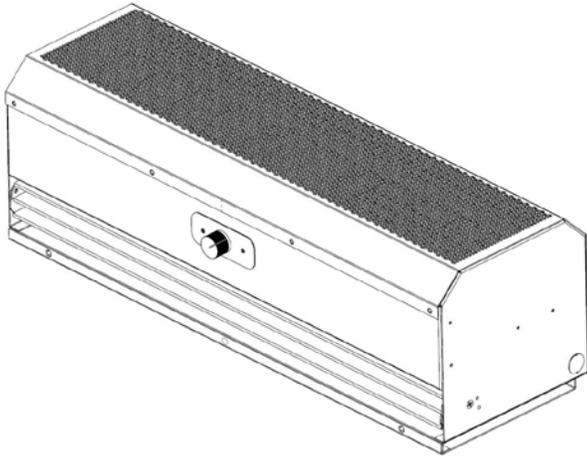


Installation, Operating, and Maintenance Instructions

Save this manual for future reference.



- Door/window widths from 26 to 144 inches
- Heavy-gauge, galvanized steel construction
- Voltages – 120V, 208V, 220V, 240V
- Adjustable aluminum directional vanes
- Mounting plate provided for easy installation

Contents

Your Warranty	2
Installation Record.....	2
Safety Rules	3
Introduction.....	4
Installing Your Air Curtain.....	5-6
Installing Your Accessories.....	7
Operating Your Air Curtain.....	8
How to Care for Your Air Curtain.....	9
Replacement Parts	10
Service Record	11



Slim Tech Series Air Curtain

Model Numbers:

**SLIMT026, SLIMT036, SLIMT042, SLIMT048, SLIMT060,
SLIMT072, SLIMT084, SLIMT096, SLIMT108, SLIMT120,
SLIMT144,**

READ THIS OWNER'S MANUAL CAREFULLY BEFORE YOU
INSTALL YOUR NEW WILLIAMS AIR CURTAIN.

WARNING: Altering the product or replacing parts with unauthorized factory parts will void all warranties and may result in improper operation and/or a hazardous safety condition to service personnel or occupants.

— Williams continues to improve its products and as a result, the design and specifications of each product may be changed without notice.

— Installation and service must be performed by a qualified installer or service agency.

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or for additional information consult a qualified installer or service agency.

Your Warranty

The manufacturer, Williams, warrants this air curtain to the original purchaser under the following conditions:

LIMITED FIVE-YEAR WARRANTY

1. Any part thereof which proves to be defective in material or workmanship within five years from date of original purchase for use will be replaced at the Manufacturer's option, FOB to its factory.
2. No liability is assumed by the Manufacturer for removal or installation labor costs, nor for freight or delivery charges.

LIMITATIONS

1. THIS LIMITED WARRANTY IS THE ONLY WARRANTY MADE BY THE MANUFACTURER. IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE LIMITED TO THE SAME FIVE YEAR TERM AS THE EXPRESS WARRANTY. UNDER NO CIRCUMSTANCES SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR CONTINGENT DAMAGES OR EXPENSES ARISING DIRECTLY OR INDIRECTLY FROM ANY DEFECT IN THE PRODUCT OR ANY COMPONENT OR FROM THE USE THEREOF. THE REMEDIES SET FORTH HEREIN ARE THE EXCLUSIVE REMEDIES AVAILABLE TO THE USER AND ARE IN LIEU OF ALL OTHER REMEDIES.

Some states do not allow limitation on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

2. This warranty does not include any charge for labor or installation.
3. This warranty does not extend to painted surfaces or to damage or defects resulting from accident, alteration, misuses or abuse or improper installation.
4. This warranty does not cover claims which do not involve defective workmanship or materials.

DUTIES OF THE ENDUSER

1. The equipment must be installed by a qualified installer and operated in accordance with the installation instructions furnished with the equipment.
2. Any travel, diagnostic costs, service labor, and labor to repair the defective unit will be the responsibility of the owner.
3. A bill of sale, cancelled check, payment record or permit should be kept to verify purchase date to establish the warranty period.
4. Have the installer enter the requested information in the space below.

GENERAL

1. The manufacturer neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with said equipment.
2. Service under this warranty should be obtained by contacting your dealer. Provide the dealer with the model number, serial number, and purchase date verification.
3. If, within a reasonable time after contacting your dealer, satisfactory service has not been received, contact: Customer Service Department, 250 West Laurel Street, Colton, CA 92324 for assistance.
4. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Installation Record

Model No. _____ Serial No. _____

Original Purchaser _____

Address _____

City and State _____ Zip _____

Dealer _____

Address _____

City and State _____ Zip _____

Installation Date _____ Name _____ Signature _____

(Dealer or authorized representative who certifies that this appliance is installed in accordance with Manufacturer's instructions and local codes.)

Stay Safe

WARNING: Read these rules and the instructions carefully. Failure to follow these rules and instructions could cause a malfunction of the air curtain. This could result in death, serious bodily injury and/or property damage.

INSTALLATION MUST CONFORM TO LOCAL CODES. COMPLIANCE WITH ALL CODES IS THE RESPONSIBILITY OF THE INSTALLER.

1. The important safety instructions, warnings and cautions in these pages are not meant to cover all possible problems or conditions. Use common sense and caution when installing, maintaining or operating the equipment.

Always contact Williams about any problems or conditions that you do not understand.

2. Use only manufacturer's replacement parts. Use of any other parts could cause injury or death.
3. It is the sole responsibility of the customer to provide the necessary protection to prevent vandalism and weather protection of the equipment.

Under no circumstance should the air curtain be left exposed to the elements.

Protect the units from dirt, plaster and other debris during the entire construction phase.

Prior to start-up, the entire interior of the unit should be inspected for debris and dirt. Clean, if necessary.

Any failure of the unit or damage to the building as a result of improperly protecting and cleaning the unit is not covered by the warranty.

4. Units weigh 25 to 75 pounds. A minimum of two people are recommended for handling and installation.
5. The equipment must be properly supported. Supports must always be adequate to hold the equipment securely.
6. All power must be disconnected before any installation or service is performed. More than one power source may be supplied to the air curtain.
7. Protect adjacent flammable material when welding or soldering. Use a heat shield to protect against sparks and solder.

8. Any access panels, guards or parts removed for servicing must be replaced prior to operating to avoid property damage, bodily injury or death.
9. Always use good safety practices regarding the handling, installation and servicing mechanical equipment.
10. When the air curtain is operating, some components operate at high speeds. Personal injury can result in touching these items.
11. Take caution that no internal damage will result if screws or holes are drilled into the cabinet.
12. Always use proper eye protection, safety equipment and tools equipment during the installation.
13. No wiring or other work should be performed without verifying that the fan coil is completely disconnected from the power source and locked out.

Introduction

The following steps are all needed for proper installation and safe operation of your air curtain. If you have any doubts as to any requirements, check with local authorities. Obtain professional help where needed. All of the checks and adjustments in the Start-Up Procedures are vital to the proper and safe operation of the air curtain. Please read the instructions before you install and use your air curtain. This will help you obtain its full value. It could also help you avoid needless service costs if the answer to the problem is found within this instruction manual.

Always consult your local HVAC inspector or building department regarding regulations codes or ordinances which apply to the installation. Check the air curtain nameplate prior to installation. It is the responsibility of the installing contractor to inspect and verify that the unit received is the correct model number, voltage, etc. Any discrepancies should be resolved before uncrating and/or installation. **Williams is not responsible for any back charges due to an incorrect unit being installed.**

Upon delivery, examine each unit and all parts carefully for shipping damage. Immediately report any freight damage to the freight carrier and file a freight claim with the carrier. All units are shipped FOB factory; therefore Williams is not responsible for damage during transit.

Returns require written authorization from Williams. Unauthorized returns will be refused. All material returned will be inspected. Any damage, missing parts, rework or repackaging resulting from prior installation, abuses or neglect will constitute just cause for Williams to issue partial or no credit.

Helpful Installation Information

The following material will help you in making the installation:

National Electrical Code ANSI/NFPA No. 70 or, in Canada, C.S.A. Standard C22.1

Unpacking Your Air Curtain

Upon delivery, examine each unit and all parts carefully for shipping damage. Immediately report any freight damage to the freight carrier and file a freight claim with the carrier. All units are shipped FOB factory, therefore Williams is not responsible for damage occurring transit.

It is the responsibility of the installing contractor to inspect and verify that the unit received is the correct model number, voltage, etc. Any discrepancies should be resolved before uncrating and /or installation. Williams is not responsible for any back charges due to an incorrect unit being installed.

Returns require written authorization from Williams. Unauthorized returns will be refused. All Material returned will be inspected. Any damage, missing parts, rework or repackaging resulting from prior installation, abuses or neglect will constitute just cause for Williams to issue partial or no credit.

REMOVE PACKING MATERIAL. Be sure to remove cardboard inserts from around blower wheels.

Installing Your Air Curtain

The following steps are needed for proper installation and safe operation of your air curtain. Installation must adhere to all local and national code requirements. If you have any doubts as to any requirements, obtain professional help. Remember to ALWAYS consult your local HVAC inspector or building department regarding regulations, codes, or ordinances which apply to the installation.

This unit must be installed in a manner which will allow the blower panel to be removed in order to clean the blower and motor and to provide access to electrical connections.

It is the sole responsibility of the customer to provide the necessary protection to prevent vandalism and weather protection of the equipment. Protect the units from dirt, plaster and other debris during the entire installation phase. Prior to start-up, the entire interior of the unit should be inspected for debris and dirt. Clean, if necessary. Any failure of the unit or damage to the building as a result of improperly protecting and cleaning the unit is not covered by the warranty.

Mounting

Units weigh 25 to 75 pounds. A minimum of two people are recommended for handling and installation.

Determine the location above the opening to where the air curtain is to be installed. It should be centered in the opening and as close to the top of the opening as possible. Make sure there are no obstructions that will interfere with the air curtain discharge.

The wall mounting plate must be level and be securely mounted to the structure with sufficient load-carrying capacity to support the weight of the equipment. All anchors for mounting must be placed and sized to ensure a safe installation. Mounting hardware is not included.

Slide the top of the air curtain down to engage the top of the wall plate, then pivot the front down to the bottom of the plate. Using the screws provided, attach the unit to the wall plate through the holes along the bottom edge of the plate. Ensure that there are no gaps between the unit and wall.

Hanging mount - there are four threaded openings on top of the unit for suspending the unit from the ceiling, if desired.

For NSF Installations:

The installation height is 7 feet. Make sure there are no obstructions that will interfere with the air curtain. Ensure that there are no gaps between the unit and the wall.

Hanging mount option – Have pan head screws installed in the four threaded openings on top of the unit. These must be removed before installation in the hanging mount position (suspension rods from the ceiling).

Electrical

No wiring or other work should be performed without verifying that the air curtain is completely disconnected from the power source and locked out. Verify a good ground connection exists prior to energizing the power source.

All wiring must comply with local and national code requirements. Williams air curtains are provided with a wiring diagram and nameplate data to provide the necessary information needed for field wiring. Wiring used for connections to the air curtain must be rated for at least 90° centigrade. All wiring connections must be tight.

For outdoor wiring, motor wiring must go thru rainproof conduit and fittings to a rainproof electrical junction box located above the unit with no more than 2 feet of conduit run so that the motor wires may reach the junction box without having splices. Do not make wire splices inside the air curtain cabinet when it is being installed outdoors.

The motor must be properly wired prior to start up. The warranty on all motors is void if the motor is burned-out due to incorrect wiring. Check the rating of the unit to determine: voltage, frequency, phase, amperage, appropriate switching, maximum over current protection (MOP) and full load amps (FLA).

Any optional items, such as fan switches to be field installed must be wired in accordance with the wiring diagram supplied with the unit and the switch manufacturer's directions. See page 6 Figures 2 and 3.

Adjusting Air Foil Deflector

The air foils have 40° of adjustment. The majority (approximately 85%) of the air flow should be directed to the outside. See figure 1. To adjust the air foils loosen the screws securing the air foil bracket. Adjust the air foils to the angle desired and retighten the screws.

Installing Your Air Curtain

FIGURE 1

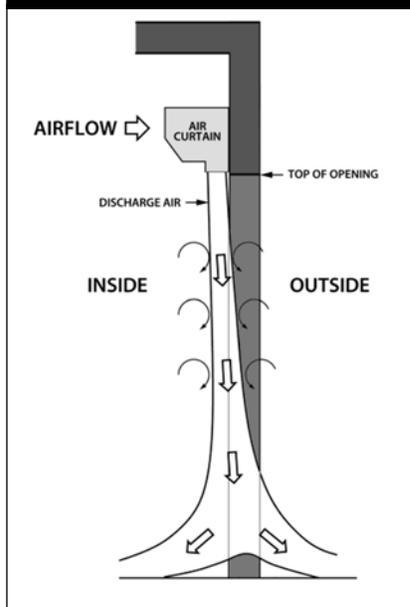


FIGURE 2 – Single Speed (NSF)

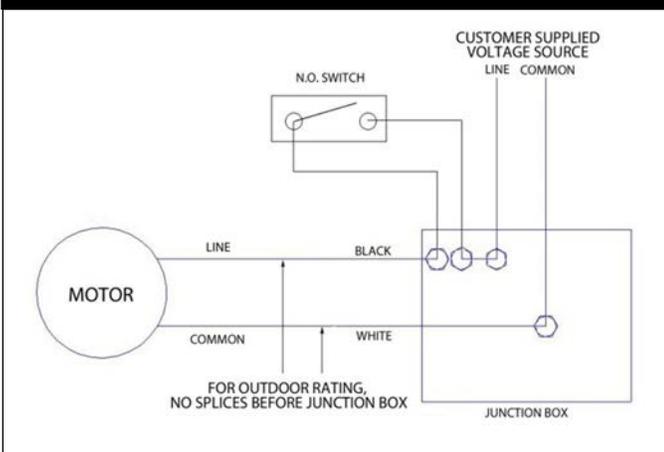
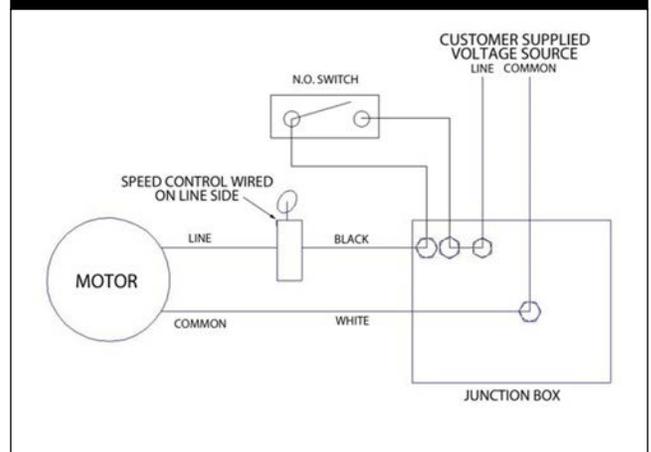


FIGURE 3 - Variable Speed



Installing Your Accessories

Thermostat Installation

Electric heated air curtain products are for indoor use only

Electric heated air curtain products come with optional thermostat (shipped loose).

Before Installing Thermostat – Verify power to unit has been turned off.

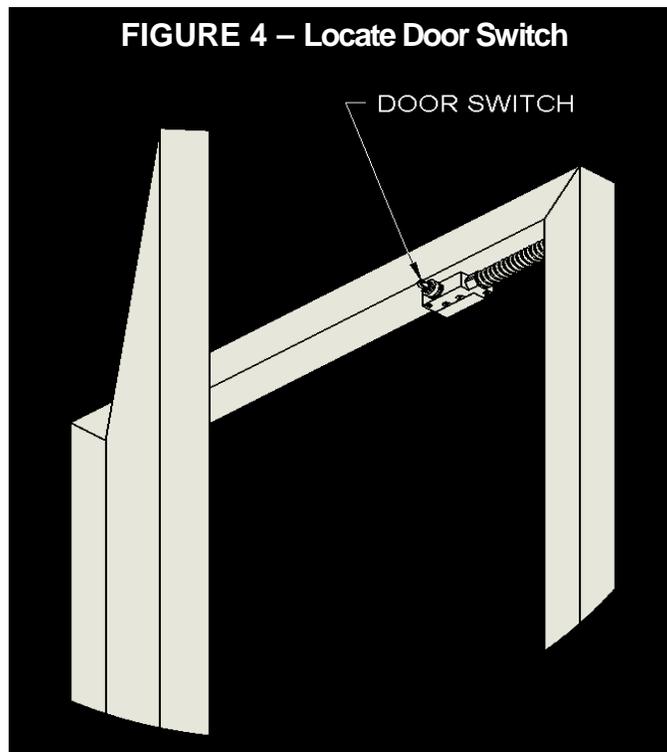
1. Thermostat is to be installed at Maximum 3ft away from the unit and at eye level height.
2. In order to sense the discharged air temperature around the door opening, the thermostat should be mounted close to the unit's discharge.
3. Use 18awg / 90°C minimum rated wires to connect from the thermostat to the air curtain unit (per unit wire diagram).
4. All wiring must follow local and NEC (National Electric Code) code.

Door Switch Installation

Air Curtain products come with optional door switch to activate ON/OFF unit operation (shipped loose).

Before Installing door switch– Verify power to unit has been turned off.

1. Locate Door Switch per Figure 4 for typical single swing, hinged door type, door limit switch installation.



2. Use ½" NPT conduit along with 18awg / 90°C minimum rated wires to connect from the door switch to the air curtain unit (per unit wire diagram).
3. All wiring must follow local and NEC (National Electric Code) code.

Operating Your Air Curtain

Start-Up Procedure

Blower Wheel: With the power off, be sure that the blower wheel(s) rotate freely and quietly. To avoid imbalance or vibration, make sure the blower has been cleaned from any installation debris.

Housekeeping: To ensure the best performance, be sure the equipment is clean of any debris collected during installation.

Access Panels/Filters: All access panels and filters must be in place before operation.

Caring for Your Air Curtain

How to Care for Your Air Curtain

 **WARNING**

RISK OF ELECTRICAL SHOCK CAN CAUSE INJURY OR DEATH.

Disconnect all remote electric power supplies before servicing. Closing the door or window should not be used for disconnect purposes.

To attain maximum performance, a formal schedule of maintenance should be performed. See page 9.

Motor and Blower: At a minimum, the motor and blower should be cleaned annually. More frequently if installed in a dirty/greasy environment.

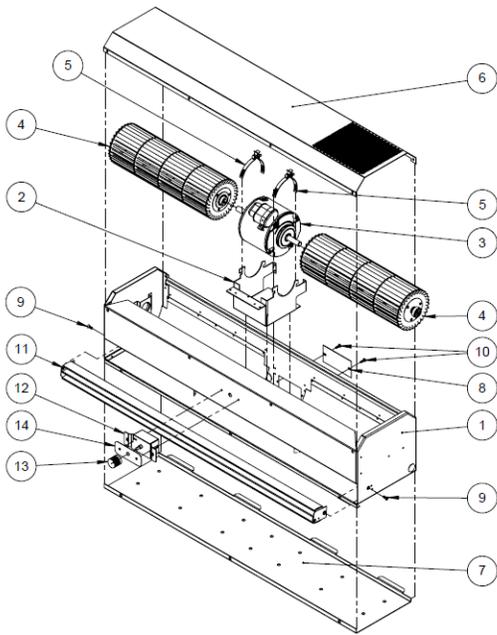
Filter (optional): The filter should be changed every three months, or more often as required.

 **CAUTION**

This unit must be installed in a manner that allows it to operate according to the nameplate data and comply with all applicable codes. Williams will assume no liability for damage to the unit or building due to misapplication, including field installed control devices not furnished or specified by Williams.

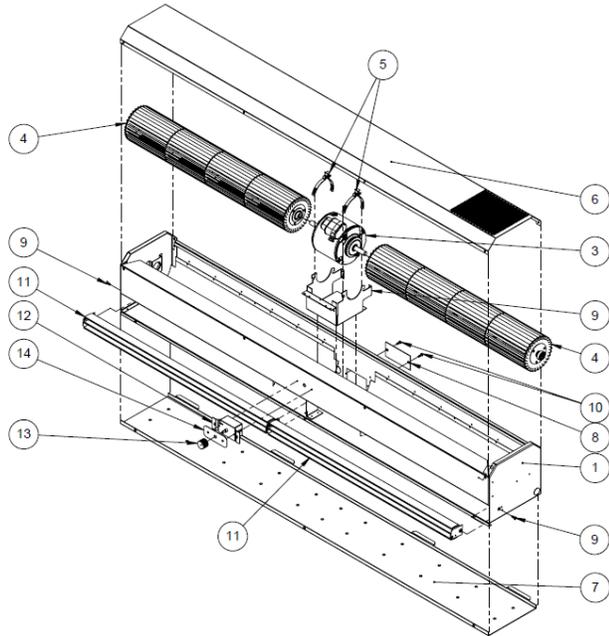
Replacement Parts

Models: SLIMT026, SLIMT036, SLIMT042, SLIMT048, SLIMT060, SLIMT072, SLIMT084, SLIMT096, SLIMT108, SLIMT120, SLIMT144



26"- 48"

ITEM NO.	DESCRIPTION	QTY.
1	CAB SUB-ASY	1
2	SPRT BRKT MOT MT	1
3	MOTOR	1
4	WHL TANGENTIAL	1
5	CLMP MTR MNT	2
6	PNL COV	1
7	SPRT BRKT WALL MNT	1
8	JB COV	1
9	SCR	2
10	SCR	2
11	ASY BLD AIR FOIL	1
12	VARIABLE CTRL (P626303-120V) (P627064-230V)	1
13	HWD KNOB VSPD	1
14	SWT ACC PLATE CENTER	1



60"- 72"

ITEM NO.	DESCRIPTION	QTY.
1	CAB SUB-ASY	1
2	SPRT BRKT MOT MT	1
3	MOTOR	1
4	WHL TANGENTIAL	1
5	CLMP MTR MNT	2
6	PNL COV	1
7	SPRT BRKT WALL MNT	1
8	JB COV	1
9	SCR	2
10	SCR	2
11	ASY BLD AIR FOIL	2
12	VARIABLE CTRL (P626303-120V) (P627064-230V)	1
13	HWD KNOB VSPD	1
14	SWT ACC PLATE CENTER	1

