

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

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Cooling General Information: Quick Reference

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

	Air Conditioners						HazLoc	TEC
	SPECTRACOOL	SLIM FIT	V-Series	PROAIR	T-Series	A2W HEX WCHE-Series	Air Conditioner	Thermoelectric
SYSTEM APPLICATION								
For indoor industrial								
For harsh/corrosive environments								
For washdown applications								
For outdoor enclosures								
For telecommunications shelters								
TEMPERATURE OF THE ELECTRONICS								
Cooler than outside the enclosure								
Warmer than outside the enclosure								
AIR CONDITIONER COOLING CAPACITY								
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)								
THERMOELECTRIC COOLING CAPACITY								
60 Watt (178 BTU/Hr.)								
100 Watt (321 BTU/Hr.)								
200 Watt (567 BTU/Hr.)								
POWER INPUT								
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								
MOUNTING								
Side								
Top								
Rack								
CABINET PROTECTION								
Type 12								
Type 3R								
Type 4								
Type 4X								
CABINET DIMENSION								
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

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

6,700
AUTHORIZED
TECHNICIANS
WORLDWIDE

**Factory-authorized
service available
around the globe**

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

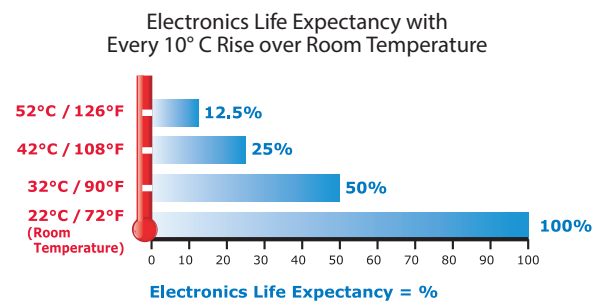
Cooling General Information: How To Select The Right Cooling Solution

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.



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

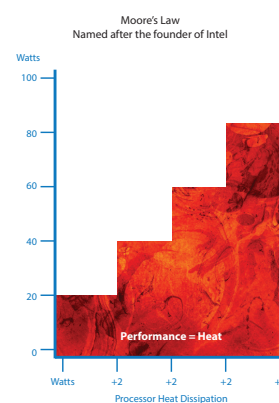
Heat also comes from sources outside the enclosure such as:

- 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.

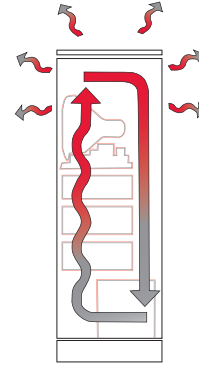
Cooling General Information: How To Select The Right Cooling Solution

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.

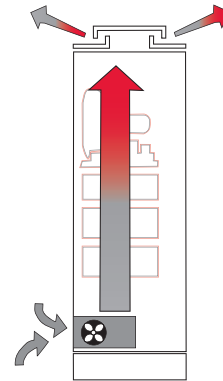


FRESH AIR ENCLOSURE COOLING

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

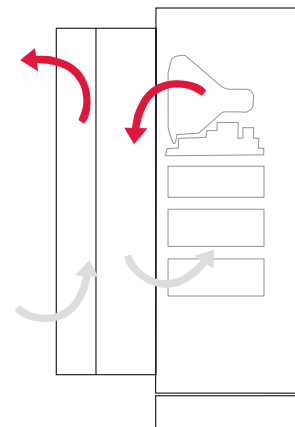
This is another active way to cool electrical components. This type of cooling maintains the seal of the enclosure—using an air conditioner or heat exchanger as examples—to remove heat from inside the electronics cabinet.

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	☐	SYSTEM OPERATING ENVIRONMENT	☐	Dirty / Wet / Metal Filings / Outdoors / Corrosive Fumes
Moderate to Low (typically under 35° C/ 95° F)	☐	TEMPERATURE OUTSIDE OF THE ENCLOSURE	☐	Hot (typically over 35° C/ 95° F)
Somewhat to Well-Above Ambient Temperature	☐	TEMPERATURE RATING OF THE ELECTRONICS	☐	Below to Somewhat Above Ambient Temperature
Moderate to Low	☐	HUMIDITY OUTSIDE OF THE ENCLOSURE	☐	High Relative Humidity
Wide	☐	TEMPERATURE RANGE FOR THE ELECTRONICS	☐	Narrow / Precise
Moderate to Low (typically under 3000 Watts)	☐	SYSTEM POWER DRAW / HEAT LOAD	☐	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:

SPECTRACOOL Slim Fit

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:

SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 300 WATT MODEL

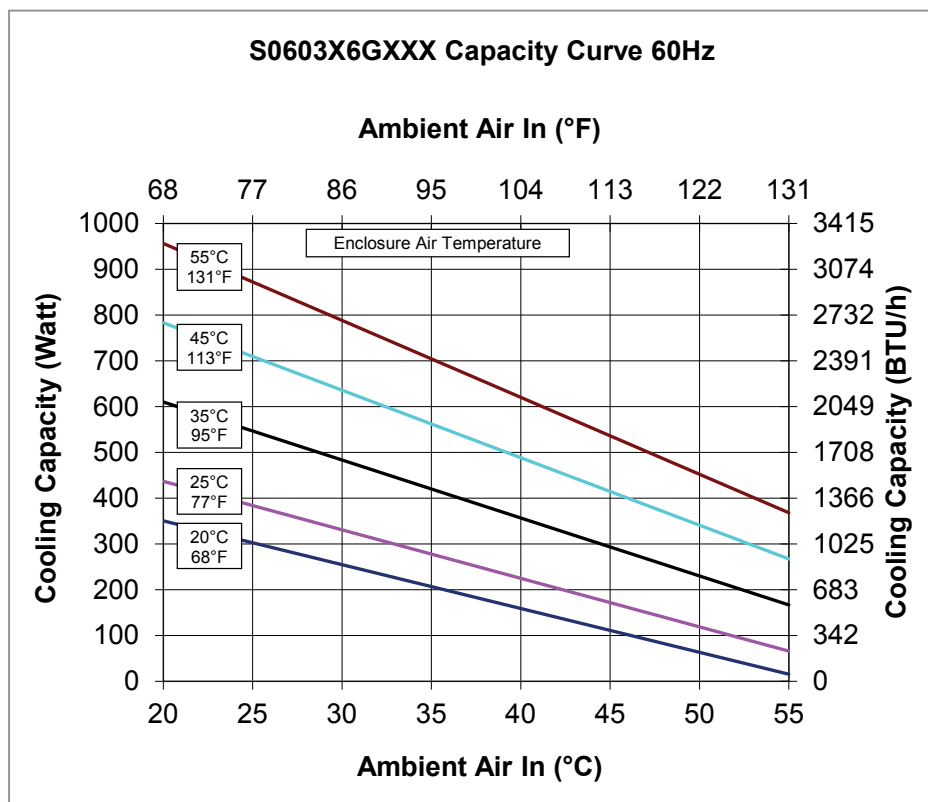
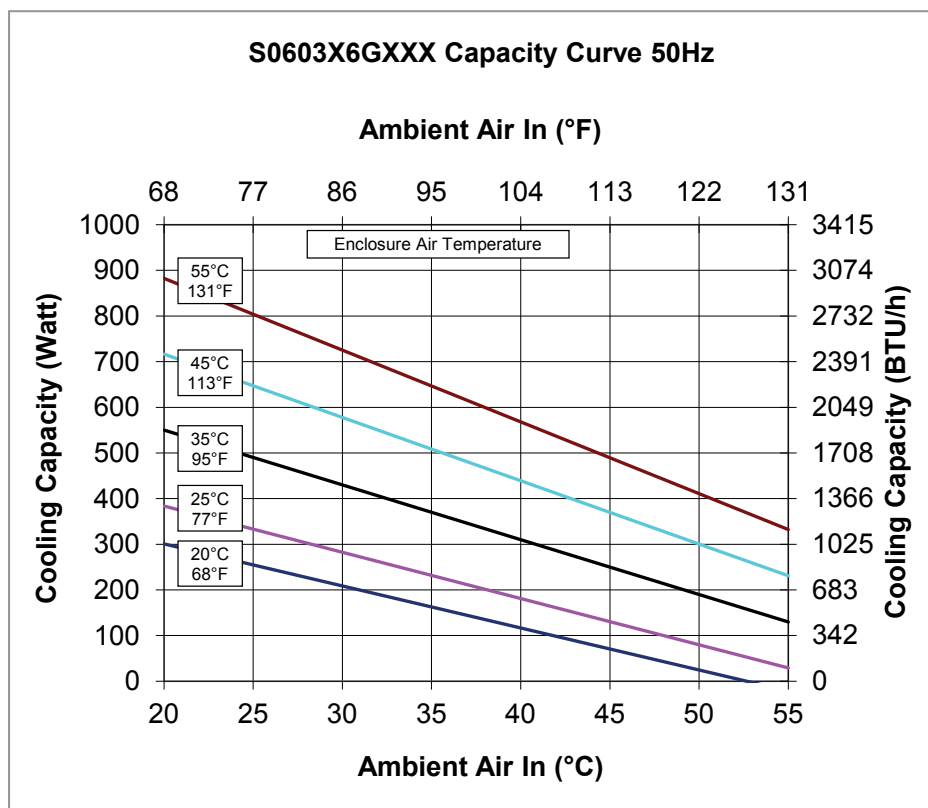
TWO MOUNTING OPTIONS: SURFACE AND FULL RECESS MOUNT

Unit Reference	300W 115V	300W 230V
Item number		
Indoor Model without Comm-Board	S060316G031	S060326G031
Indoor Model with Comm-Board	S060316G041	S060326G041
COOLING PERFORMANCE		
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	370	370
Cooling Performance L35 L35 (Watt) 50/60Hz	370/420	370/420
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%
ELECTRICAL DATA		
Rated Voltage (Volt)	100/115	230
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511		
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
ENCLOSURE PROTECTION		
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
Sound Level		
At 1 M (dBA)	68	68
UNIT CONSTRUCTION		
Material	Steel	Steel
Finish	RAL 7035	RAL 7035
UNIT DIMENSIONS		
Height (mm)	550	550
Width (mm)	280	280
Depth (mm)	142	142
Weight (kg)	13	13

SPECTRACOOL Slim Fit

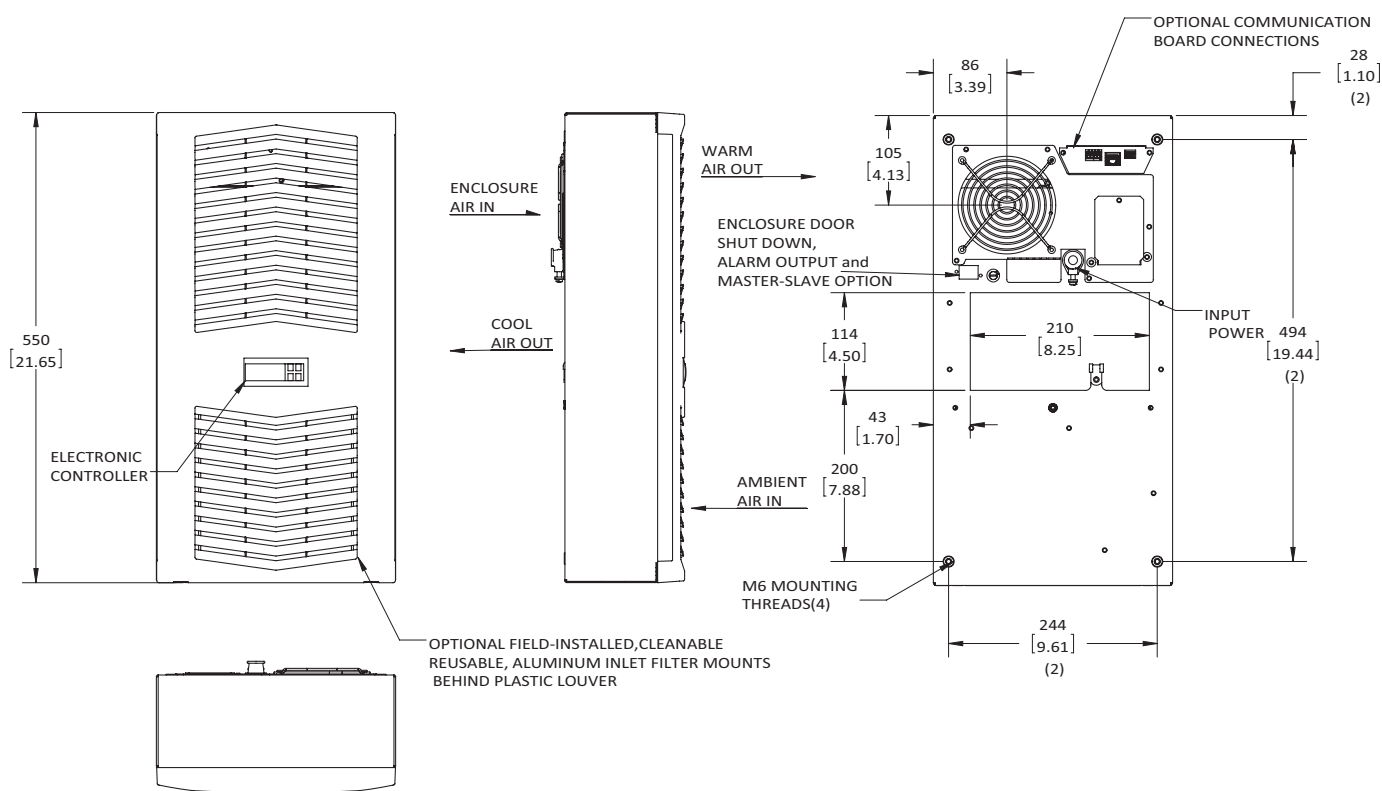
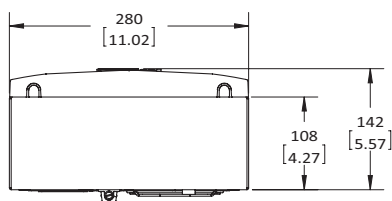
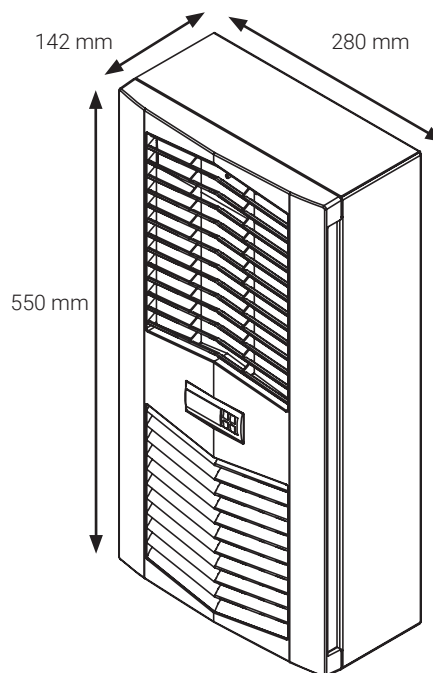
SPECTRACOOL SLIM FIT – 300 WATT MODEL

PERFORMANCE CURVES FOR 300W MODELS ACCORDING TO EN 14511



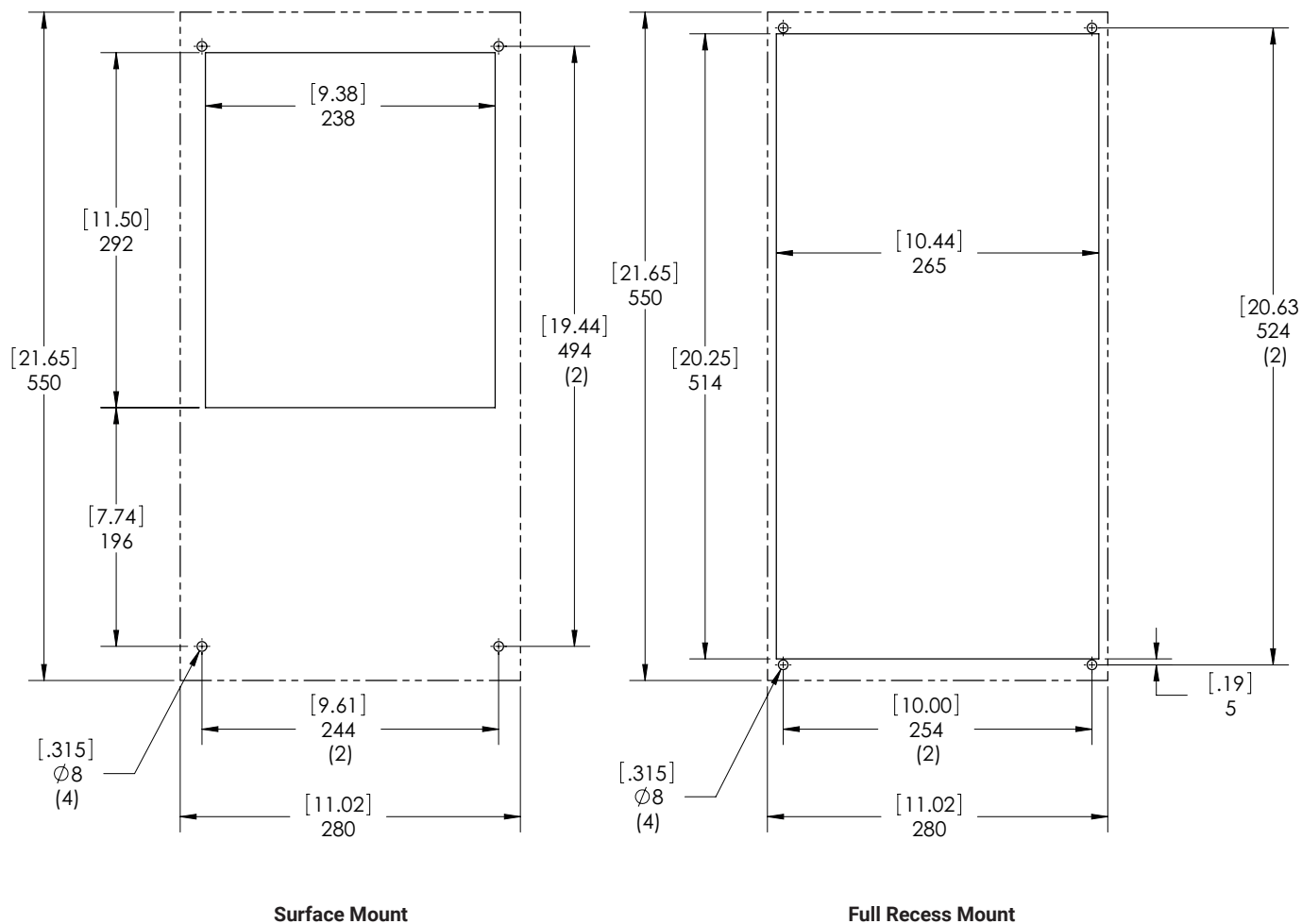
SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 300 WATT MODEL



SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 300 WATT MODEL



300W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 500 WATT MODEL

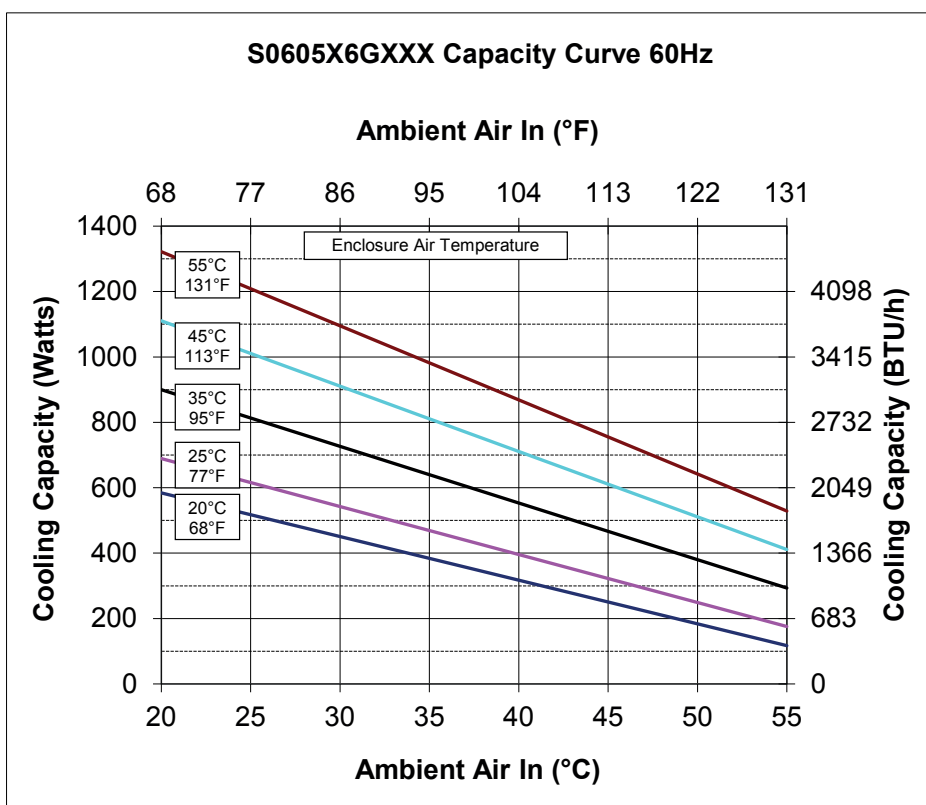
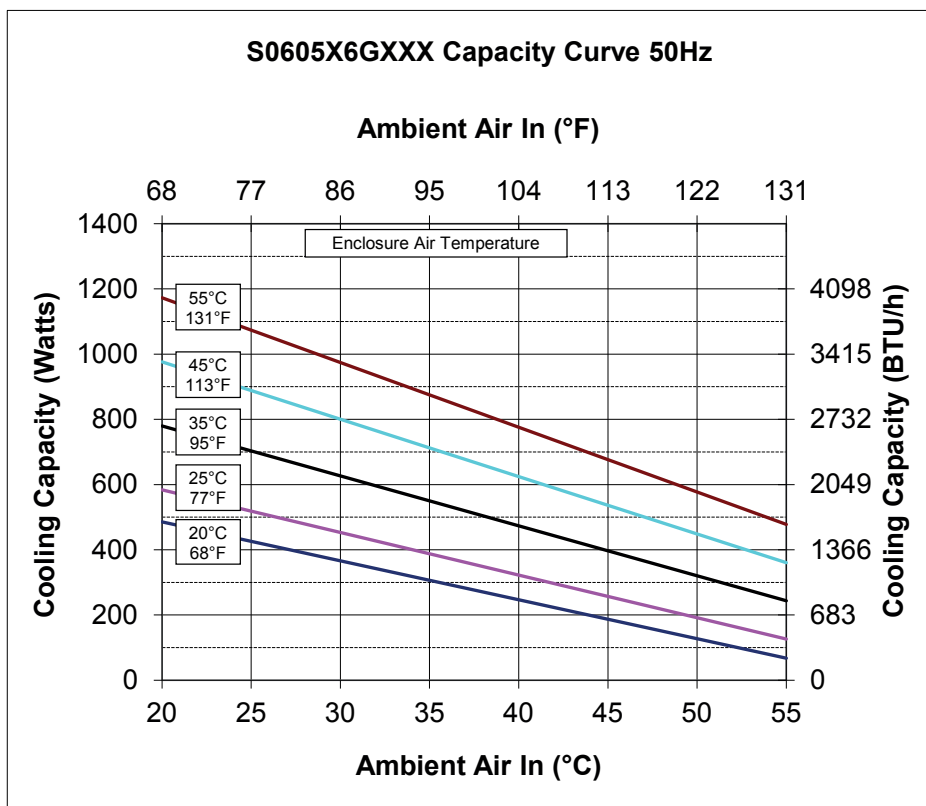
THREE MOUNTING OPTIONS

Unit Reference	500W 115V	500W 230V
Item number		
Indoor Model without Comm-Board	S060516G031	S060526G031
Indoor Model with Comm-Board	S060516G041	S060526G041
COOLING PERFORMANCE		
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	550	550
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%
ELECTRICAL DATA		
Rated Voltage (Volt)	115	230
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511		
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
ENCLOSURE PROTECTION		
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
SOUND LEVEL		
At 1 M (dBA)	68	68
UNIT CONSTRUCTION		
Material	Steel	Steel
Finish	RAL 7035	RAL 7035
UNIT DIMENSIONS		
Height (mm)	550	550
Width (mm)	280	280
Depth (mm)	199	199
Weight (kg)	15	15

SPECTRACOOL Slim Fit

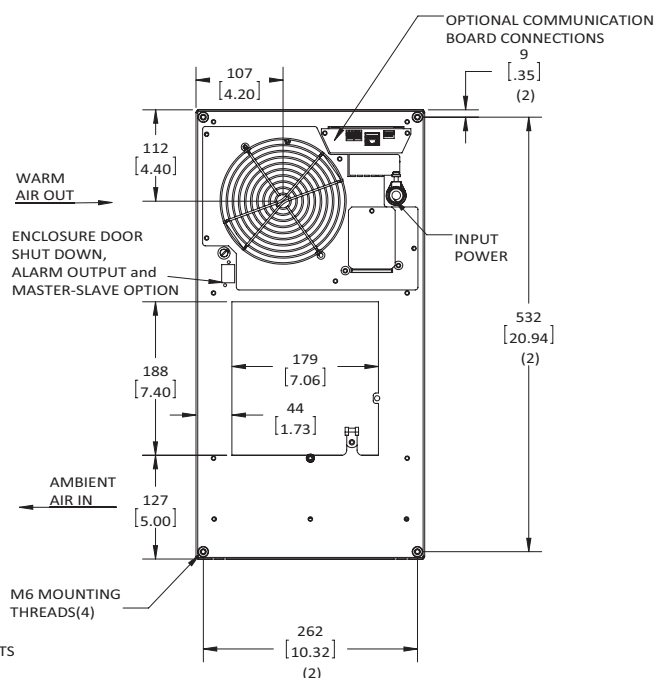
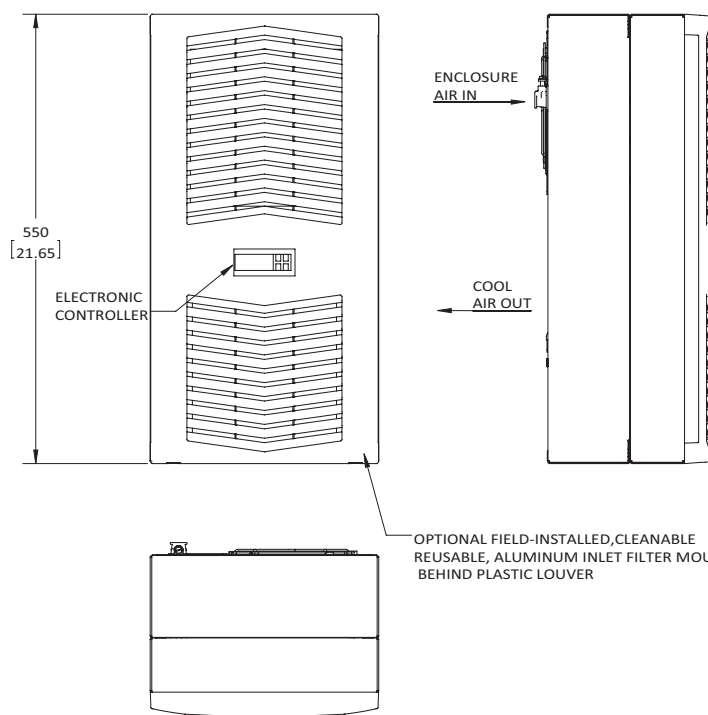
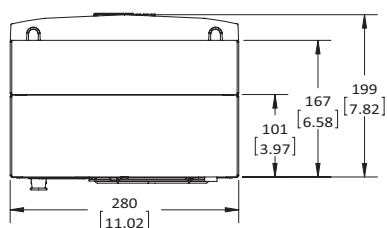
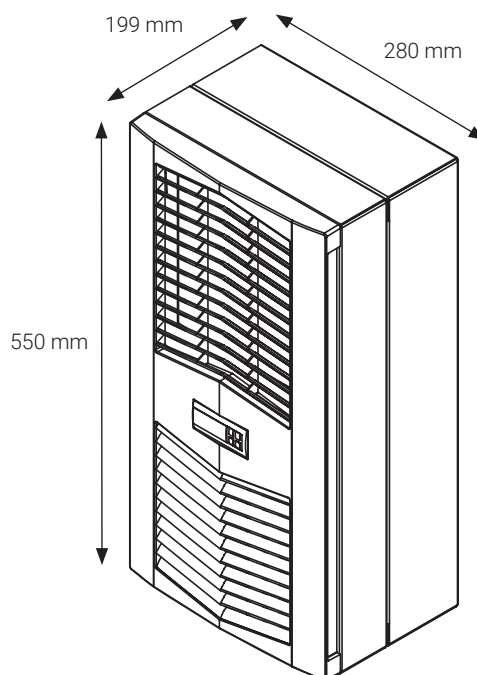
SPECTRACOOL SLIM FIT – 500 WATT MODEL

PERFORMANCE CURVES FOR 500W MODELS ACCORDING TO EN 14511



SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 500 WATT MODEL



SPECTRACOOL SLIM FIT – 500 WATT MODEL

SPECTRACOOOL Slim Fit

SPECTRACOOOL SLIM FIT – 1000 WATT MODEL

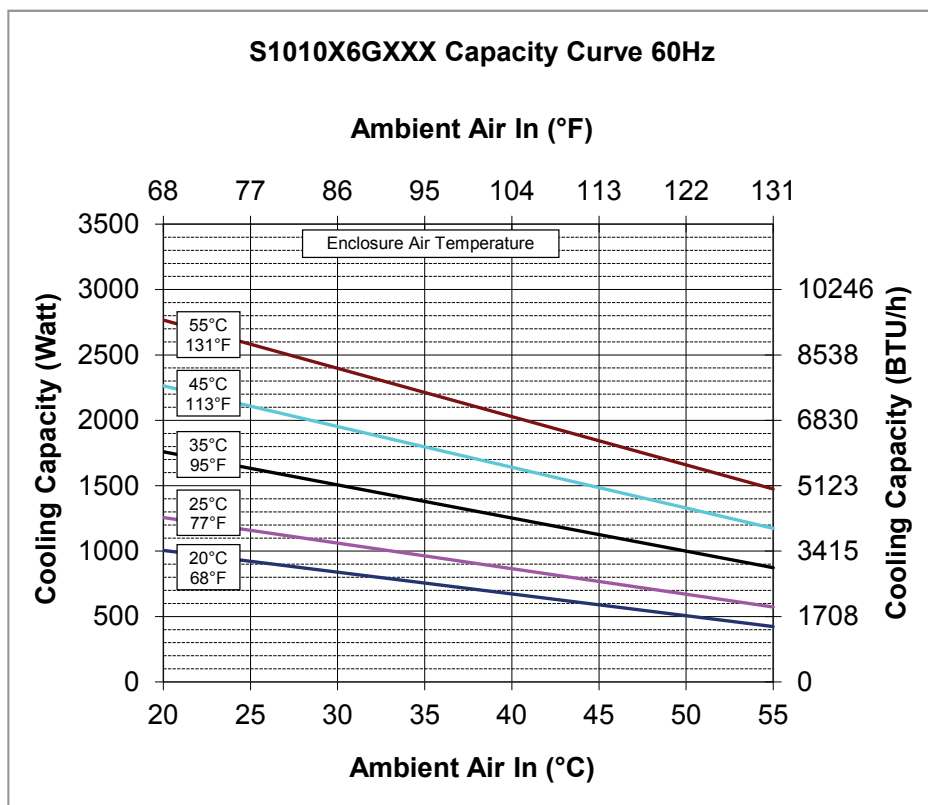
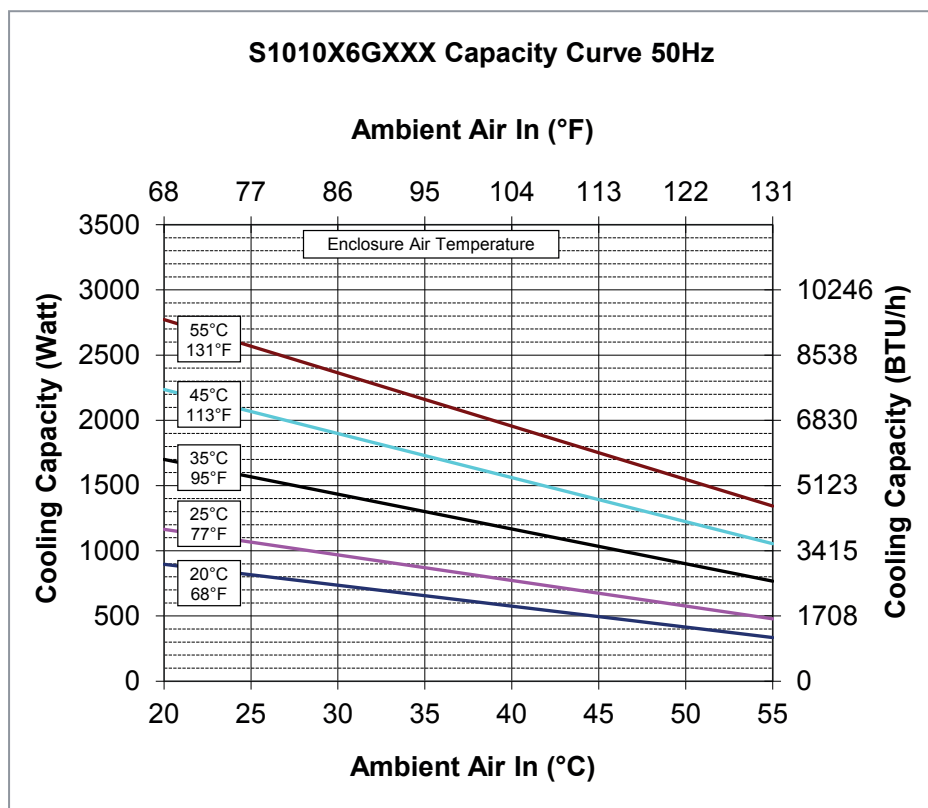
THREE MOUNTING OPTIONS

Unit Reference	1000W 115V	1000W 230V	1000W 400/460V 1~
Item number			
Indoor Model without Comm-Board	S101016G031	S101026G031	S101046G031
Indoor Model with Comm-Board	S101016G041	S101026G041	S101046G041
COOLING PERFORMANCE			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	1300	1300	1300
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%
ELECTRICAL DATA			
Rated Voltage (Volt)	115	230	400/460
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511			
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
ENCLOSURE PROTECTION			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
CONTROLLER			
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
SOUND LEVEL			
At 1 M (dBA)	71	71	71
UNIT CONSTRUCTION			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
UNIT DIMENSIONS			
Height (mm)	951	951	951
Width (mm)	400	400	400
Depth (mm)	260	260	260
Weight (kg)	39	39	45

SPECTRACOOL Slim Fit

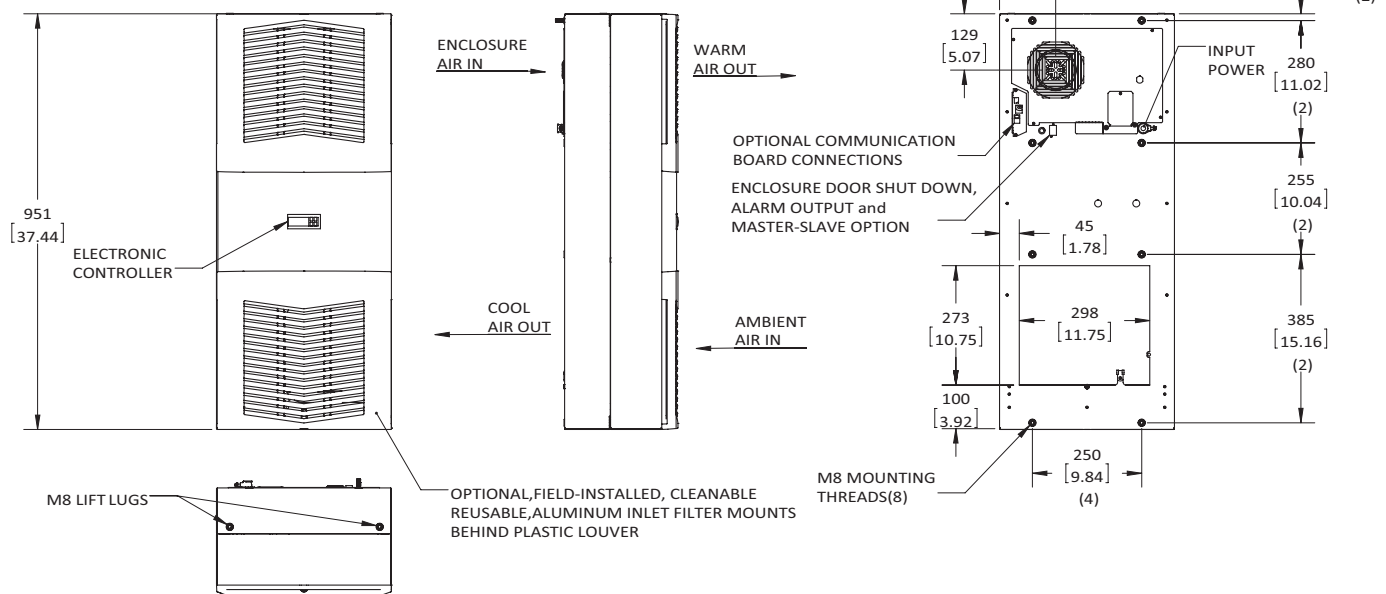
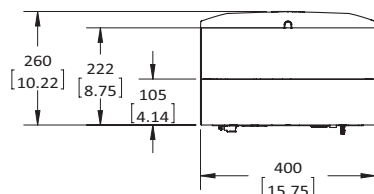
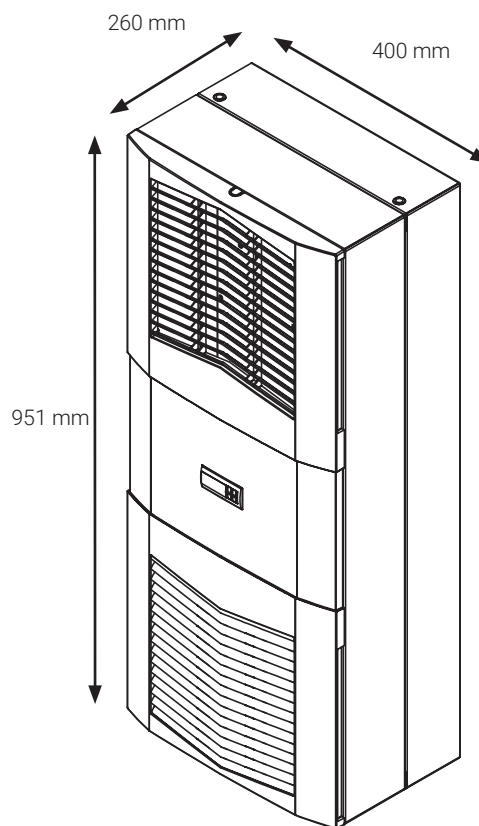
SPECTRACOOL SLIM FIT – 1000 WATT MODEL

PERFORMANCE CURVES FOR 1000W MODELS ACCORDING TO EN 14511



SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 1000 WATT MODEL



SPECTRACOOL SLIM FIT – 1000 WATT MODEL



Dashed Lines Represent The Air Conditioner

SPECTRACOOOL Slim Fit

SPECTRACOOOL SLIM FIT – 1500 WATT MODEL

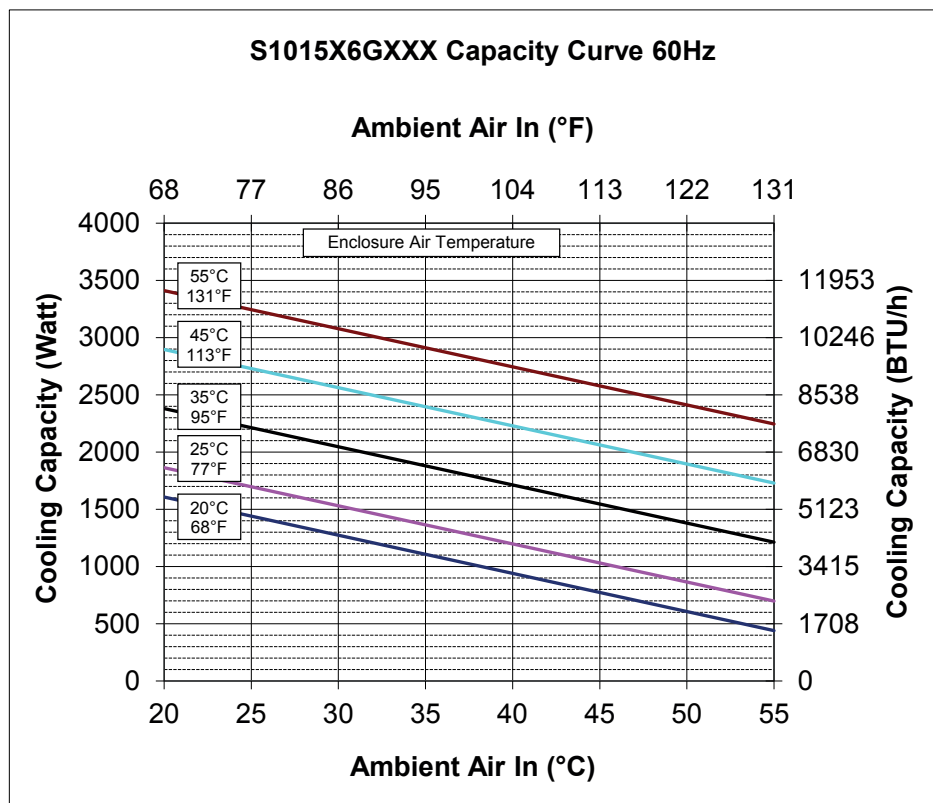
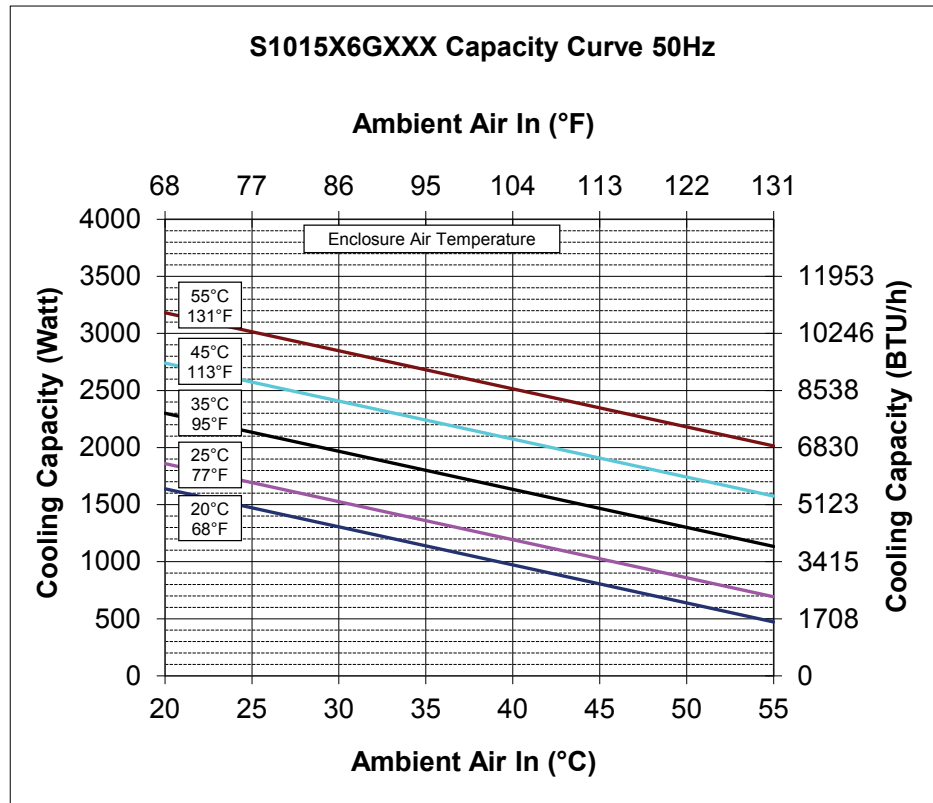
THREE MOUNTING OPTIONS

Unit Reference	1500W 115V	1500W 230V	1500W 400/460V 3~
Item number			
Indoor Model without Comm-Board	S101516G031	S101526G031	S101546G031
Indoor Model with Comm-Board	S101516G041	S101526G041	S101546G041
COOLING PERFORMANCE			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	1800	1800	1800
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%
ELECTRICAL DATA			
Rated Voltage (Volt)	115	230	400/460
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511			
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
ENCLOSURE PROTECTION			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
CONTROLLER			
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
SOUND LEVEL			
At 1 M (dBA)	73	73	73
UNIT CONSTRUCTION			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
UNIT DIMENSIONS			
Height (mm)	951	951	951
Width (mm)	400	400	400
Depth (mm)	260	260	260
Weight (kg)	43	43	43

SPECTRACOOL Slim Fit

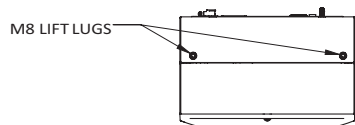
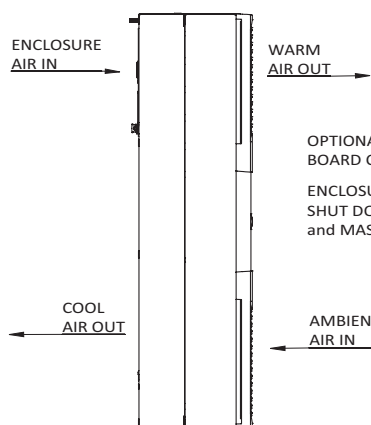
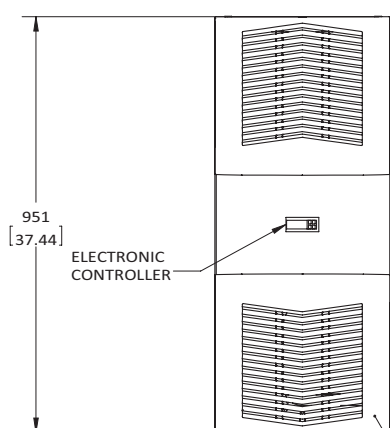
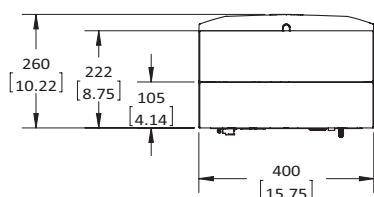
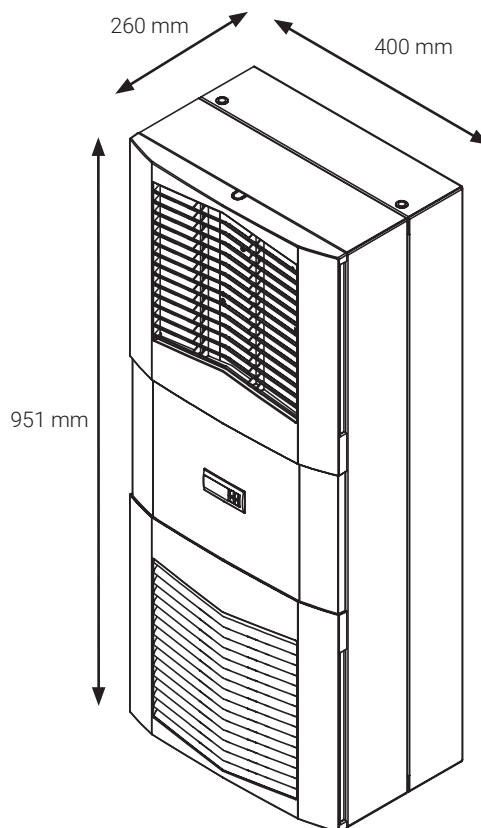
SPECTRACOOL SLIM FIT – 1500 WATT MODEL

PERFORMANCE CURVES FOR 1500W MODELS ACCORDING TO EN 14511

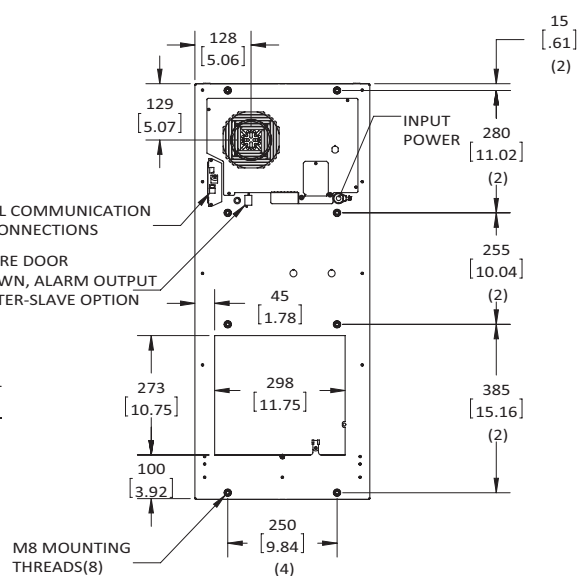


SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 1500 WATT MODEL

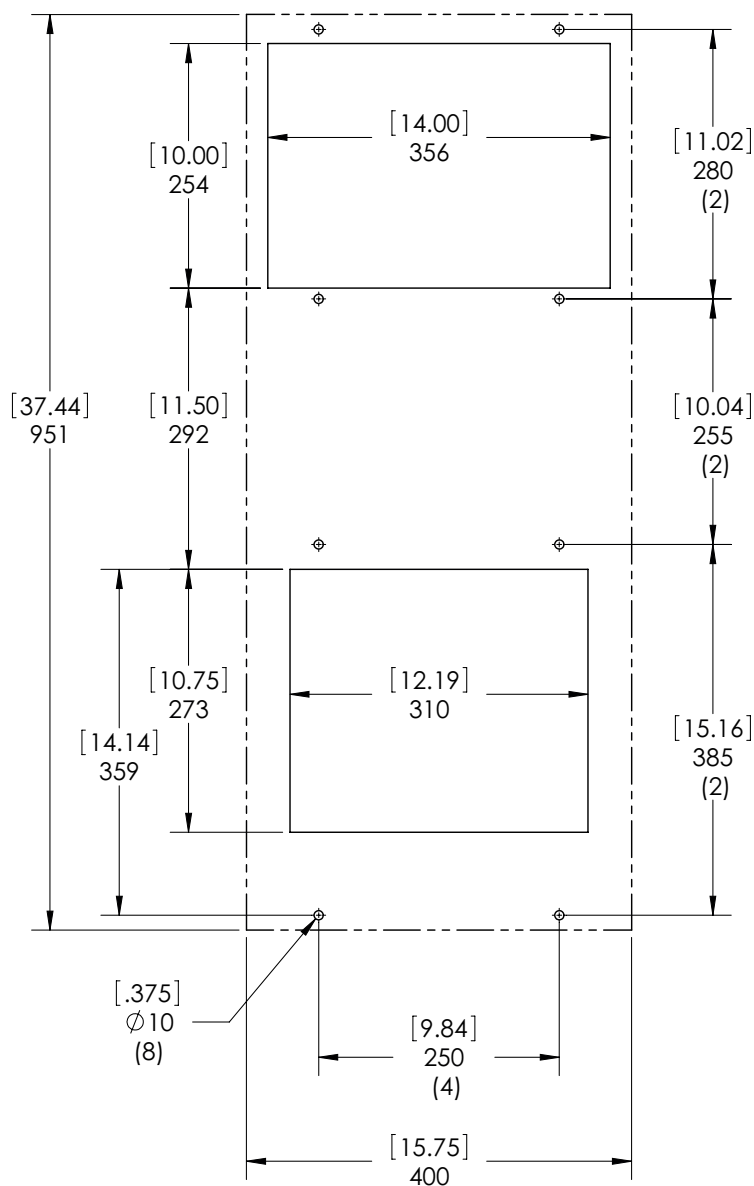


OPTIONAL, FIELD-INSTALLED, CLEANABLE REUSABLE, ALUMINUM INLET FILTER MOUNTS BEHIND PLASTIC LOUVER

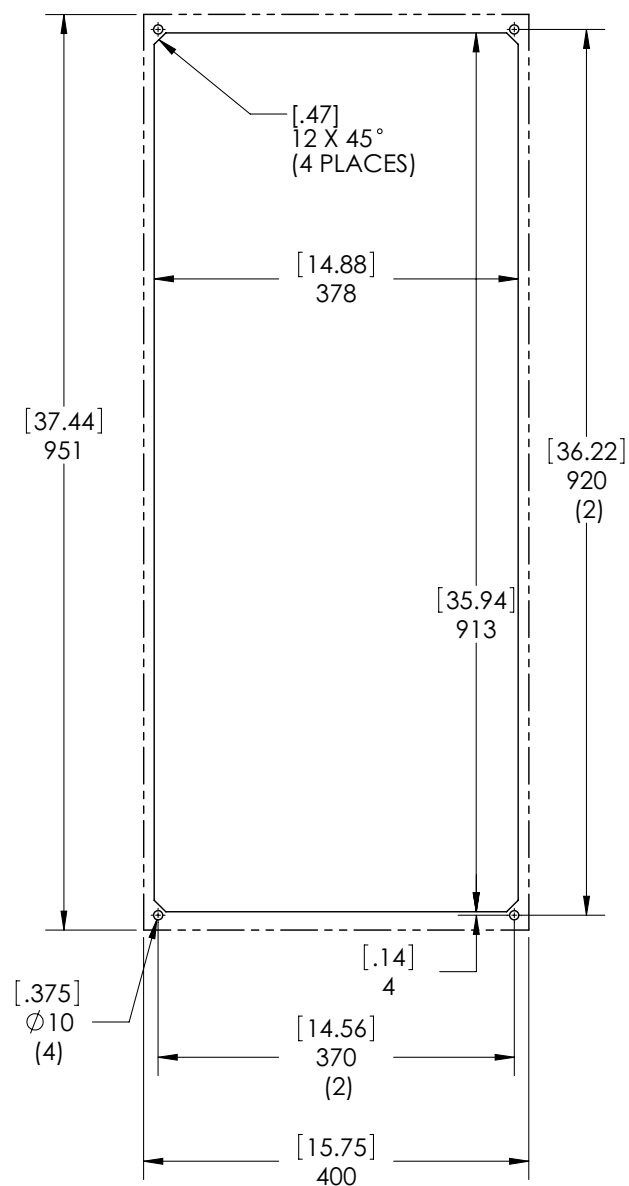


SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 1500 WATT MODEL



Surface Mount



Partial and Full Recess Mount

1500W CUTOUT DRAWING

Dashed Lines Represent The Air Conditioner

SPECTRACOOOL Slim Fit

SPECTRACOOOL SLIM FIT – 2000 WATT MODEL

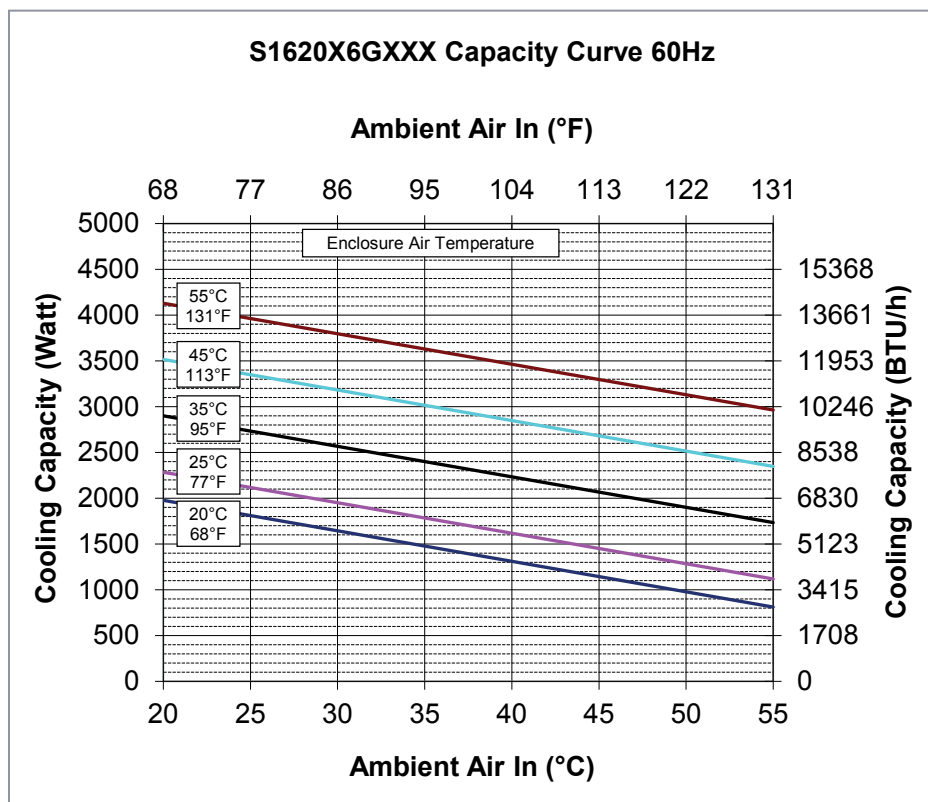
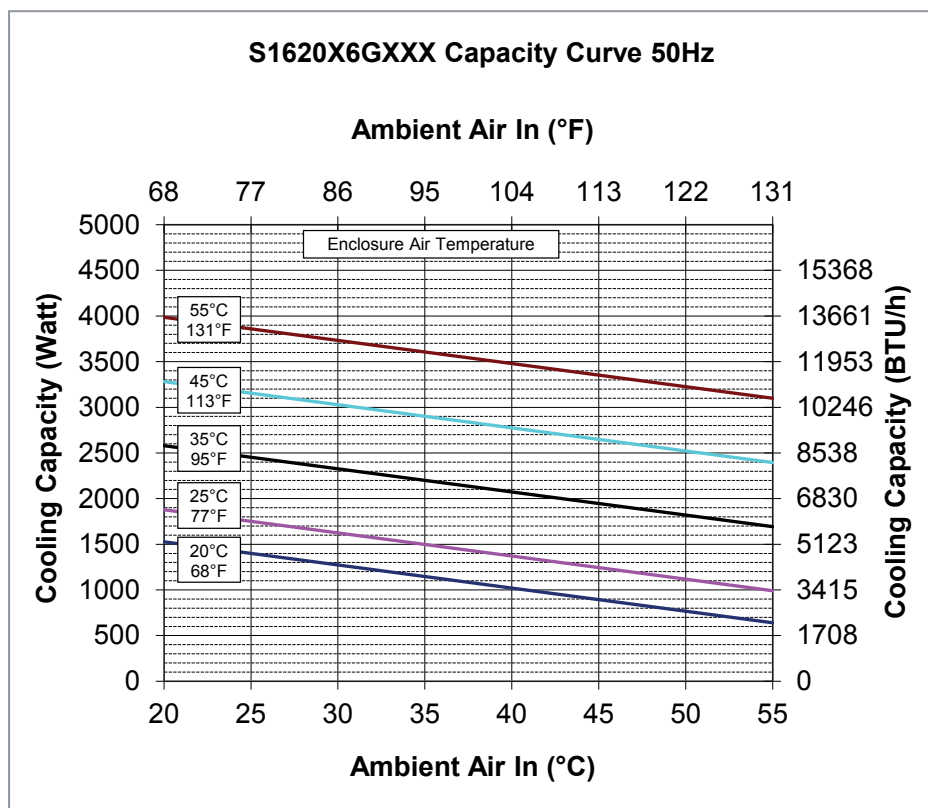
THREE MOUNTING OPTIONS

Unit Reference	2000W 115V	2000W 230V	2000W 400/460V 3~
Item Number			
Indoor Model without Comm-Board	S162016G031	S162026G031	S162046G031
Indoor Model with Comm-Board	S162016G041	S162026G041	S162046G041
COOLING PERFORMANCE			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	2200	2200	2200
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%
ELECTRICAL DATA			
Rated Voltage (Volt)	115	230	400/460
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511			
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
ENCLOSURE PROTECTION			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
CONTROLLER			
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
SOUND LEVEL			
At 1 M (dBA)	70	70	70
UNIT CONSTRUCTION			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
UNIT DIMENSIONS			
Height (mm)	1580	1580	1580
Width (mm)	400	400	400
Depth (mm)	295	295	295
Weight (kg)	68	68	68

SPECTRACOOL Slim Fit

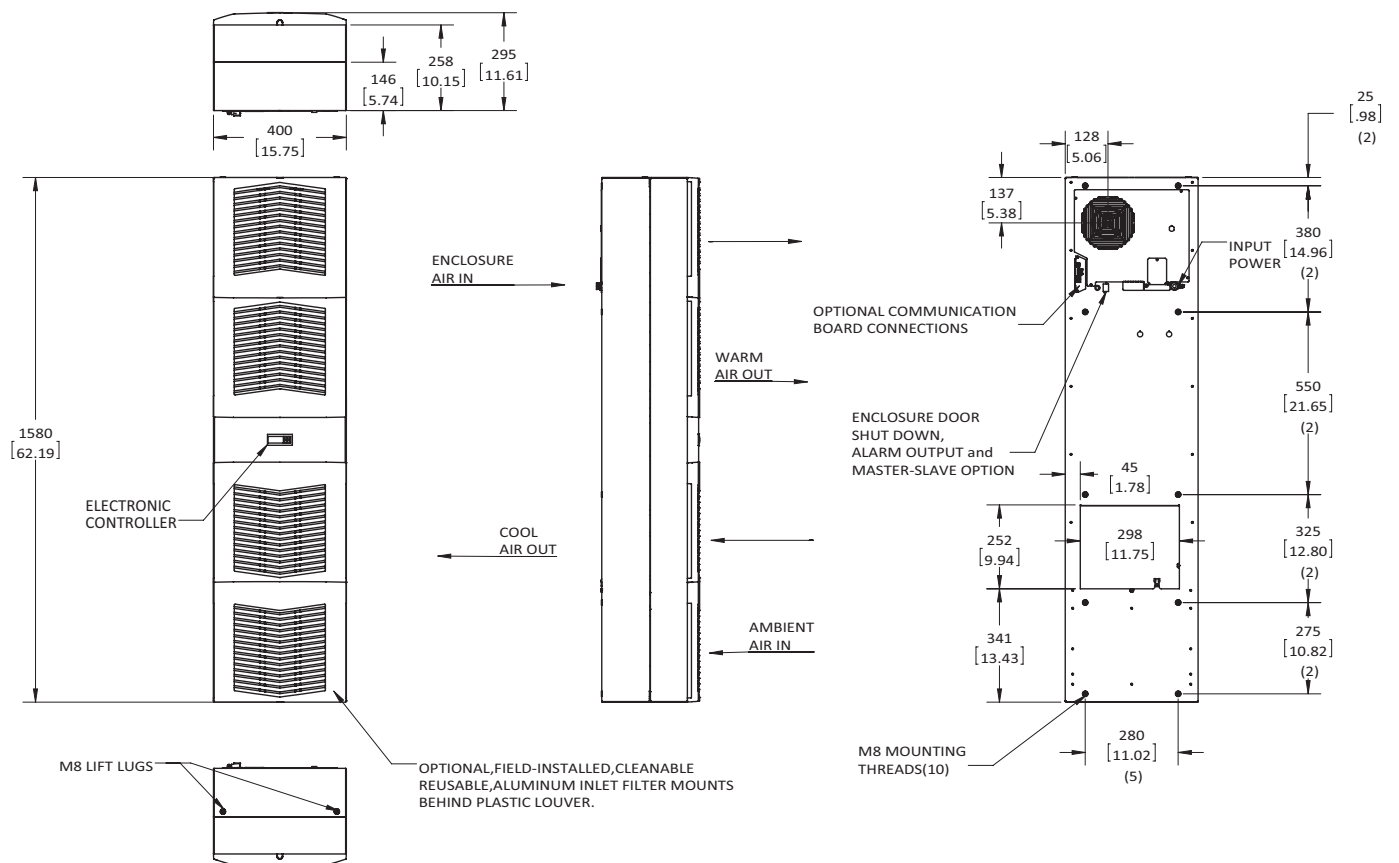
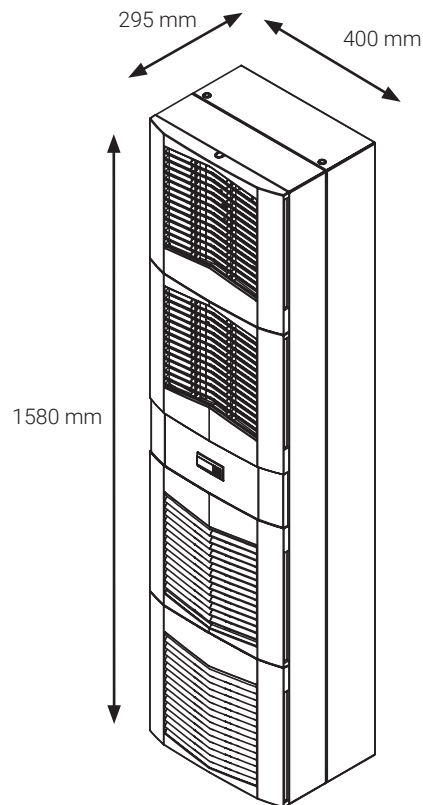
SPECTRACOOL SLIM FIT – 2000 WATT MODEL

PERFORMANCE CURVES FOR 2000W MODELS ACCORDING TO EN 14511



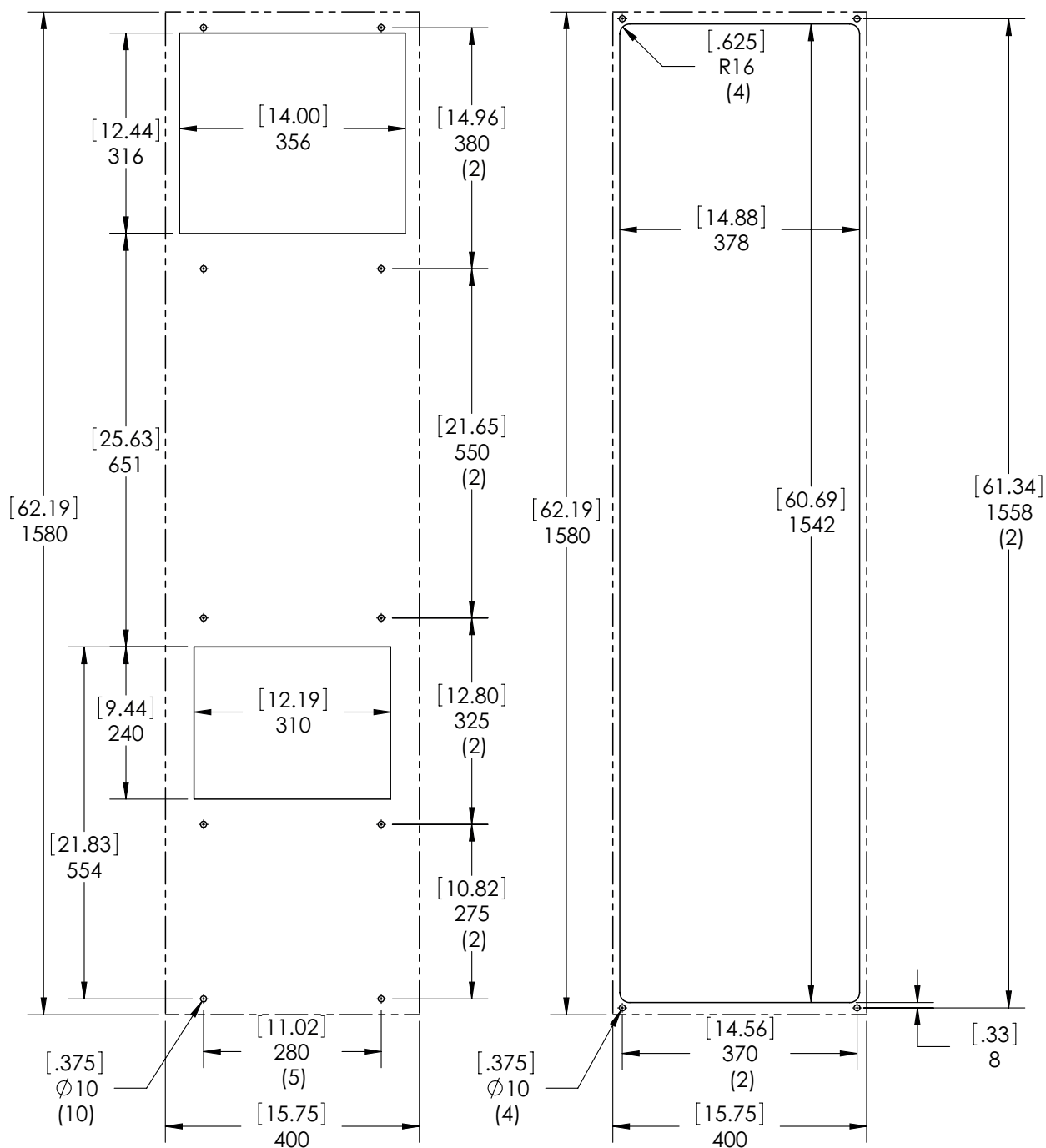
SPECTRACOOL Slim Fit

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

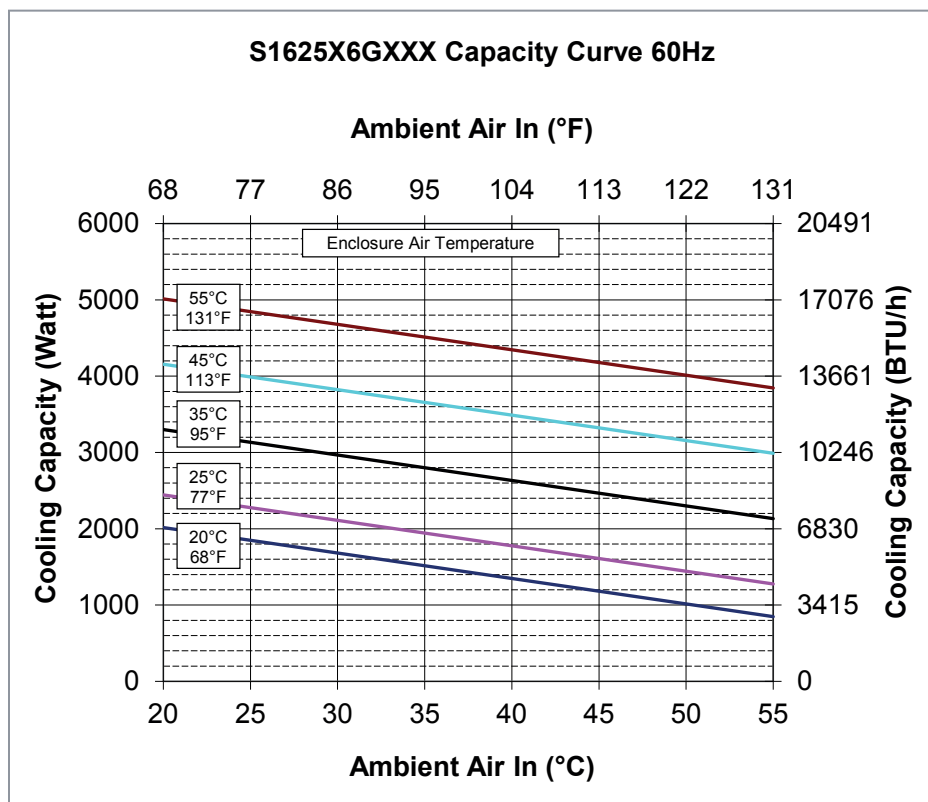
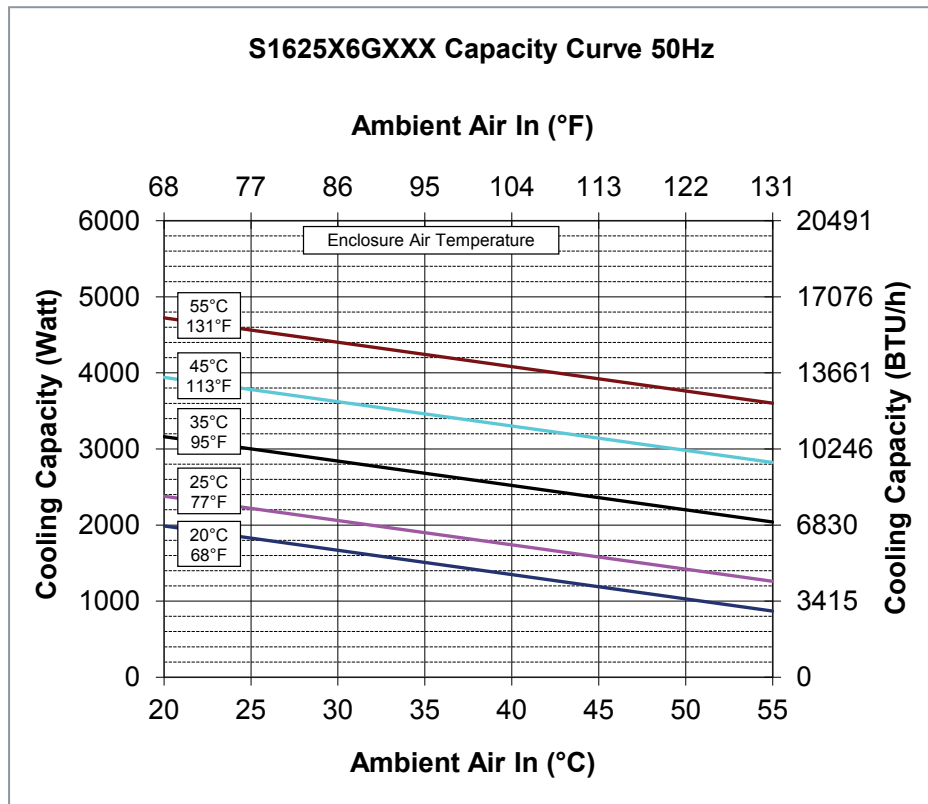
THREE MOUNTING OPTIONS

Unit Reference	2500W 115V	2500W 230V	2500W 400/460V 3~
Item number			
Indoor Model without Comm-Board	S162516G031	S162526G031	S162546G031
Indoor Model with Comm-Board	S162516G041	S162526G041	S162546G041
COOLING PERFORMANCE			
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)	2680	2680	2680
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%
ELECTRICAL DATA			
Rated Voltage (Volt)	115	230	400/460
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
PERFORMANCE FACTOR (EER), 50/60Hz, DIN EN 14511			
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
ENCLOSURE PROTECTION			
IP Code (External Loop/Internal Loop)	IP34/IP54	IP34/IP54	IP34/IP54
CONTROLLER			
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
SOUND LEVEL			
At 1 M (dBA)	72	72	72
UNIT CONSTRUCTION			
Material	Steel	Steel	Steel
Finish	RAL 7035	RAL 7035	RAL 7035
UNIT DIMENSIONS			
Height (mm)	1580	1580	1580
Width (mm)	400	400	400
Depth (mm)	295	295	295
Weight (kg)	70	70	70

SPECTRACOOL Slim Fit

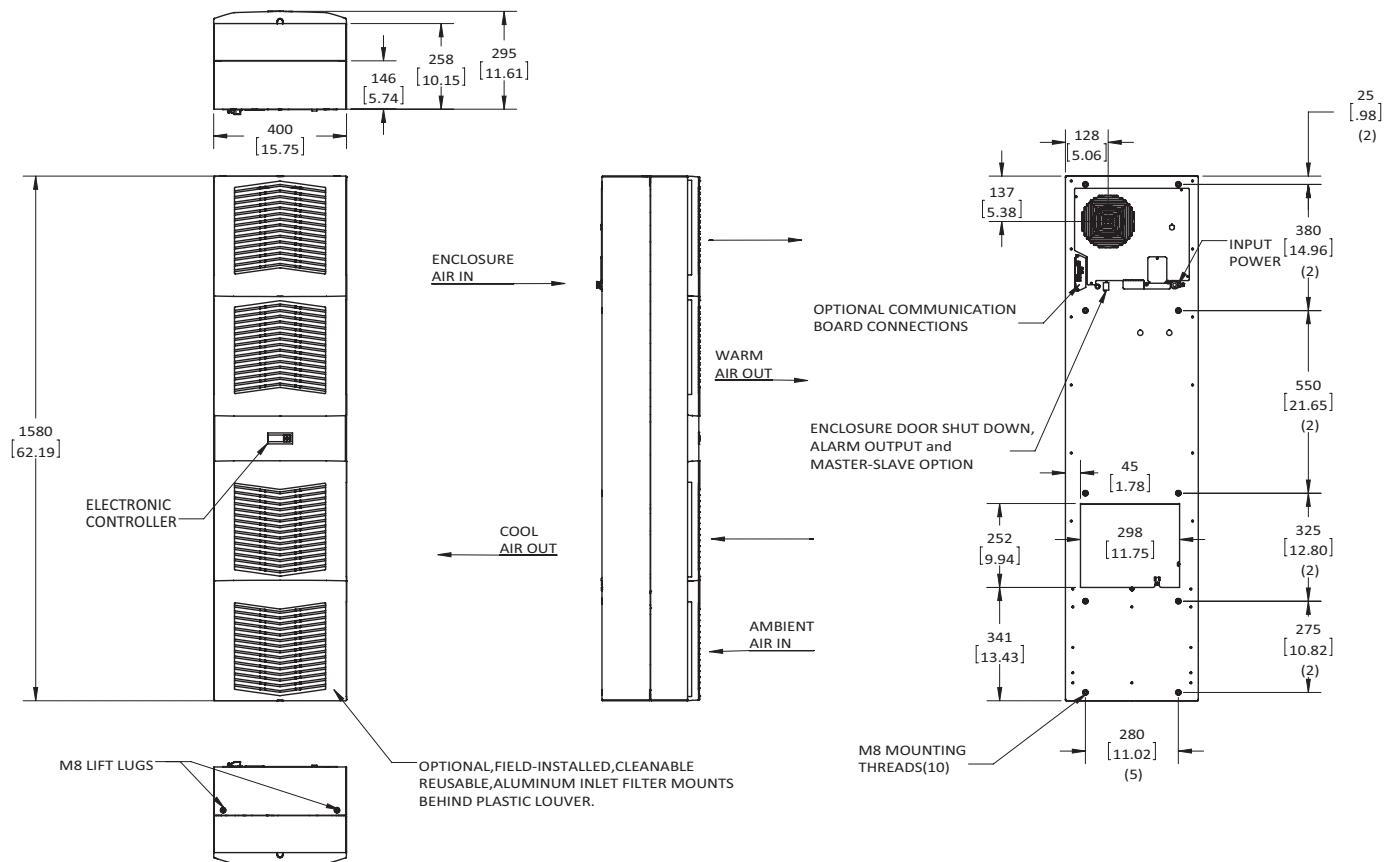
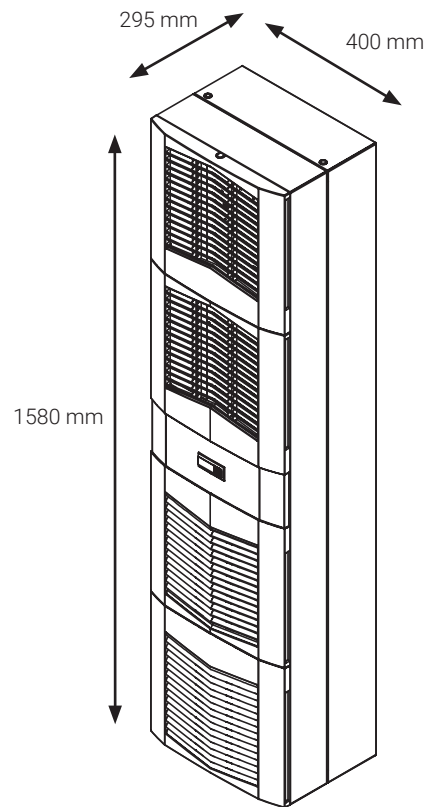
SPECTRACOOL SLIM FIT – 2500 WATT MODEL

PERFORMANCE CURVES FOR 2500W MODELS ACCORDING TO EN 14511



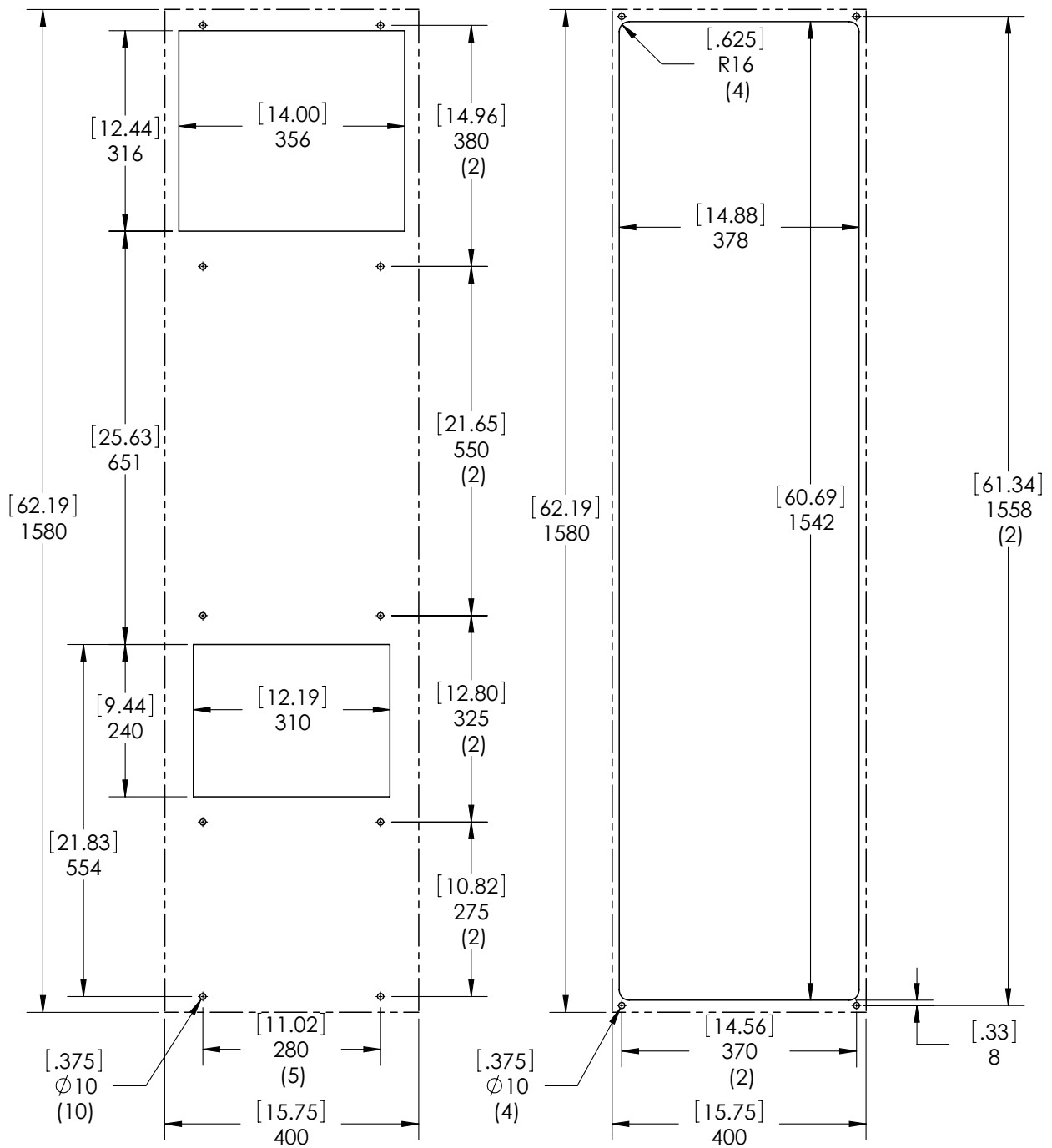
SPECTRACOOL Slim Fit

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

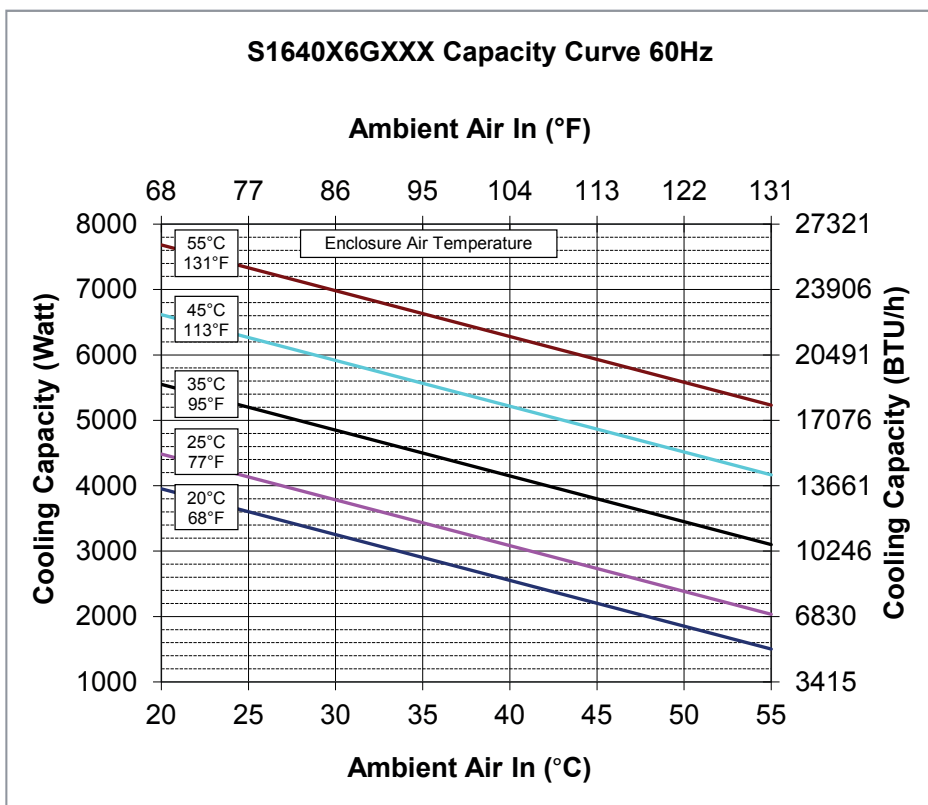
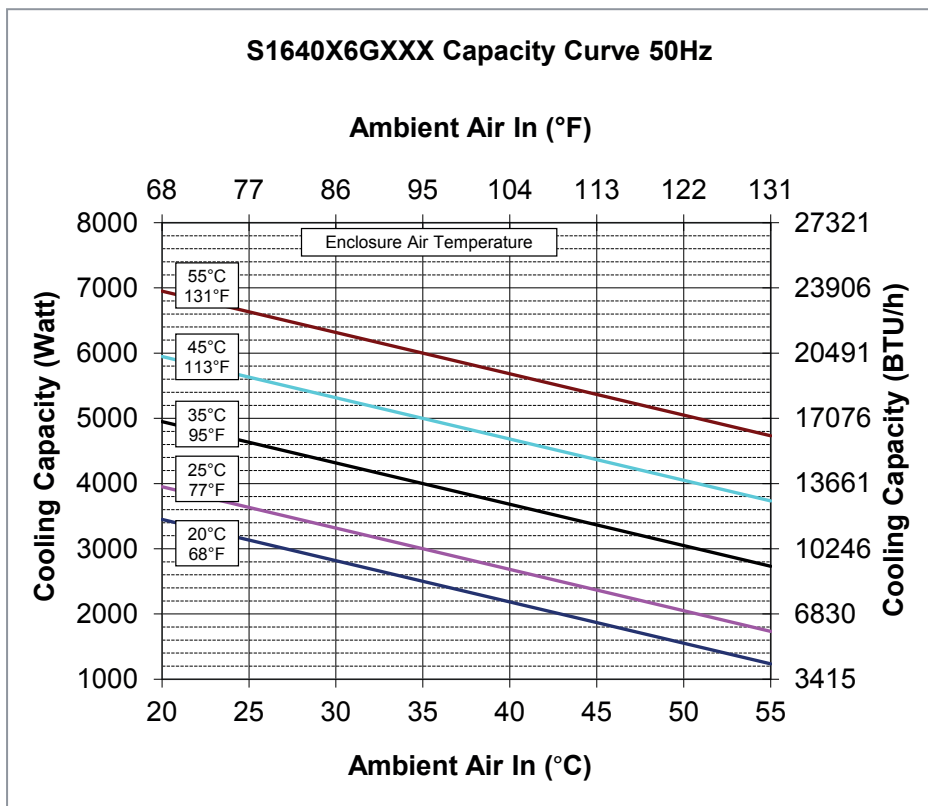
TWO MOUNTING OPTIONS: SURFACE AND PARTIAL RECESS MOUNT

Unit Reference		4000W 400/460V 3~
Item number		
Indoor Model without Comm-Board		S164046G031
Indoor Model with Comm-Board		S164046G041
COOLING PERFORMANCE		
Total L35 L35, 50Hz, according to DIN EN 14511 (Watt)		4000
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)		400/460
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

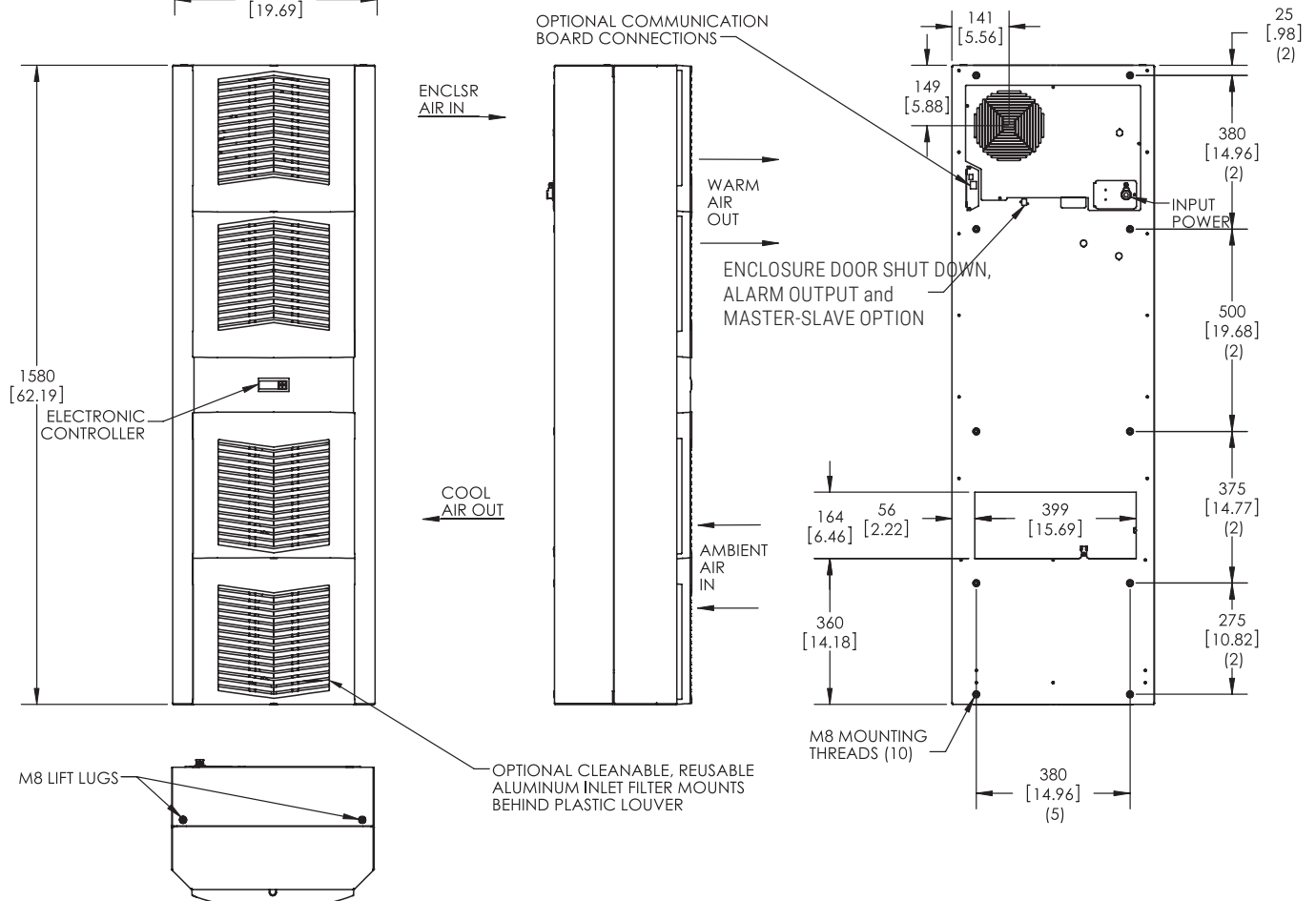
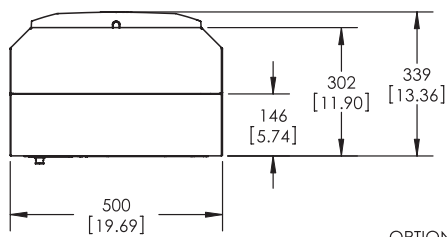
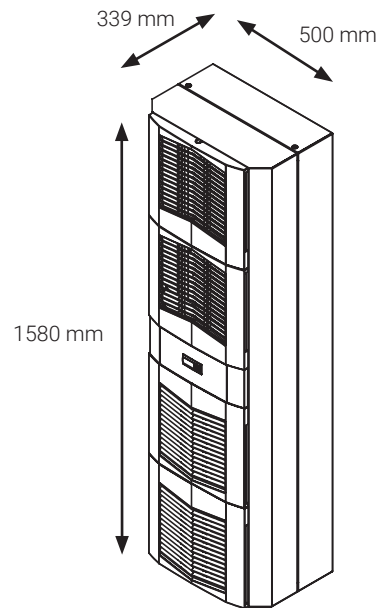
SPECTRACOOL SLIM FIT – 4000 WATT MODEL

PERFORMANCE CURVES FOR 4000W MODELS ACCORDING TO EN 14511



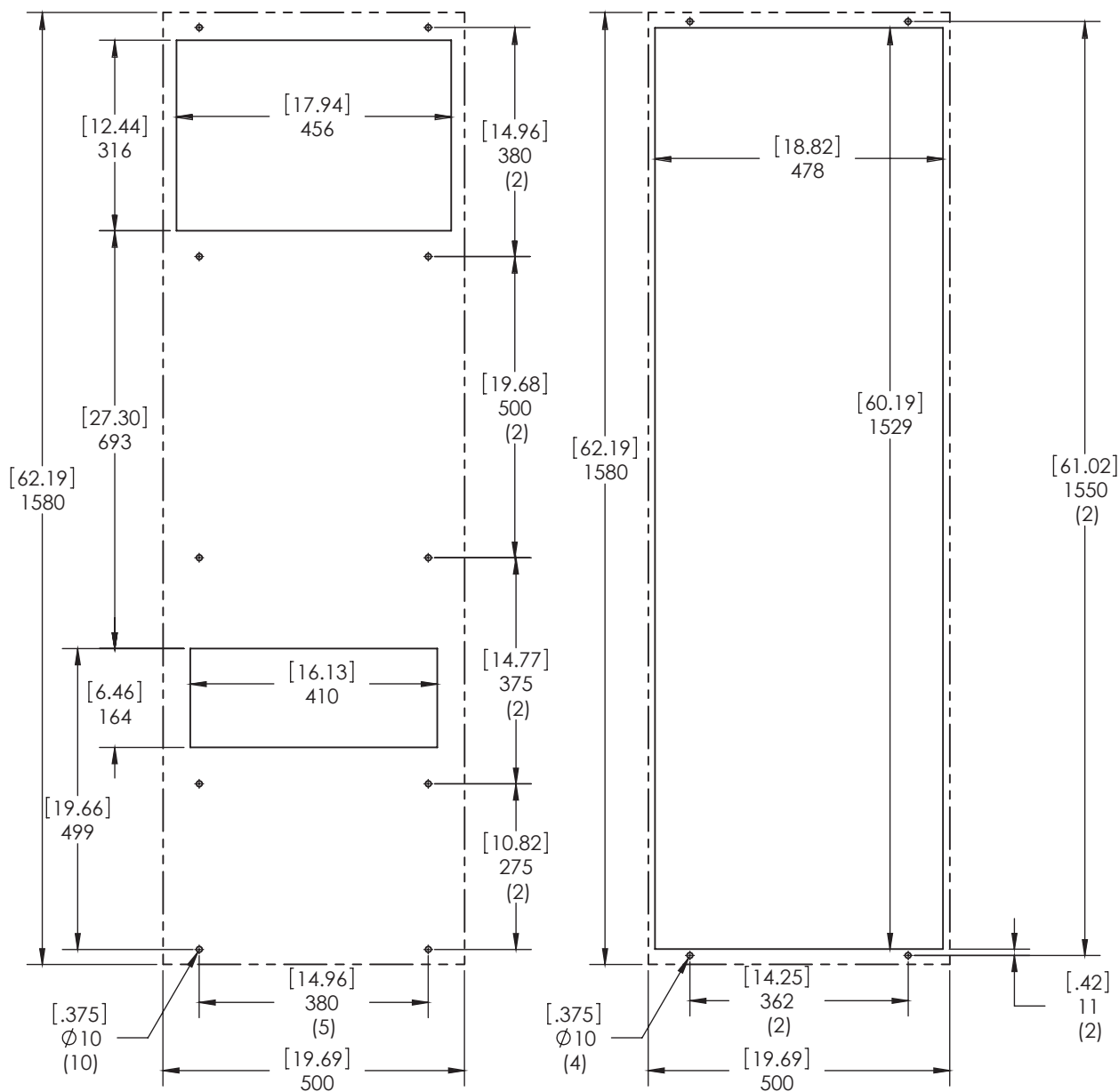
SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 4000 WATT MODEL



SPECTRACOOL Slim Fit

SPECTRACOOL SLIM FIT – 4000 WATT MODEL



Surface Mount

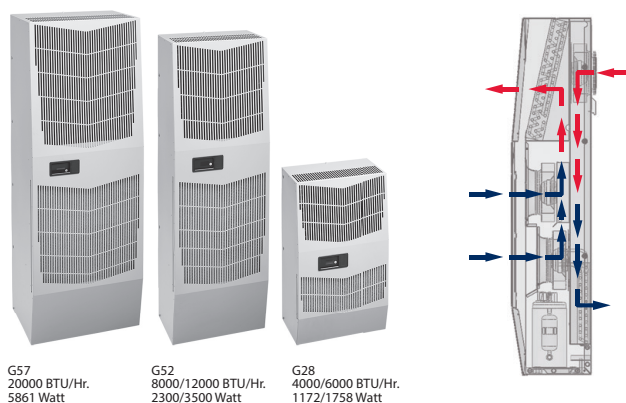
Partial Recess Mount

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

- 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

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

SPECTRACOOOL Indoor/Outdoor G-Series

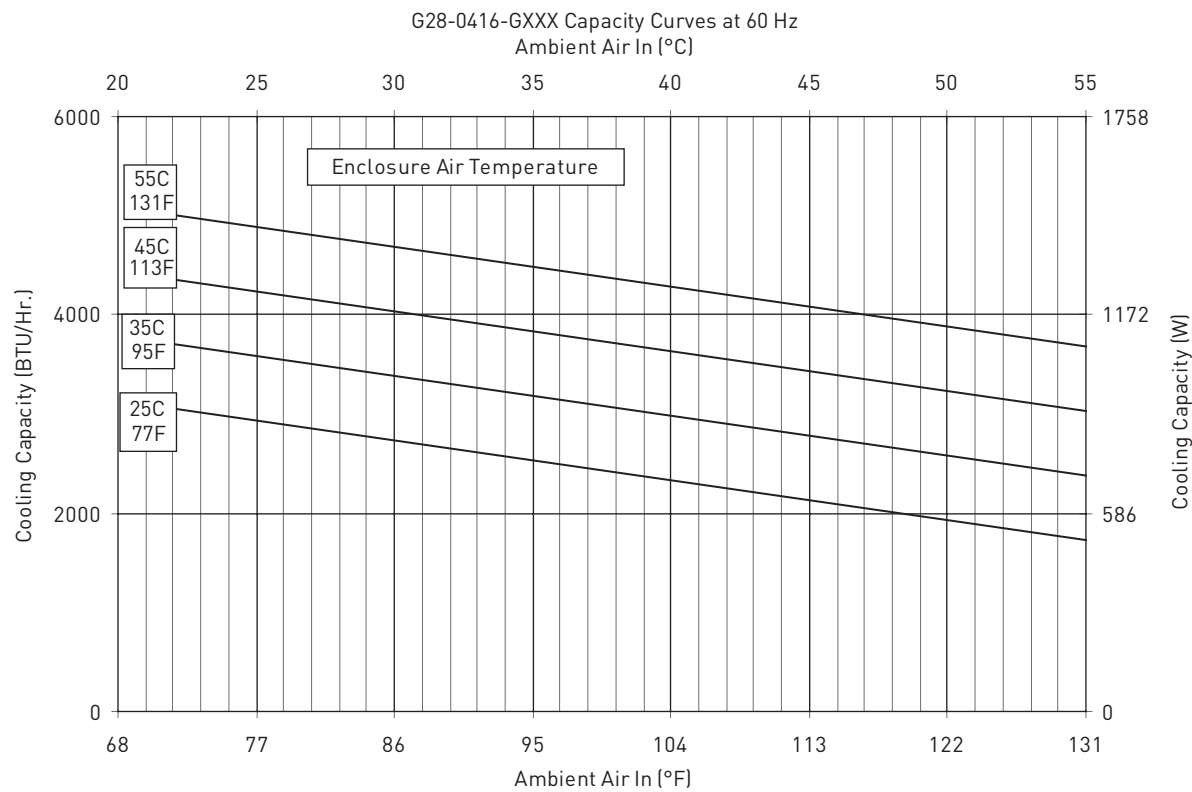
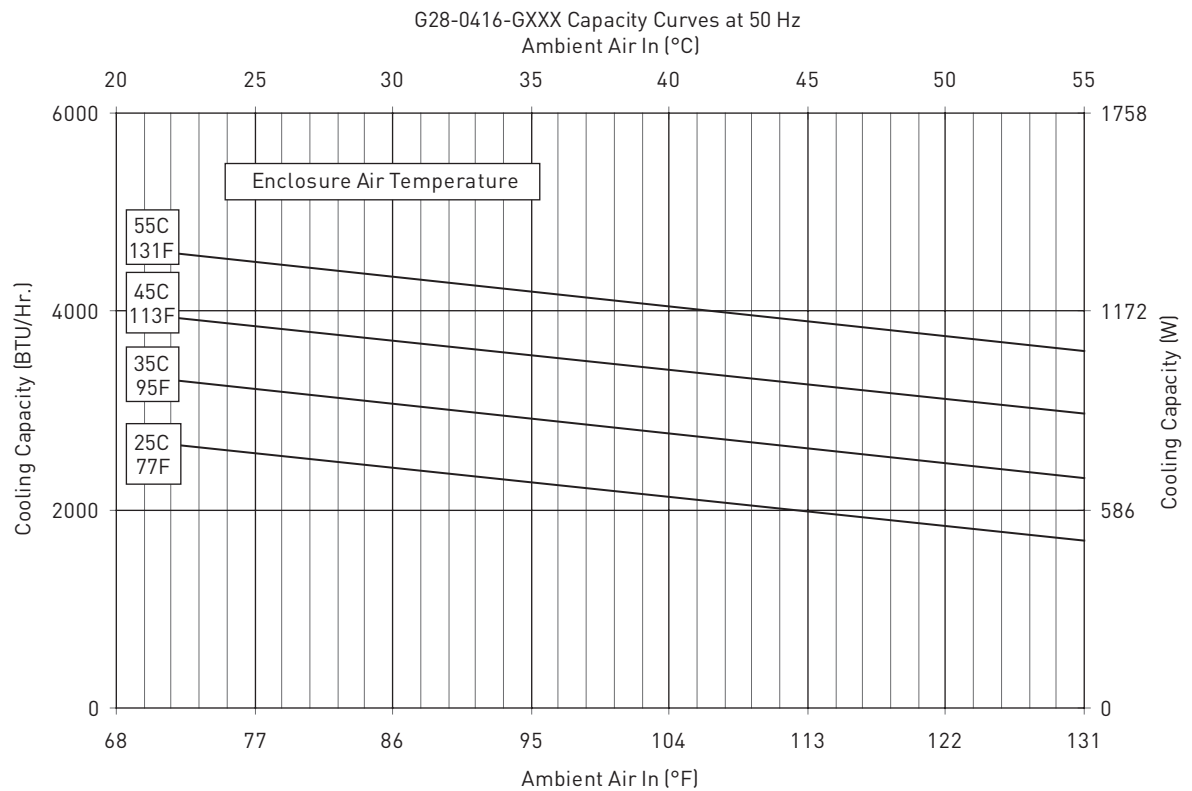
PERFORMANCE DATA G28 MODELS 4000/6000 BTU/HR. (1172/1758 WATT)

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						
Outdoor Model with Heat Pkg.	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 SPECTRACOOOL to be mounted to GENESIS M28 air conditioner cutout Catalog Number PLM28G28				
EASYSWAP Adaptor Plenum (T-Series T29)		Enables SPECTRACOOOL 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./ka)	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.

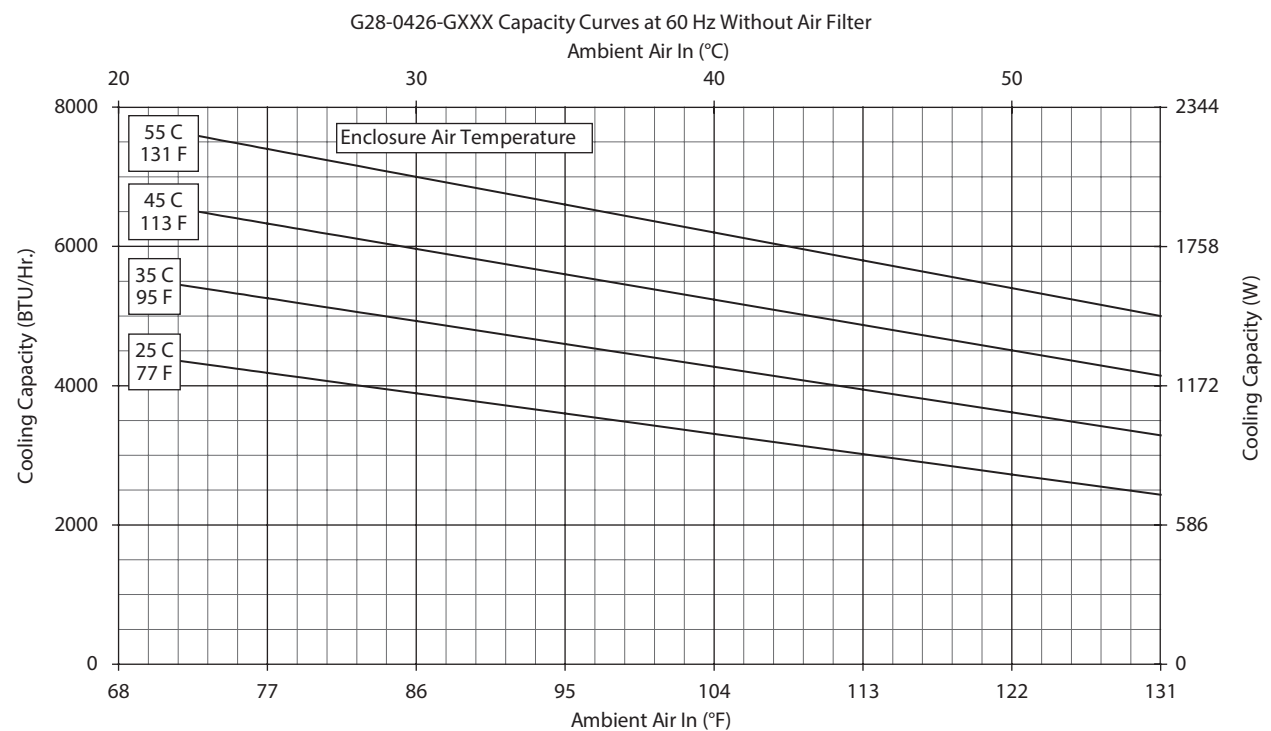
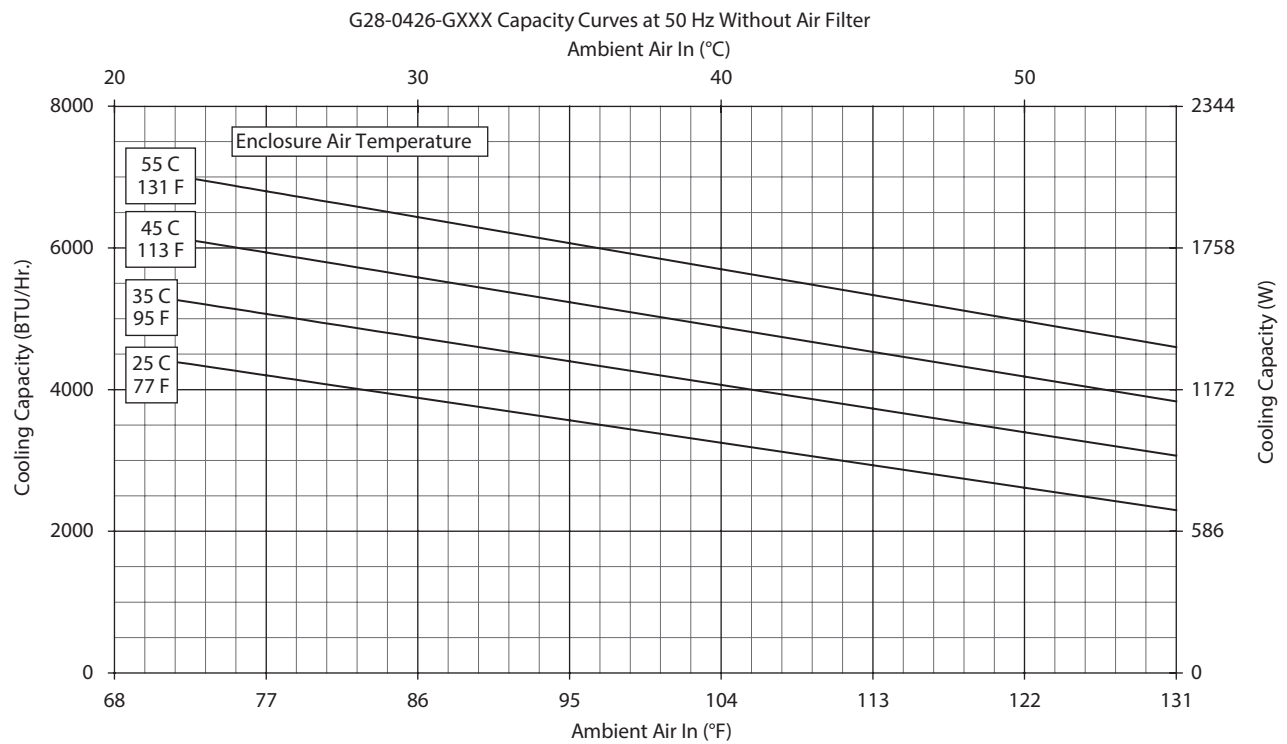
SPECTRACOOL Indoor/Outdoor G-Series

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



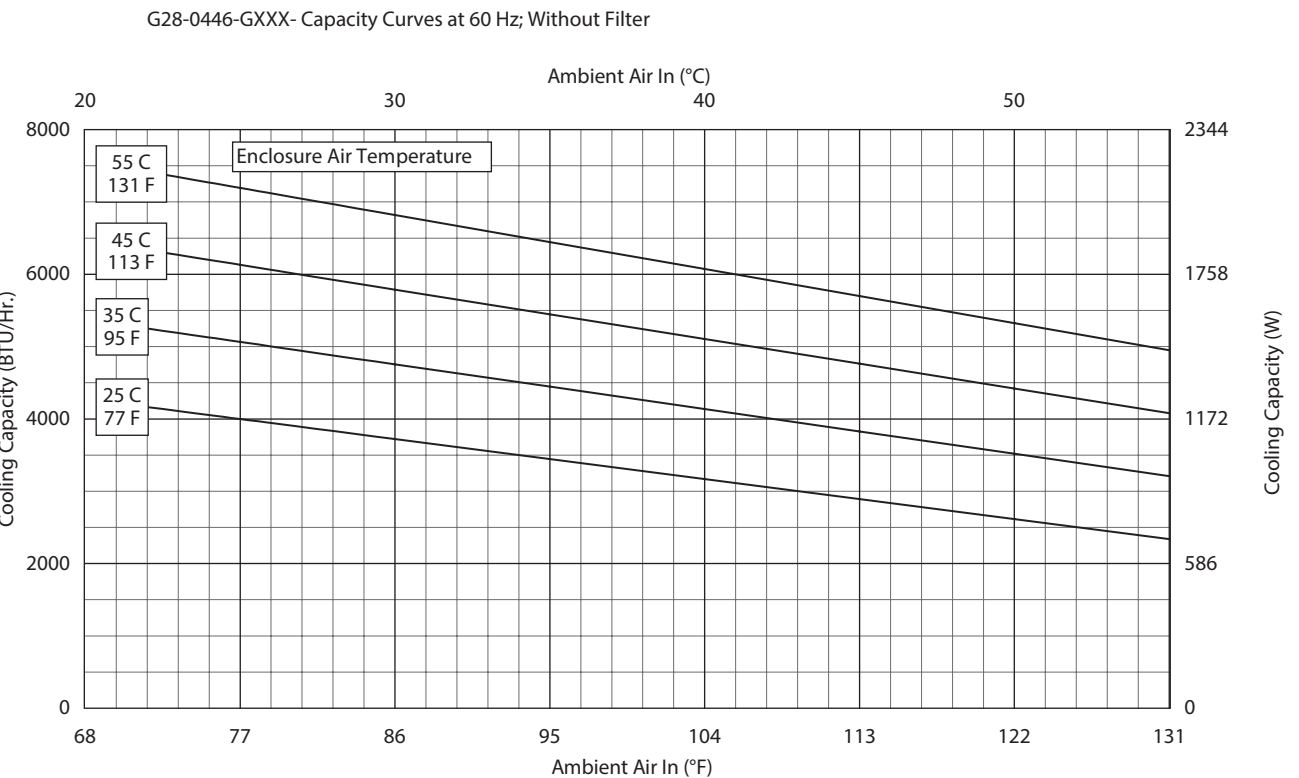
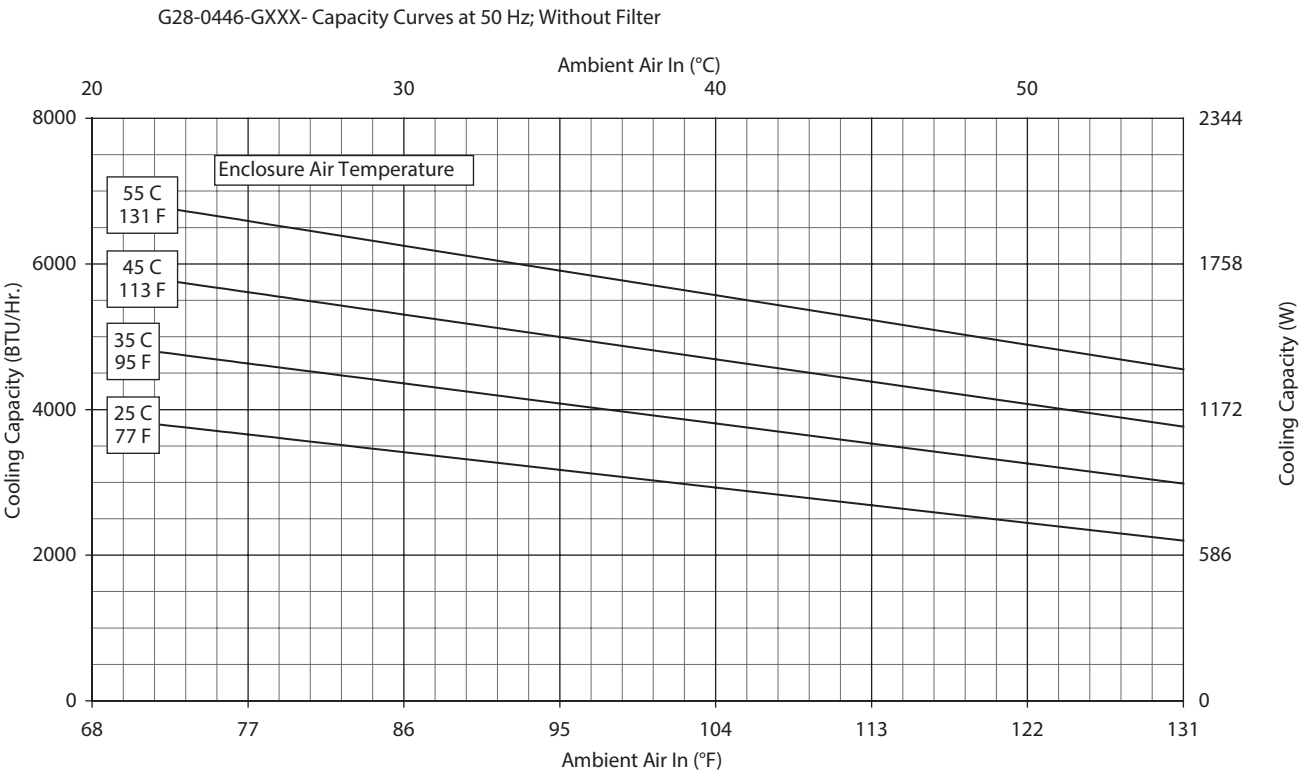
SPECTRACOOL Indoor/Outdoor G-Series

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



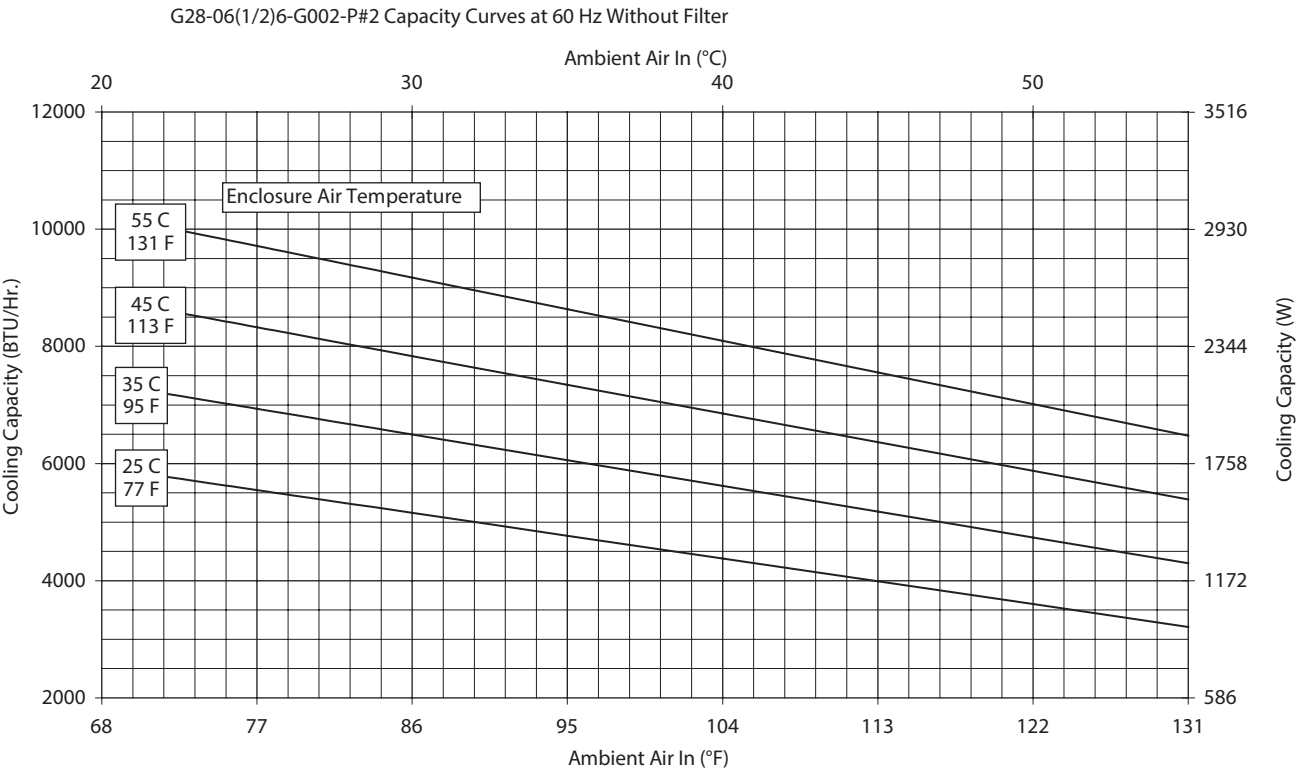
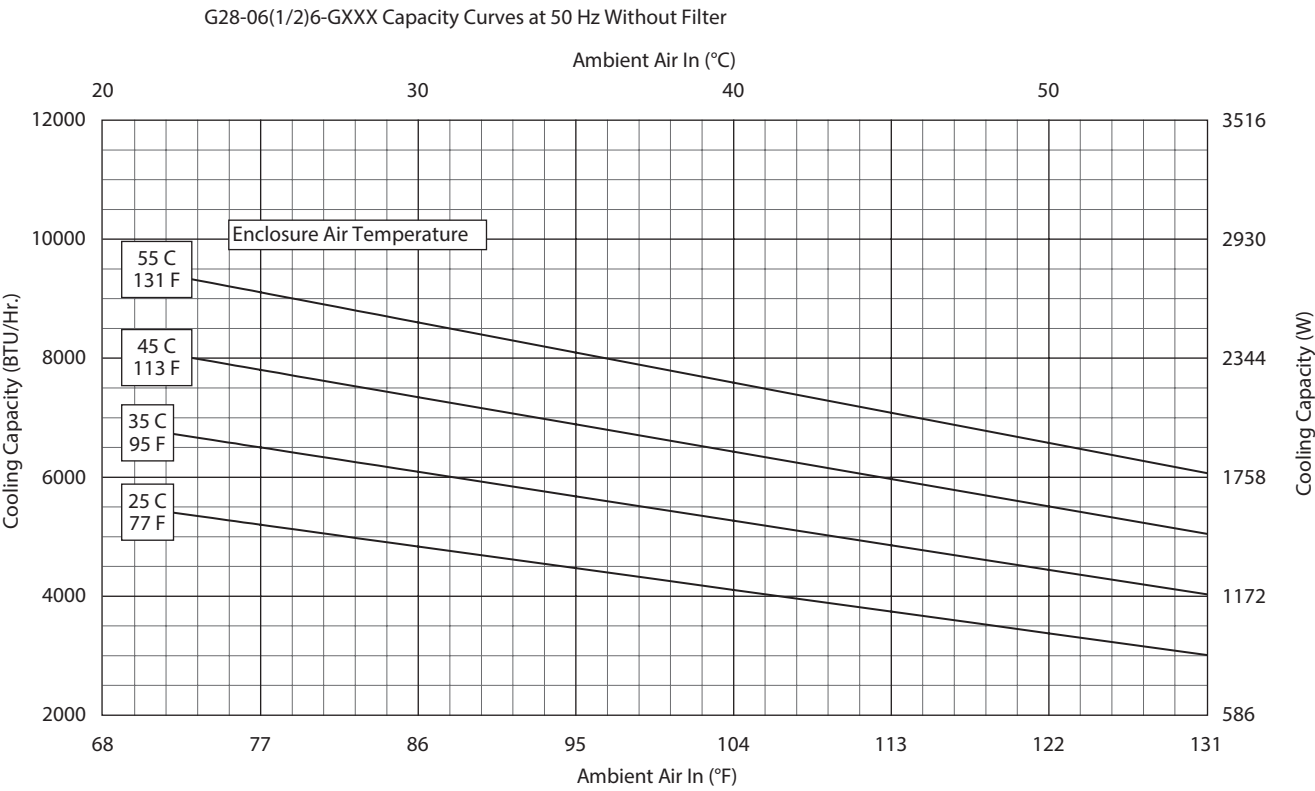
SPECTRACOOL Indoor/Outdoor G-Series

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



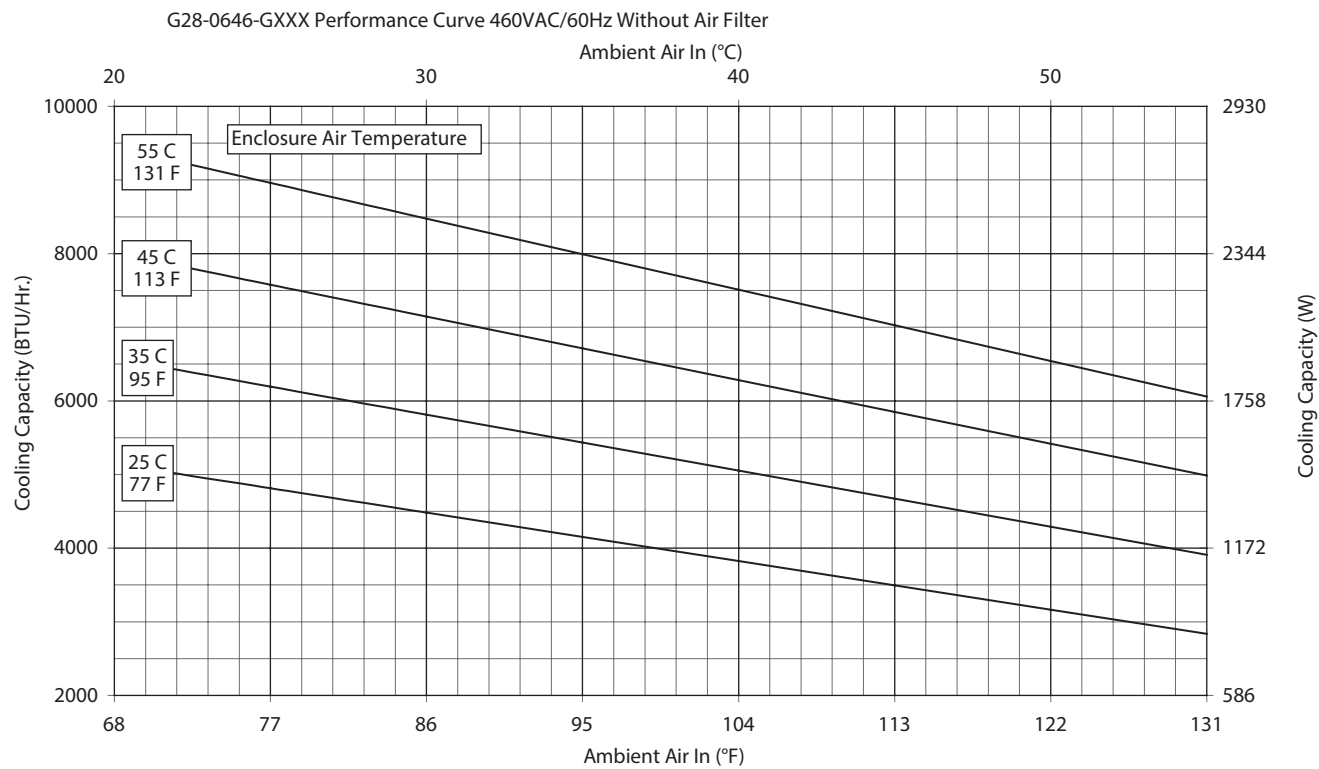
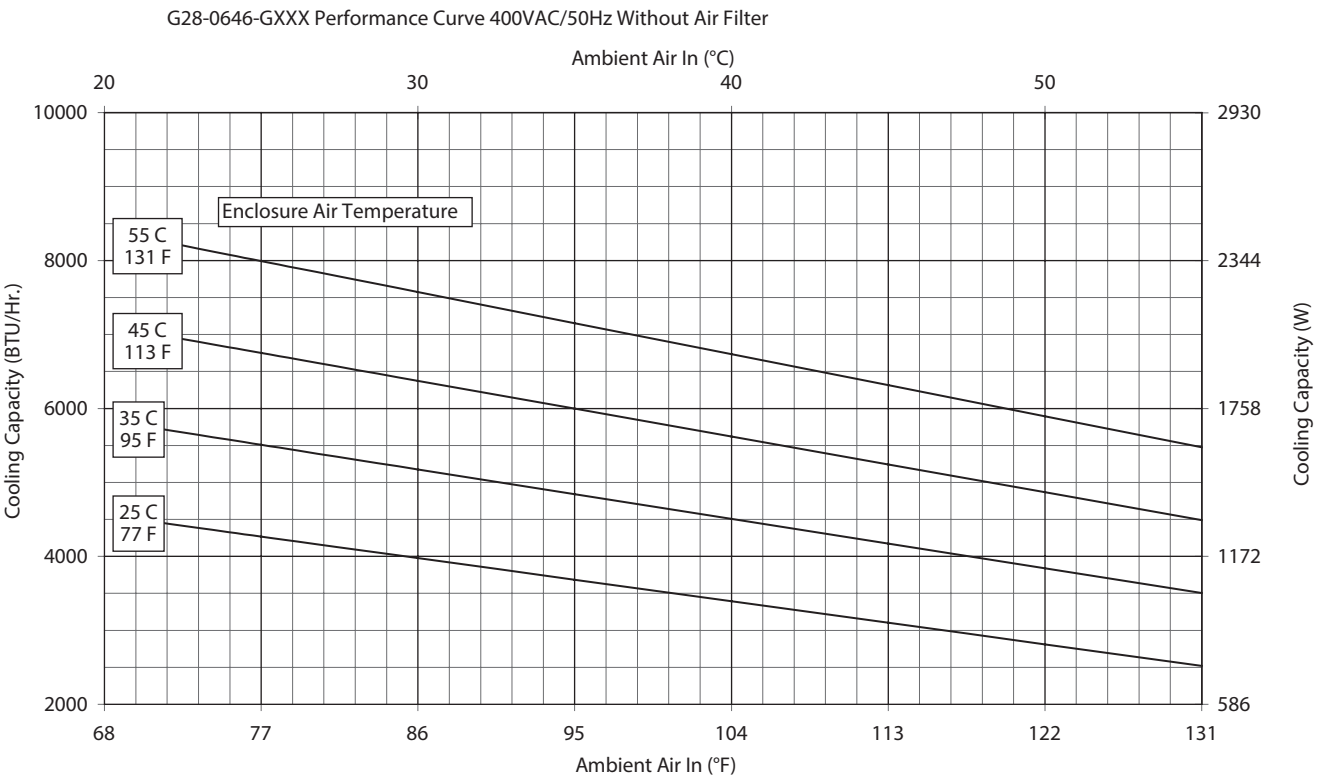
SPECTRACOOL Indoor/Outdoor G-Series

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



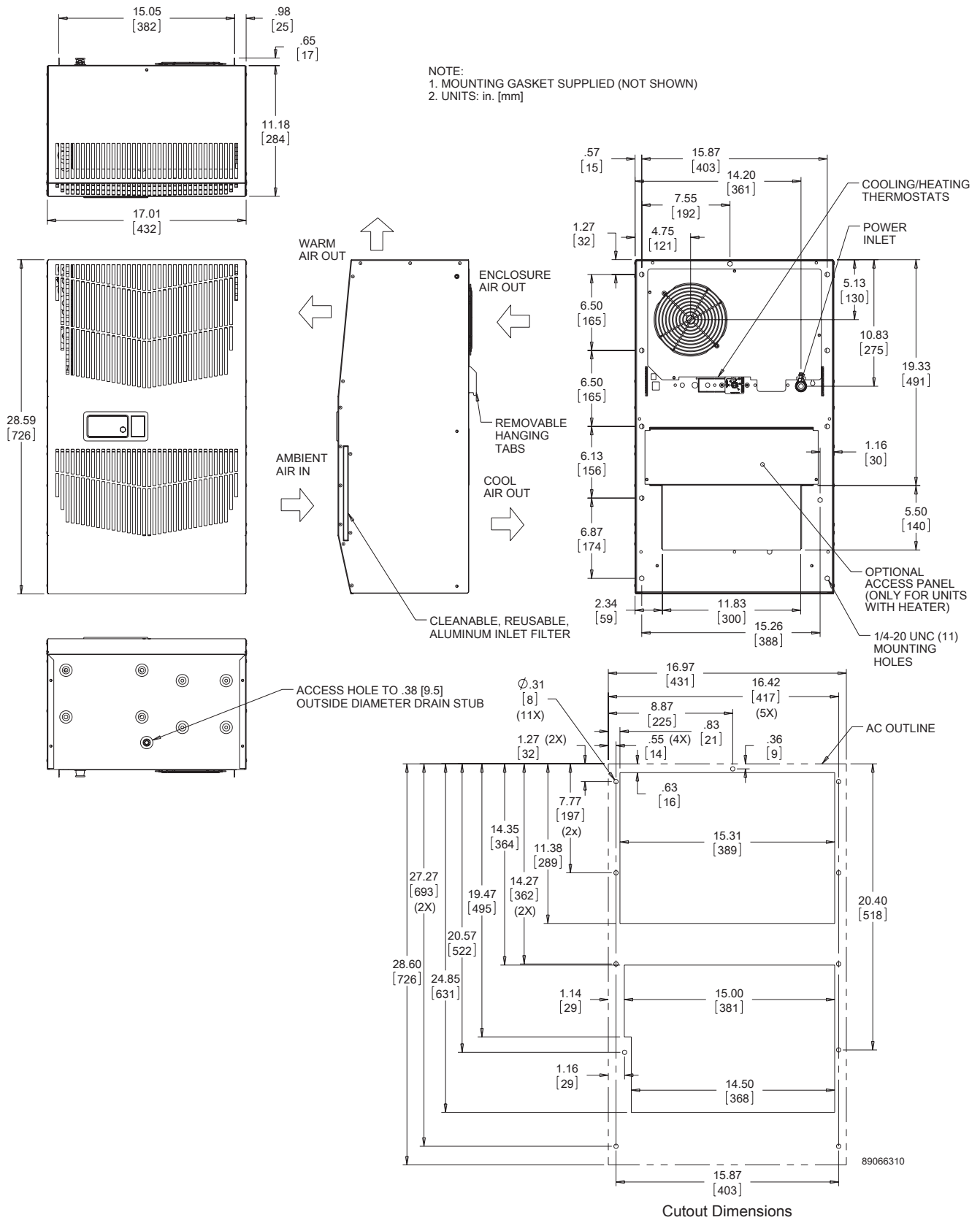
SPECTRACOOL Indoor/Outdoor G-Series

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



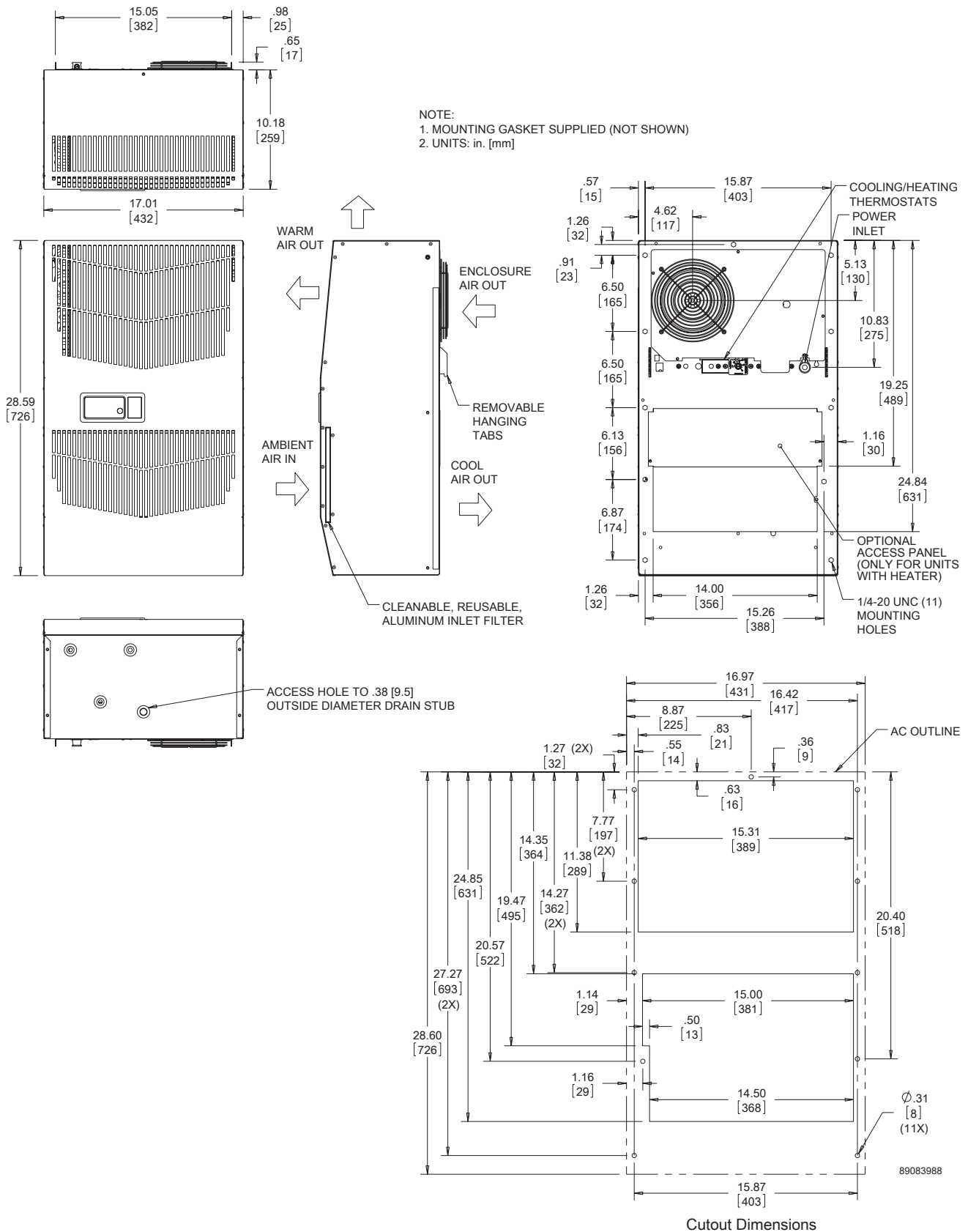
SPECTRACOOL Indoor/Outdoor G-Series

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



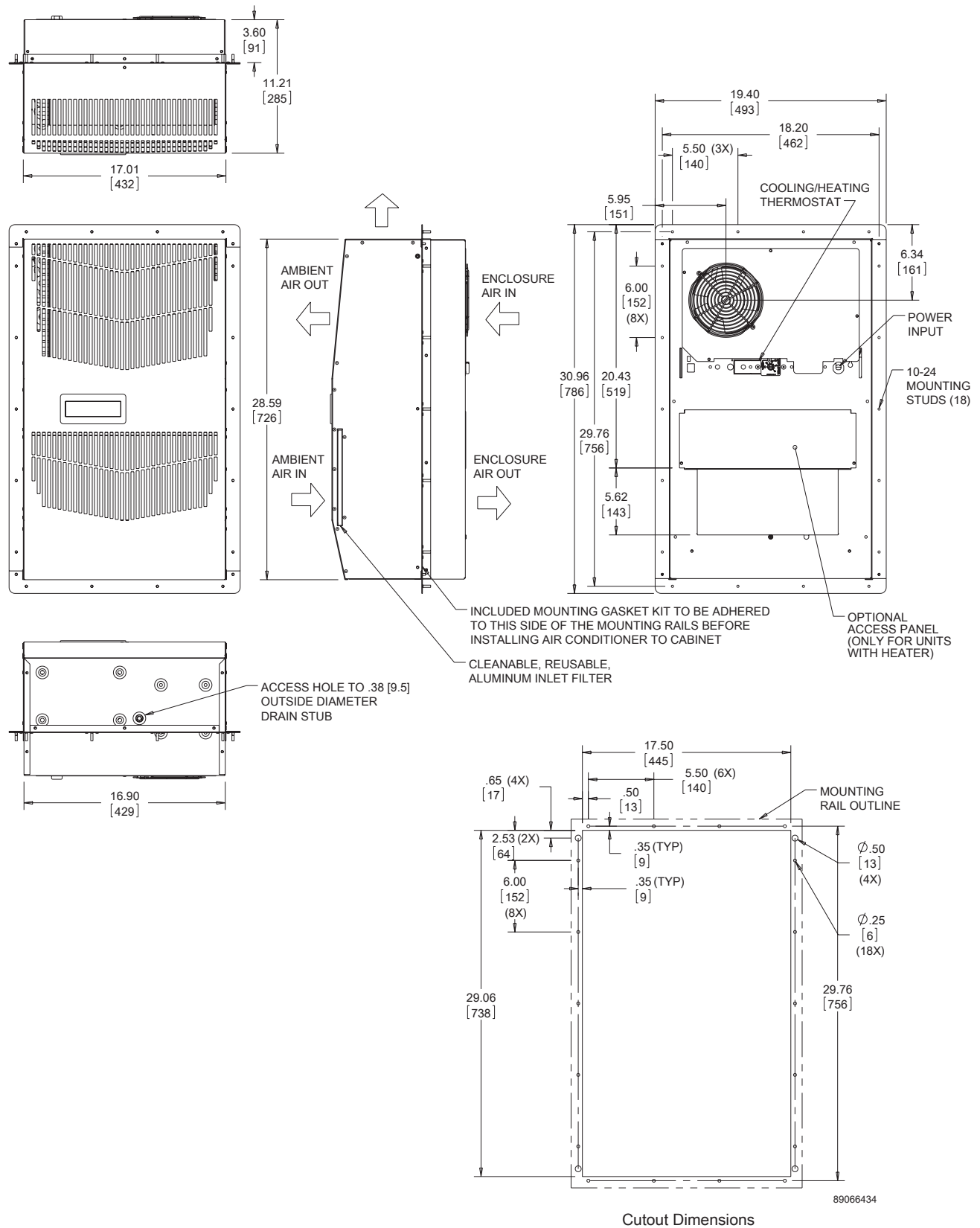
SPECTRACOOL Indoor/Outdoor G-Series

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



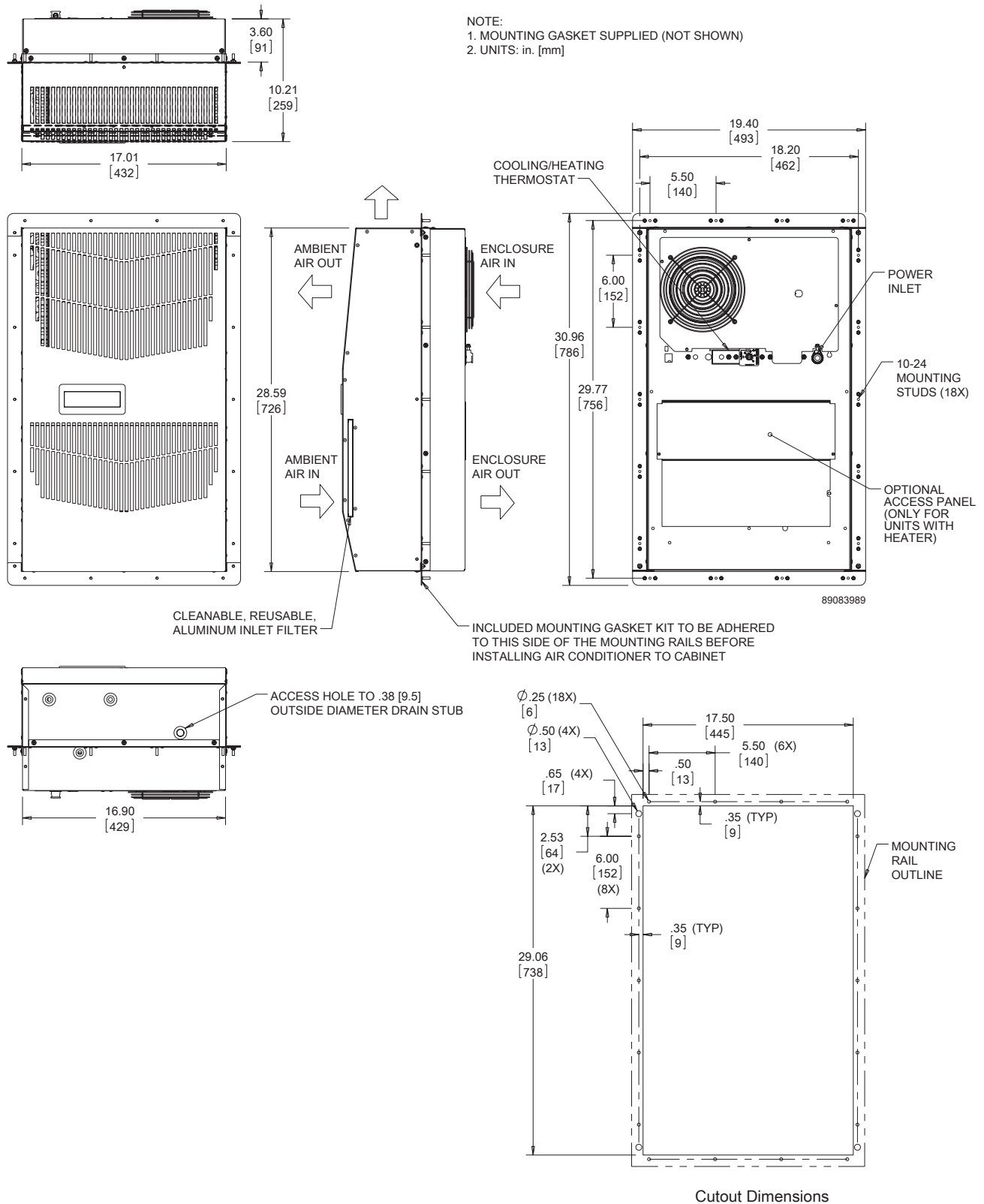
SPECTRACOOL Indoor/Outdoor G-Series

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



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 :

SPECTRACOOL Indoor/Outdoor G-Series

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

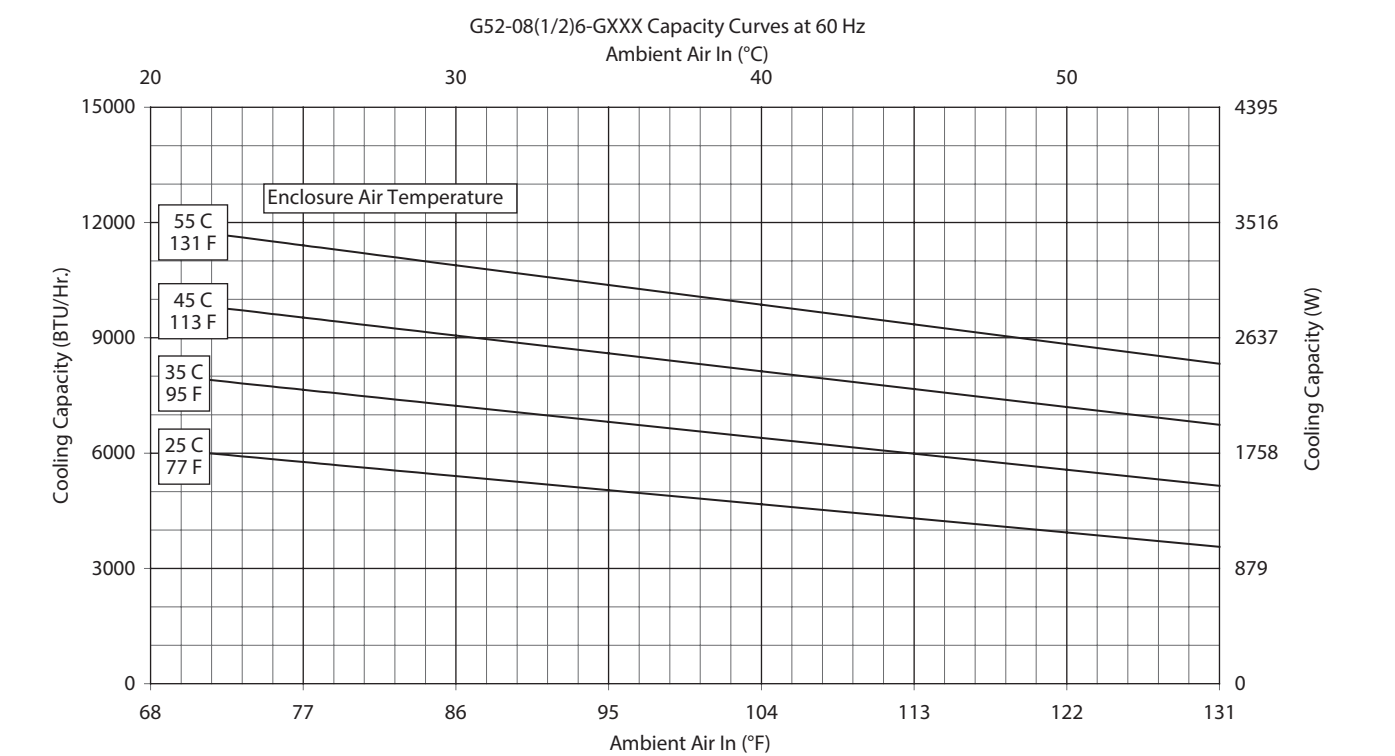
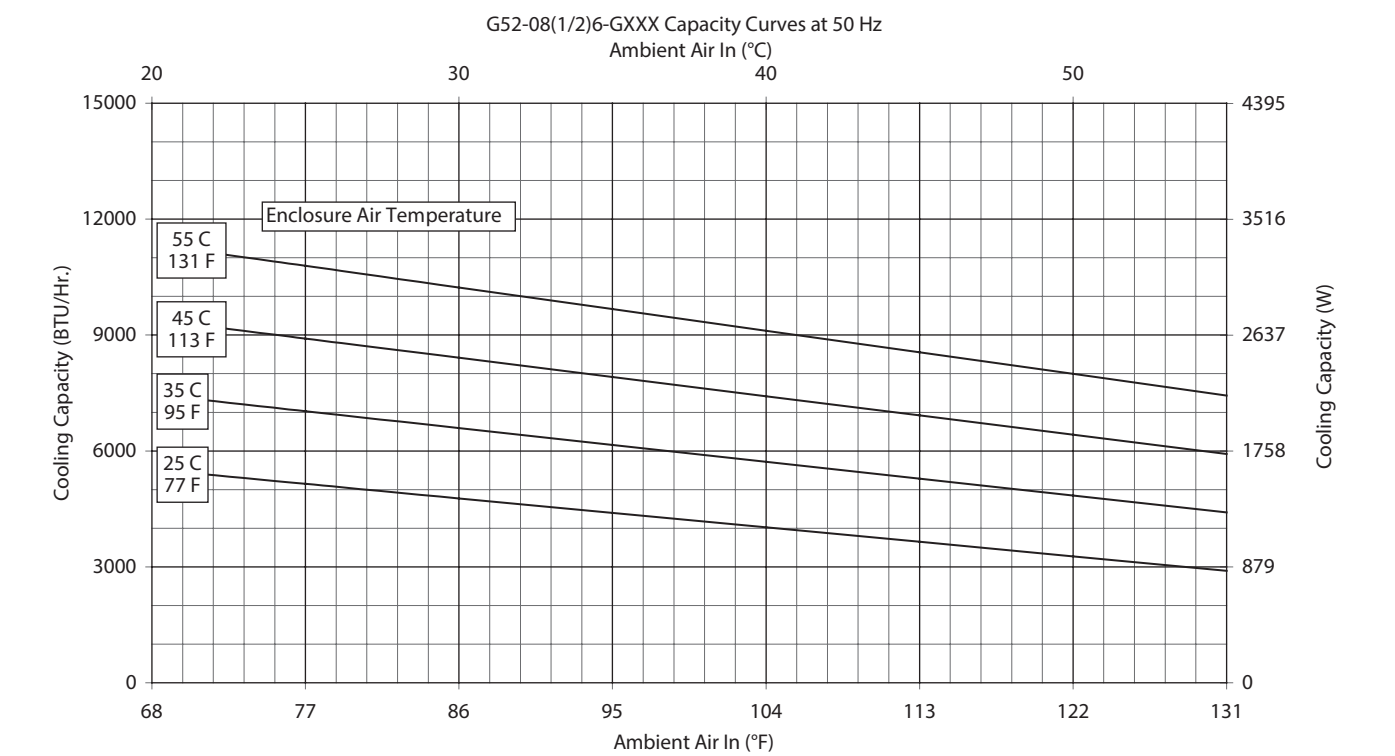
Item number						
Indoor Model	G520816G050	G520826G050	G520846G050	G521216G050	G521226G050	G521246G050
Indoor Model Stainless Steel Type 4X	G520816G051	G520826G051	G520846G051	G521216G051	G521226G051	G521246G051
Outdoor Model without Heat Pkg.	G520816G100	G520826G100	G520846G100	G521216G100	G521226G100	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/m3/hr.)	285/484	285/484	285/484	287/487	287/487	287/487
External loop 50 Hz (CFM/m3/hr.)	650/1104	650/1104	650/1104	635/1078	635/1078	635/1078
Internal loop 60 Hz (CFM/m3/hr.)	310/527	310/527	310/527	305/518	305/518	305/518
External loop 60 Hz (CFM/m3/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 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			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.

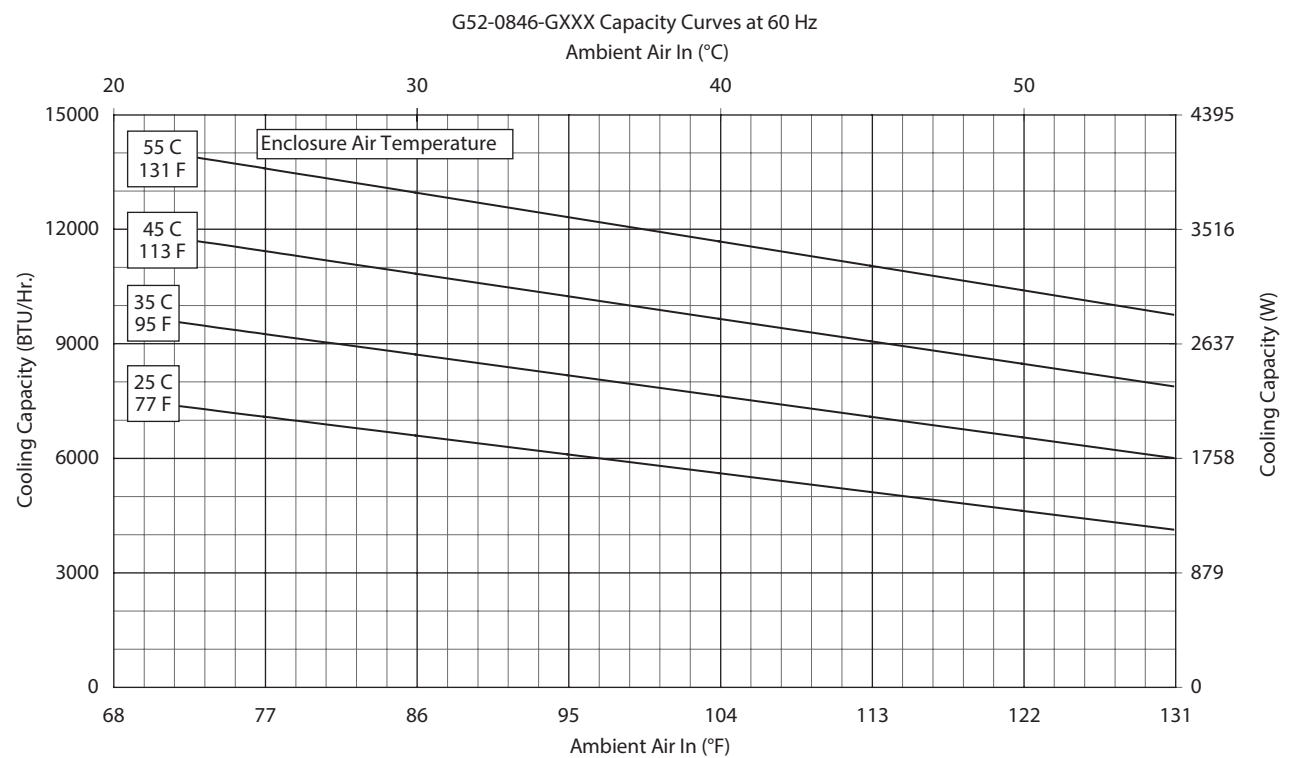
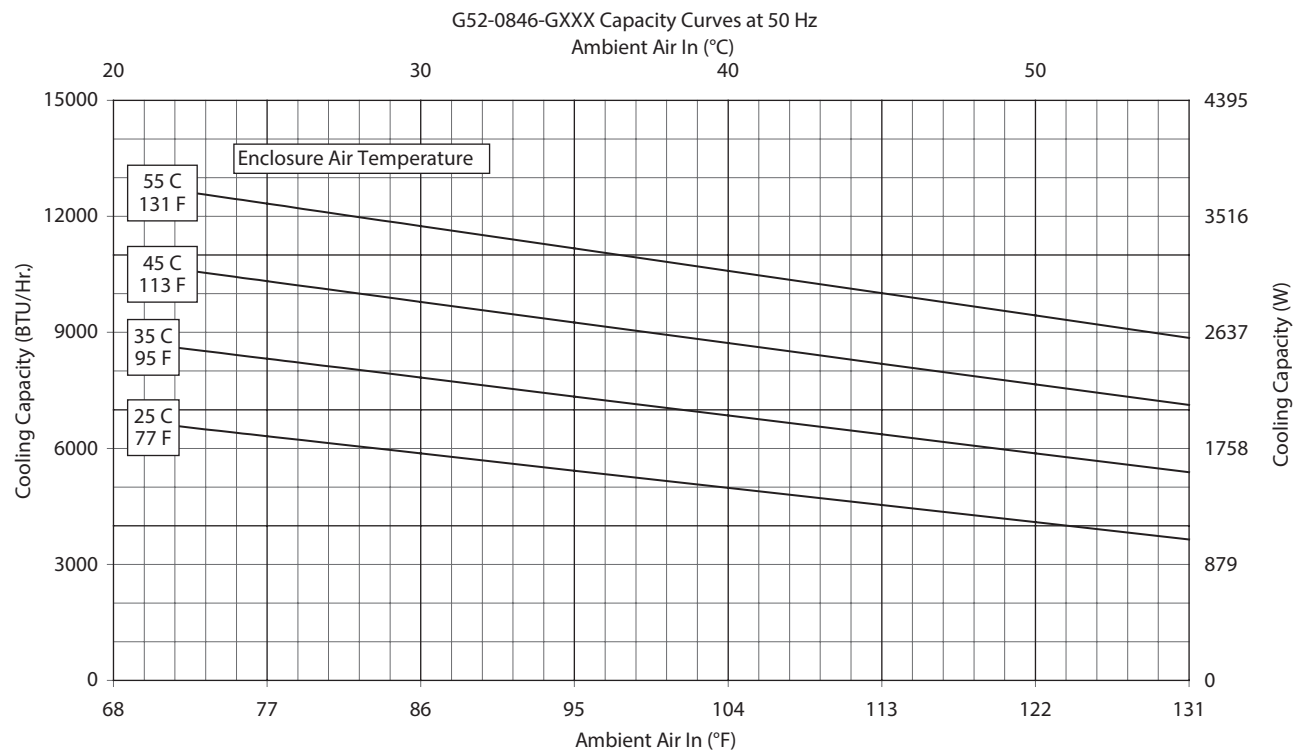
SPECTRACOOL Indoor/Outdoor G-Series

PERFORMANCE CURVES FOR G52 MODELS 8000 BTU/HR. (2300 WATT)



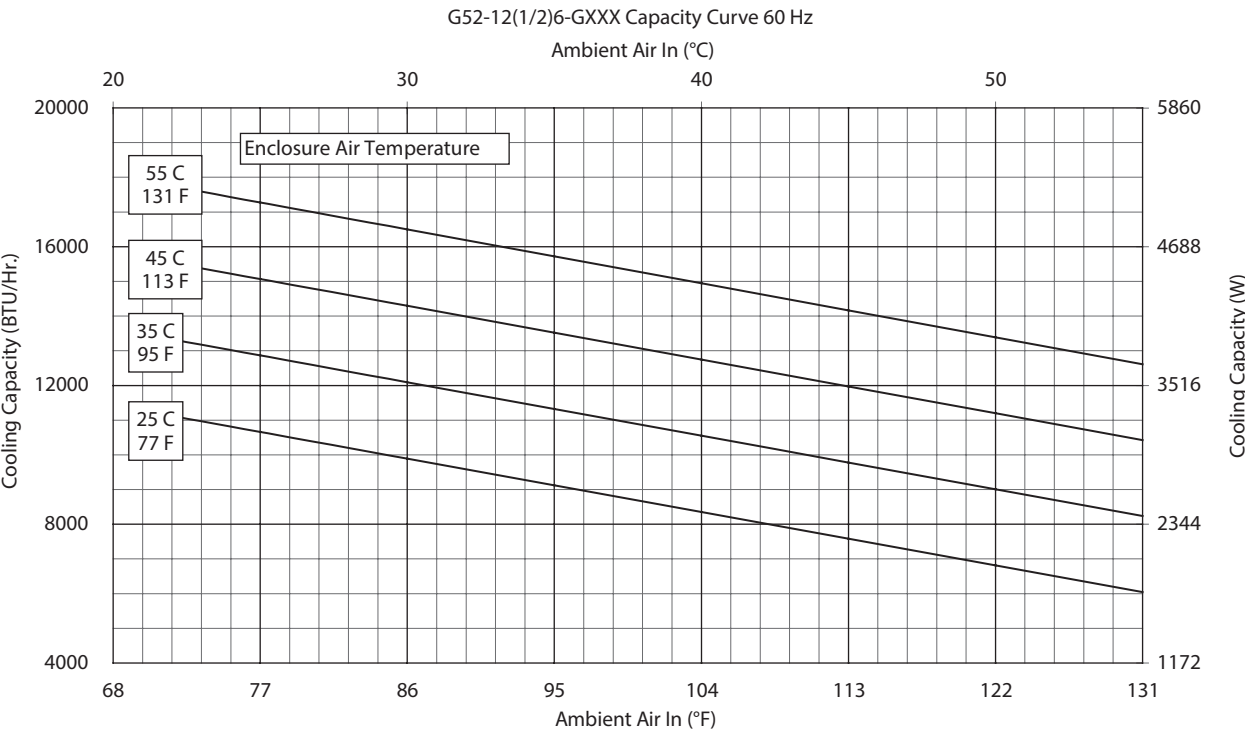
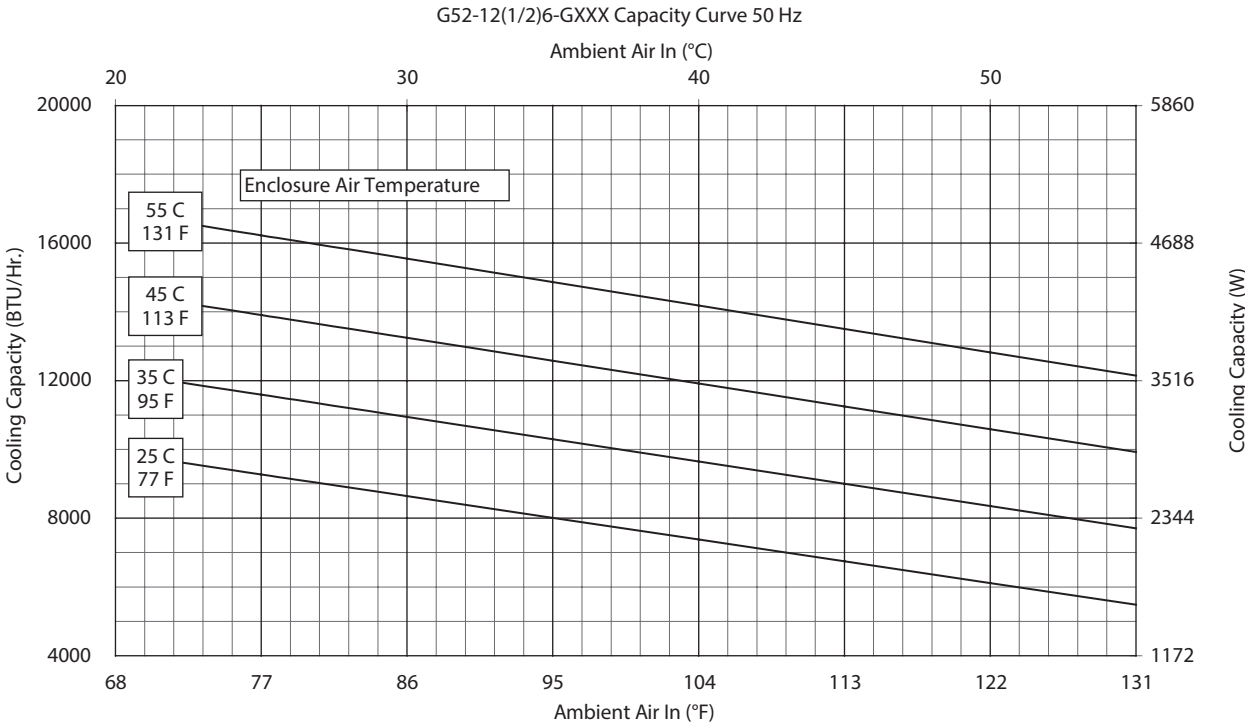
SPECTRACOOL Indoor/Outdoor G-Series

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



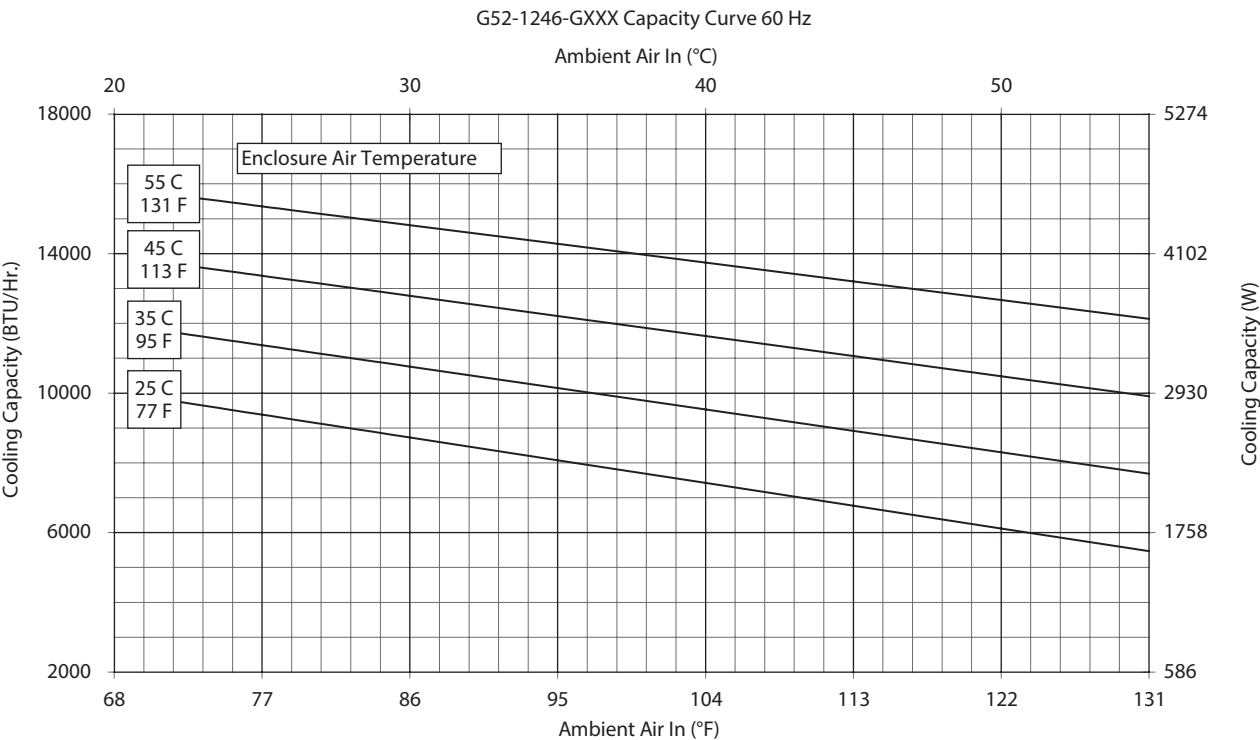
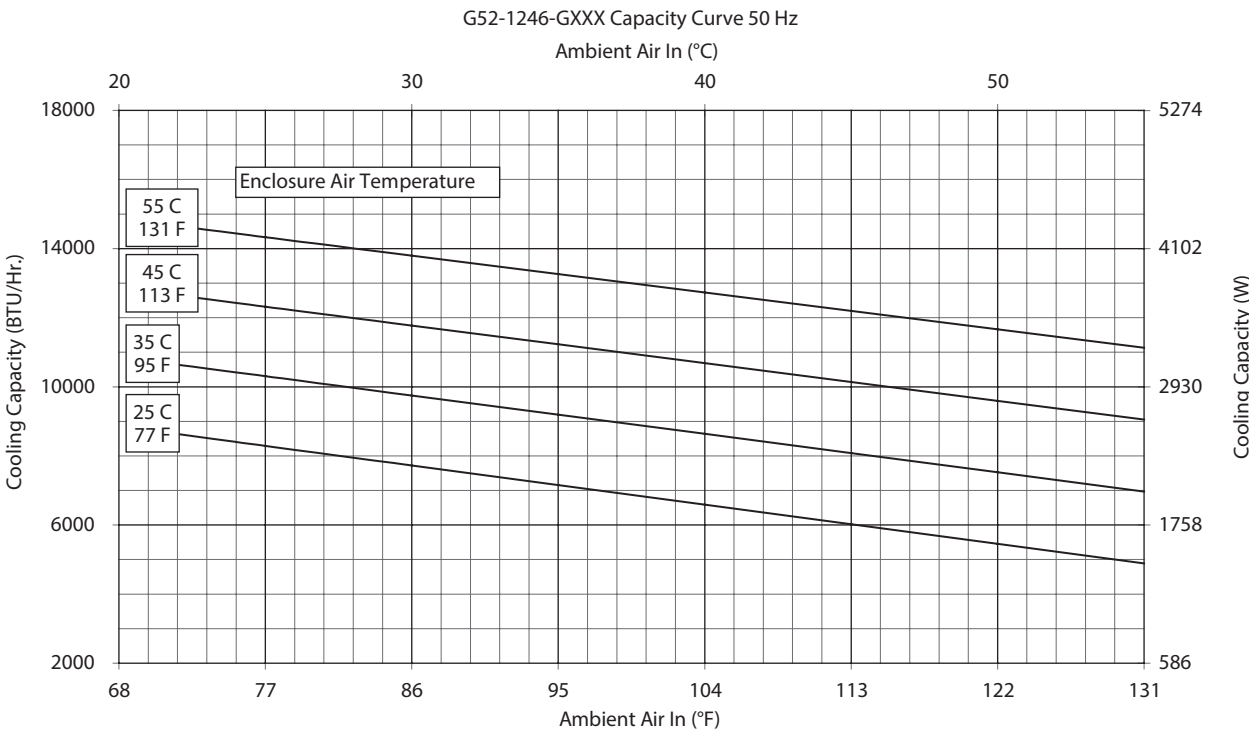
SPECTRACOOL Indoor/Outdoor G-Series

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



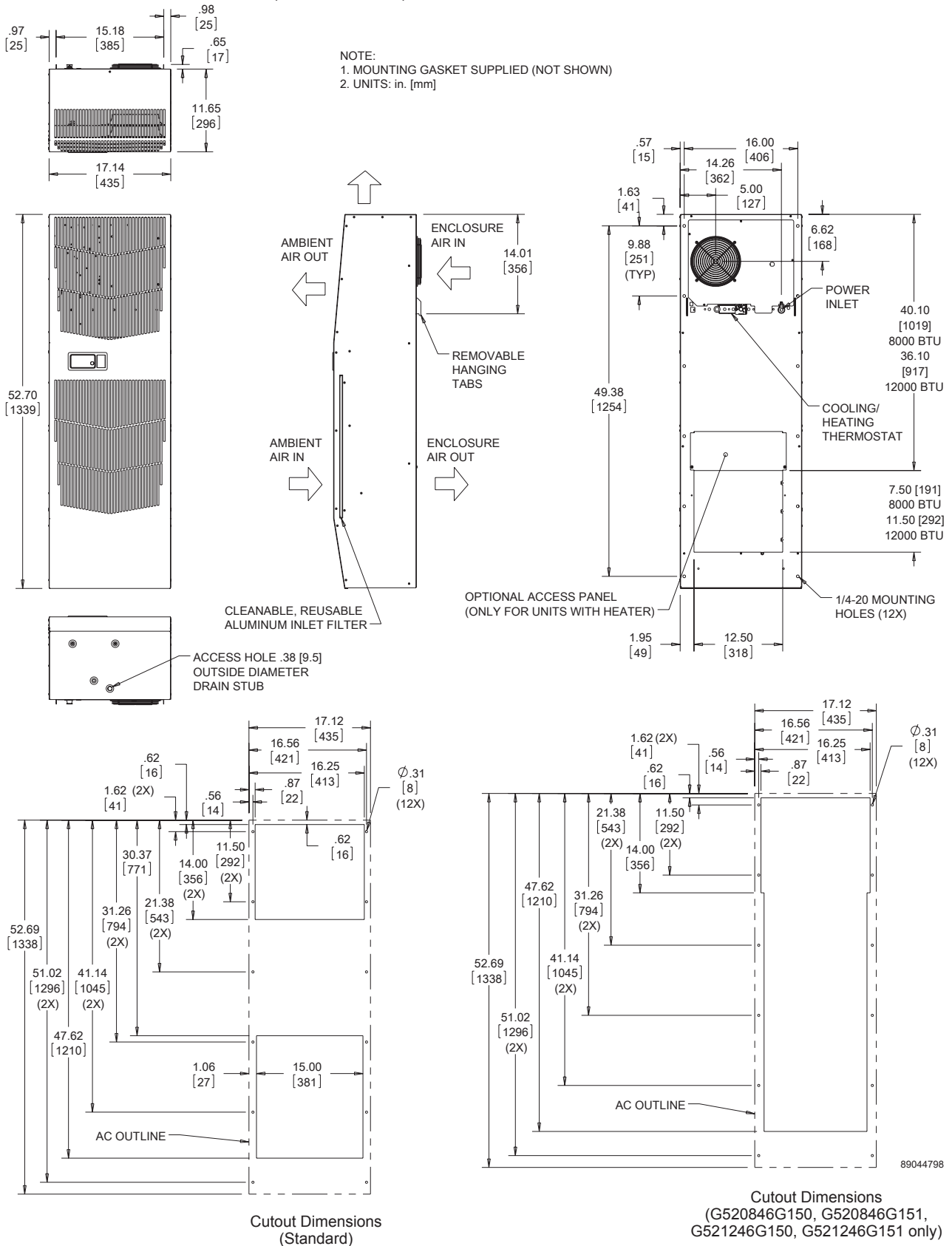
SPECTRACOOL Indoor/Outdoor G-Series

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



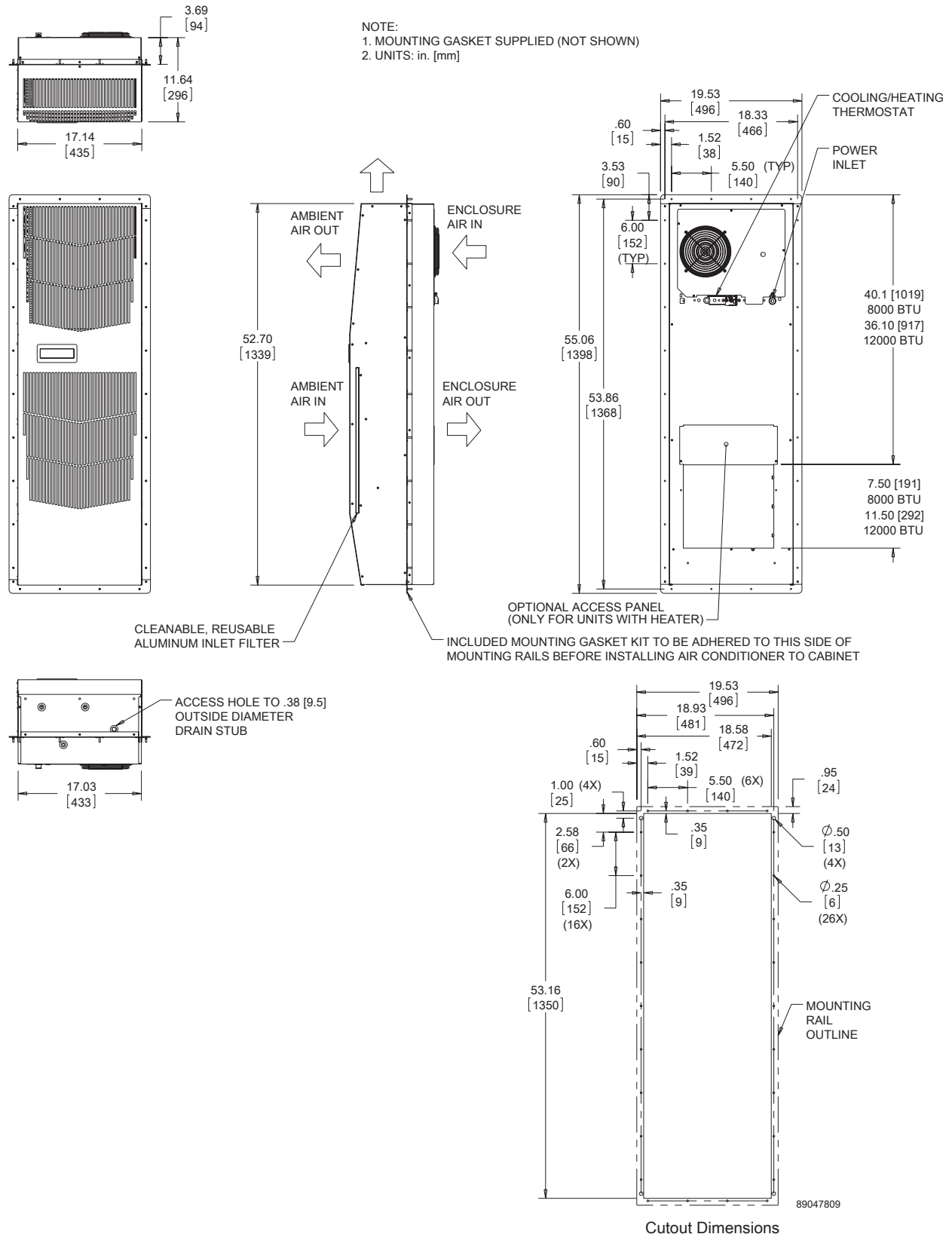
SPECTRACOOL Indoor/Outdoor G-Series

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



SPECTRACOOL Indoor/Outdoor G-Series

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



NOTES:

SPECTRACOOL Indoor/Outdoor G-Series

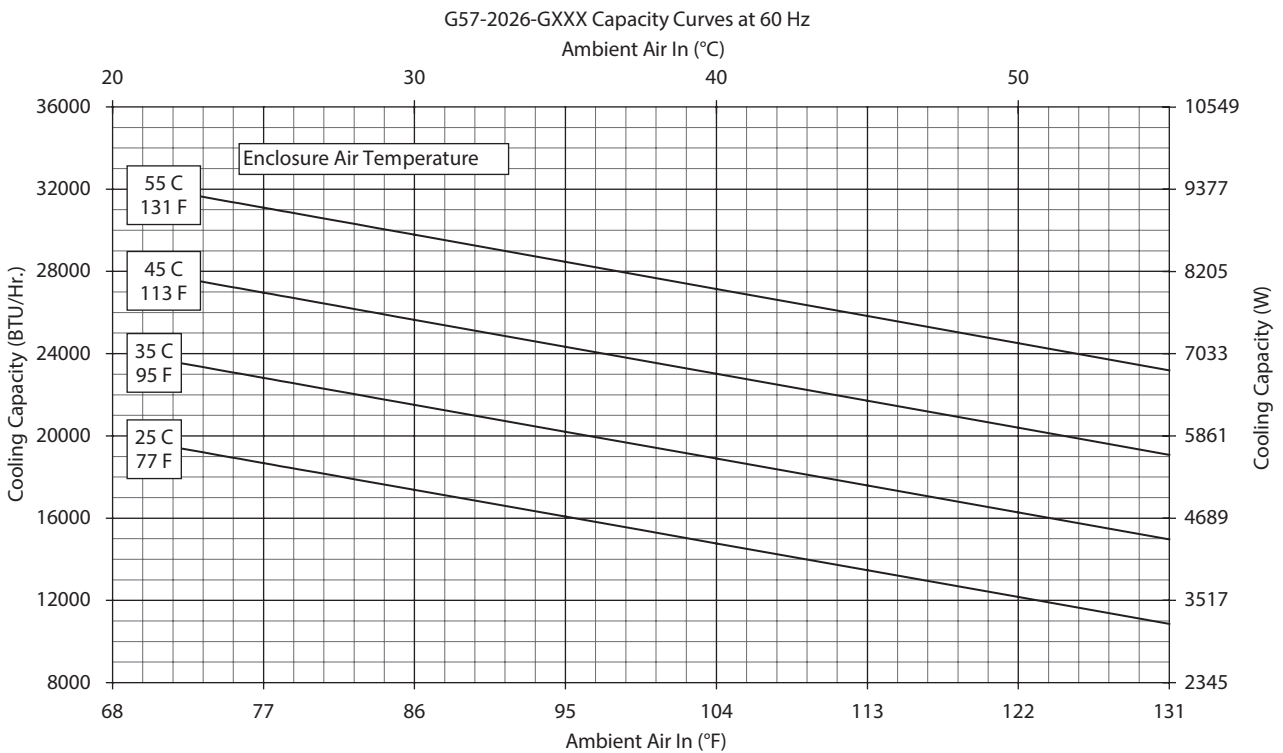
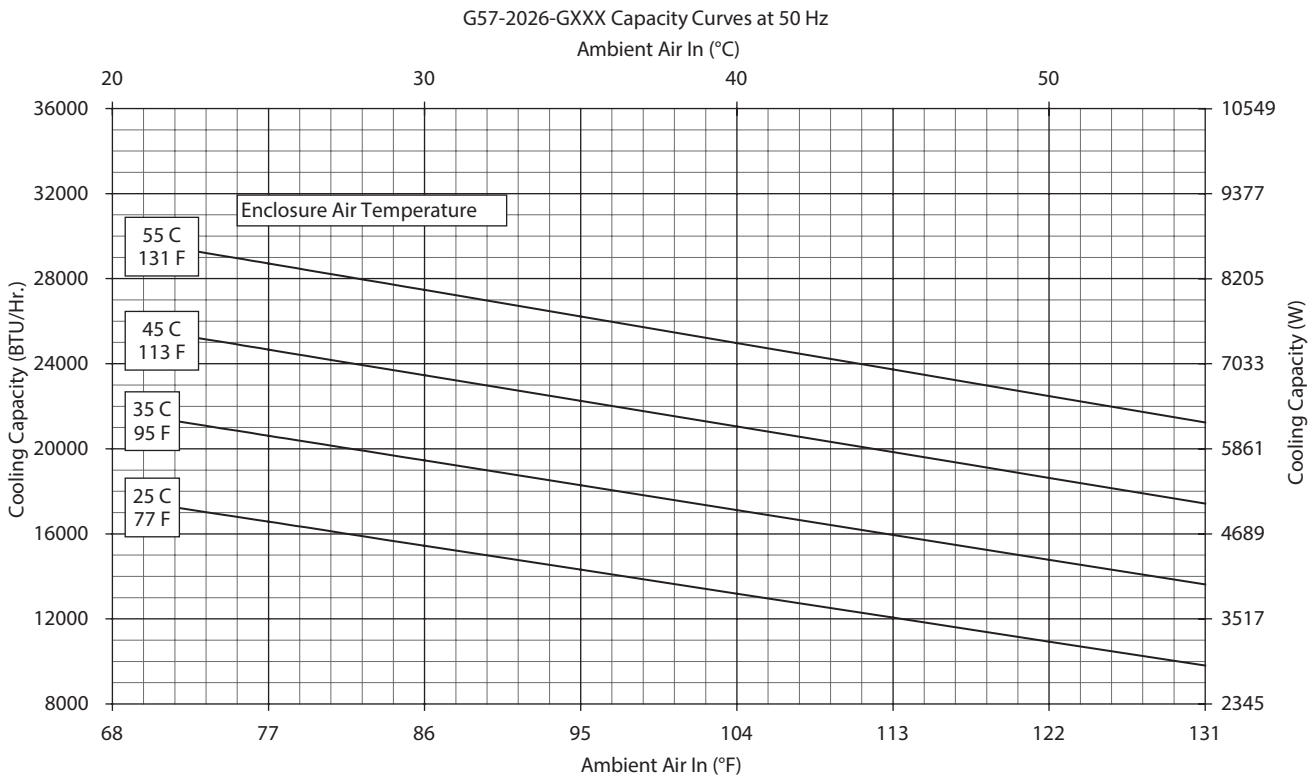
PERFORMANCE DATA G57 MODELS 20000 BTU/HR. (5861 WATT)

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:		
BTU/Hr.	20000	20000
Watt	5861	5861
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		
Rated Voltage	230/230	400/460 3~
Frequency (Hz)	50/60	50/60
Operating Range	+/- 10%	+/- 10%
Max. Power Consuption (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.

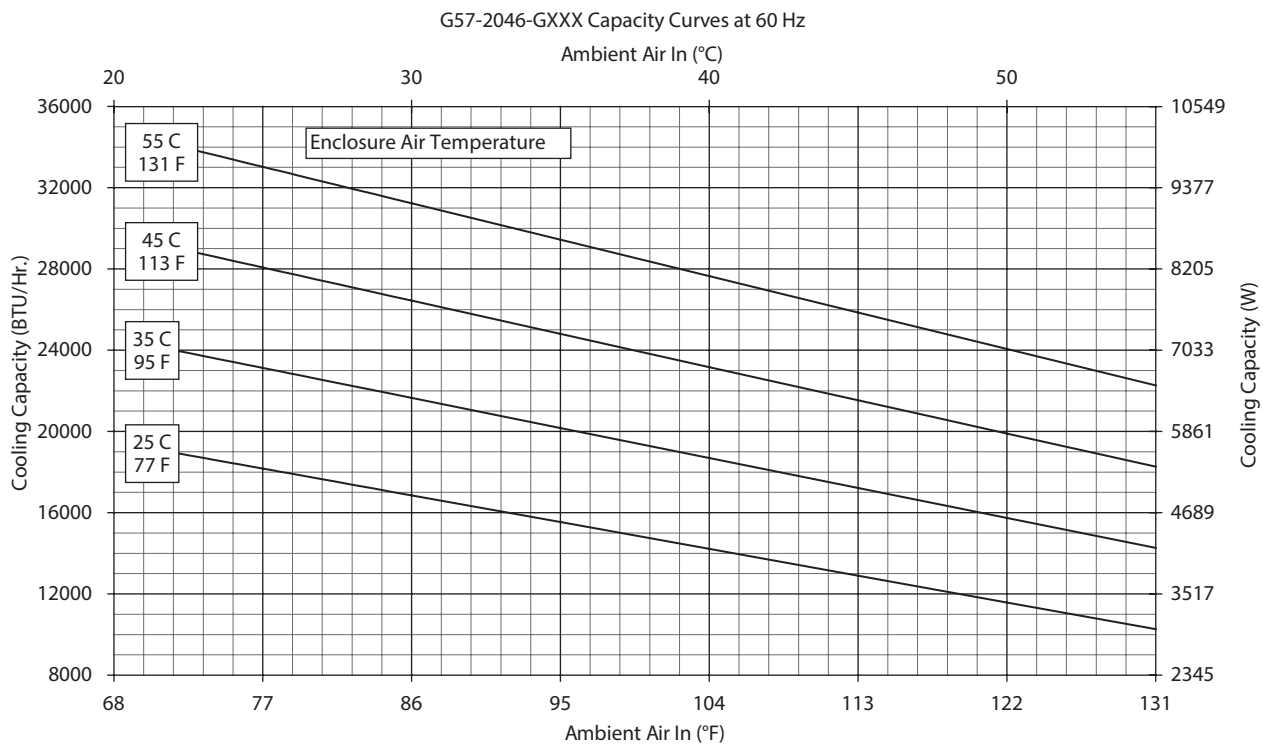
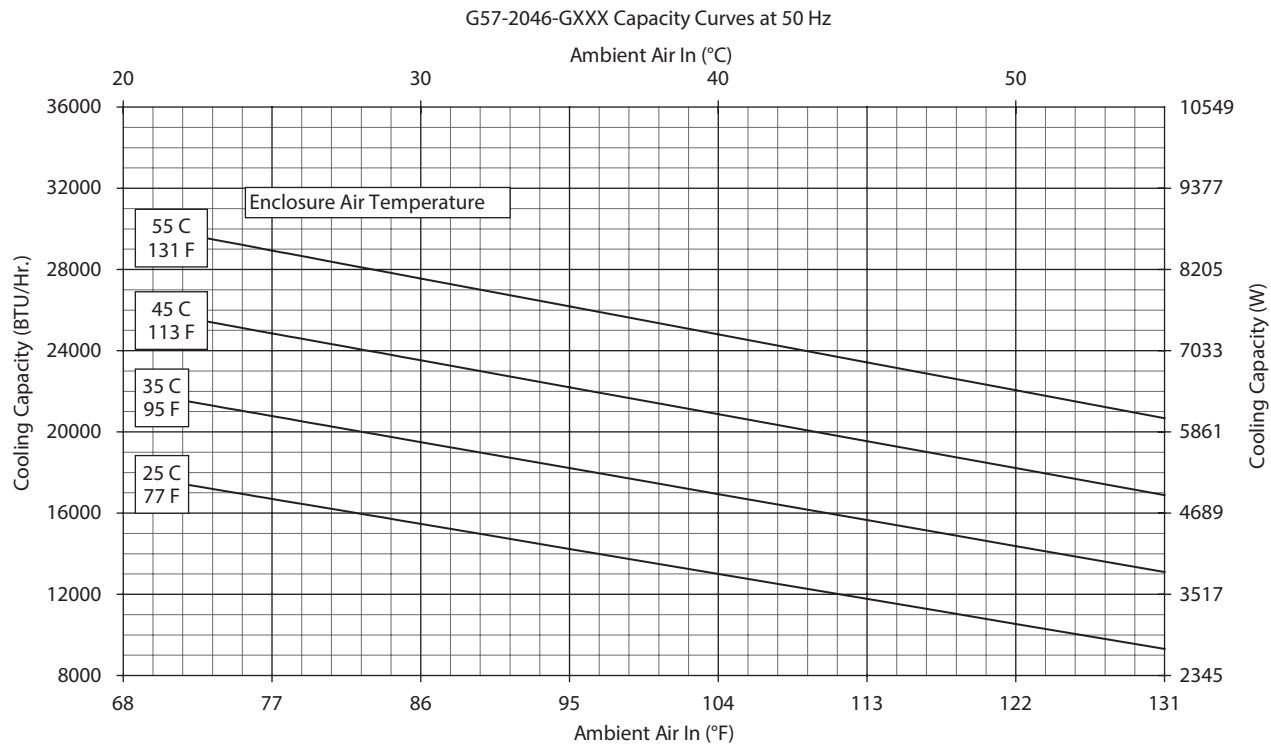
SPECTRACOOL Indoor/Outdoor G-Series

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



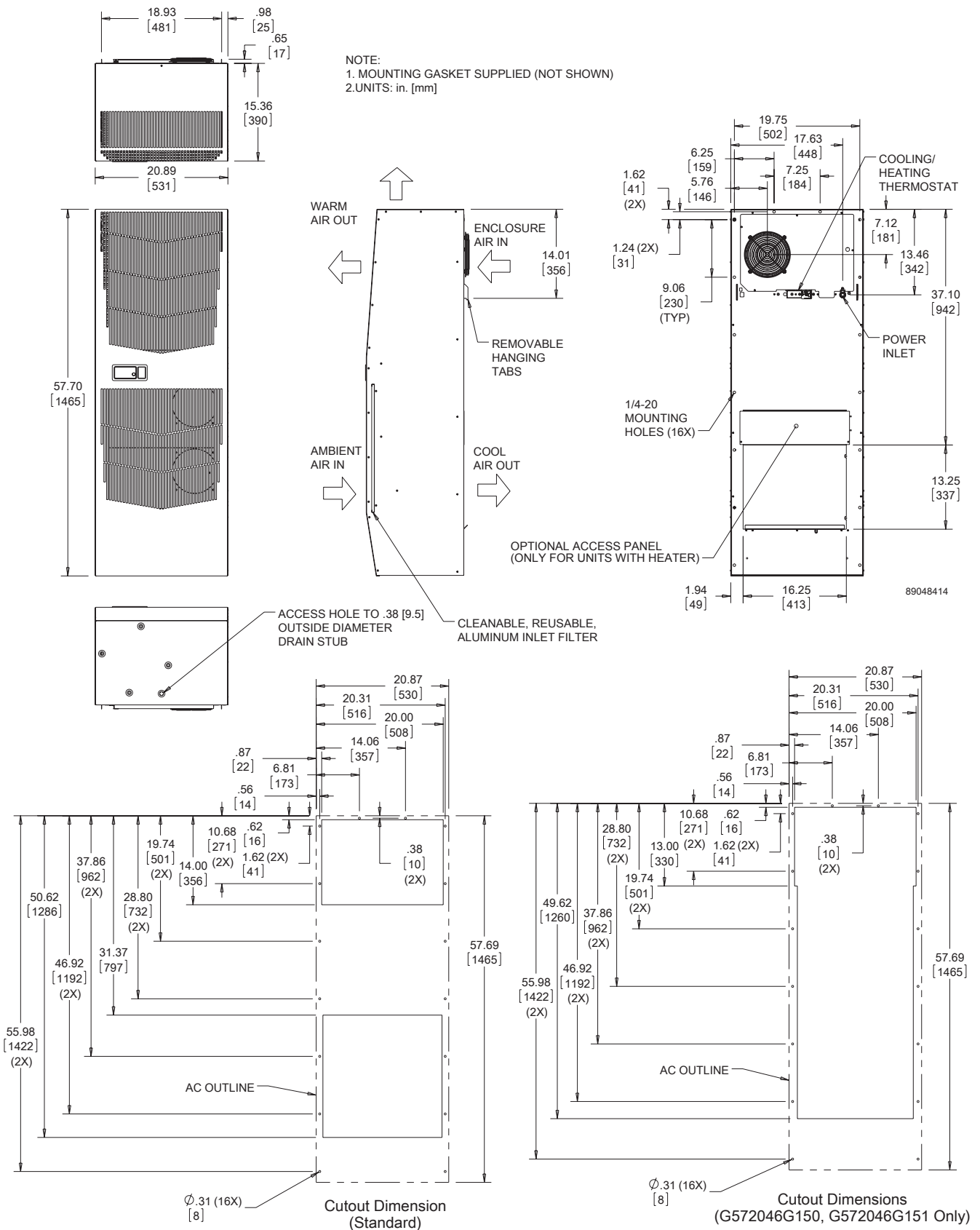
SPECTRACOOL Indoor/Outdoor G-Series

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



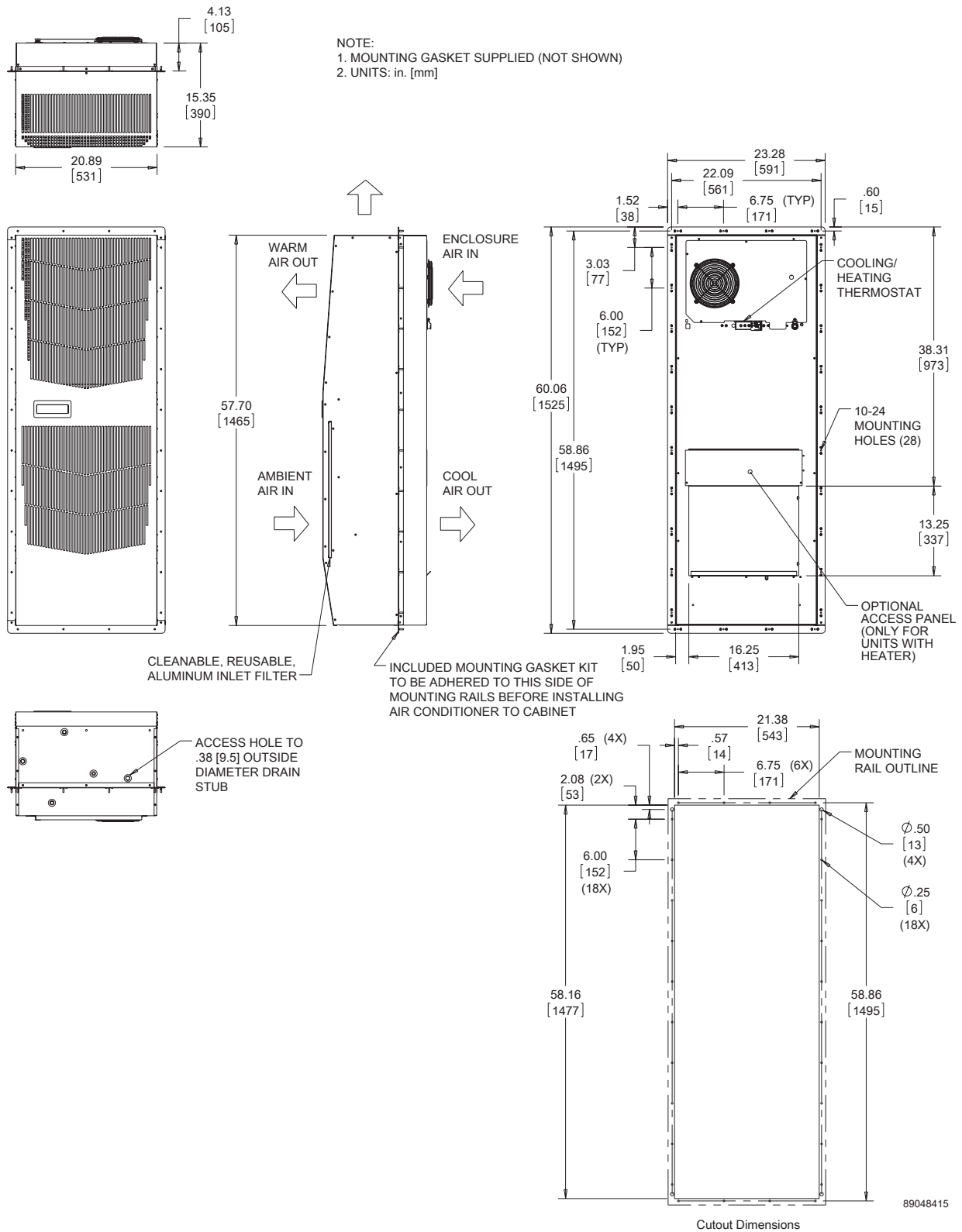
SPECTRACOOL Indoor/Outdoor G-Series

G57 Models 20000 BTU/Hr. (5861 Watt)



SPECTRACOOL Indoor/Outdoor G-Series

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



NOTES :

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

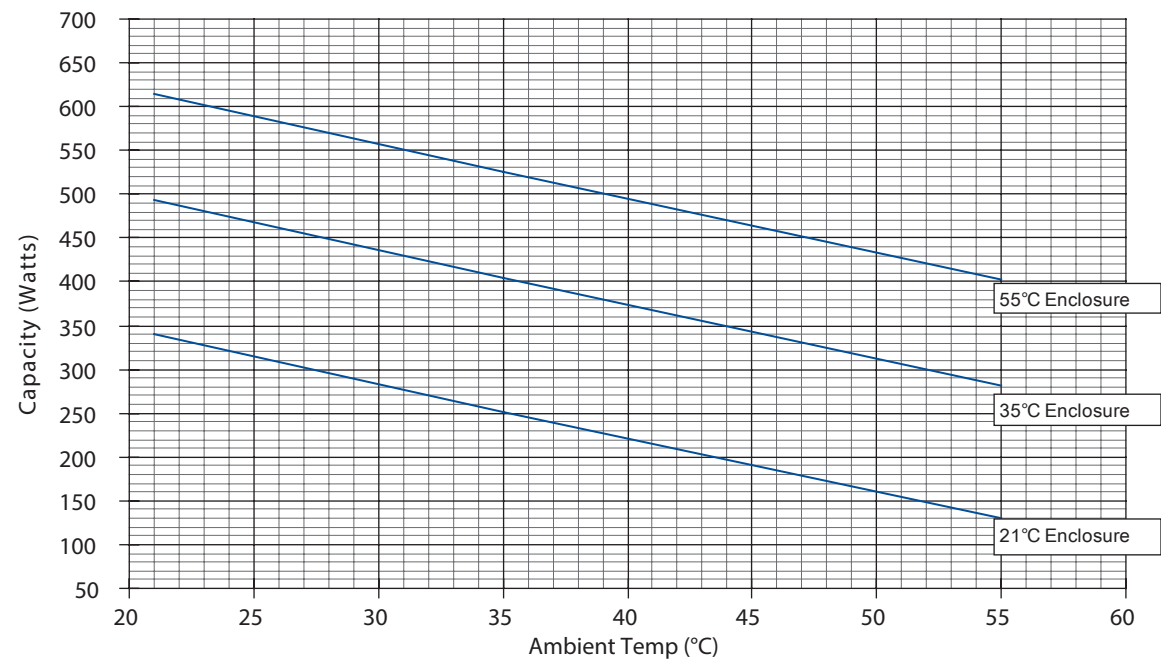
PERFORMANCE DATA 400 W, 600 W

MODEL	400 Watt	600 Watt
Item number		
Indoor Model	VA060325G052A	VA060625G052A
Indoor Model Partial Recessed Mount	VA060325G053A	VA060625G053A
Indoor Model with Display and Malfunction Switch	VA060325G059A	VA060625G059A
Outdoor Model with Heat Package	VA060325G152A	VA060625G152A
Outdoor Model with Heater SS 316	VA060325G156A	VA060625G156A
COOLING PERFORMANCE:		
Nominal:		
L35 L35		
Watt	400	590
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 (m3/h)	115	180
External loop (m3/h)	325	270
Duty Cycle	100%	100%
Encl. Heater max. Watt (Outdoor Models)	500	500
ELECTRICAL DATA		
Rated Voltage	230	230
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
Power Input Description	Terminal Block	Terminal Block
PERFORMANCE FACTOR L35 L35		
Cooling Performance (Watt)/ Power Consumption (Watt)	1.8	1.4
PERFORMANCE FACTOR L35 L50		
Cooling Performance (Watt)/ Power Consumption (Watt)	1.1	1.0
ENCLOSURE PROTECTION		
IP Code	IP 56 Internal loop IP34 External loop	IP 56 Internal loop IP34 External loop
CONTROLLER		
Description	Basic Mechanical Thermostat	Basic Mechanical Thermostat
Thermostat Location	Enclosure Side	Enclosure Side
Factory Thermostat Setting (°C)	35	35
SOUND LEVEL		
At 1 M	64 dBA	72 dBA
UNIT CONSTRUCTION		
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
UNIT DIMENSIONS		
Height (mm)	508	508
Width (mm)	270	270
Depth (mm)	252	252
Weight (kg)	23	25

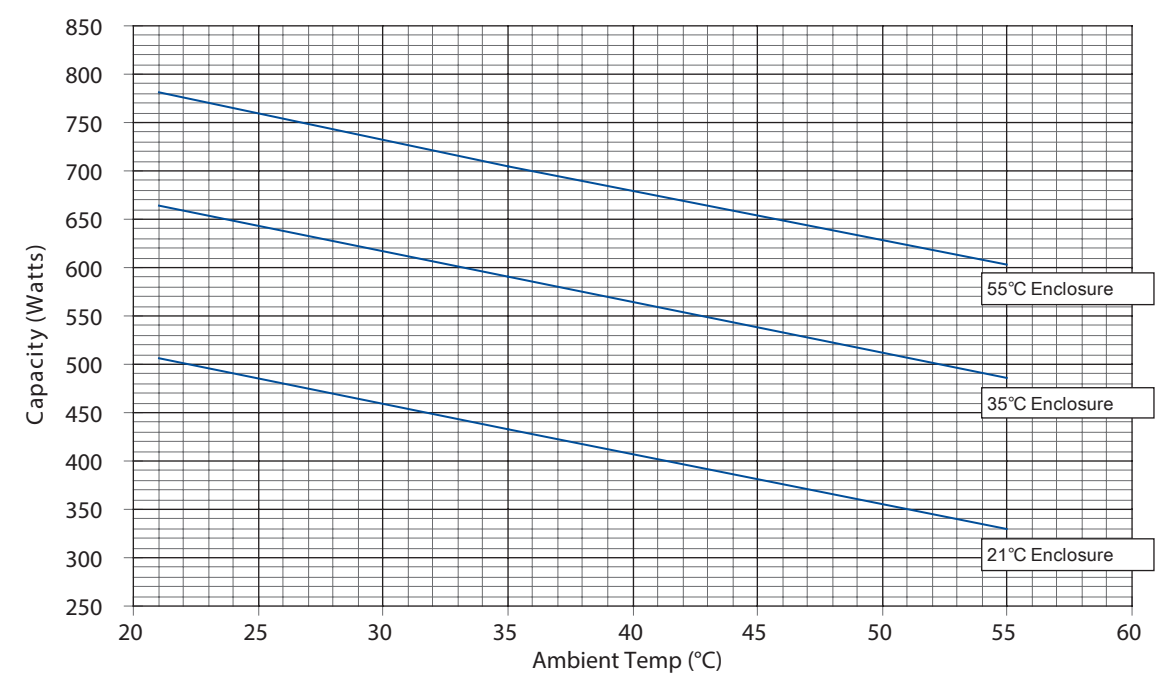
V-Series Indoor/Outdoor

Performance Curves for 400 and 600 Watt Models

VA060325GXXXXA 400 Watt Capacity Curves 230V/50Hz

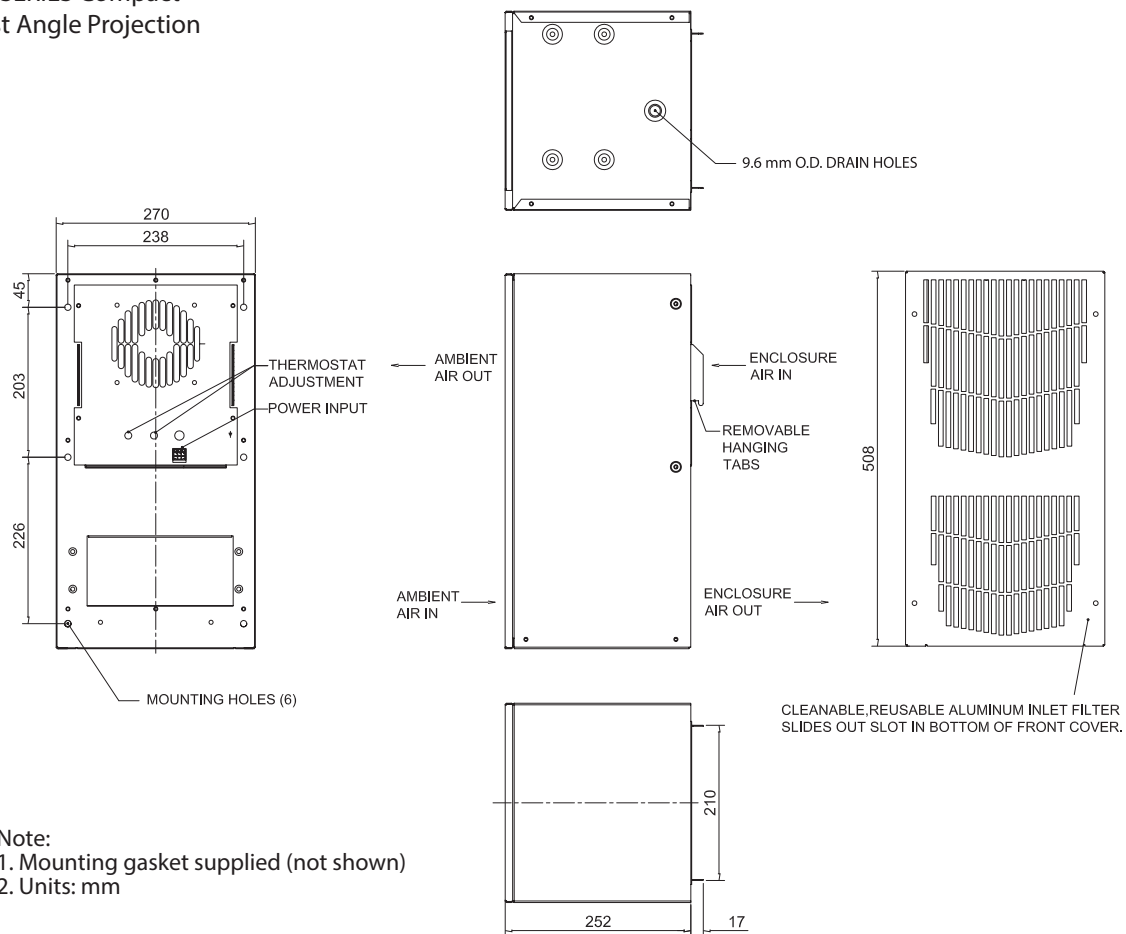


VA060625GXXXXA 600 Watt Capacity Curves 230V/50Hz

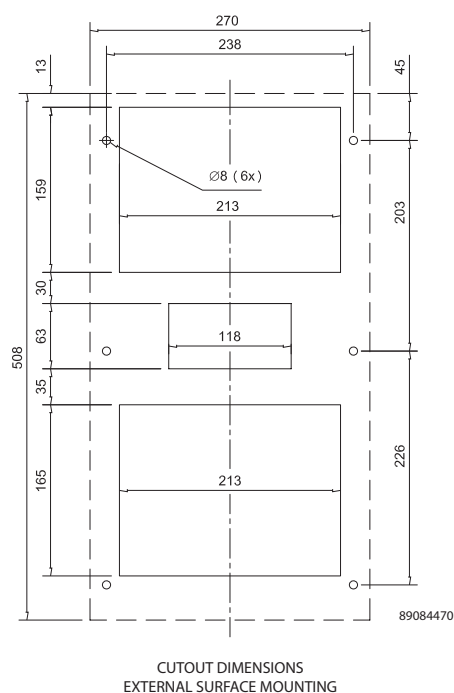


V-Series Indoor/Outdoor

V-SERIES Compact 1st Angle Projection

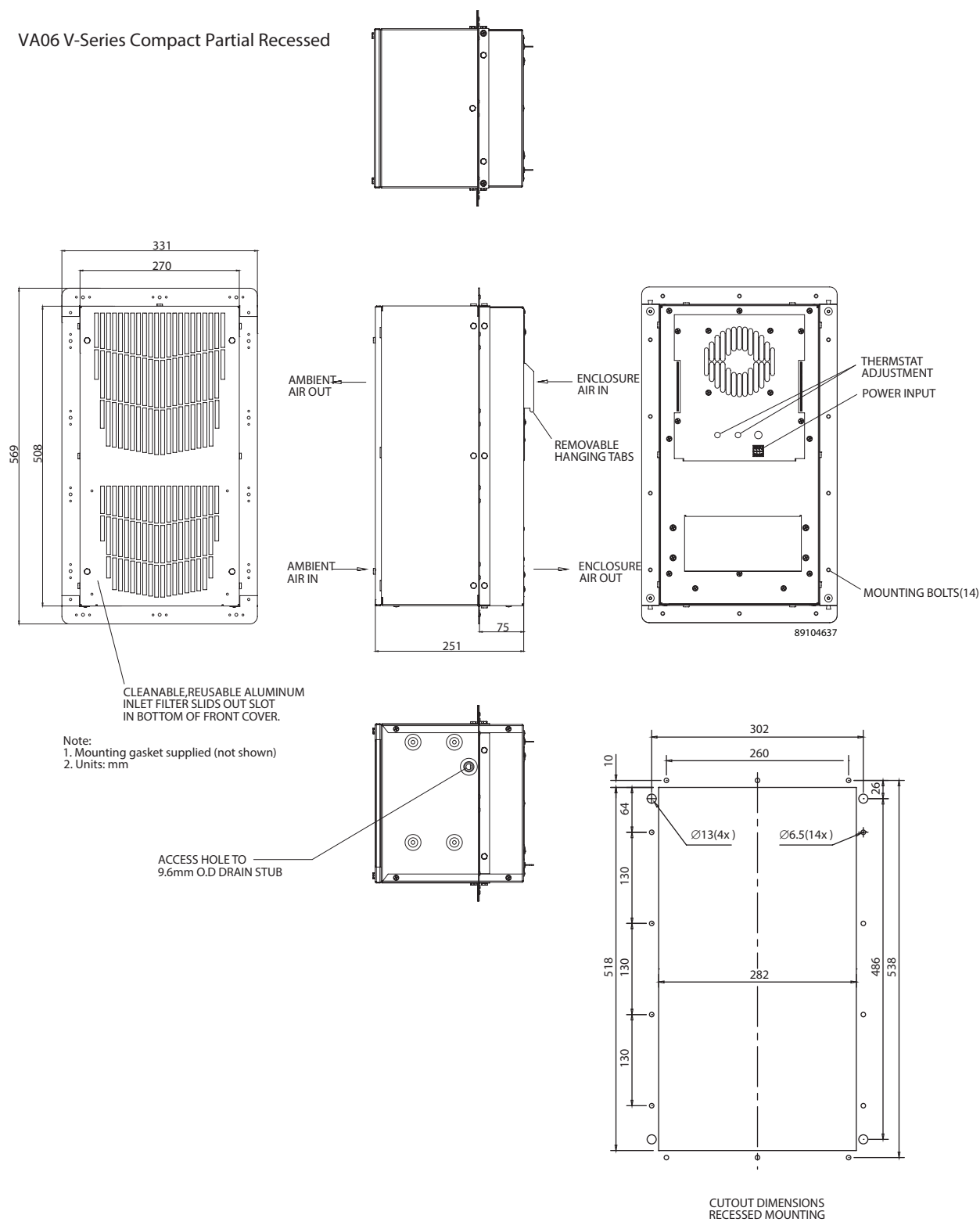


Note:
1. Mounting gasket supplied (not shown)
2. Units: mm



V-Series Indoor/Outdoor

VA06 V-Series Compact Partial Recessed



NOTES :

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

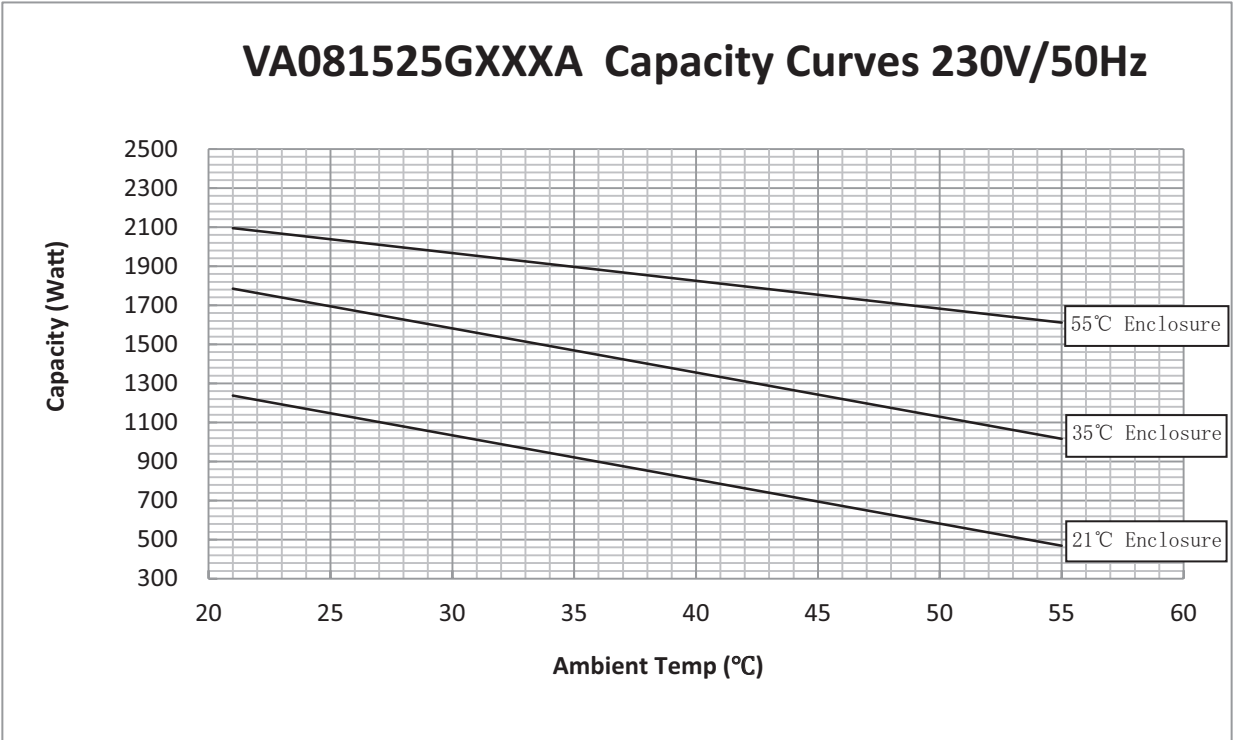
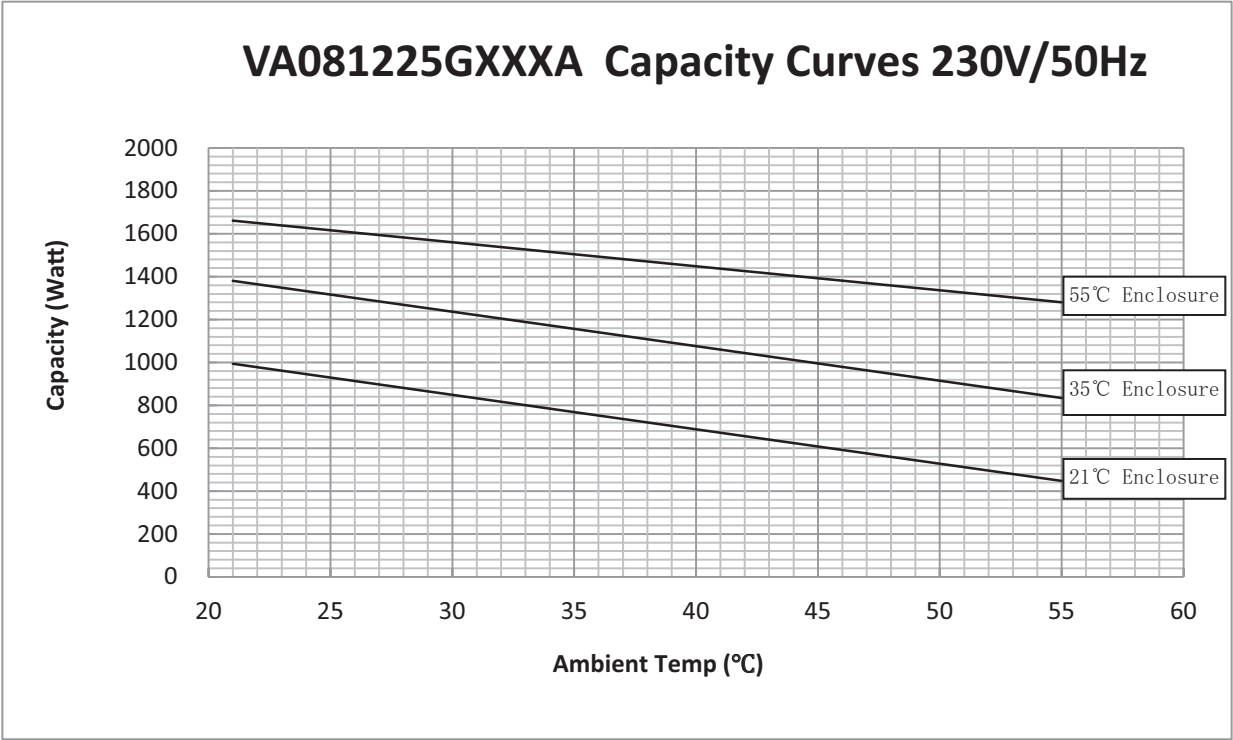
For product general accessories, please refer to the chapter "Accessories".

V-Series Indoor/Outdoor

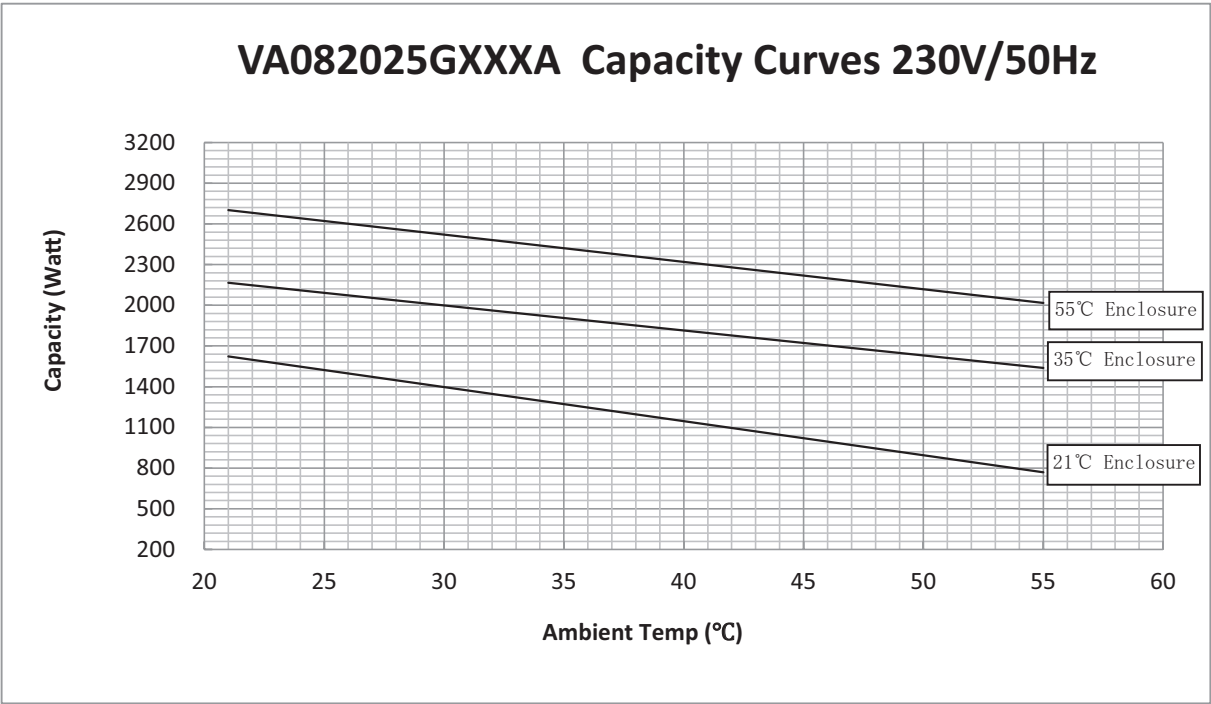
PERFORMANCE DATA 1200 W, 1500 W, 2000 W

MODEL	1200 Watt	1500 Watt	2000 Watt
Item Number			
Indoor Model	VA081225G052A	VA081525G052A	VA082025G052A
Indoor Model Partial Recessed Mount	VA081225G053A	VA081525G053A	VA082025G053A
Indoor Model With Display and Malfunction Switch	VA081225G059A	VA081525G059A	VA082025G059A
Outdoor Model with Heat Package	VA081225G152A	VA081525G152A	VA082025G152A
Outdoor Model with Heater SS316	VA081225G156A	VA081525G156A	VA082025G156A
COOLING PERFORMANCE:			
Nominal:			
L35 L35			
Watt	1160	1470	1910
L35 L50	960		
Watt	960	1170	1540
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
ELECTRICAL DATA			
Rated Voltage	230	230	230
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
PERFORMANCE FACTOR L35 L35			
Cooling Performance (Watt)/ Power Consumption (Watt)	2,1	2,4	2,1
ENCLOSURE PROTECTION			
IP Code	IP56 Internal loop IP34 External loop		
CONTROLLER			
Description	Basic Mechanical Thermostat		
Thermostat Location	Enclosure Side		
Factory Thermostat Setting (°C)	35		
SOUND LEVEL			
At 1 M	71 dBA	71 dBA	71 dBA
UNIT CONSTRUCTION			
Material	Galvanized Sheet Metal Standard		
Finish	RAL 7035 Light-Gray,semi-textured powder-coat paint standard		
UNIT DIMENSIONS			
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

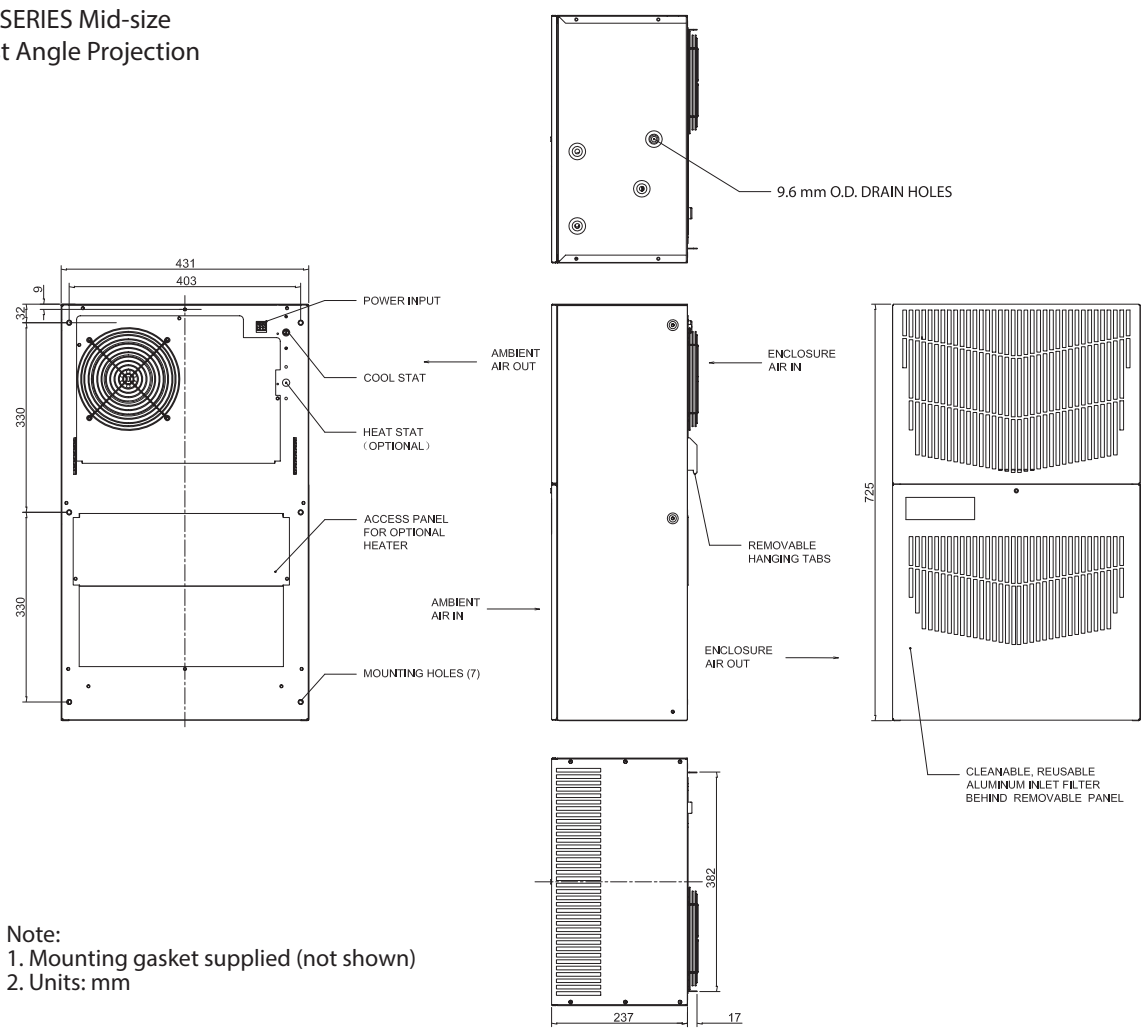


V-Series Indoor/Outdoor

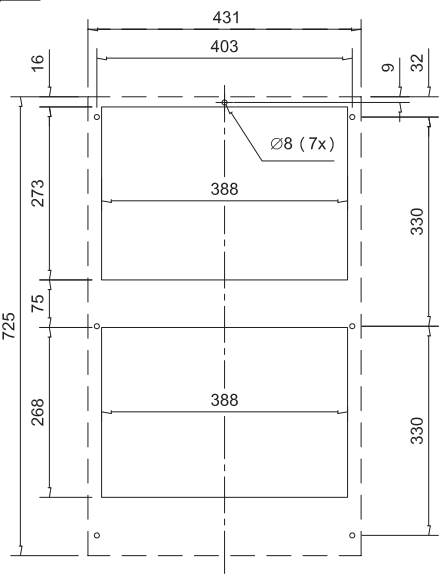


V-Series Indoor/Outdoor

V-SERIES Mid-size
1st Angle Projection



Note:
1. Mounting gasket supplied (not shown)
2. Units: mm

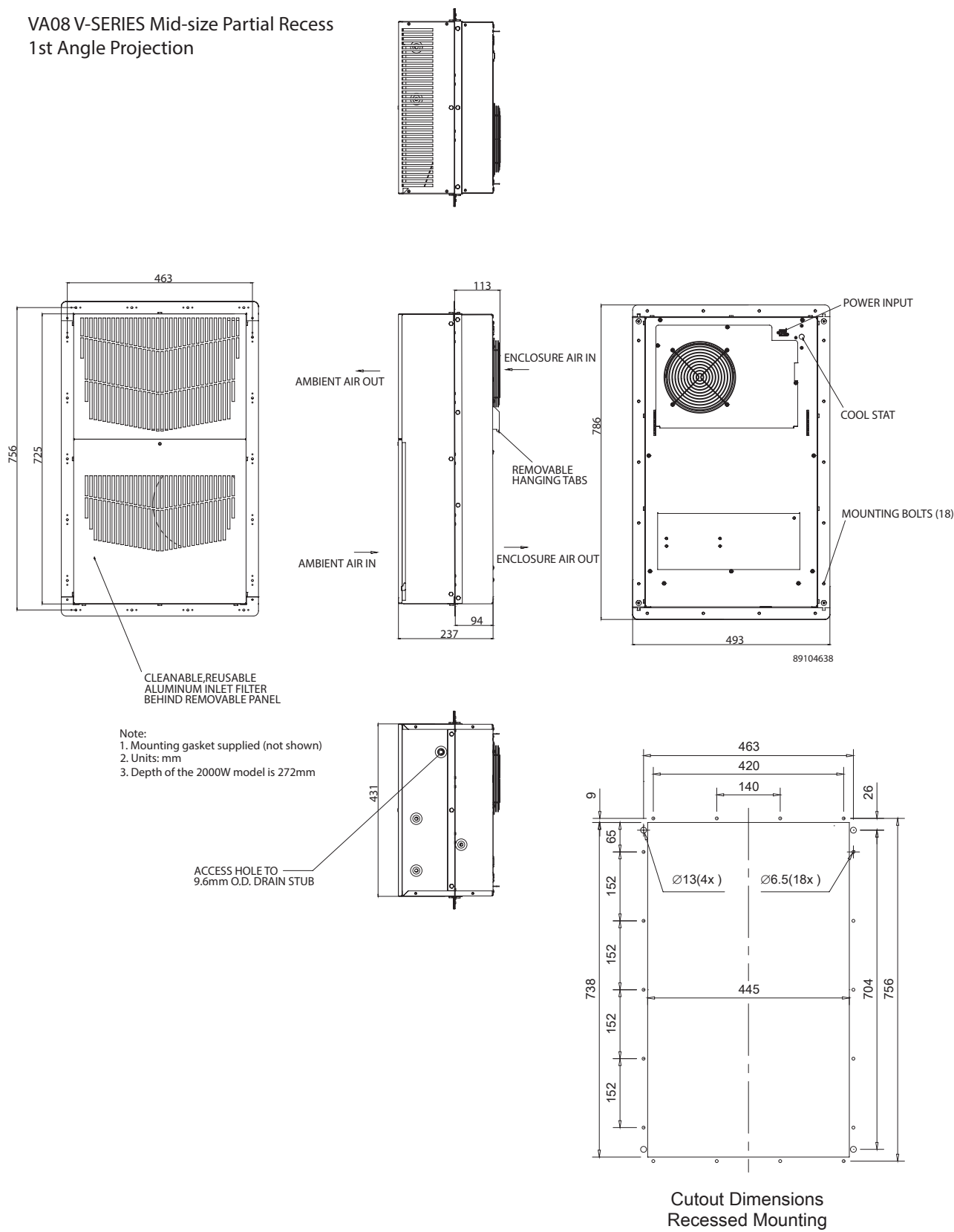


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Cutout Dimensions
External Surface Mount

V-Series Indoor/Outdoor

VA08 V-SERIES Mid-size Partial Recess
1st Angle Projection



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

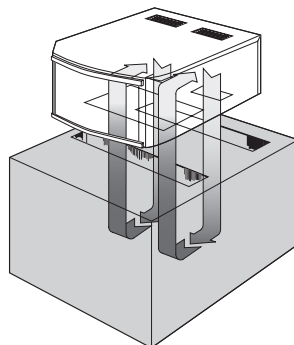
PERFORMANCE DATA MHB11 MODELS 2200 BTU/HR. (645 WATT)

Item number	MHB110216G306	MHB110226G306	MHB110246G400
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	2200/2200	2200/2200	2200/2200
Watt	645/645	645/645	645/645
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/m3/hr.)	158/268	170/289	170/289
External loop 50 Hz (CFM/m3/hr.)	222/377	218/370	218/370
Internal loop 60 Hz (CFM/m3/hr.)	177/301	192/326	192/326
External loop 60 Hz (CFM/m3/hr.)	252/428	245/416	245/416
ELECTRICAL DATA			
Rated Voltage	115	220/230	440/460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12 standard		
CONTROLLER			
Description	Basic mechanical thermostat		
Thermostat Location	Behind filter		
Factory Thermostat Setting (°F/°C)	80/27		
SOUND LEVEL			
At 1.5 Meters	62 dB(A)		
UNIT CONSTRUCTION			
Material	Mild steel sheet metal standard Stainless steel optional		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard		
UNIT DIMENSIONS			
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
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	3300/4000	3300/4000	3300/4000
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/m3/hr.)	158/268	170/289	170/289
External loop 50 Hz (CFM/m3/hr.)	222/377	218/370	218/370
Internal loop 60 Hz (CFM/m3/hr.)	177/301	192/326	192/326
External loop 60 Hz (CFM/m3/hr.)	252/428	245/416	245/416
ELECTRICAL DATA			
Rated Voltage	110/115	220/230	440/460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12 standard		
CONTROLLER			
Description	Basic mechanical thermostat		
Thermostat Location	Behind filter		
Factory Thermostat Setting (°F/°C)	80/27		
SOUND LEVEL			
At 1.5 Meters	62 dB(A)		
UNIT CONSTRUCTION			
Material	Mild steel sheet metal standard Stainless steel optional		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard		
UNIT DIMENSIONS			
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



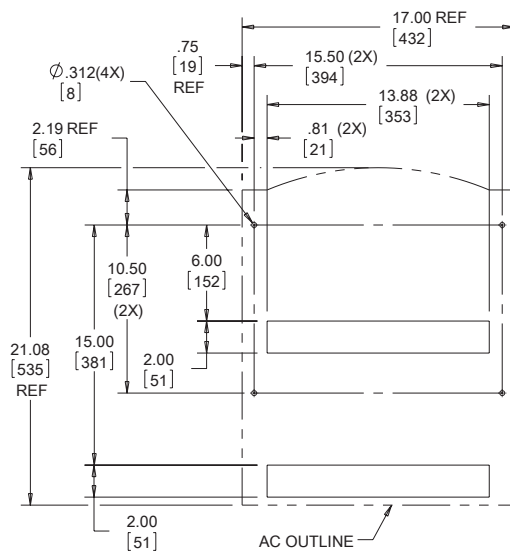
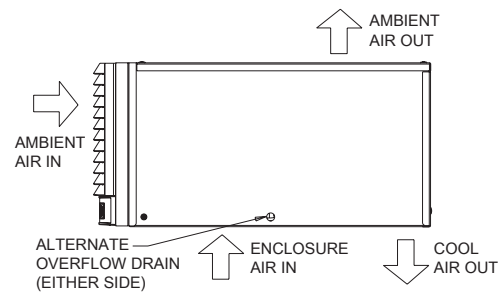
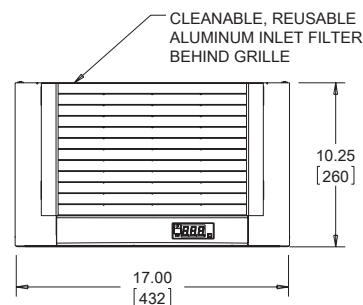
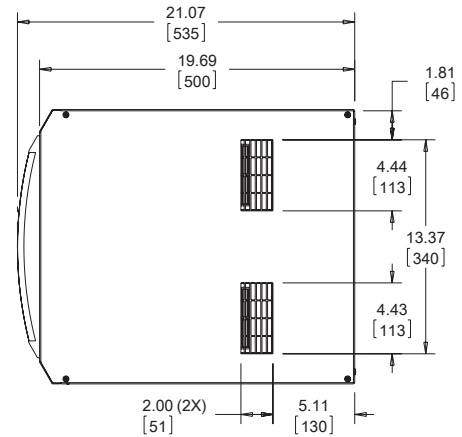
Top-Mount to Enclosure

Genesis Top-Mount Indoor M-Series

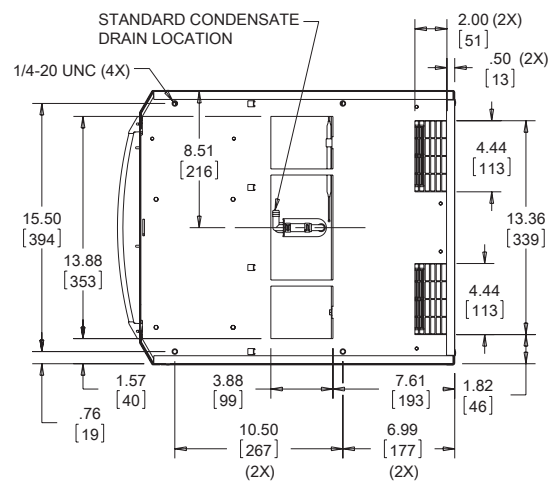
MHB11 Models 2200-4000 BTU/Hr. (645-1172 Watt)

NOTE:

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



Cutout Dimensions



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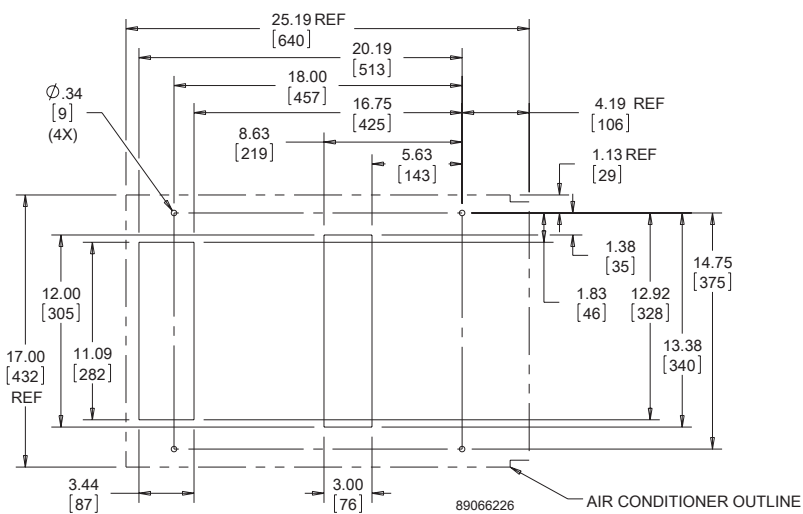
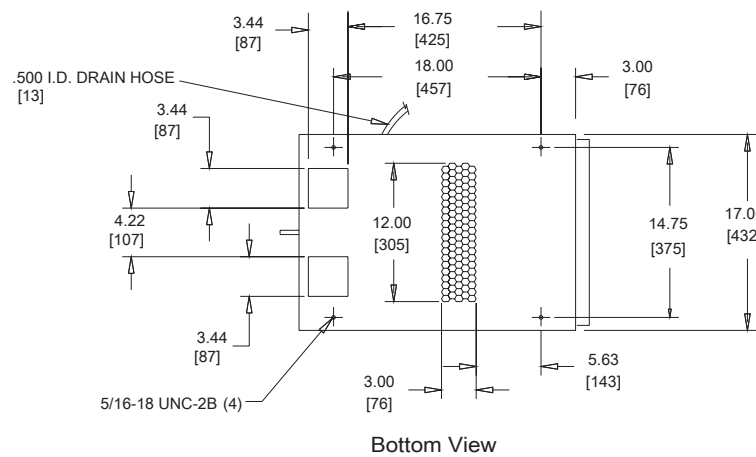
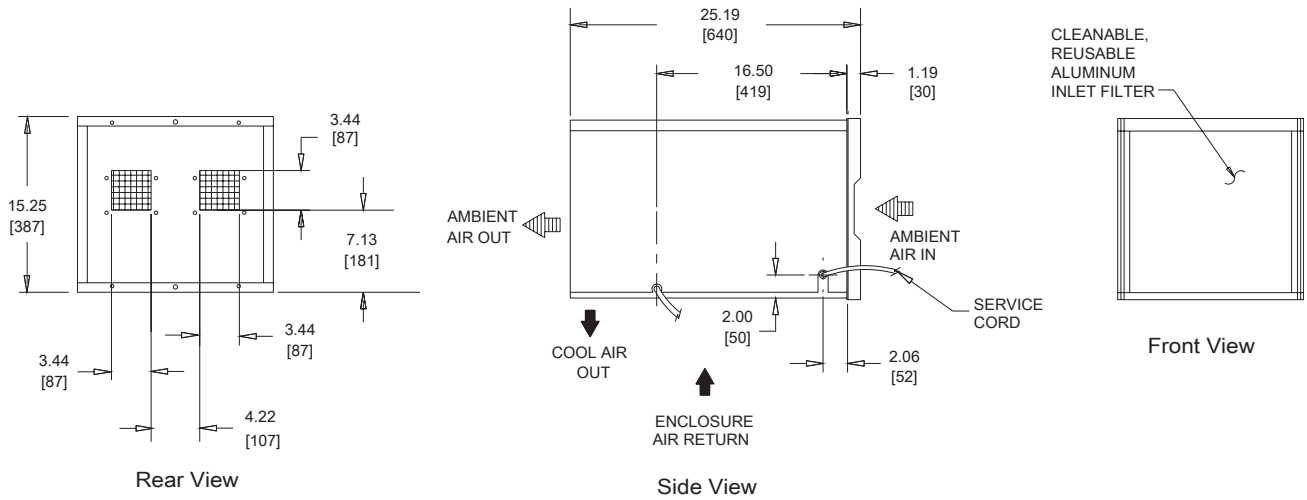
Genesis Top-Mount Indoor M-Series

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

Item number			
Indoor Model	HB160816G040	HB160826G040	HB160846G040
COOLING PERFORMANCE			
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
ELECTRICAL DATA			
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
ENCLOSURE PROTECTION			
UL Type	Type 12 Standard		
CONTROLLER			
Description	Basic Mechanical Thermostat		
Thermostat Location	Enclosure Side on All Base Models		
Factory Thermostat Setting (°F/°C)	80/27	80/27	80/27
UNIT CONSTRUCTION			
Material	Galvanized Sheet Metal Standard (Optional: Stainless Steel)		
Finish	RAL 7042 gray, semi-gloss powder-coat paint standard Other colors and textures available		
UNIT DIMENSIONS			
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)



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

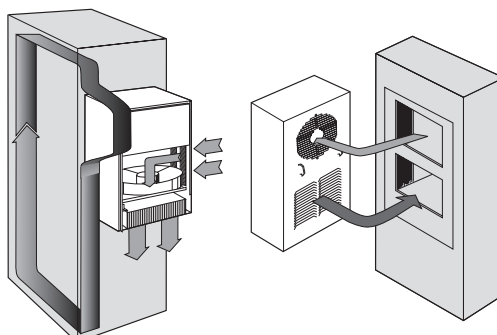
- Thermostat Malfunction Package
- Special Voltage Package
- Outdoor Package
- Harsh Environment Package
- Stainless Steel Package
- Heater Package

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

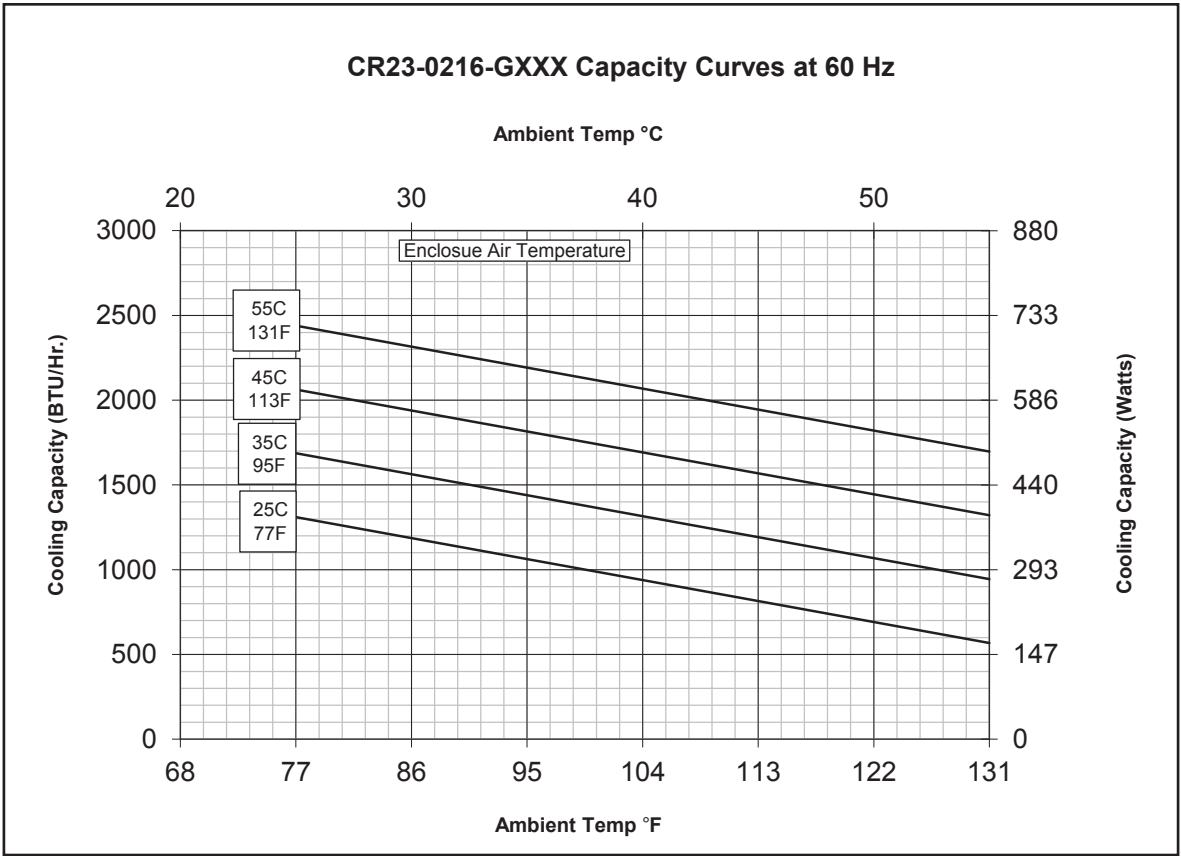
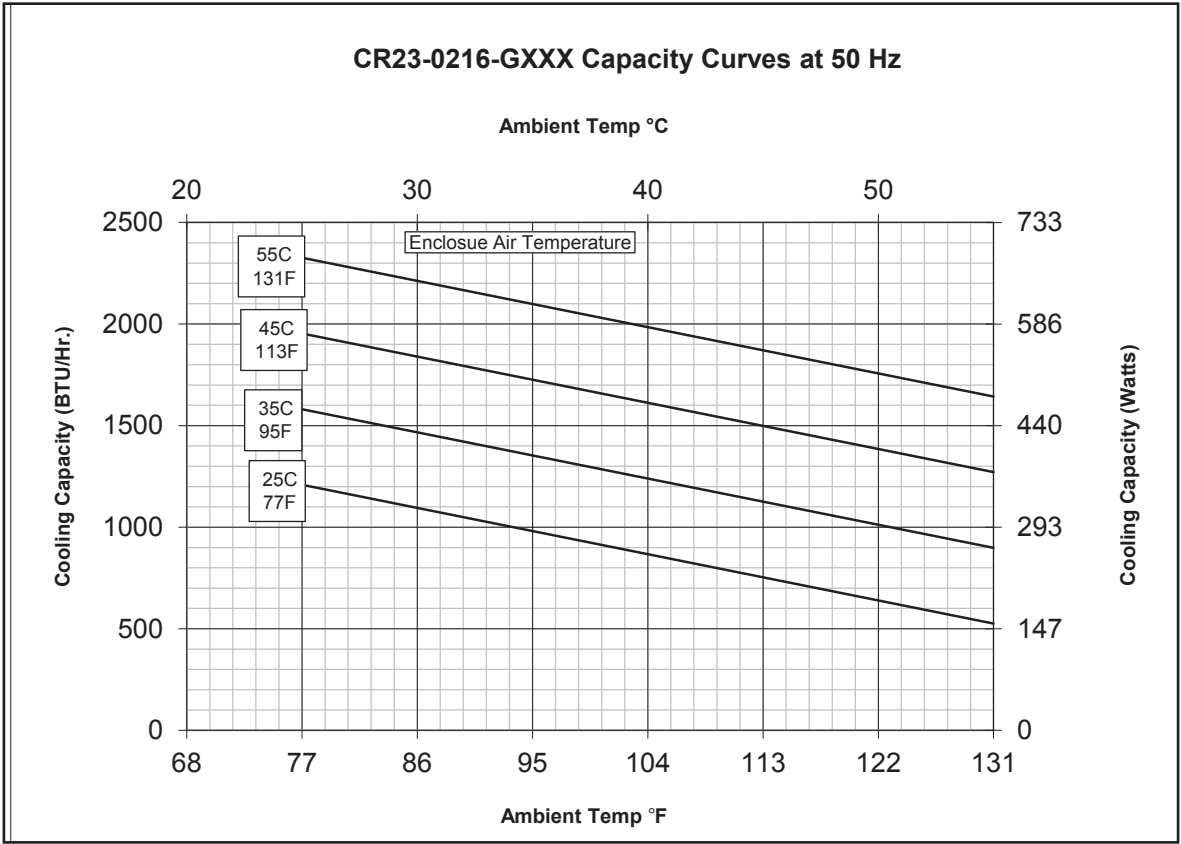
PROAIR Harsh Environments CR23/CR29/CR43

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

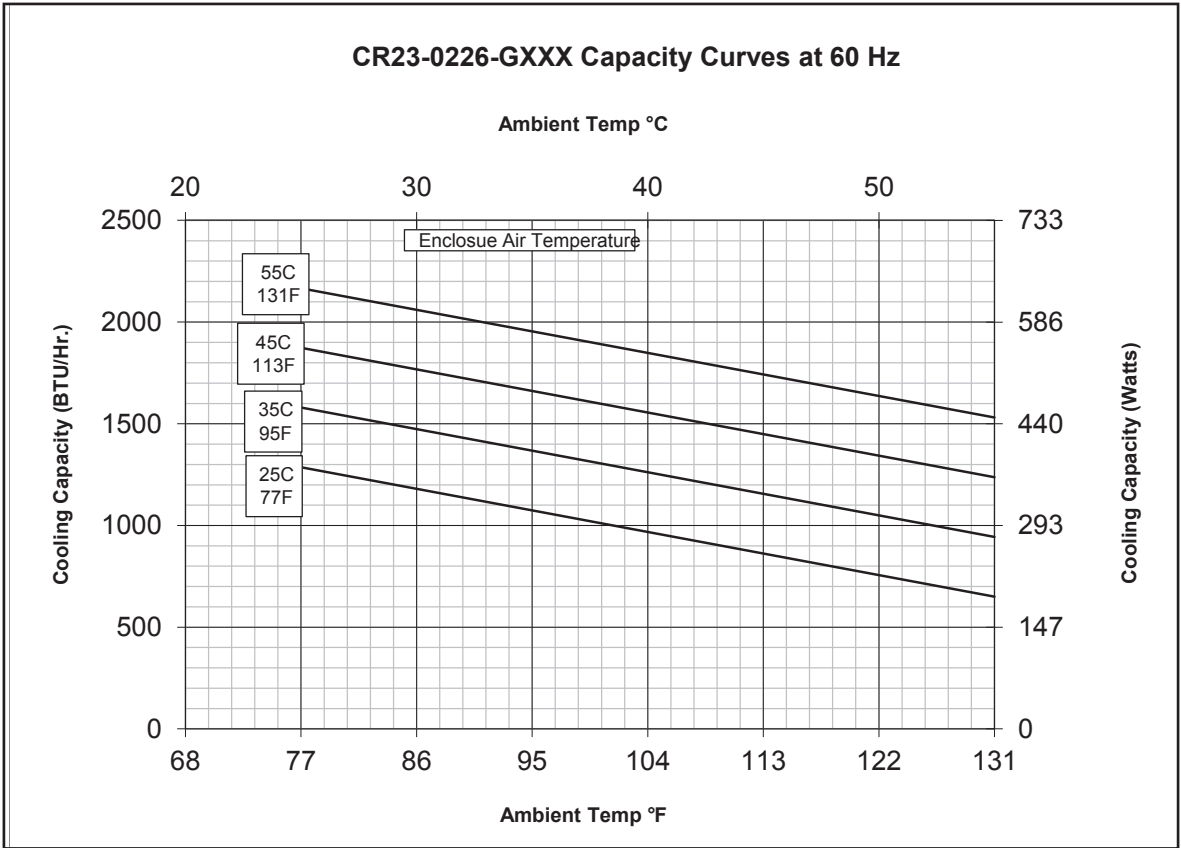
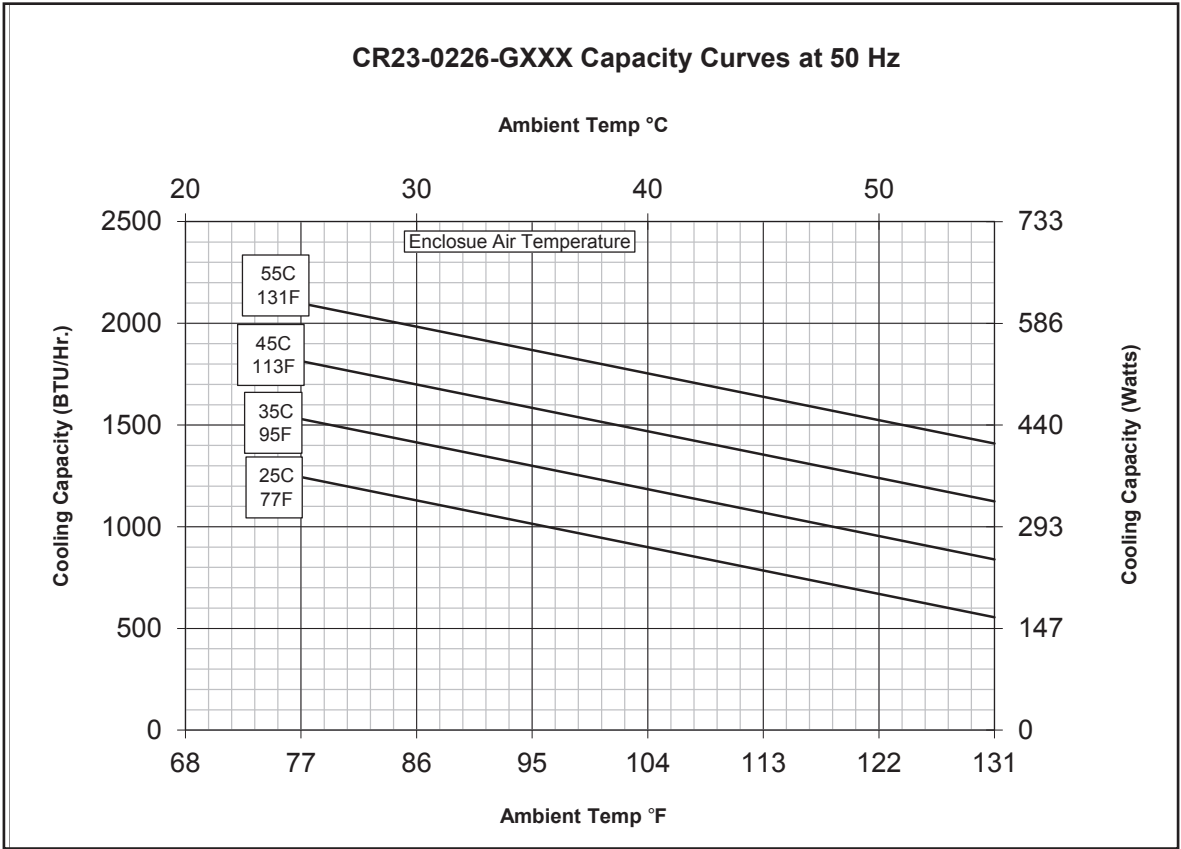
Item number			
Indoor Model	CR230216G002	CR230226G002	CR230246G400
Outdoor/SS/Corrosion Type 3R	CR230216G007	CR230226G009	—
Indoor/Outdoor/SS/Corrosion Type 4X/IP66	CR230216G015	CR230226G014	CR230226G037
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	1400/1600	1400/1600	1400/1600
Watt	410/469	410/469	410/469
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/m3/hr.)	117/199	117/199	117/199
External loop 50 Hz (CFM/m3/hr.)	86/146	86/146	86/146
Internal loop 60 Hz (CFM/m3/hr.)	130/221	130/221	130/221
External loop 60 Hz (CFM/m3/hr.)	95/161	95/161	95/161
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R standard Type 4, 4X Stainless steel		
CONTROLLER			
Description	Basic mechanical thermostat		
Thermostat Location	Behind cover		
Factory Thermostat Setting (°F/°C)	80/27		
SOUND LEVEL			
At 1.5 Meters	62 dB(A)		
UNIT CONSTRUCTION			
Material	Mild steel sheet metal standard Stainless Steel Typ 304 standard		
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		
UNIT DIMENSIONS			
Height (in./mm)	23/584	23/584	
Width (in./mm)	10/254	10/254	
Depth (in./mm)	8.75/222	8.75/222	
Weight (lb./kg)	57/26	67/30	



PROAIR Harsh Environments CR23/CR29/CR43

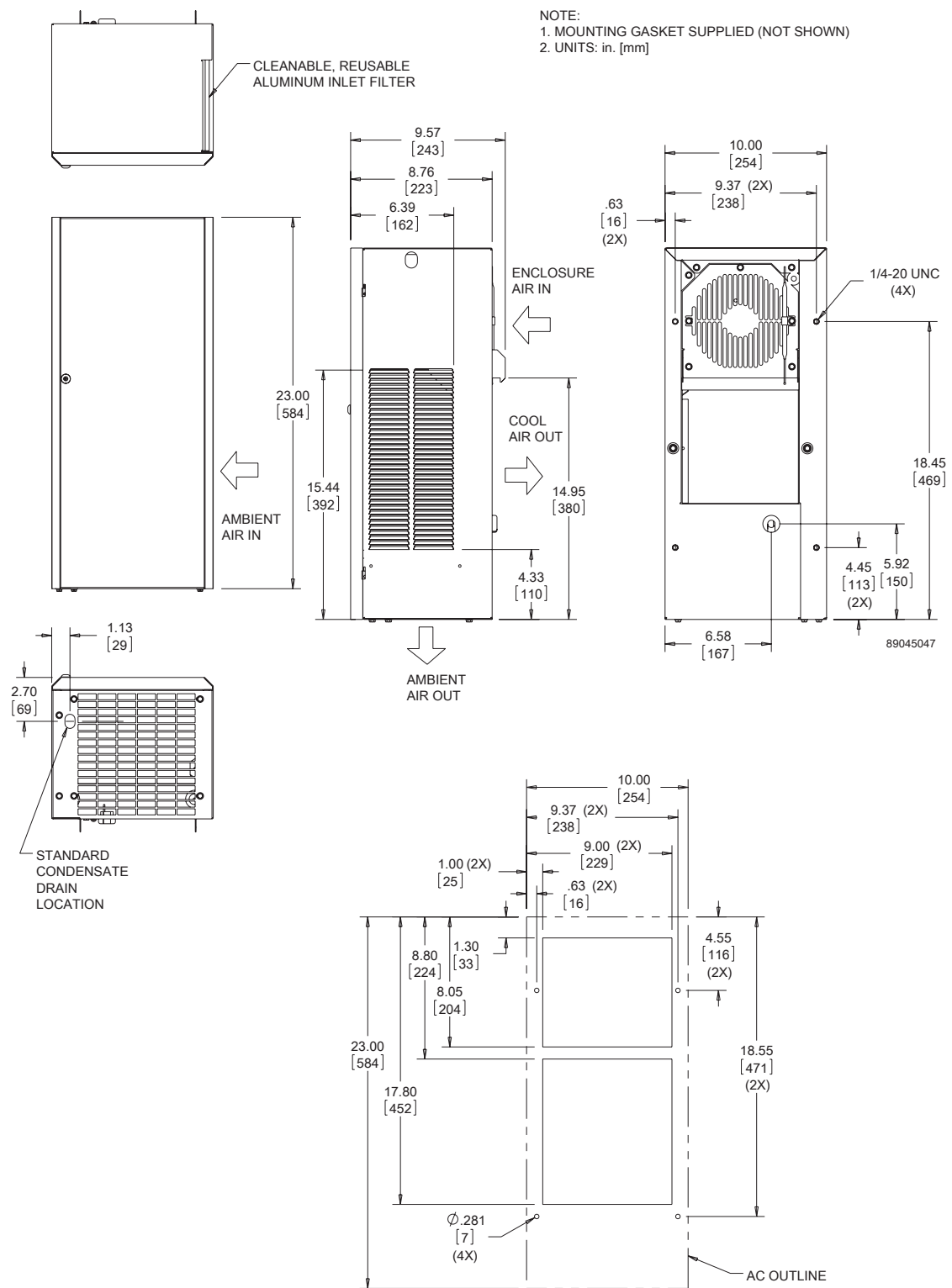


PROAIR Harsh Environments CR23/CR29/CR43



PROAIR Harsh Environments CR23/CR29/CR43

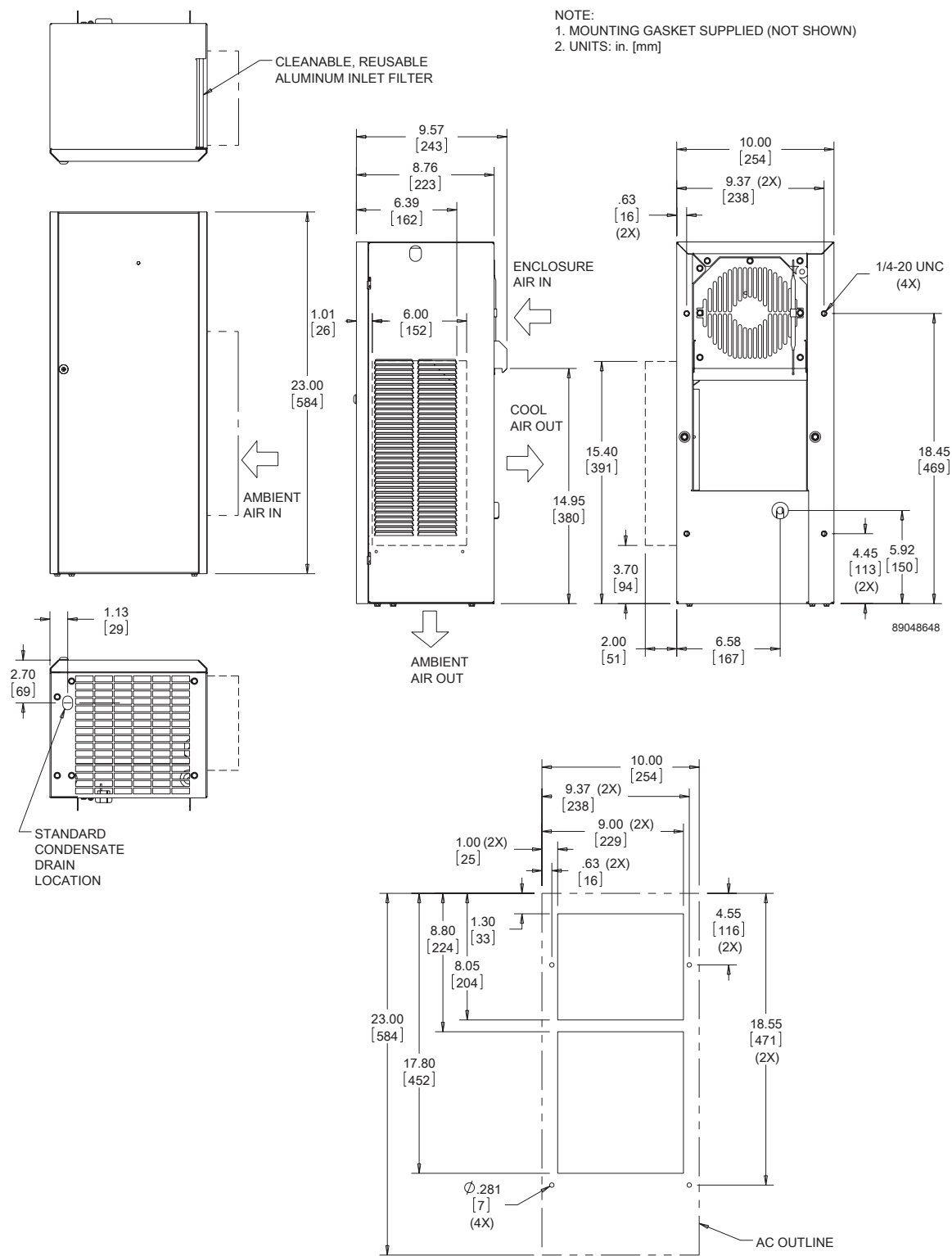
CR23 Models 1600 BTU/Hr. (469 Watt)



Cutout Dimensions

PROAIR Harsh Environments CR23/CR29/CR43

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

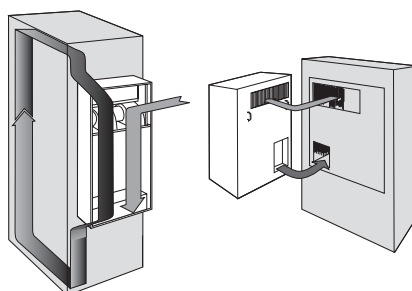


Cutout Dimensions

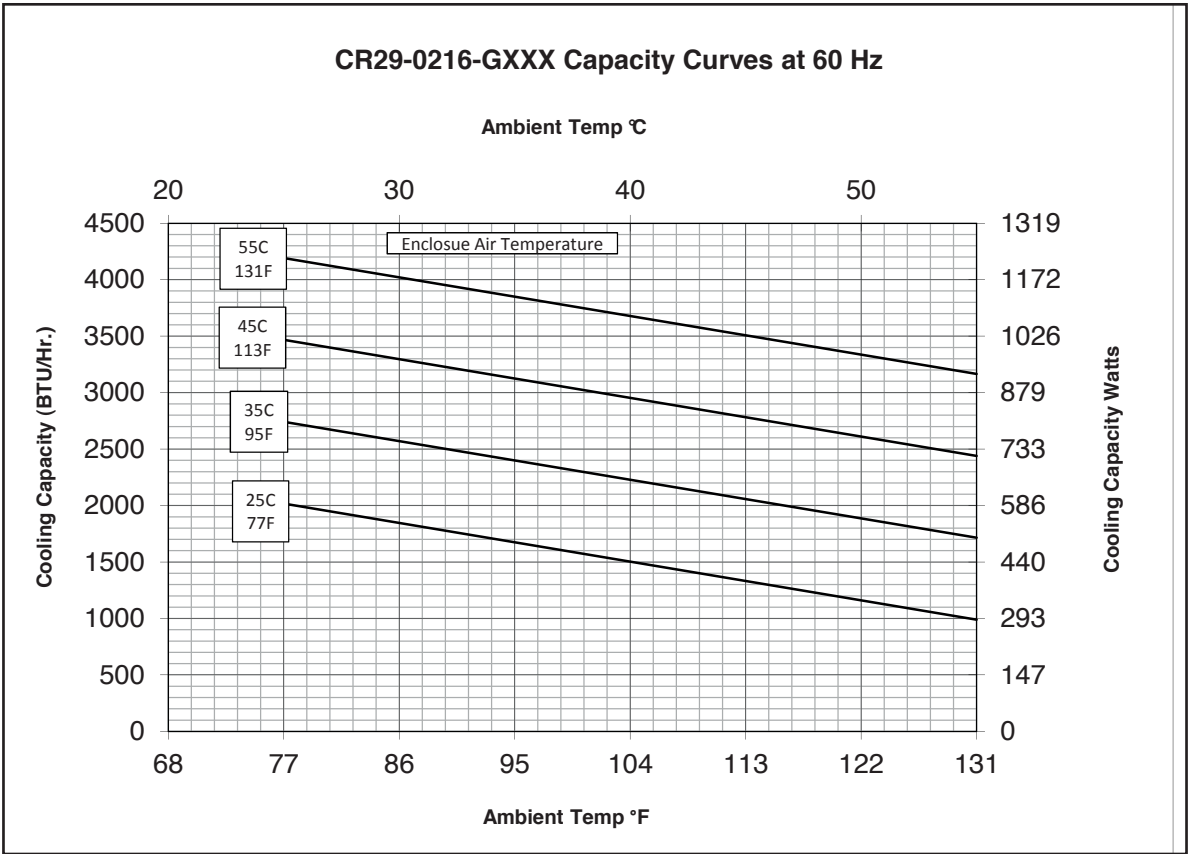
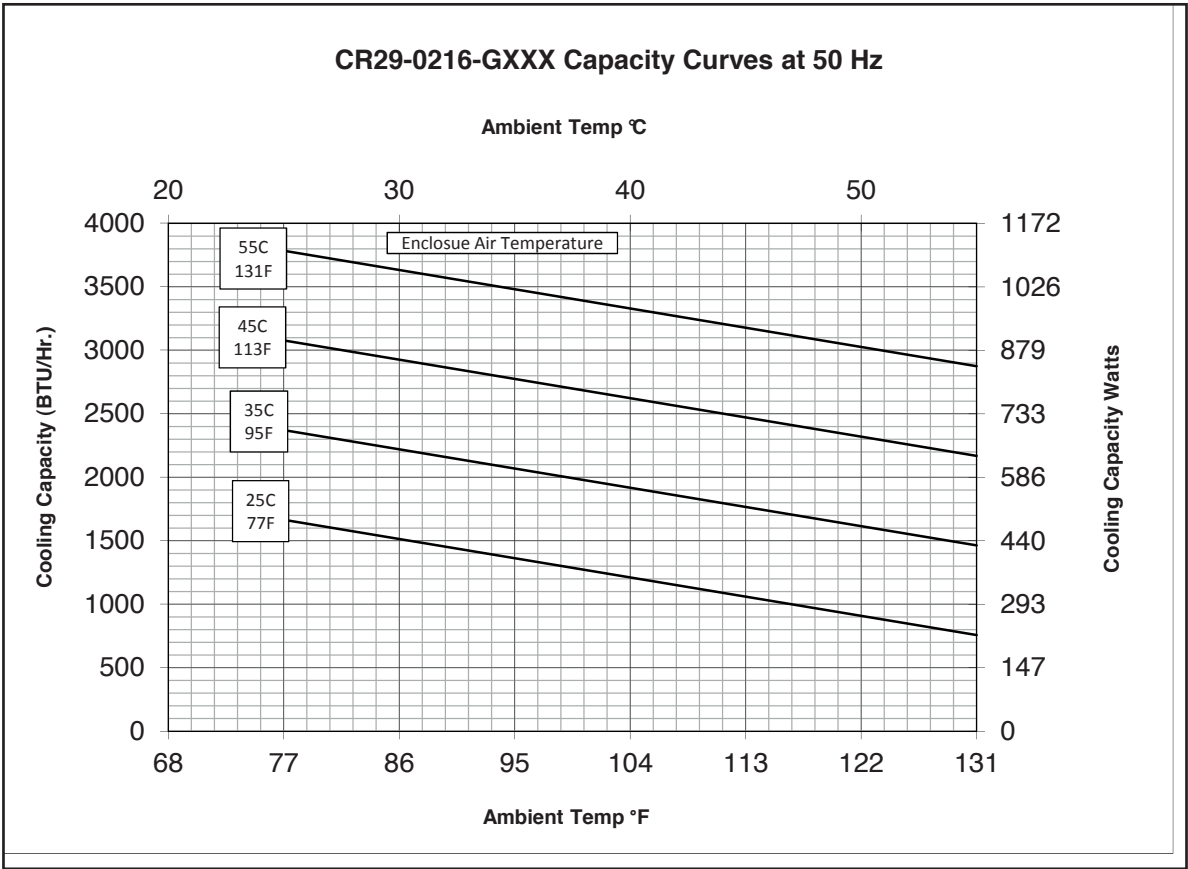
PROAIR Harsh Environments CR23/CR29/CR43

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

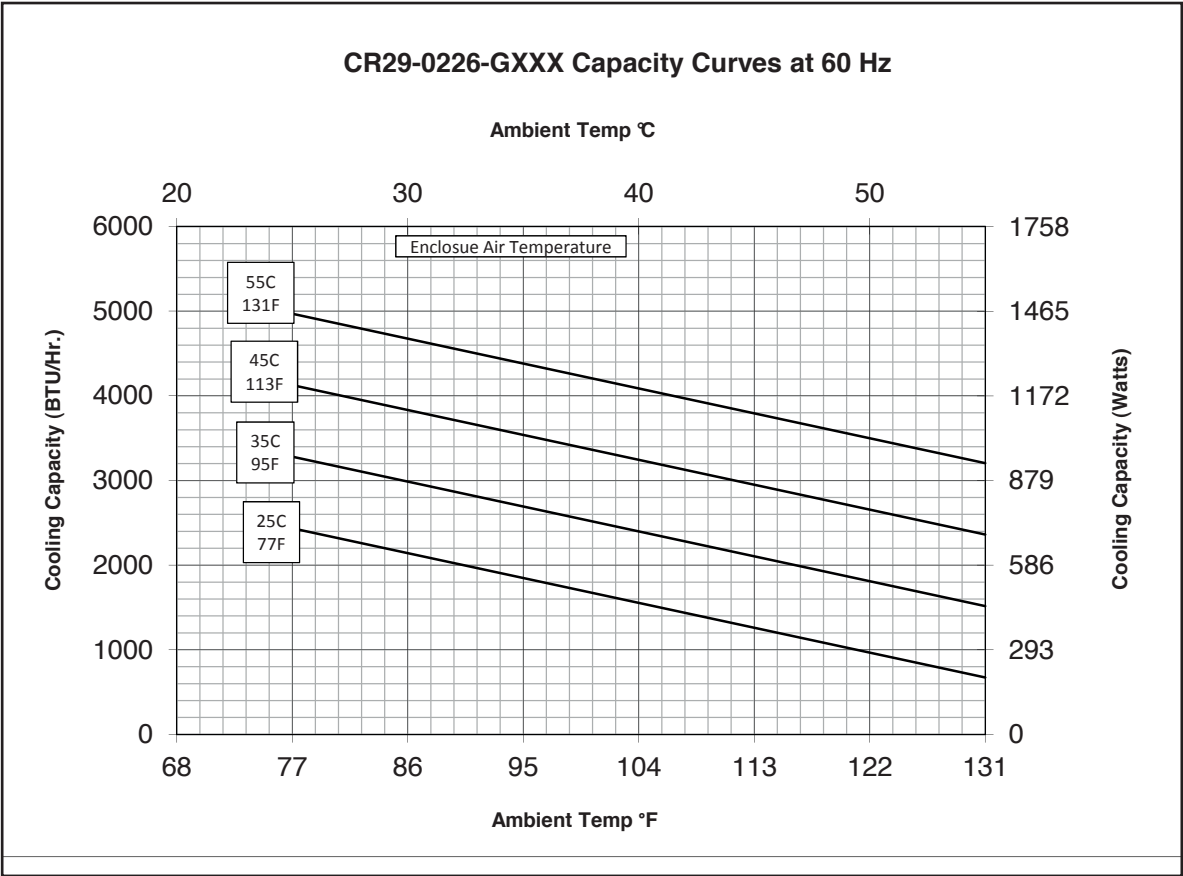
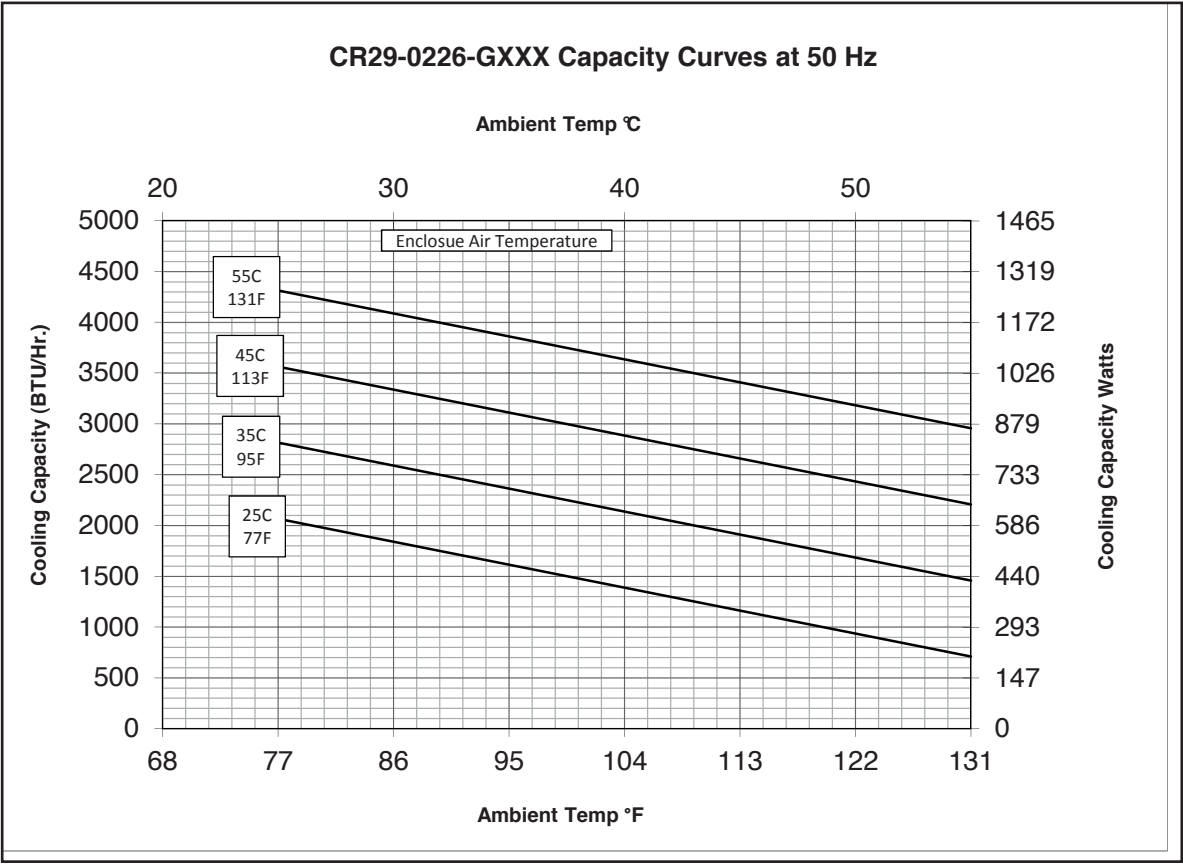
Item number						
Indoor Model	CR290216G002	CR290226G002	CR290246G400	CR290416G002	CR290426G002	CR290446G400
Outdoor/SS/Corrosion Type 3R	CR290216G013	CR290226G010	CR290246G401	CR290416G030	CR290426G017	—
Indoor/Outdoor/SS/Corrosion Type 4X/IP66	CR290216G036	CR290226G037	CR290226G045	CR290416G068	CR290426G054	CR290426G061
COOLING PERFORMANCE						
Nominal:						
BTU/Hr.	2600/3000	2600/2700	2600/2700	3500/4000	3500/4000	3500/4000
Watt	761/879	761/791	761/791	1025/1172	1025/1172	1026/1172
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/m3/hr.)	141/239	141/239	141/239	141/239	141/239	141/239
External loop 50 Hz (CFM/m3/hr.)	235/399	235/399	235/399	235/399	235/399	235/399
Internal loop 60 Hz (CFM/m3/hr.)	157/266	157/266	157/266	157/266	157/266	157/266
External loop 60 Hz (CFM/m3/hr.)	261/443	261/443	261/443	261/443	261/443	261/443
ELECTRICAL DATA						
Rated Voltage	115	230	460V 1PH	115	230	460V 1PH
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
ENCLOSURE PROTECTION						
UL Type	Type 12, 3R standard 4X/IP66 stainless steel			Type 12, 3R standard 4X/IP66 stainless steel		
CONTROLLER						
Description	Basic mechanical thermostat			Basic mechanical thermostat		
Thermostat Location	Behind cover			Behind cover		
Factory Thermostat Setting (°F/°C)	80/27			80/27		
SOUND LEVEL						
At 1.5 Meters	68 dB(A)			68 dB(A)		
UNIT CONSTRUCTION						
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		
UNIT DIMENSIONS						
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./ka)	98/44	98/44	108/49	118/54	118/54	128/58



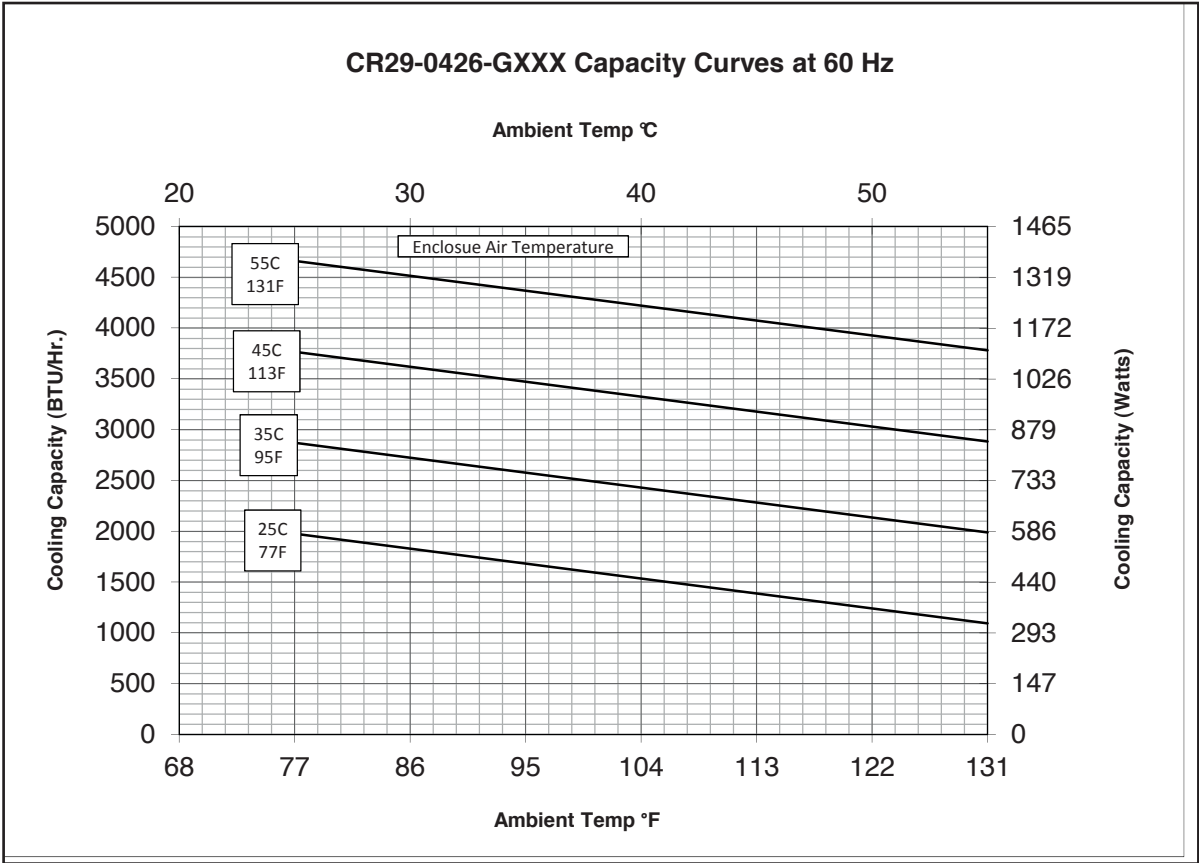
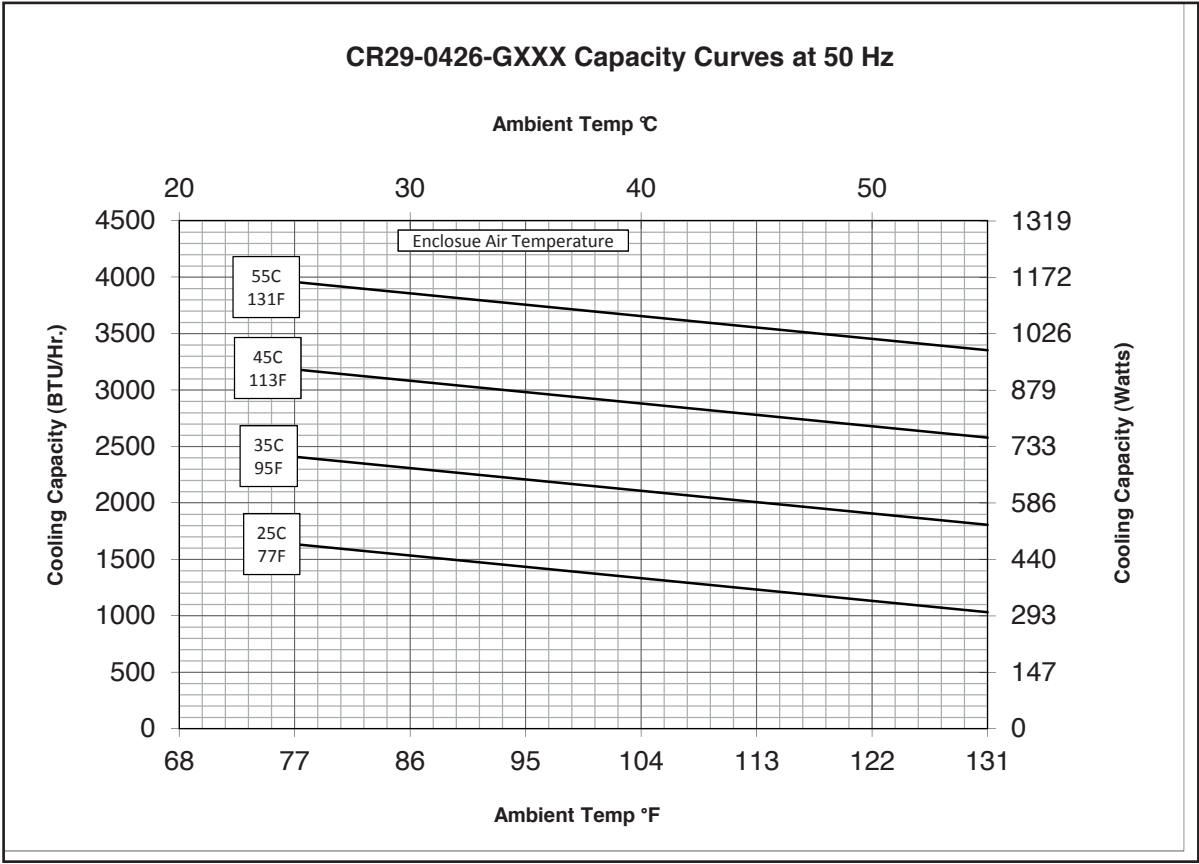
PROAIR Harsh Environments CR23/CR29/CR43



PROAIR Harsh Environments CR23/CR29/CR43



PROAIR Harsh Environments CR23/CR29/CR43



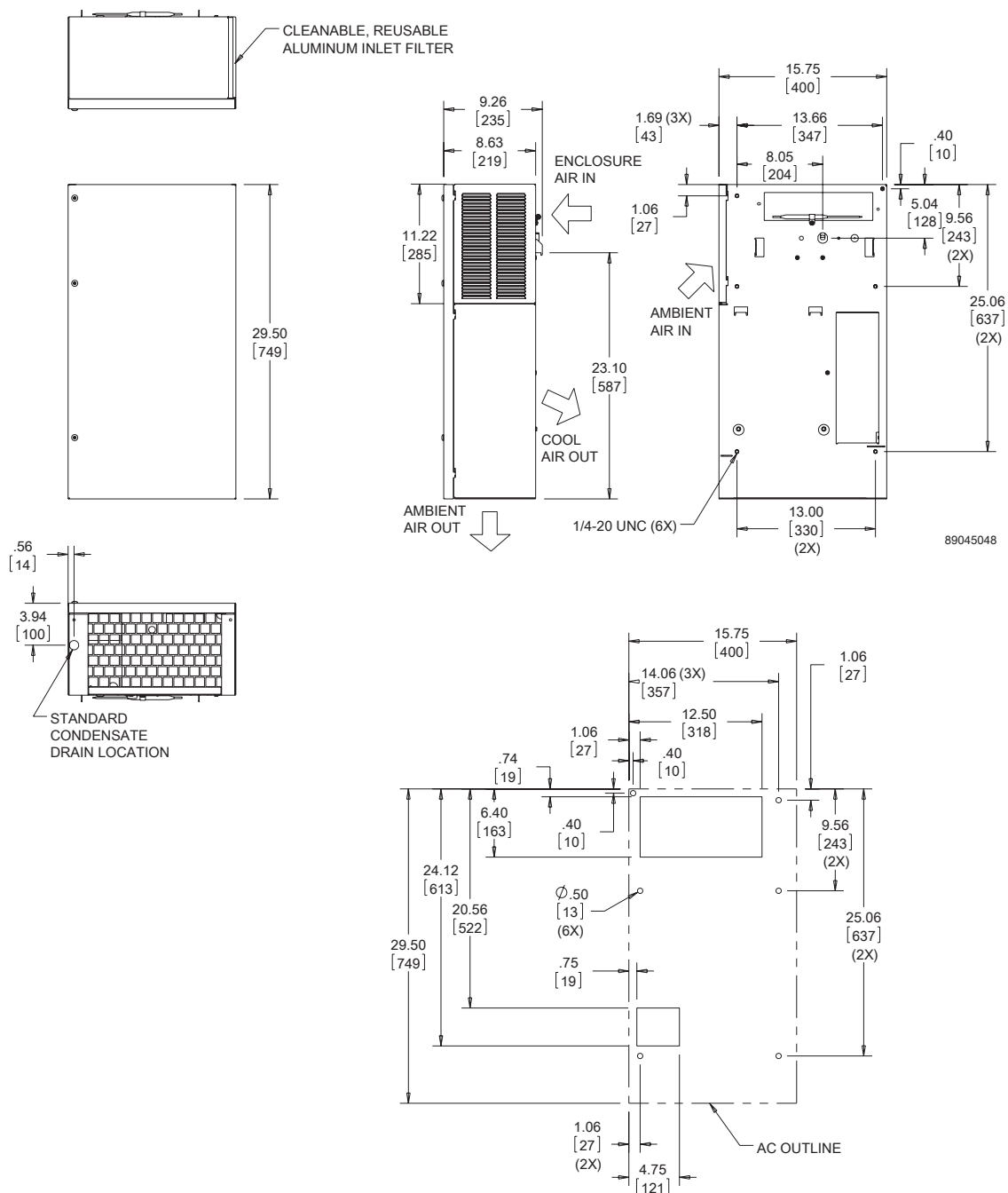
PROAIR Harsh Environments CR23/CR29/CR43

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

NOTE:

1. MOUNTING GASKET SUPPLIED (NOT SHOWN)

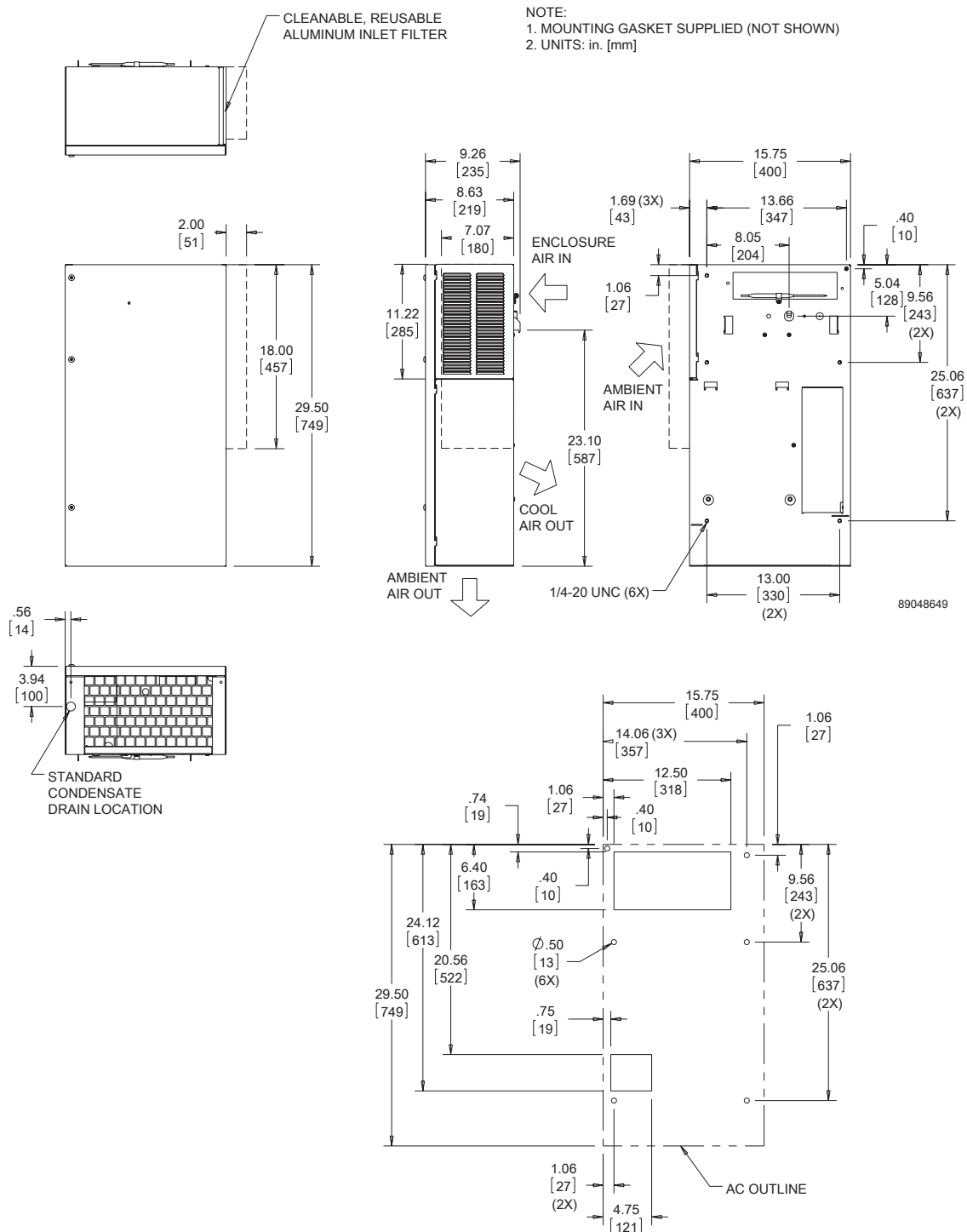
2. UNITS: in. [mm]



Cutout Dimensions

PROAIR Harsh Environments CR23/CR29/CR43

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

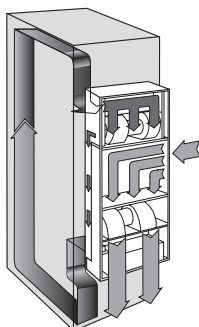


Cutout Dimensions

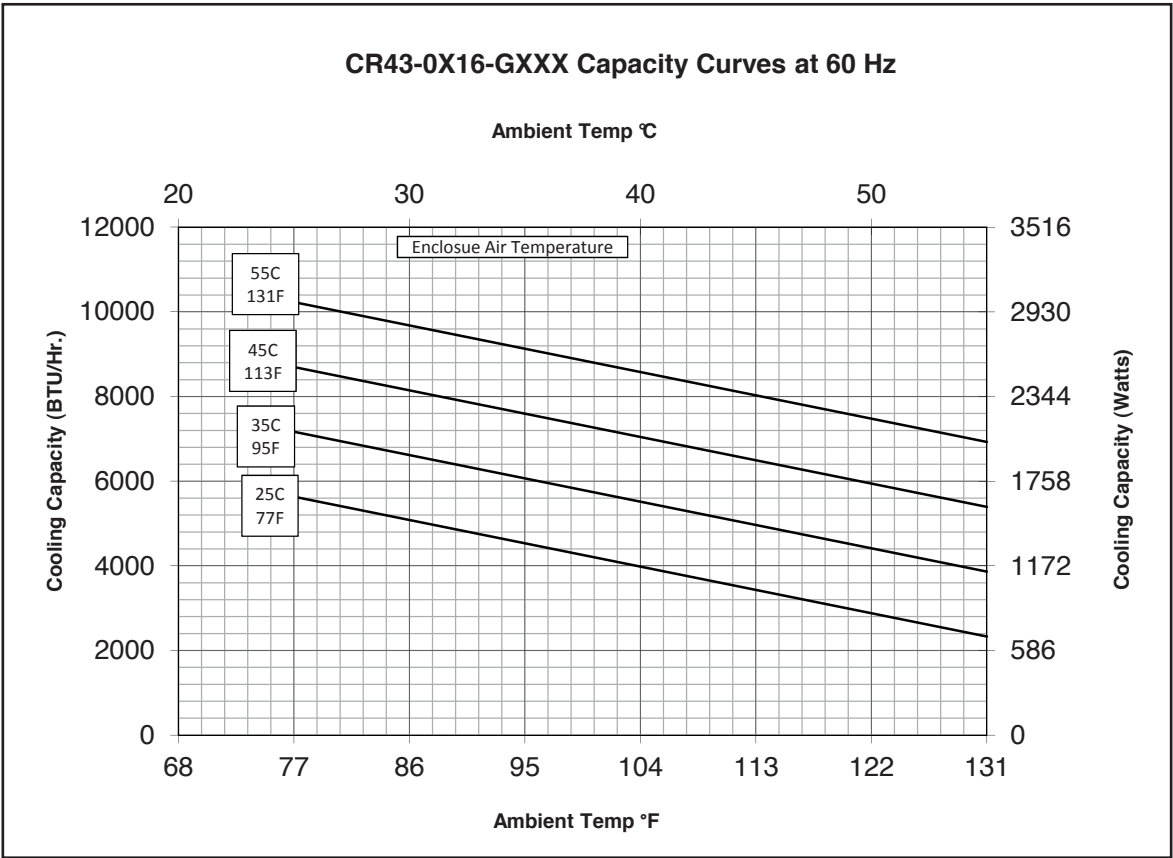
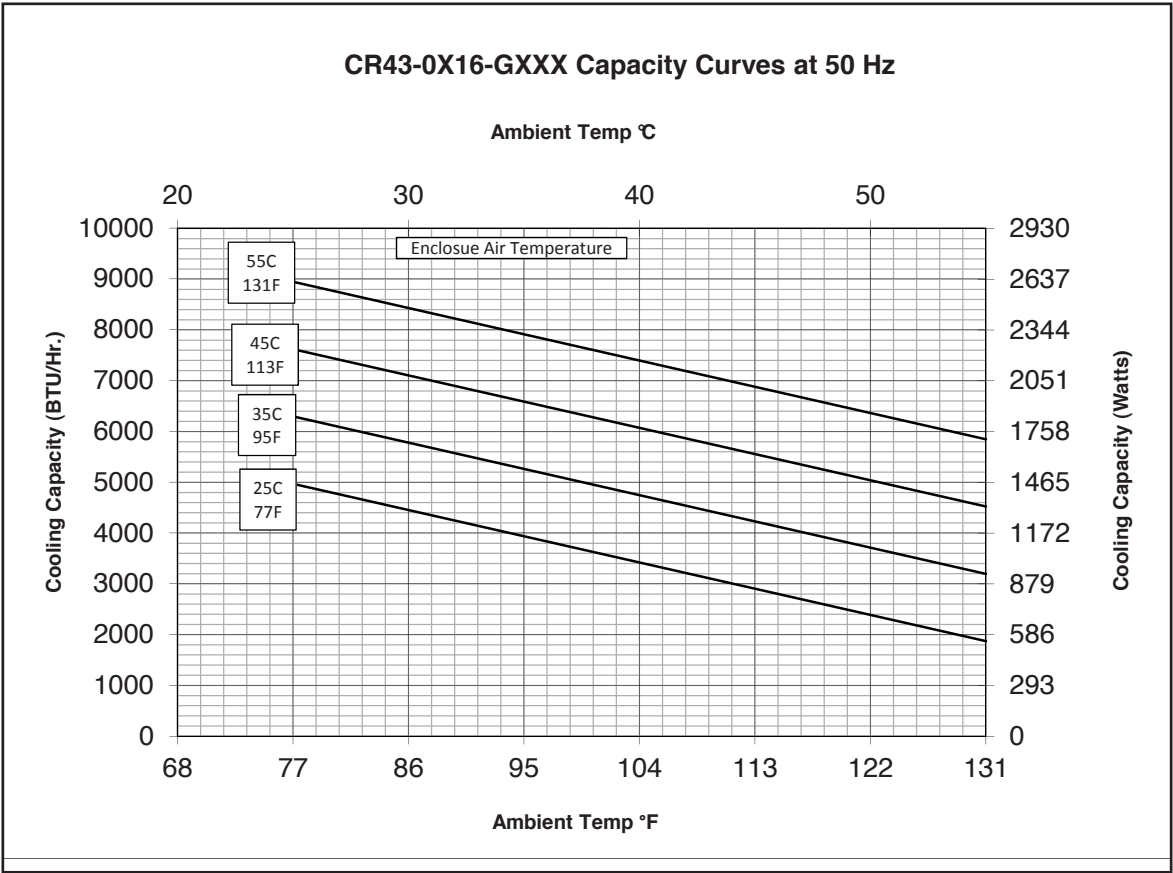
PROAIR Harsh Environments CR23/CR29/CR43

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

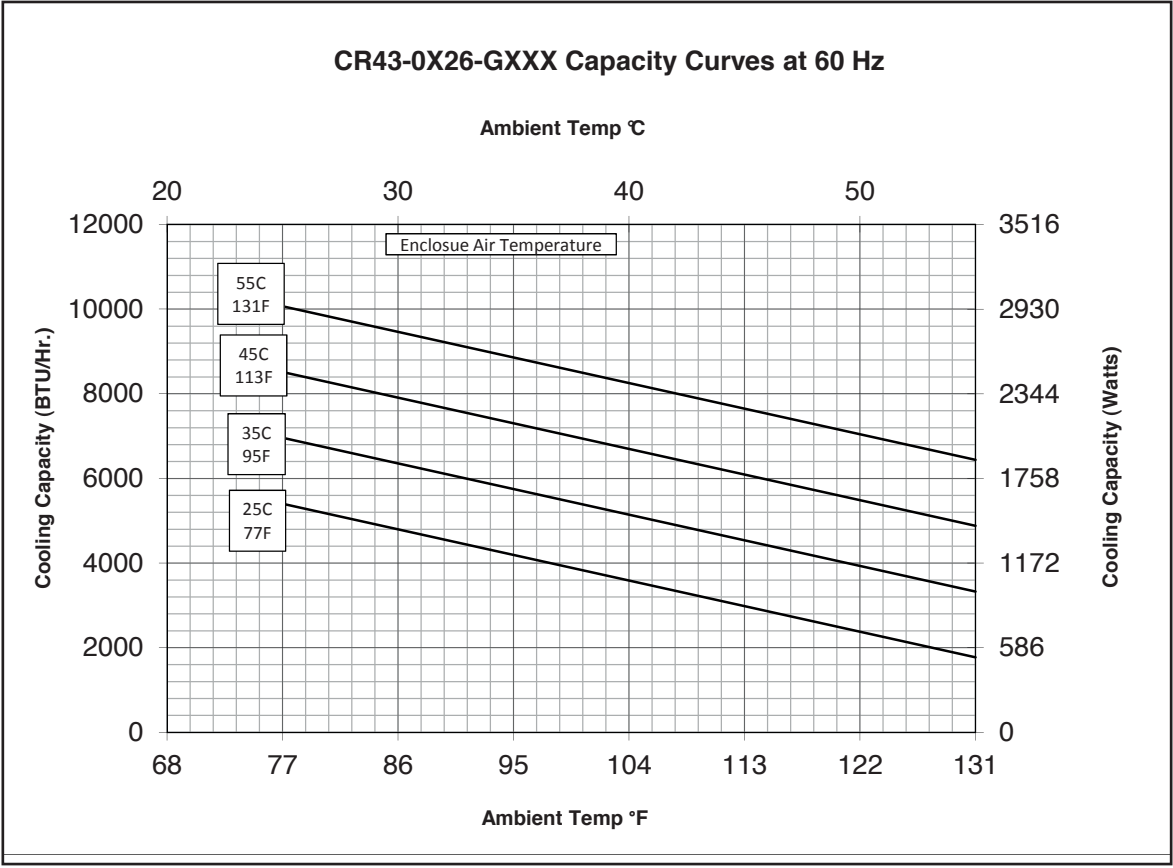
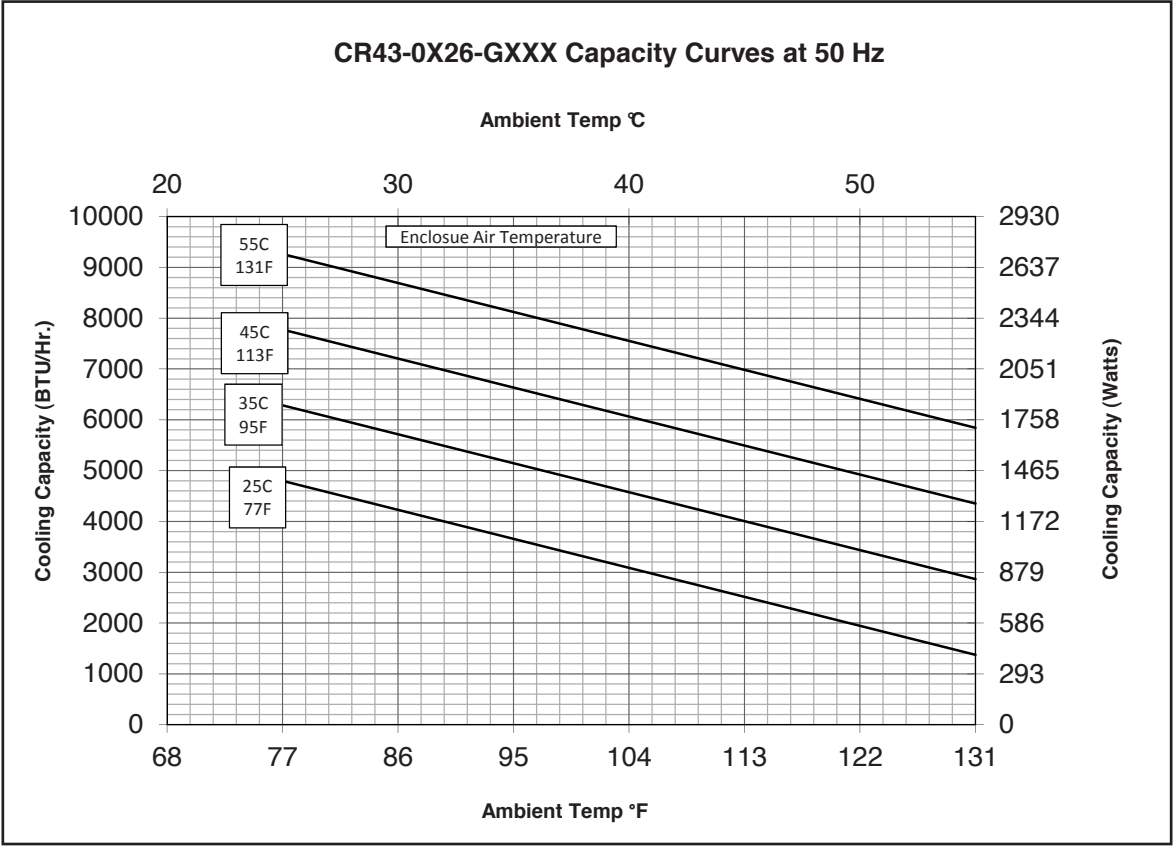
Item number						
Indoor Model	CR430616G002	CR430626G002	CR430646G004	CR430816G002	CR430826G002	CR430826G089
Outdoor/SS/Corrosion Type 3R	CR430616G004	—	—	CR430816G010	CR430826G037	—
Indoor/Outdoor/SS/Corrosion Type 4X/ IP66	CR430616G031	CR430626G034	CR430626G074	CR430816G036	CR430826G038	CR430846G401
COOLING PERFORMANCE						
Nominal:						
BTU/Hr.	5500/6000	5500/6000	5500/6000	7100/8000	7100/8000	7100/8000
Watt	1611/1758	1611/1758	1611/1758	2080/2344	2080/2344	2080/2344
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/m3/hr.)	320/543	226/384	226/384	320/543	226/384	226/384
External loop 50 Hz (CFM/m3/hr.)	480/815	470/798	470/798	480/815	470/798	470/798
Internal loop 60 Hz (CFM/m3/hr.)	368/625	255/433	255/433	368/625	255/433	255/433
External loop 60 Hz (CFM/m3/hr.)	544/924	540/917	540/917	544/924	540/917	540/917
ELECTRICAL DATA						
Rated Voltage	115	230	460V 1PH	115	230	460V 1PH
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 Others available upon request		cUR Recognized CE EAC	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	6-ft. cord with NEMA 5-20 plug	6-ft. cord with NEMA 6-15 plug	6-ft. cord with wire leads
ENCLOSURE PROTECTION						
UL Type	Type 12, 3R standard 4X/IP66 Stainless steel			Type 12, 3R standard 4X/IP66 Stainless steel		
CONTROLLER						
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		
SOUND LEVEL						
At 1.5 Meters	71 dB(A)			71 dB(A)		
UNIT CONSTRUCTION						
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		
UNIT DIMENSIONS						
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

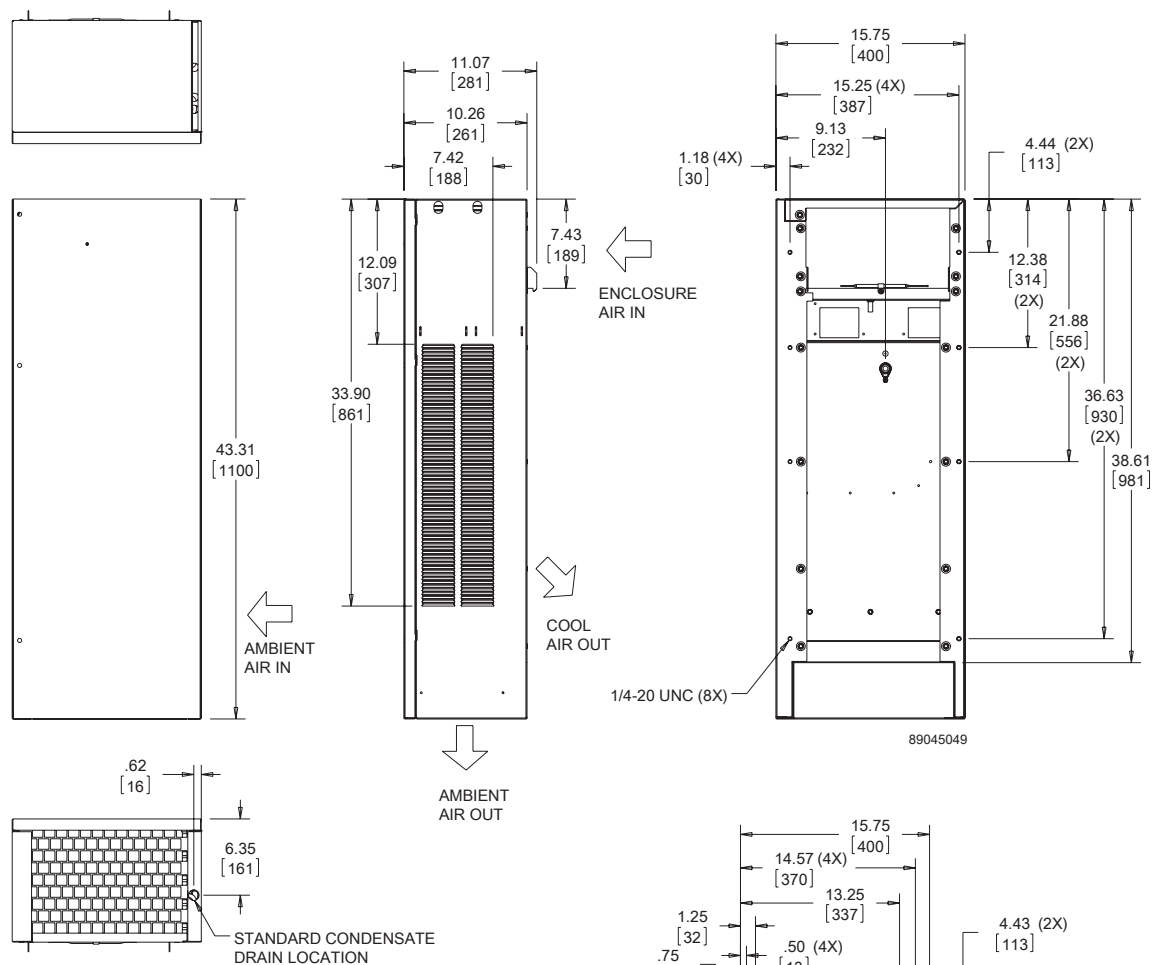


PROAIR Harsh Environments CR23/CR29/CR43



PROAIR Harsh Environments CR23/CR29/CR43

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

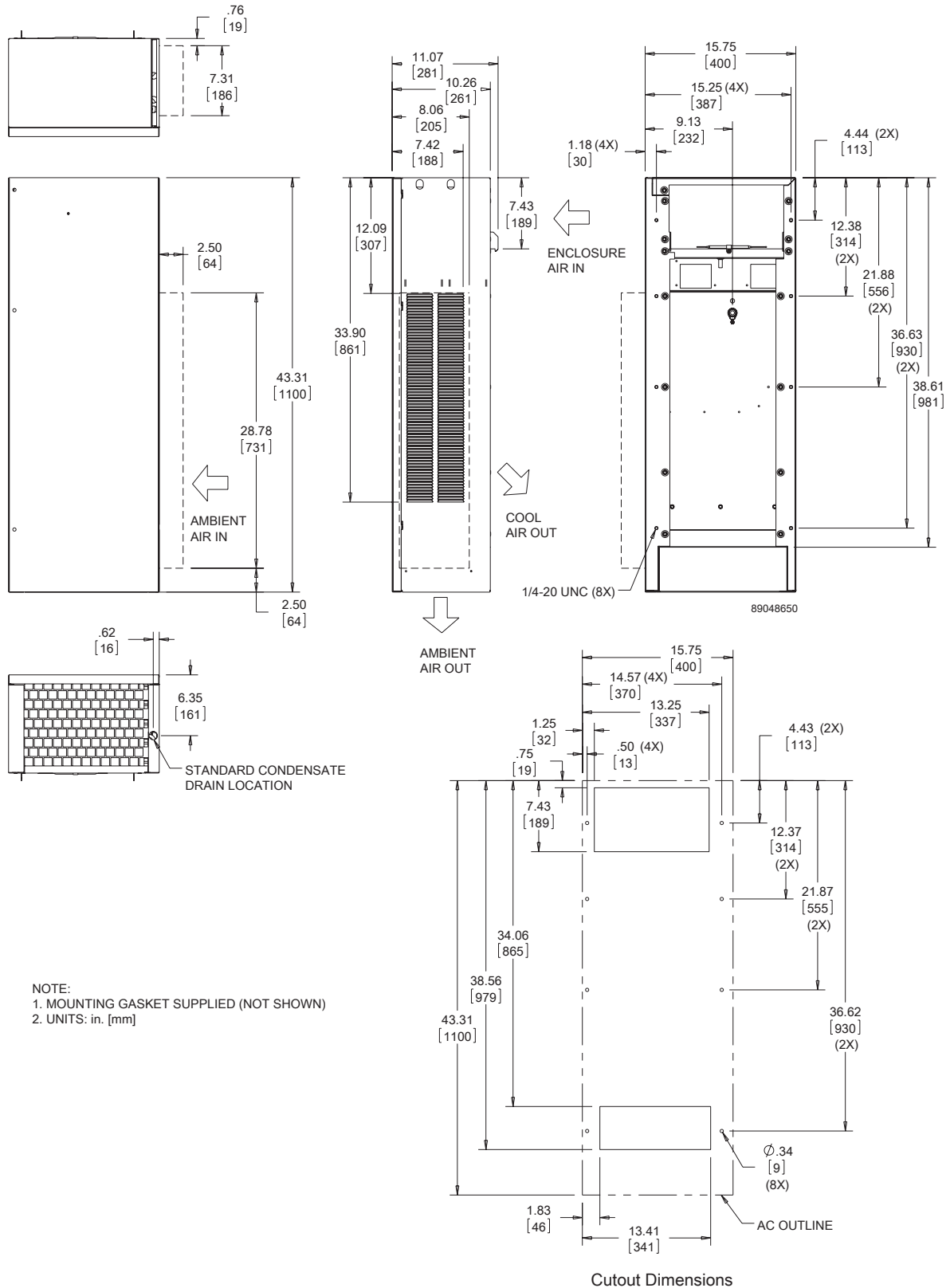


NOTE:
1. MOUNTING GASKET SUPPLIED (NOT SHOWN)
2. UNITS: in. [mm]

Cutout Dimensions

PROAIR Harsh Environments CR23/CR29/CR43

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



NOTES :

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".

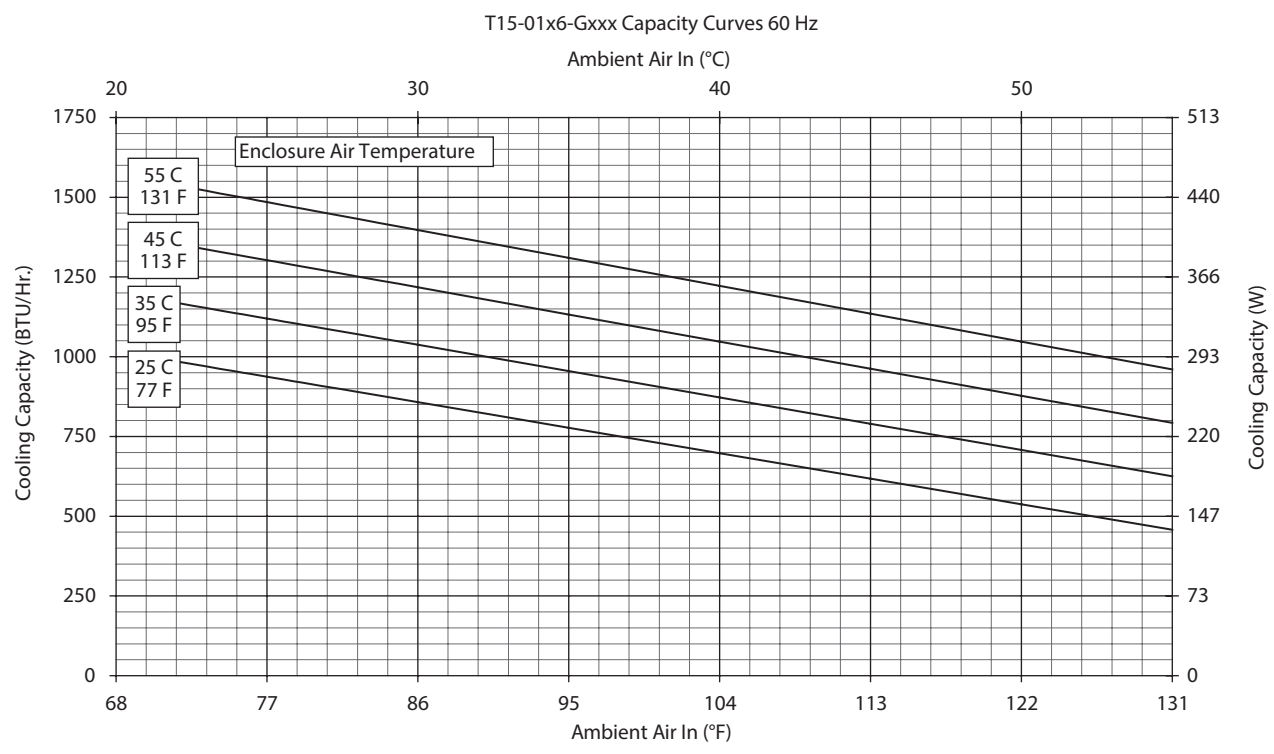
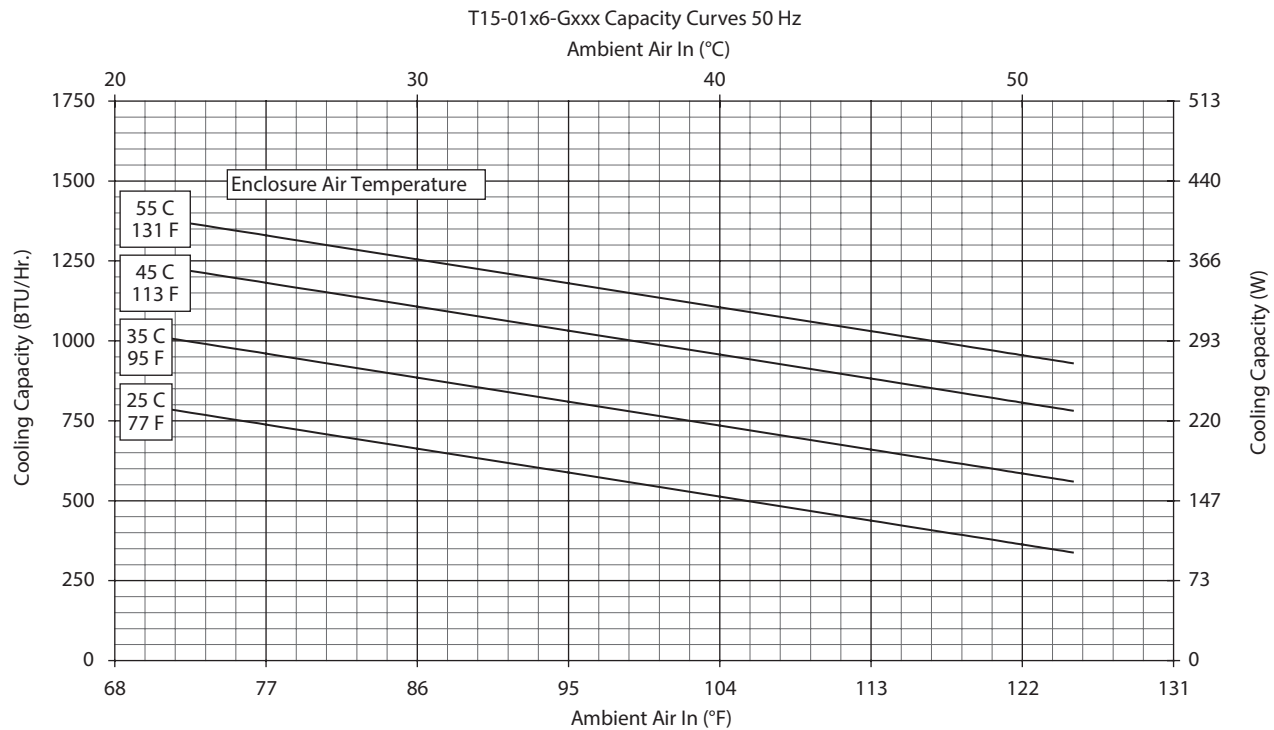
T-Series Outdoor T15 to T70

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

Item number		
Indoor Model	T150116G120	T150126G120
Outdoor Model without Heat Pkg.	T150116G100	T150126G100
Outdoor Model with Heat Pkg.	T150116G150	T150126G150
Outdoor Model/SST/Corrosion/4X	T150116G152	T150126G104
Outdoor Model/SST/Corrosion/4X/Heater	—	—
COOLING PERFORMANCE		
Nominal:		
BTU/Hr.	800/800	800/900
Watt	235/235	235/264
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
ELECTRICAL DATA		
Rated Voltage	100/115	220/230
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
ENCLOSURE PROTECTION		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel optional	
CONTROLLER		
Description	Mechanical thermostat	
Thermostat Location	Enclosure behind front panel	
Factory Thermostat Setting (°F/°C)	80/27	
SOUND LEVEL		
At 1.5 Meters	63 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)	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

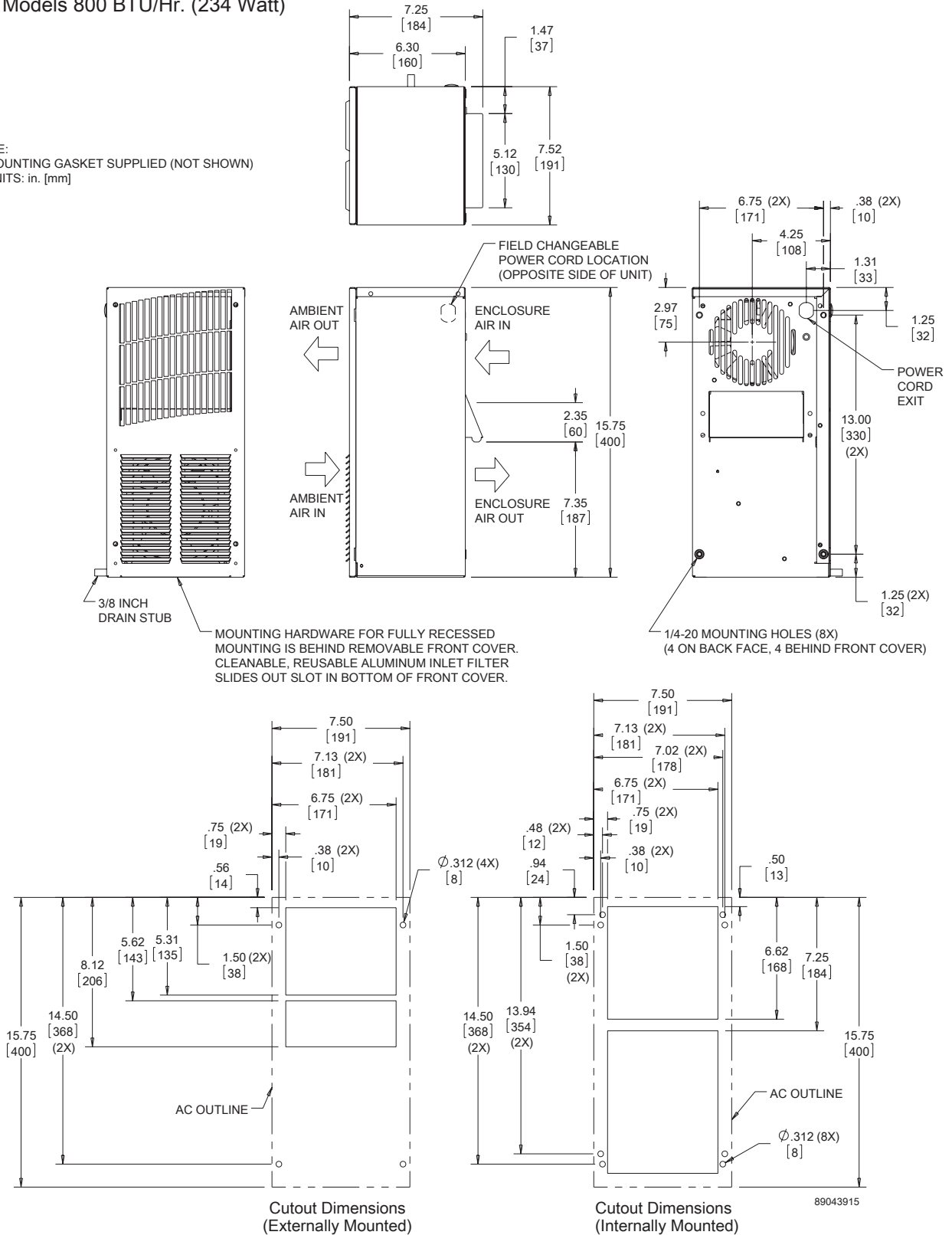
Performance Curves for T15 Models 800 BTU/Hr. (234 Watt)



T-Series Outdoor T15 to T70

T15 Models 800 BTU/Hr. (234 Watt)

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



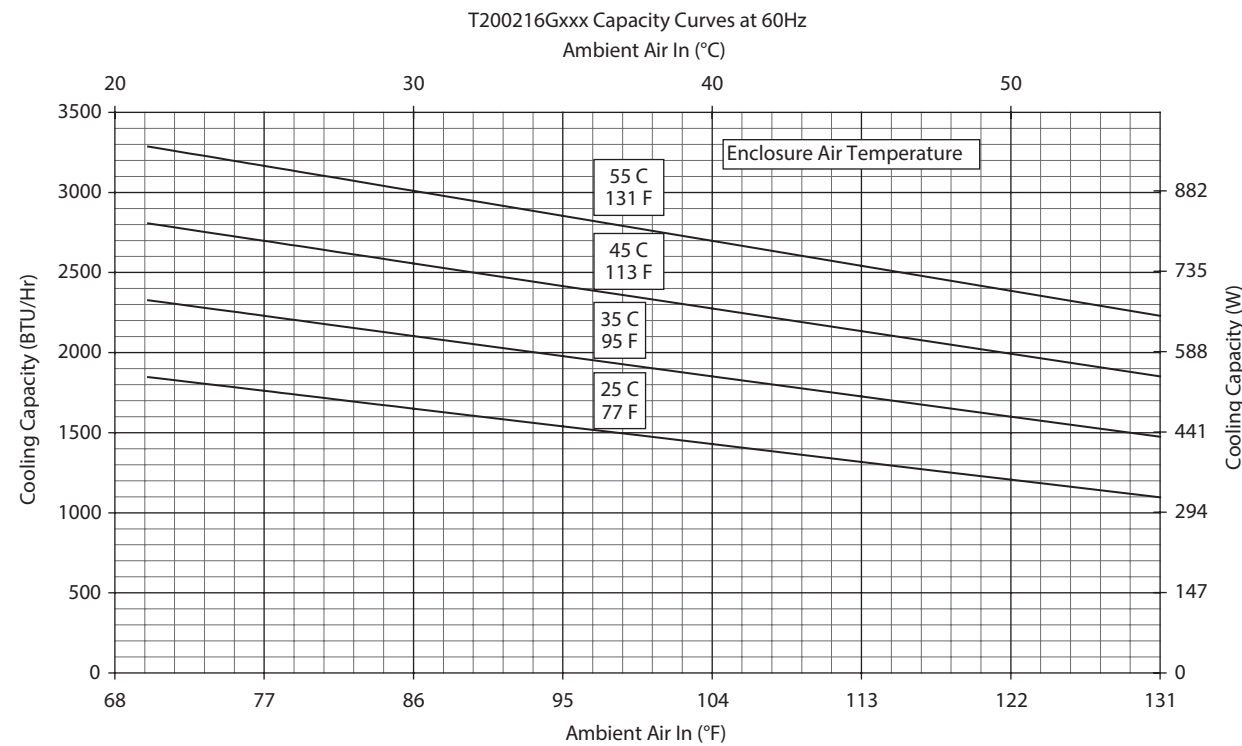
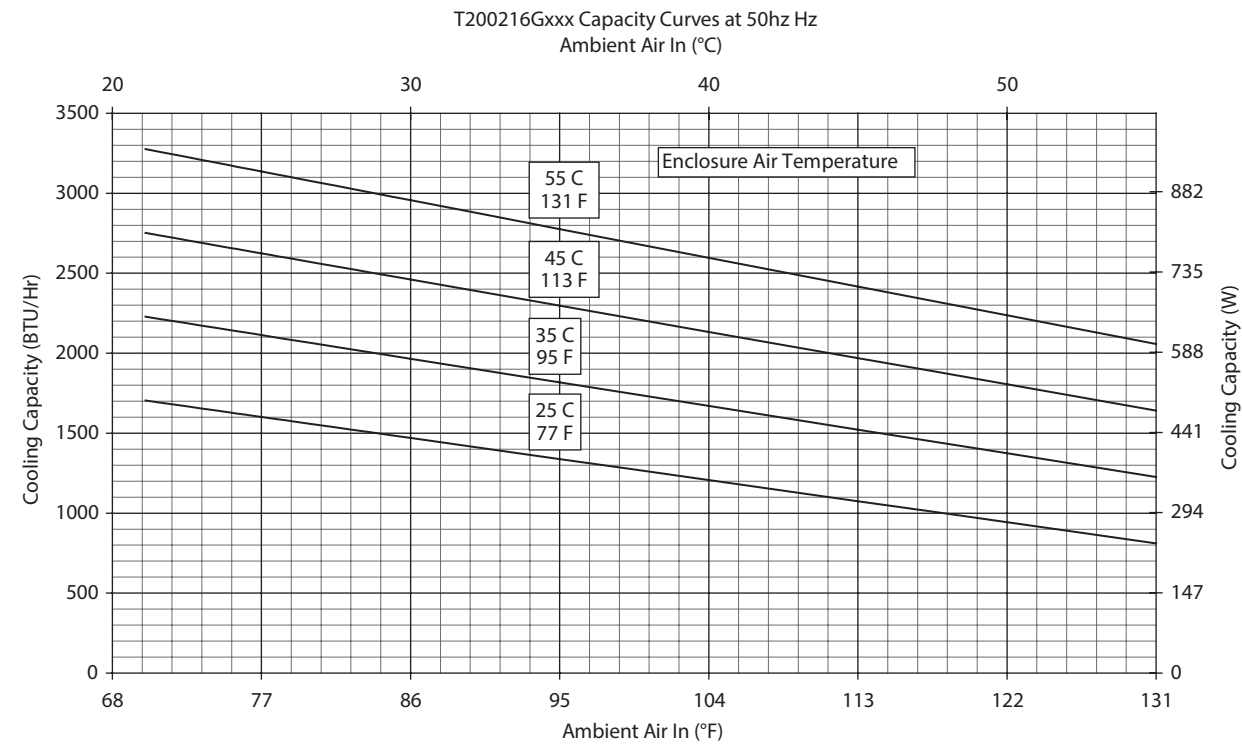
T-Series Outdoor T15 to T70

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

Item number			
Outdoor Model without Heat Pkg.	T200216G100	T200226G100	T200246G400
Outdoor Model with Heat Pkg.	T200216G150	T200226G150	—
Outdoor Model/SS/Corrosion/4X	T200216G155	T200226G103	T200246G401
Outdoor Model/SS/Corrosion/4X/Heater	T200216G157	T200226G158	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	1800/2000	1800/2000	1800/2000
Watt	528/586	528/586	528/586
At 131 °F/131 °F (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 °F (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/m3/hr.)	77/131	77/131	77/131
External loop 50 Hz (CFM/m3/hr.)	150/255	150/255	150/255
Internal loop 60 Hz (CFM/m3/hr.)	91/155	91/155	91/155
External loop 60 Hz (CFM/m3/hr.)	165/280	165/280	165/280
Max. Heater W (Outdoor Models)	500	500	500
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel optional		
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	66 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)	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

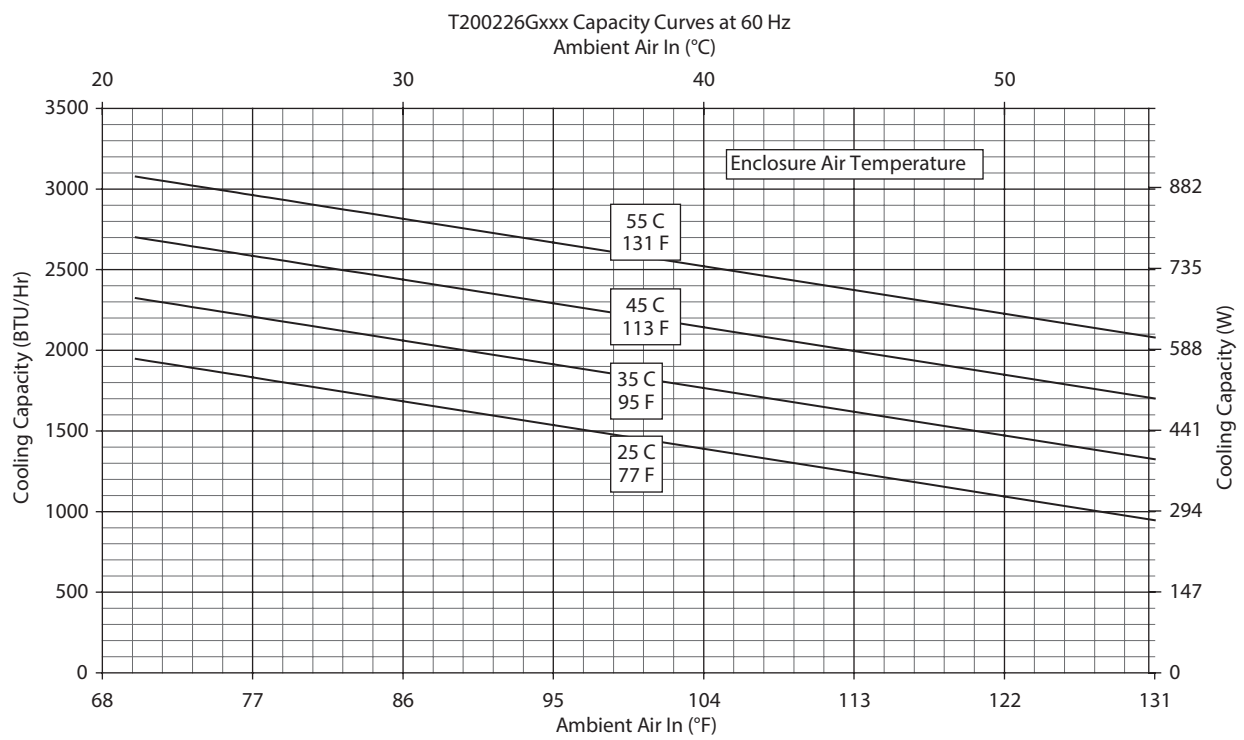
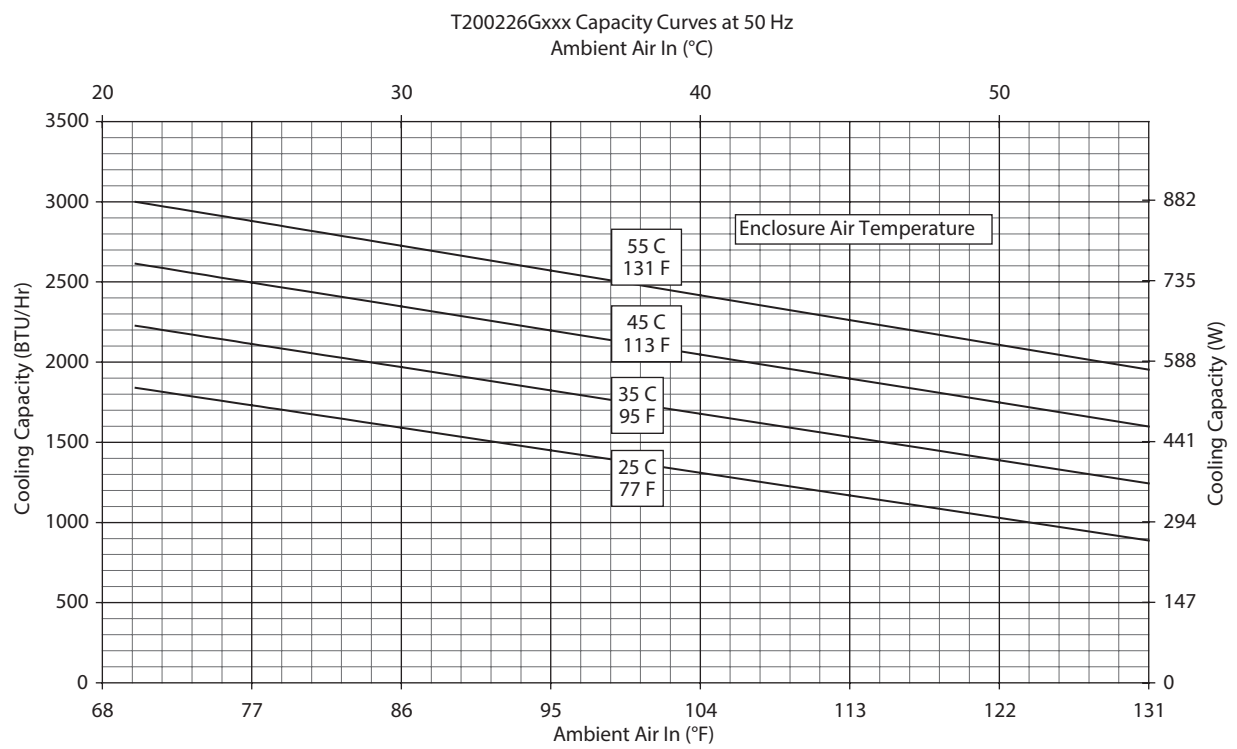
T-Series Outdoor T15 to T70

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



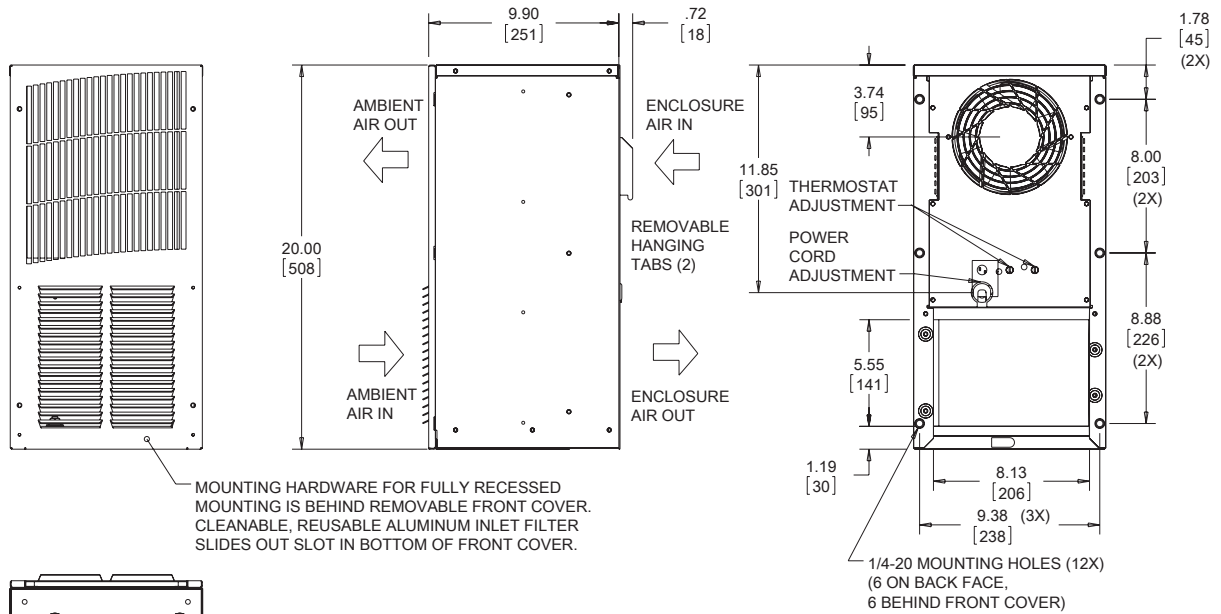
T-Series Outdoor T15 to T70

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

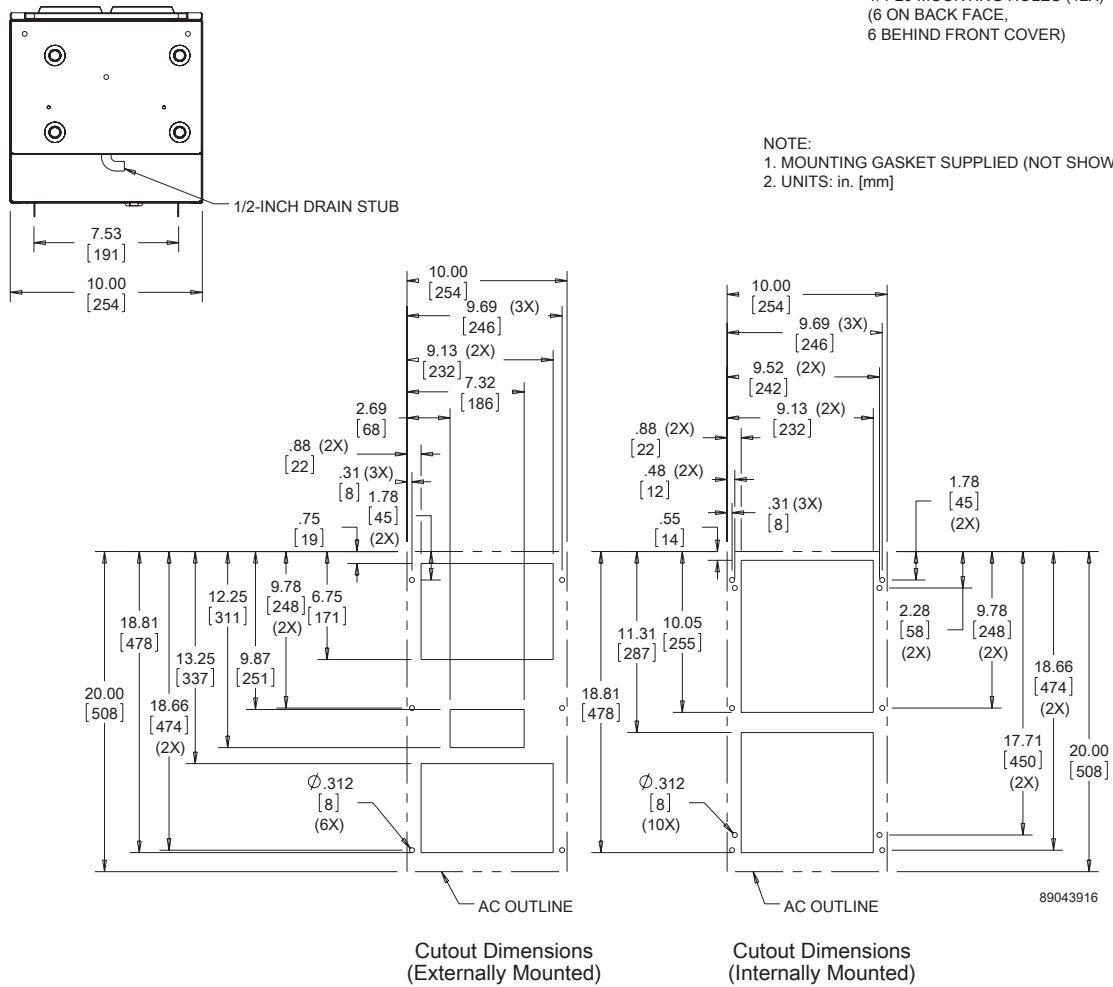


T-Series Outdoor T15 to T70

T20 Models 2000 BTU/Hr. (586 Watt)

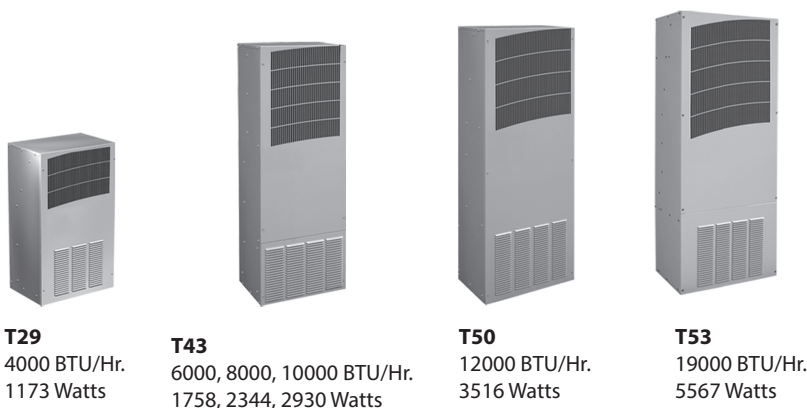


NOTE:
1. MOUNTING GASKET SUPPLIED (NOT SHOWN)
2. UNITS: in. [mm]



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".

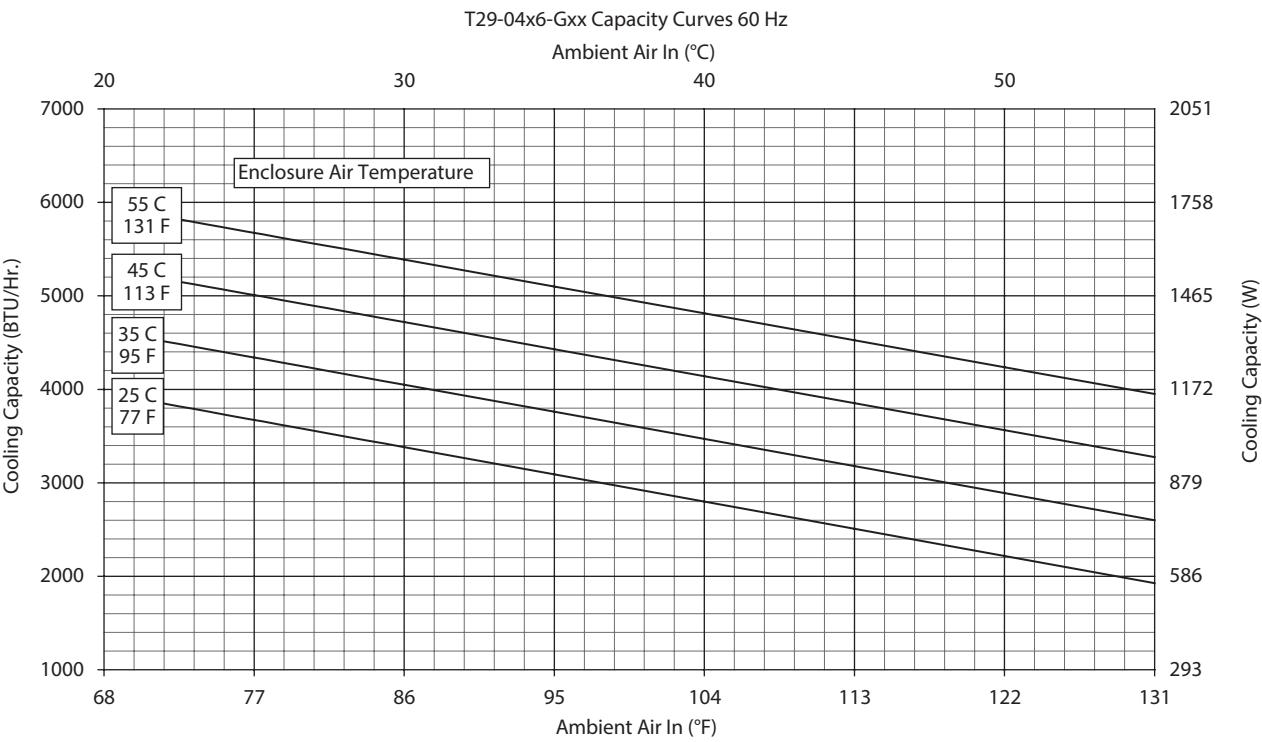
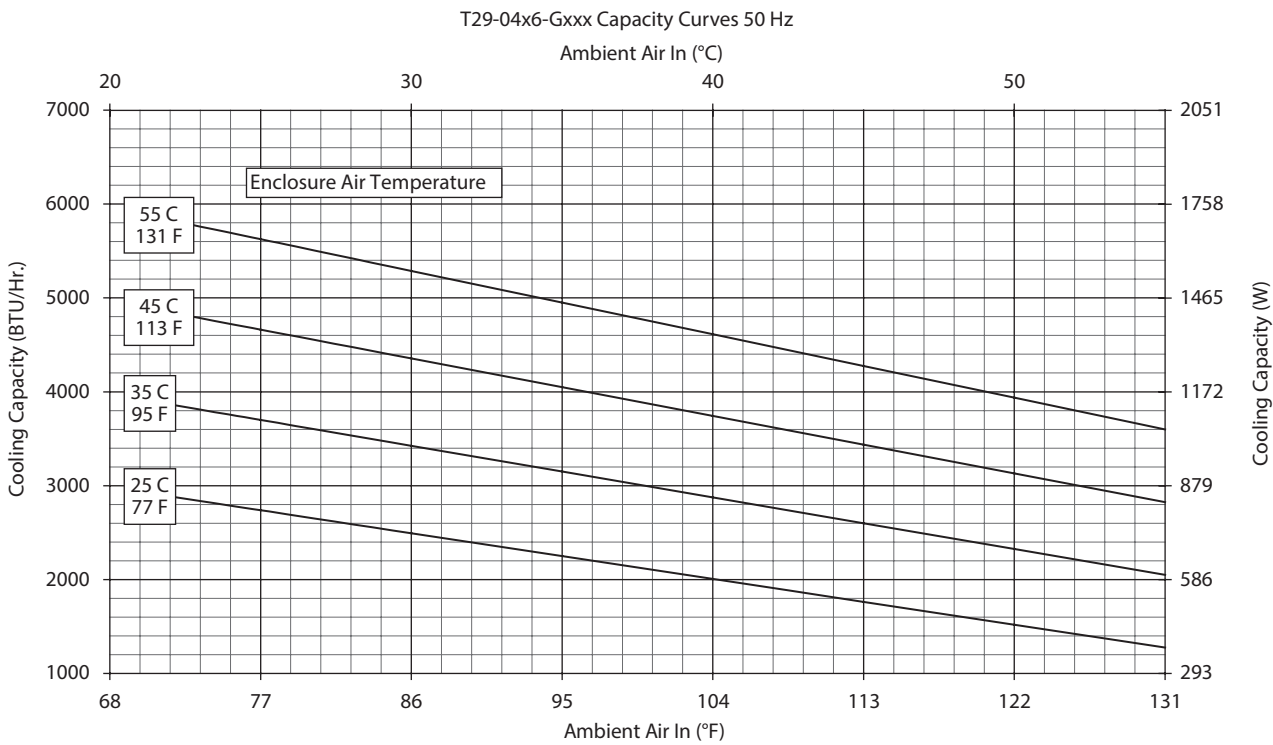
T-Series Outdoor T15 to T70

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

Item number			
Outdoor Model without Heat Pkg.	T290416G100	T290426G100	—
Outdoor Model with Heat Pkg.	T290416G150	T290426G150	—
Outdoor Model/SS/Corrosion/4X	T290416G159	T290426G161	—
Outdoor Model/SS/Corrosion/4X/Heater	T290416G156	T290426G160	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	3600/4000	3600/4000	3600/4000
Watt	1055/1172	1055/1172	1055/1172
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	
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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 (I)	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
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	67 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)	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

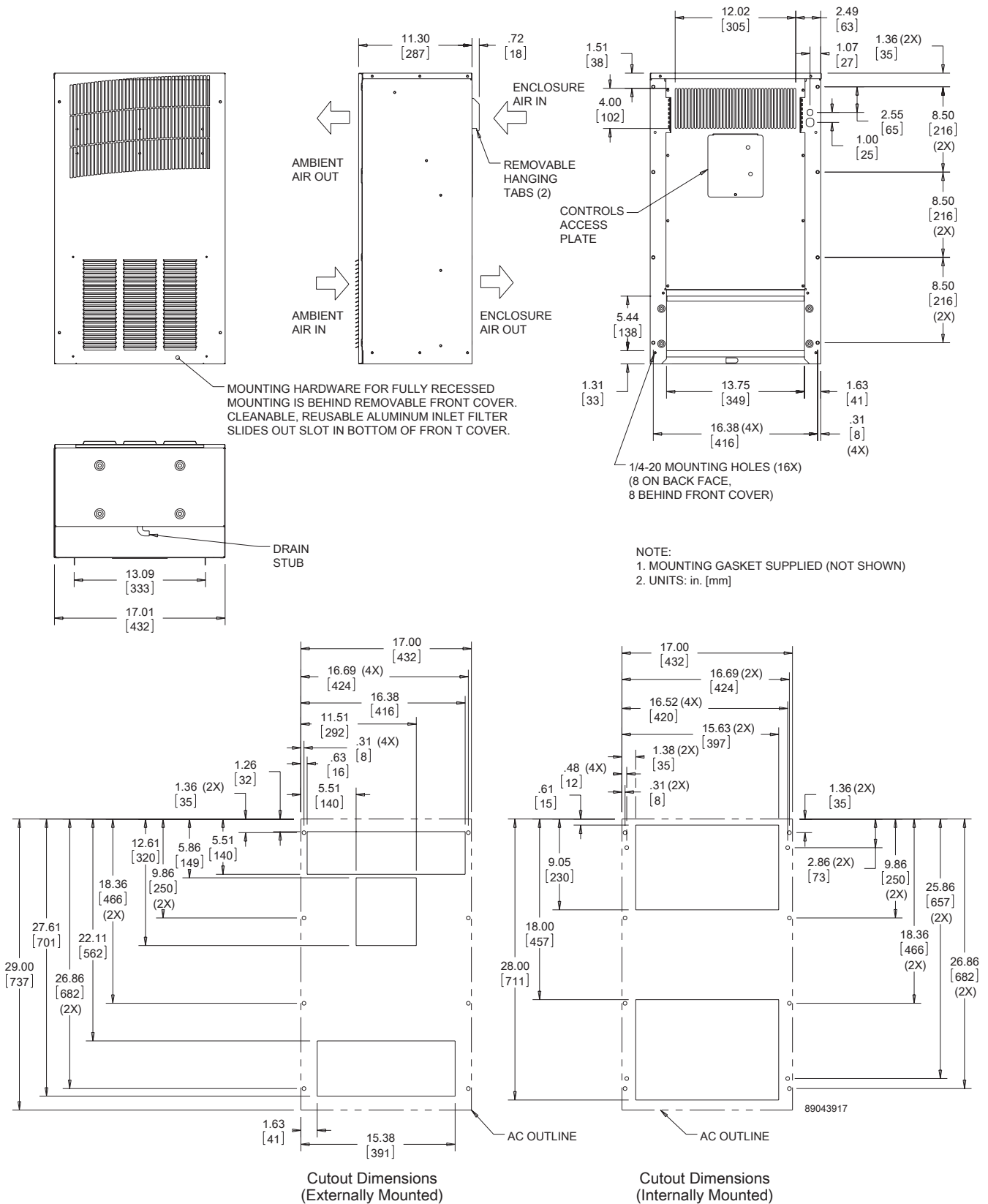
T-Series Outdoor T15 to T70

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



T-Series Outdoor T15 to T70

T29 Models 4000 BTU/Hr. (1173 Watt)



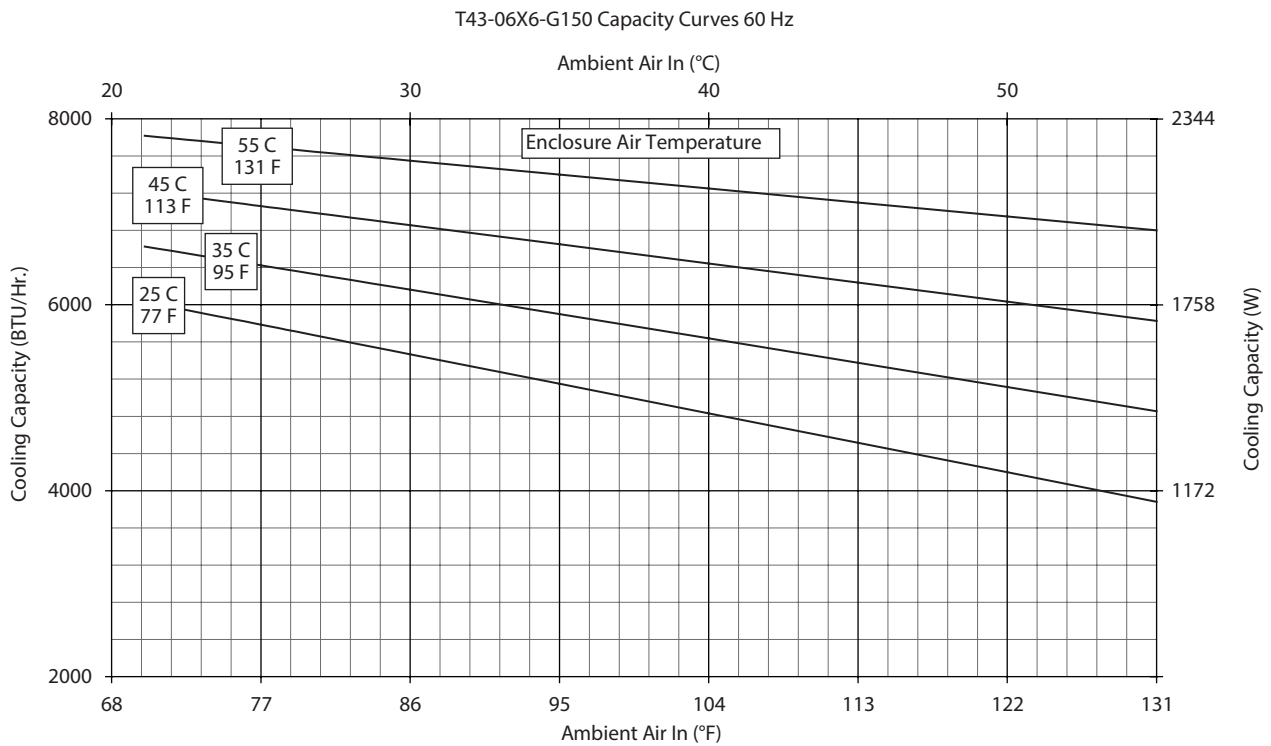
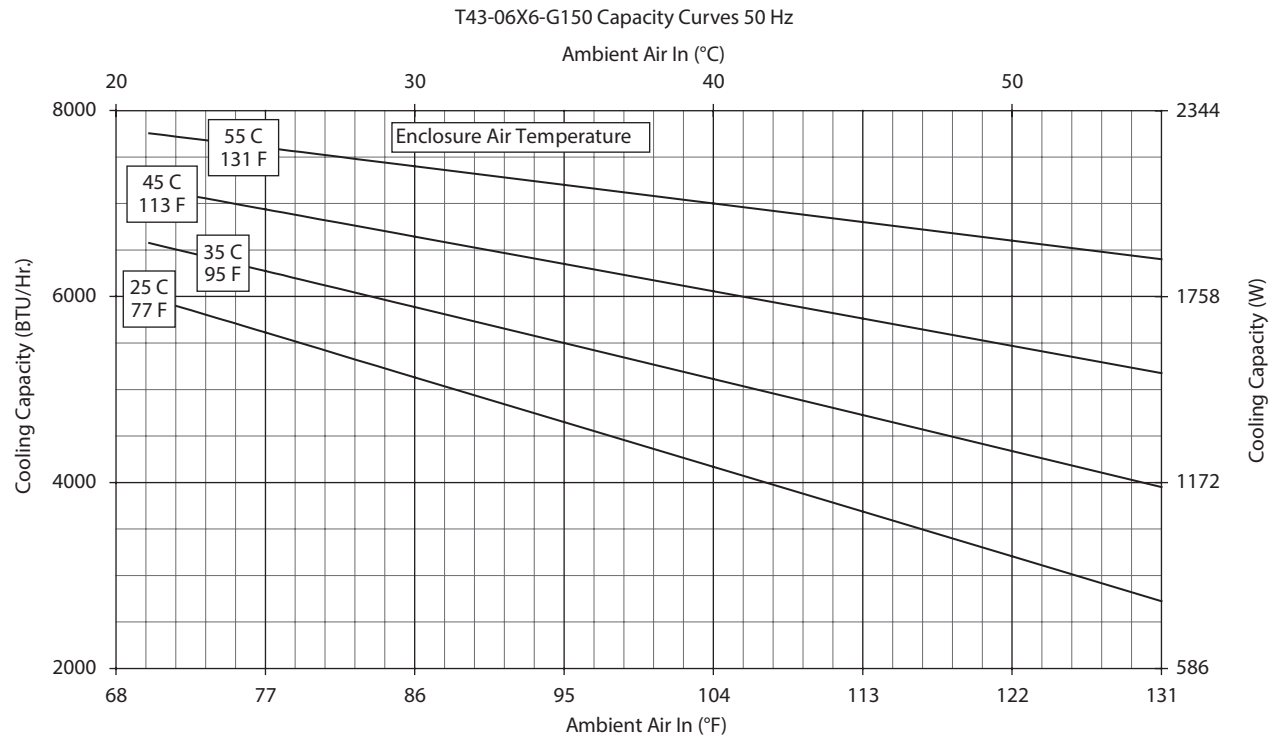
T-Series Outdoor T15 to T70

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

Item Number			
Outdoor Model without Heat Pkg.	T430616G100	T430626G100	—
Outdoor Model with Heat Pkg.	T430616G150	T430626G150	—
Outdoor Model/SS/Corrosion/4X	T430616G102	T430626G159	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	6310/6680	6520/6770	6520/6770
Watt	1848/1958	1910/1985	1910/1985
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
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
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	65.7 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)	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)



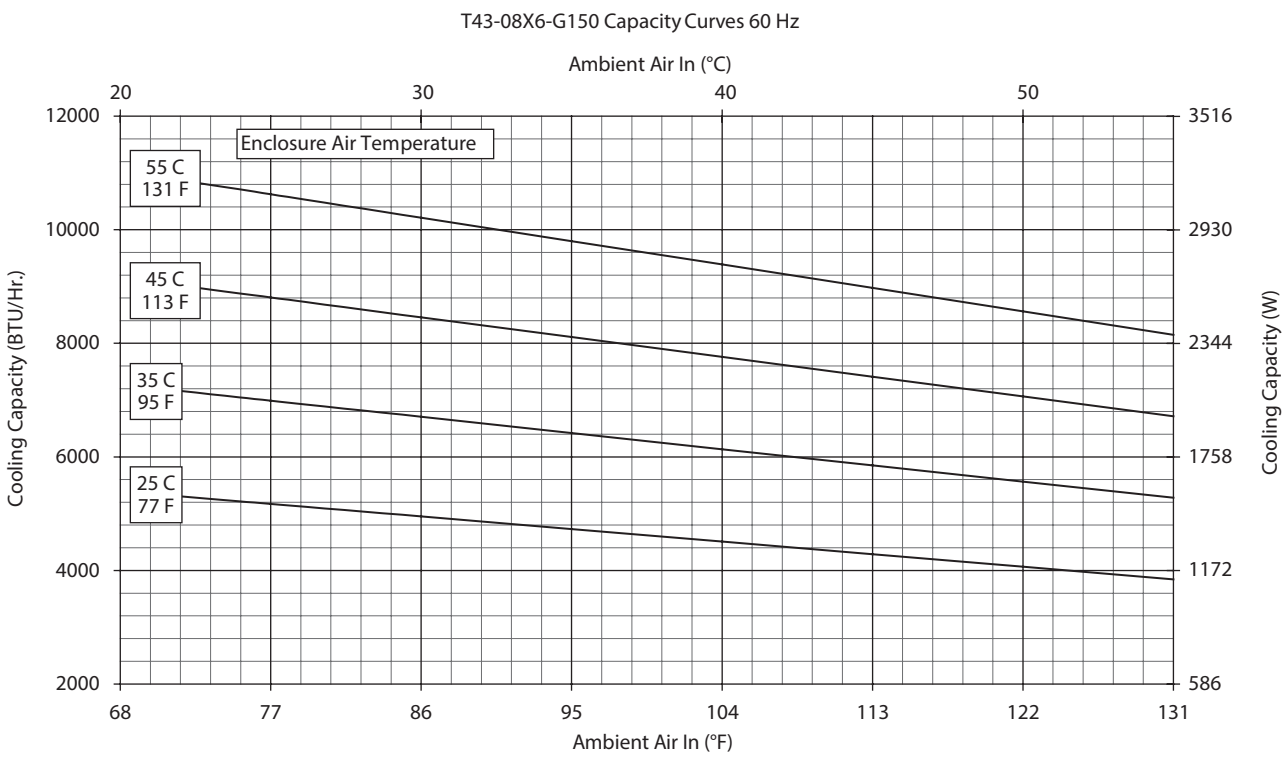
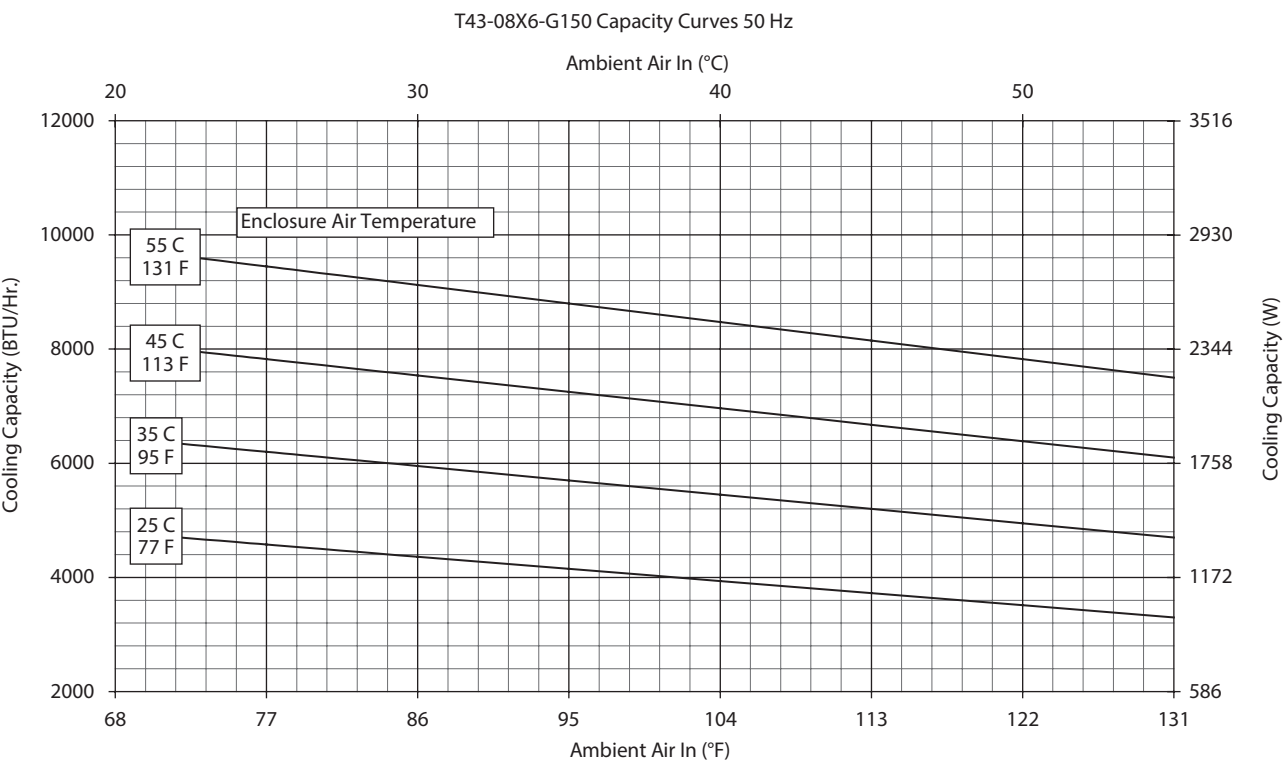
T-Series Outdoor T15 to T70

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

Item number			
Outdoor Model without Heat Pkg.	T430816G100	T430826G100	—
Outdoor Model with Heat Pkg.	T430816G150	T430826G150	—
Outdoor Model/SS/Corrosion/4X	T430816G153	T430826G108	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	7900/8600	7400/8200	7400/8200
Watt	2310/2500	2160/2400	2160/2400
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/m3/hr.)	273/464	273/464	273/464
External loop 50 Hz (CFM/m3/hr.)	310/527	310/527	310/527
Internal loop 60 Hz (CFM/m3/hr.)	290/493	290/493	290/493
External loop 60 Hz (CFM/m3/hr.)	315/535	315/535	315/535
Max. Heater W (Outdoor Models)	1000	1000	N/A
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
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	65.7 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)	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)



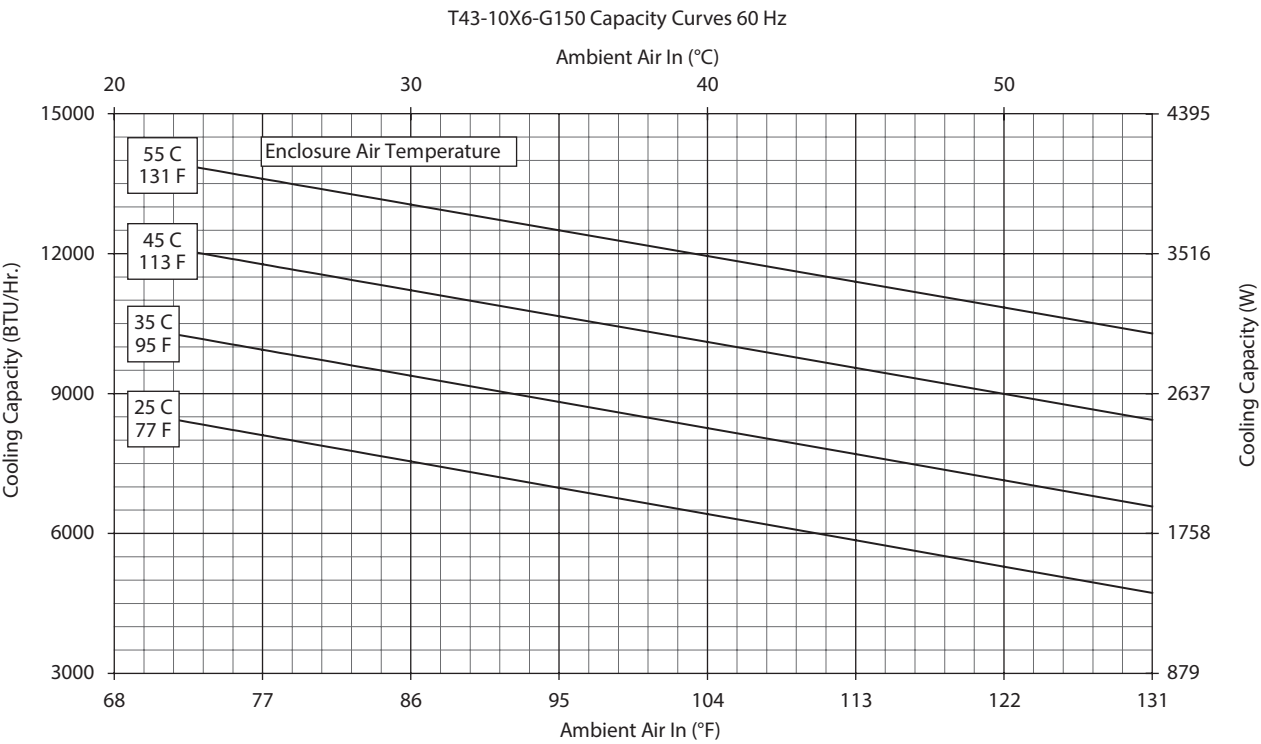
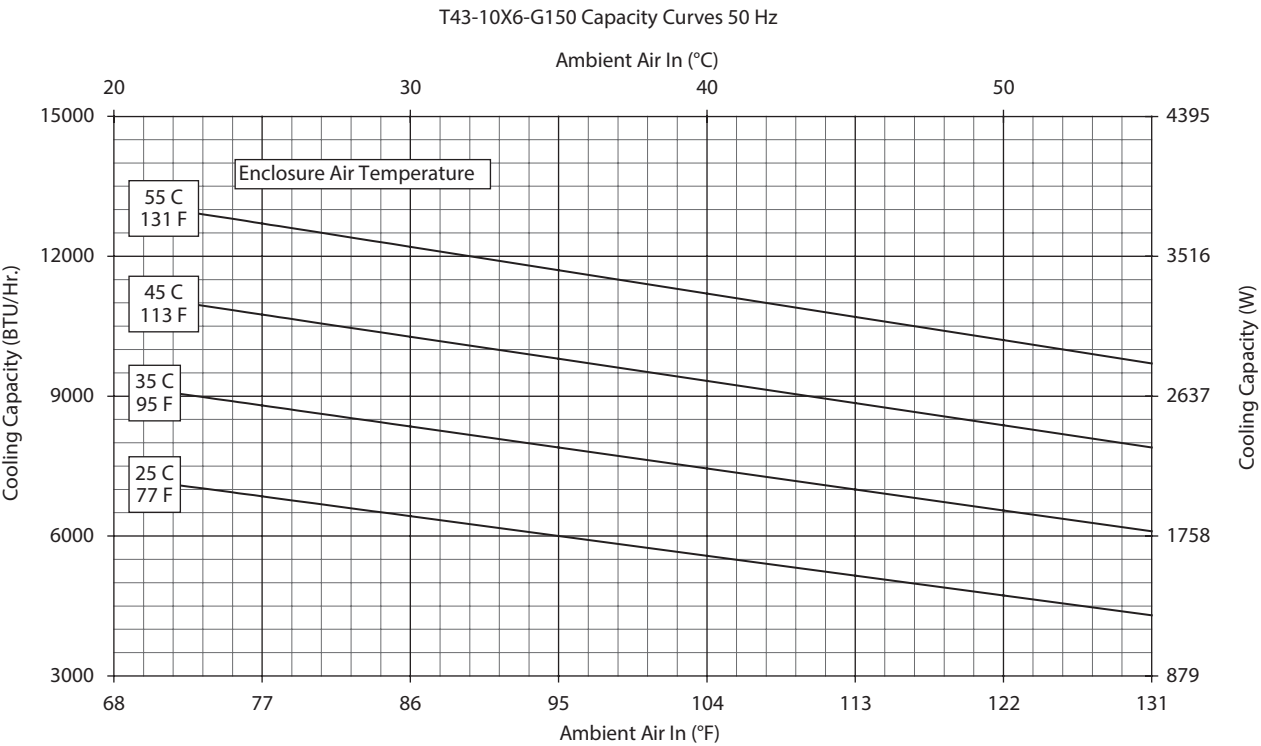
T-Series Outdoor T15 to T70

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

Item number			
Outdoor Model without Heat Pkg.	T431016G100	T431026G100	—
Outdoor Model with Heat Pkg.	T431016G150	T431026G150	—
Outdoor Model/SS/Corrosion/4X	T431016G102	T431026G104	—
Outdoor Model/SS/Corrosion/4X/Heater	T431016G153	T431026G152	—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	9670/10300	10100/10500	10100/10500
Watt	2831/3016	2957/3075	2957/3075
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
ELECTRICAL DATA			
Rated Voltage	115	230	460V 1PH
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
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
International Rating	IP56 on the internal loop; IP34 on the external loop		
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	73.3 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)	43/1092		
Width (in./mm)	15.75/400		
Depth (in./mm)	10.9/279		
Weight (lb./kg)	125/57		

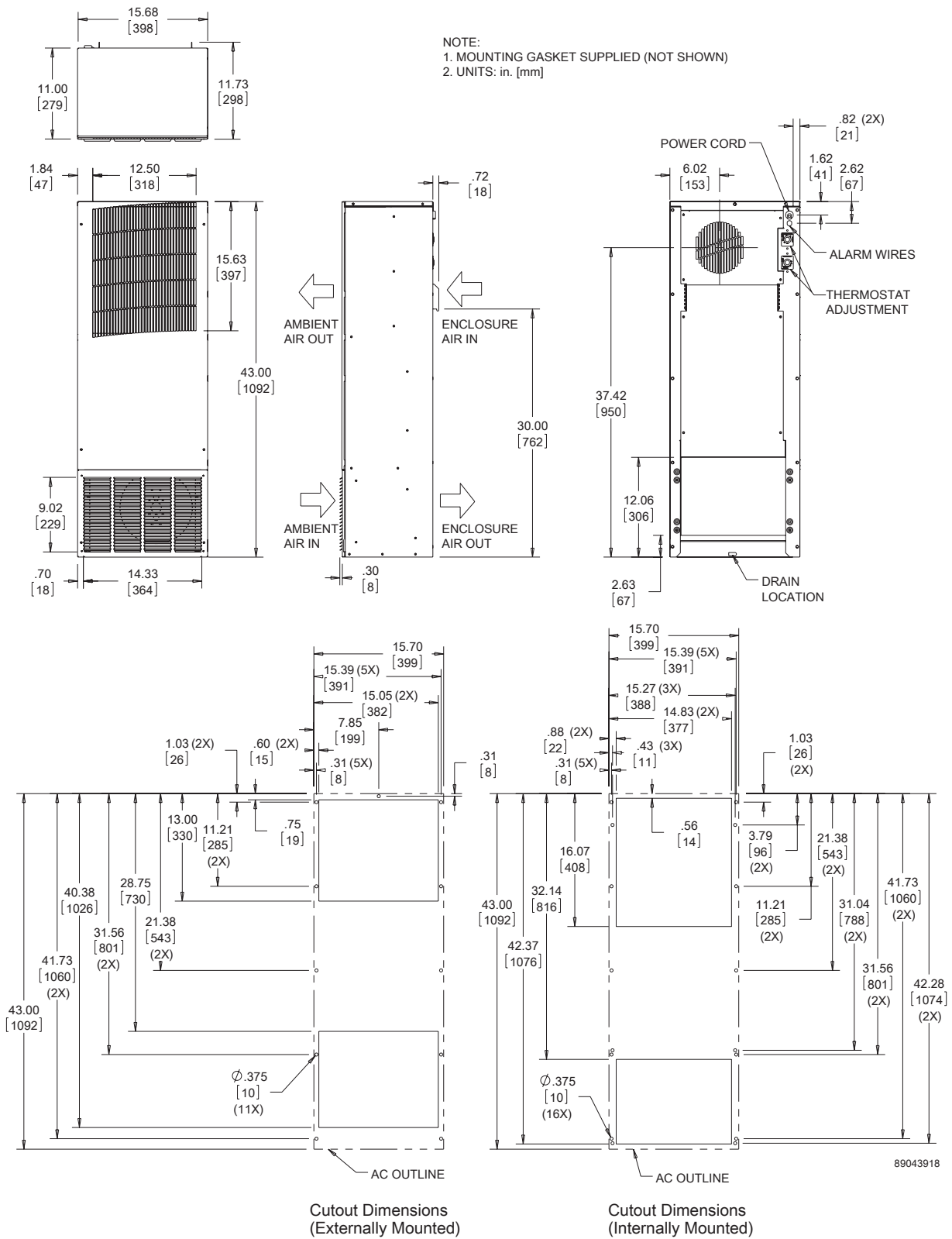
T-Series Outdoor T15 to T70

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:

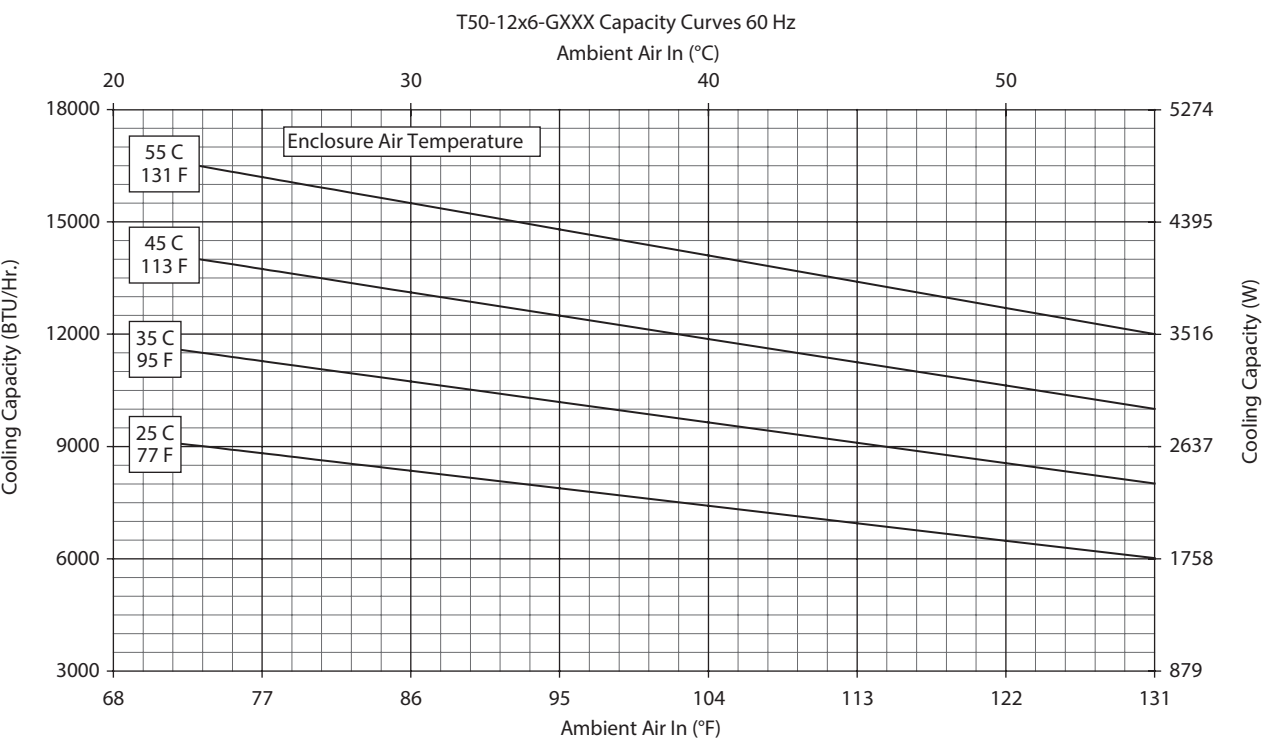
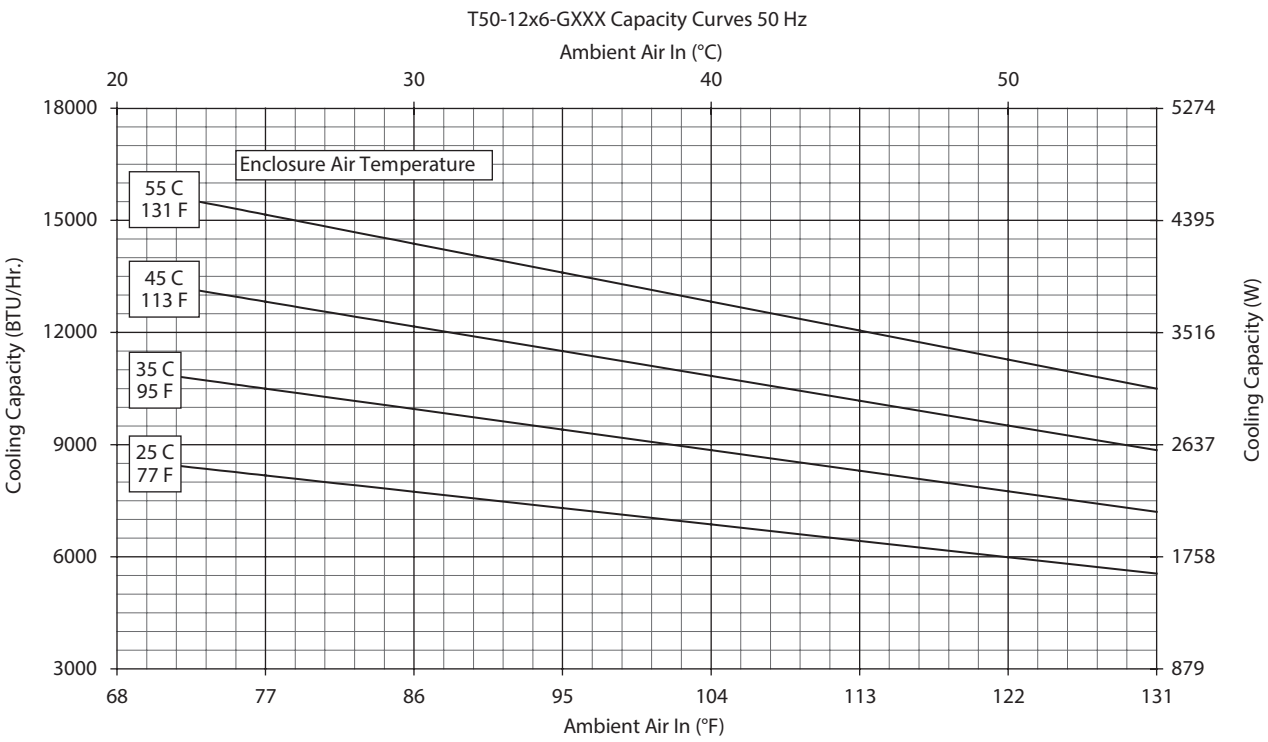
T-Series Outdoor T15 to T70

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

Item number		
Outdoor Model without Heat Pkg.	T501226G100	—
Outdoor Model with Heat Pkg.	T501226G150	—
Outdoor Model/SS/Corrosion/4X	T501226G125	T501246G401
Outdoor Model/SS/Corrosion/4X/Heater	T501226G156	—
COOLING PERFORMANCE		
Nominal:		
BTU/Hr.	11000/12000	11000/12000
Watt	3223/3516	3223/3516
At 131 °F/131 °F (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 °F (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/m3/hr.)	300/510	300/510
External loop 50 Hz (CFM/m3/hr.)	520/883	520/883
Internal loop 60 Hz (CFM/m3/hr.)	368/626	368/626
External loop 60 Hz (CFM/m3/hr.)	625/1062	625/1062
Max. Heater W (Outdoor Models)	1500	1500
ELECTRICAL DATA		
Rated Voltage	220/230	460V 1PH
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
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	68 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)	50/1270	
Width (in./mm)	19/483	
Depth (in./mm)	11.05/281	
Weight (lb./kg)	164/75	

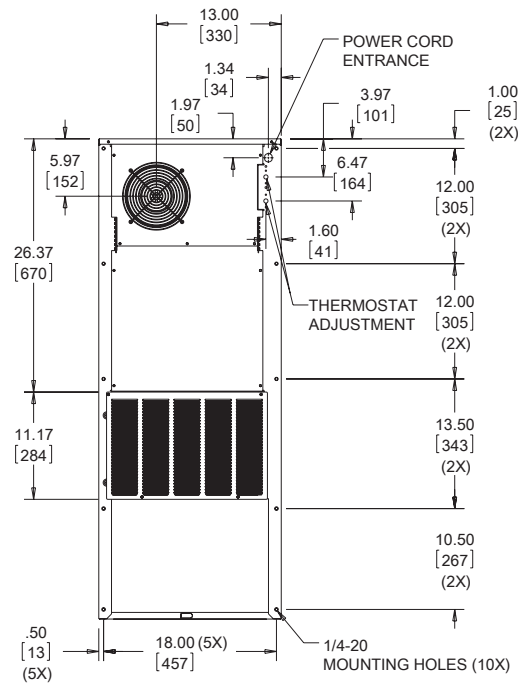
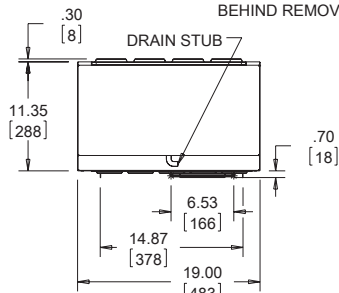
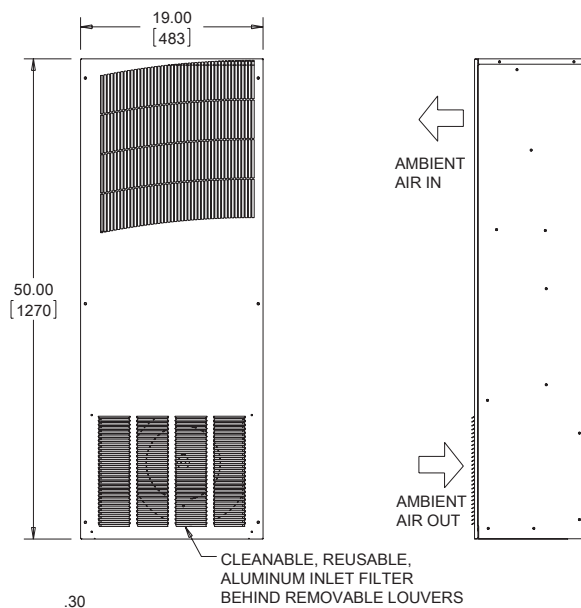
T-Series Outdoor T15 to T70

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

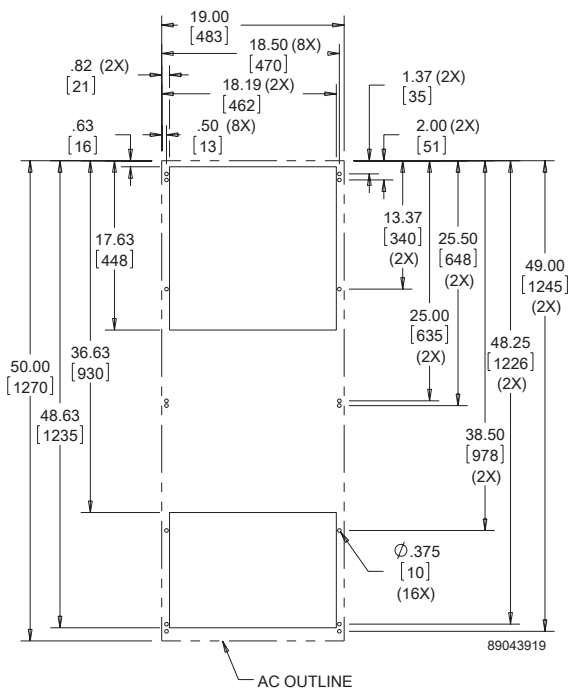
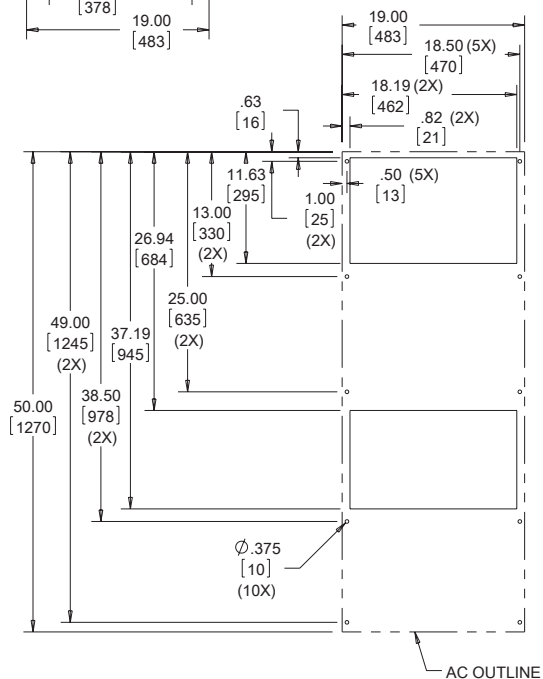


T-Series Outdoor T15 to T70

T50 Models 12000 BTU/Hr. (3516 Watt)



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



NOTES:

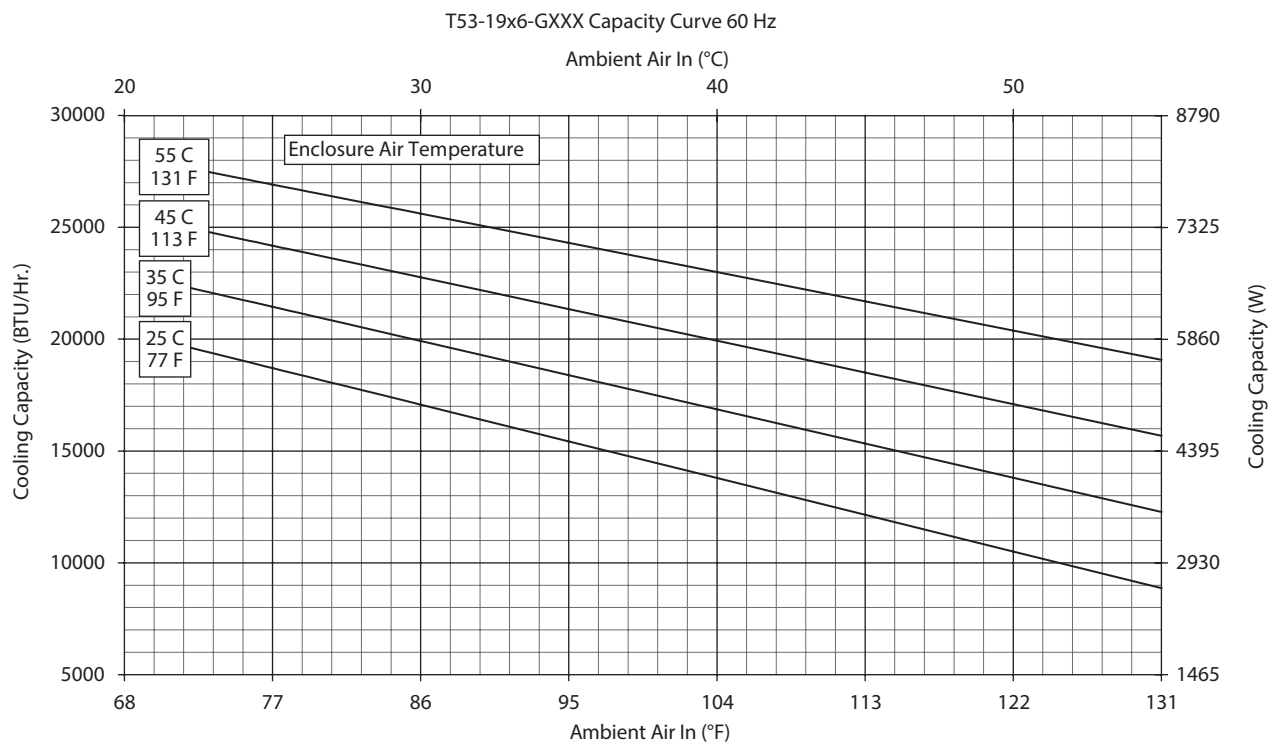
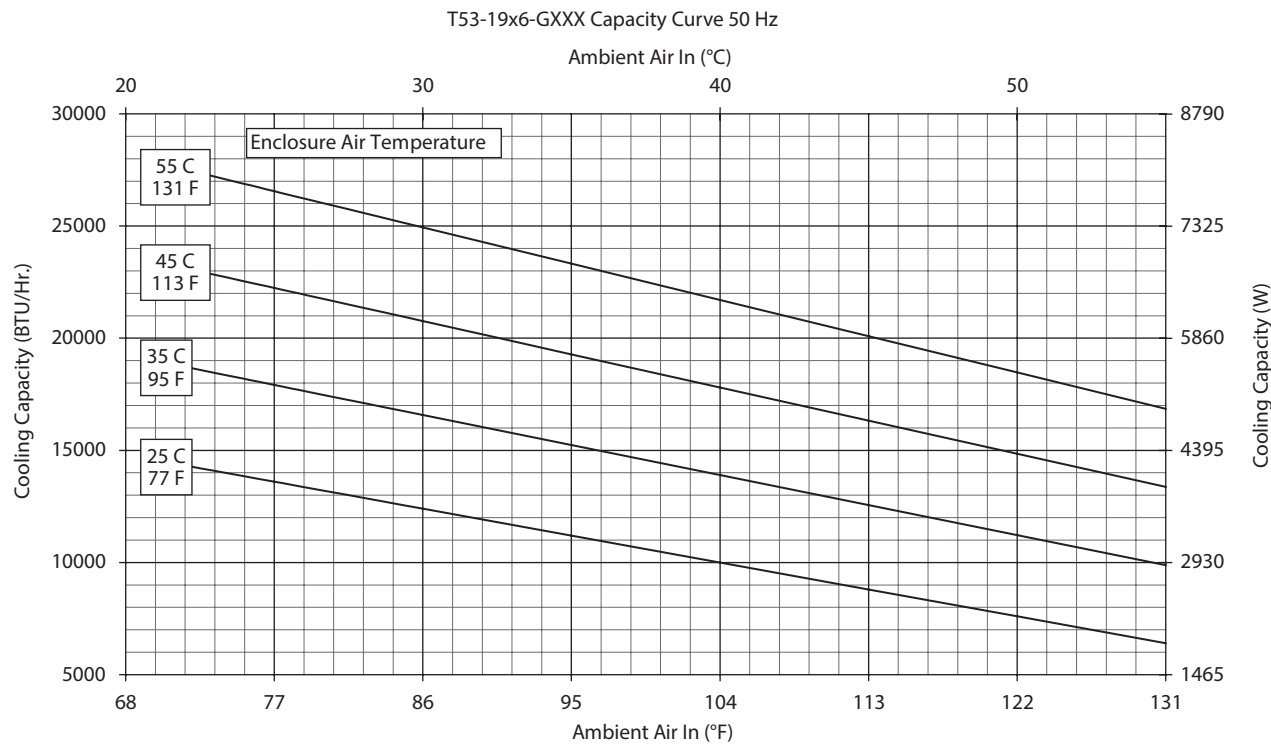
T-Series Outdoor T15 to T70

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

Item number		
Outdoor Model without Heat Pkg.	T531926G100	—
Outdoor Model with Heat Pkg.	T531926G150	—
Outdoor Model/SS/Corrosion/4X	T531926G109	—
Outdoor Model/SS/Corrosion/4X/Heater	—	—
COOLING PERFORMANCE		
Nominal:		
BTU/Hr.	16800/19000	16800/19000
Watt	4922/5567	4922/5567
At 131 °F/131 °F (55 °C/55 °C):		
BTU/Hr. (50/60 Hz)	16854/19081	16854/19081
W (50/60 Hz)	4939/5592	4939/5592
At 95 °F/95 °F (35 °C/35 °C):		
BTU/Hr. (50/60 Hz)	15240/19815	15240/19815
W (50/60 Hz)	4466/5807	4466/5807
Refrigerant	410A	410A
Refrigerant Charge (ounces/grams)	40/1132	40/1132
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/m3/hr.)	449/763	449/763
External loop 50 Hz (CFM/m3/hr.)	1204/2046	1204/2046
Internal loop 60 Hz (CFM/m3/hr.)	519/882	519/882
External loop 60 Hz (CFM/m3/hr.)	1300/2209	1300/2209
Max. Heater W (Outdoor Models)	3000	
ELECTRICAL DATA		
Rated Voltage	230	460V 1PH
Frequency (Hz)	50/60	50/60
Operating Range	+/- 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

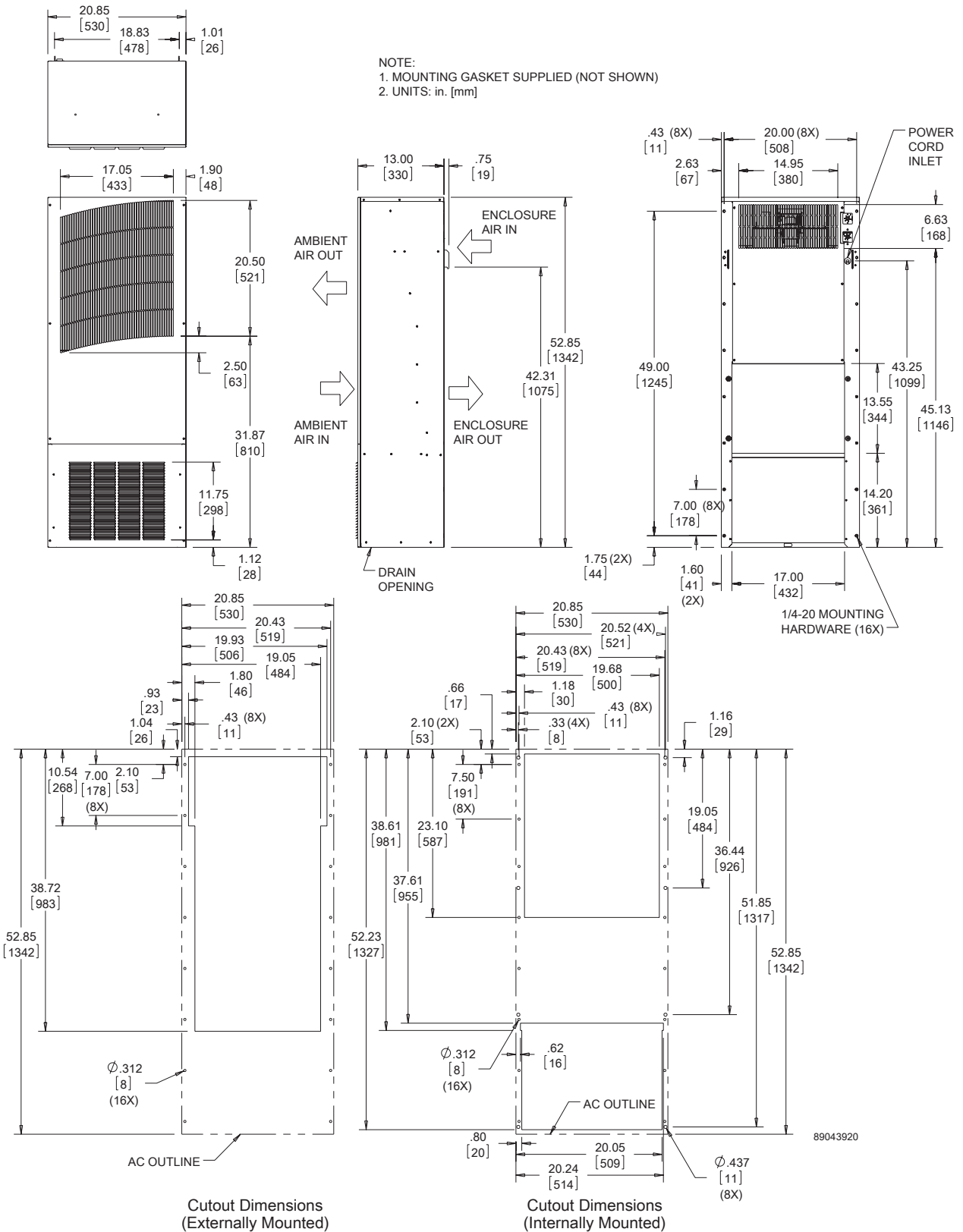
T-Series Outdoor T15 to T70

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



T-Series Outdoor T15 to T70

T53 Models 19000 BTU/Hr. (5567 Watt)



NOTES :

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

- 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

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

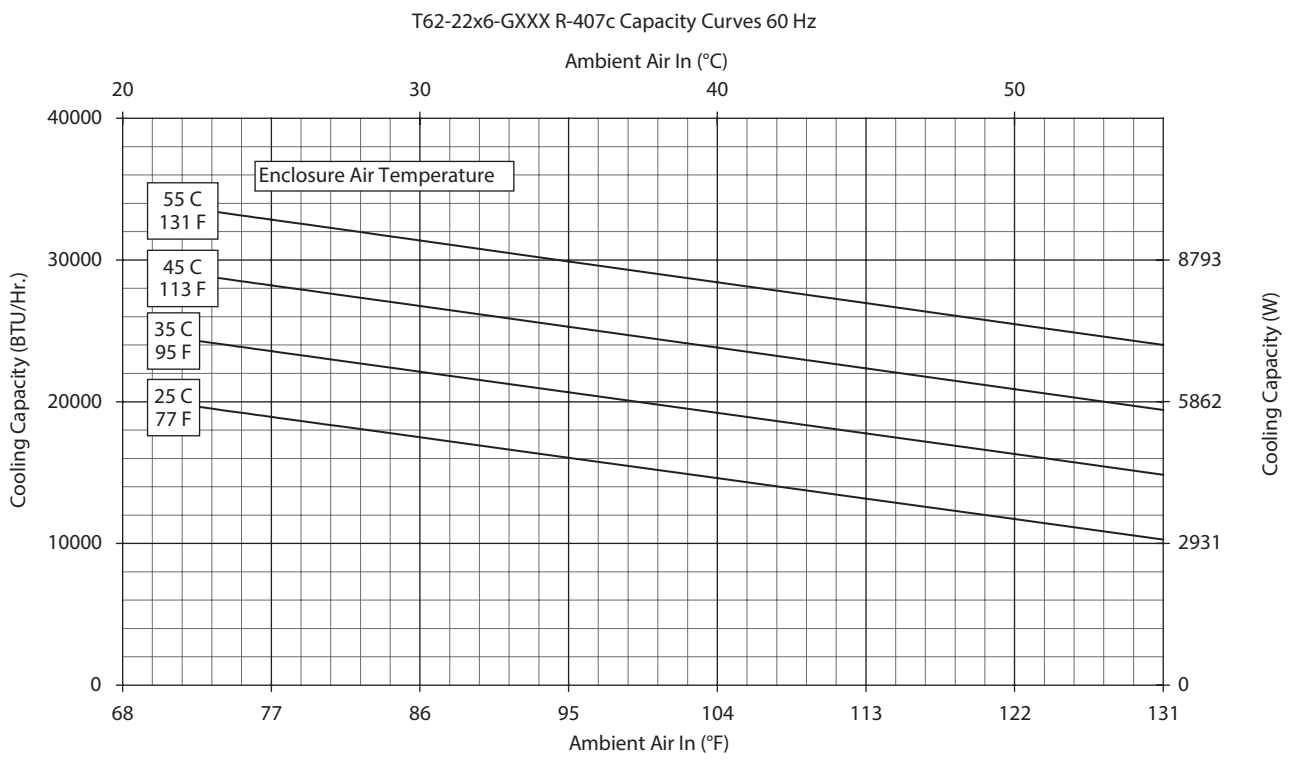
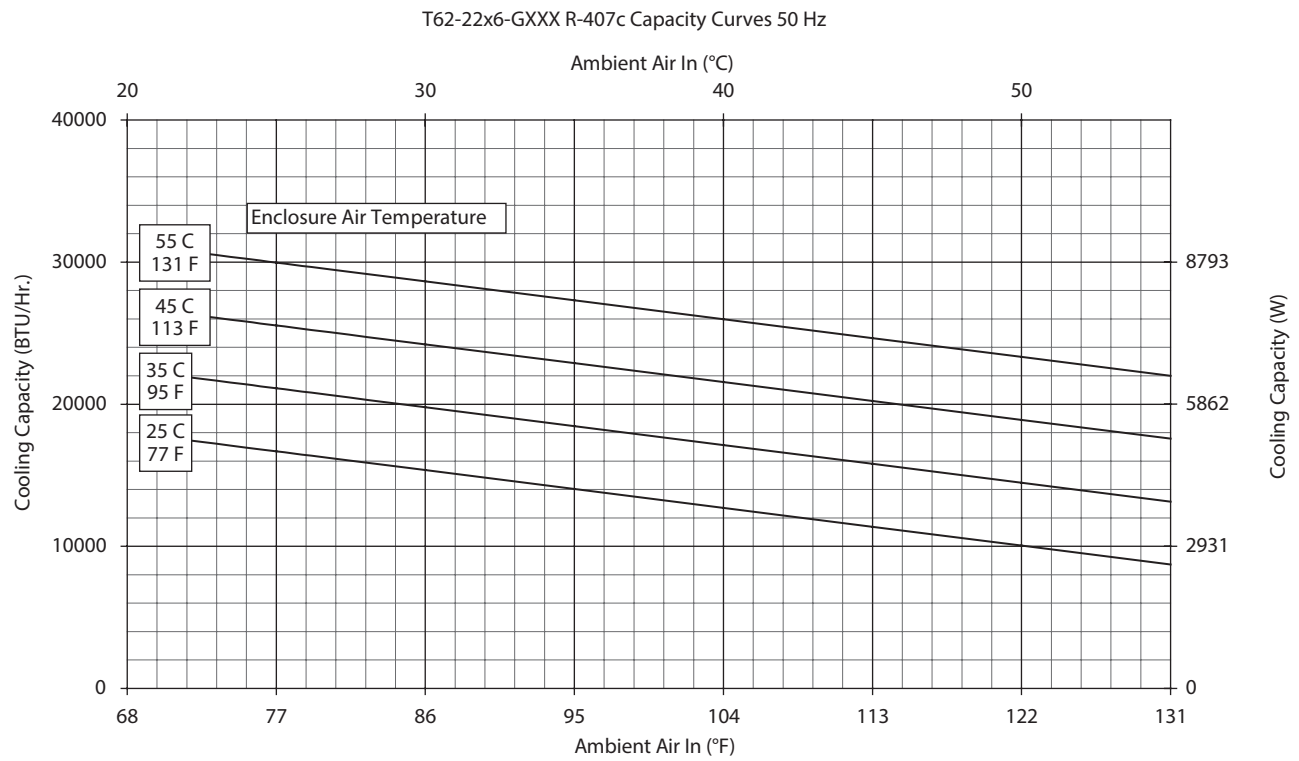
T-Series Outdoor T15 to T70

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

Item number	T622226G150		—
COOLING PERFORMANCE			
Nominal:			
BTU/Hr.	20500/23500	20500/23500	
Watt	6007/6886	6007/6886	
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/m3/hr.)	570/968	570/968	
External loop 50 Hz (CFM/m3/hr.)	1443/2452	1443/2452	
Internal loop 60 Hz (CFM/m3/hr.)	673/1143	673/1143	
External loop 60 Hz (CFM/m3/hr.)	1797/3053	1797/3053	
Max. Heater W (Outdoor Models)	2000	Up to 3000 (Optional)	
ELECTRICAL DATA			
Rated Voltage	230	460V 1PH	
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	
ENCLOSURE PROTECTION			
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel		
CONTROLLER			
Description	Mechanical thermostat		
Thermostat Location	Enclosure ide on all base models		
Factory Thermostat Setting (°F/°C)	80/27		
SOUND LEVEL			
At 1.5 Meters	71 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)	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	

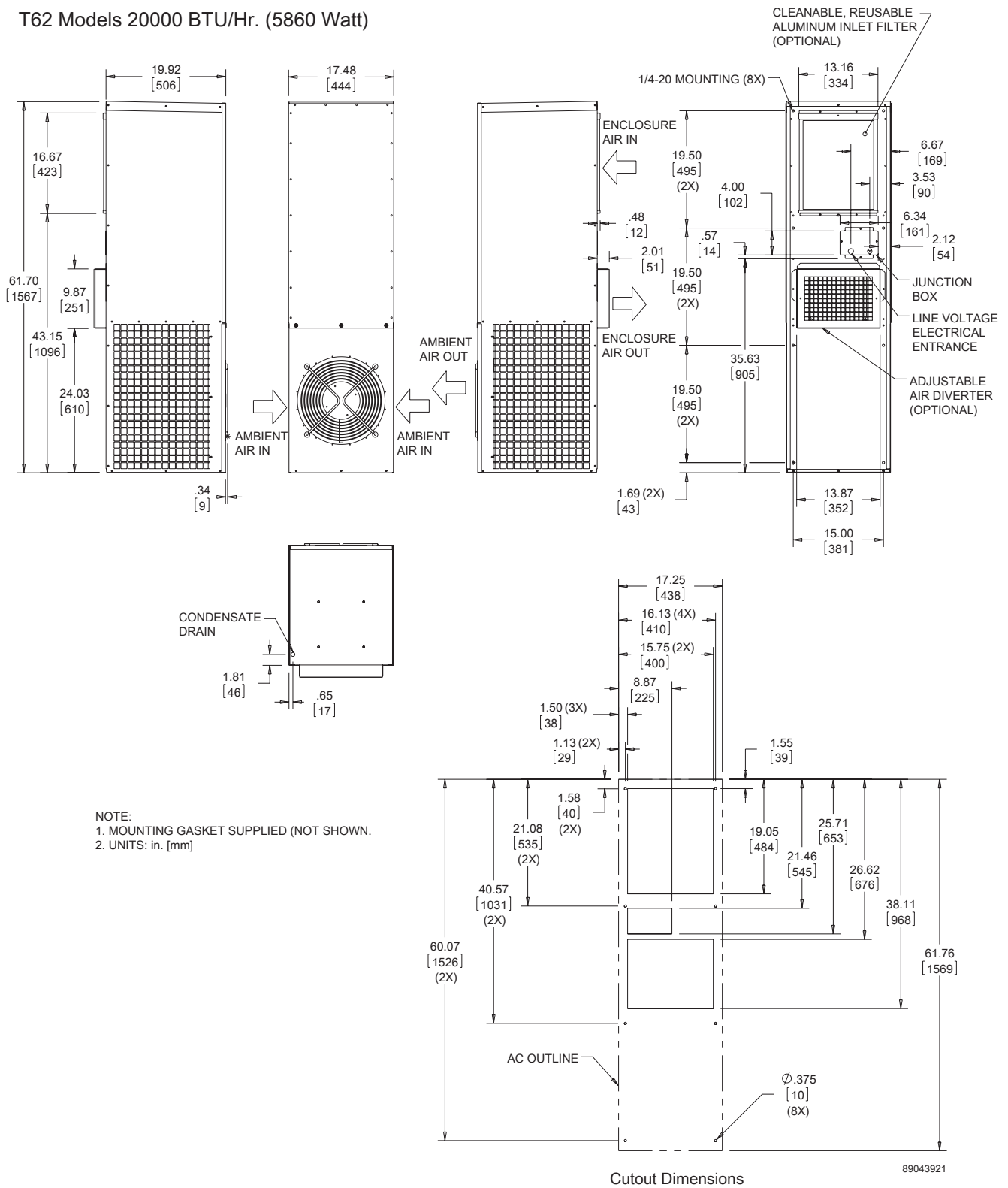
T-Series Outdoor T15 to T70

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



T-Series Outdoor T15 to T70

T62 Models 20000 BTU/Hr. (5860 Watt)



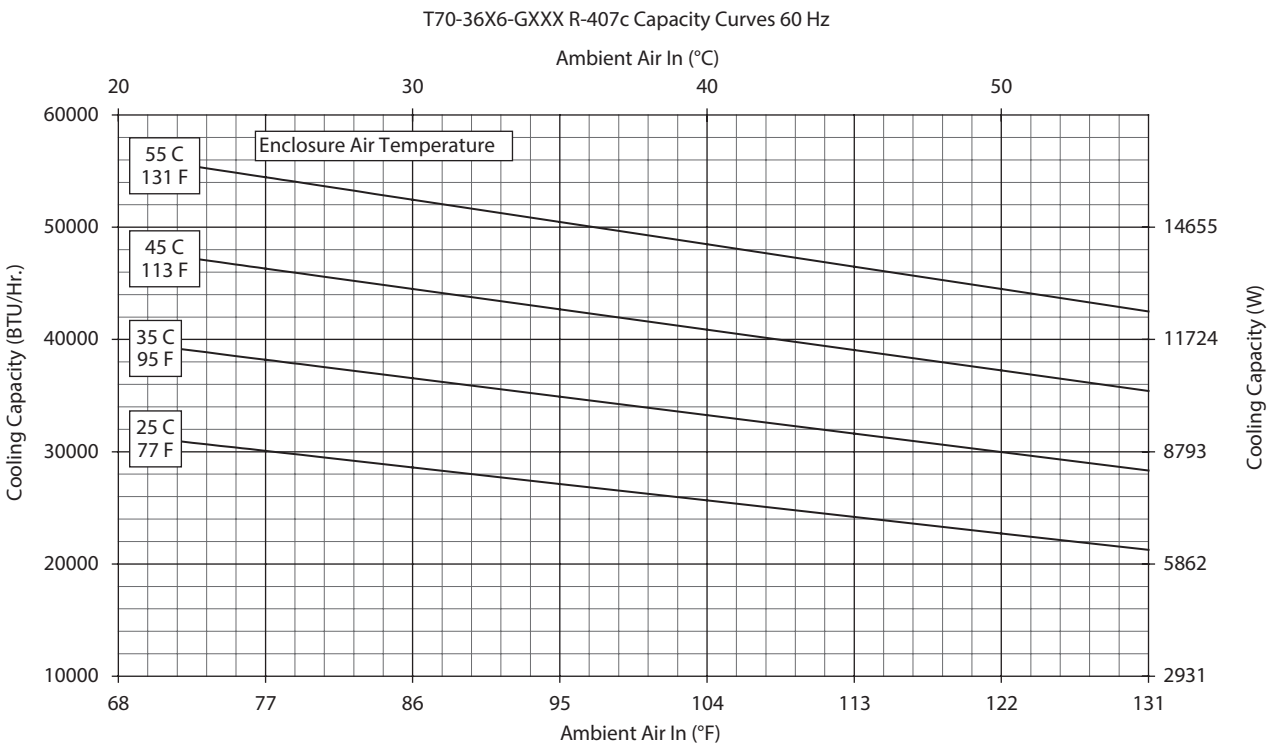
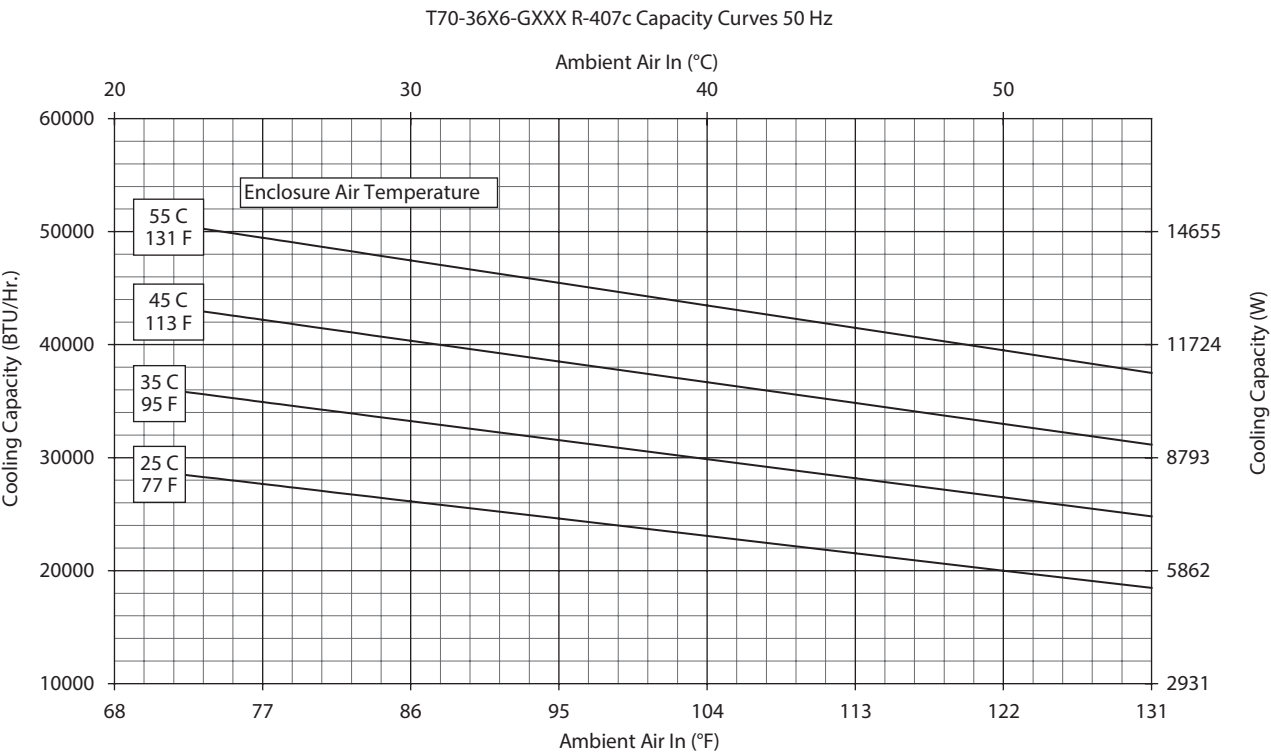
T-Series Outdoor T15 to T70

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

Item number		
	T703626G150	—
COOLING PERFORMANCE		
Nominal:		
BTU/Hr.	39000/43000	
Watt	11430/12602	
At 131 °F/131 °F (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/m3/hr.)	1085/1843	
External loop 50 Hz (CFM/m3/hr.)	2176/3697	
Internal loop 60 Hz (CFM/m3/hr.)	1171/1989	
External loop 60 Hz (CFM/m3/hr.)	2347/3987	
Max. Heater W (Outdoor Models)	2000 Standard (5000 Optional)	
ELECTRICAL DATA		
Rated Voltage	230	460
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	
ENCLOSURE PROTECTION		
UL Type	Type 12, 3R, 4 standard Type 4X Stainless steel	
International Rating	UL/cUL Listed	
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	66 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)	69.8/1772	
Width (in./mm)	22.8/578	
Depth (in./mm)	20.94/532	
Weight (lb./kg)	260/118	

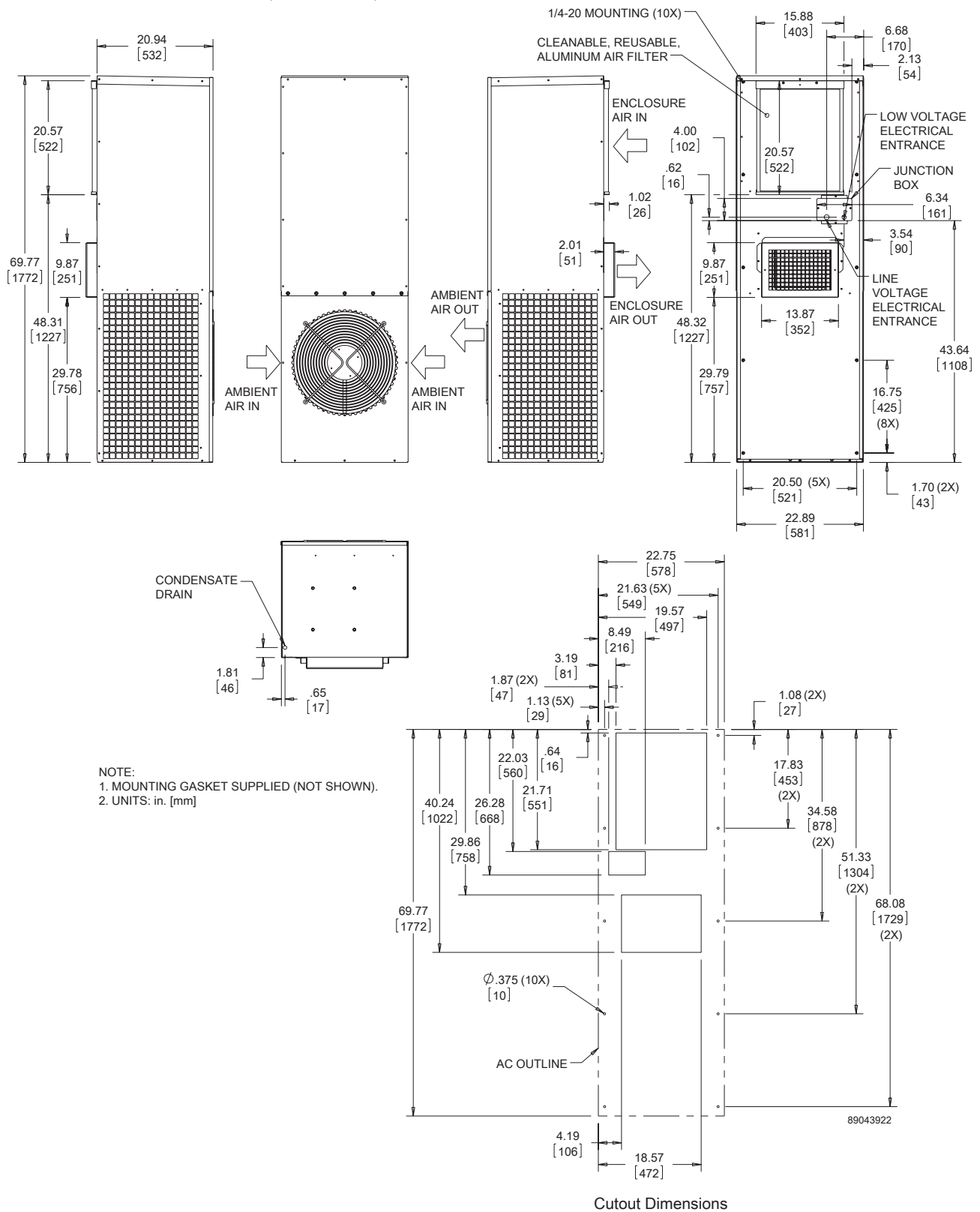
T-Series Outdoor T15 to T70

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



T-Series Outdoor T15 to T70

T70 Models 36000 BTU/Hr. (10548 Watt)



NOTES:

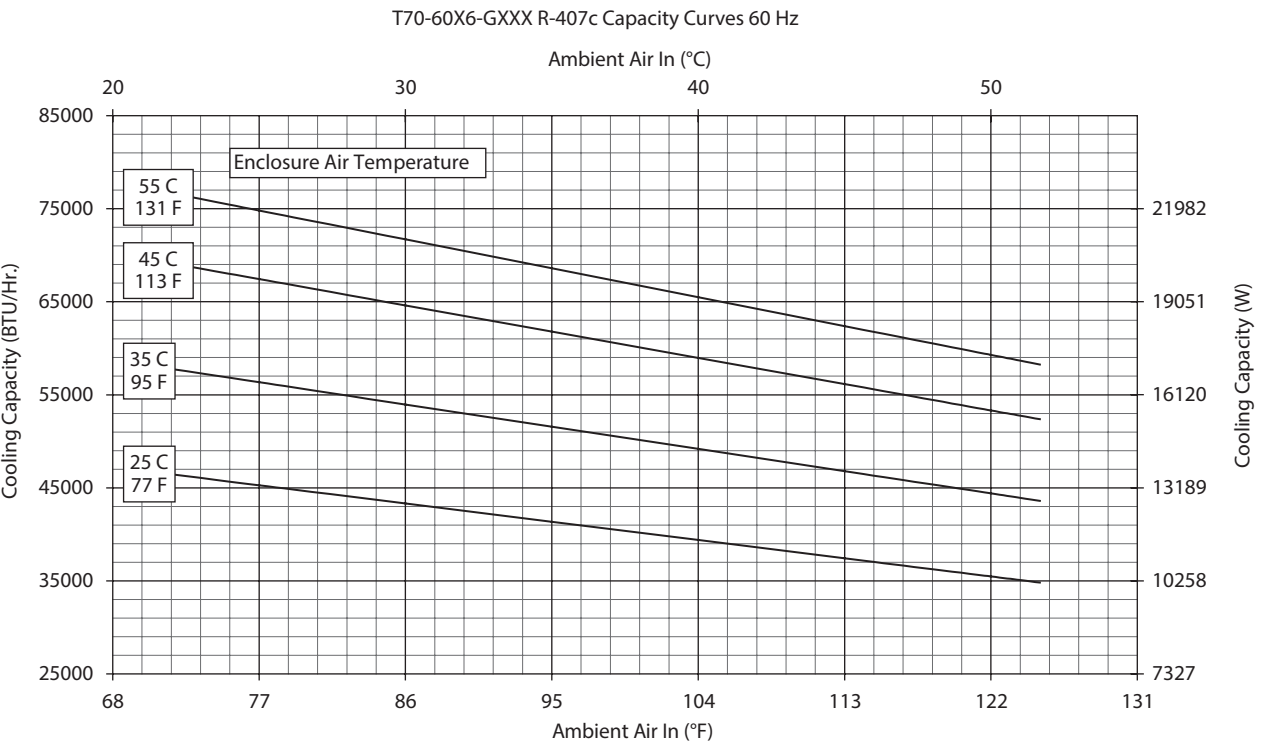
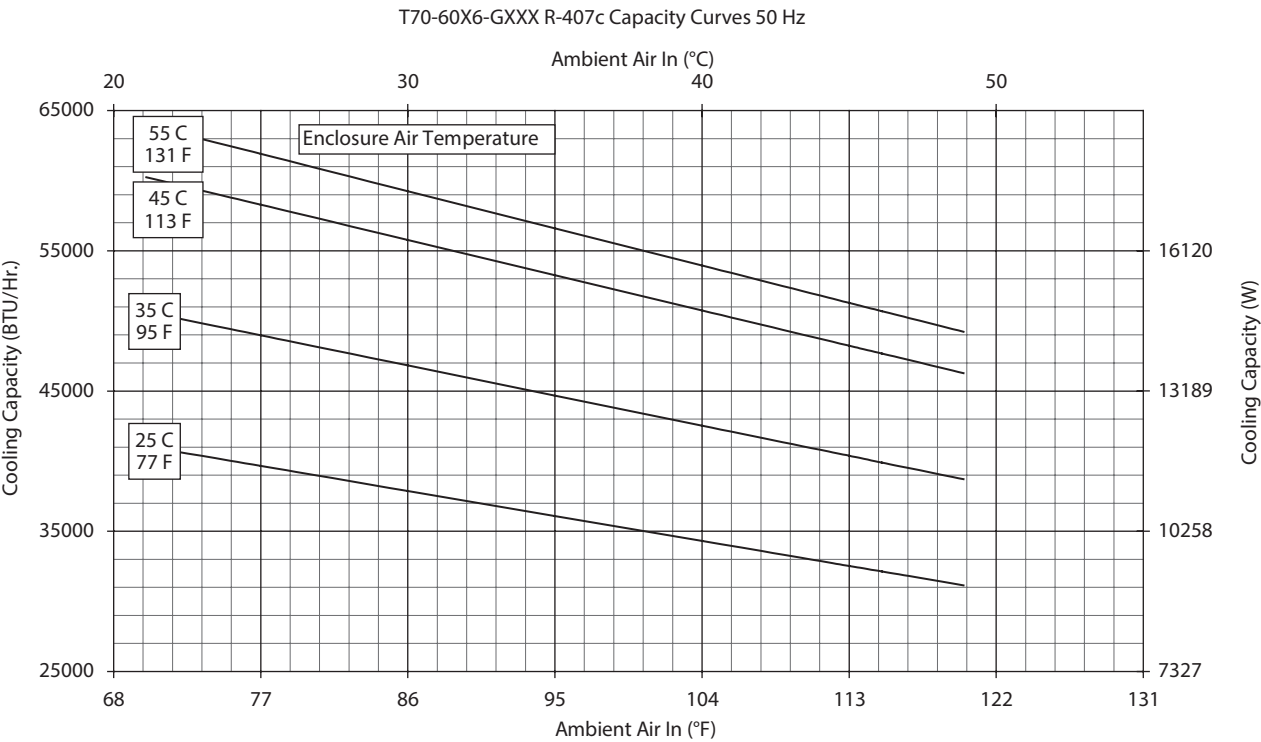
T-Series Outdoor T15 to T70

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

Item number	T706026G150	T706046G400
COOLING PERFORMANCE		
Nominal:		
BTU/Hr.	51900/60000	
Watt	15210/17584	
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/m3/hr.)	1510/2565	
External loop 50 Hz (CFM/m3/hr.)	2716/4614	
Internal loop 60 Hz (CFM/m3/hr.)	1629/2767	
External loop 60 Hz (CFM/m3/hr.)	2931/4979	
Max. Heater W (Outdoor Models)		
ELECTRICAL DATA		
Rated Voltage	200/230	420/460
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	
ENCLOSURE PROTECTION		
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	
CONTROLLER		
Thermostat Location	Enclosure side on all base models	
Factory Thermostat Setting (°F/°C)	80/27	
SOUND LEVEL		
At 1.5 Meters	66 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)	69.77/1772	
Width (in./mm)	35.86/911	
Depth (in./mm)	22.94/583	
Weight (lb./kg)	419/190.5	

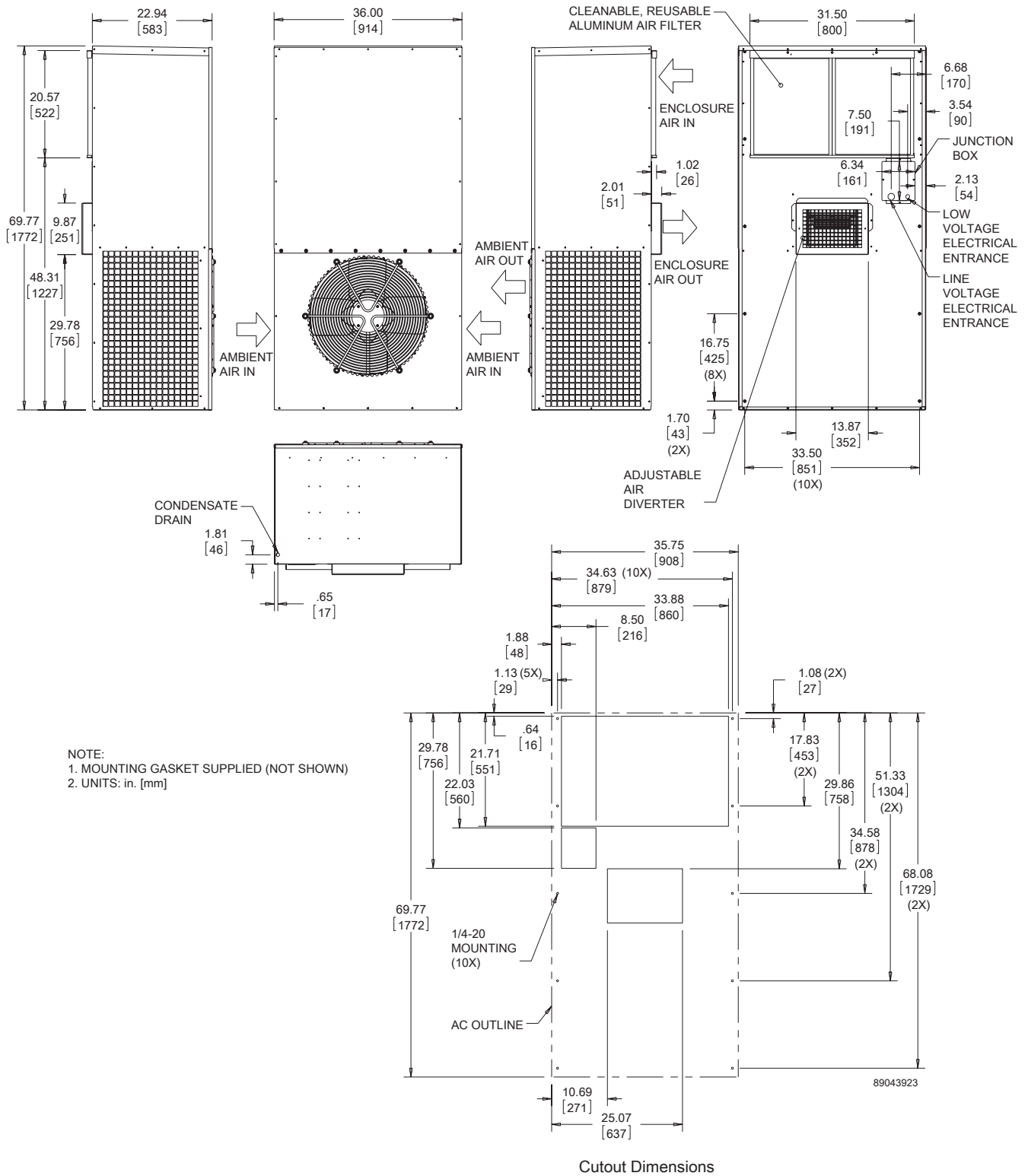
T-Series Outdoor T15 to T70

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



T-Series Outdoor T15 to T70

T70 Models 59000 BTU/Hr. (17287 Watt)



NOTES:

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



- 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

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

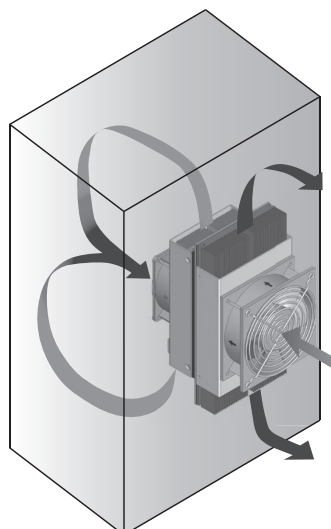
- DC Powered operation for 24V and 48V applications
- Low profile design allows for mounting vertically and horizontally on any enclosure to avoid interference with internal components
- Filterless design reduces maintenance requirements
- Contains no refrigerant, making it earth friendly
- Prewired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

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



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

NOTES:

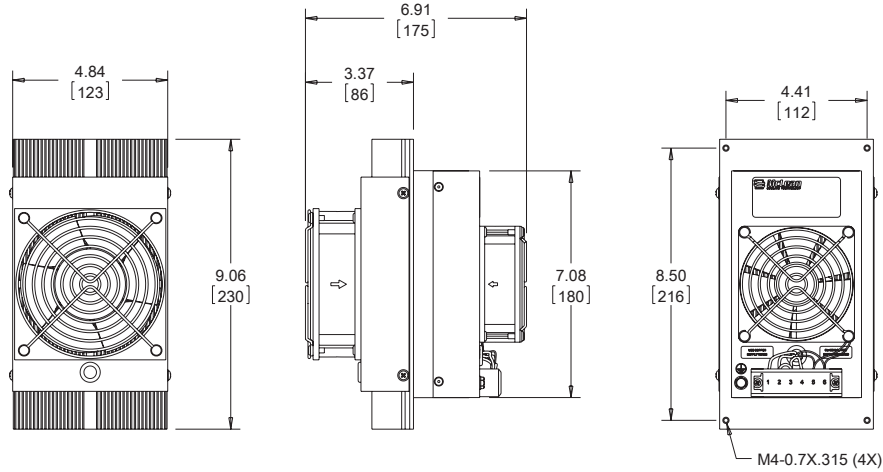
Thermoelectric Coolers TE09/TE12/TE16

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

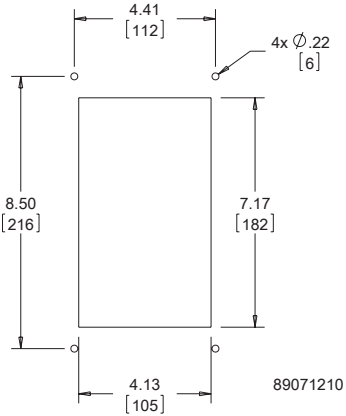
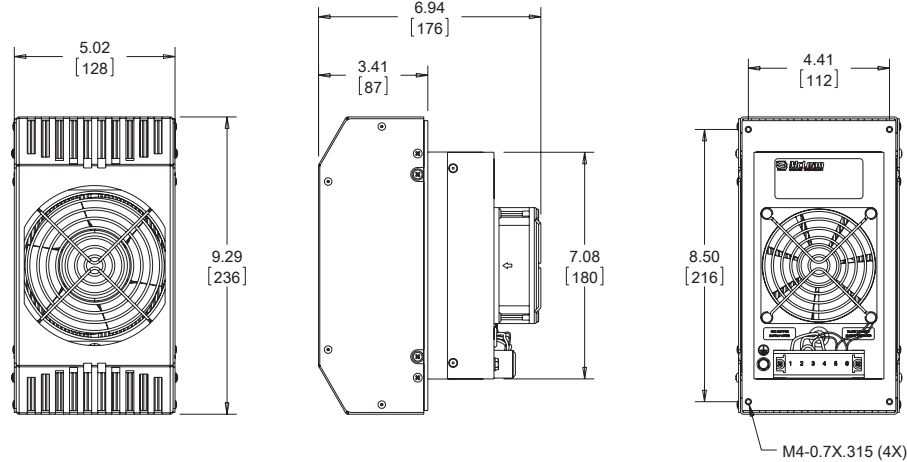
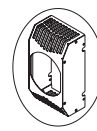
Item number			
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud
Catalog Number	TE090624020	TE090624010	TE090624011
COOLING PERFORMANCE			
BTU/Hr.	178	178	178
Watt	52	52	52
Operating Temperature Range:			
Maximum (°C/°F)	55/131	55/131	55/131
Minimum (°C/°F)	-40/-40	-40/-40	-40/-40
Air Flow 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

60 W 24 V



60 W 24 V



Cutout Dimensions

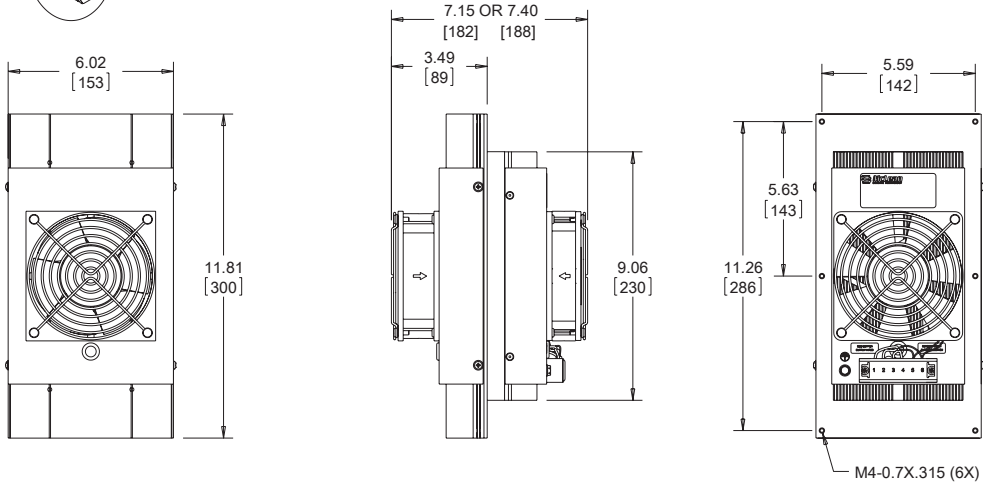
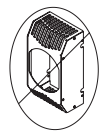
Thermoelectric Coolers TE09/TE12/TE16

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

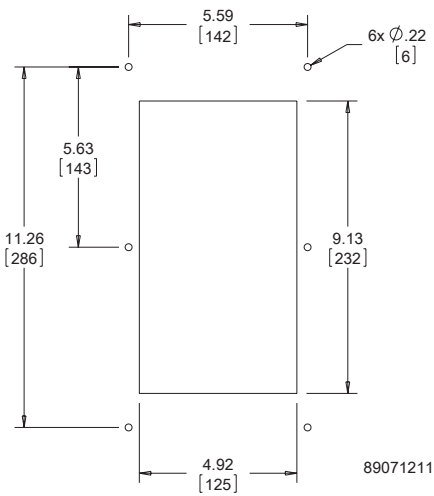
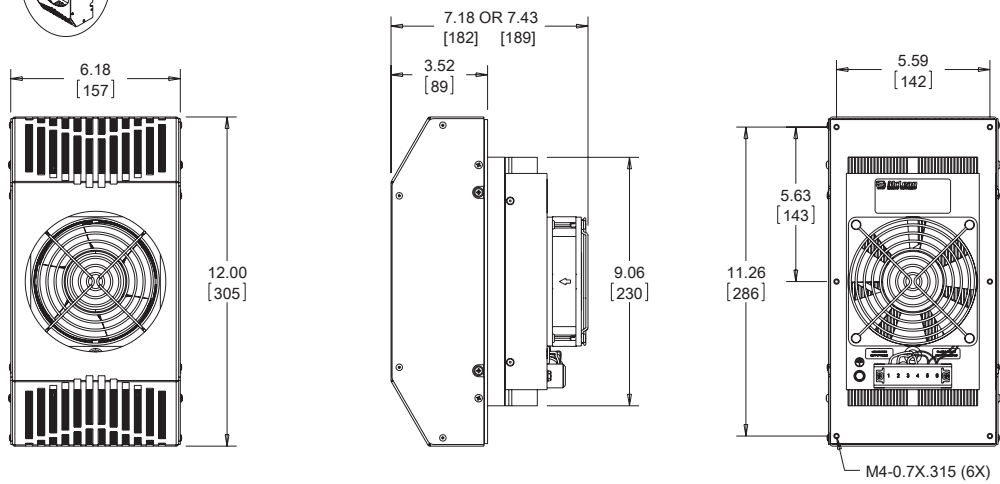
Item number					
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud	48V w/o shroud	48V w/painted shroud
Catalog Number	TE121024020	TE121024010	TE121024011	TE121048020	TE121048010
COOLING PERFORMANCE					
BTU/Hr.	321	321	321	321	321
Watt	94	94	94	94	94
Operating Temperature Range:					
Maximum (°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

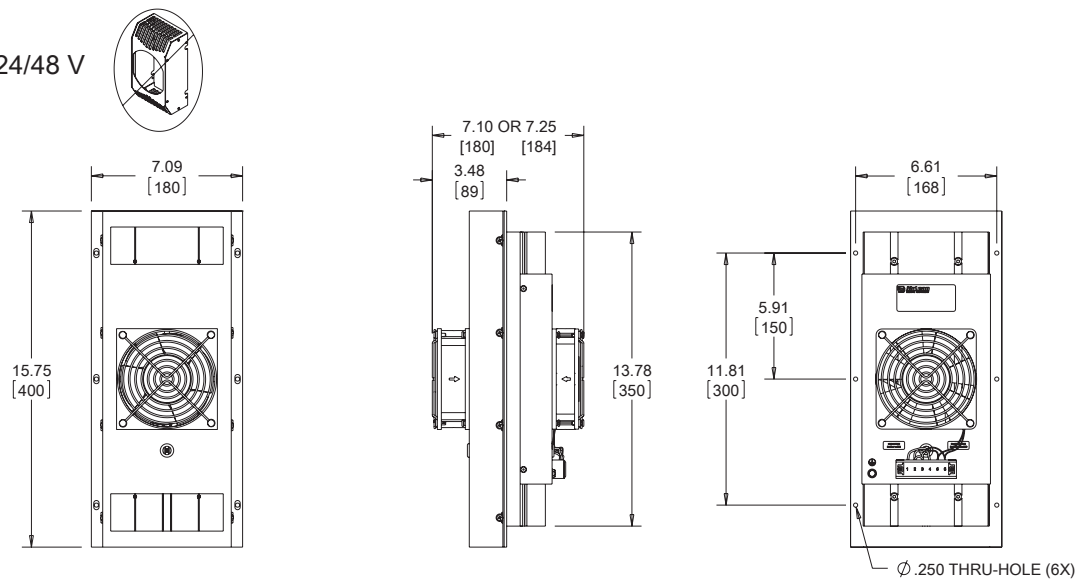
Thermoelectric Coolers TE09/TE12/TE16

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

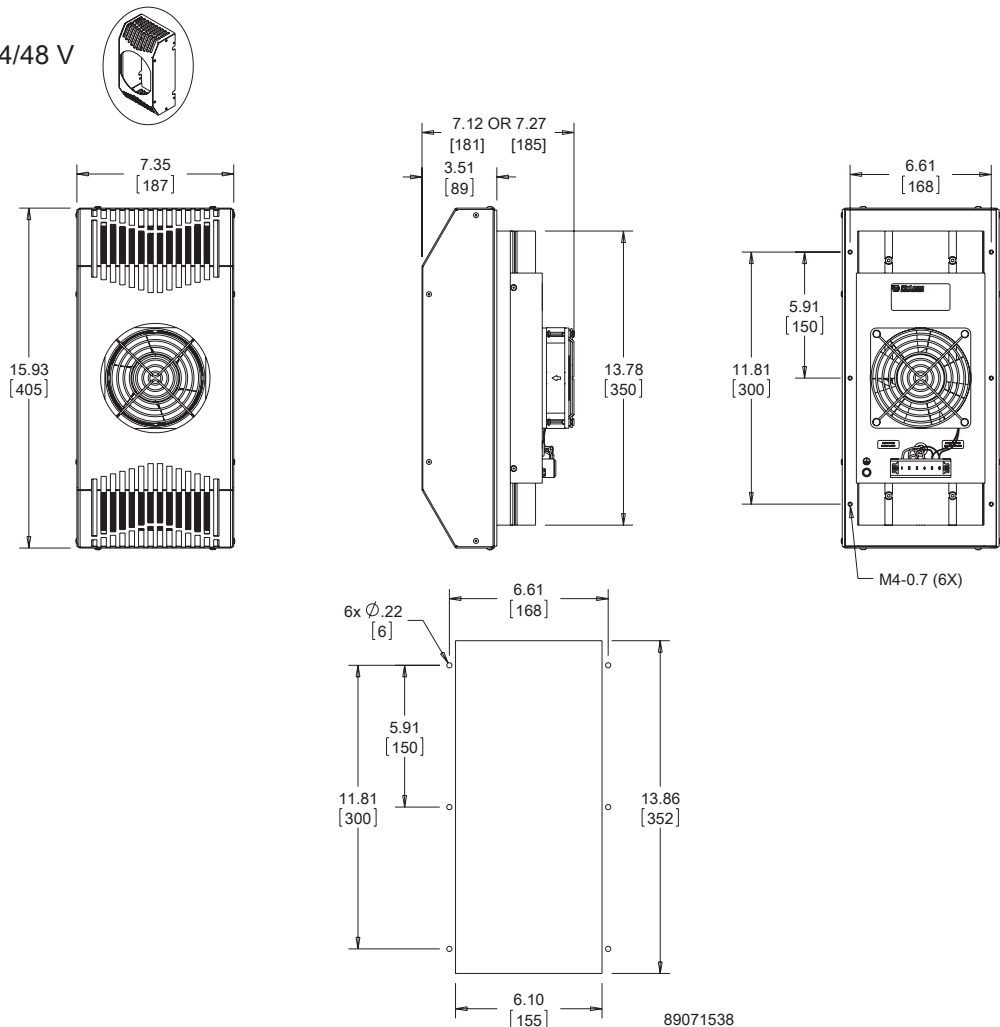
Item number					
Description	24V w/o shroud	24V w/painted shroud	24V w/SS shroud	48V w/o shroud	48V w/painted shroud
Catalog Number	TE162024020	TE162024010	TE162024011	TE162048020	TE162048010
COOLING PERFORMANCE					
BTU/Hr.	567	567	567	567	567
Watt	166	166	166	166	166
Operating Temperature Range:					
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

200 W 24/48 V

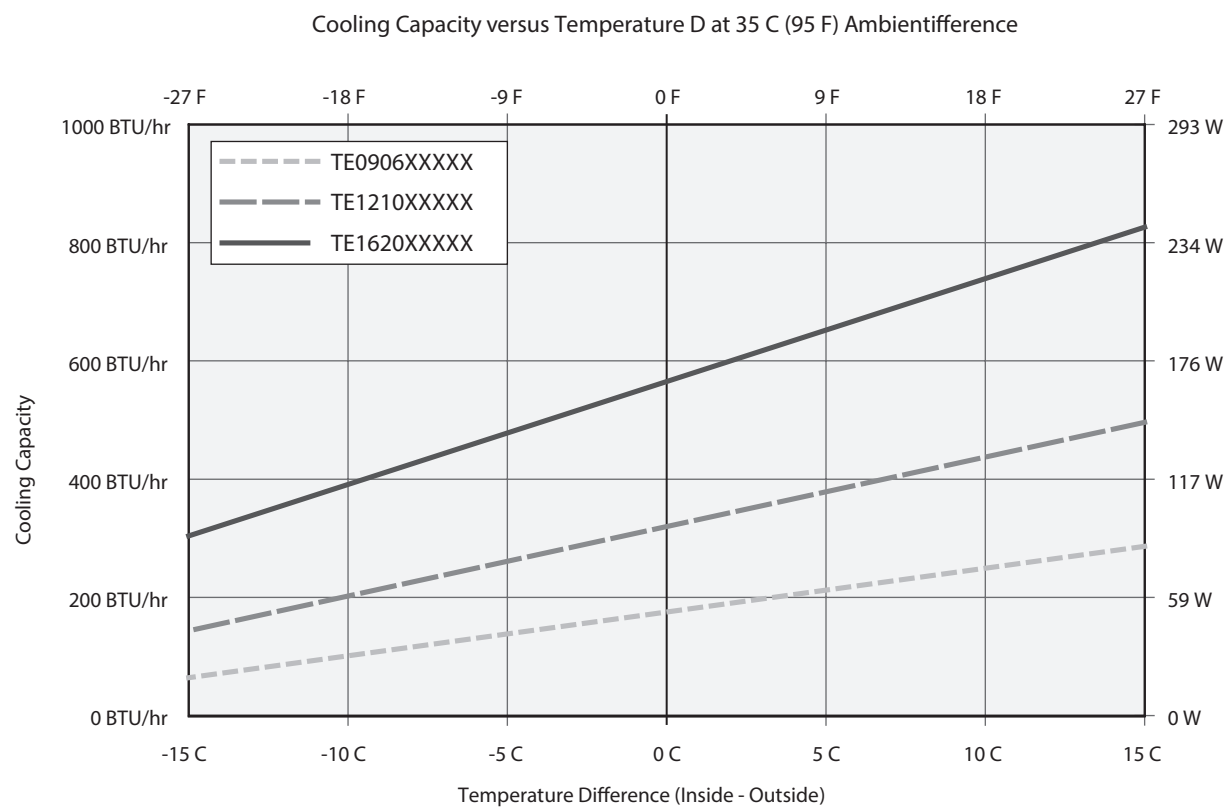


200 W 24/48 V



Cutout Dimensions

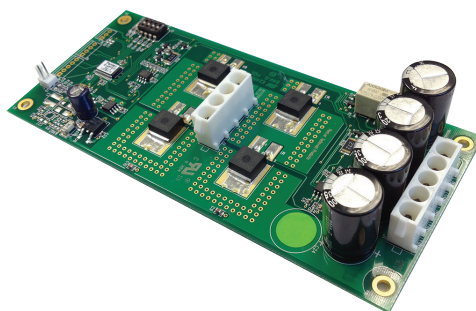
Thermoelectric Coolers TE09/TE12/TE16



NOTES:

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

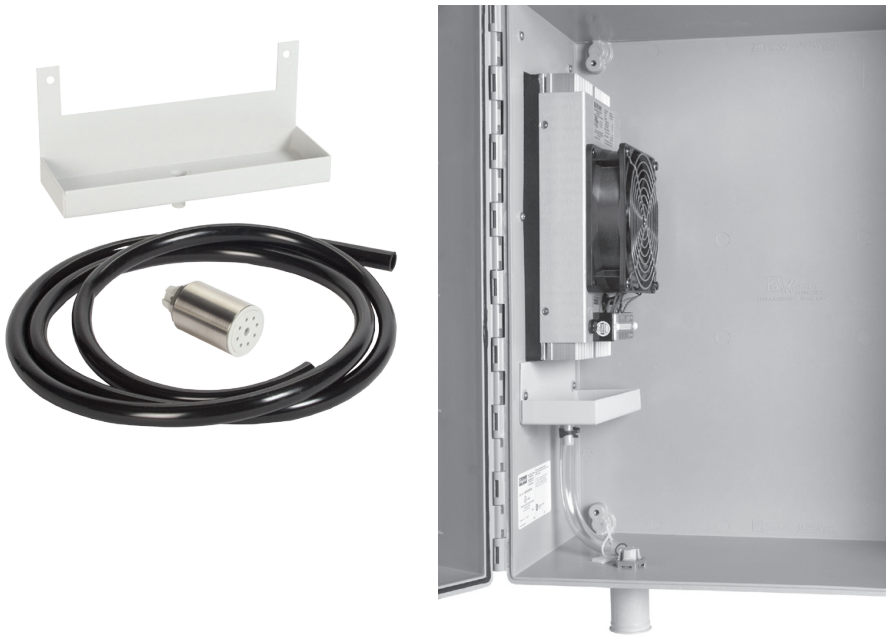
- 4 cooling temperature set points range from 22,5°C to 35°C (35°C Factory Setting)
- 3 heating temperature set points range from 5°C to 15°C (15°C Factory Setting)
- Heating function can be easily disabled if desired
- On-board LEDs indicate low temp, high temp alarm, and overall system status
- Dry contact relay output provides for external alarm indication

PERFORMANCE DATA

Item numbers		
	TEC24VCNTLRN	TEC48VCNTLRN
ELECTRICAL DATA		
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.
UNIT DIMENSIONS		
PCB Dimensions		
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	
MOUNTING BRACKET DIMENSIONS		
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	
ACCESSORIES		
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



FEATURES

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

- 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

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

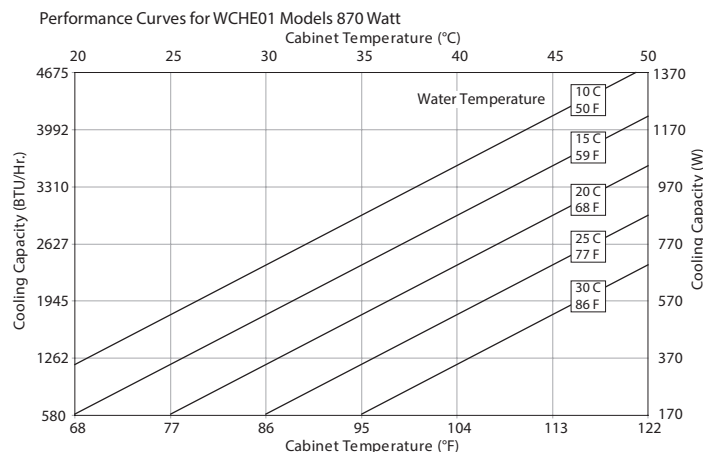
- Standard models constructed of rugged steel
- RAL 7035 light-gray, powder-coat polyester paint

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

Air to Water Heat Exchanger Indoor WCHE-Series

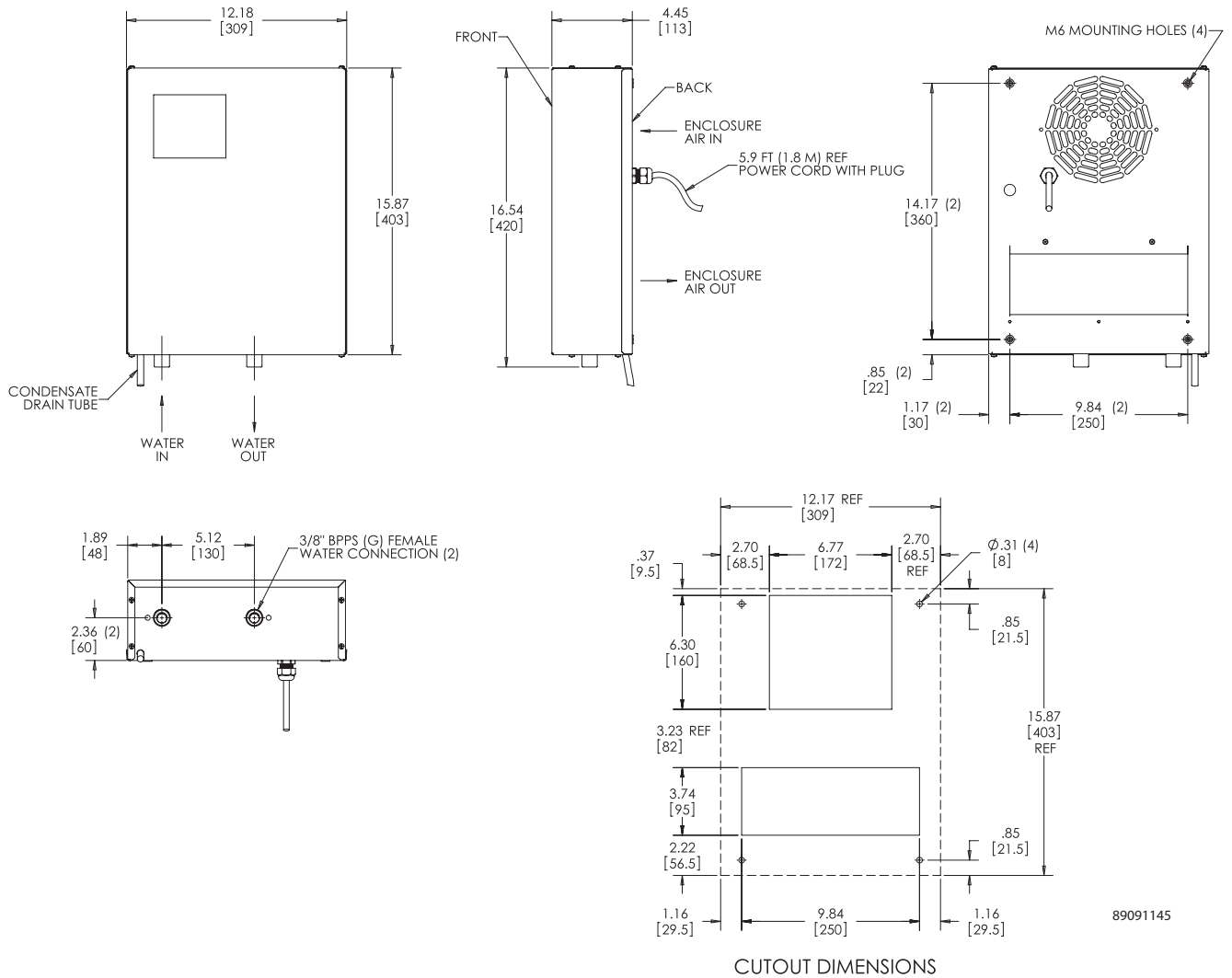
PERFORMANCE DATA WCHE01 MODELS 870 WATT

Item number			
Indoor Model	—	WCHE01926002	WCHE01926005
Indoor Model Stainless Steel			WCHE01926006
COOLING PERFORMANCE			
Nominal:			
BTU/Hr. @ Δt 25 °C	2968	2968	2968
Watt @ Δt 25 °C	870	870	870
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
ELECTRICAL DATA			
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)	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
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)	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

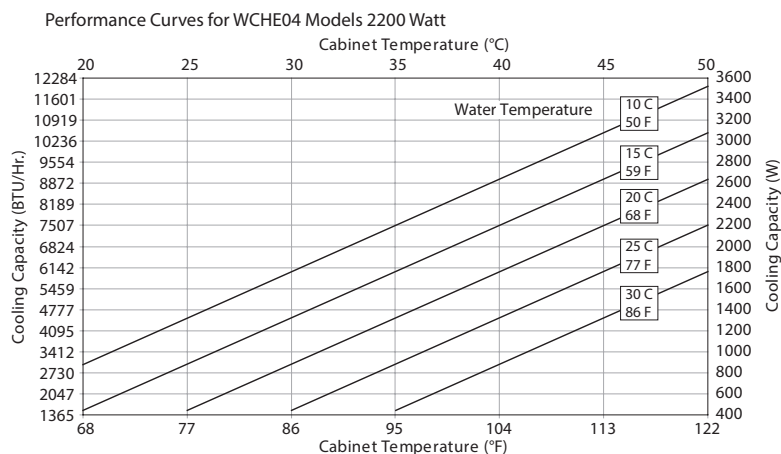


NOTES:

Air to Water Heat Exchanger Indoor WCHE-Series

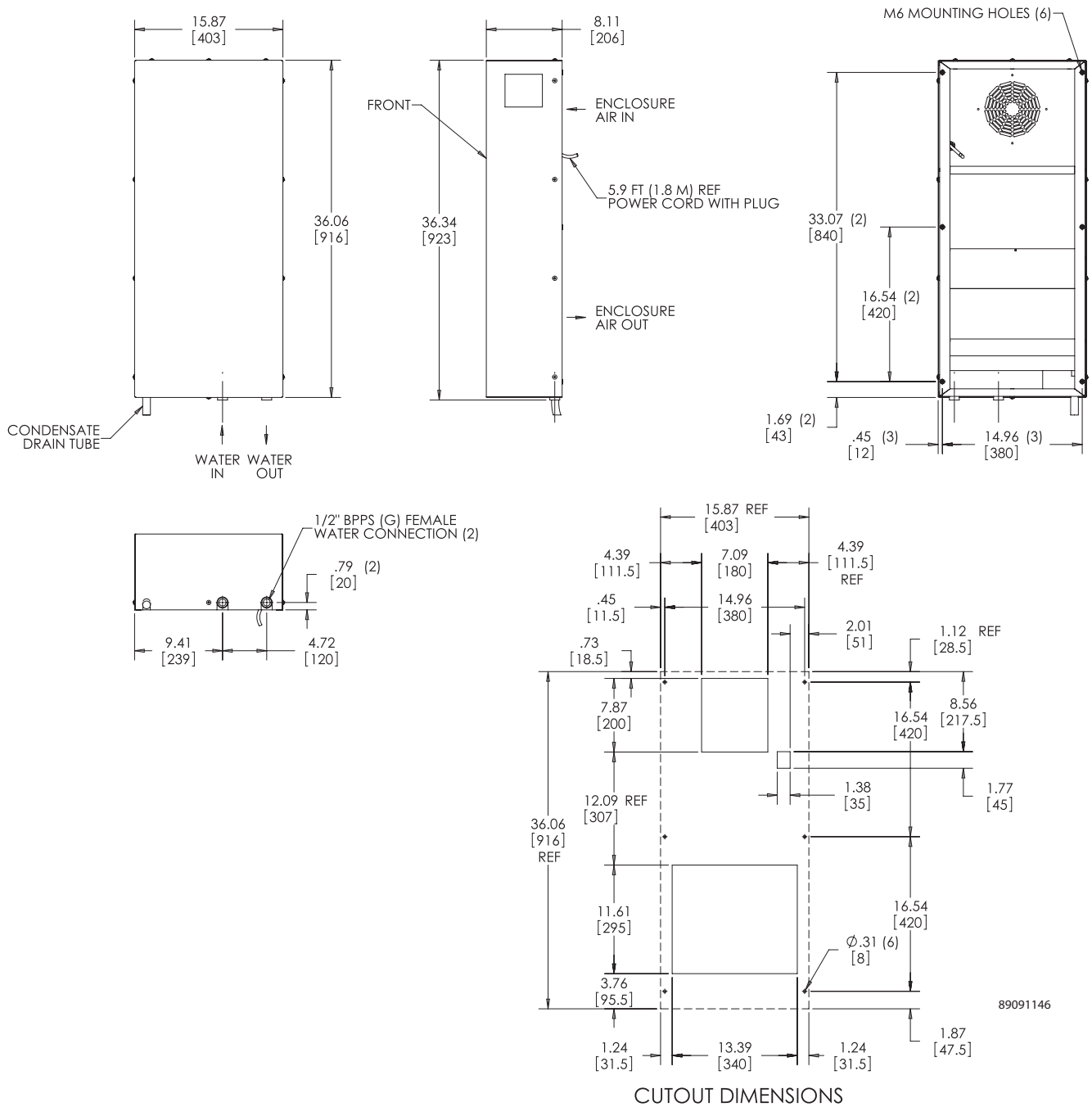
PERFORMANCE DATA WCHE04 MODELS 2200 WATT

Item number			
Indoor Model	—	WCHE04926002	WCHE04926005
Indoor Model Stainless Steel			WCHE04926006
COOLING PERFORMANCE			
Nominal:			
BTU/Hr. @ Δt 25 °C	7506	7506	7506
Watt @ Δt 25 °C	2200	2200	2200
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.)	339/575	339/575	339/575
Internal loop 60 Hz (Airflow: CFM/m3/hr.)	339/575	339/575	339/575
Waterflow (l/hr.)	150	150	150
Max. water pressure (kPa)	1000	1000	1000
ELECTRICAL DATA			
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)	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

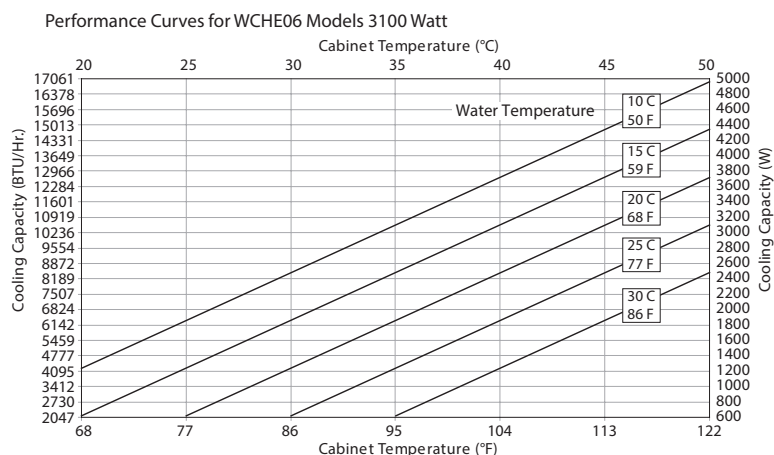
WCHE04 Models 2200 Watt



Air to Water Heat Exchanger Indoor WCHE-Series

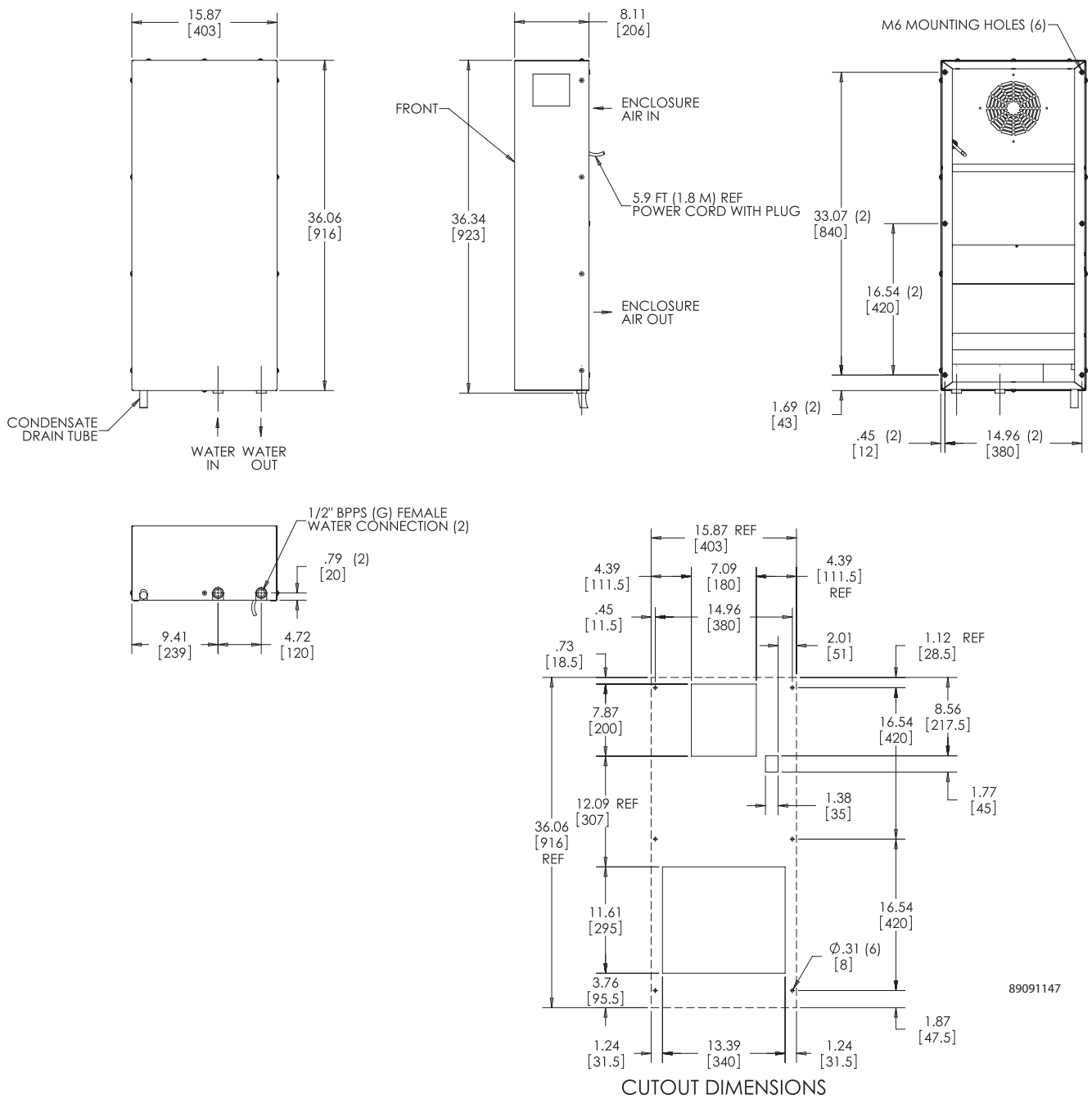
PERFORMANCE DATA WCHE06 MODELS 3100 WATT

Item number			
Indoor Model	—	WCHE06926002	WCHE06926005
Indoor Model Stainless Steel			WCHE06926006
COOLING PERFORMANCE			
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/m3/hr.)	507/860	507/860	507/860
Internal loop 60 Hz (Airflow: CFM/m3/hr.)	507/860	507/860	507/860
Waterflow (l/hr.)	500	500	500
Max. water pressure (kPa)	1000	1000	1000
ELECTRICAL DATA			
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
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)	46.3/21	46.3/21	46.3/21



Air to Water Heat Exchanger Indoor WCHE-Series

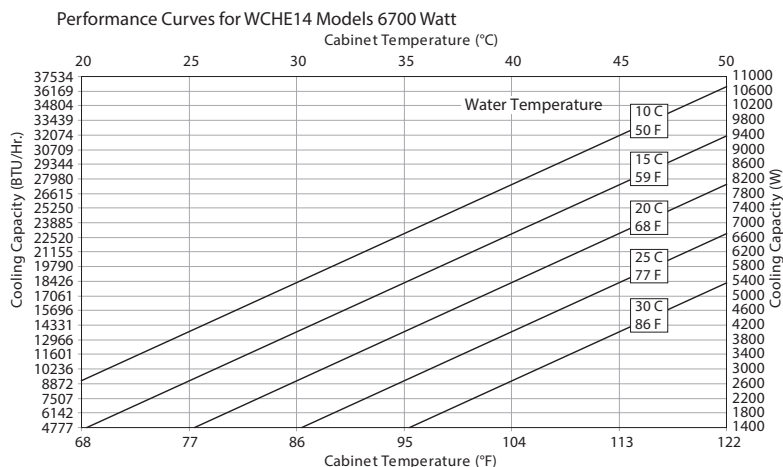
WCHE06 Models 3100 Watt



Air to Water Heat Exchanger Indoor WCHE-Series

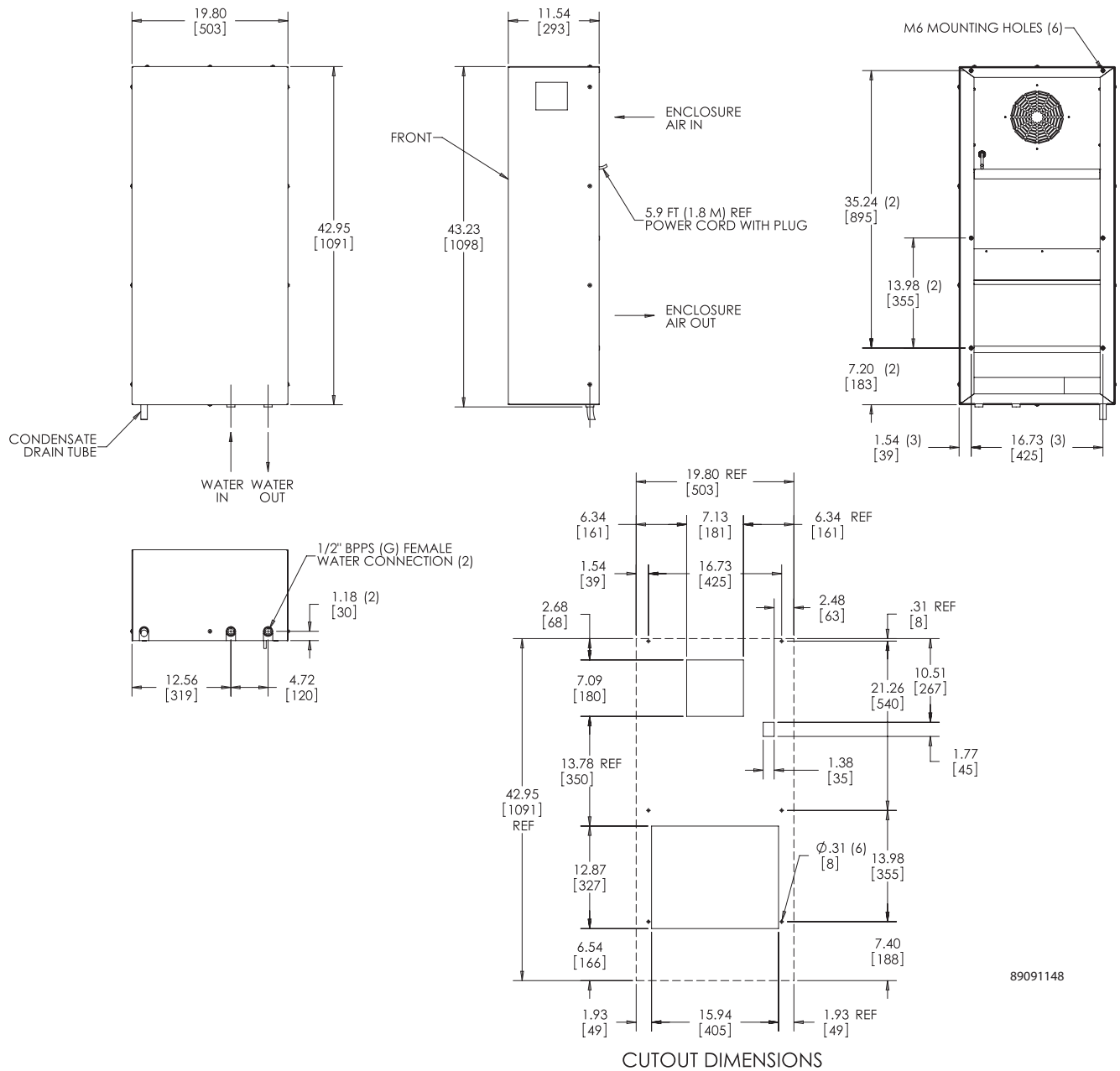
PERFORMANCE DATA WCHE14 MODELS 6700 WATT

Item number			
Indoor Model	—	WCHE14926002	WCHE14926005
Indoor Model Stainless Steel			WCHE14926006
COOLING PERFORMANCE			
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/m3/hr.)	855/1450	855/1450	855/1450
Internal loop 60 Hz (Airflow: CFM/m3/hr.)	855/1450	855/1450	855/1450
Waterflow (l/hr.)	1000	1000	1000
Max. water pressure (kPa)	1000	1000	1000
ELECTRICAL DATA			
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
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)	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

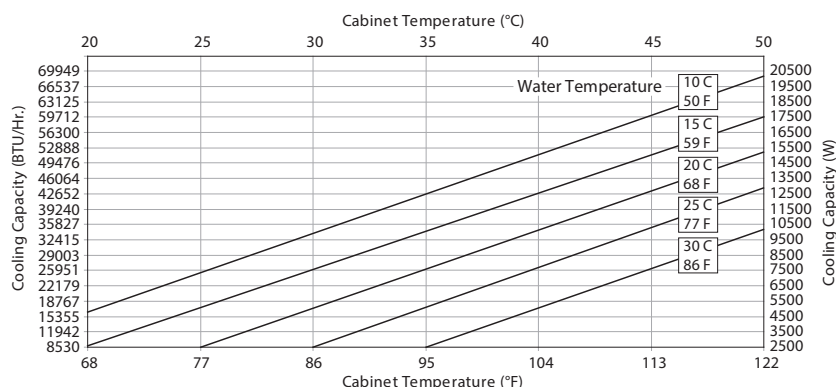


Air to Water Heat Exchanger Indoor WCHE-Series

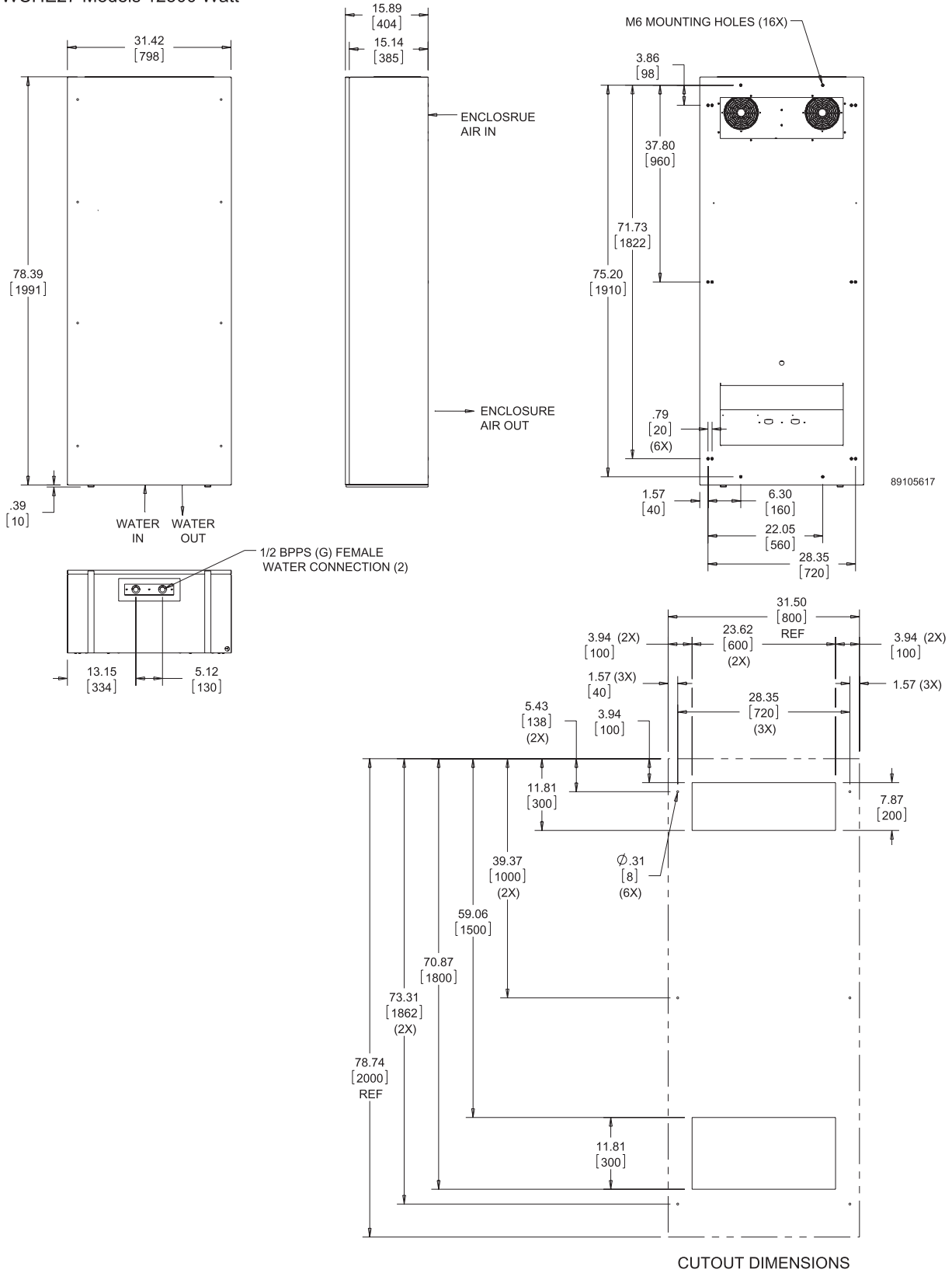
PERFORMANCE DATA WCHE27 MODELS 12500 WATT

Item number		
Indoor Model	WCHE27826005	--
Indoor Model Stainless Steel		--
COOLING PERFORMANCE		
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/m3/hr.)	1707/2900	1707/2900
Internal loop 60 Hz (Airflow: CFM/m3/hr.)	1707/2900	1707/2900
Waterflow (l/hr.)	1440	1440
Max. water pressure (kPa)	1000	1000
ELECTRICAL DATA		
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
ENCLOSURE PROTECTION	IP54	IP54
CONTROLLER		
Description	Basic Mechanical Thermostat	
Thermostat Location	Behind front cover, near the fan	
Factory Thermostat Setting (°F/°C)	95/35	95/35
SOUND LEVEL		
At 1.0 Meters	60 dBA	60 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)	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



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

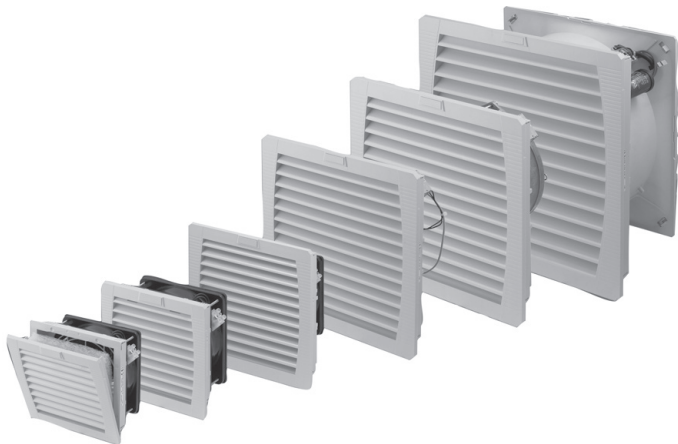
SPECIFICATIONS

- Airflow capacity of 19 m³/h ... 640 m³/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:

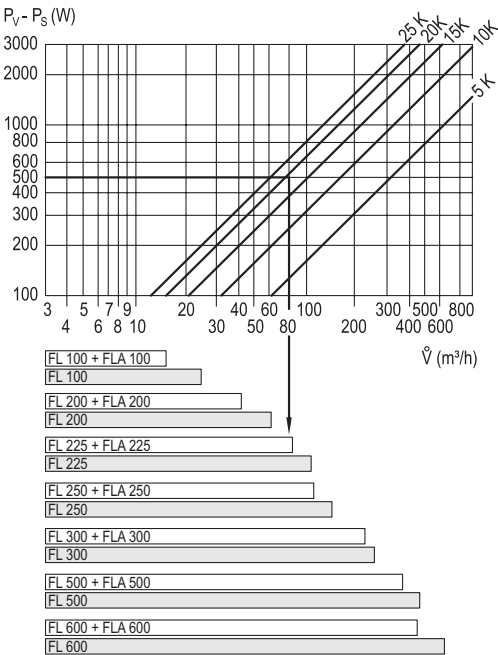
- V** = airflow volume
- f** = air constant = 3.3 m³ K/Wh
- PV** = thermal power loss
(sum of heat losses of the devices in the cabinet)
- PS** = radiant power1)
(heat which is dissipated by the cabinet without additional cooling)
- ΔT** = difference between internal temperature TI and ambient temperature TU, **ΔT** = TI - TU

READING EXAMPLE

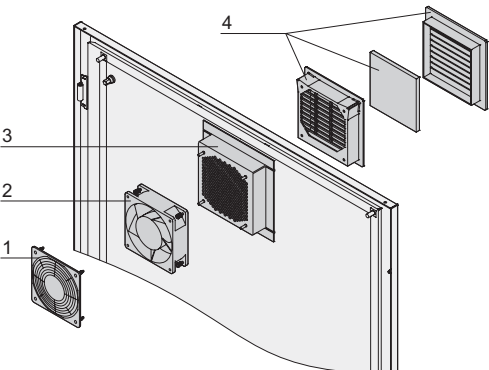
For example, the devices in the cabinet produce a power loss of 840 W. The cabinet releases 340 W to the environment via its surfaces. The air pulled in from outside the cabinet has a temperature of 20°C . The maximum allowed cabinet temperature is 40°C.

Which air filtered fan should be employed?

- PV = 840 W, PS = 340 W, read-off point PV - PS = 500 W
- ΔT = Ti - Ta = 40 C - 20 C = 20 C = 20 K
- On the characteristic for 20 K we obtain, at PV - PS = 500 W, a minimum necessary airflow volume of V = 80 m³/h.
- A FL 250 air filtered fan should be used that gives an airflow volume of 125 m³/h or, if used in combination with the FLA 250 exhaust filter, of 93 m³/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		Fan
3	1	EMC hood
3	1	FLA outlet/inlet filter

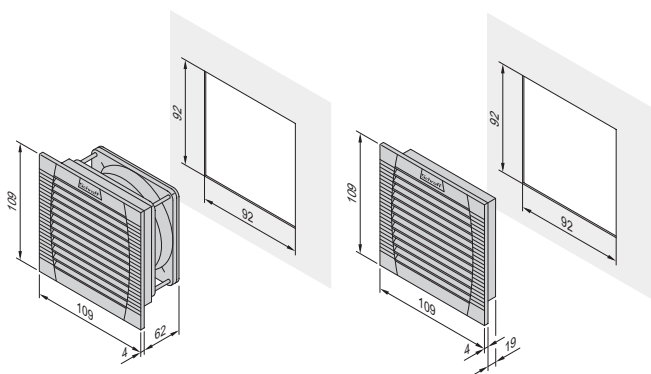
Filter Fans

AIR FILTERED FAN FL 100



SPECIFICATIONS

- Airflow volume 19 m³/h
- Easy conversion from pressure to suction operation
- Protection class IP 24
- 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
60715-142	Air filtered fan 24 VDC
60715-141	Air filtered fan 115 VAC
60715-140	Air filtered fan 230 VAC
60715-156	Air outlet/inlet filter FLA 100 (Items 1 + 2 included), 1 piece
60715-182	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 m³/h	19/24 m³/h	19 m³/h
Noise level to EN ISO 3741	33 dB(A)	33 dB(A)	33 dB(A)
Combination FL + FLA	12/14 m³/h	12/14 m³/h	12 m³/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, cUL, EAC		

NOTE

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

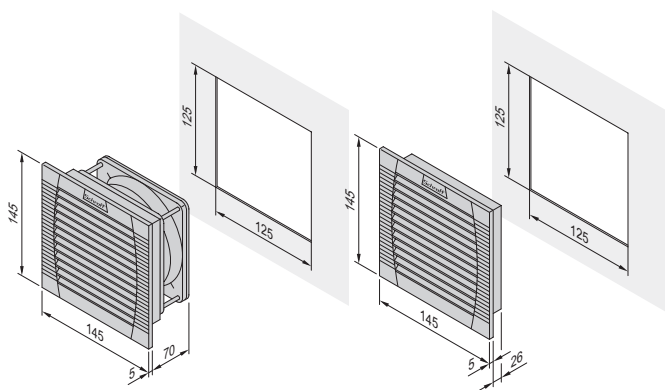
Filter Fans

AIR FILTERED FAN FL 200



SPECIFICATIONS

- Airflow volume 60 m³/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
60715-145	Air filtered fan 24 VDC
60715-144	Air filtered fan 115 VAC
60715-143	Air filtered fan 230 VAC
60715-157	Air outlet/inlet filter FLA 200 (Items 1 + 2 included), 1 piece
60715-183	Replacement filter IP 54 for FL 200 and FLA 200, filter class G 3 (EN 779), PU 5 pieces
60715-187	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 m³/h	60/66 m³/h	60 m³/h
Free airflow volume with IP 55 filter	56/64 m³/h	56/64 m³/h	56 m³/h
Combination FL + FLA IP 54	38/42 m³/h	38/42 m³/h	38 m³/h
Combination FL + FLA IP 55	40/46 m³/h	40/46 m³/h	40 m³/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

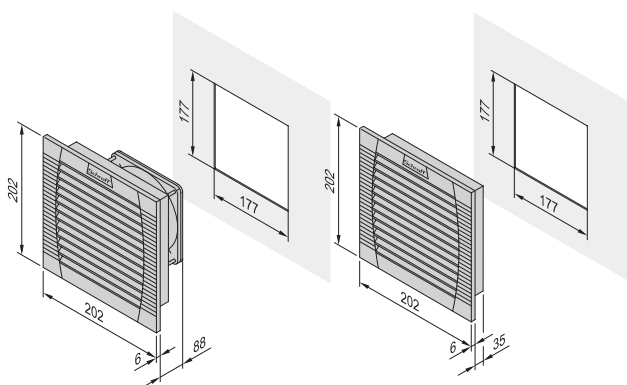
Filter Fans

AIR FILTERED FAN FL 225



SPECIFICATIONS

- Airflow volume 98 m³/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

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

TECHNICAL DATA

Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	98/108 m³/h	98/108 m³/h
Free airflow volume with IP 55 filter	100/110 m³/h	100/110 m³/h
Combination FL + FLA IP 54	73/80 m³/h	73/80 m³/h
Combination FL + FLA IP 55	55/64 m³/h	55/64 m³/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

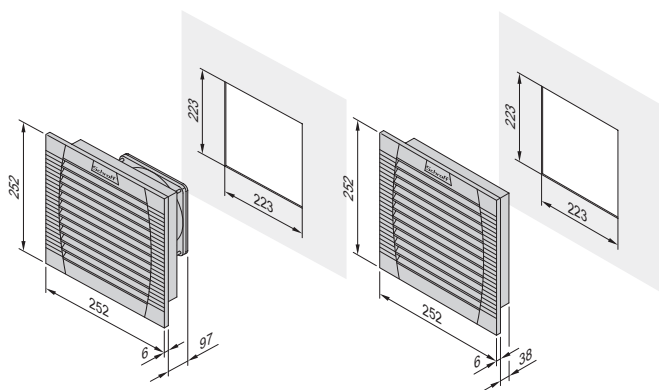
Filter Fans

AIR FILTERED FAN FL 250



SPECIFICATIONS

- Airflow volume 125 m³/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

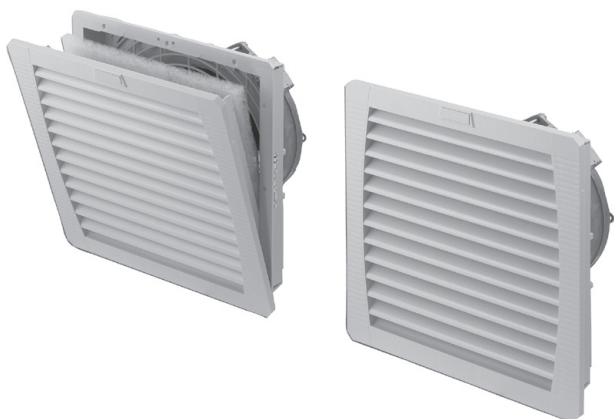
Voltage	230 VAC	115 VAC
Frequency	50/60 Hz	50/60 Hz
Free airflow volume with IP 54 filter	125/138 m³/h	125/138 m³/h
Free airflow volume with IP 55 filter	145/160 m³/h	140/160 m³/h
Combination FL + FLA IP 54	93/102 m³/h	93/102 m³/h
Combination FL + FLA IP 55	109/113 m³/h	109/113 m³/h
Max. static pressure 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

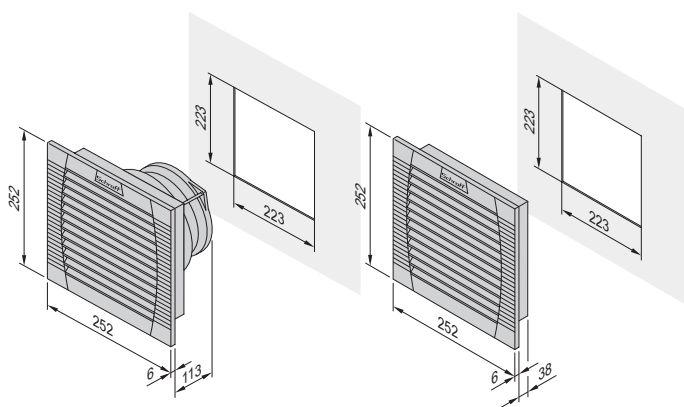
Filter Fans

AIR FILTERED FAN FL 300



SPECIFICATIONS

- Airflow volume 223 m³/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 m³/h	223/247 m³/h
Free airflow volume with IP 55 filter	233/265 m³/h	233/265 m³/h
Combination FL + FLA IP 54	201/223 m³/h	201/223 m³/h
Combination FL + FLA IP 55	180/207 m³/h	180/207 m³/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

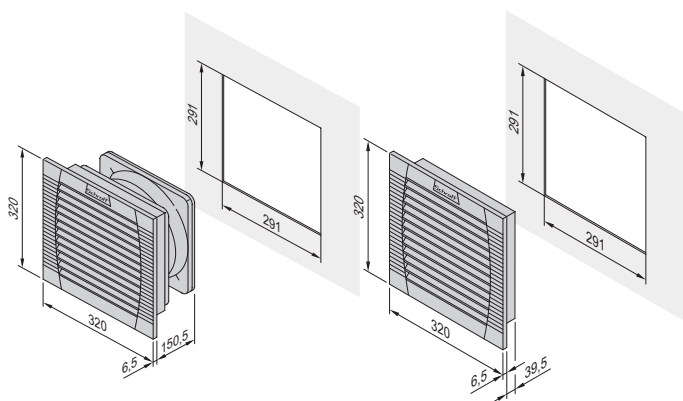
Filter Fans

AIR FILTERED FAN FL 500



SPECIFICATIONS

- Airflow volume 480 m³/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 m³/h	480/480 m³/h
Free airflow volume with IP 55 filter	505/505 m³/h	505/505 m³/h
Combination FL + FLA IP 54	370/370 m³/h	370/370 m³/h
Combination FL + FLA IP 55	380/380 m³/h	380/380 m³/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

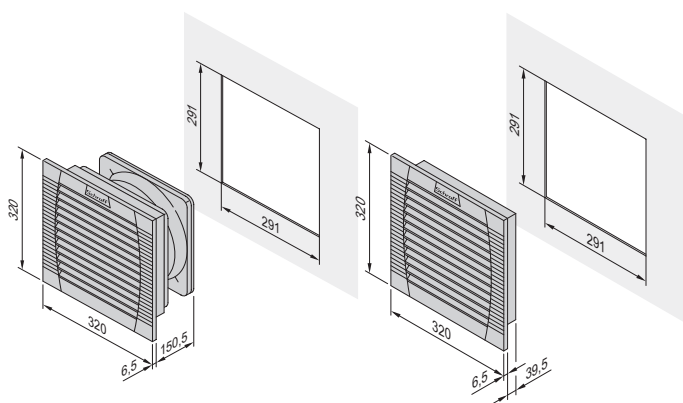
Filter Fans

AIR FILTERED FAN FL 600



SPECIFICATIONS

- Airflow volume 640 m³/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 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 m³/h	640/653 m³/h
Free airflow volume with IP 55 filter	770/785 m³/h	770/785 m³/h
Combination FL + FLA IP 54	445/445 m³/h	445/445 m³/h
Combination FL + FLA IP 55	490/501 m³/h	490/501 m³/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 :
