

# **Schwank**

## **Installation Manual**

### **Epic12 Series Air Curtain**

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Recommended Mounted Height: 10-14ft



Schwank Ltd. certifies that the air curtains shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 (includes performance testing per AMCA 220) and comply with the requirements of the AMCA Certified Ratings Program. Rated data shown is for ambient (unheated) units. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

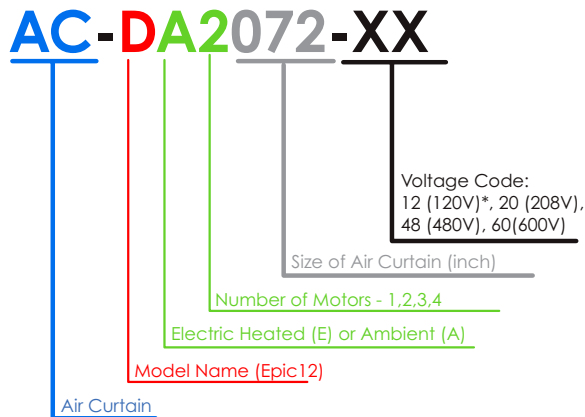


# → Technical Specification

## Ambient, no heat

Model	Width (inches)	Motors (0.75 HP)	Average Outlet Velocity (FPM)	Air Volume (CFM)	Uniformity
AC-DA1036-XX	36	1	2267	1632	91%
AC-DA1042-XX	42	1	2093	1758	85%
AC-DA1048-XX	48	1	2003	1923	80%
AC-DA2072-XX	72	2	2267	3264	91%
AC-DA2084-XX	84	2	2093	3516	85%
AC-DA2096-XX	96	2	2003	3846	80%
AC-DA3108-XX	108	3	2267	4896	91%
AC-DA3120-XX	120	3	2161	5187	91%
AC-DA3144-XX	144	3	2003	5769	80%
AC-DA4144-XX	144	4	2267	6528	91%
AC-DA4168-XX	168	4	2093	7032	85%

1. For 50HZ expect ~ 17% reduction in performance
2. 0.75 HP AC Motor - Single Speed
3. Adjustable Air Directional Vane +/- 40 Degrees
4. Top air intake (Optional: Front intake)
5. Colors and Aesthetics:
  - a. Air Curtain Unit: RAL 7016 Anthracite Grey - Powder Coated Steel

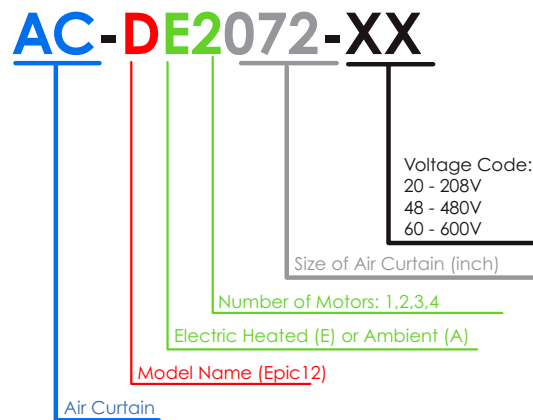


# → Technical Specification

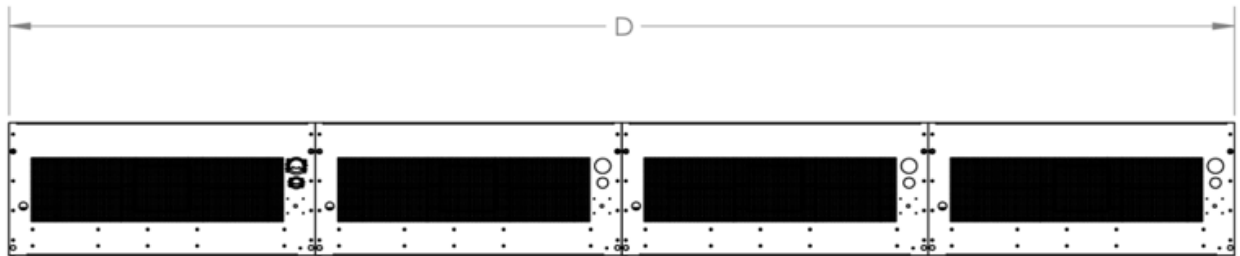
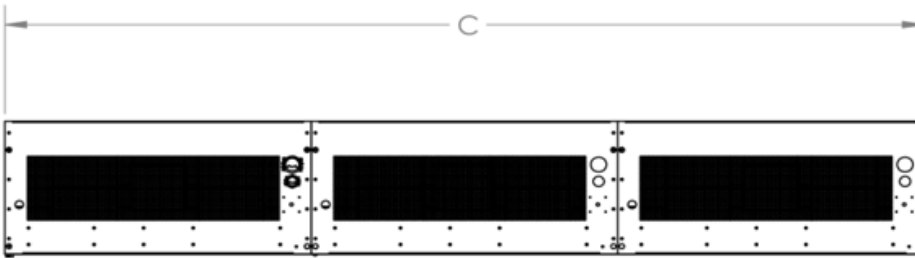
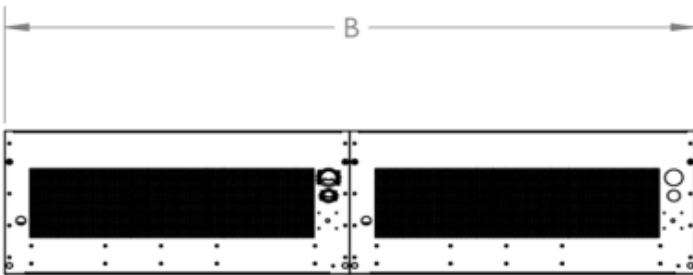
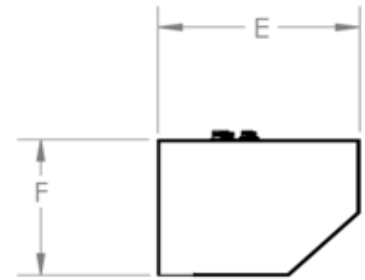
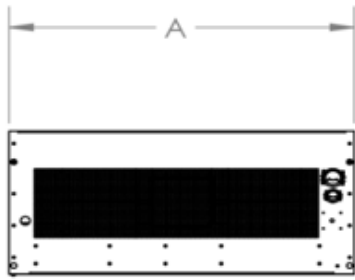
## Electrical heat

Model	Width (inches)	Total Heating - KW	Motors (0.75 HP)	Average Outlet Velocity (FPM)	Air Volume (CFM)	Uniformity
AC-DE1036-XX	36	12	1	2267	1632	91%
AC-DE1042-XX	42	12	1	2093	1758	85%
AC-DE1048-XX	48	12	1	2003	1923	80%
AC-DE2072-XX	72	24	2	2267	3264	91%
AC-DE2084-XX	84	24	2	2093	3516	85%
AC-DE2096-XX	96	24	2	2003	3846	80%
AC-DE3108-XX	108	36	3	2267	4896	91%
AC-DE3120-XX	120	36	3	2161	5187	91%
AC-DE3144-XX	144	36	3	2003	5769	80%
AC-DE4144-XX	144	48	4	2267	6528	91%
AC-DE4168-XX	168	48	4	2093	7032	85%

1. For 50HZ expect ~ 17% reduction in performance
2. 0.75HP AC Motor - Single Speed
3. 13Deg F - Approximate Temp Rise for Electric Heated Models
4. Adjustable Air Directional Vane +/- 40 Degrees
5. Top air intake (Optional: Front intake)
6. Colors and Aesthetics:
  - a. Air Curtain Unit: RAL 7016 Anthracite Grey - Powder Coated Steel



## → Unit Dimensions



Model*	Ref	Size (inch)
AC-DA1036-XX		37.12
AC-DA1042-XX	A	43.12
AC-DA1048-XX		49.12
AC-DA1060-XX		61.12
AC-DA2072-XX		74.24
AC-DA2084-XX	B	86.24
AC-DA2096-XX		98.24

Model	Ref	Size (inch)
AC-DA3108-XX		111.36
AC-DA3120-XX	C	122.24
AC-DA3144-XX		147.36
AC-DA4144-XX		148.48
AC-DA4168-XX	D	172.48
ALL Sizes		E
ALL Sizes	F	13.21

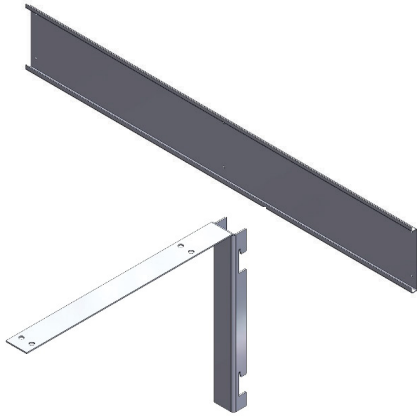
\* Also applies to heated model

## → Type of Mounting Hardware

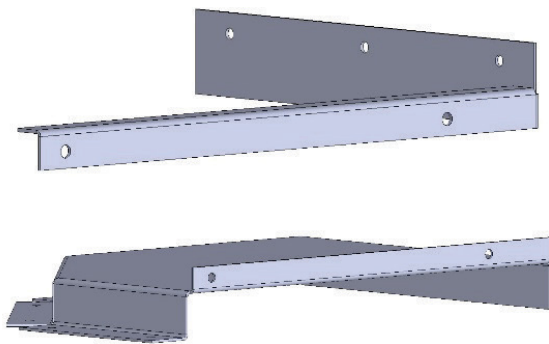
Angled Bracket Kit



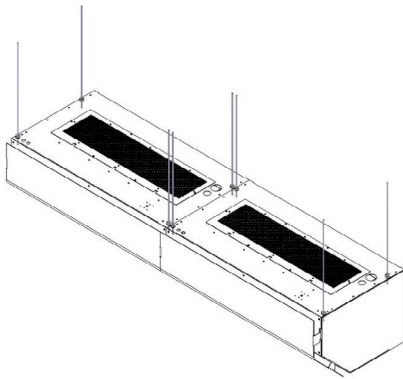
Wall Mount Kit



Vertical Mount Kit



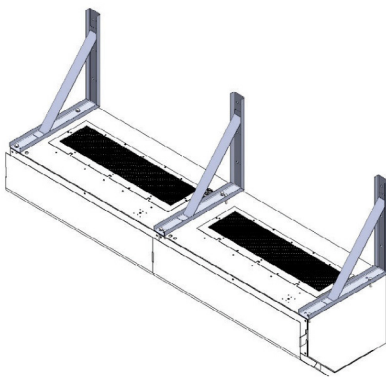
## → Mounting and Installation Methods



### **Threaded Rods – Ceiling Mount**

3/8-16 threaded inserts are present on the top of the air curtain to attach the threaded rods at one end. The threaded rods opposite ends can be fastened to the ceiling. Ensure that no more than 1-1/2 Inch of the rods should protrude into the air curtain.

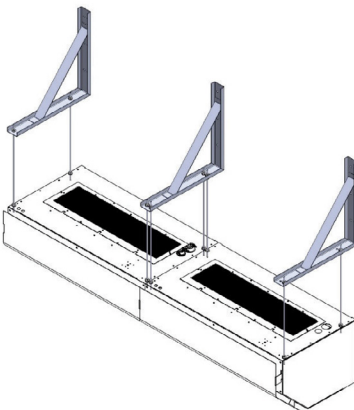
**Threaded rods supplied by others.**



### **Angled Bracket – Wall Mount**

Back side of the angled brackets has six mounting holes capable of accepting six 3/8 mounting bolts, with washers. Mark and pre-drill mounting surface accurately. Lift the air curtain to the brackets and use 3/8 bolts and washers to fasten the air curtain to the angled bracket using the eight threaded inserts present on top of the air curtain.

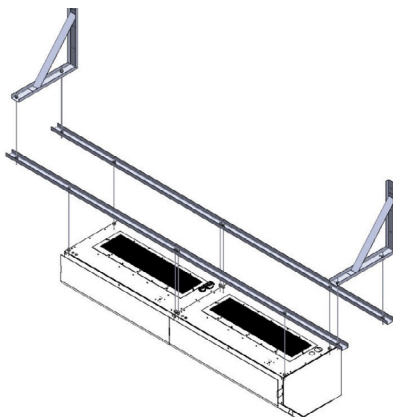
**Angled Bracket**



### **Angled Bracket w/ Suspended Rods – Wall Mount**

The back side of the angled brackets has six mounting holes capable of accepting six 3/8 mounting bolts with washers. Mark and pre-drill the mounting surface accurately. Lift the air curtain to the brackets and use 3/8 bolts and washers to fasten the air curtain to the angled bracket using the eight threaded inserts present on top of the air curtain.

**Threaded rods supplied by others**



### **Heavy Duty Angled Brackets (Set of 2)**

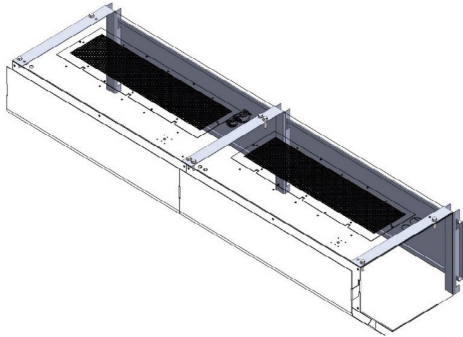
Can be used as:

- Heavy Duty Angled brackets w/ Strut only
- Heavy Duty Angled brackets w/ Strut & Threaded Rods

Includes two 3 ft × 3 ft strut-based brackets for industrial door installations. Brackets mount on each side of the unit and are field-adjustable for alignment.

Must be connected across the unit using strut or angle iron (field provided), or used for suspended mounting with threaded rods and strut (field provided).

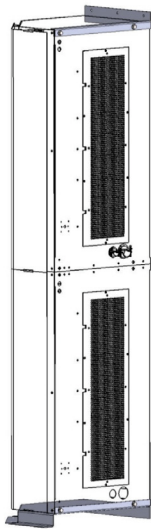
**Threaded Rods and Strut supplied by others.**



### Concealed Backplate Wall Mount Kit

The wall mount consists of two pieces, a plate that extends the whole length of the air curtain and a bracket that attaches to the air curtain. The back side of the plate has six mounting holes capable of accepting six 3/8 mounting bolts with washers. Mark and pre-drill the mounting surface accurately. First, fasten the plate to the wall, then Attach the brackets to the top of the air curtain using 3/8 bolts on the unit

Lift and anchor the air curtain with a bracket attached to it on the plate fastened to the wall.



### Vertical Floor Mounting Kit

The vertical mount consists of two pieces, a base bracket and a vertical wall mount bracket. The base bracket is attached to the floor using 3/8 fasteners appropriate to the surface mounted to. The wall bracket is attached to the two threaded inserts on top of the air curtain with 3/8 bolts and washers, then to the base bracket with 3/8 bolts and washers. To secure the air curtain from the wall, the back side of the vertical wall mount has two mounting holes capable of accepting three 3/8 mounting bolts with washers. Mark and pre-drill the mounting surface accurately.

All Units may be mounted vertically. For vertical mounting, all units must be ordered with a vertical kit from the factory.

The side of the door that the unit will be installed when facing the door (Left or Right) determines the Kit ordered. All units vertically mounted must be secured from the wall as well as the ground.

## → Mounting Kits Part Numbers

Mounting Kits	Description
JC-0960-060	EPIC12 Wall Mount, Ceiling Mount Angled "L" Bracket Kit (36" 42" 48" 60") w/ Anthracite Grey Color RAL 7016 - Set of 2 Brackets
JC-0960-096	EPIC12 Wall Mount, Ceiling Mount Angled "L" Bracket Kit (72" 84" 96" ) w/ Anthracite Grey Color RAL7016 - Set of 3 Brackets
JC-0960-108	EPIC12 Wall Mount, Ceiling Mount Angled "L" Bracket Kit (108",120",144"(3 motors)) w/ Anthracite Grey Color RAL7016 - Set of 4 Brackets
JC-0960-144	EPIC12 Wall Mount, Ceiling Mount Angled "L" Bracket Kit (144"(4 motors),168") w/ Anthracite Grey Color RAL7016 - Set of 5 Brackets
JC-0963-36	EPIC12 Concealed Wall Mount Backplate Kit for 36"
JC-0963-42	EPIC12 Concealed Wall Mount Backplate Kit for 42"
JC-0963-48	EPIC12 Concealed Wall Mount Backplate Kit for 48"
JC-0963-72	EPIC12 Concealed Wall Mount Backplate Kit for 72"
JC-0963-84	EPIC12 Concealed Wall Mount Backplate Kit for 84"
JC-0963-96	EPIC12 Concealed Wall Mount Backplate Kit for 96"
JC-0963-108	EPIC12 Concealed Wall Mount Backplate Kit for 108"
JC-0963-120	EPIC12 Concealed Wall Mount Backplate Kit for 120"
JC-0964-KT	EPIC12 Right Side Verticle Mounting Kit (Floor Mount) w/ Anthracite Grey Color RAL7016
JC-0965-KT	EPIC12 Left Side Verticle Mounting Kit (Floor Mount) w/ Anthracite Grey Color RAL7016
JC-0966-KT	EPIC12 Heavy Duty 3ft x 3ft Strut Bracket - Set of 2 w/ Hardware

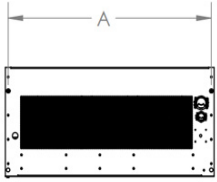
## → Accessories

Accessories	Description
JC-0216-CC	Plunger type Overhead Door Switch For Air Curtains (UL and CSA Certified)
JC-0216-MM	Roller Type Overhead Door Switch for Air Curtains (UL and CSA Certified)
JM- 0219-XX	Heavy Duty Magnetic industrial Door Switch for Air Curtain
JC-0209-HOA	Eplic12 Air Curtain HOA (Hands OFF AUTO) Switch With Enclosure For Basic (default) Controls Only
JS-0569-WR	Single Stage Low Voltage (24V) Digital Thermostat (°F / °C Selectable)
JS-0569-DT	Two-Stage 24V Digital Thermostat
JC-0231-XX	32A/600V Wall Mounted Disconnect Panel (3-Pole) (For any Epic12 Ambient Models)
JC-0232-XX	63A/600V Wall Mounted Disconnect Panel (3-Pole) (See Disconnect Chart for Electric Heated Models)
JC-0232-ZZ	100A/600V Wall Mounted Disconnect Panel (3-Pole) See Disconnect Chart for Electric Heated Models
JC-0233-YY	180A/600V Wall Mounted Disconnect Panel (3-Pole) (See Disconnect Chart for Electric Heated Models)

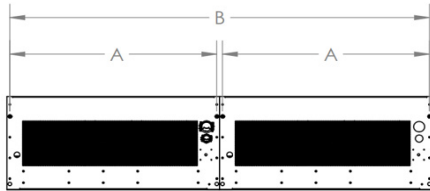
## → Wall Mounted Disconnect Switches for Electric Heated Models

Unit Size	208V / 3Phase	480V / 3Phase	600V / 3Phase
36-48	JC-0232-XX	JC-0231-XX	JC-0231-XX
72-96	JC-0232-ZZ	JC-0232-XX	JC-0232-XX
108-120	JC-0233-YY	JC-0232-XX	JC-0232-XX
144 (3 motors)	JC-0233-YY	JC-0232-XX	JC-0232-XX
144 (4 motors)	JC-0233-YY	JC-0232-ZZ	JC-0232-ZZ
168	JC-0233-YY	JC-0232-ZZ	JC-0232-ZZ

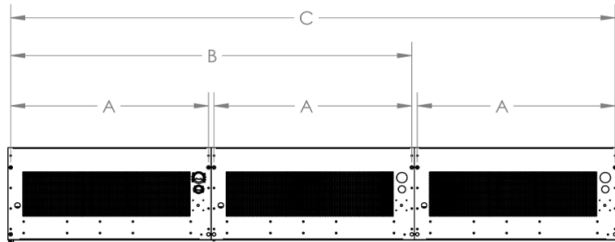
## → Mounting Dimensions



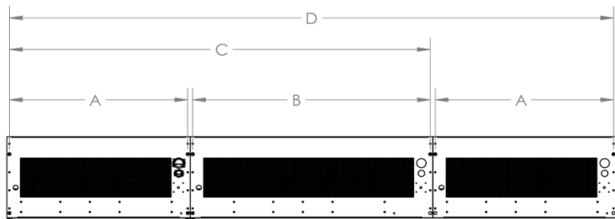
Model	Ref	Size (inch)
AC-DA036-XX		36.12
AC-DA042-XX	A	42.12
AC-DA048-XX		48.12
AC-DA060-XX		60.12



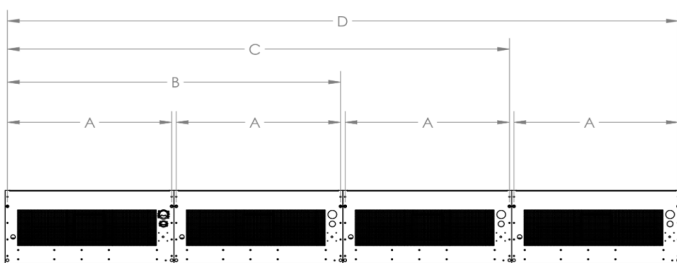
Model	Ref	Size (inch)
AC-DA072-XX		36.12
AC-DA084-XX	A	42.12
AC-DA096-XX		48.12
AC-DA072-XX		73.24
AC-DA084-XX	B	85.24
AC-DA096-XX		97.24



Model	Ref	Size (inch)
AC-DA108-XX		36.12
AC-DA144-XX ( 3 Motors )	A	48.12
AC-DA108-XX		74.24
AC-DA144-XX ( 3 Motors )	B	97.24
AC-DA108-XX		110.36
AC-DA144-XX ( 3 Motors )	C	146.36



Model	Ref	Size (inch)
AC-DA120-XX	A	36.12
AC-DA120-XX	B	48.12
AC-DA120-XX	C	85.24
AC-DA120-XX	D	122.36



Model	Ref	Size (inch)
AC-DA144-XX (4 Motors)		36.12
AC-DA168-XX	A	42.12
AC-DA144-XX (4 Motors)		74.24
AC-DA168-XX	B	85.24
AC-DA144-XX (4 Motors)		110.36
AC-DA168-XX	C	128.36
AC-DA144-XX (4 Motors)		146.86
AC-DA168-XX	D	170.86

## Controls and Activation

The Epic12 air curtain is offered with two control packages depending on the user and facility requirement:

Basic (Default)  
Advanced (Upgradeable)

### **Basic (Default) Control Package**

The Basic control package comes standard with every Epic12 unit by default from factory. Features include:

On/Off operation via door switch  
(Door Switch Required)

Dry contact for enable/disable for fire alarm or building management system integration

Hand-Off-Auto (HOA) input available  
(HOA Activation Switch Required)

Single Stage Heating Control  
(Single stage thermostat recommended)

### **Advanced Control Package**

This upgradeable control package offers enhanced features and functionality for Epic12 air curtains. It is recommended for high-traffic doors that require integration with Building Management Systems (BMS) or SchwankONE.

**Control features include all of the basic control features and::**

Integration with Building Management System via MODBUS

Two-Stage Heating Control  
(2 Stage T-Stat required)

Time Delay Feature  
(20-second delay programmed for high-traffic doors)

Schwank.ONE Connectivity

# → Replacement Parts List

## Schwank Epic12 Series Air Curtain - Ambient & Electric Heated

Part #	Description	C - Number of Motors	ZZZ - Unite Suite	YY - Voltage	X - Phase	Heating Mode
JC-1001-36	FRONT COVER (NO INTAKE HOLES), 36"- EPIC12	Any	036, 072, 108, 120, 144 (4 Motor)	Any	Any	Any
JC-1001-42	FRONT COVER (NO INTAKE HOLES), 42"- EPIC12	1,2,4	042, 084, 168	Any	Any	Any
JC-1001-48	FRONT COVER (NO INTAKE HOLES), 48"- EPIC12	1,2,3	048, 096, 120 (Middle Panel), 144 (3 Motor)	Any	Any	Any
JC-1002-36	FRONT COVER (WITH INTAKE HOLES), 36"- EPIC12	Any	036, 072, 108, 120, 144 (4 Motor)	Any	Any	Any
JC-1002-42	FRONT COVER (WITH INTAKE HOLES), 42"- EPIC12	1,2,4	042, 084, 168	Any	Any	Any
JC-1002-48	FRONT COVER (WITH INTAKE HOLES), 48"- EPIC12	1,2,3	048, 096, 120 (Middle Panel), 144 (3 Motor)	Any	Any	Any
JC-1000-36	BOTTOM COVER, 36"- EPIC12	Any	036, 072, 108, 120, 144 (4 Motor)	Any	Any	Any
JC-1000-42	BOTTOM COVER, 42"- EPIC12	1,2,4	042, 084, 168	Any	Any	Any
JC-1000-48	BOTTOM COVER, 48"- EPIC12	1,2,3	048, 096, 120 (Middle Panel), 144 (3 Motor)	Any	Any	Any
JC-0814-XX	3/4HP 1Phase 120V	1	036, 042, 048, 060	12	1	Any
JC-0814-XX	3/4HP 1Phase 208V	Any	Any	20	1	Any
JC-0817-XX	3/4HP 3Phase 480V	Any	Any	20, 48	3	Any
JC-0815-XX	3/4HP 3Phase 600V	Any	Any	60	3	Any
JC-0854-XX	Blower Wheel - Left	Any	Any	Any	Any	Any
JC-0852-XX	Blower Wheel - Right	Any	Any	Any	Any	Any
JC-0802-XX	PCB Board - Basic Plus Controls	Any	Any	Any	Any	Any
JC-0821-XX	Contactora_3-Poles_ 600V/25 Amp	Any	Any	Any	Any	Any
JL-0778-AC	Transformer_ 100VA_ 208V / 24V	Any	Any	20	Any	Electrical Only
JL-1000-48	Transformer_ 75VA_ 480V / 24V	Any	Any	48	Any	Electrical Only
JL-1000-60	Transformer_ 75VA_ 600V / 24V	Any	Any	60	Any	Ambient & Electrical
JL-1001-12	Transformer_ 40VA_120V / 24V	1	36,042,048	12	Any	Ambient Only
JL-1001-20	Transformer_ 40VA_208/240V / 24V	1,2	Any	20	Any	Ambient Only
JL-1001-48	Transformer_ 40VA_ 480V / 24V	Any	Any	48	Any	Ambient Only
JC-0805-ZZ	Power Distribution Block_175A / 600V	Any	Any	Any	Any	Electric Heated Only
JC-0805-DD	Power Distribution Block_85A / 600V	Any	Any	12,20	1	Ambient Only
JC-0805-CC	Power Distribution Block_70A / 230V	Any	Any	20	3	Ambient Only
JC-0830-XX	High Temp. Limit Switch	Any	Any	Any	Any	Electric Heated Only
JC-0806-20	Heating Elements With Mounting Brackets_ 6KW-- 208V	Any	Any	20	Any	Electric Heated Only
JC-0806-48	Heating Elements With Mounting Brackets_ 6KW-- 480V	Any	Any	48	Any	Electric Heated Only
JC-0806-60	Heating Elements With Mounting Brackets_ 6KW-- 600V	Any	Any	60	Any	Electric Heated Only

All model numbers AC-DA C ZZ-YY-X (ambient) and AC-DE C ZZZ-YY-XX (heated)

### Nomenclature for Parts

Replace C with Number of Motors: 1,2,3,4

Replace ZZZ with Size: 036, 042, 048, 072, 084, 096, 108, 120, 144, 168

Replace YY with Voltage Code: 120V (12), 208V (20), 480V (48), 600(60)

Replace X with Phase: 1Phase (1), 3Phase (3)

EN

- Read the safety instructions before performing installation and/or maintenance activities on the unit.
- Installation and/or maintenance activities on the unit may only be performed by qualified technical staff.
- The unit shall not be installed and used outdoors or in environments that are aggressive, or potentially explosive. At installation site make sure surrounding environment does not require higher IP classification of the equipment than what is stated on the data label of the unit (if any).
- The unit must be connected in accordance with the applicable local requirements. Make sure that the unit's power supply voltage matches the local mains voltage. The unit's power supply voltage and maximum ratings are displayed on the data label placed on the unit.
- The unit shall be fused according to the table below.

FR

- Veuillez lire les consignes de sécurité avant d'installer l'unité ou d'en effectuer l'entretien.
- L'installation ou l'entretien de l'unité doivent être effectués par un technicien qualifié seulement.
- L'unité ne doit pas être installée et utilisée à l'extérieur ou dans un environnement hostile ou potentiellement explosif. Au site d'installation, veuillez vous assurer que le milieu environnant n'exige pas une classification IP de l'équipement supérieure à ce qui est indiqué sur l'étiquette de données de l'unité (le cas échéant).
- L'unité doit être branchée conformément aux exigences locales applicables. Veuillez vous assurer que la tension d'alimentation de l'unité correspond à la tension de secteur locale. La tension d'alimentation de l'unité et les calibres maximums sont indiqués sur l'étiquette de données placée sur l'unité.
- L'unité doit être protégée par un fusible conformément au tableau ci-dessous.

# Troubleshooting Guide

Problems	Possible Causes	Solutions
<b>Non-Operational</b>	No Power from Power Source	Ensure power line is active and ON
	Failed Switch	Replace Failed Switch
	Blown Fuse	Determine Root Cause then replace fuse
	Motor Safety Tripped	Built-in motor safety switch, will reset automatically after cool down. Replace motor if it does not reset.
<b>No Air / Minimal Air</b>	Negative Building Pressure	Add Makeup Air Units to improve building pressure
	Air Intake or Filter Clogged	Clean / Un-Clog Filter – Follow maintenance section
	Air Nozzle	Adjust nozzle to correct angle – Ensure there is no obstruction
<b>Continuous ON (Unit Not Turning off)</b>	Door Switch is stuck or permanently energized	Return the door switch to normal operation positions – If not returning with normal pressure, replace door switch.
	Continuous operation Mode: ON	Turn OFF continuous mode from controller
<b>Excessive Noise / Vibration</b>	Blower wheel loose on motor shaft.	Tighten screw connecting blower wheel and motor shaft
	Loose blower Housing	Tighten Housing on Fan Deck
	Blower Rubbing against Housing	Replace Motor if Motor Shaft Bent / Adjust blower location on shaft if rubbing with corners of housing
	Damaged Blower	Replace Blower Wheel
	Dirty Blower Wheel	Remove the front screen and clean the blower wheels – If necessary, remove the blowers and clean.
<b>Uneven Airflow</b>	One Motor not Operating	Replace or Fix the Motor
	Shaft Not Turning Blower Wheel	Tighten the Blower Hub Screw
<b>Excessive Air Spill</b>	Incorret nozzle angle	Adjust nozzle angle for best setting – 15 Degree towards outside is most optimal (also depends on wind conditions and distance of the unit from the door)
<b>No Heat / Minimal Heat</b>	Improper Connection (Voltage)	Must be wired to Three Phase 208V or 480V or 600V
	Thermostat	Tstat Set Point Achieved (ambient conditions) / Tstat Malfunction or wiring
	Coils Malfunction	Replace Heating Coil
	Contactors not functioning	Replace or Repair Contactors
	Thermal Safety Switch	Automatically resets twice and if the thermal safety switch still trips, find the root cause and replace the switch
<b>Excessive Heat</b>	TStat in wrong location	Relocate the thermostat close to the unit for actual temperature and away from air stream
	Tstat Configured Wrong	Reset Tstat and adjust for the correct temperature



## Installation and operating instructions

### Important Instructions

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read all instructions before installing or using this heater.
- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc., and curtains at least 6 feet (1.83 m) from the discharge of the heater and keep them away from the sides and rear (sides and rear restrictions apply to location dedicated heaters only).
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- Do not operate any heater after it malfunctions. Disconnect power at the service panel and have the heater inspected by a reputable electrician before reusing it.
- Minimum clearance must be 3" from ceiling.
- Do not use outdoors.
- To disconnect the heater, turn the controls off, and turn off the power to the heater circuit at the main disconnect panel (or operate the internal disconnect switch if provided)
- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock, fire, or damage to the heater.
- To prevent a possible fire, do not block air intake or exhaust in any manner.
- A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- This heater may include an audible or visual alarm to warn that parts of the heater are getting excessively hot. If the alarm sounds (or illuminates), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. **DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (OR ILLUMINATING).**

### General Instructions

Please read these instructions before installing this product. Save this I&O manual for later reference.

This product should only be installed and operated as directed by the manufacturer. Any use other than specified will lead to the warranty being null and Void.

Inadequate installation presents a risk of electric shock, the possibility of injury through contact with moving parts, and other potential risks.

This product should only be installed by qualified individual(s). These instructions should be well understood by installing personnel, and they should be aware of general safety considerations.

### Warning

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- Before installing or using this product carefully read the instructions.
- The product should only be installed and operated as directed by the manufacturers.
- For installation, a qualified and experienced individual(s) are needed.
- Installation should be carried out in accordance with all applicable codes and standards, including fire-rated construction.
- Installing the device in a wet environment or an excessive amount of moisture is not permitted.
- When cutting or drilling into a wall or ceiling. Avoid damage electrical wiring and other hidden utilities.
- Power sources should always be disconnected, locked and tagged before being installed or serviced.
- Use the unit at the rated voltage and frequency indicated on the nameplate.
- Routine maintenance is required as suggested by manufacturer to maintain peak performance and efficiency.
- When in operation, this product gets hot. Avoid touching hot surfaces. Allow to cool off before performing any maintenance to prevent burns.

- Combustible items should be kept at least 6 feet away from the air curtain's discharge and 1 inch away from the air curtain's other sides. Combustible items should be kept at least 6 feet away from the air curtain's discharge and 1 inch away from the air curtain's other sides.
- To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
- Do not obstruct the air intake or air curtain discharge in any way to avoid a potential fire.
- No foreign items should be inserted or allowed to pass through any ventilation or discharge openings since this might result in damage to the air curtain, an electric.

## Packaging

The unit's packaging protects the product from any damage to the unit including scratches. The packaging also facilitates ease of transportation.

### Important

- Immediately after receiving your air curtain, look for any damage to the unit and Inform manufacturer immediately.
- Schwank is not liable for any damage claims post installation or due to negligence.
- The unit's serial number is found on the unit and is required to obtain replacement components, request technical help, or get a wiring schematic.

## Application area

Schwank Epic 12 Series Air Curtain is designed to create an environmental separation in any door opening that is between 3 feet and 14 feet wide, by providing both temperature control and flying insect control when building doors are open.

The recommended mounting height is 12 feet for Climate Separation and 10 feet for Insect Control. The unit should be positioned on the inside of the facility, flush to the wall, and as near the top or side of the door opening as possible to provide the optimum shield. The Epic 12 Series air curtain is available in both Ambient and Electric Heated models.

## **SAVE ABOVE INSTRUCTIONS**

[schwankgroup.com/products/air-curtains](http://schwankgroup.com/products/air-curtains)

## Operation

The unit must extend or overlap to the entire width of the door opening to create the most effective seal. The unit's door opening is shielded, and heat loss is reduced by air being pulled in through the air curtain's grille at the top or front of the air curtain and blown out through the unit's opening creating a barrier. Keep obstructions out of the air stream to maintain optimum performance. The air blown through the opening can be directed using the adjustable nozzle at the opening.

The air temperature, the pressure differential across the entryway, and any wind load all affect how effective the air curtain is. If the building has negative air pressure, the air curtain will not operate effectively. In these circumstances, a mechanism of supplying makeup air to the building is necessary to maintain equal air pressure on both sides of the entrance.

## Electrical installation

The installation, which should be preceded by an isolator switch with a contact separation and should only be wired by a licensed electrician and in accordance with NEC and the local electrical codes and regulations. The control system is pre-installed in the air curtain with an integrated PLC.

The controller is supplied pre-programmed with quick-fit connections. Modular cables are connected to the control board. See manual for controller.

## Start-up

When the unit is used for the first time or after an extended period of non-use, smoke or an odor may result from dust or dirt which has collected on the element. This is completely normal and disappears after a brief time.

## Adjustment of the nozzle

The direction and speed of the airflow should be adjusted considering the load on the opening. Pressure forces affect the airstream and force it inwards towards the premises (when the premises are heated, and the outdoor air is cold).

The airstream should, therefore, be directed outwards to withstand the load. The higher the load, the greater the angle required.

## Basic setting fan speed

This fan only operates at single speed when door is opened.

**Service, repairs, and maintenance** for all service, repair and maintenance first carry out the following:

1. Turn off the disconnect Switch.
2. Disconnect the power supply.
3. Open the front shields by removing the screws to access the electronics.
4. After service, repairs and maintenance fasten the service hatch and the front.

## Maintenance

### *All units*

Since fan motors and other components are maintenance-free, no maintenance other than cleaning is necessary. The level of cleaning can vary depending on local conditions. It is recommended to clean every 6 Months (individual conditions may vary).

General Air Curtain Maintenance steps are as follows:

- Regularly inspect the air curtain for any visible signs of damage or wear, such as frayed or loose wires, bent or broken components, or damaged blades.
- Clean the air curtain regularly to remove any dust, dirt, or debris that may have accumulated on the unit. This can typically be done by wiping the unit down with a clean, dry cloth or using a soft-bristled brush to gently remove any dirt or debris.
- Check the air filter regularly and replace it if it is dirty or damaged. A dirty air filter can reduce the efficiency of the air curtain and may need to be replaced more frequently.
- Check the airflow of the air curtain and make sure it is installed at the correct mounting height and there is no negative pressure in the building. If the airflow is too low or too high, it can affect the effectiveness of the air curtain.
- If the air curtain is not working properly or is not functioning at all, it may need to be serviced or repaired. In this case – follow troubleshooting steps listed in the manual. It is best to consult the manufacturer or a professional technician for

## Overheating

The air curtain unit with electrical heating is equipped with overheating protection. If it is deployed due to overheating, reset as follows:

1. Disconnect the electricity supply with the fully isolated switch.
2. Allow the electrical coil to cool.
3. Determine the cause of overheating and rectify the fault.
4. Reconnect the air curtain.

All motors are equipped with an integral thermal safety cut-out. This will operate, stopping the air curtain should the motor temperature rise too high. The cut-out will automatically reset when the motor temperature has returned to within the motor's operating limits.

## Fan replacement

1. Determine which of the fans is not functioning.
2. Disconnect the cables from the relevant motor on the fan deck.
3. Remove the screws securing the fan deck and lift the fan deck out.
4. Install the new fan deck as above in reverse order.

## Replacing heating elements

1. Disconnect and remove the fan deck
2. Mark and disconnect the cables to the electric elements.
3. Remove the mounting screws securing the electric elements in the unit and remove the faulty element.
4. Replace faulty electric element.
5. Install the electric elements in reverse order to the above.

## Residual current circuit breaker (GFI)

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has not been used for an extended period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault but is simply rectified by connecting the appliance to the main supply via a socket without a safety cut-out so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a brief time when it is not being used for extended periods of time.



## LIMITED WARRANTY CERTIFICATE

### Warranty Schwank Air Curtain Epic12 Series Air Curtains

The Manufacturer warrants that this product is free from defects in material or workmanship under normal use and service subject to the terms of this document.

### Limited Warranty

Subject to the conditions and limitations stated herein, during the term of this limited warranty, we will supply any component part (at our option a new or repaired component part) of the air curtain as defined below, which the Manufacturer's examination determines to be defective in workmanship or material for a period of five (5) years for Ambient (Unheated Models) and 24 Months (Electric heated models) from the from the date of shipment, unless otherwise specified below. This warranty applies to the air curtain's original owner, and subsequent transferees and only if the unit is installed, operated, and maintained in accordance with the printed instructions accompanying the unit and in compliance with all applicable installation codes and good trade practices.

### What is not covered

The Manufacturer shall not be responsible for any expenses, including service, labor, diagnosis, analysis, material or transportation charges incurred during removal or reinstallation of this product, or any of its components or parts. All labor or service charges shall be paid by the owner. This warranty does not cover products improperly installed, misused, exposed to or damaged by negligence, accident, corrosive or contaminating atmosphere, water, excessive thermal shock, impact, abrasion, normal wear due to use, alteration or operation contrary to the owner's manual or if the serial number has been altered, defaced or removed. This warranty shall not apply if the electrical input to the product varies by more than  $\pm 10\%$  of the rated input on the rating plate. The Manufacturer shall not be liable for any default or delay in performance by its warranty caused by any contingency beyond its control, including war, government restrictions, or restraints, strikes, fire, flood, acts of God, or short or reduced supply of raw materials or products.

### Limitations and Exclusions

This document contains all warranties made by the Manufacturer and may not be varied, altered or extended by any person. There are no promises, or agreements extending from the Manufacture other than the statements contained herein. THIS WARRANTY IS IN LIEU OF ALL WARRANTIES EXPRESSED OR IMPLIED, TO THE EXTENT AUTHORIZED BY THE LAWS OF THE JURISDICTION, INCLUDING SPECIFICALLY THE WARRANTIES OR MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.

It is understood and agreed that the Manufacturer's obligation hereunder is limited to repairing or replacing parts determined to be defective as stated above. In no event shall the Manufacturer be responsible for any alleged personal injuries or other special, incidental or consequential damages. As to property damages, contract, tort or other claim the Manufacturer's responsibility shall not exceed the purchase price paid for the product. All replacement parts will be warranted for the unused portion of the warranty coverage period remaining on the applicable unit.

Some Authorities do not allow certain warranty exclusions or limitations on duration of warranty or the exclusions or limitations of incidental or consequential damages. In such cases, the above limitations or exclusions may not apply to you and are not intended to do so where prohibited by law. This warranty gives you specific legal rights. You may also have other rights which vary by jurisdiction.

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