Greater efficiency and flow

More robust design

Common performance – 120 to 240 VAC

Most configurable blower on the market

Runs cooler, cleaner and longer

Improved software flexibility
Key Features

- Higher performance design with “Common Performance” model provides 17% greater flow compared to other manufacturers
- “Common Performance” provides the same air performance between 120 VAC and 240 VAC
- New design reduces overall noise and improves sound quality
- Innovative cooling chamber provides lower operating temperature prolonging overall life
- Improved flexibility for speed control, data logging, and programmability

We Keep the World Moving . . .

The innovative design and enhancements of the Windjammer® PRO provide INCREASED PERFORMANCE over competitive models. One key feature is the ability to apply multiple performance profiles depending on the application requirement. New to the feature list, “Common Performance” provides the ability to have the same air performance whether operating at 120 or 240 VAC. This is great for OEM products designed for the global market.

The Windjammer® PRO operates at a LOWER TEMPERATURE to extend the life of the brushless motor. Improved motor cooling along with shaft and bearing assembly redesigns extend the life of bearings and sensitive electronic modules.

The redesigned blower housing and optional motor cooling ducts makes this model perfect for HUMID AND HARSH ENVIRONMENTS. Improved sealing along with a reconfigured bearing prevents contamination from infiltrating into the bearings or motor controller assembly, prolonging the blowers’ life in these environments.

Principles of our Acustek® technology have been applied to REDUCE NOISE and substantially improve the sound quality produced by this blower. A redesigned motor enclosure with improved air and noise channeling makes the Windjammer® PRO one of AMETEK’s quietest high flow designs available.

Next generation controller software adds IMPROVED FLEXIBILITY over other designs. Custom speed and acceleration profiles, overcurrent safety limits, and error logging are just a few of the new software features available with the Windjammer® PRO.
Configuring Your Blower

Please examine and check off the following steps to help you determine your requirements at a glance. Contact your local AMETEK sales representative for a list of standard configurations. Other variations may require additional lead time.

**Step 1**
**Construction**
- **Bypass**
- **Dual Function**

Working air is separated from the motor cooling air. This is great for environments with contamination, high heat, moisture, etc.

**Step 2**
**Input Voltage**
- 120 AC
- 240 AC
- Dual Voltage

*110-132 VAC 50/60 Hz*  
*208-264 VAC 50/60 Hz*  
*240V models are optimized and typically offer higher air performance than dual voltage models*  
*120-132 VAC 50/60 Hz | 18A*  
*208-264 VAC 50/60 Hz | 13A*  
*Dual Voltage offers the same air performance when supplied 120 or 240 VAC*

**Step 3**
**Working Inlet Style**
- Flat Face
- Inlet Tube
- Bell Mouth

If inlet tube is not being used in system, a bell mouth configuration will provide more air flow performance.

**Step 4**
**Motor Cooling Style**
- Dual Vents
- Dual Tubes
- Inlet Tube Only
- Exhaust Tube Only

These options allow for *warm* motor exhaust air to be ducted outside, or *clean/dry* motor cooling air to be ducted inside.

**Step 5**
**Flow Performance**
- Standard
- High
- Ultra High

*1.25" (31.8mm) Inlet*  
*1.75" (44.5mm) Inlet*  
*2.75" (69.9mm) Inlet*  
*2.50" (63.5mm) Exhaust*  
*1.25" (31.8mm) Exhaust*  
*1.75" (44.5mm) Exhaust*  
*2.50" (63.5mm) Exhaust*

Generally, more flow on the “open” side of the curve reduces the maximum pressure on the “sealed” side of the curve. Other factors (voltage, construction, stages, etc.) affect these curves so this chart should be used for reference only. Always refer to individual data sheet for actual performance data.
**Pressure Performance**

- 1 Stage
- 2 Stage
- Non-Standard
- 3 Stage
- 4 Stage

Generally, more pressure on the “sealed” side of the curve reduces the maximum flow on the “open” side of the curve. Always refer to individual datasheet for actual performance data. When operating on the left side of the chart (low flow) an increase in the number of stages can give you substantially more pressure.

![Pressure vs Flow graph](chart.png)

**Mounting**

- 5/16” Thru-Hole
- 1/4” Thru-Hole
- 1/4-20
- M6 x 1
- #10-32
- M5
- M6

3 holes spaced 90° apart on a Ø 6.5” (165.1) bolt circle

**Protection**

- Standard
- Silicone Coating

Silicone coated board protects the motor controller from environments with high amounts of debris.

- Silicone Coating + SST Components

Steel components (including shaft and bearings) are replaced with SST to provide additional corrosion resistance.

**Speed Control**

- PWM
  - 75% PWM
  - 50% PWM
  - 25% PWM

15 – 45 vdc max amplitude 30 Hz – 20 kHz frequency range

Speed control options allow the blower speed to be controlled via a configurable input signal. If the 0-10 vdc option is selected an input signal of 5 vdc is sent to the blower it will result in a half speed command.

- 0-10 vdc
  - Configurable from 0-15 vdc

- Mechanical
  - Onboard Potentiometer

- Remote Potentiometer
  - Provides a 5 vdc output which can be connected to a remote mounted (customer supplied) potentiometer.

- 4-20 mA
  - PWM
  - Typically 4-20 mA and PWM commands offer better isolation from other system signals (noise).

**Also SELECT:**

- Pull Up
  - If speed command is lost, blower will operate at full speed.

- Pull Down
  - If speed command is lost, blower speed will be reduced to zero.

**Feedback Loop**

- Open Loop
- Closed Loop

**Wiring Harness** (Check all required)

- No Harness (Customer supplied)
  - Power | AMP 350766-1
  - Speed | MOLEX 39-01-4051
  - Status | MOLEX 50-29-1662

- Power Input Harness
  - Provided with flying leads

- Speed Input/Output Harness
  - Status Output Harness
  - Speed output can be configured to 1,2,3, or 6 pulses per revolution (standard 2 pulses per revolution)
  - Status out “pulse codes” are outlined in the operation manual

Both Speed and Status connectors supply a 15 vdc amplitude pulsed (digital) signal. It is also possible to supply an outside voltage (up to 15 vdc).

**LEAD LENGTH:** (Not applicable for “No Harness” option)

- 6.5” (165mm)
- 15” (380mm)
- 24” (610mm)
Performance and Efficiency Data

Technical Data

Sound Level @ Full Speed: 82dB (A) and 55 Sones
Operating Temperature (Working Air): -4°F to 122°F (-20°C to 50°C)
Approximate Weight: 6.5 Lbs (2.95 Kg)

Standard Options

The proven reliability of the AMETEK Windjammer® makes the PRO Series the perfect fit for an extraordinary number of applications around the world. AMETEK has learned numerous lessons from past engagements fueling the Windjammer® Pro’s development, design, and value creation. The features and functions offered allow the Windjammer® PRO to fit more seamlessly into any application. See standard configurations.

Custom Options

AMETEK is committed to making your life easier. If you do not find the options you desire above, we also offer customized services. Contact your sales representative for more information.

Notes: Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft³ (29.92” Hg, Sea Level, 68°F). Vacuum performance available upon request.
## Windjammer PRO Ordering Information

### Size
- 057 = 5.7
- 072 = 7.2
- 066 = 6.6
- 084 = 8.4

### Construction
- B = Bypass
- T = Thru-flow
- P = Peripheral
- S = Slotted shell (dual purpose)

### Flow
- S = Standard Flow
- H = High flow
- U = Ultra high flow

### Fan System
- 1 = Single stage
- 2 = 2 Stage
- 3 = 3 Stage
- 4 = 4 Stage
- X = Non standard

### Voltage
- 0 = Dual voltage 120/240
- 1 = 110/120
- 2 = 230/240

### Rotor
- F = Ferrite N=Neo Blend (standard)
- H = Neo Blend, High Energy Magnetization

### Mounting Holes
- A = (3X) 5/16" thru (standard)
- B = (3x) 1/4-20
- C = (3X) M6
- D = (3X) #10-32
- E = (3X) M5

### Working Air Inlet, Motor Cooling Inlet – Exhaust
- A = Bell-mouth, inlet slots – exhaust slots
- B = Inlet tube, inlet slots – exhaust slots
- C = Bell-mouth, inlet tube – exhaust slots
- D = Inlet tube, inlet tube – exhaust slots
- E = Flat face inlet, inlet slots – exhaust slots
- F = Flat face inlet, inlet tube – exhaust slots

### Protection
- 0 = Conformal coated PCBA (standard)
- 1 = Add silicone coating on PCBA
- 2 = Add silicone coating on PCBA with stainless steel components

### Feedback Loop
- 0 = Open loop
- 1 = Closed loop

### Speed Control
- 0 = Mechanical
- 1 = Remote potentiometer
- 2 = 0-10V pull down
- 3 = 0-10V pull up
- 4 = 4-20mA pull down
- 5 = 4-20mA pull up
- 6 = PWM pull down
- 7 = PWM pull up

### Wiring Harnesses (flying leads)
- A = No harnesses
- B = 6.5" power, speed and status out
- C = 6.5" power only
- D = 15" power, speed and status out
- E = 15" power only
- F = 24" power, speed and status out
- G = 24" power only

### Packaging
- B = Bulk pack
- S = Single pack

**Example:** WP057BH2-0N##A-#### / AA013-AS