

# V-Series

INDOOR AIR CONDITIONERS



*Reliable, easy-care cooling  
for industrial systems*



**McLean**<sup>™</sup>  
COOLING TECHNOLOGY

*Protecting Electronics.  
Exceeding Expectations.<sup>™</sup>*



**Pentair**  
Technical Products

# V-SERIES Indoor Air Conditioners

Reliable easy-care cooling



## Engineered for cooling industrial systems in Europe and Asia

### RELIABLE PERFORMANCE

- Indoor operating temperature range from 20 °C to 55 °C
- Exceptional IP 56 protection against dust and water infiltration
- Reliable mechanical thermostat to reduce the chance of failure
- All-metal shroud for rugged factory conditions
- Rigorously tested to withstand shipping vibration, high temperatures and other operating challenges
- Every unit functionally tested prior to leaving the factory

### EARTH-FRIENDLY

- Rotary compressor\* for energy efficiency
- R134A earth-friendly refrigerant
- RoHS compliant

## V-SERIES Key Advantages

1. Coated coils for filterless operation in most environments
2. Built-in hooks to hang unit on cabinet before fastening, making installation easier
3. T3 class rotary compressor\* for energy efficiency, reliability and high ambient air temperatures
4. Rugged all-metal shroud for demanding factory conditions
5. Easy access to optional aluminum filter and other components for fast service and less system downtime

\*1200, 1500 & 2000 watt models

### VERSATILE COOLING

- 300, 600, 1200, 1500 and 2000 watt models
- 230 VAC 50 Hz power input with +/- 10% operating range
- CE and GOST certifications

### ATTRACTIVE APPEARANCE

- RAL7035 light grey semi-textured paint standard
- Custom colors and textures available upon request
- Exterior surface mounting standard

### EASY TO USE

- 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
- Unique passive condensate management system
- Full-size cut-out print included with every unit
- Easy access to the optional aluminum filter and other components

### RESPONSIVE CUSTOMER SERVICE

- Popular models and spare parts in-stock, ready for immediate shipment
- Over 1,000 field repair technicians worldwide



# McLean™ Global Cooling Solutions

*High-performance cooling for virtually any environment*

**Designed to cool industrial, telecom and other electronic systems anywhere in the world**

## **INDUSTRIAL / OUTSIDE PLANT**

- SPECTRACOOL indoor / outdoor air conditioners
- PROAIR indoor heat exchangers
- Industrial filter fan collection
- Enclosure heaters
- Thermostats and other accessories

## **HARSH ENVIRONMENT**

- PROAIR Type 4X stainless air conditioners
- Water-cooled air conditioners

## **TELECOMMUNICATIONS / SECURITY & DEFENSE**

- T-Series outdoor air conditioners
- CLIMAGUARD outdoor heat exchangers
- Custom-sized heat exchanger cores
- Thermoelectric coolers
- Direct air cooling systems



*McLean Cooling Technology makes electronics cooling easier, so you can go about your business. Be sure to ask us for more details about our global cooling solutions. Or visit our web site at [www.McLeanCoolingTech.com](http://www.McLeanCoolingTech.com)*

## V-Series Compact Air Conditioners



**VA06 Indoor Model**  
 300 and 600 Watts

### Industry Standards

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

### Application

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

### 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
- Unique 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
- Exterior surface mounting standard
- Full-size cutout print included with every unit
- Easy access to the optional aluminum filter and other components
- Rigorously tested to withstand shipping vibration, high temperatures and other operating challenges
- Every unit functionally tested prior to leaving the factory
- R134A earth-friendly refrigerant and RoHS compliant

### Specifications

- 300 and 600 nominal watts
- 230 VAC 50 Hz power input with +/-10 percent operating range
- CE and GOST certifications

### Finish

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

### Model Number Structure

VA	06	06	25	G	052	S
1	2	3	4	5	6	7

1. Identifies the of air conditioner type, VA=V Series Air Conditioner.
2. Identifies the approximate height, 06=501mm to 600mm.
3. This is the air conditioner's nominal capacity in Watt, 06=600 W.
4. Identifies the input power of air conditioner, 2=220V/230V, 5=50Hz.
5. Identifies the construction material and refrigerant of air conditioner, G=Galvanized sheet metal and R134a.
6. Unique set of numbers for each air conditioner which identifies the accessories on a model, 052=Terminal block and finger guard.
7. S=Standard product.

### Notes

Visit [www.McLeanCoolingTech.com](http://www.McLeanCoolingTech.com) to download 2D and 3D CAD drawings into the design of your electronics system.

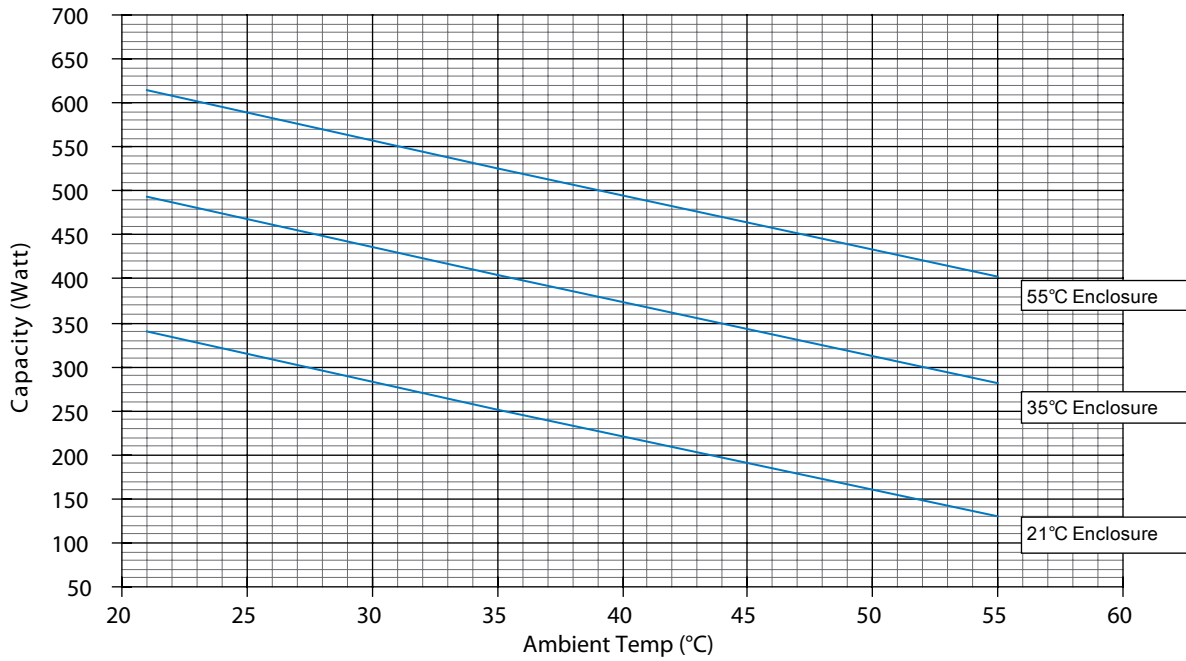
## V-Series Air Conditioners

 Performance Data **300 W, 600 W**

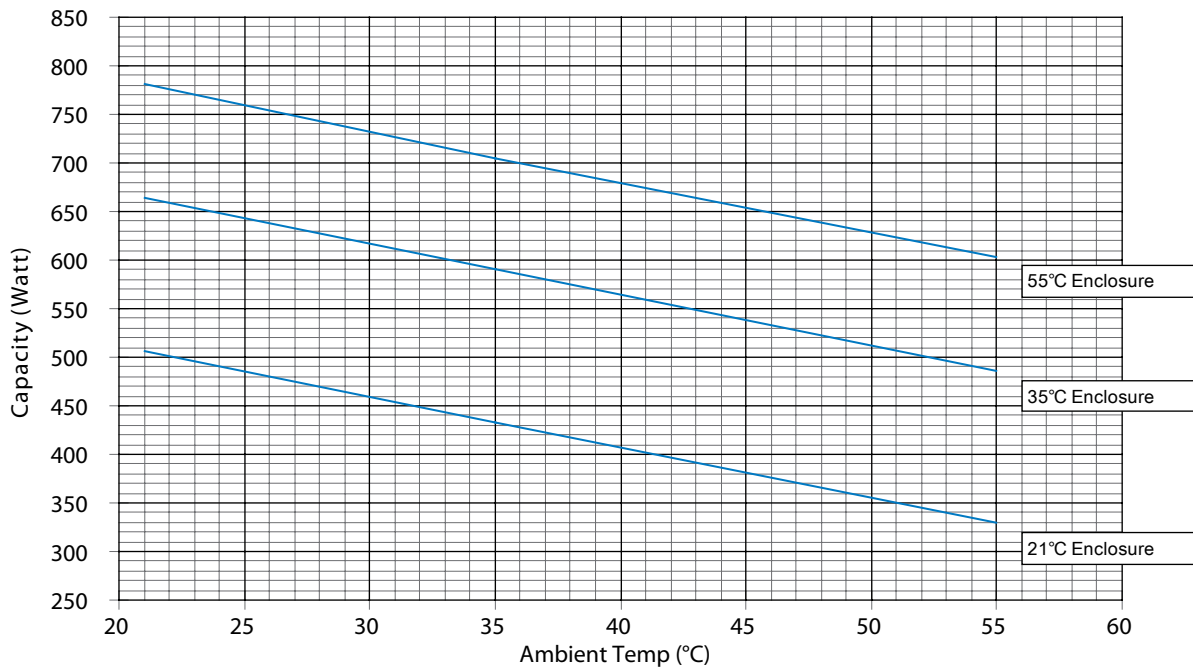
<b>MODEL NUMBER</b>		
	VA060325G052S	VA060625G052S
<b>COOLING PERFORMANCE:</b>		
Nominal:		
L35 L35		
<b>Watt</b>	400	590
L35 L50		
<b>Watt</b>	310	510
Refrigerant	R134a	R134a
Refrigerant Charge (g)	100	150
Operating Temperature Range:		
Maximum (°C)	55	55
Minimum (°C)	20	20
Airflow at 0 Static Pressure:		
Internal loop (m <sup>3</sup> /h)	115	180
External loop (m <sup>3</sup> /h)	325	270
Duty Cycle	100%	100%
<b>ELECTRICAL DATA</b>		
<b>Rated Voltage</b>	<b>230</b>	<b>230</b>
Frequency (Hz)	50	50
Operating Range	+/-10%	+/-10%
Power Consumption	225	420
L35 L35 (Watt)		
Max. Nominal Current (Amp)	1.5	2.8
Starting Current (Amp)	7	16
Pre-fuse T (Amp)	10	10
Agency Approvals	CE	CE
	GOST	GOST
Power Input Description	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR L35 L35</b>		
Cooling Performance (Watt)/ Power Consumption (Watt)	1.8	1.4
<b>ENCLOSURE PROTECTION</b>		
IP Code	IP 56 Internal loop IP34 External loop	IP 56 Internal loop IP34 External loop
<b>CONTROLLER</b>		
Description	Basic Mechanical Thermostat	Basic Mechanical Thermostat
Thermostat Location	Enclosure Side	Enclosure Side
Factory Thermostat Setting (°C)	35	35
<b>SOUND LEVEL</b>		
At 1 M	64 dBA	72 dBA
<b>UNIT CONSTRUCTION</b>		
Material	Galvanized Sheet Metal Standard	Galvanized Sheet Metal Standard
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard	RAL 7035 light-gray, semi-textured powder-coat paint standard
<b>UNIT DIMENSIONS</b>		
Height (mm)	508	508
Width (mm)	270	270
Depth (mm)	252	252
Weight (kg)	23	25

Performance Curves for 300 and 600 Watt Models

**VA060325GXXXS 300 Watt Capacity Curves 230V/50Hz**

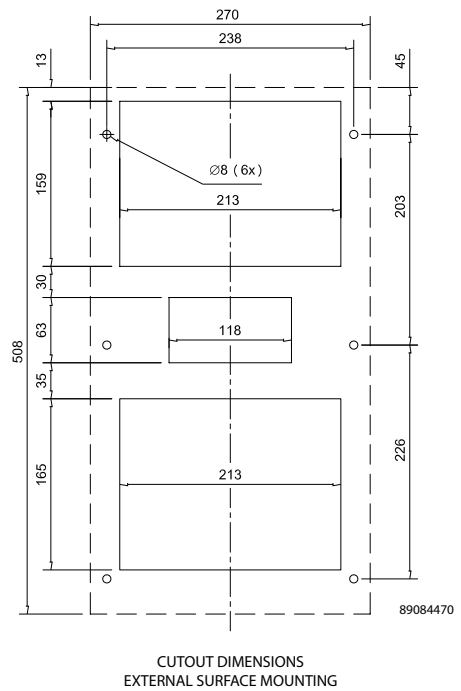
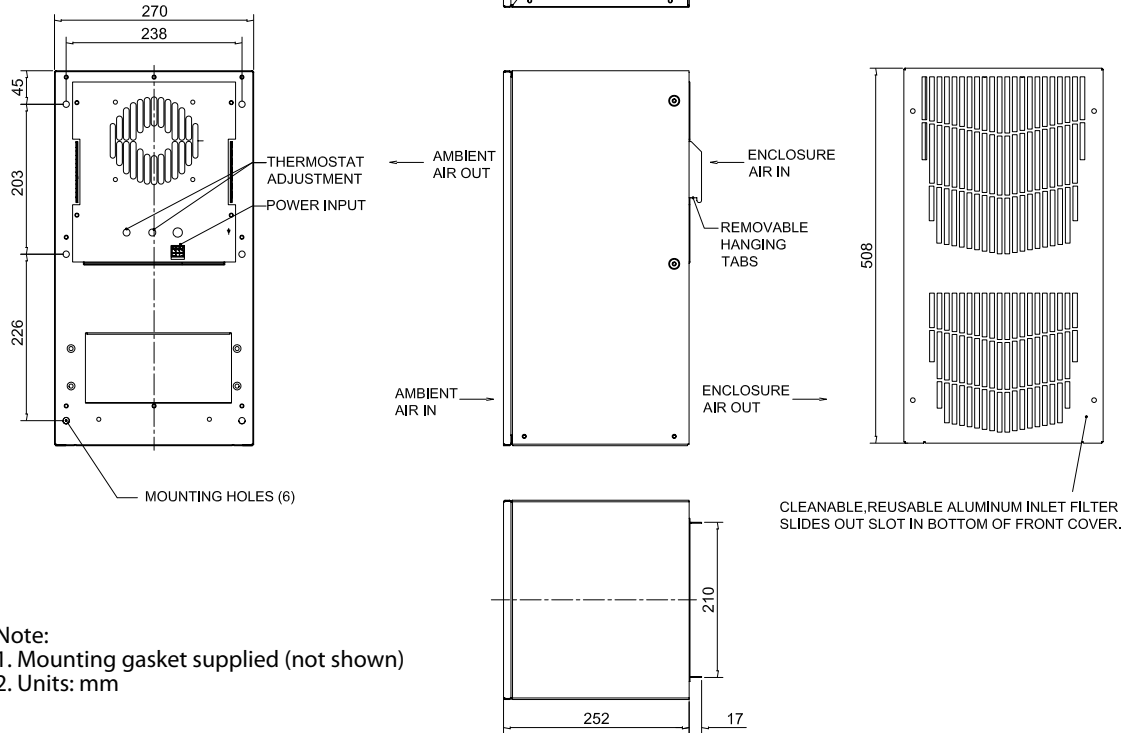


**VA060625GXXXS 600 Watt Capacity Curves 230V/50Hz**



V-Series Air Conditioners

V-SERIES Compact  
1st Angle Projection





## 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  
 GOST

#### Application

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

#### 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
- Unique 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
- Exterior surface mounting standard
- Full-size cutout print included with every unit
- Easy access to the optional aluminum filter and other components
- Rigorously tested to withstand shipping vibration, high temperatures and other operating challenges
- 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 watts
- 230 VAC 50 Hz power input with +/-10 percent operating range
- CE and GOST certifications

#### Finish

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

#### Model Number Structure

VA	06	06	25	G	052	S
1	2	3	4	5	6	7

1. Identifies the of air conditioner type, VA=V Series Air Conditioner.
2. Identifies the approximate height, 06=501mm to 600mm.
3. This is the air conditioner's nominal capacity in Watt, 06=600 W.
4. Identifies the input power of air conditioner, 2=220V/230V, 5=50Hz.
5. Identifies the construction material and refrigerant of air conditioner, G=Galvanized sheet metal and R134a.
6. Unique set of numbers for each air conditioner which identifies the accessories on a model, 052=Terminal block and finger guard.
7. S=Standard product.

#### Notes

Visit [www.McLeanCoolingTech.com](http://www.McLeanCoolingTech.com) to download 2D and 3D CAD drawings into the design of your electronics system.



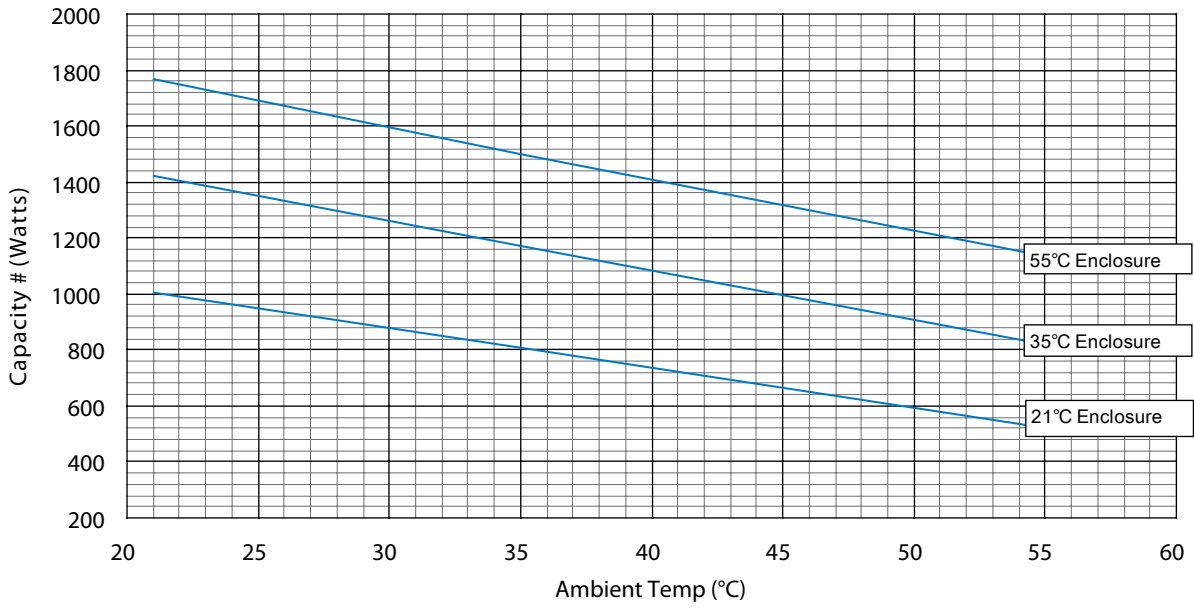
## V-Series Air Conditioners

## Performance Data 1200 W, 1500 W, 2000 W

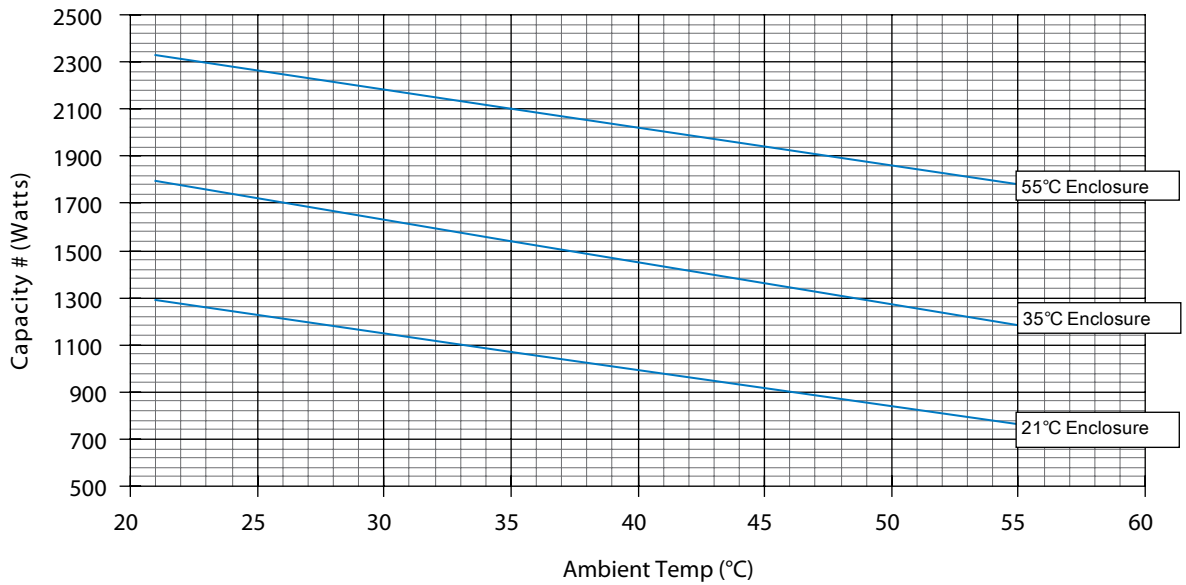
<b>MODEL NUMBER</b>			
Indoor Model	VA081225G052S	VA081525G052S	VA082025G052S
<b>COOLING PERFORMANCE</b>			
Nominal:			
L35 L35			
<b>Watt</b>	<b>1200</b>	<b>1550</b>	<b>1950</b>
L35 L50			
<b>Watt</b>	<b>930</b>	<b>1280</b>	<b>1700</b>
Refrigerant	R134a	R134a	R134a
Refrigerant Charge (g)	462	652	765
Operating Temperature Range:			
Maximum (°C)	55	55	55
Minimum (°C)	20	20	20
Airflow at 0 Static Pressure:			
Internal loop (m <sup>3</sup> /h)	345	530	530
External loop (m <sup>3</sup> /h)	275	545	565
Duty Cycle	100%	100%	100%
<b>ELECTRICAL DATA</b>			
Rated Voltage	230	230	230
Frequency (Hz)	50	50	50
Operating Range	+/-10%	+/-10%	+/-10%
Power Consumption L35 L35 (Watts)	565	610	855
Max. Nominal Current (Amps)	3.4	3.7	5.6
Starting Current (Amps)	16.2	16.3	22.7
Pre-fuse T (Amps)	10	10	10
Agency Approvals	CE GOST	CE GOST	CE GOST
Power Input Description	Terminal Block	Terminal Block	Terminal Block
<b>PERFORMANCE FACTOR L35 L35</b>			
Cooling Performance (Watt)/ Power Consumption (Watt)	2.1	2.5	2.3
<b>ENCLOSURE PROTECTION</b>			
IP Code	IP 56 Internal loop IP34 External loop	IP 56 Internal loop IP34 External loop	IP 56 Internal loop IP34 External loop
<b>CONTROLLER</b>			
Description	Basic Mechanical Thermostat	Basic Mechanical Thermostat	Basic Mechanical Thermostat
Thermostat Location	Enclosure Side	Enclosure Side	Enclosure Side
Factory Thermostat Setting (°C)	35	35	35
<b>SOUND LEVEL</b>			
At 1 M	68 dBA	71 dBA	73 dBA
<b>UNIT CONSTRUCTION</b>			
Material	Galvanized Sheet Metal Standard	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	RAL 7035 light-gray, semi-textured powder-coat paint standard
<b>UNIT DIMENSIONS</b>			
Height (mm)	725	725	725
Width (mm)	431	431	431
Depth (mm)	237	237	237
Weight (kg)	37	38	42

Performance Curves for 1200 and 1500 Watt Models

**VA081225GXXXS Capacity Curves 230V/50Hz**



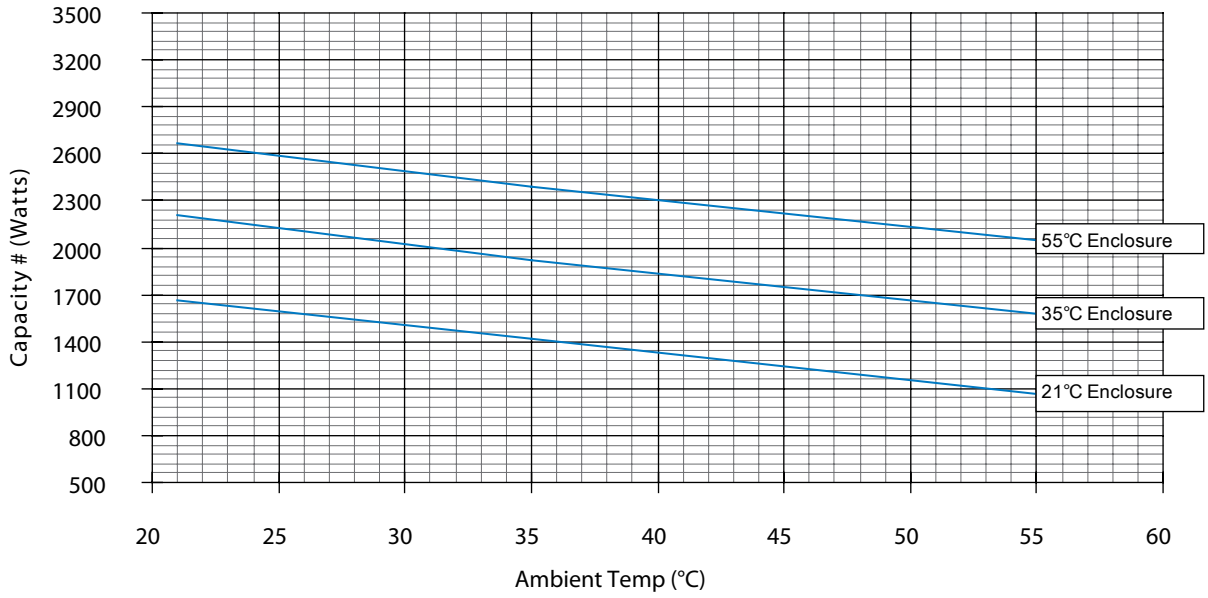
**VA081525GXXXS Capacity Curves 230V/50Hz**



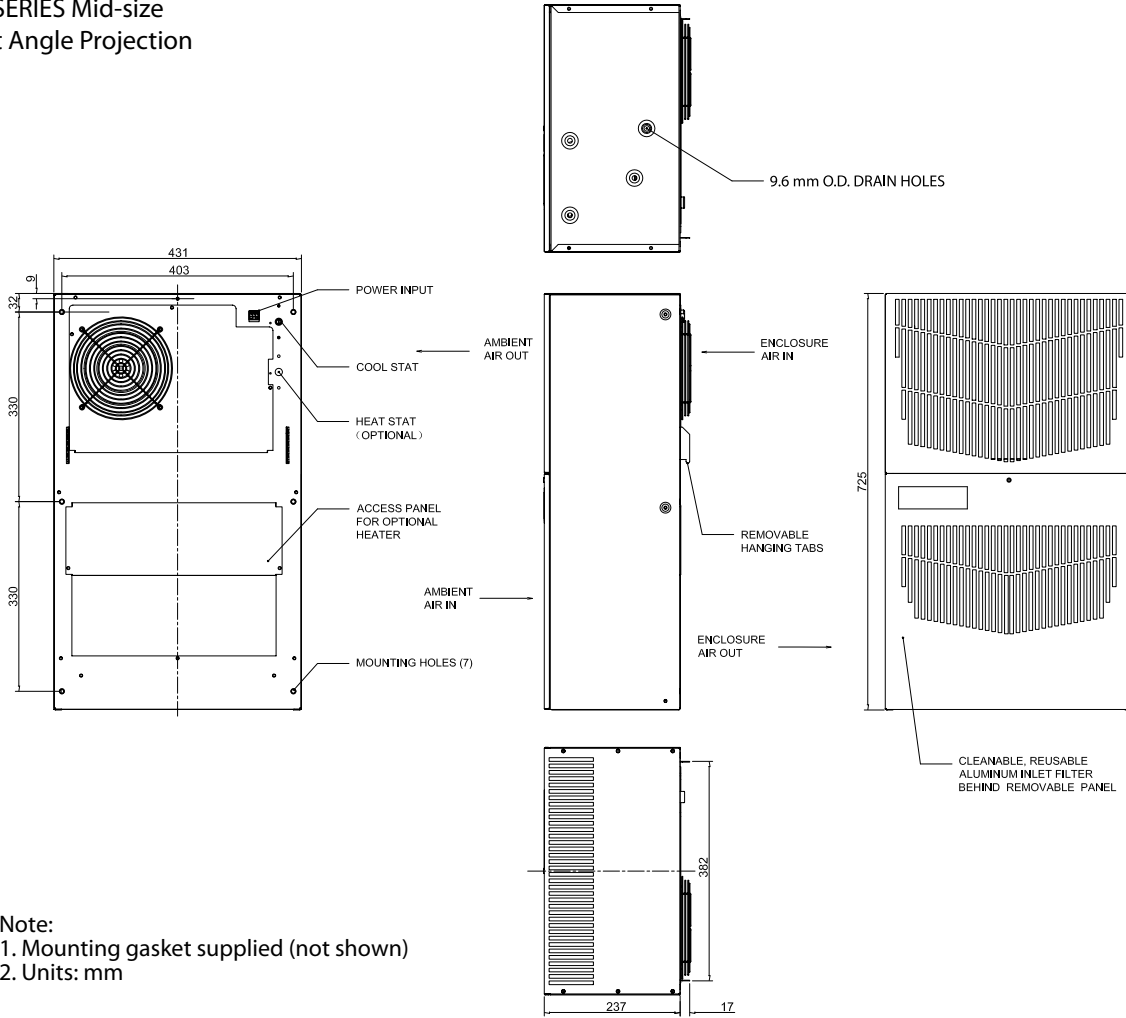
V-Series Air Conditioners

Performance Curves for 2000 Watt Model

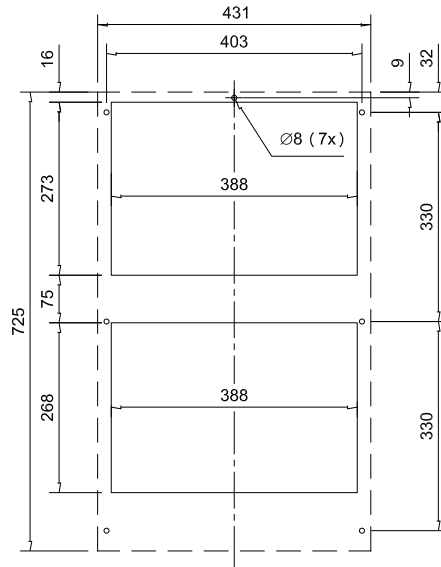
**VA082025GXXXS Capacity Curves 230V/50Hz**



V-SERIES Mid-size  
1st Angle Projection



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



Cutout Dimensions  
External Surface Mount

89084471

**V-Series Air Conditioners****Notes**

*No company engineers and services cooling solutions for vital electronics better than*  
**Pentair Technical Products**



*With more than 30 years of experience producing everything from fan assemblies to standard air conditioners and heat exchangers to engineered cooling applications for one-of-a-kind systems, Pentair Technical Products' McLean has the people and products to deliver the cool. The markets we serve include industrial automation, food and beverage, telecommunications, petrochemical, transportation, data networking, security and defense, and many others.*

*Pentair Technical Products understands your need for performance and does whatever it takes to ensure that when you make a promise to a customer, you can keep it.*

**PRODUCT SELECTION**

Indoors or outdoors, McLean air conditioners, heat exchangers, air movers and controls get the job done.



**CUSTOM COOLING SOLUTIONS**

An experienced staff with advanced software, rapid prototyping and in-house test facilities delivers custom cooling solutions quickly and to your exact specifications.



**TECHNICAL EXPERTISE AND SUPPORT**

With over 30 years of experience across dozens of industries, our engineers are able to assist your project design every step of the way. We also put that same cooling know-how into the standard platform solutions that we develop for the broader market.



### PRODUCT RELIABILITY

Speak with McLean customers, and you'll discover a strong market reputation for product reliability. We are ISO 9001:2008 certified. Every unit is also functionally tested before shipping.



### EXPERIENCED SALES STAFF

Years of cooling systems expertise, engineering knowledge and responsive problem solving help our sales staff "listen, learn, develop and deliver."



### COOL CUSTOMER SUCCESSES Thomson and McLean Are Shaken, But Not Stirred

Thomson Broadcasting is the world leader in digital video technologies. That's why top media, entertainment and communications companies turn to Thomson to get the right images to the right place at the right time – over time.

And that's why Thomson turns to the McLean brand to help keep its customers' broadcast systems up and running 24/7.

"We recently tested a new UHF base station for one of our clients," said Don Wike, Chief Design Engineer. "We put our system, including a McLean outdoor air conditioner, through a pretty rigorous Telcordia GR487 test protocol. We shook the UHF system, dropped it from over 18 inches, and simulated years of cold winters and hot summers in a cycle chamber. After all this, the McLean unit still performed beautifully."

Don added, "Our customers count on Thomson to design a rugged digital media system. And we count on McLean to keep the electronics cool. We had over 8,000 watts of heat to dissipate in the new UHF base station system. The McLean 3-ton A/C unit proved it can handle the load. Pentair Technical Products also allowed us to use their thermal cycle test chamber, saving us R&D costs."

For electronics cooling that performs under extreme conditions, take a serious look at McLean. More cool customer stories are available at [McLeanCoolingTech.com](http://McLeanCoolingTech.com)



### ONLINE PARTS ORDERING

An easy-to-navigate online parts store provides fast, secure replacement part ordering 24/7.



### FISCALLY STRONG

The Pentair Technical Products' McLean brand is owned by Pentair, a \$3.5 billion diversified, publicly held global operating company. We handle single-unit in-stock orders to \$5 million+ global projects.



### GLOBAL REACH

McLean's growing worldwide network of sales, distribution and manufacturing delivers quality service for those who need global infrastructure.



### SUPERIOR SERVICE AND REPAIR

Over 1,000 certified repair technicians provide 24-hour emergency service worldwide.



## Decades of experience protecting electronics in demanding applications

With the combined knowledge and engineering assets of recognized brand leaders — Hoffman™, Schroff™ and McLean™ Cooling Technology — Pentair Technical Products is the leading provider of worldwide product and service solutions for enclosing, protecting and cooling electrical and electronic systems. A Pentair global business unit, the industry-leading brands of Pentair Technical Products provide diverse, proven solutions to the commercial, communications, energy, electronics, industrial, infrastructure, medical, and security & defense markets worldwide.



VIEW  
McLEAN ONLINE

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For worldwide locations, see [pentairtechnicalproducts.com](http://pentairtechnicalproducts.com)