




Manual Desiccant Dryer Model AD3400

SPECIFICATIONS	
Maximum Pressure	150 PSIG
Maximum Temperature	125°F
Maximum Continuous Airflow*	10 SCFM
Atmospheric Dewpoint*	-45°F
Total Airflow*	4400 SCF
Weight with Desiccant	7.4 lbs.
Weight Desiccant (Alone)	1.8 lbs.
Pipe Connections	½" NPT

*With Dry Desiccant at 100 PSIG (7 bar) and 70°F

Description

 Manual Dryers are used to remove water vapor from the compressed air system. Atmospheric dew points as low as -100°F are achievable when operated within rated unit specifications.

General Safety Information

- Relieve all air pressure from airline before installation
- Install unit in airline before opening desiccant container. After unit installation, add desiccant.
- Always make sure bowl, bowl guard and clamp ring are in place and the clamp ring is securely locked before installation
- DO NOT exceed the pressure and temperature ratings as shown on the specifications.
- Follow all local, state and federal EPA, OSHA and similar codes.

Installation

- 1) Install as close as possible to the point where the air is being used.
- 2) Install unit with the airflow going in the direction of the arrow.
- 3) Install unit on the airline before opening desiccant container. After installation, add desiccant. Shake and tap bowl while filling desiccant to settle. Fill to 1/8" below inner shoulder of the bowl.
- 4) Replace bowl, bowl guard and clamp onto the unit. Be sure clamp ring is securely locked in placed before pressurizing unit.

Most manual dryer users will achieve optimal results when installing the dryer alone, as close to the equipment or process being protected as possible in the compressed air system. Some users, especially those with highly contaminated systems, or critical air requirements, may wish to further protect their system and/or manual dryer, or extend the life with the following component:

Part No. F3500, coalescing filter should be installed prior to the manual desiccant dryer in any lubricated compressor system, which does not use a system coalescing filter. The coalescing filter removes oil from the compressed air, which prevents oil from coating the silica gel and destroying its ability to dry the air. Oil contaminated desiccant must be replaced and disposed of properly, as it cannot be regenerated.

Operation

- 1) The silica gel desiccant, visible through the clear polycarbonate plastic bowl, contains a color indicator. It changes from bright blue (meaning dry) to pink (meaning wet) to indicate the need to replace or regenerate desiccant.
- 2) By installing two or more units in parallel, higher dry airflows can be achieved.

Maintenance

- 1) The only service required for silica gel units is when the desiccant color moisture indicator has changed from bright blue (meaning dry) to pink (meaning wet). Should this color change occur:
 - a. Turn off and depressurize the line containing the dryer unit
 - b. Loosen the clamp ring and remove the bowl from the top housing.
 - c. Proceed to step 2 or 3 as desired
- 2) Desiccant Replacement:
 - a. Pour out used desiccant.
 - b. Open new container and refill bowl.
 - c. Shake or tap bowl to settle desiccant. Fill bowl to 1/8" below inner step.
 - d. Use Part No. 34006 when ordering replacement desiccant
 - e. Dispose of desiccant according to local codes
- 3) Desiccant Regeneration:
 - a. Pour out used pink desiccant onto flat pan. Place desiccant in 350°F oven for approximately three hours or until the desiccant color has changed back to bright blue.
 - b. Remove desiccant from oven and allow it to cool to ambient temperature.
 - c. Pour desiccant back into unit bowl, periodically shaking and tapping to settle the desiccant.
- 4) Replace bowl, bowl guard and clamp onto unit. Be sure clamp ring is securely locked in place before repressurizing the unit.

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

D

D

C

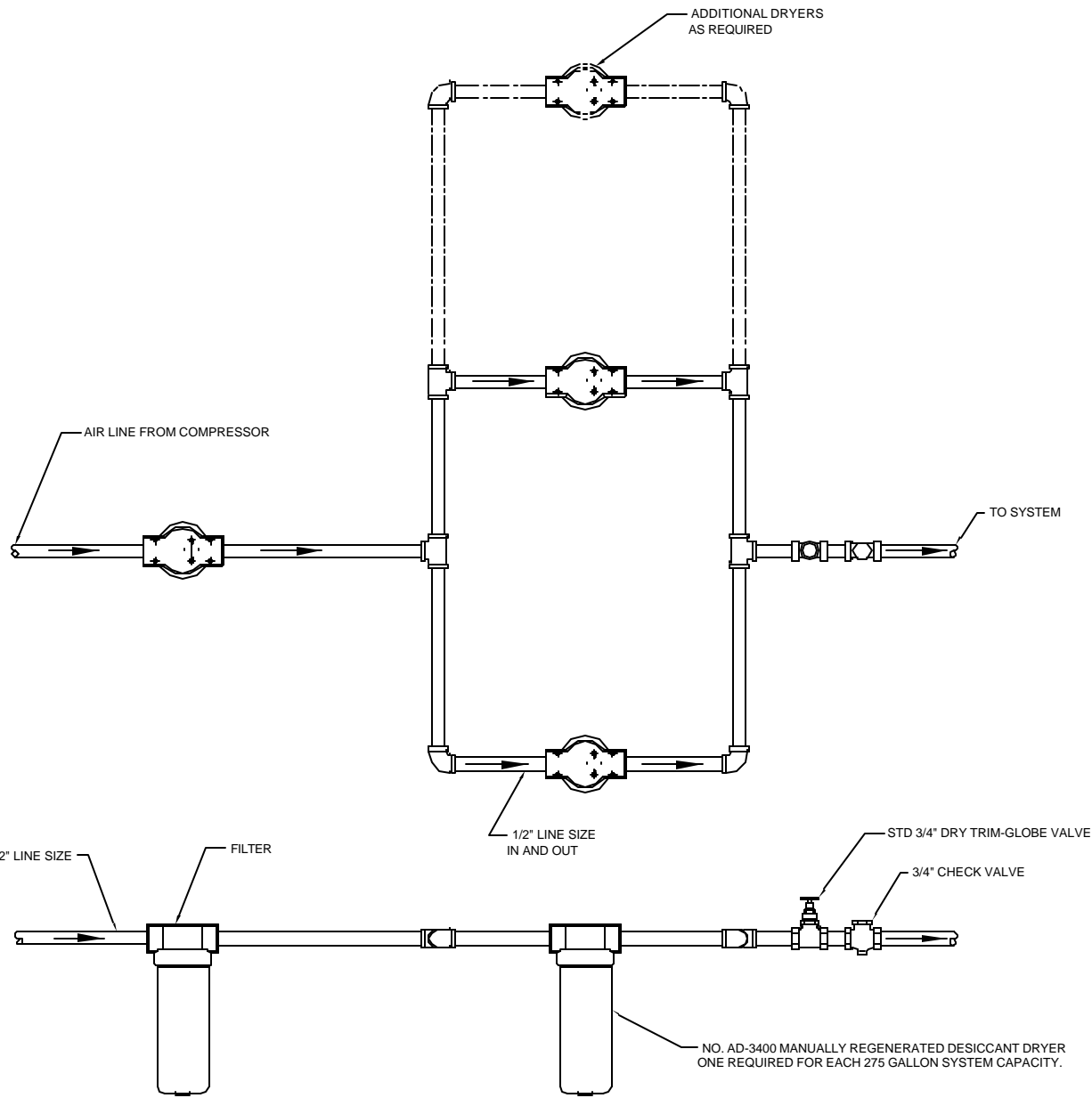
C

B

B

A

A



1/2" LINE SIZE

FILTER

1/2" LINE SIZE
IN AND OUT

STD 3/4" DRY TRIM-GLOBE VALVE

3/4" CHECK VALVE

NO. AD-3400 MANUALLY REGENERATED DESICCANT DRYER
ONE REQUIRED FOR EACH 275 GALLON SYSTEM CAPACITY.

ADDITIONAL DRYERS
AS REQUIRED

AIR LINE FROM COMPRESSOR

TO SYSTEM

SPRINKLER SYSTEMS\ INSTALLATION DWG. MANUAL AIR DRYING SYSTEM G-765-B.DWG

4

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1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
±1/8 XX 4-80 ±1/2

APPROVALS	DATE
DRAWN EJR	
CHECKED	
SCALE NTS	SIZE
SHEET 1 OF 1	



INSTALLATION DRAWING
MANUAL AIR DRYING SYSTEM FOR
DRY PIPE SPRINKLERS

DWG. NO. G-765-B

REV 1