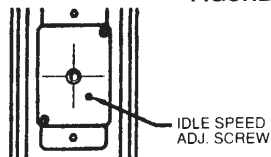


## OPERATING INSTRUCTIONS

This control is designed to operate with an exhaust fan load. A minimum speed adjustment screw is located internally to allow for independent setting of the minimum fan speed. In the event the motor fails to start satisfactorily or enters an automatic thermal shutdown, the minimum speed has been adjusted too low. Rotate the adjustment screw clockwise to increase the speed setting.

FIGURE 1



The motor must be operating in its normal environment in order to establish the proper speed adjustment. That is, when the motor is driving an exhaust fan at the minimum speed and the associated shutter does not open, the adjustment screw should be rotated clockwise to increase the speed. Continue to adjust the minimum speed upward until the desired operating conditions are obtained.

### NOTICE

These instructions cover the usual installation, operation and maintenance methods for which the product(s) was designed. They do not purport to cover all details or variations in the product(s) nor to provide for every possible contingency that might be met in connection with the installation, operation and maintenance. For any departures from these instructions, or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to the Company.

### DISCLAIMER

The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions or dimensions.

### WARNING!

DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments.

### WARNING!

Acme products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the User. If these products are used in a life support ventilation system where failure could result in loss or injury, the User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

## LIMITED WARRANTY

**WARRANTY AND DISCLAIMER:** the Company extends this limited warranty to the original purchaser and warrants that products supplied by the Company, shall be free from original defects in workmanship and materials for two years from date of shipment (except for the warranty periods noted for products listed below), provided same have been properly handled, stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's express authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Purchaser assumes all risks and liability for results of use of all products.

Evaporative cooling pads are warranted to be free of defects in materials and workmanship for a period of two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated; and further, not subjected to excessive heat, corrosive agents or chemicals, or mechanical abuse that may cause tearing, crushing or undue deterioration, nor used on a system or in a manner other than that for which it was designed as explained in the product literature.

The following products are warranted to be free of defects in materials and workmanship for the periods shown from date of shipment: Acme's exclusive duplex split pillow block bearings and shaft five years, belts one year, Polyethylene tubing 90 days, AIR40 Heater warranty one year, AIR40 Emitter warranty three years and DDP fan lifetime warranty on its propeller, cone, and housing.

**LIMITATION OF REMEDY AND DAMAGES:** All claims under this warranty must be made in writing and delivered to P. O. Box 978, Muskogee, Oklahoma, 74402, within 15 days after discovery of the defect and prior to the expiration of two years from the date of shipment by the Company of the product claimed defective, and Purchaser shall be barred from any remedy if Purchaser fails to make such claim within such period. Within 30 days after receipt of a timely claim, the Company shall have the option either to inspect the product while in Purchaser's possession or to request Purchaser to return the product to the Company at Purchaser's expense for inspection by the Company. The Company shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Purchaser F.O.B. point of shipment; provided, however, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Purchaser's sole and exclusive remedy shall be a refund to the Purchaser of any part of the invoice price, paid to the Company, for the defective product or part.

The Company is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from the Company's plant, or the installation of the repaired or replaced product or part.

The warranties set forth above do not apply to any components, accessories, parts or attachments manufactured by other manufacturers; such being subject to the manufacturer's warranty, if any. To the extent not prohibited by the manufacturer's warranty, the Company shall pass through to Purchaser such manufacturer's warranty. THE COMPANY'S WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED AND WAIVED. THIS WARRANTY CONSTITUTES THE COMPANY'S SOLE AND EXCLUSIVE WARRANTY FOR DEFECTIVE GOODS AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCTS.

No employee, agent, dealer, or other person is authorized to give any warranties on behalf of the Company or to assume for the Company any other liability in connection with any of its products except in writing and signed by an officer of the Company.

**REPLACEMENT PARTS** If replacement parts are ordered, purchaser warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original product was purchased.

**TECHNICAL ADVICE AND RECOMMENDATIONS. DISCLAIMER:** Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at the Company's sole option and may be subject to additional charge.

The Company assumes no obligation or liability on account of any recommendations, opinions or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at Purchaser's and End User's risk and shall not constitute any warranty or guarantee of such products or their performance.

**LIMITATION OF LIABILITY** The cumulative liability of the Company to the Purchaser and any other persons for all claims in any way relating to or arising out of the products, including, but not limited to, any cause of action sounding in contract, tort, or strict liability, shall not exceed the total amount of the purchase price paid for those products which are the subject of any such claim. This limitation of liability is intended to apply without regard to whether other provisions of this agreement have been breached or have proven ineffective even if the Company has been advised of the possibility of such claims or demands. In no event shall the Company be liable to the Purchaser or any other person for any loss of profits or any incidental, special, exemplary, or consequential damages for any claims or demands brought by the Purchaser or such other persons.

**INDEMNITY** The Company's maximum liability to Purchaser and to any end user is as set forth above. The Company makes no warranty to anyone for any products not manufactured by the Company and shall have no liability for any use or installation of any products (whether manufactured by the Company or other manufacturers) not specifically authorized by this sale. Purchaser acknowledges various warnings by the Company regarding the products and its installation and use. If the Company incurs any claims, lawsuits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage including, but not limited to, claims arising out of the Purchaser's or any end user's installation or use of the products, the Purchaser shall indemnify and hold the Company harmless.



ACME ENGINEERING & MANUFACTURING CORP.  
P.O. BOX 978  
MUSKOGEE, OK 74402  
918/682-7791 FAX 918/682-0134

610184

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ACME ENGINEERING & MANUFACTURING CORP.

## INSTALLATION/OPERATING INSTRUCTIONS PB100 MSC MANUAL FAN SPEED CONTROLLER

ALL WIRING AND MATERIALS MUST AGREE WITH LOCAL CODES AND ORDINANCES.



### GENERAL INSTRUCTIONS

Read all instructions carefully before proceeding with wiring. Failure to do so may result in damage to the switch or possibly cause a hazardous condition to exist.

To prevent electrical shock, disconnect the 115/230 VAC power source before attempting any wiring connections.

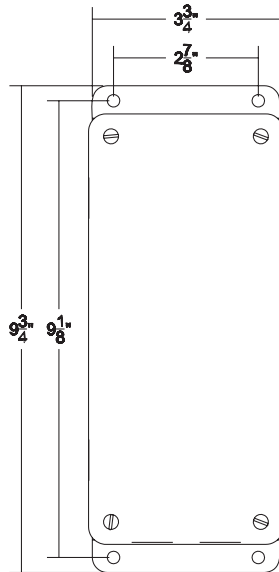
MODEL NO	OPERATING VOLTAGE	CURRENT RATING
PB100MSC115	115 VAC 1-PHASE 60 Hz	MAXIMUM 6 AMPS
PB100MSC230	230 VAC 1-PHASE 60 Hz	MAXIMUM 6 AMPS

**Additional materials required not supplied with the controller:**

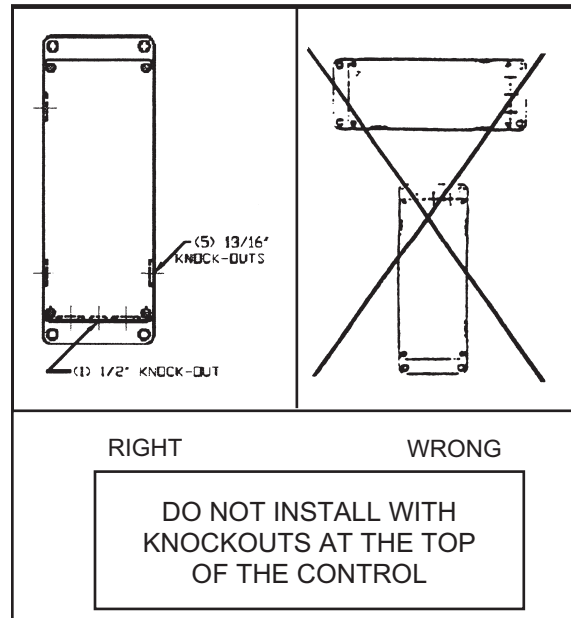
- 3/4" watertight fittings
- #10 wood or drywall screws
- Wire nuts

**INSTRUCTIONS**

When mounting this control onto an uneven surface such as brick, metal or concrete, it may be necessary to first mount a smooth wood panel to the surface. The control can then be attached to the panel.



1. Position the control on the mounting surface and mark the locations of the four mounting holes. Drill 1/8" pilot holes as required.
2. Attach the control to the panel or surface in an upright manner insuring that the electrical knockouts are located at the bottom or side of the control.



3. To remove enclosure cover, loosen the four screws from the cover. Remove both the cover and control knob as one piece. It is not necessary to separate the control knob from the cover.

4. Remove selected knockouts.
5. Verify that the line voltage matches the controller and motor name plate voltage.
6. Pass electrical wiring into the enclosure bottom via watertight fittings or conduit fittings. Strip and attach power wires to the appropriate wire pigtails supplied with the control element. Connections can be made using wire nuts. See Figure 1.
7. Align flats on the control shaft and knob, replace cover and tighten the cover screws until snug. Do not tighten cover screws.

**FAILURE TO USE APPROPRIATE WATERTIGHT FITTINGS AND A SUITABLE DRIP LOOP CAN RESULT IN A CONTROL MALFUNCTION AND POSSIBLE PROPERTY DAMAGE**

