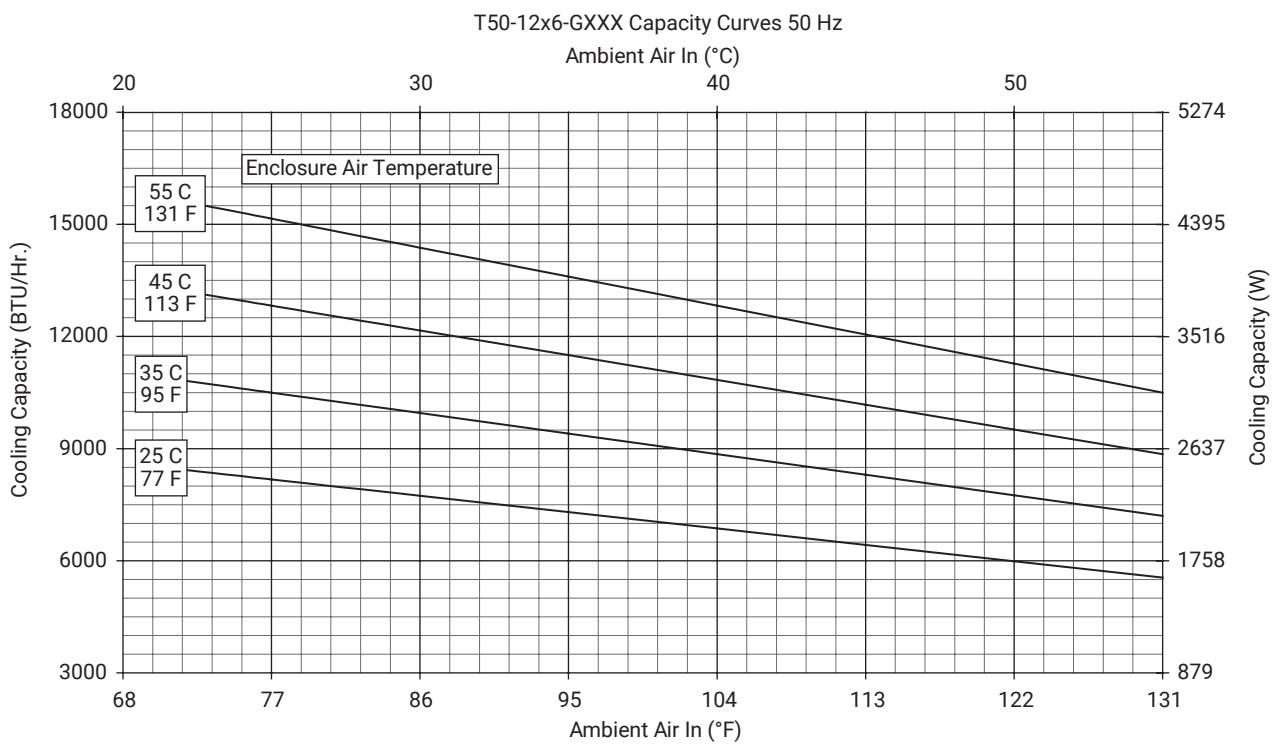
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T50 12000 BTU/HR. (3516 WATT) MODELS

<b>Item number</b>		
Outdoor Model without Heat Pkg.	<b>T501226G100</b>	—
Outdoor Model with Heat Pkg.	<b>T501226G150</b>	—
Outdoor Model/SS/Corrosion/4X	<b>T501226G125</b>	<b>T501246G401</b>
Outdoor Model/SS/Corrosion/4X/Heater	<b>T501226G156</b>	—
<b>COOLING PERFORMANCE</b>		
Nominal:		
BTU/Hr.	<b>11000/12000</b>	<b>11000/12000</b>
Watt	<b>3223/3516</b>	<b>3223/3516</b>
At 131 °F/131 °C (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	10030/12000	10030/12000
W (50/60 Hz)	2939/3516	2939/3516
At 95 °F/95 °C (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	9300/10050	9300/10050
W (50/60 Hz)	2725/2945	2725/2945
Refrigerant	R-134A	R-134A
Refrigerant Charge (ounces/grams)	46/1300	46/1300
Operating Temperature Range:		
Maximum (°F/°C)	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	300/510	300/510
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	520/883	520/883
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	368/626	368/626
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	625/1062	625/1062
Max. Heater W (Outdoor Models)	1500	1500
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>220/230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	1804/2139	2070/2346
Max. Nominal Current (A at 50/60 Hz)	8.2/9.3	4.5/5.1
Starting Current (A)	38	20
Agency Approvals	cUL Listed CE EAC	cUR Recognized CE EAC
Power Input Description	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
<b>ENCLOSURE PROTECTION</b>		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel	
<b>CONTROLLER</b>		
Description	Mechanical thermostat	
Thermostat Location	Enclosure side on all base models	
Factory Thermostat Setting (°F/°C)	80/27	
<b>SOUND LEVEL</b>		
At 1.5 Meters	68 dB(A)	
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	50/1270	
Width (in./mm)	19/483	
Depth (in./mm)	11.05/281	
Weight (lb./kg)	164/75	

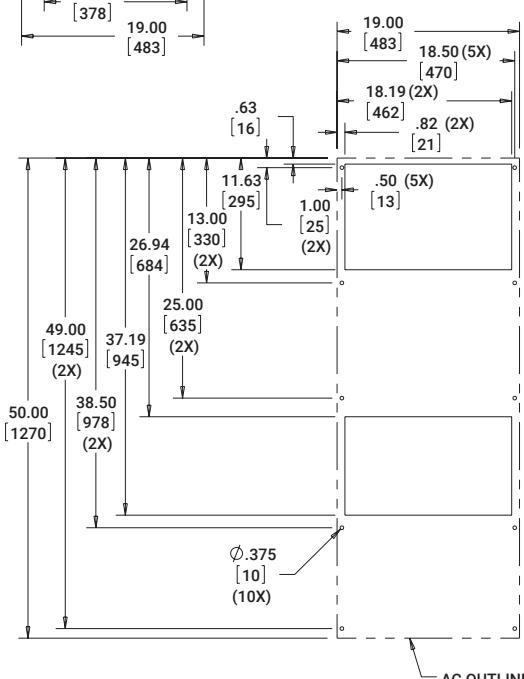
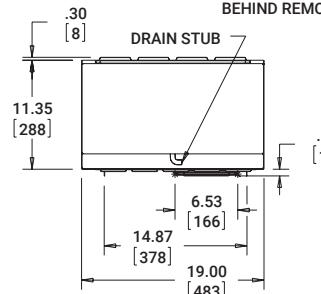
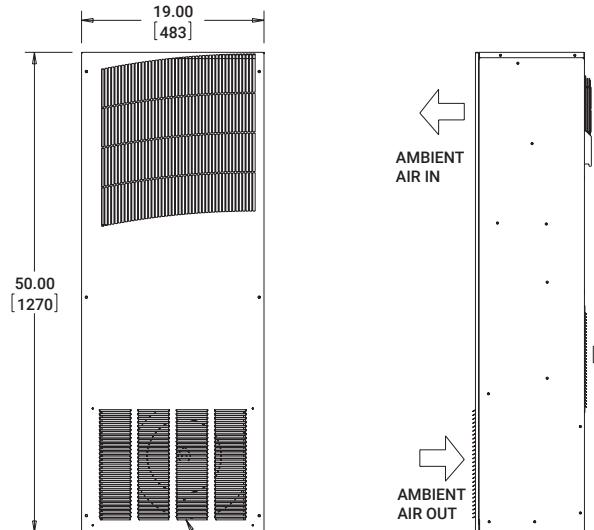
# T-Series Outdoor T15 to T70

Performance Curves for T50 Models 12000 BTU/Hr. (3516 Watt)

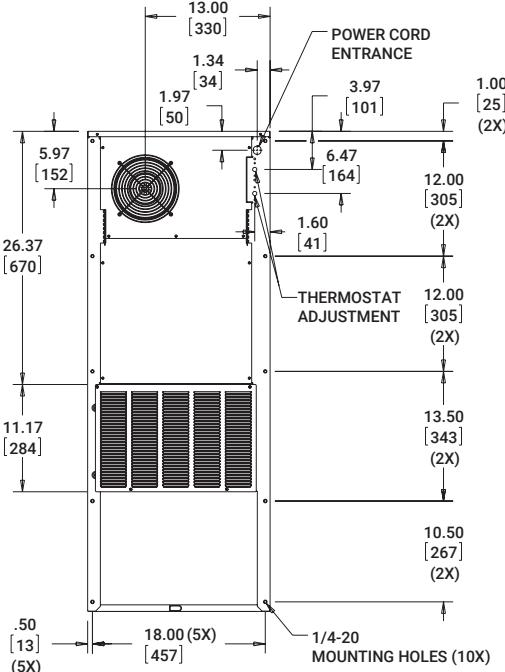


# T-Series Outdoor T15 to T70

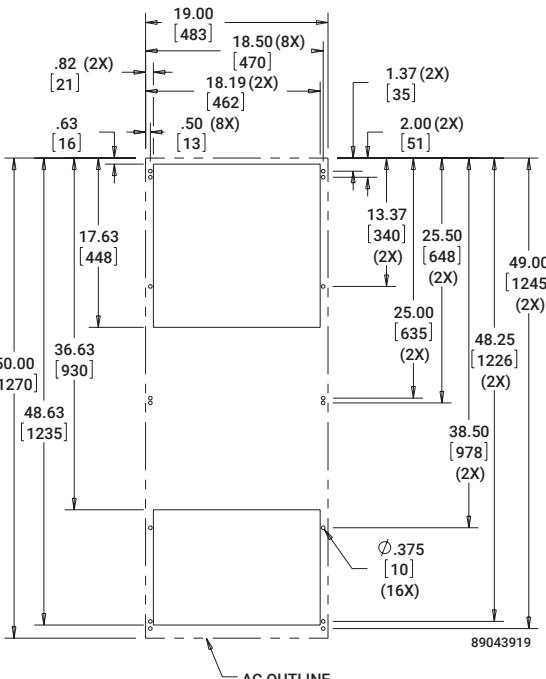
**T50 Models 12000 BTU/Hr. (3516 Watt)**



Cutout Dimensions  
(Externally Mounted)



**NOTE:**  
1. MOUNTING GASKET SUPPLIED (NOT SHOWN)  
2. UNITS: in. [mm]



Cutout Dimensions  
(Internally Mounted)

**NOTES:**

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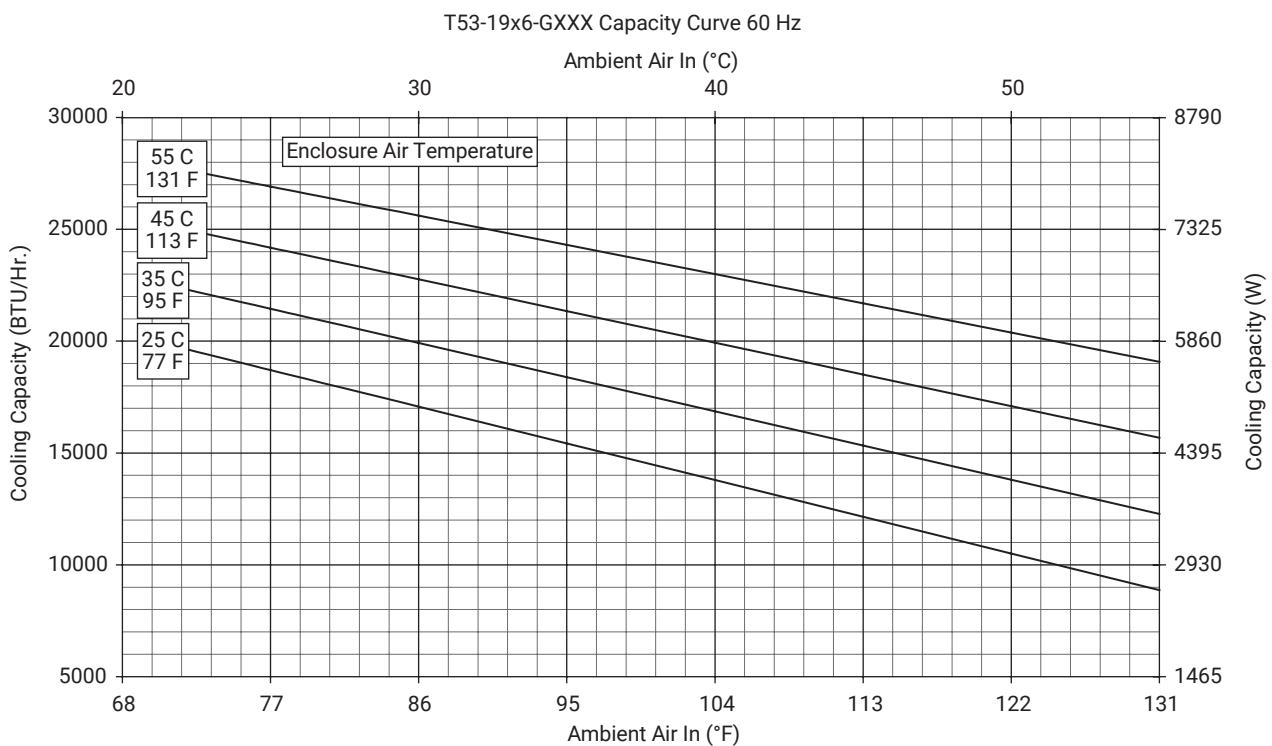
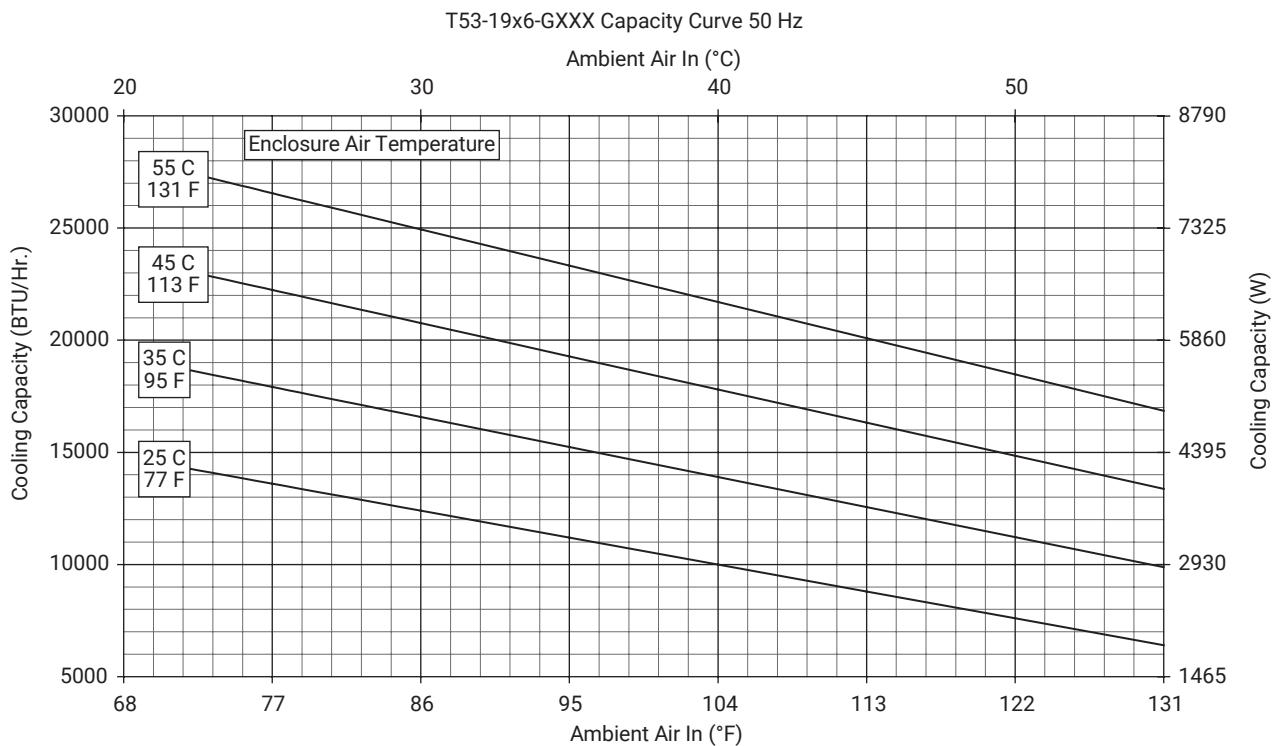
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T53 19000 BTU/HR. (5567 WATT) MODELS

Item number			
Outdoor Model without Heat Pkg.	<b>T531926G100</b>	—	—
Outdoor Model with Heat Pkg.	<b>T531926G150</b>	—	—
Outdoor Model/SS/Corrosion/4X	<b>T531926G109</b>	—	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—	—
COOLING PERFORMANCE			
Nominal:			
<b>BTU/Hr.</b>	<b>16800/19000</b>	<b>16800/19000</b>	<b>16800/19000</b>
<b>Watt</b>	<b>4922/5567</b>	<b>4922/5567</b>	<b>4922/5567</b>
At 131 °F/131 °C (55 °C/55 °C):			
BTU/Hr. (50/60 Hz)	16854/19081	16854/19081	16854/19081
W (50/60 Hz)	4939/5592	4939/5592	4939/5592
At 95 °F/95 °C (35 °C/35 °C):			
BTU/Hr. (50/60 Hz)	15240/19815	15240/19815	15240/19815
W (50/60 Hz)	4466/5807	4466/5807	4466/5807
Refrigerant	410A	410A	410A
Refrigerant Charge (ounces/grams)	40/1132	40/1132	40/1132
Operating Temperature Range:			
Maximum (°F/°C)	131/55	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:			
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	449/763	449/763	449/763
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	1204/2046	1204/2046	1204/2046
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	519/882	519/882	519/882
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	1300/2209	1300/2209	1300/2209
Max. Heater W (Outdoor Models)	3000		
ELECTRICAL DATA			
<b>Rated Voltage</b>	<b>230</b>	<b>460V 1PH</b>	
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	3979/4669	4370/5152	
Max. Nominal Current (A at 50/60 Hz)	17.3/20.3	9.5/11.2	
Starting Current (A)	54	28	
Agency Approvals	CUL Listed CE EAC	CUR Recognized CE EAC	
Power Input Description		Terminal block	
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
CONTROLLER			
Description	Mechanical thermostat		
Thermostat Location	Enclosure side on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
SOUND LEVEL			
At 1.5 Meters	76 dB(A)		
UNIT CONSTRUCTION			
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
UNIT DIMENSIONS			
Height (in./mm)	53.0/1346.2		
Width (in./mm)	21.0/533.4		
Depth (in./mm)	13.0/330.2		
Weight (lb./kg)	197/90	237/108	

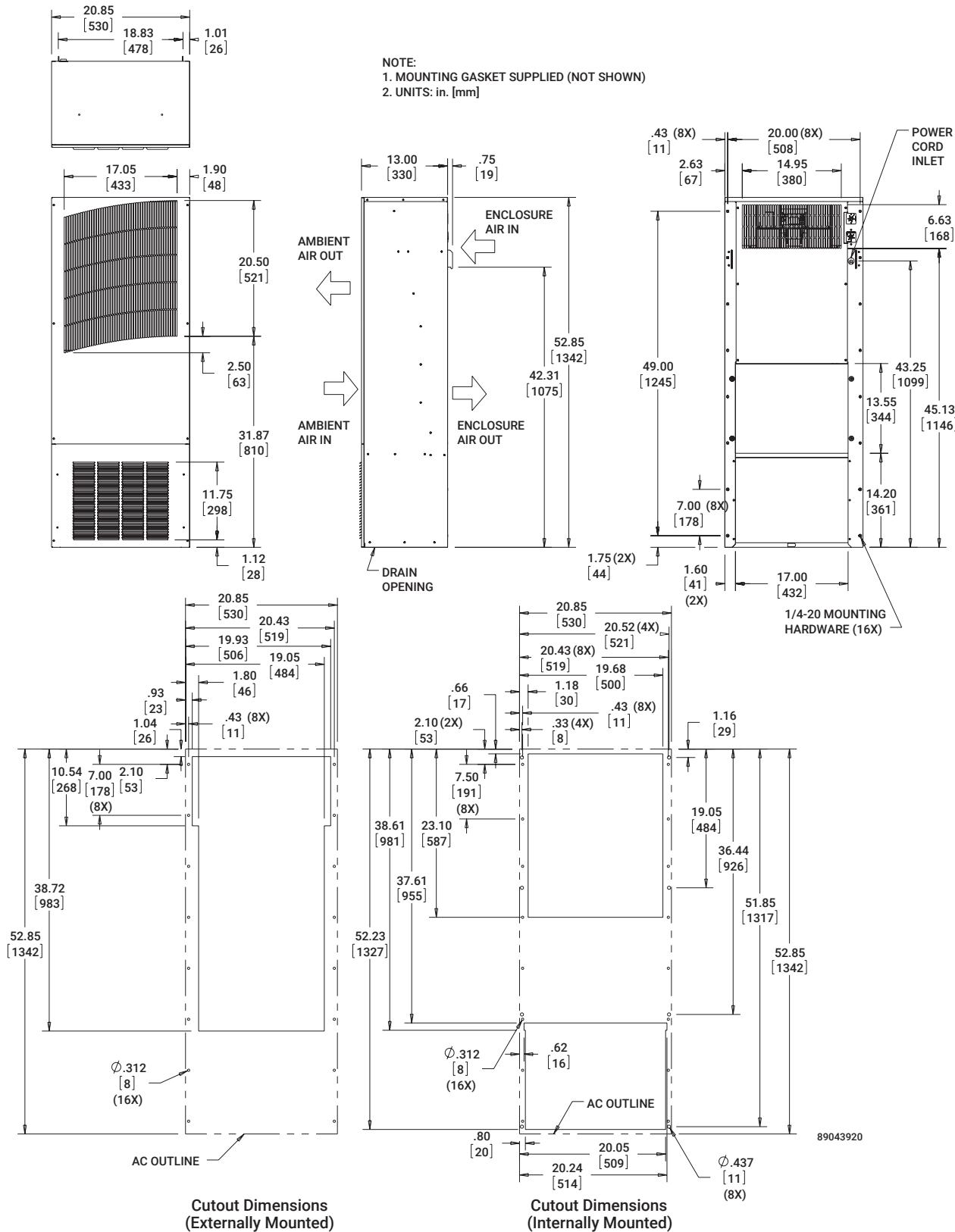
# T-Series Outdoor T15 to T70

Performance Curves for T53 Models 19000 BTU/Hr. (5567 Watt)



## T-Series Outdoor T15 to T70

## T53 Models 19000 BTU/Hr. (5567 Watt)



**NOTES :**

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# T-Series Outdoor T15 to T70

## T-SERIES LARGE CAPACITY OUTDOOR



**T62**  
20000 BTU/Hr.  
5860 Watts

**T70-36**  
36000 BTU/Hr.  
10548 Watts

**T70-60**  
59000 BTU/Hr.  
17287 Watts

### INDUSTRY STANDARDS

UL/cUL Listed; Type 12, 3R, 4; 4X optional; File No. SA6453  
UR/cUR Recognized

UR/cUR recognized on select models, reference performance data tables.

CE  
EAC  
Telcordia GR-487 capable



### APPLICATION

- Industrial automation
- Telecommunications equipment
- Package handling equipment
- Security and defense systems
- And more

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Stock models equipped with head pressure control for low-ambient operation, compressor heater, coated condenser coil, malfunction switch, thermostat and heater package
- Outdoor model operating temperature range from -40°F/-40°C to 131°F/55°C
- Exterior mounting

For product general accessories, please refer to the chapter "Accessories".

- Compact footprint to minimize real estate and maximize capacity
- Reliable mechanical thermostat on enclosure side of the unit
- Dual condenser-side air movers for performance redundancy
- Painted galvanized sheet-metal cover for rugged factory and outdoor environments
- Easy-mount flanges for simple installation
- Every unit functionally tested before shipping

### SPECIFICATIONS

- Models for 230 and 460 VAC power input
- Stainless Steel Model in Typ 304 standard
- Standard Outdoor Air Conditioner models also include:
  - Telcordia GR-487 capable
  - Thermostat
  - Corrosion-resistant components
  - Malfunction switch
  - Compressor heater
  - Head pressure control
  - Enclosure heater

### FINISH

- RAL 7035 light-gray, semi-textured powder-coat paint
- Other colors and textures available

### OPTIONS

- Thermostat Malfunction Package
- Special Voltage Package
- Outdoor Package
- Harsh Environment Package
- Stainless Steel Package
- Heater Package

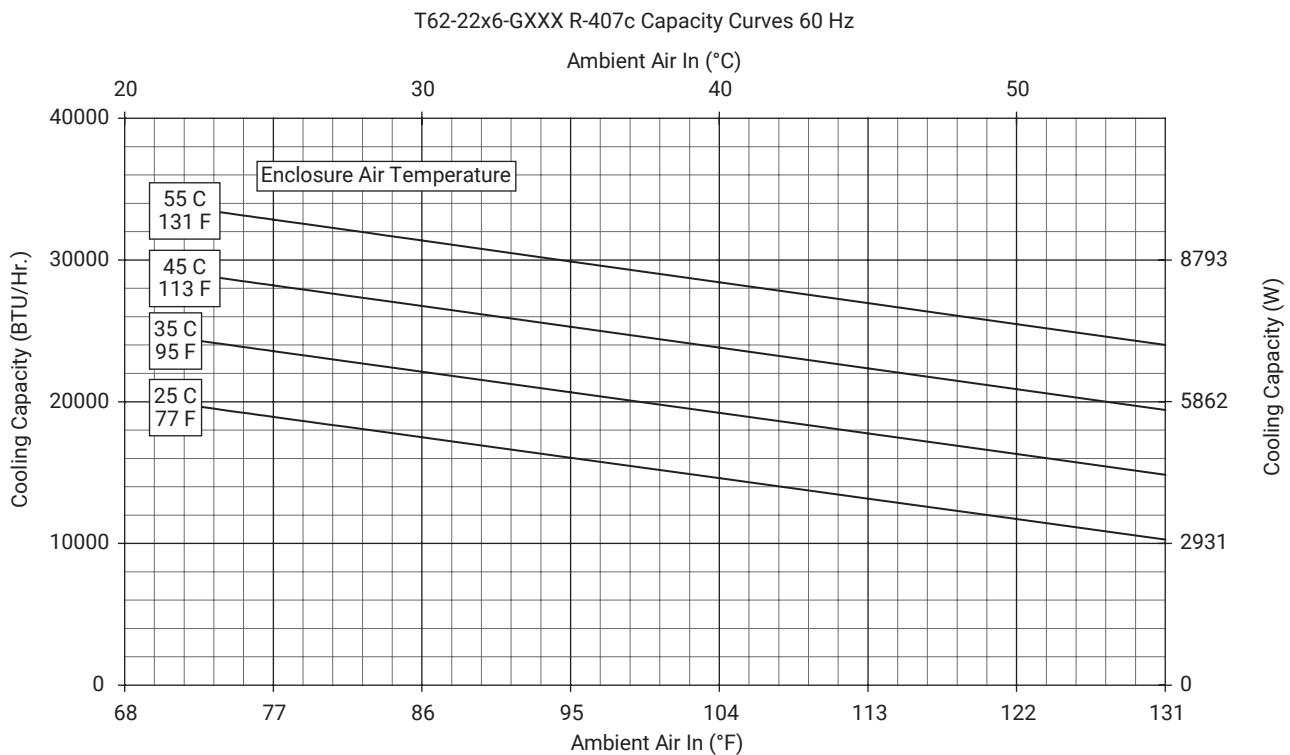
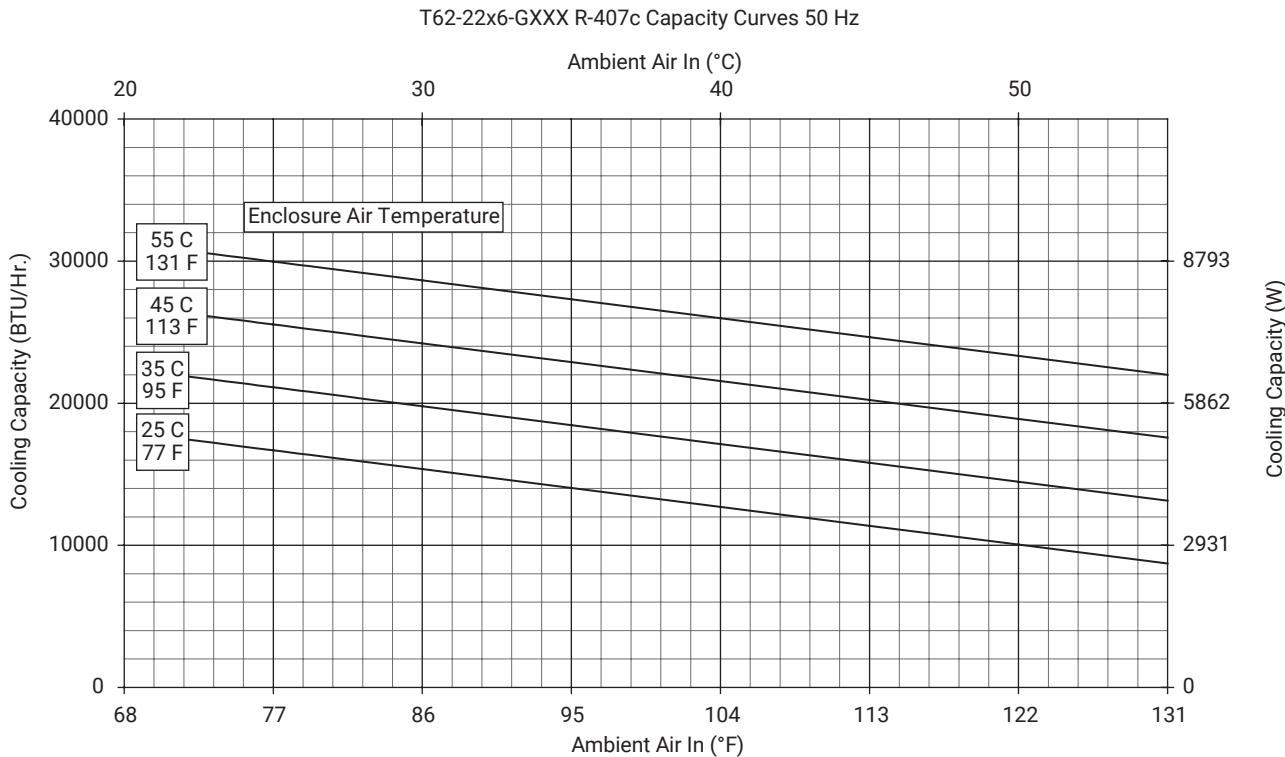
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T62 20000 BTU/HR. (5860 WATT) MODELS

Item number	T622226G150	—
<b>COOLING PERFORMANCE</b>		
Nominal:		
<b>BTU/Hr.</b>	<b>20500/23500</b>	<b>20500/23500</b>
<b>Watt</b>	<b>6007/6886</b>	<b>6007/6886</b>
At 131 °F/131 °F (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	20860/23927	20860/23927
W (50/60 Hz)	6113/7012	6113/7012
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	18258/20256	18258/20256
W (50/60 Hz)	5351/5936	5351/5936
Refrigerant	R-407C	
Refrigerant Charge (ounces/grams)	42/1300	42/1300
Operating Temperature Range:		
Maximum (°F/°C)	131/55	131/55
Minimum (°F/°C)	-40/-40	-40/-40
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	570/968	570/968
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	1443/2452	1443/2452
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	673/1143	673/1143
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	1797/3053	1797/3053
Max. Heater W (Outdoor Models)	2000	Up to 3000 (Optional)
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>230</b>	<b>460V 1PH</b>
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	4370/5060	7000/9200
Max. Nominal Current (A at 50/60 Hz)	19/22	10.5/12
Starting Current (A)	60	30
Agency Approvals	cUL Listed CE EAC	cur Recognized CE EAC
Power Input Description	Terminal block	Terminal block
<b>ENCLOSURE PROTECTION</b>		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel	
<b>CONTROLLER</b>		
Description	Mechanical thermostat	
Thermostat Location	Enclosure ide on all base models	
Factory Thermostat Setting (°F/°C)	80/27	
<b>SOUND LEVEL</b>		
At 1.5 Meters	71 dB(A)	
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	61.77/1568.96	61.77/1568.96
Width (in./mm)	19.91/505.71	19.91/505.71
Depth (in./mm)	17.36/440.94	17.36/440.94
Weight (lb./kg)	218/99.1	258/117

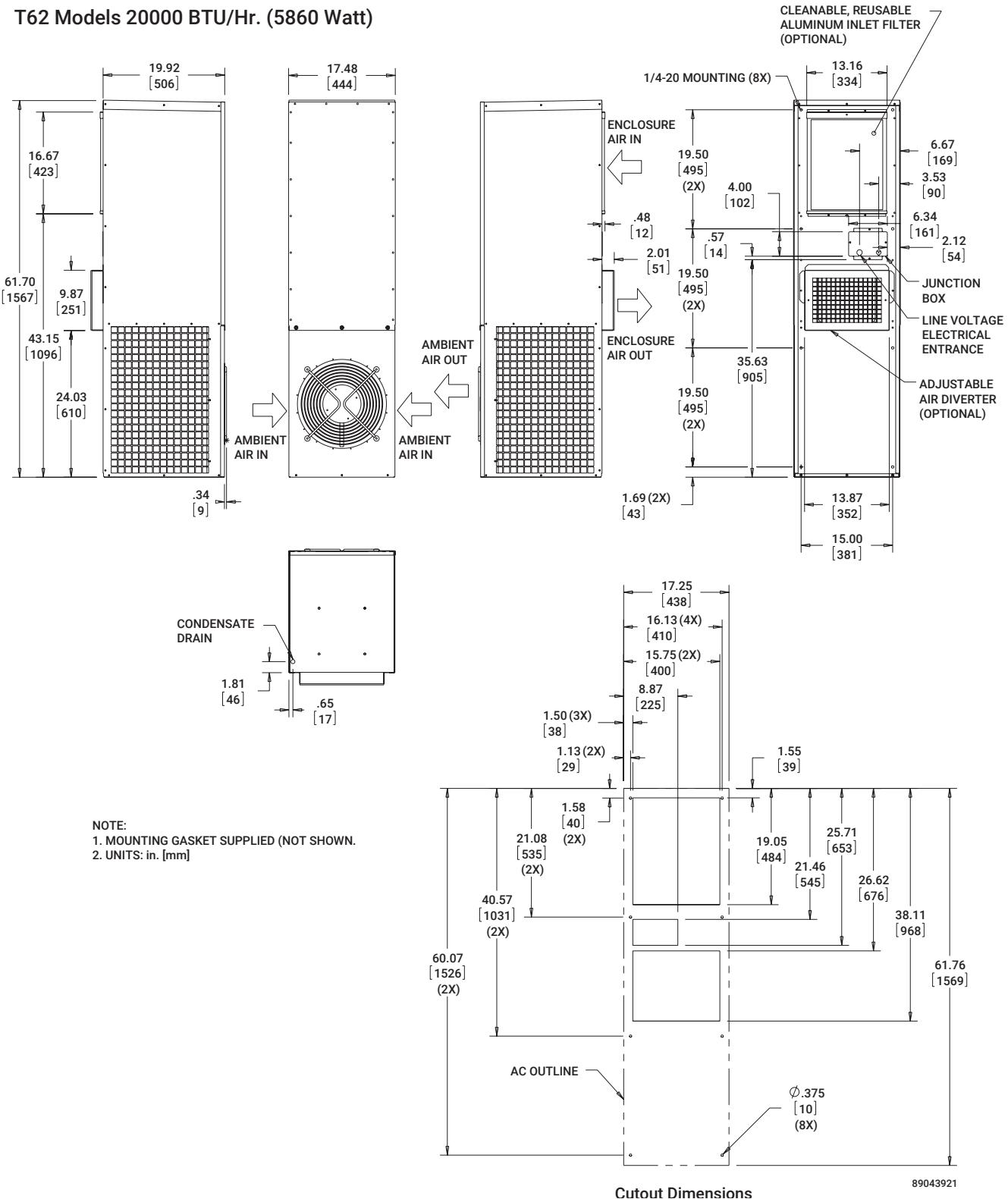
# T-Series Outdoor T15 to T70

Performance Curves for T62 Models 20000 BTU/Hr. (5860 Watt)



# T-Series Outdoor T15 to T70

**T62 Models 20000 BTU/Hr. (5860 Watt)**



# T-Series Outdoor T15 to T70

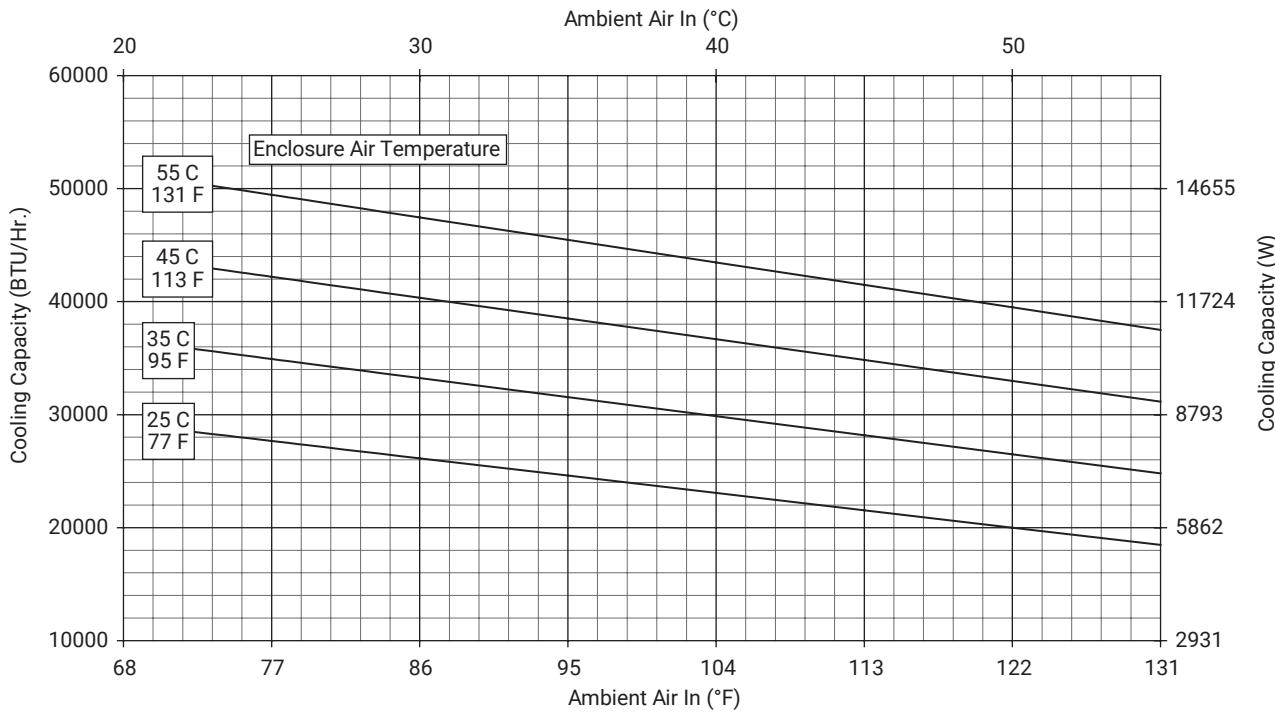
## PERFORMANCE DATA T70-36 36000 BTU/HR. (10548 WATT) MODELS

Item number	T703626G150	-
<b>COOLING PERFORMANCE</b>		
Nominal:		
BTU/Hr.	<b>39000/43000</b>	
Watt	<b>11430/12602</b>	
At 131 °F/131 °C (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	38613/42930	
W (50/60 Hz)	11316/12570	
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	31364/36130	
W (50/60 Hz)	9192/10579	
Refrigerant	R-407C	
Refrigerant Charge (ounces/grams)	110/3118	
Operating Temperature Range:		
Maximum (°F/°C)	131/55	
Minimum (°F/°C)	-40/-40	
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	1085/1843	
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	2176/3697	
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	1171/1989	
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	2347/3987	
Max. Heater W (Outdoor Models)	2000 Standard (5000 Optional)	
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>230</b>	<b>460</b>
Frequency (Hz)	50/60	60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	8280	8280
Max. Nominal Current (A at 50/60 Hz)	36	18
Starting Current (A)	104	52
Agency Approvals	cUL Listed CE EAC Others available upon request	
Power Input Description	Terminal block	
<b>ENCLOSURE PROTECTION</b>		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel	
International Rating	UL/cUL Listed	
<b>CONTROLLER</b>		
Description	Mechanical thermostat	
Thermostat Location	Enclosure side on all base models	
Factory Thermostat Setting (°F/°C)	80/27	
<b>SOUND LEVEL</b>		
At 1.5 Meters	66 dB(A)	
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	69.8/1772	
Width (in./mm)	22.8/578	
Depth (in./mm)	20.94/532	
Weight (lb./kg)	260/118	

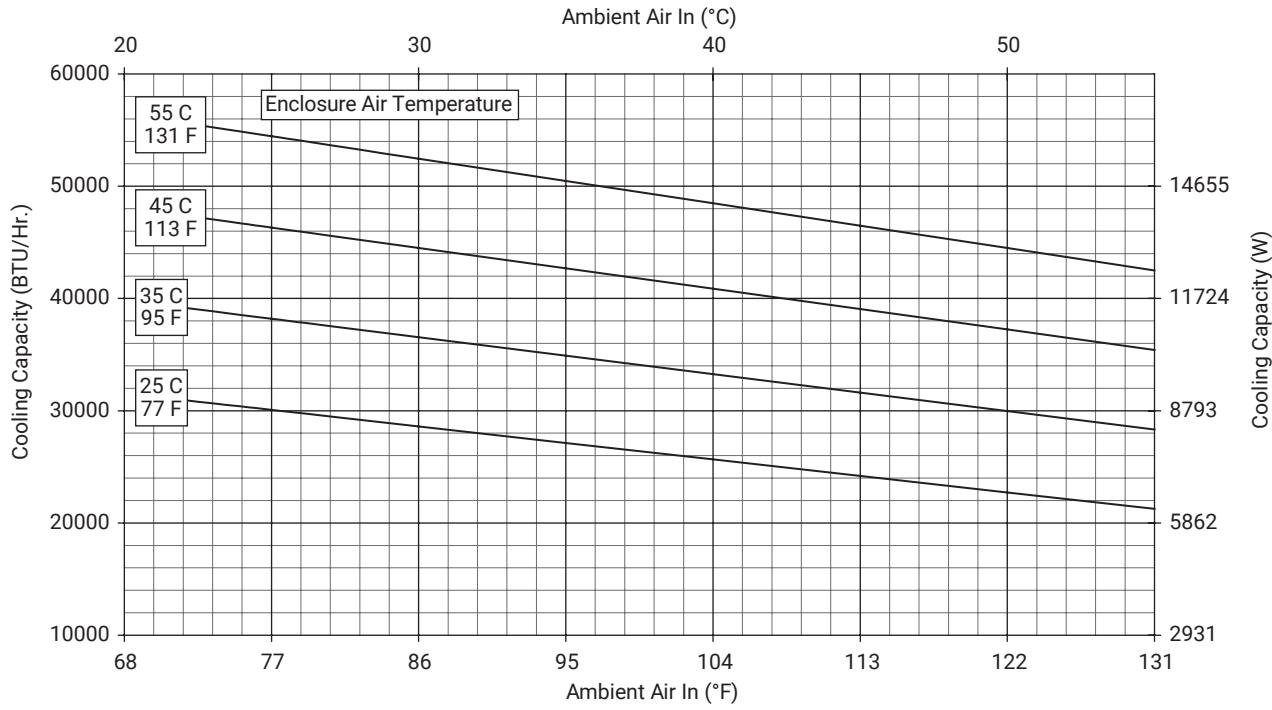
# T-Series Outdoor T15 to T70

Performance Curves for T70 Models 36000 BTU/Hr. (10548 Watt)

T70-36X6-GXXX R-407c Capacity Curves 50 Hz

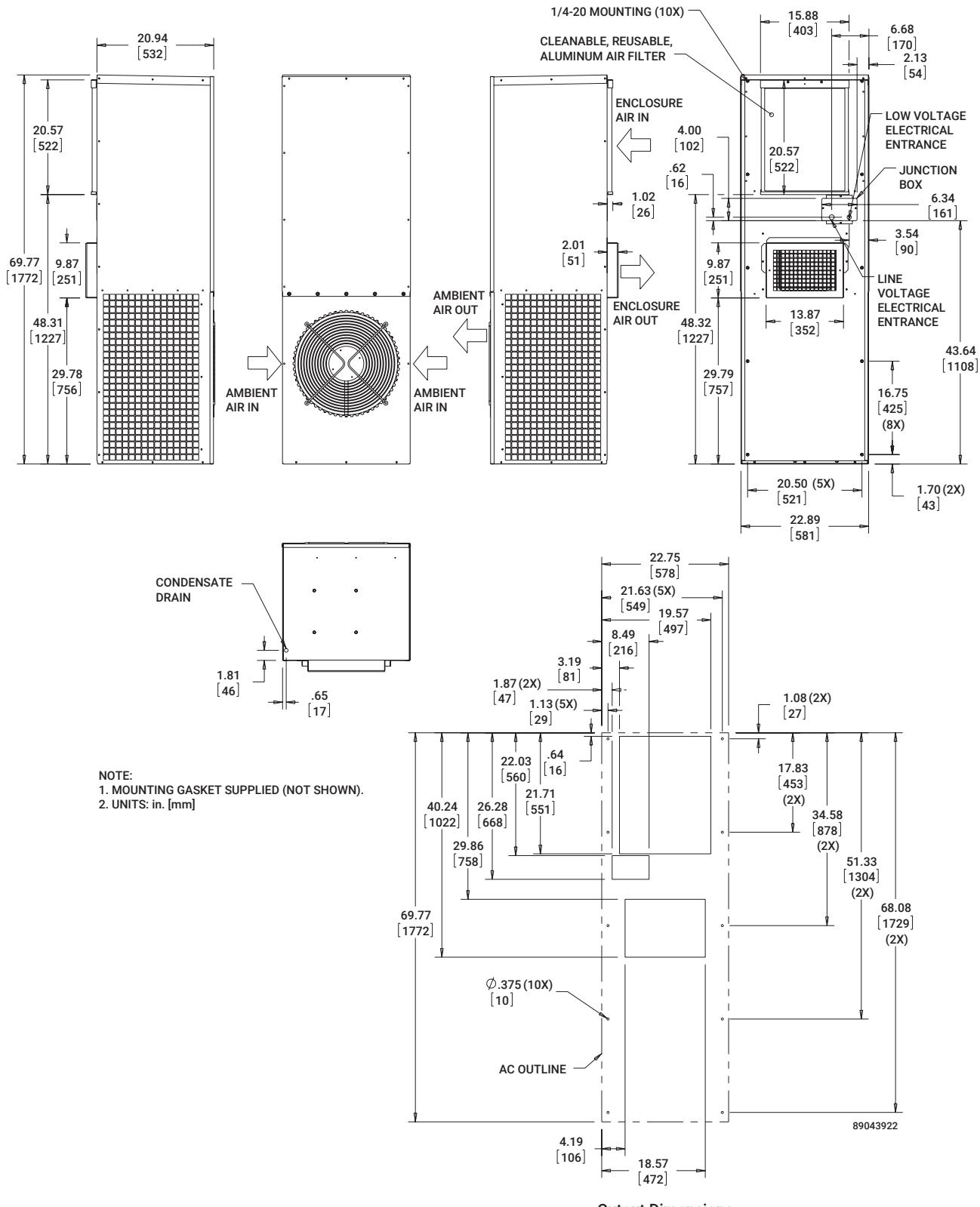


T70-36X6-GXXX R-407c Capacity Curves 60 Hz



# T-Series Outdoor T15 to T70

**T70 Models 36000 BTU/Hr. (10548 Watt)**



**NOTES:**

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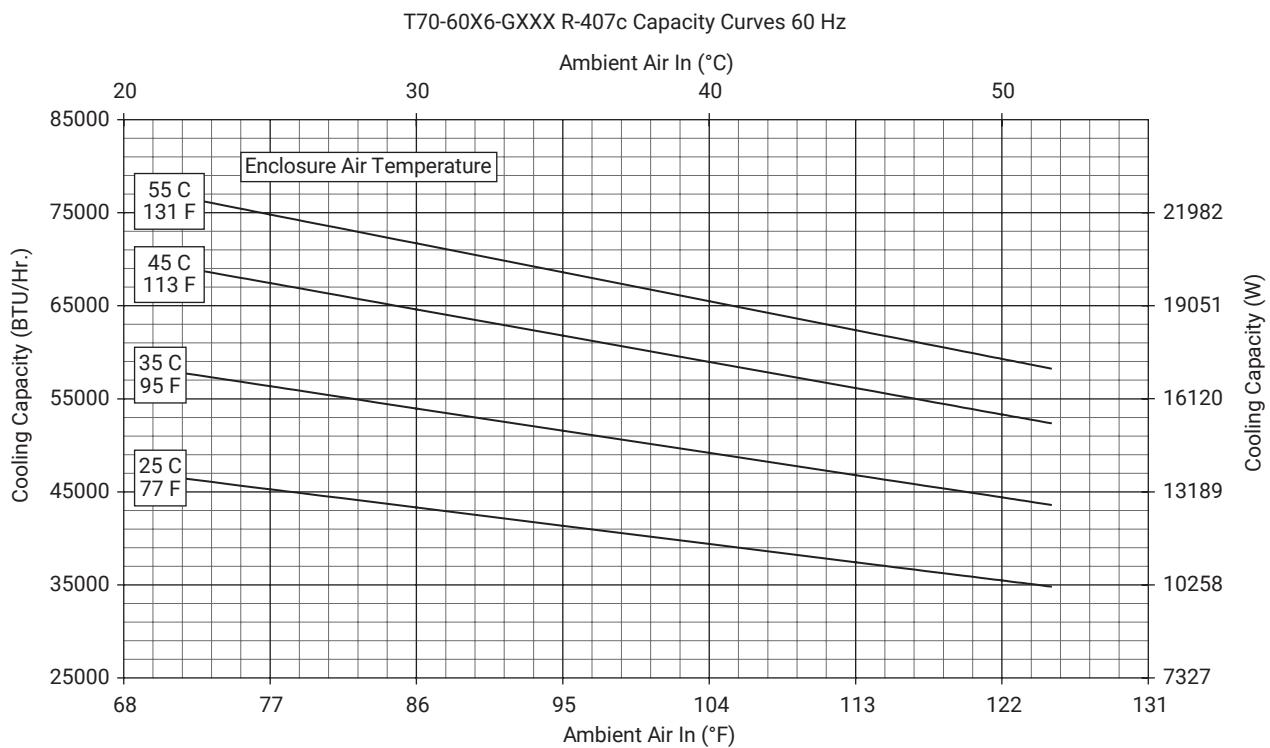
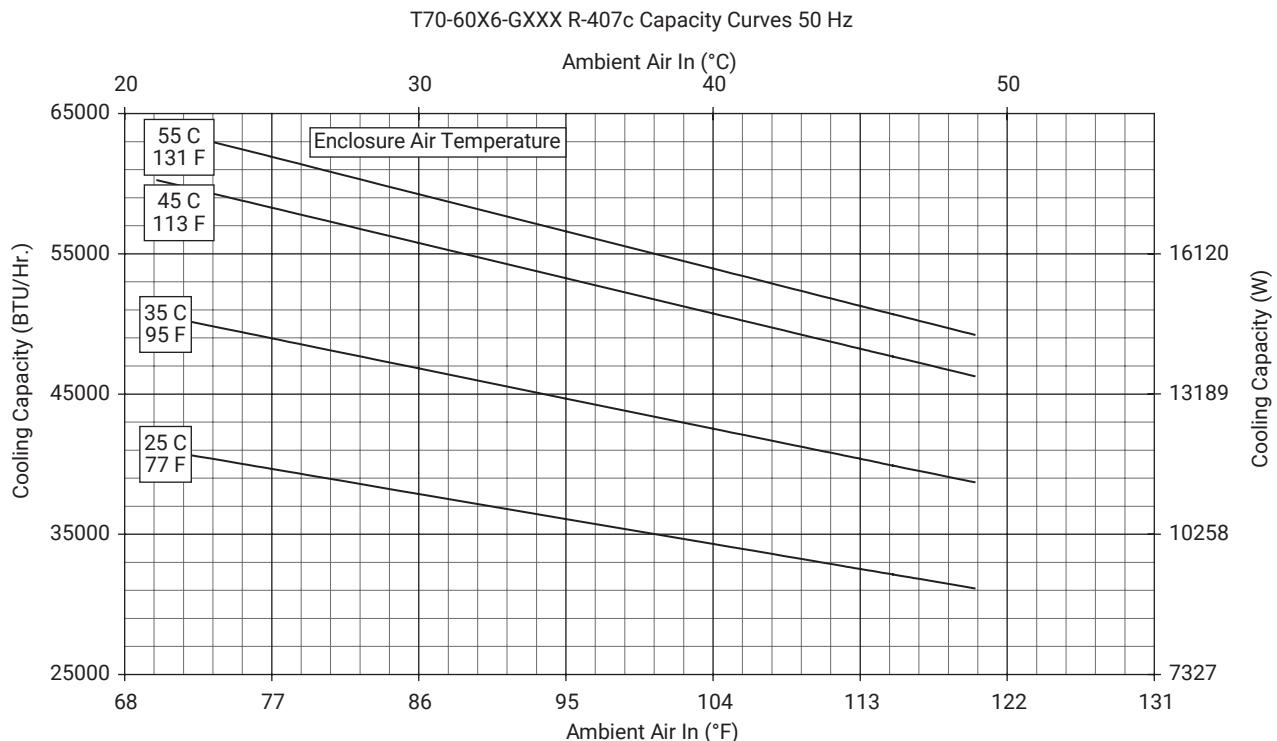
# T-Series Outdoor T15 to T70

## PERFORMANCE DATA T70-60 59000 BTU/HR. (17287 WATT) MODELS

Item number	T706026G150	T706046G400
<b>COOLING PERFORMANCE</b>		
Nominal:		
<b>BTU/Hr.</b>	<b>51900/60000</b>	
<b>Watt</b>	<b>15210/17584</b>	
At 122 °F/122 °F (50 °C/50 °C):		
BTU/Hr. (50/60 Hz)	51900/60000	
W (50/60 Hz)	15210/17584	
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	47122/54500	
W (50/60 Hz)	13810/15972	
Refrigerant	R-407C	
Refrigerant Charge (ounces/grams)	150/4252	
Operating Temperature Range:		
Maximum (°F/°C)	122/50	
Minimum (°F/°C)	-40/-40	
Airflow at 0 Static Pressure:		
Internal loop 50 Hz (CFM/m <sup>3</sup> /hr.)	1510/2565	
External loop 50 Hz (CFM/m <sup>3</sup> /hr.)	2716/4614	
Internal loop 60 Hz (CFM/m <sup>3</sup> /hr.)	1629/2767	
External loop 60 Hz (CFM/m <sup>3</sup> /hr.)	2931/4979	
Max. Heater W (Outdoor Models)		
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>200/230</b>	<b>420/460</b>
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	7000/9200	6426/7038
Max. Nominal Current (A at 50/60 Hz)	35/40	15.3
Starting Current (A)	144	144
Agency Approvals	cUL Listed CE EAC Others available upon request	
Power Input Description	Terminal block	
<b>ENCLOSURE PROTECTION</b>		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel	
International Rating	IP56 on the internal loop; IP34 on the external loop	
Description	Mechanical thermostat	
<b>CONTROLLER</b>		
Thermostat Location	Enclosure side on all base models	
Factory Thermostat Setting (°F/°C)	80/27	
<b>SOUND LEVEL</b>		
At 1.5 Meters	66 dB(A)	
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized sheet metal standard Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	69.77/1772	
Width (in./mm)	35.86/911	
Depth (in./mm)	22.94/583	
Weight (lb./kg)	419/190.5	

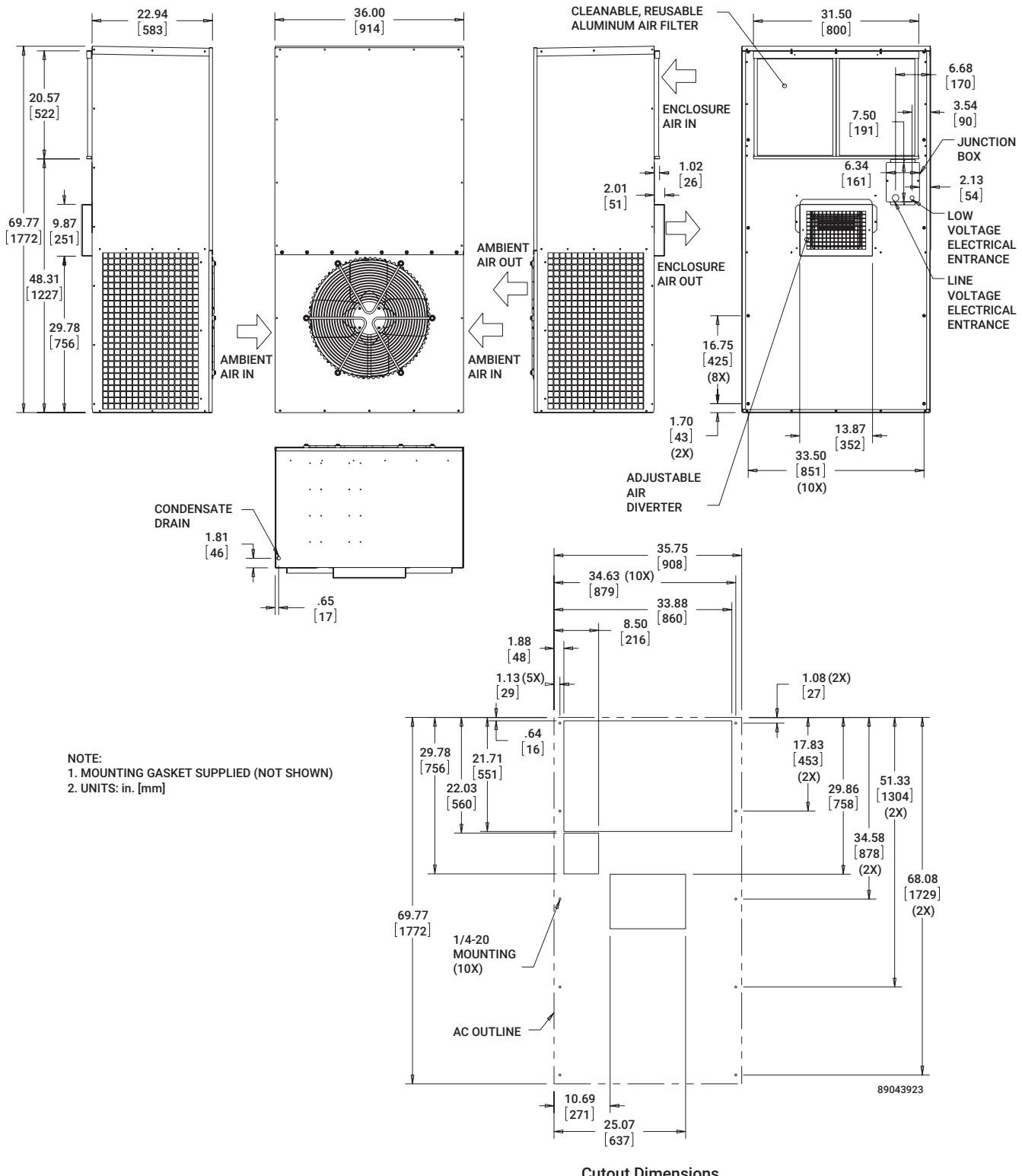
# T-Series Outdoor T15 to T70

Performance Curves for T70 Models 59000 BTU/Hr. (17287 Watt)



# T-Series Outdoor T15 to T70

**T70 Models 59000 BTU/Hr. (17287 Watt)**



**NOTES:**

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# Thermoelectric Coolers TE09/TE12/TE16

## THERMOELECTRIC COOLERS INDOOR/OUTDOOR



### INDUSTRY STANDARDS

UR, cUR Recognized; Type 12, 3R, 4, 4X; File No. SA6453

CE  
IP 65



### APPLICATION

Thermoelectric Coolers minimize downtime and component loss by removing heat around critical components within an enclosure. These compact, low-profile coolers using the Peltier effect allow for cooling of small indoor and outdoor enclosures. No condensers, compressors or filters are required making it a reliable solution for demanding low-maintenance environments.

### SCOPE OF DELIVERY

- Thermoelectric cooling unit
- Mounting gasket and hardware kit
- Installation instruction

### FEATURES

- DC Powered operation for 24V and 48V applications
- Low profile design allows for mounting vertically and horizontally on any enclosure to avoid interference with internal components
- Filterless design reduces maintenance requirements
- Contains no refrigerant, making it earth friendly
- Prewired with simple terminal block for easy wiring connections

For other general accessories, please refer to the chapter "Accessories"

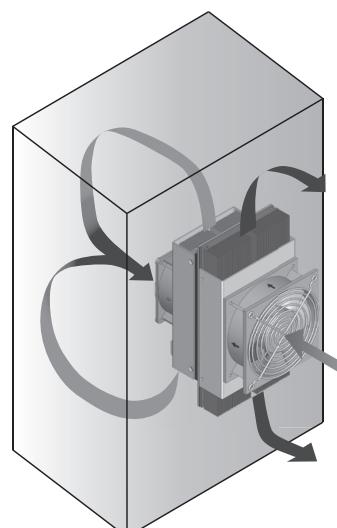
- Operates on the Peltier effect for cooling or heating
- Compressor-free air conditioning for demanding indoor and outdoor applications
- Shrouded and unshrouded models included in standard packages
- Operating temperature range -40°C (-40°F) to 55°C/(131°F)
- Partial recess mount

### SPECIFICATIONS

- Models
  - 60 Watt, 24 Volt
  - 100 Watt, 24/48 Volt
  - 200 Watt, 24/48 Volt

### FINISH

- Shrouded finish includes both powder coat paint RAL 7035 light gray standard and stainless steel 304



**NOTES:**

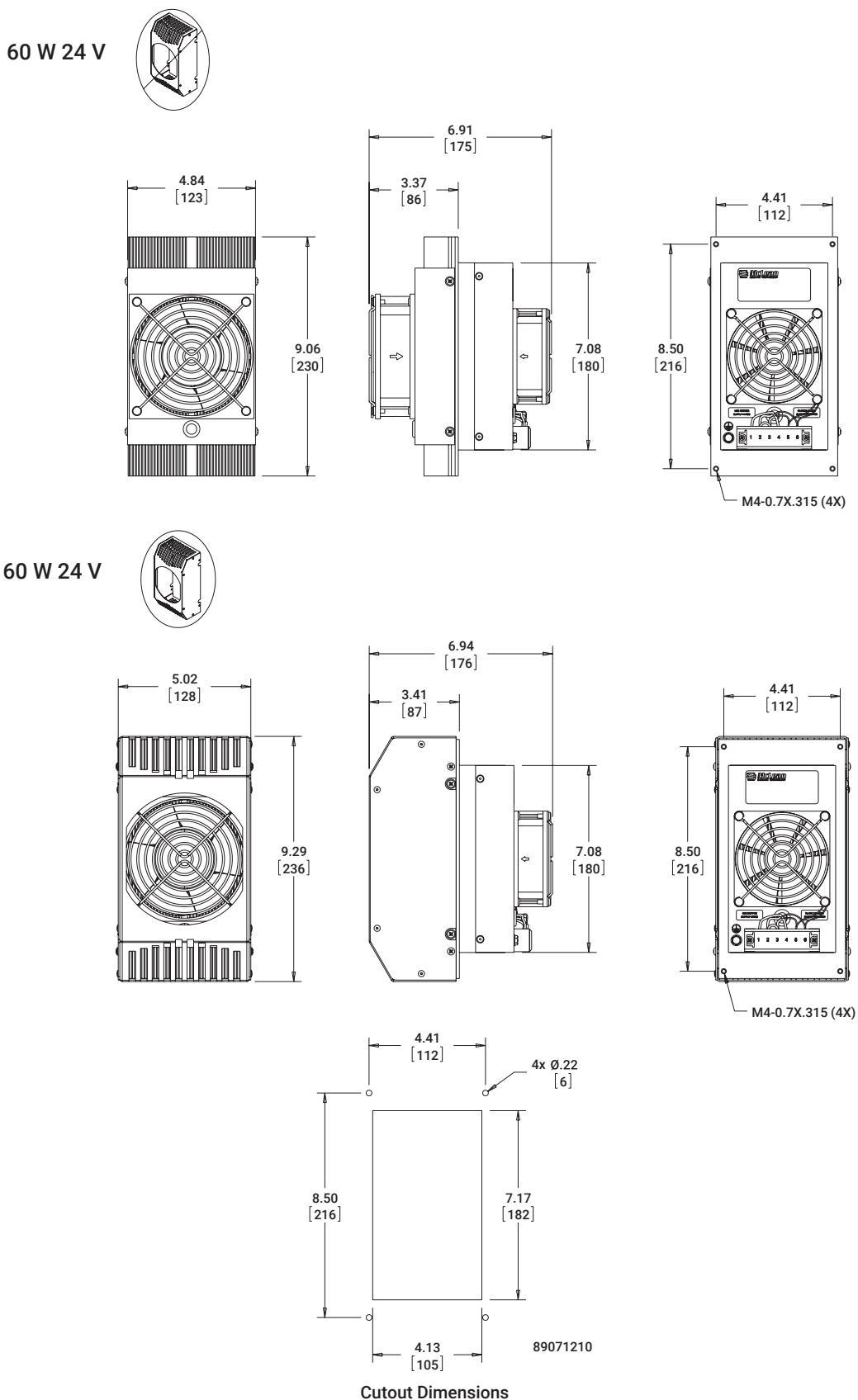
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# Thermoelectric Coolers TE09/TE12/TE16

## PERFORMANCE DATA TE09 60W 204 BTU/HR. (24 V)

Item number			
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud
Catalog Number	<b>TE090624020</b>	<b>TE090624010</b>	<b>TE090624011</b>
COOLING PERFORMANCE			
<b>BTU/Hr.</b>	<b>178</b>	<b>178</b>	<b>178</b>
<b>Watt</b>	<b>52</b>	<b>52</b>	<b>52</b>
Operating Temperature Range:			
Maximum (°C/°F)	55/131	55/131	55/131
Minimum (°C/°F)	-40/-40	-40/-40	-40/-40
Air Flow at 0 Static Pressure:			
Internal loop (CFM/M3/Hr.)	24/41	24/41	24/41
External loop (CFM/M3/Hr.)	80/136	80/136	80/136
Nominal Heating Watt	64	64	64
ELECTRICAL DATA			
Input DC Voltage			
Nominal (VDC)	24	24	24
Minimum (VDC)	18	18	18
Maximum (VDC)	27.6	27.6	27.6
Power Consumption 95 °F/95 °F (35 °C/35 °C)	89	89	89
Max Current (Amps)	4.4	4.4	4.4
Agency Approvals	UR, cUR Recognized CE	UR, cUR Recognized CE	UR, cUR Recognized CE
Power Input Description	Terminal Block	Terminal Block	Terminal Block
ENCLOSURE PROTECTION			
UL Type/IP Rating	Type 12,3R,4,4X/IP 65	Type 12,3R,4/IP 65	Type 12,3R,4,4X/IP 65
SOUND LEVEL			
At 1.5 Meters	65 dBA	65 dBA	65 dBA
UNIT CONSTRUCTION			
Heat Sink Material	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum
Shroud Material	N/A	Galvanized Steel	Stainless Steel Typ 304 standard
Shroud Finish	N/A	RAL 7035 light-gray, semi-textured powder-coat paint standard	No. 4 Brushed Finish
UNIT DIMENSIONS			
Height (in./mm)	9.06/230	9.29/236	9.29/236
Width (in./mm)	4.84/123	5.02/128	5.02/128
Depth (in./mm)	6.91/176	6.94/176	6.94/176
Weight (lb./kg)	6.00/2.70	7.80/3.60	7.80/3.60

# Thermoelectric Coolers TE09/TE12/TE16



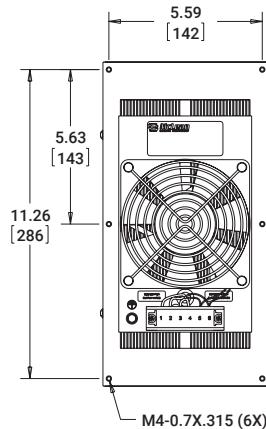
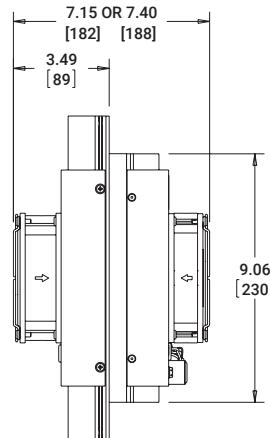
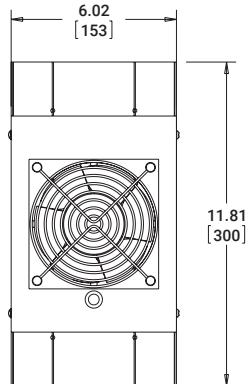
# Thermoelectric Coolers TE09/TE12/TE16

## PERFORMANCE DATA TE12 100W 341 BTU/HR. (24/48 V)

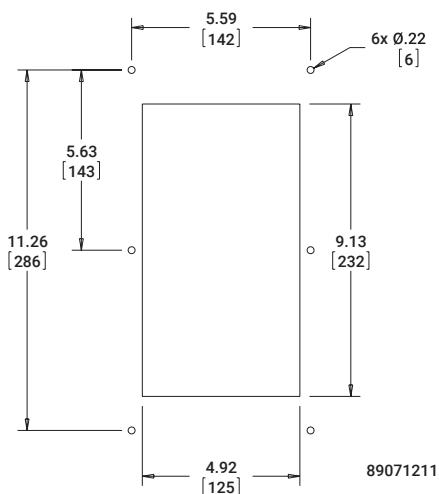
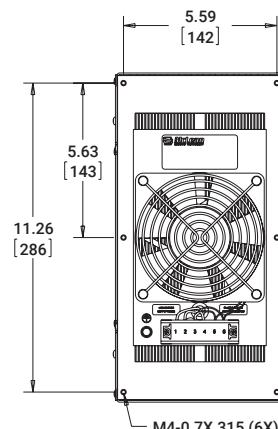
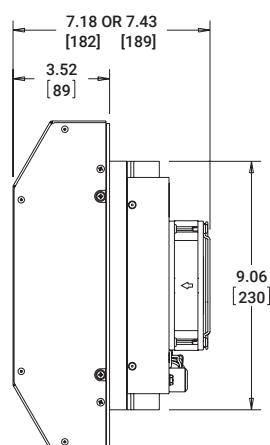
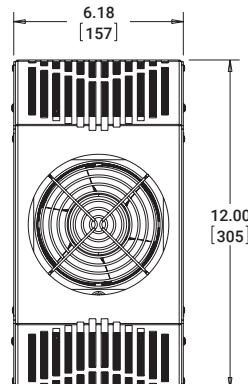
Item number					
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud	48V w/o shroud	48V w/painted shroud
Catalog Number	<b>TE121024020</b>	<b>TE121024010</b>	<b>TE121024011</b>	<b>TE121048020</b>	<b>TE121048010</b>
COOLING PERFORMANCE					
<b>BTU/Hr.</b>	<b>321</b>	<b>321</b>	<b>321</b>	<b>321</b>	<b>321</b>
<b>Watt</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>94</b>
Operating Temperature Range:					
Maximum (°C/°F)	55/131	55/131	55/131	55/131	55/131
Minimum (°C/°F)	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40
Air Flow at 0 Static Pressure:					
Internal loop (CFM/M3/Hr.)	62/105	62/105	62/105	62/105	62/105
External loop (CFM/M3/Hr.)	86/146	86/146	86/146	86/146	86/146
Nominal Heating Watts	94	94	94	94	94
ELECTRICAL DATA					
Input DC Voltage					
Nominal (VDC)	24	24	24	48	48
Minimum (VDC)	18	18	18	40	40
Maximum (VDC)	27.6	27.6	27.6	56.7	56.7
Power Consumption 95 °F/95 °F (35 °C/35 °C)	162	162	162	162	162
Max Current (Amps)	8.5	8.5	8.5	4.4	4.4
Agency Approvals	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC
Power Input Description	Terminal Block	Terminal Block	Terminal Block	Terminal Block	Terminal Block
ENCLOSURE PROTECTION					
UL Type/IP Rating	Type 12,3R,4,4X/ IP 65	Type 12,3R,4/IP 65	Type 12,3R,4,4X/ IP 65	Type 12,3R,4,4X/ IP 65	Type 12,3R,4/IP 65
SOUND LEVEL					
At 1.5 Meters	68 dBA	68 dBA	68 dBA	68 dBA	68 dBA
UNIT CONSTRUCTION					
Heat Sink Material	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum
Shroud Material	N/A	Galvanized Steel	Stainless Steel Typ 304 standard	N/A	Galvanized Steel
Shroud Finish	N/A	RAL 7035 light-gray, semi-textured powder-coat paint standard	No. 4 Brushed Finish	N/A	RAL 7035 light-gray, semi-textured powder-coat paint standard
UNIT DIMENSIONS					
Height (in./mm)	11.81/300	12.00/305	12.00/305	11.81/300	12.00/305
Width (in./mm)	6.02/153	6.18/157	6.18/157	6.02/153	6.18/157
Depth (in./mm)	7.40/188	7.43/189	7.43/189	7.40/188	7.43/189
Weight (lb./kg)	8.50/3.90	11.00/5.00	11.00/5.00	8.50/3.90	11.00/5.00

# Thermoelectric Coolers TE09/TE12/TE16

**100 W 24/48 V**



**100 W 24/48 V**



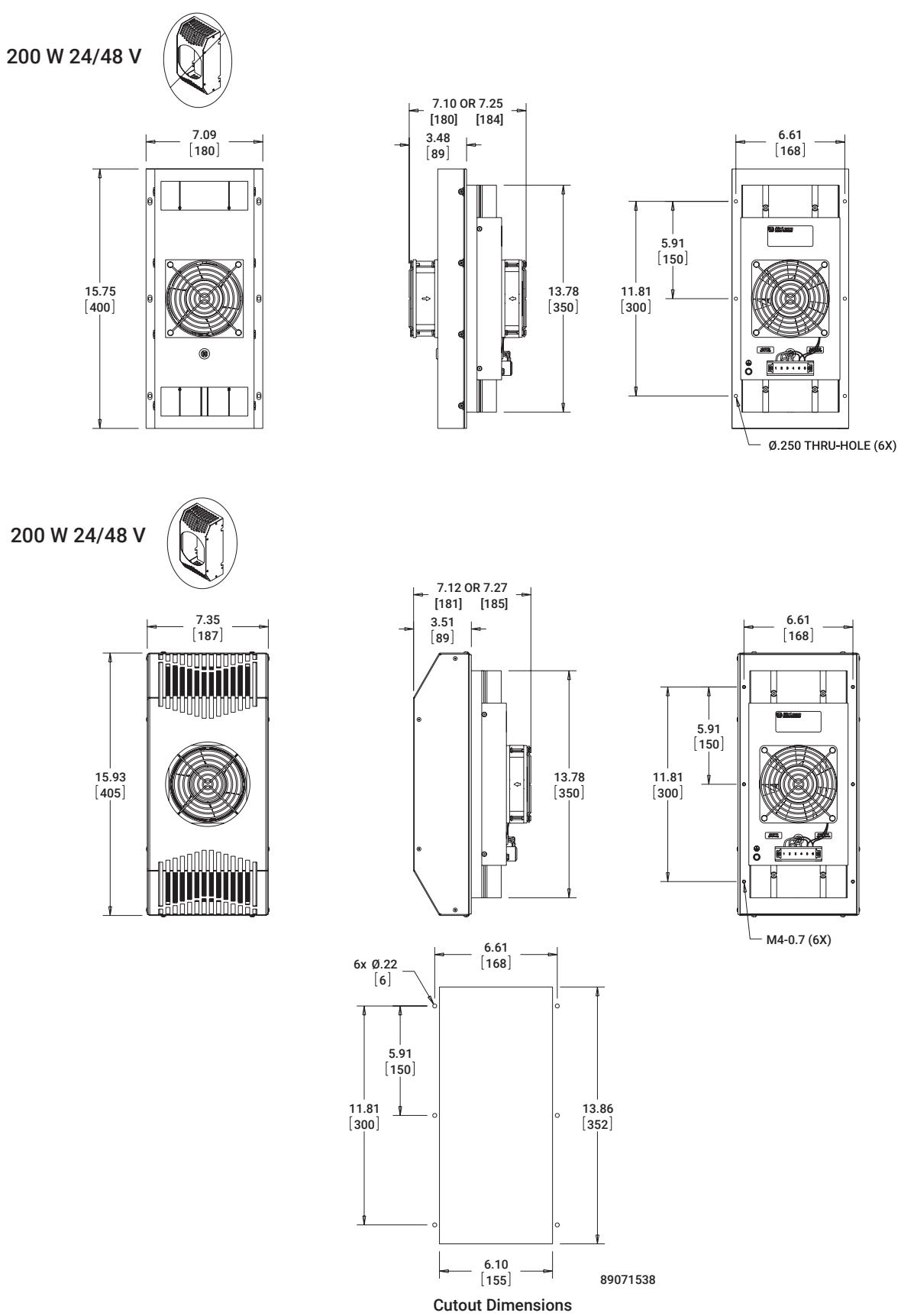
Cutout Dimensions

# Thermoelectric Coolers TE09/TE12/TE16

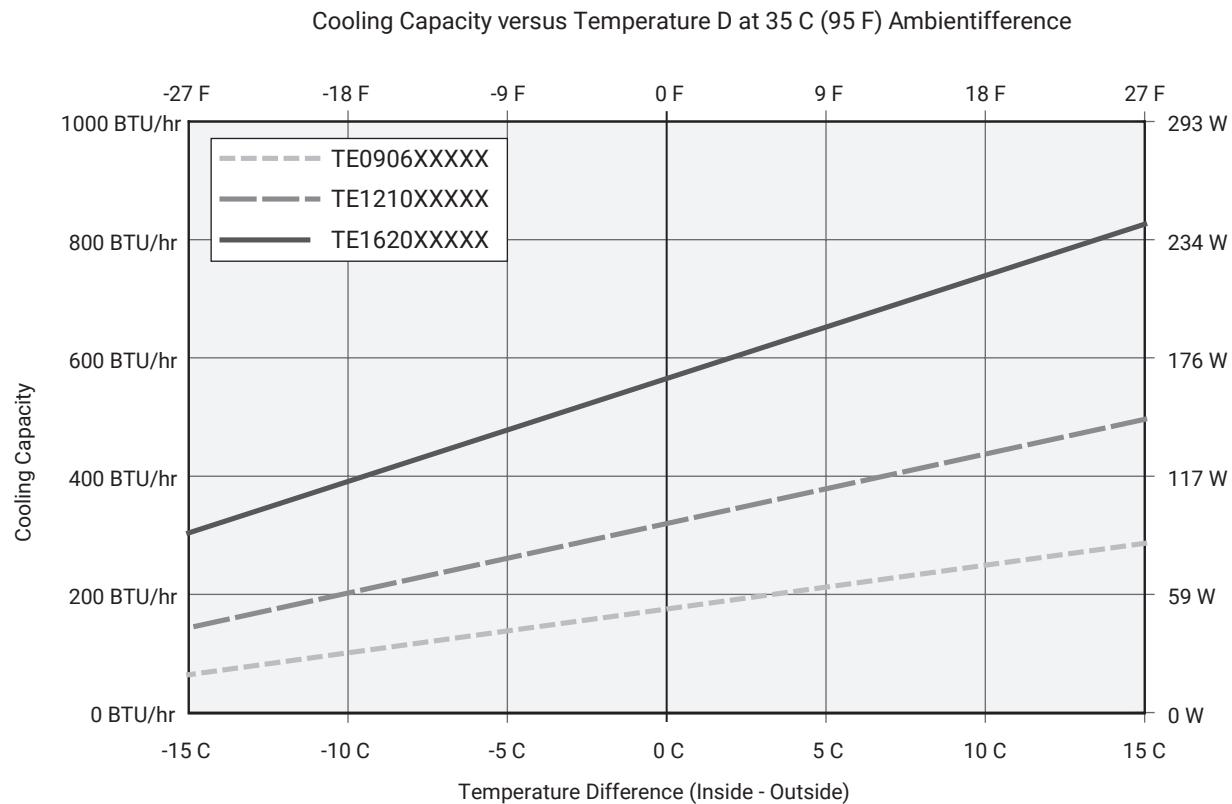
## PERFORMANCE DATA TE16 200W 682 BTU/HR. (24/48 V)

Item number					
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud	48V w/o shroud	48V w/painted shroud
Catalog Number	<b>TE162024020</b>	<b>TE162024010</b>	<b>TE162024011</b>	<b>TE162048020</b>	<b>TE162048010</b>
COOLING PERFORMANCE					
<b>BTU/Hr.</b>	<b>567</b>	<b>567</b>	<b>567</b>	<b>567</b>	<b>567</b>
<b>Watt</b>	<b>166</b>	<b>166</b>	<b>166</b>	<b>166</b>	<b>166</b>
Operating Temperature Range:					
Maximum (°C/°F)	55/131	55/131	55/131	55/131	55/131
Minimum (°C/°F)	-40/-40	-40/-40	-40/-40	-40/-40	-40/-40
Air Flow at 0 Static Pressure:					
Internal loop (CFM/M3/Hr.)	62/105	62/105	62/105	62/105	62/105
External loop (CFM/M3/Hr.)	86/146	86/146	86/146	86/146	86/146
Nominal Heating Watt	146	146	146	146	146
ELECTRICAL DATA					
Input DC Voltage					
Nominal (VDC)	24	24	24	48	48
Minimum (VDC)	18	18	18	40	40
Maximum (VDC)	27.6	27.6	27.6	56.7	56.7
Power Consumption 95 °F/95 °F (35 °C/35 °C)	295	295	295	295	295
Max Current (Amps)	14.7	14.7	14.7	7.6	7.6
Agency Approvals	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC	UR, cUR Recognized CE EAC
Power Input Description	Terminal Block	Terminal Block	Terminal Block	Terminal Block	Terminal Block
ENCLOSURE PROTECTION					
UL Type/IP Rating	Type 12,3R,4,4X/ IP 65	Type 12,3R,4/IP 65	Type 12,3R,4,4X/ IP 65	Type 12,3R,4,4X/ IP 65	Type 12,3R,4/IP 65
SOUND LEVEL					
At 1.5 Meters	68 dBA	68 dBA	68 dBA	68 dBA	68 dBA
UNIT CONSTRUCTION					
Heat Sink Material	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum
Shroud Material	N/A	Galvanized Steel	Stainless Steel Typ 304 standard	N/A	Galvanized Steel
Shroud Finish	N/A	RAL 7035 light-gray, semi-textured powder-coat paint standard	No. 4 Brushed Finish	N/A	RAL 7035 light-gray, semi-textured powder-coat paint standard
UNIT DIMENSIONS					
Height (in./mm)	15.75/400	15.93/405	15.93/405	15.75/400	15.93/405
Width (in./mm)	7.09/180	7.35/187	7.35/187	7.09/180	7.35/187
Depth (in./mm)	7.25/184	7.27/185	7.27/185	7.25/184	7.27/185
Weight (lb./kg)	14.80/6.70	18.60/8.40	18.60/8.40	14.80/6.70	18.60/8.40

# Thermoelectric Coolers TE09/TE12/TE16



# Thermoelectric Coolers TE09/TE12/TE16



**NOTES:**

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# Thermoelectric Coolers TE09/TE12/TE16

## THERMOELECTRIC TEMPERATURE CONTROLLER



### INDUSTRY STANDARDS

UL Recognized; File No. 60730



### FEATURES

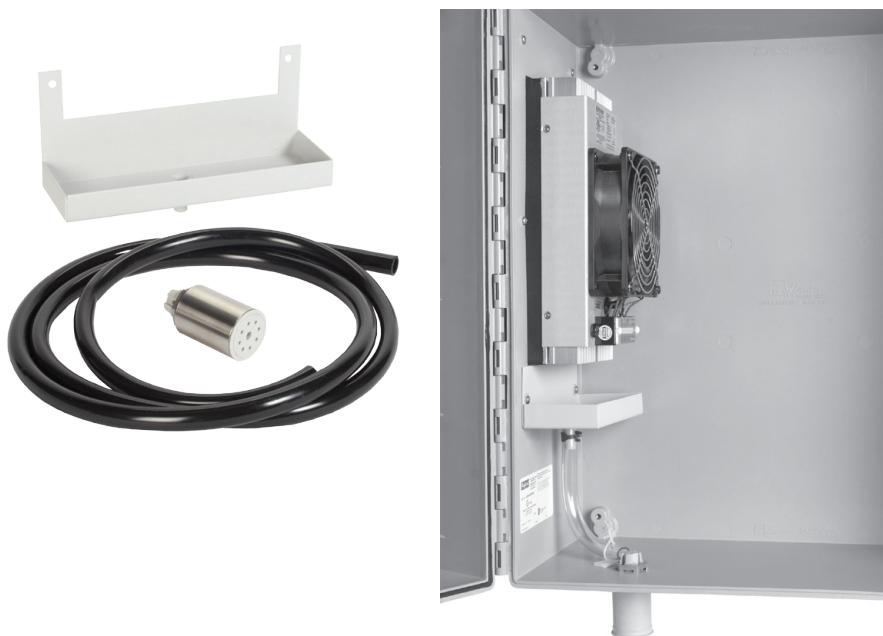
- Provides PWM regulation of cooling and heating output for TEC units
- Automatically switches between cooling and heating

### PERFORMANCE DATA

Item numbers	TEC24VCNTRN	TEC48VCNTRN
<b>ELECTRICAL DATA</b>		
Rated Voltage (VDC)	24	48
Operating Range (VDC)	18 to 30	40 to 60
Current @ Rated Voltage (Amps)	17.2	8.6
Operating Temperature Range		
Maximum (°F/°C)	131/55	
Minimum (°F/°C)	-40/-40	
Temperature Accuracy (°F/°C)	± 3.6/2.0	
Alarm Contact Rating	1) 0.5 A max @ 24 VDC - from same source of power as unit, SELV, non-power limited (greater than 15 W); OR 2) 0.5 A max @ 24 VAC - from, SELV, Class 2 safety isolating transformer.	1) 0.5 A max @ 48 VDC - from same source of power as unit, SELV, non-power limited (greater than 15 W); OR 2) 0.5 A max @ 24 VAC - from, SELV, Class 2 safety isolating transformer.
<b>UNIT DIMENSIONS</b>		
<b>PCB Dimensions</b>		
Height (in/mm)	1.20/30	
Width (in/mm)	2.88/73	
Length (in/mm)	6.50/165	
Weight (lb./kg)	0.21/0.10	
<b>MOUNTING BRACKET DIMENSIONS</b>		
Height (in/mm)	0.50/13	
Width (in/mm)	3.19/91	
Length (in/mm)	6.50/165	
Weight (lb./kg)	0.29/0.13	
<b>ACCESSORIES</b>		
Input Supply Harness	60-in. (1525mm) long Supply Harness Catalog Number TECSUPPLYHARNESS	
Board to TEC Harness	36-in. (915mm) long Control Harness Catalog Number TECCONTROLHARNESS	

# Thermoelectric Coolers TE09/TE12/TE16

## THERMOELECTRIC CONDENSATE MANAGER



### INDUSTRY STANDARDS

Maintains UL/cUL Type 3R, 12, 4 and 4X rating when properly installed

- Drains condensation to bottom of enclosure via vent drain (vent drain included with package)

- Utilizes existing mounting holes and fasteners of thermoelectric cooler that requires no additional mounting



### FEATURES

- Includes all required hardware and vent drain
- Maintains the integrity of Type 4 or Type 4X enclosure

### FINISH

- Pan Material Galvanized steel polyester powder coat paint with RAL 7035
- Vent drain material options include stainless steel or non-metallic

### PERFORMANCE DATA

Item numbers						
	TEC60WCMSS4	—	TEC100WCMSS4	—	TEC200WCMSS4	—
Fits TEC Unit Model	All TE09	All TE09	All TE12	All TE12	All TE16	All TE16
UNIT CONSTRUCTION						
Pan Material	Galvanized Steel					
Pan Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard					
Vent Drain Material	Stainless Steel	Non-Metallic	Stainless Steel	Non-Metallic	Stainless Steel	Non-Metallic
UNIT DIMENSIONS						
Height (in./mm)	.75/19	.75/19	.75/19	.75/19	.75/19	.75/19
Width (in./mm)	5.50/140	5.50/140	6.25/159	6.25/159	7.44/189	7.44/189
Depth (in./mm)	2.50/64	2.50/64	2.50/64	2.50/64	2.50/64	2.50/64

# Air to Water Heat Exchanger Indoor WCHE-Series

## CLIMAGUARD AIR-TO-WATER INDOOR HEAT EXCHANGERS



### INDUSTRY STANDARDS

cUL Listed; Type 12; File No. SA33866

CE  
IP54/IP55



### APPLICATION

- Industrial process controls
- Industrial robotics controls
- Electronic cabinets in harsh environments
- Conveyor systems

### SCOPE OF DELIVERY

- Air conditioner unit
- Mounting gasket and hardware kit
- Cutout template
- Installation instruction

### FEATURES

- Filterless design
- NEMA power cord connection standard
- Copper pipe and aluminum fins heat exchanger core
- Air movers with thermal protection
- Regulating mechanical thermostat set at 35 °C (95 °F), differential of 4 °C (7 °F)
- Operating temperature (inside cabinet) from 10-50 °C (50-122 °F)
- Ambient temperature range from 5-70 °C (41-158 °F)

### SPECIFICATIONS

- Capacities ranging from 870 Watt to 12500 Watt
- Stainless Steel Model in Typ 304 standard
- Solenoid water valve
- Recovery of condensation system and condensation discharge pipe
- Requires an available cooled water source

### FINISH

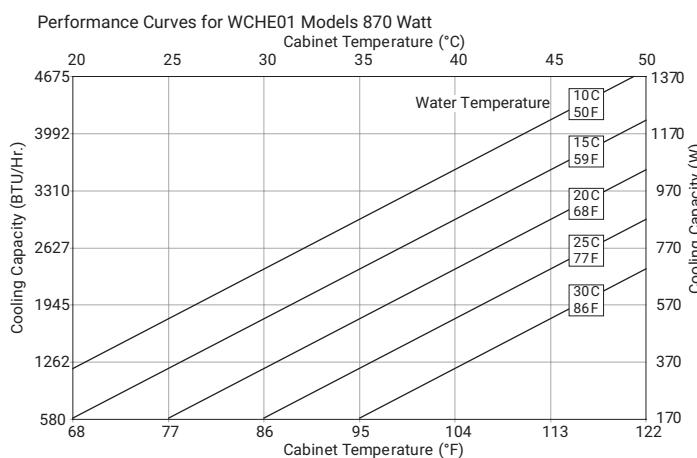
- Standard models constructed of rugged steel
- RAL 7035 light-gray, powder-coat polyester paint

For other general accessories, please refer to the chapter "Accessories"

# Air to Water Heat Exchanger Indoor WCHE-Series

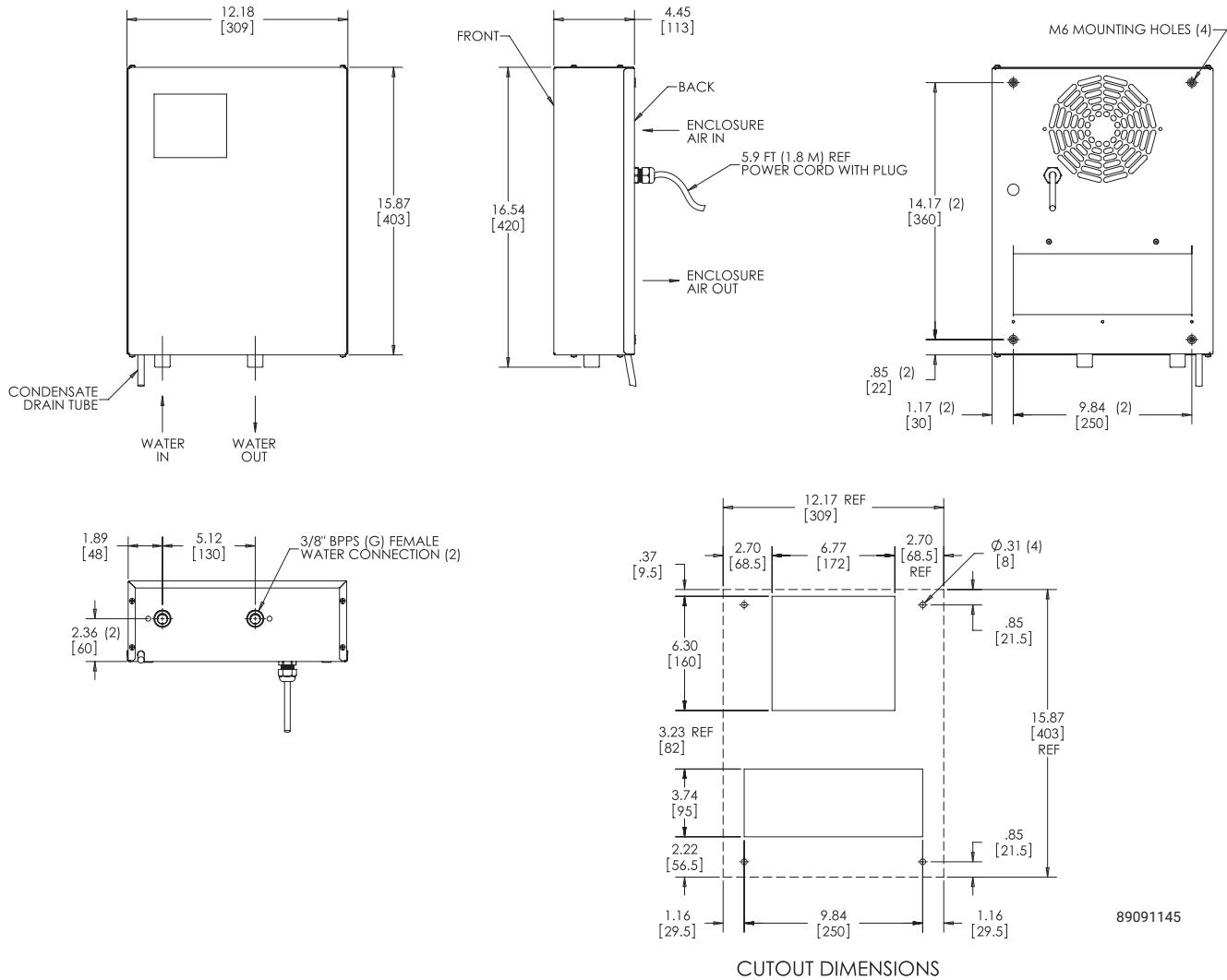
## PERFORMANCE DATA WCHE01 MODELS 870 WATT

Item number		WCHE01926002	WCHE01926005
Indoor Model	—	WCHE01926002	WCHE01926005
Indoor Model Stainless Steel			WCHE01926006
<b>COOLING PERFORMANCE</b>			
Nominal:			
BTU/Hr. @ Δt 25 °C	<b>2968</b>	<b>2968</b>	<b>2968</b>
Watt @ Δt 25 °C	<b>870</b>	<b>870</b>	<b>870</b>
Operating Temperature Range (inside cabinet):			
Maximum (°F/°C)	122/50	122/50	122/50
Minimum (°F/°C)	50/10	50/10	50/10
Ambient Temperature Range:			
Maximum (°F/°C)	158/70	158/70	158/70
Minimum (°F/°C)	41/5	41/5	41/5
Flow at 0 Static Pressure:			
Internal loop 50 Hz (Airflow: CFM/m3/hr.)	194/330	194/330	194/330
Internal loop 60 Hz (Airflow: CFM/m3/hr.)	194/330	194/330	194/330
Waterflow (l/hr.)	150	150	150
Max. water pressure (kPa)	500	500	500
<b>ELECTRICAL DATA</b>			
Rated Voltage	<b>115</b>	<b>230</b>	<b>230</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	28	28	28
Max. Nominal Current (A at 50/60 Hz)	0.5	0.5	0.5
Starting Current (Amps)	0.7	0.7	0.7
Agency Approvals	cUL Listed	cUL Listed	CE
Power Input Description	Cord with NEMA 5-15 plug	Cord with NEMA 6-15 plug	3 meter cable with open ends
<b>ENCLOSURE PROTECTION</b>			
IP Rating	IP55	IP55	IP55
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat		
Thermostat Location	Behind front cover, near the fan		
Factory Thermostat Setting (°F/°C)	95/35	95/35	95/35
<b>SOUND LEVEL</b>			
At 1.0 Meters	58 dBA	58 dBA	58 dBA
<b>UNIT CONSTRUCTION</b>			
Material	Mild Steel Sheet Metal		Mild Steel Sheet Metal/Stainless Steel Typ 304 standard
Finish	RAL 7035 light-gray, semi-textured powder-coat paint		RAL 7035 light-gray, semi-textured powder-coat paint
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	15.9/404	15.9/404	15.9/404
Width (in./mm)	12.12/308	12.12/308	12.12/308
Depth (in./mm)	4.49/114	4.49/114	4.49/114
Weight (lb./kg)	19.84/9	19.84/9	19.84/9



# Air to Water Heat Exchanger Indoor WCHE-Series

WCHE01 Models 870 Watt



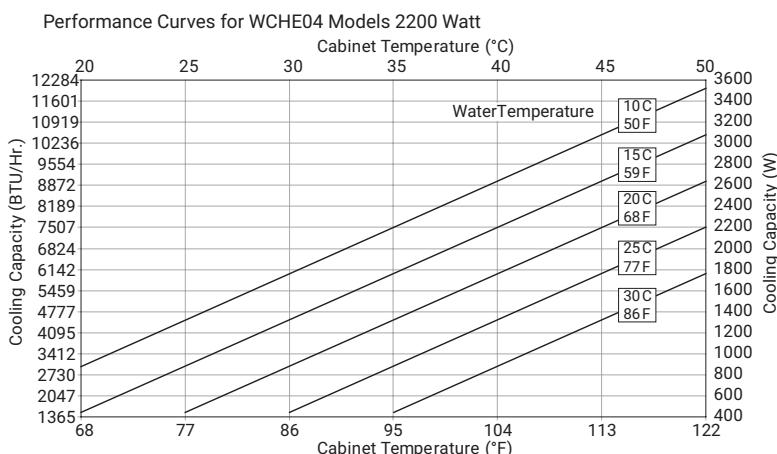
**NOTES:**

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# Air to Water Heat Exchanger Indoor WCHE-Series

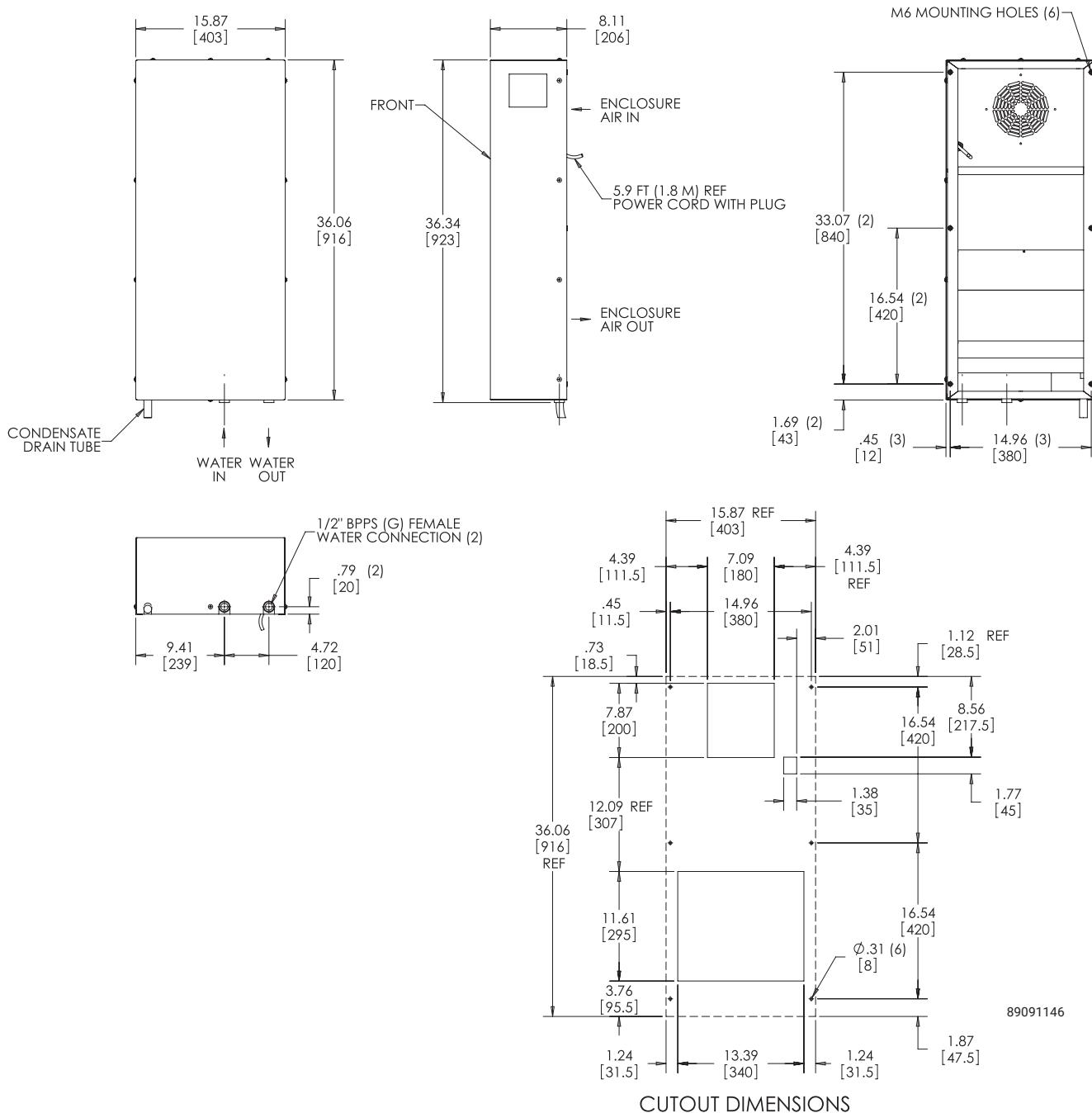
## PERFORMANCE DATA WCHE04 MODELS 2200 WATT

Item number	—	WCHE04926002	WCHE04926005
Indoor Model	—	WCHE04926002	WCHE04926005
Indoor Model Stainless Steel	—	WCHE04926006	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr. @ Δt 25 °C	<b>7506</b>	<b>7506</b>	<b>7506</b>
Watt @ Δt 25 °C	<b>2200</b>	<b>2200</b>	<b>2200</b>
Operating Temperature Range (inside cabinet):			
Maximum (°F/°C)	122/50	122/50	122/50
Minimum (°F/°C)	50/10	50/10	50/10
Ambient Temperature Range:			
Maximum (°F/°C)	158/70	158/70	158/70
Minimum (°F/°C)	41/5	41/5	41/5
Flow at 0 Static Pressure:			
Internal loop 50 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	339/575	339/575	339/575
Internal loop 60 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	339/575	339/575	339/575
Waterflow (l/hr.)	150	150	150
Max. water pressure (kPa)	1000	1000	1000
ELECTRICAL DATA			
Rated Voltage	<b>115</b>	<b>230</b>	<b>230</b>
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	90	90	90
Max. Nominal Current (A at 50/60 Hz)	0.8	0.8	0.8
Starting Current (Amps)	1	1	1
Agency Approvals	cUL Listed	cUL Listed	CE
Power Input Description	Cord with NEMA 5-15 plug	Cord with NEMA 6-15 plug	3 meter cable with open ends
ENCLOSURE PROTECTION	IP55	IP55	IP55
CONTROLLER			
Description	Basic Mechanical Thermostat		
Thermostat Location	Behind front cover, near the fan		
Factory Thermostat Setting (°F/°C)	95/35	95/35	95/35
SOUND LEVEL			
At 1.0 Meters	58 dBA	58 dBA	58 dBA
UNIT CONSTRUCTION			
Material	Mild Steel Sheet Metal	Mild Steel Sheet Metal/Stainless Steel Typ 304 standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint	RAL 7035 light-gray, semi-textured powder-coat paint	
UNIT DIMENSIONS			
Height (in./mm)	36.41/925	36.41/925	36.41/925
Width (in./mm)	15.75/400	15.75/400	15.75/400
Depth (in./mm)	8.07/205	8.07/205	8.07/205
Weight (lb./kg)	44.1/20	44.1/20	44.1/20



# Air to Water Heat Exchanger Indoor WCHE-Series

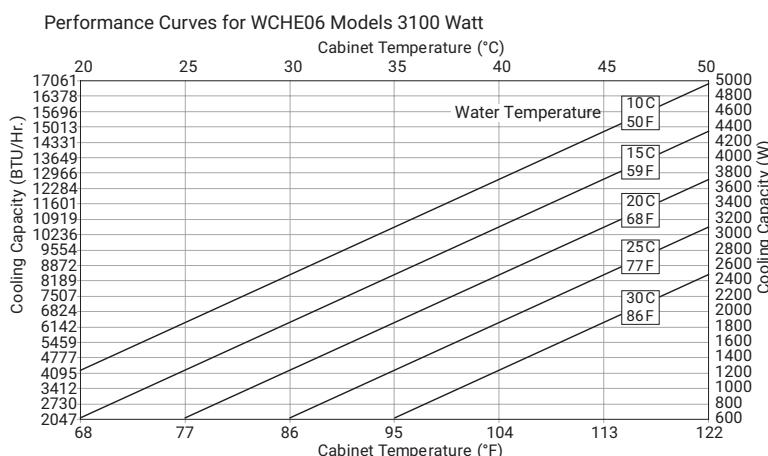
## WCHE04 Models 2200 Watt



# Air to Water Heat Exchanger Indoor WCHE-Series

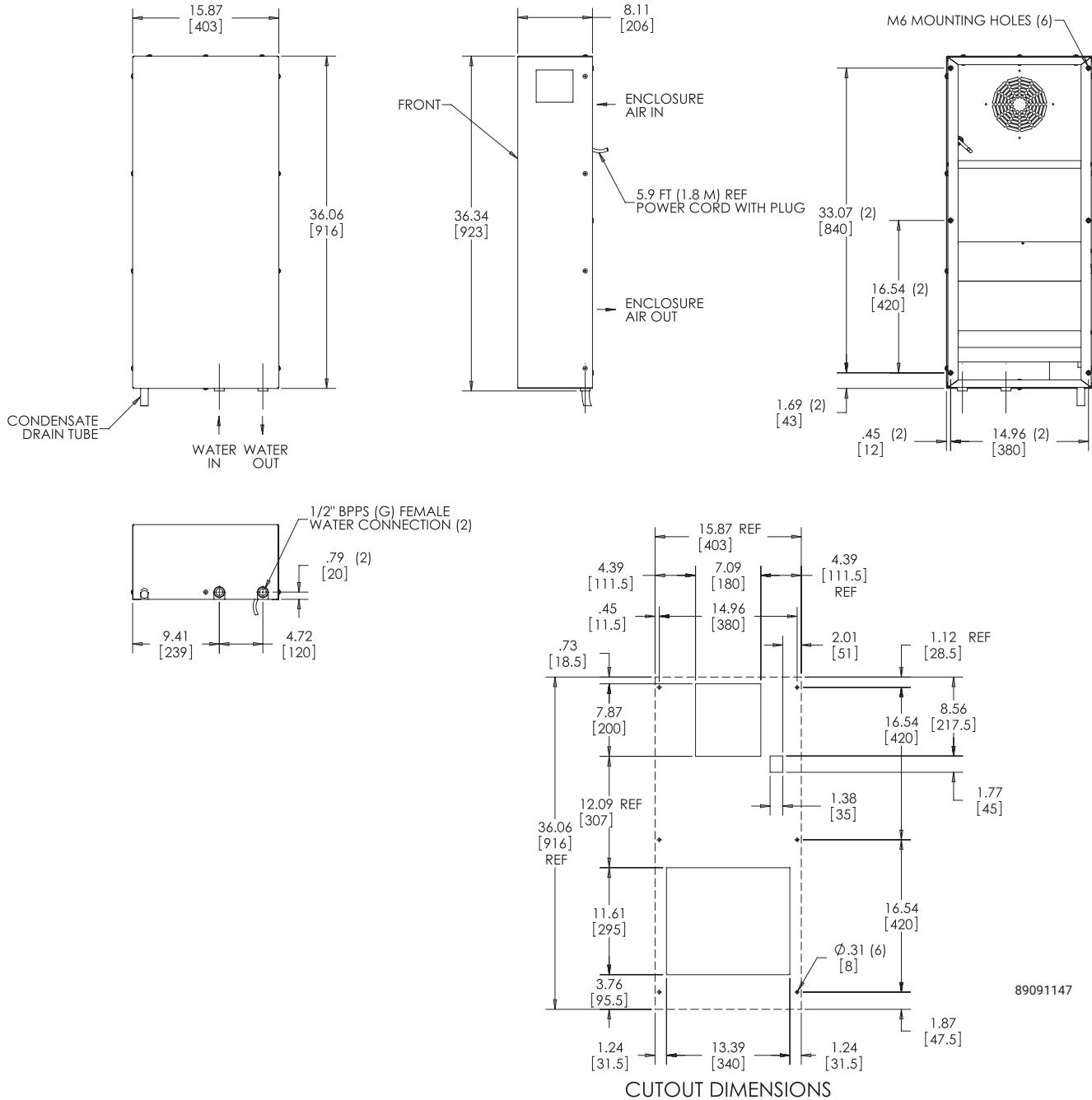
## PERFORMANCE DATA WCHE06 MODELS 3100 WATT

Item number		WCHE06926002	WCHE06926005
Indoor Model	—	WCHE06926002	WCHE06926005
Indoor Model Stainless Steel			WCHE06926006
<b>COOLING PERFORMANCE</b>			
Nominal:			
BTU/Hr. @ Δt 25 °C	10577	10577	10577
Watt @ Δt 25 °C	3100	3100	3100
Operating Temperature Range (inside cabinet):			
Maximum (°F/°C)	122/50	122/50	122/50
Minimum (°F/°C)	50/10	50/10	50/10
Ambient Temperature Range:			
Maximum (°F/°C)	158/70	158/70	158/70
Minimum (°F/°C)	41/5	41/5	41/5
Flow at 0 Static Pressure:			
Internal loop 50 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	507/860	507/860	507/860
Internal loop 60 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	507/860	507/860	507/860
Waterflow (l/hr.)	500	500	500
Max. water pressure (kPa)	1000	1000	1000
<b>ELECTRICAL DATA</b>			
Rated Voltage	115	230	230
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	110	115	115
Max. Nominal Current (A at 50/60 Hz)	2	1	1
Starting Current (Amps)	2.4	1.2	1.2
Agency Approvals	cUL Listed	cUL Listed	CE
Power Input Description	Cord with NEMA 5-15 plug	Cord with NEMA 6-15 plug	3 meter cable with open ends
<b>ENCLOSURE PROTECTION</b>			
	IP55	IP55	IP55
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat		
Thermostat Location	Behind front cover, near the fan		
Factory Thermostat Setting (°F/°C)	95/35	95/35	95/35
<b>SOUND LEVEL</b>			
At 1.0 Meters	58 dBA	58 dBA	58 dBA
<b>UNIT CONSTRUCTION</b>			
Material	Mild Steel Sheet Metal		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint		
	RAL 7035 light-gray, semi-textured powder-coat paint		
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	36.41/925	36.41/925	36.41/925
Width (in./mm)	15.75/400	15.75/400	15.75/400
Depth (in./mm)	8.07/205	8.07/205	8.07/205
Weight (lb./kg)	46.3/21	46.3/21	46.3/21



# Air to Water Heat Exchanger Indoor WCHE-Series

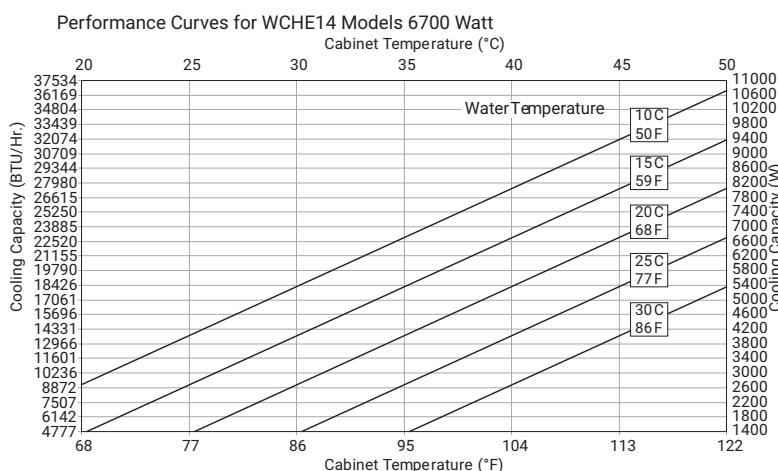
WCHE06 Models 3100 Watt



# Air to Water Heat Exchanger Indoor WCHE-Series

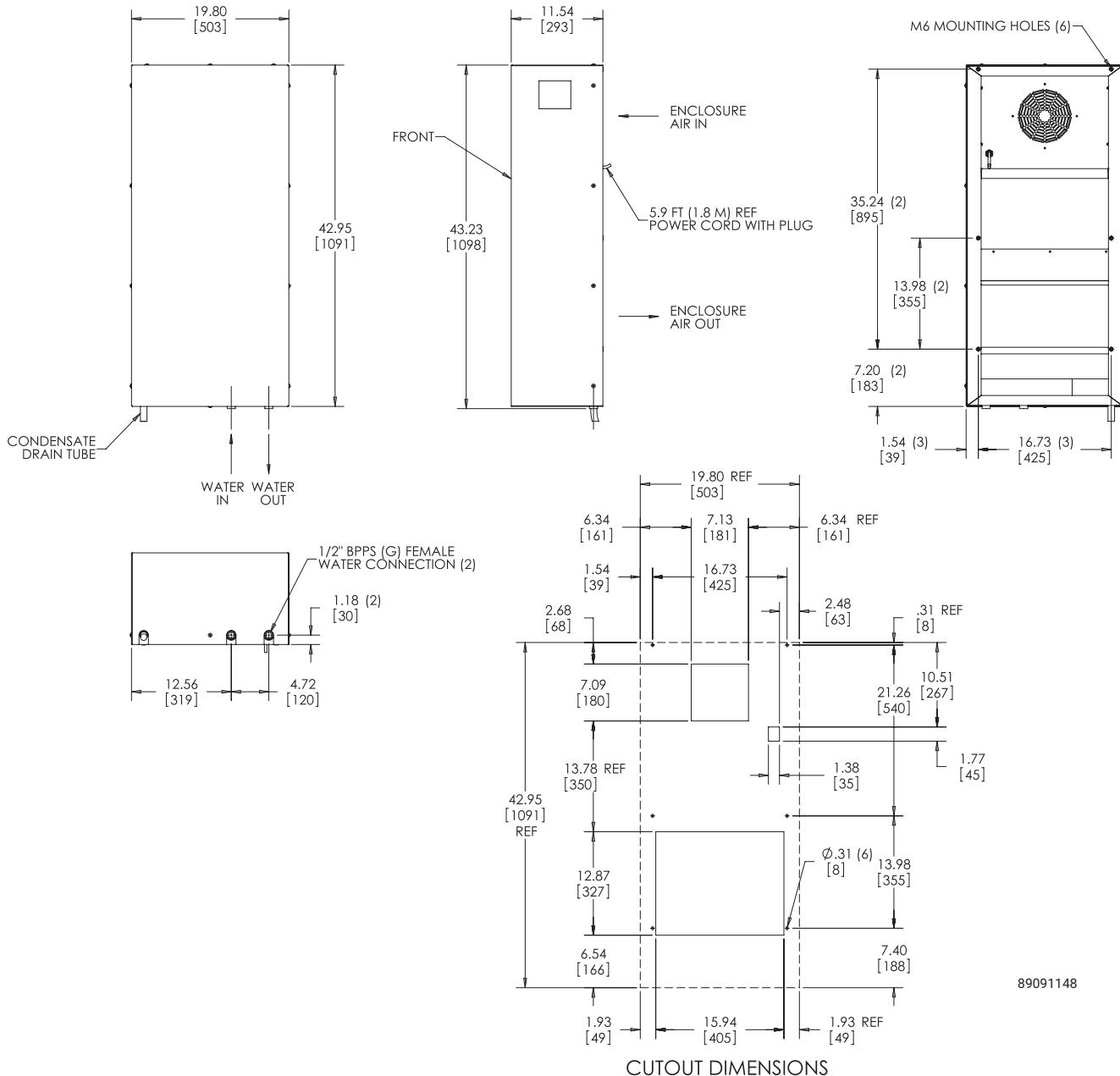
## PERFORMANCE DATA WCHE14 MODELS 6700 WATT

Item number		WCHE14926002	WCHE14926005
Indoor Model	—	WCHE14926002	WCHE14926005
Indoor Model Stainless Steel			WCHE14926006
<b>COOLING PERFORMANCE</b>			
Nominal:			
BTU/Hr. @ Δt 25 °C	22861	22861	22861
Watt @ Δt 25 °C	6700	6700	6700
Operating Temperature Range (inside cabinet):			
Maximum (°F/°C)	122/50	122/50	122/50
Minimum (°F/°C)	50/10	50/10	50/10
Ambient Temperature Range:			
Maximum (°F/°C)	158/70	158/70	158/70
Minimum (°F/°C)	41/5	41/5	41/5
Flow at 0 Static Pressure:			
Internal loop 50 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	855/1450	855/1450	855/1450
Internal loop 60 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	855/1450	855/1450	855/1450
Waterflow (l/hr.)	1000	1000	1000
Max. water pressure (kPa)	1000	1000	1000
<b>ELECTRICAL DATA</b>			
Rated Voltage	115	230	230
Frequency (Hz)	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	200	245	245
Max. Nominal Current (A at 50/60 Hz)	2	1.3	1.3
Starting Current (Amps)	2.4	1.4	1.4
Agency Approvals	cUL Listed	cUL Listed	CE
Power Input Description	Cord with NEMA 5-15 plug	Cord with NEMA 6-15 plug	3 meter cable with open ends
<b>ENCLOSURE PROTECTION</b>			
IP55	IP55	IP55	IP55
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat		
Thermostat Location	Behind front cover, near the fan		
Factory Thermostat Setting (°F/°C)	95/35	95/35	95/35
<b>SOUND LEVEL</b>			
At 1.0 Meters	58 dBA	58 dBA	58 dBA
<b>UNIT CONSTRUCTION</b>			
Material	Mild Steel Sheet Metal		Mild Steel Sheet Metal/Stainless Steel Typ 304 standard
Finish	RAL 7035 light-gray, semi-textured powder-coat paint		RAL 7035 light-gray, semi-textured powder-coat paint
<b>UNIT DIMENSIONS</b>			
Height (in./mm)	43.34/1101	43.34/1101	43.34/1101
Width (in./mm)	19.72/501	19.72/501	19.72/501
Depth (in./mm)	11.81/300	11.81/300	11.81/300
Weight (lb./kg)	86/39	86/39	86/39



# Air to Water Heat Exchanger Indoor WCHE-Series

WCHE14 Models 6700 Watt



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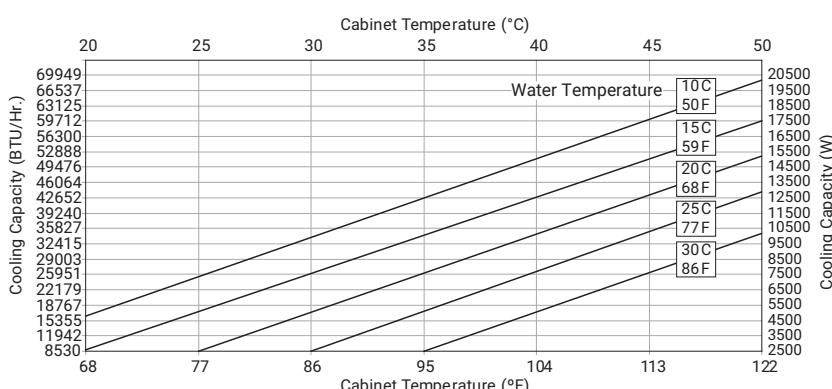
CUTOUT DIMENSIONS

# Air to Water Heat Exchanger Indoor WCHE-Series

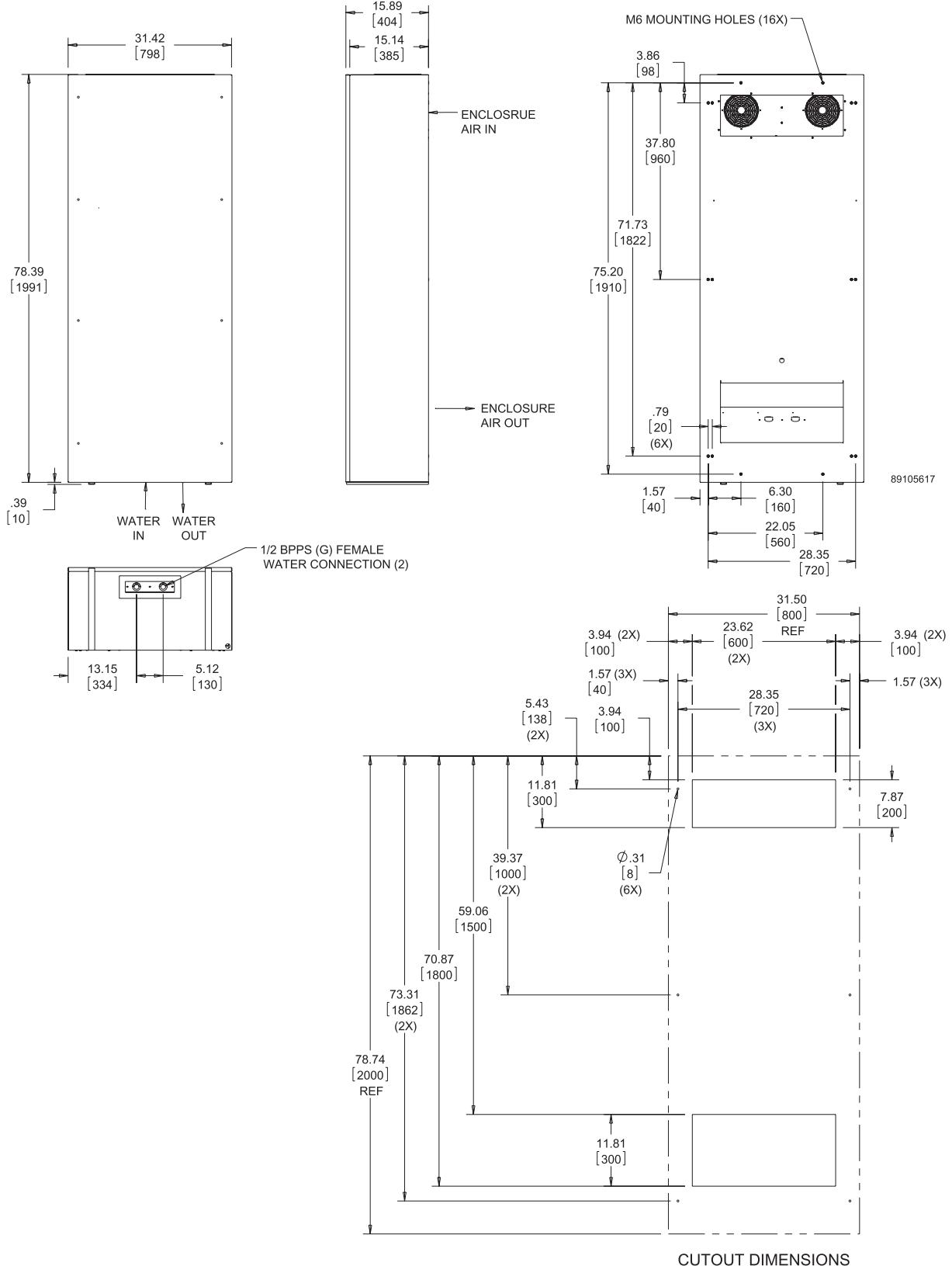
## PERFORMANCE DATA WCHE27 MODELS 12500 WATT

Item number	WCHE27826005	--
Indoor Model		--
Indoor Model Stainless Steel		--
<b>COOLING PERFORMANCE</b>		
Nominal:		
BTU/Hr. @ Δt 25 °C	42650	42650
Watt @ Δt 25 °C	12500	12500
Operating Temperature Range (inside cabinet):		
Maximum (°F/°C)	122/50	122/50
Minimum (°F/°C)	50/10	50/10
Ambient Temperature Range:		
Maximum (°F/°C)	158/70	158/70
Minimum (°F/°C)	41/5	41/5
Flow at 0 Static Pressure:		
Internal loop 50 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	1707/2900	1707/2900
Internal loop 60 Hz (Airflow: CFM/m <sup>3</sup> /hr.)	1707/2900	1707/2900
Waterflow (l/hr.)	1440	1440
Max. water pressure (kPa)	1000	1000
<b>ELECTRICAL DATA</b>		
Rated Voltage	230	400/440
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	400/520	400/520
Max. Nominal Current (A at 50/60 Hz)	1.65/2.15	1/1.18
Starting Current (Amps)	1.9/2.4	1.2/1.4
Agency Approvals	CE	CE
Power Input Description	3 meter cable with open ends	3 meter cable with open ends
<b>ENCLOSURE PROTECTION</b>		
Controller		
Description	Basic Mechanical Thermostat	
Thermostat Location	Behind front cover, near the fan	
Factory Thermostat Setting (°F/°C)	95/35	95/35
<b>SOUND LEVEL</b>		
At 1.0 Meters	60 dBA	60 dBA
<b>UNIT CONSTRUCTION</b>		
Material	Mild Steel Sheet Metal	Mild Steel Sheet Metal/ Stainless Steel Typ 304 standard
Finish	RAL 7035 light-gray, semi-textured powder-coat paint	RAL 7035 light-gray, semi-textured powder-coat paint
<b>UNIT DIMENSIONS</b>		
Height (in./mm)	78.74/2000	78.74/2000
Width (in./mm)	31.50/800	31.50/800
Depth (in./mm)	15.74/400	15.74/400
Weight (lb./kg)	198/90	198/90

Performance Curves for WCHE27 Models 12500 Watt



WCHE27 Models 12500 Watt



CUTOUT DIMENSIONS

# Filter Fans

## AIR FILTERED FAN



### INDUSTRY STANDARDS

Ingress protection from IP 54 to IP 55 in accordance with IEC 60529

cUR Recognized



### APPLICATION

Air filtered fans are ideal for use in industrial environments to protect all electronic and important components and extend the equipment lifecycle. Use a filter fan when the temperature inside the enclosure is higher than the ambient temperature.

### FEATURES

- Easy tool-less clip-on assembly (material thickness 1,5-3,0 mm)
- Screw on version also available (material thickness >3,0 mm)
- Easy conversion from pressure to suction operation
- Filter mat can be changed easily without tools

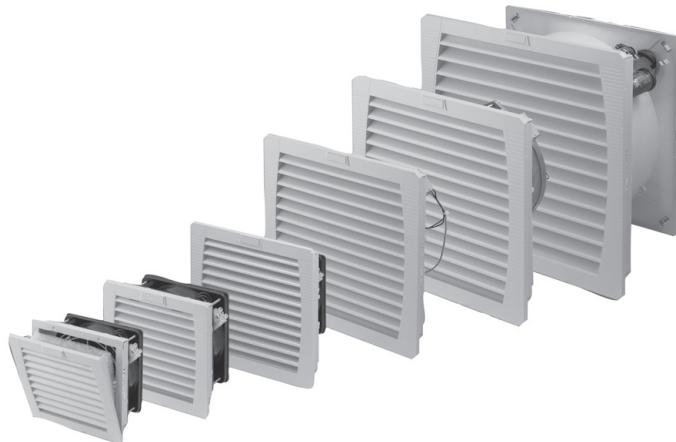
### SPECIFICATIONS

- Airflow capacity of 19 m<sup>3</sup>/h ... 640 m<sup>3</sup>/h (FL 100 ... FL 600)
- Three supply voltages (230 VAC, 115 VAC, 24 VDC)
- Seven performance classes with six different assembly dimensions
- Outlet/inlet filter
- Fluted filter to increase degree of ingress protection from IP54 to IP55
- Side-by-side assembly with only one cutout option for all types of filter fans

### FINISH

- RAL 7035 light gray

# Filter Fans



## HOW TO DIMENSION AIR FILTERED FANS

To establish the size of the air filtered fan required, calculate the air throughput necessary to dissipate the amount of heat contained in the cabinet.

The necessary airflow volume (at sea level) is calculated thus:

$$V = f \times (PV - PS)/\Delta T$$

where:

**V** = airflow volume

**f** = air constant =  $3.3 \text{ m}^3 \text{ K/Wh}$

**PV** = thermal power loss

(sum of heat losses of the devices in the cabinet)

**PS** = radiant power<sub>1</sub>

(heat which is dissipated by the cabinet without additional cooling)

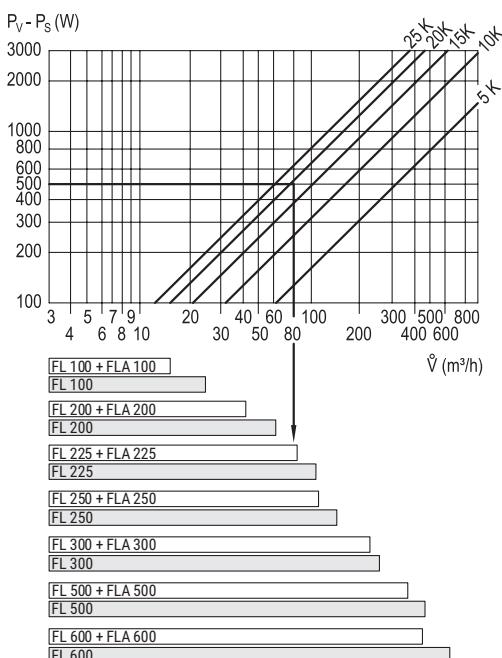
**ΔT** = difference between internal temperature TI and ambient temperature TU, **ΔT** = TI - TU

## READING EXAMPLE

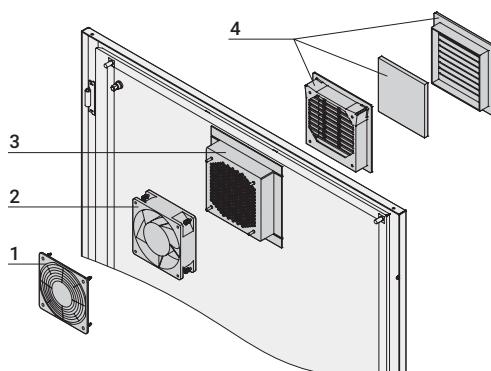
For example, the devices in the cabinet produce a power loss of 840 W. The cabinet releases 340 W to the environment via its surfaces. The air pulled in from outside the cabinet has a temperature of 20°C. The maximum allowed cabinet temperature is 40°C.

Which air filtered fan should be employed?

1.  $P_V = 840 \text{ W}$ ,  $PS = 340 \text{ W}$ , read-off point  $P_V - PS = 500 \text{ W}$
2.  $\Delta T = T_I - T_a = 40 \text{ C} - 20 \text{ C} = 20 \text{ C} = 20 \text{ K}$
3. On the characteristic for 20 K we obtain, at  $P_V - PS = 500 \text{ W}$ , a minimum necessary airflow volume of  $V = 80 \text{ m}^3/\text{h}$ .
4. A FL 250 air filtered fan should be used that gives an airflow volume of 125 m<sup>3</sup>/h or, if used in combination with the FLA 250 exhaust filter, of 93 m<sup>3</sup>/h.



## EMC SOLUTIONS



## SPECIFICATIONS

- EMC shielding in accordance with your requirements
- Customized developments

## SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Protective fan grille
2	1	Fan
3	1	EMC hood
3	1	FLA outlet/inlet filter

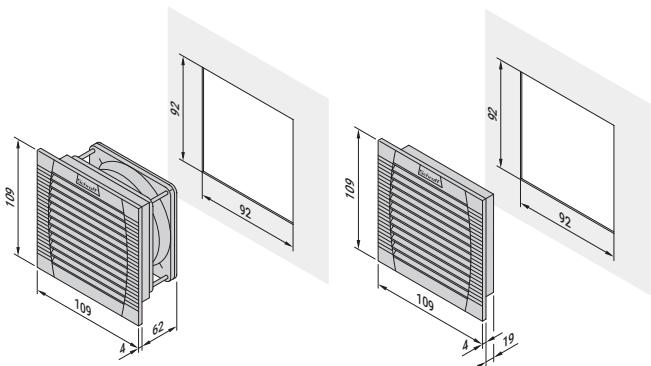
# Filter Fans

## AIR FILTERED FAN FL 100



### SPECIFICATIONS

- Airflow volume 19 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54
- Simple clip-on mounting without tools



Air Filtered Fan FL 100

Air outlet/inlet filter FLA 100

Metal thicknesses 1 ... 2 mm - cutout 92 x 92 mm.

Metal thicknesses > 2 ... 3 mm - cutout 93 x 93 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	2 wire connection, length 310 mm

### STANDARD PRODUCT

Item number	Description
<b>60715-142</b>	Air filtered fan 24 VDC
<b>60715-141</b>	Air filtered fan 115 VAC
<b>60715-140</b>	Air filtered fan 230 VAC
<b>60715-156</b>	Air outlet/inlet filter FLA 100 (Items 1 + 2 included), 1 piece
<b>60715-182</b>	Replacement filter IP 54 for FL 100 and FLA 100, filter class G 3 (EN 779), PU 5 pieces

### TECHNICAL DATA

Voltage	230 VAC	115 VAC	24 VDC
Frequency	50/60 Hz	50/60 Hz	DC
Free airflow volume with filter	19/24 m <sup>3</sup> /h	19/24 m <sup>3</sup> /h	19 m <sup>3</sup> /h
Noise level to EN ISO 3741	33 dB(A)	33 dB(A)	33 dB(A)
Combination FL + FLA	12/14 m <sup>3</sup> /h	12/14 m <sup>3</sup> /h	12 m <sup>3</sup> /h
Max. static pressure	38 Pa	38 Pa	38 Pa
Operating temperature	-15 ... +55 °C	-15 ... +55 °C	-15 ... +55 °C
Power consumption	12/11 W	12/11 W	2.4 W
Filter efficiency	88 %	88 %	88 %
MTBF at 40 °C	52000 h	52000 h	70000 h
Approvals	CE, cUR, EAC		

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

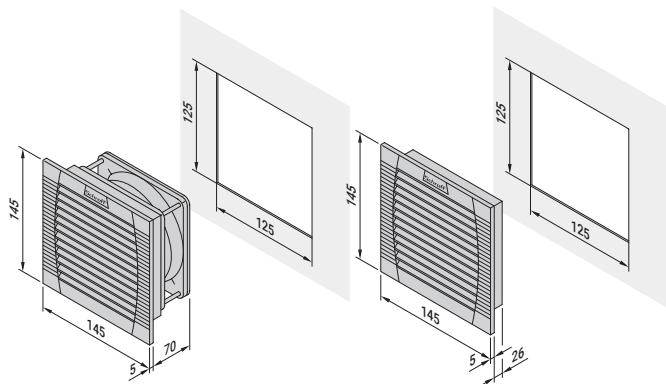
# Filter Fans

## AIR FILTERED FAN FL 200



### SPECIFICATIONS

- Airflow volume 60 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54, with fluted filter IP 55
- Simple clip-on mounting without tools



Air Filtered Fan FL 200

Air outlet/inlet filter FLA 200

Metal thicknesses 1 ... 2 mm - cutout 125 x 125 mm.

Metal thicknesses > 2 ... 3 mm - cutout 126 x 126 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection AC (terminal strip); connection DC (2 wires, 310 mm long)

### STANDARD PRODUCT

Item number	Description
<b>60715-145</b>	Air filtered fan 24 VDC
<b>60715-144</b>	Air filtered fan 115 VAC
<b>60715-143</b>	Air filtered fan 230 VAC
<b>60715-157</b>	Air outlet/inlet filter FLA 200 (Items 1 + 2 included), 1 piece
<b>60715-183</b>	Replacement filter IP 54 for FL 200 and FLA 200, filter class G 3 (EN 779), PU 5 pieces
<b>60715-187</b>	Fluted filter IP 55 for FL 200 and FLA 200, filter class G4 (EN 779), PU 5 pieces

### TECHNICAL DATA

Voltage	230 VAC	115 VAC	24 VDC
Frequency	50/60 Hz	50/60 Hz	DC
Free airflow volume with IP 54 filter	60/66 m <sup>3</sup> /h	60/66 m <sup>3</sup> /h	60 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	56/64 m <sup>3</sup> /h	56/64 m <sup>3</sup> /h	56 m <sup>3</sup> /h
Combination FL + FLA IP 54	38/42 m <sup>3</sup> /h	38/42 m <sup>3</sup> /h	38 m <sup>3</sup> /h
Combination FL + FLA IP 55	40/46 m <sup>3</sup> /h	40/46 m <sup>3</sup> /h	40 m <sup>3</sup> /h
Max. static pressure IP 54	60 Pa	60 Pa	60 Pa
Max. static pressure IP 55	57 Pa	57 Pa	61 Pa
Noise level to EN ISO 3741	44 dB(A)	44 dB(A)	44 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C	-15 ... +55 °C
Power consumption	19/18 W	20/20 W	5 W
Filter efficiency IP 54	83 %	83 %	83 %
Filter efficiency IP 55	91 %	91 %	91 %
MTBF at 40 °C	37000 h	37000 h	62000 h
Approvals	CE, cUR, EAC		

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

# Filter Fans

## AIR FILTERED FAN FL 225



### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection AC terminal block; DC spring terminal strip

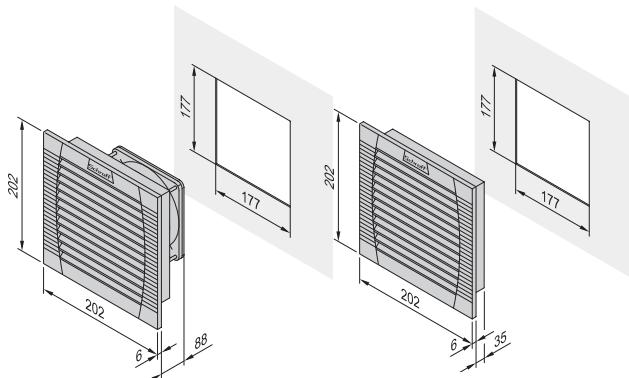
### STANDARD PRODUCT

Item number	Description
60715-147	Air filtered fan 115 VAC
60715-146	Air filtered fan 230 VAC
60715-158	Air outlet/inlet filter FLA 225 (Items 1 + 2 included), 1 piece
60715-184	Replacement filter IP 54 for FL 225 and FLA 225, filter class G 3 (EN 779), PU 5 pieces
60715-188	Fluted filter IP 55 for FL 225 and FLA 225, filter class G4 (EN 779), PU 5 pieces



### SPECIFICATIONS

- Airflow volume 98 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54, with fluted filter IP 55



Air Filtered Fan FL 225

Air outlet/inlet filter FLA 225

Metal thicknesses 1 ... 2 mm - cutout 177 x 177 mm.

Metal thicknesses > 2 ... 3 mm - cutout 178 x 178 mm

### TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	98/108 m <sup>3</sup> /h	98/108 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	100/110 m <sup>3</sup> /h	100/110 m <sup>3</sup> /h
Combination FL + FLA IP 54	73/80 m <sup>3</sup> /h	73/80 m <sup>3</sup> /h
Combination FL + FLA IP 55	55/64 m <sup>3</sup> /h	55/64 m <sup>3</sup> /h
Max. static pressure IP 54	66 Pa	66 Pa
Max. static pressure IP 55	61 Pa	61 Pa
Noise level to EN ISO 3741	40 dB(A)	40 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C
Power consumption	19/18 W	19/18 W
Filter efficiency IP 54	88 %	88 %
Filter efficiency IP 55	91 %	91 %
MTBF at 40 °C	37000 h	37000 h
Approvals	CE, cUR, EAC	

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

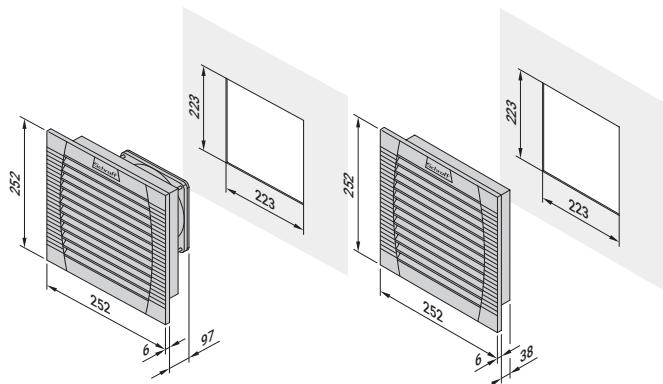
# Filter Fans

## AIR FILTERED FAN FL 250



### SPECIFICATIONS

- Airflow volume 125 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54; with fluted filter IP 55
- Simple clip-on mounting without tools



Air Filtered Fan FL 250/300

Air outlet/inlet filter FLA 250/300

Metal thicknesses 1 ... 2 mm - cutout 223 x 223 mm.

Metal thicknesses > 2 ... 3 mm - cutout 224 x 224 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection spring terminal strip

### STANDARD PRODUCT

Item number	Description
60715-149	Air filtered fan 115 VAC
60715-148	Air filtered fan 230 VAC
60715-159	Air outlet/inlet filter FLA 250/300 (Items 1 + 2 included), 1 piece
60715-185	Replacement filter IP 54 for FL 250/300 and FLA 250/300, filter class G 3 (EN 779), PU 5 pieces
60715-189	Fluted filter IP 55 for FL 250/300 and FLA 250/300, filter class G4 (EN 779), PU 5 pieces

### TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	125/138 m <sup>3</sup> /h	125/138 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	145/160 m <sup>3</sup> /h	140/160 m <sup>3</sup> /h
Combination FL + FLA IP 54	93/102 m <sup>3</sup> /h	93/102 m <sup>3</sup> /h
Combination FL + FLA IP 55	109/113 m <sup>3</sup> /h	109/113 m <sup>3</sup> /h
Max. static pressure IP 54	52 Pa	52 Pa
Max. static pressure IP 55	49 Pa	49 Pa
Noise level to EN ISO 3741	40 dB(A)	40 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C
Power consumption	18/17 W	18/17 W
Filter efficiency IP 54	88 %	88 %
Filter efficiency IP 55	91 %	91 %
MTBF at 40 °C	40000 h	40000 h
Approvals	CE, cUR, EAC	

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

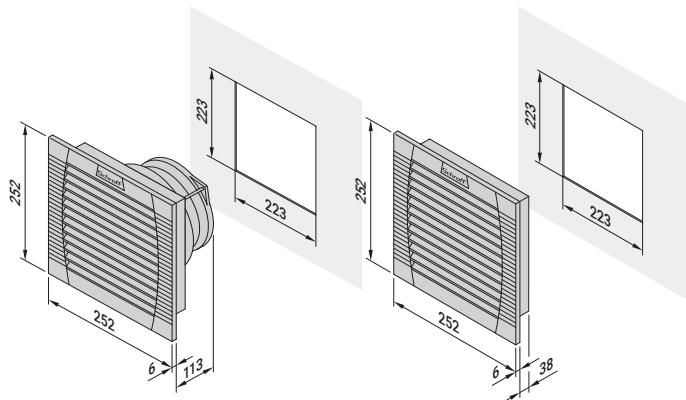
# Filter Fans

## AIR FILTERED FAN FL 300



### SPECIFICATIONS

- Airflow volume 223 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54, with fluted filter IP 55
- Simple clip-on mounting without tools



Air Filtered Fan FL 250/300

Air outlet/inlet filter FLA 250/300

Metal thicknesses 1 ... 2 mm - cutout 223 x 223 mm.

Metal thicknesses > 2 ... 3 mm - cutout 224 x 224 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection spring terminal strip

### STANDARD PRODUCT

Item number	Description
60715-151	Air filtered fan 115 VAC
60715-150	Air filtered fan 230 VAC
60715-159	Air outlet/inlet filter FLA 250/300 (Items 1 + 2 included), 1 piece
60715-185	Replacement filter IP 54 for FL 250/300 and FLA 250/300, filter class G 3 (EN 779), PU 5 pieces
60715-189	Fluted filter IP 55 for FL 250/300 and FLA 250/300, filter class G4 (EN 779), PU 5 piece

### TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	223/247 m <sup>3</sup> /h	223/247 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	233/265 m <sup>3</sup> /h	233/265 m <sup>3</sup> /h
Combination FL + FLA IP 54	201/223 m <sup>3</sup> /h	201/223 m <sup>3</sup> /h
Combination FL + FLA IP 55	180/207 m <sup>3</sup> /h	180/207 m <sup>3</sup> /h
Max. static pressure IP 54	116 Pa	116 Pa
Max. static pressure IP 55	112 Pa	112 Pa
Noise level to EN ISO 3741	42 dB(A)	42 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C
Power consumption	45/39 W	50/45 W
Filter efficiency IP 54	88 %	88 %
Filter efficiency IP 55	91 %	91 %
MTBF at 40 °C	40000 h	40000 h
Approvals	CE, cUR, EAC	

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

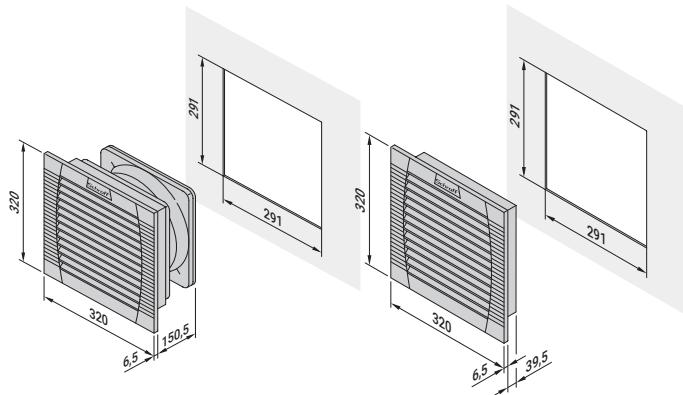
# Filter Fans

## AIR FILTERED FAN FL 500



### SPECIFICATIONS

- Airflow volume 480 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54; with fluted filter IP 55
- Simple clip-on mounting without tools (can also be bolted on)



Air Filtered Fan FL 500/600

Air outlet/inlet filter FLA 500/600

Metal thicknesses 1 ... 2 mm - cutout 291 x 291 mm.

Metal thicknesses > 2 ... 3 mm - cutout 292 x 292 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection spring terminal strip

### STANDARD PRODUCT

Item number	Description
60715-153	Air filtered fan 115 VAC
60715-152	Air filtered fan 230 VAC
60715-160	Air outlet/inlet filter FLA 500/600 (Items 1 + 2 included), 1 piece
60715-186	Replacement filter IP 54 for FL 500/600 and FLA 500/600, filter class G 3 (EN 779), PU 5 pieces
60715-190	Fluted filter IP 55 for FL 500/600 and FLA 500/600, filter class G4 (EN 779), PU 5 pieces

### TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	480/480 m <sup>3</sup> /h	480/480 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	505/505 m <sup>3</sup> /h	505/505 m <sup>3</sup> /h
Combination FL + FLA IP 54	370/370 m <sup>3</sup> /h	370/370 m <sup>3</sup> /h
Combination FL + FLA IP 55	380/380 m <sup>3</sup> /h	380/380 m <sup>3</sup> /h
Max. static pressure IP 54	76 Pa	76 Pa
Max. static pressure IP 55	74 Pa	74 Pa
Noise level to EN ISO 3741	54 dB(A)	54 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C
Power consumption	80/100 W	90/110 W
Filter efficiency IP 54	88 %	88 %
Filter efficiency IP 55	91 %	91 %
MTBF at 40 °C	40000 h	40000 h
Approvals	CE, cUR, EAC	

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

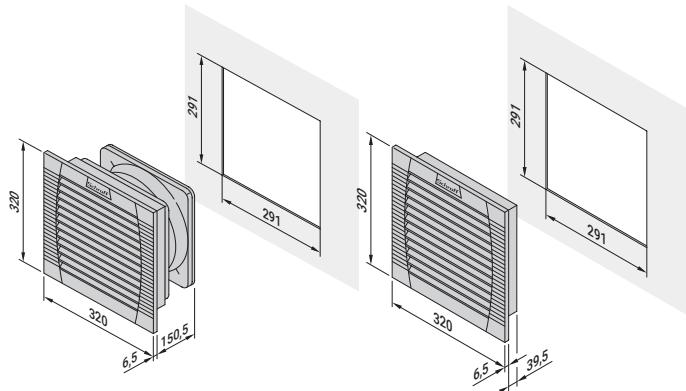
# Filter Fans

## AIR FILTERED FAN FL 600



### SPECIFICATIONS

- Airflow volume 640 m<sup>3</sup>/h
- Easy conversion from pressure to suction operation
- Protection class IP 54, with fluted filter IP 55
- Simple clip-on mounting without tools



Air Filtered Fan FL 500/600

Air outlet/inlet filter FLA 500/600

Metal thicknesses 1 ... 2 mm - cutout 291 x 291 mm.

Metal thicknesses > 2 ... 3 mm - cutout 292 x 292 mm

### SCOPE OF DELIVERY

Item	Qty.	Description
1	1	Front grille and case, plastic, ABS, RAL 7035, self-extinguishing, UL 94 V-0
2	1	Filter, filter class G 3 (EN 779)
3	1	Fan
4	1	Connection spring terminal strip

### STANDARD PRODUCT

Item number	Description
60715-155	Air filtered fan 115 VAC
60715-154	Air filtered fan 230 VAC
60715-160	Air outlet/inlet filter FLA 500/600 (Items 1 + 2 included), 1 piece
60715-186	Replacement filter IP 54 for FL 500/600 and FLA 500/600, filter class G 3 (EN 779), PU 5 pieces
60715-190	Fluted filter IP 55 for FL 500/600 and FLA 500/600, filter class G4 (EN 779), PU 5 piece

### TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	640/653 m <sup>3</sup> /h	640/653 m <sup>3</sup> /h
Free airflow volume with IP 55 filter	770/785 m <sup>3</sup> /h	770/785 m <sup>3</sup> /h
Combination FL + FLA IP 54	445/445 m <sup>3</sup> /h	445/445 m <sup>3</sup> /h
Combination FL + FLA IP 55	490/501 m <sup>3</sup> /h	490/501 m <sup>3</sup> /h
Max. static pressure IP 54	134 Pa	134 Pa
Max. static pressure IP 55	132 Pa	132 Pa
Noise level (while printing, to EN ISO 3741)	63 dB(A)	63 dB(A)
Max. ambient temperature	-15 ... +55 °C	-15 ... +55 °C
Power consumption	120/160 W	130/170 W
Filter efficiency IP 54	88 %	88 %
Filter efficiency IP 55	91 %	91 %
MTBF at 40 °C	40000 h	40000 h
Approvals	CE, cUR, EAC	

### NOTE

- Mounting for wall thicknesses from 1 to 3 mm
- Multiple-fan solution on request

**NOTES :**

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