AVD 370

The next generation of air movement is here and engineered for maximum performance with peak efficiency. Ideal for ceiling heights as low as 12 feet, the AirVolution-D 370 commercial ceiling fan is the perfect airflow solution for cooling your smaller spaces. A sleek design and custom color options add to its appeal, making these fans the most attractive ceiling fans on the market.

STANDARD FEATURES

- Ultra Efficient, PMAC Direct Drive motor
- Revolutionary integrated drive/mount/enclosure system
- Clearcoat anodized blades
- Forward, reverse, variable speed
- Rated for indoor and outdoor use*
- Capable of Building Automation Integration (with AirLynk upgrade) and fire alarm
- Digital wall controller with fault code access

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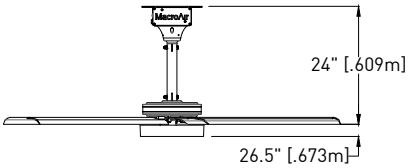
ILLUSTRATION SHOWN WITH STANDARD DROP LENGTH



STEP 1: POWER UNIT

Item #	Options	Qty
M370-0025-MA	AVD 370 Power Unit, 3/4 HP Equivalent	

STEP 2: FAN BLADE DIAMETER

Item #	Diameter	Qty
60-20006-00****	6 ft / 1.83 m****	
60-20008-00	8 ft / 2.44 m	
60-20010-00	10 ft / 3.05 m	
60-20012-00	12 ft / 3.66 m	

STEP 3: VOLTAGE

Item #	Diameter	Qty
30-05006-00	100-120V Single Phase, 50/60Hz**	
31-21010-00	208-240V Single Phase, 50/60Hz	

STEP 4: MOUNTING

Item #	Options	Qty
60-50143-00	Rapid Mount Commercial with I-beam Hardware Kit (up to 5ft drop length) (Standard)	
60-50142-00	AVD Universal Mount with I-beam Hardware Kit	
60-40049-00	Glulam Hardware Kit	

STEP 5: CONTROLS

Item #	Description	Qty
30-90308-00	Digital Remote Assembly (Standard)	
30-04006-00	Controller 4	
30-04007-00	Controller 4 + Single Temperature Sensor	
30-04030-00	Controller 30	
30-10012-00	AirLynk - BacNet	
30-04030-02	Dual Control Enabled Controller 30 (requires AirLynk-BacNet)	

*Motor unit only. Consult with a MacroAir sales specialist for best practice.
**100-120V Option Requires additional step up transformer
*** MacroAir Technologies, Inc. certifies that the model AVD 370 (diameters 8'-12') shown herein are licensed to bear the AMCA seal. The ratings shown are based on the tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.
****6' diameter AVD370 is not an AMCA certified model

STEP 5: STOCK DROP LENGTHS

Item #	Length (ft/in)	Length (m)	Qty
51-E01in-02	1 ft*	0.30 m	
51-y0200-02	2 ft (Standard)	0.61 m	
51-y0300-02	3 ft	0.91 m	
51-y0400-02	4 ft	1.22 m	
51-y0500-02	5 ft	1.52 m	
51-y0600-02	6 ft	1.83 m	
51-y0700-02	7 ft	2.13 m	
51-y0800-02	8 ft	2.44 m	
51-y0900-02	9 ft	2.74 m	
51-y1000-02	10 ft	3.05 m	
51-yftin-02**	Customization fee		

y = D for Rapid Mount Commercial,
or C for AVD Universal Mount
ft = length in feet (i.e. 04 for 4 feet, 10 for 10 feet)
in = length in inches (i.e. 05 for 5 inches, 10 for 10 inches)
*1 ft is the shortest allowed drop length for AVD-370. Lengths shorter than the standard drop length are not recommended and will not work for some fan diameters. 1' drops will not come with the Rapid Mount or UMH hardware, and are direct/rigid mounted instead. Consult MacroAir for more details. To order custom Drop Length or length greater than 10 ft, please call MacroAir.

DROP LENGTH is the distance from fan mounting point to the blades.

AirVolution-D fans can only be connected with a single-piece of custom length drop tube.

Measure the distance from the fan's mounting point down to the desired fan blade position and provide this information with the fan order to receive the correct custom drop length. Guy wires kits are provided and required in all situations where a drop length of greater than 5 feet.

For custom drop lengths, order a length longer and MacroAir will cut it down to the requested length. Estimated lead time is 10 business days.

Do you have a custom color in mind? Custom powder coating is available for all our blades, mounts and drop lengths.

OPTIONAL: POWDER COATING

Item #	Diameter	Estimated Lead Time	Qty
60-20006-02	6 ft / 1.83 m	15 business days	
60-20008-02	8 ft / 2.44 m	15 business days	
60-20010-02	10 ft / 3.05 m	15 business days	
60-20012-02	12 ft / 3.66 m	15 business days	
Special Finishes			
60-201yy-00 (Light Oak Wood Grain)	All Diameters	--	
Mounting hardware & drop length	All Diameters	15 business days	
Hub Cover	All Diameters	15 business days	

yy = ft, fan diameter

For powder coating colors, please refer to Appendix A.

ADDITIONAL OPTIONS

Item #	Description	Qty
10-60200-00	AVD Fuse Disconnect Switch*	

*IEC Compliance requires a fused disconnect switch. Fuse selection is input voltage specific, so fuses are not provided with purchase of a disconnect.

AVD 370

BASIC SPECIFICATIONS

AIRFOIL DIAMETER	6ft	8ft	10ft	12ft
Airfoil Style	4.5" Extruded Anodized Aluminum Airfoil			
Number of Airfoils	6			
PERFORMANCE				
Max Speed	138 RPM	140 RPM	94 RPM	65 RPM
Recommended Spacing*	28 ft [8.5 m]	36 ft [11 m]	40 ft [12.2 m]	48 ft [14.6 m]
Max Affected Area	1,400 ft² [130 m²]	2,400 ft² [223 m²]	3,200 ft² [297 m²]	4,000 ft² [371 m²]
Sound Level dBA at Max Speed**	45	55	56	48
HANGING REQUIREMENTS				
Hanging Weight	71 lbs [32.21 kg]	79 lbs [35.83 kg]	86 lbs [39.01 kg]	93 lbs [42.18 kg]
Max Torque	4 ft-lb [5 Nm]	13 ft-lb [18 Nm]	20 ft-lb [27 Nm]	19 ft-lb [26 Nm]
Max Thrust in Reverse	2 lbs [0.9 kg]	4 lbs [1.8 kg]	6 lbs [2.7 kg]	7 lbs [3.2 kg]
MOTOR AND DRIVE TRAIN				
Motor Type	Gearless Direct Drive			
Equivalent Horsepower Rating	3/4 HP			
Operating Temp Range	16°F [-10C°] - 122 F° [50C°]			
MAX AMP DRAW / RECOMMENDED FUSE				
110 VAC Single Phase***	2.7A / Fuse N/A	2.7A / Fuse N/A	2.7A / Fuse N/A	2.7A / Fuse N/A
208 VAC Single Phase	1.4A / 2.5A	1.4A / 2.5A	1.4A / 2.5A	1.4A / 2.5A
POWER AND CONTROLS				
Power Source Low	Single Phase 110-120 VAC 50/60 Hz / Single Phase 208-240 VAC 50/60 Hz			
Control Options	Digital Touchpad, MacroAir Controller 30, AirLynk - BacNet			
INSTALLATION				
Mounting Hardware	Rapid Mount Commercial			
Drop Length	In addition to the standard drop length supplied, optional drop lengths are available in 1ft increments; total drop lengths 5ft and greater require Universal Mounting Hardware with guy wires			
RATINGS AND COMPLIANCE				
Fire and Sprinkler	NFPA Compliant			
Outdoor Rating****	Rated for outdoor use			
Warranty	10 years mechanical (blades, hub, and frame), 5 years electrical (motor, controls, and remote), 1 year of labor coverage.			

*For spacing between fan units based on the dimensions of a specific space please refer to https://macroairfans.com/airviz.

**Sound testing taken with the sensor 5 ft above the ground and 20 ft from the center of the fan at 20 ft high.
The sound performance is not AMCA International licensed but is provided to aid in selection and applications of the product.

***Preliminary Test Results

****Applicable to the fan unit only, does not include controller and accessories.

AVD 370

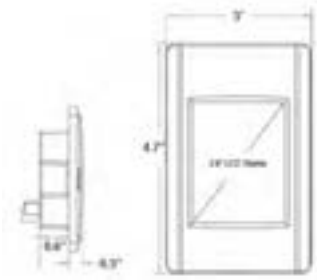
MacroAir Technologies, Inc. certifies that the model AVD 370 (diameters 8'-12') shown herein are licensed to bear the AMCA seal. The ratings shown are based on the tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

PERFORMANCE SPECIFICATIONS

Fan Diameter (Ft)	Fan Speed (% of max RPM)	Fan Speed (RPM)	Voltage/ Phase/ Frequency	Standby Power (Watts)	Electrical Input Power (Watts)	Airflow Rate (CFM)	CFEI 40	CFEI 100	Direction	Reverse Operation?
8	20	27.82	230/Single Phase/60Hz	6.0	33.05	3175.77	2.431	1.889	Forward	Yes
	40	55.93	230/Single Phase/60Hz		49.62	10356.22			Forward	Yes
	60	83.82	230/Single Phase/60Hz		86.24	16541.62			Forward	Yes
	80	111.87	230/Single Phase/60Hz		153.88	23033.49			Forward	Yes
	100	139.93	230/Single Phase/60Hz		274.54	29190.67			Forward	Yes
10	20	18.71	230/Single Phase/60Hz	6.0	30.50	3280.29	2.536	1.812	Forward	Yes
	40	37.51	230/Single Phase/60Hz		43.50	12740.80			Forward	Yes
	60	56.35	230/Single Phase/60Hz		70.71	20020.17			Forward	Yes
	80	75.07	230/Single Phase/60Hz		123.33	27522.96			Forward	Yes
	100	93.61	230/Single Phase/60Hz		210.89	34868.72			Forward	Yes
12	20	13.00	230/Single Phase/60Hz	6.0	28.98	4326.02	2.698	1.873	Forward	Yes
	40	25.88	230/Single Phase/60Hz		38.56	14454.50			Forward	Yes
	60	38.93	230/Single Phase/60Hz		57.94	23116.51			Forward	Yes
	80	51.97	230/Single Phase/60Hz		96.45	31406.53			Forward	Yes
	100	64.91	230/Single Phase/60Hz		161.60	39584.30			Forward	Yes

Digital Remote

- Standard on all MacroAir fan models (Except AirLegacy)
- Simple and intuitive control
- Easy ground-level troubleshooting and diagnostics

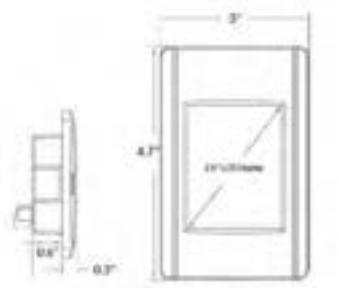


Features	Digital Touchpad Remote
Item #	30-90308-00
# Fans Controlled	1 fan
Display	2.8 TFT
Resolution	240x320x16 pixels
Backlight life time	20,000 hours
Backlight brightness	160 cd/m2
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Rating (front)	IP 40 / NEMA 1
Weight (incl. enclosure)	375 g
Communication Protocol	RS 485
Power Supply	24V from fan
Size (incl. enclosure)	91.2 x 135.5 x42.0
Operating Temperature	-4° to 158°F / -20° to +70°C
Storage Temperature	-22° to 176°F / -30° to +80°C

Note: Only one type of controller can be used when selecting Controller 4, Digital Remote Assembly or Analog Remote Assembly. AirLynk (BacNet) can be used as a stand alone, or paired with a Dual Control Enabled Controller 30 (see Dual Control page) or with Local Override Remotes for some fan models (see Local Override page)

Controller 4

- Available upgrade for all MacroAir fan models (Except AirLegacy)
- Control up to 4 fans from a single point
- Control fans individually, independent of speed & direction
- Simple and intuitive control
- Temperature sensor (optional upgrade) starts and stops the fan(s)
- 3-Year-Warranty



Features	Controller 4	Controller 4 with temperature sensor
Item #	30-04006-00	30-04007-00
# Fans Controlled	Up to 4 fans, individually	
Display	2.8 TFT	
Resolution	240x320x16 pixels	
Backlight life time	20,000 hours	
Backlight brightness	160 cd/m2	
Shock	IEC 60068-2-27	
Vibration	IEC 60068-2-6	
Rating (front)	IP 40 / NEMA 1	
Weight (incl. enclosure)	375 g	
Communication Protocol	RS 485	
Power Supply	24V from fan	
Size (incl. enclosure)	91.2 x 135.5 x42.0	
Operating Temperature	-4° to 158°F / -20° to +70°C	
Storage Temperature	-22° to 176°F / -30° to +80°C	

Note: Only one type of controller can be used when selecting Controller 4, Digital Remote Assembly or Analog Remote Assembly. AirLynk (BacNet) can be used as a stand alone, or paired with a Dual Control Enabled Controller 30 (see Dual Control page) or with Local Override Remotes for some fan models (see Local Override page)

Controller 30

STANDARD FEATURES

- Available upgrade for all MacroAir fan models (except AirLegacy)
- Provides a single point for individual or group fan control
- Enables run time, scheduling, grouping, and fan naming
- Secure remote login to controller via smart device or computer
- Password protection capabilities for scheduling, naming

Features	Controller 30
Item #	30-04030-00
# Fans Controlled	30 fans
Display	10.1" (16:9), TFT-LCD with LED backlight
Resolution	1024x600 pixels
Backlight life time	50000 hours
Backlight brightness	500 cd/m2
Shock	15g, half-sine, 11ms according to IEC60068-2-27
Vibration	1g, according to IEC 60068-2-6, Test Fc
Sealing front	IP65, NEMA 4X/ 12 and UL Type 4X/ 12
Sealing back (excl. enclosure)	IP20
Weight (incl. enclosure)	10 lb / 4.5 kg
Communication Protocol	MODBUS RS485
Ethernet Port	2x100 Mbit
USB Port	2
Power Supply	110-240 V
Size (incl. enclosure)	10.7 x 13.0 x 3.7 in (W x H x D) / 272 x 330 x 84 mm (W x H x D)
Operating Temperature	14° to 140°F / -10° to +60°C
Storage Temperature	-4° to 158°F / -20° to +70°C
Languages	English, Spanish, French, Malay

Note: Only one type of controller can be used when selecting Controller 4, Digital Remote Assembly or Analog Remote Assembly. AirLynk (BacNet) can be used as a stand alone, or paired with a Dual Control Enabled Controller 30 (see Dual Control page) or with Local Override Remotes for some fan models (see Local Override page)

AirLynk BMS Integration

Gives the ability to control your fans through BACnet® (MS/TP or IP) and LonWorks®.

BACnet and LonWorks are both protocols used to automate or manage buildings systems (commonly called a BMS or BAS). Our fans use MODBUS to communicate and the correct use of AirLynk, MacroAir's interface, will allow the integration of our fans into a BMS/BAS. A BMS/BAS enables you to run the fans in conjunction with your HVAC system to help save energy costs.

Our proven solution is AirLynk, an external, high-performance building automation multi-protocol interface that is pre configured to communicate between any MacroAir fan and various building automation protocols including: BACnet®MS/TP, BACnet/IP, Modbus TCP/IP, and LonWorks®.

Successful integration of any MacroAir fan with a BMS/BAS is dependent upon following these guidelines:

- Identify the BMS and its protocol before the purchase order is placed. This allows the fans to be pre programmed, dramatically reducing installation errors and integration time.
- Strictly adhere to the included installation manual to eliminate issues that will occur from wrong types of wire, improper wire terminations or wire routing.
- We highly recommend engaging our Controls Engineers to visit the site for fan start-up to ensure a smooth and successful integration. Our experience has found that many installers are unfamiliar with the subtle but critical differences between BMS systems, interfaces, fan models, connection methods and best practices. For a nominal fee plus travel expenses, one of our Controls Engineers can be on site to ensure a smooth and successful start-up. For more information about this service, please inquire with our Technical Services Department.

To Order BMS enabled fans and AirLynk please do the following:

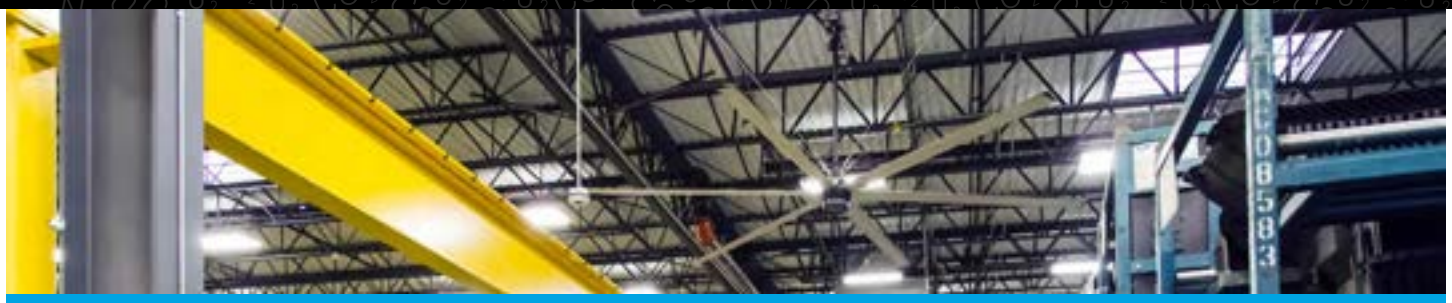
- Identify the BMS network
- Discuss your network with MacroAir's Control Engineers
- Order one AirLynk to connect up to 30 fans

Item #	Description
30-10012-00	AirLynk - BACnet, (Works on all Fan Lines, except AirLegacy), Up to 30 Fans per AirLynk
30-10011-00	AirLynk - LonWorks, (Works on all Fan Lines, except AirLegacy), Up to 30 Fans per AirLynk
30-90315-00	Local Override Remote (each fan) for BMS (Works on all Fan Lines, except AirLegacy and AVD 370)
30-04030-02	Dual Control Enabled Controller 30 (Works on all Fan Lines, except AirLegacy) Up to 30 Fans per AirLynk
10-80632-00	Repeater (required for some older model fans; contact your sales rep for details)

Note: Only one type of controller can be used when selecting Controller 4, Digital Remote Assembly or Analog Remote Assembly. AirLynk (BacNet) can be used as a stand alone, or paired with a Dual Control Enabled Controller 30 (see Dual Control page) or with Local Override Remotes for some fan models (see Local Override page)

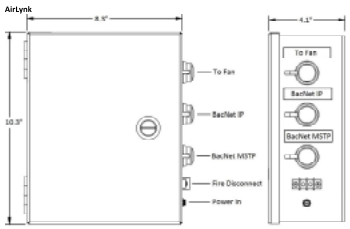
Dual Control

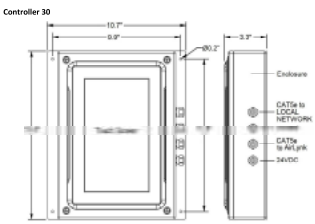
for BMS Integration

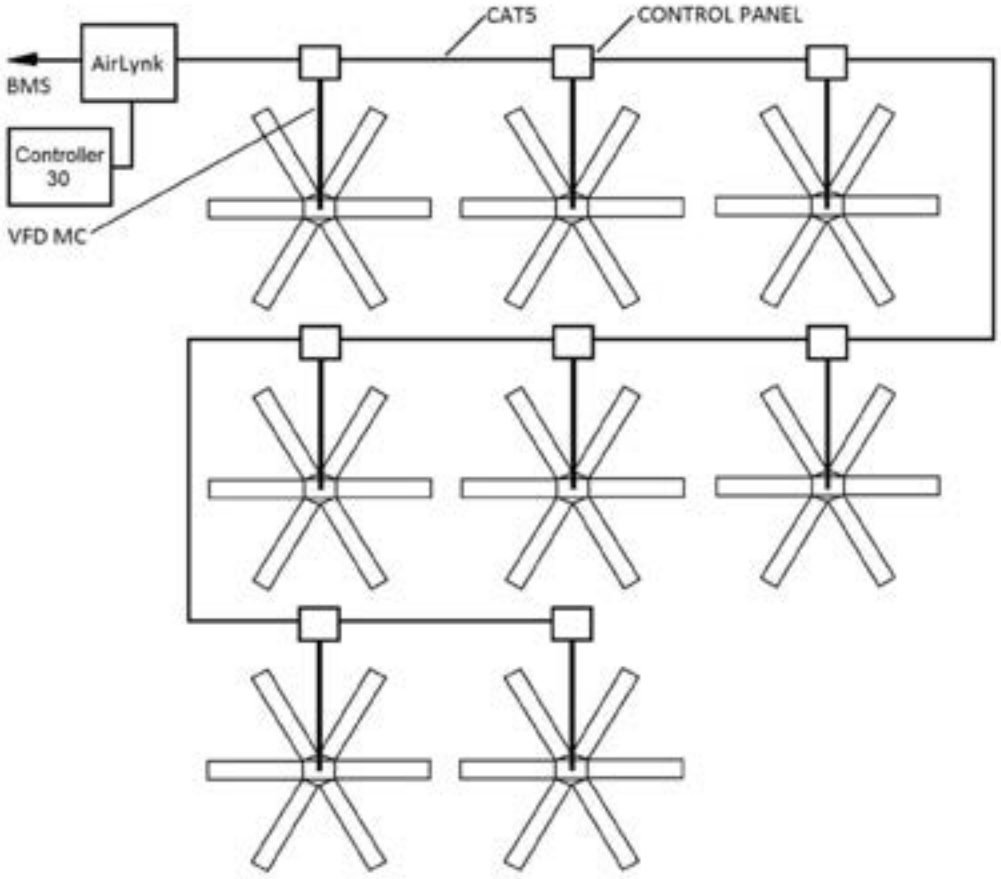


STANDARD FEATURES

- Seamless integration of a building management system and local fan network
- Fans take last known command, be it from the BMS, the Dual Control enabled Network Controller 30 screen(s), or VNC enabled smart devices
- Provides a single point of local control of up to 30 fans
- Enables grouping and fan naming
- Password protection capabilities for operation, naming, and grouping
- Requires AirLynk (BacNet) and Dual Control Enabled Controller 30*

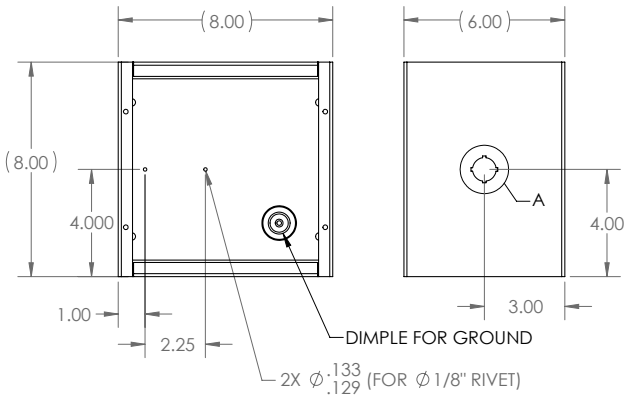


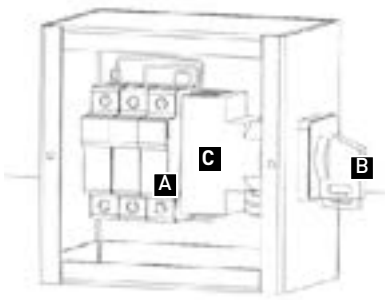




MacroAir Fused Disconnect

To meet national and international codes (such as the NEC and IEC directives), all HVLS fans need a means of disconnect on the incoming power for emergency and maintenance purposes, typically within line of site of the fan. MacroAir HVLS fan models with an off-board control panel include this disconnect within the panel enclosure. Models with a VFD enclosure mounted directly on the fan require an additional disconnect. MacroAir offers an optional disconnect package for AVD fans, but fuses are not included as they depend on the field's power supply. Recommendations for fuse sizing and sourcing are found in each fan model's installation manual.





Part Number 10-60200-00	AVD Fuse Disconnect Switch
Enclosure Dimensions	8" x 6" x 8"
(A) Fuse Pole Block	IEC 60269-2 COMPLIANT (USED ON 480V 3PH; 240V 3PH)
(B) Rotary Handle, ON/OFF	Lock-out/Tag-out capable, replacement part number 10-50716-00
(C) Disconnect Switch	SCHNEIDER VLS3P025D1, Rohs Compliant
(D) Fuses	Class CC or gG Fast Acting Fuses (Not provided, reference fan installation manual for recommended size)

NOTE: Ensure that there is no power when installing this component.

Means for disconnection with contact separation at least 3mm.

4.1.1: Mount the fuse disconnect switch outside of the swept area of the fan airfoils.

4.1.2: Wire the power cable from the fan to the bottom of the fuse block. Then wire the incoming power source to the disconnect switch.

4.1.3: In the diagram below, a three phase system is shown. For a single phase system, phase 1 would be connected to L1, neutral would be connected to L2, and L3 would be left not terminated.