

OIL-LESS PISTON COMPRESSORS FOR DRY SPRINKLER SYSTEMS

Operation & Maintenance Manual

Installation Insert Sheet to be used with Operating & Maintenance Instructions 70-2100

This equipment is to be installed by qualified personnel and must be in accordance with local and governmental codes or ordinances



WARNING



PLEASE READ THIS MANUAL COMPLETELY BEFORE INSTALLING AND USING THIS PRODUCT. SAVE THIS MANUAL FOR FUTURE REFERENCE AND KEEP IN THE VICINITY OF THE PRODUCT.

General Information These instructions are to be used in addition to the Operating & Maintenance Instructions provided with the unit. This information pertains to models designed for Tank & Tankless Dry Sprinkler System units. Follow all recommended safety precautions, and read the information carefully before installing or servicing the unit.

This unit is intended for installation indoors for use on dry sprinkler systems in accordance with the Standard for Installation of Sprinkler Systems, NFPA 13 and the National Electrical Code NFPA 70.

Sizing The air compressor should be sized to restore and maintain the air pressure in the sprinkler system in accordance with the requirements in NFPA 13.

Mounting The unit may be horizontally or vertically mounted. There must be at least 12" of clearance from sidewalls, floors and ceilings to insure the unit will operate correctly. Firmly mount the unit to a stable, rigid surface by bolting it through the slotted holes in the motor mounting base. To "riser" mount the unit, a vertical mounting kit is available, Gast part #AT670 Compressor Mounting Bracket, shown on the right. The kit is provided with stainless steel adjustable straps and hardware that make it suitable for mounting to all sizes of pipes.



ISO 9001 & 14001 CERTIFIED

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Electric Motor Control 3 Phase motors must be protected against short circuit, overload and excessive temperature rise. Fuses, motor-protective switches and thermal-protective switches provide necessary protection in these circumstances. Fuses only serve as a short circuit protection of motor (wiring fault), not as a protection against overload. Incoming line fuses should be chosen to withstand motor's starting current.



WARNING Incorrect wiring can result in electric shock and cause permanent damage to unit.

3 Phase motor starters, incorporating thermal-magnetic overload or circuit breakers protect 3 phase motors from overload or reduced voltage conditions. Selection of correct overload setting is required to provide best possible protection. Refer to motor starter manufacturer's recommendations.

Electric Motor Connection Refer to motor nameplate for wiring diagram. All dual-voltage motors are shipped from factory wired for high voltage. If motor fails to start or slows down under load, shut unit off. Check that supply voltage agrees with motor nameplate. Verify three-phase motor turns in proper direction of rotation after installation. Turning in wrong direction will result in overheating.

Operating & Maintenance Disconnect power before servicing. The motor may be thermally protected and will restart automatically when it cools if the thermal protection switch is tripped. Maintain a clean air filter cartridge to insure best flow and performance. Location and quality of air being ingested indicates frequency of inspection and replacement. A dirty filter restricts airflow and causes pump to run hotter, resulting in longer operating cycles.

Drain air receiver regularly. The amount of moisture and how quickly it accumulates inside air receiver is proportional to the amount of humidity in the air and how long the pump is in operation. If not drained, the air receiver will fill with water.

The field wiring for the unit is made inside the pressure-regulating switch. The switch is factory preset and sealed to cutout at 50 psi. **DO NOT ADJUST ABOVE 50 PSI.**

The pressure relief valves are designed to release the pressure of the system between 60-70 psi. However, due to the location of the valve and dynamic load of the compressor, the actual ASME ratings (based on static loads) are higher. Gast will not guarantee performance of a field-rebuilt unit. Return a units to a Gast Authorized Service Facility for repair. Contact the factory for a Gast authorized service facility closest you or you may find the most up to date list on our web site.

Gast Part	#ASME Pressure Rating	Models Used On
AS100C	80 PSI+/-3%	1LAA, 2LAF, 3LBA, 3LEM
AS100D	90 PSI+/-3%	4LCB, 6LCF, 7LDE
AS100E	110 PSI+/-3%	5LCA
AS100B	70 PSI +/-3%	8LDF

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! WARNING

Electrical Shock Hazard

This product must be properly grounded.
Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.
If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation that is green or green with yellow stripes is the grounding wire.
Check the condition of the power supply wiring. Do not permanently connect this product to wiring that is not in good condition or is inadequate for the requirements of this product.
Failure to follow these instructions can result in death, fire or electrical shock.

! WARNING

Electrical Shock Hazard

Disconnect electrical power supply cord before performing maintenance on this product. Some motors are thermally protected and will automatically re-start when protector resets. If product is hard wired into system, disconnect electrical power at the circuit breaker or fuse box before performing maintenance on this product. Failure to follow these instructions can result in death, fire or electric shock.
If the product is supplied with an electrical power cord, protect it from twisting, cuts and abrasion. When not in use, store in a clean dry place