

# Standard Air Dryer System

## ELECTRIC OPERATION

### Description

Series 415 and 416 air dryer systems include the 311C series dryer, an enclosure and two filters completely assembled and ready for installation. The filters have automatic drains for discharge of collected liquids. Easily replaced filter cartridges remove solids to 5 microns in the first stage and liquids and solids to .03 microns in the second stage.

### Specifications

**Inlet Pressure** – 80 to 125 psig

**Maximum Inlet Temperature** – +125°F

**Dew Point** – See chart for typical conditions – page 12. The lower the outlet flow, the lower the dew point.

**Medium** – Compressed air

**Output Flow Capacity** – See chart for typical conditions – page 12

**Purge Flow** – See chart for typical purge flow – page 12

**Air Connections** – Inlet and outlet – 1/4" NPT Female

**Mounting** – Mount unit with tanks vertical; four mounting holes

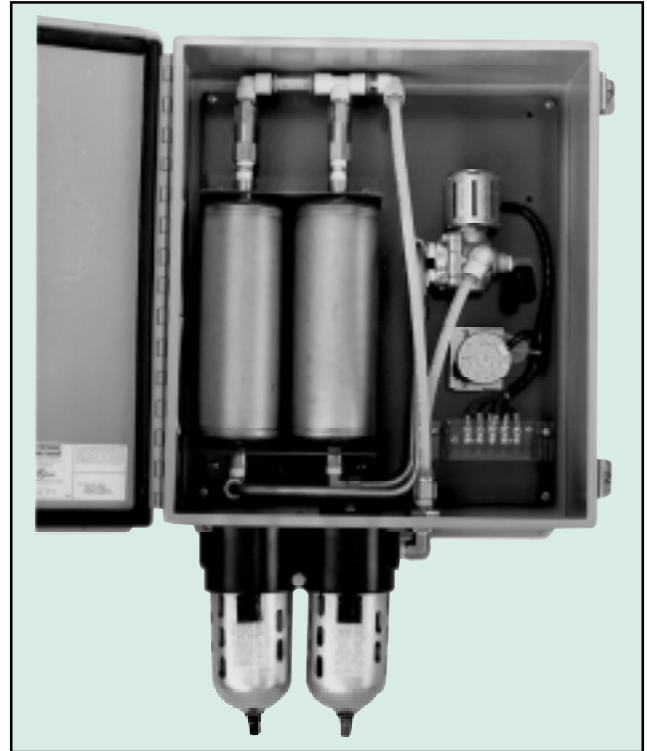
**Dimensions** – 24" x 14" x 6" – See drawing page 12

**Electric Motor and Solenoid Valve** – 120 volts/ 60 hz/ single phase/15 watts

**Electric Connections** – Terminal strip

**Filter Rating** – Removes 99.99998% of all solid and liquid particles .03 microns and larger.

**Weight** – Approximately 43 pounds



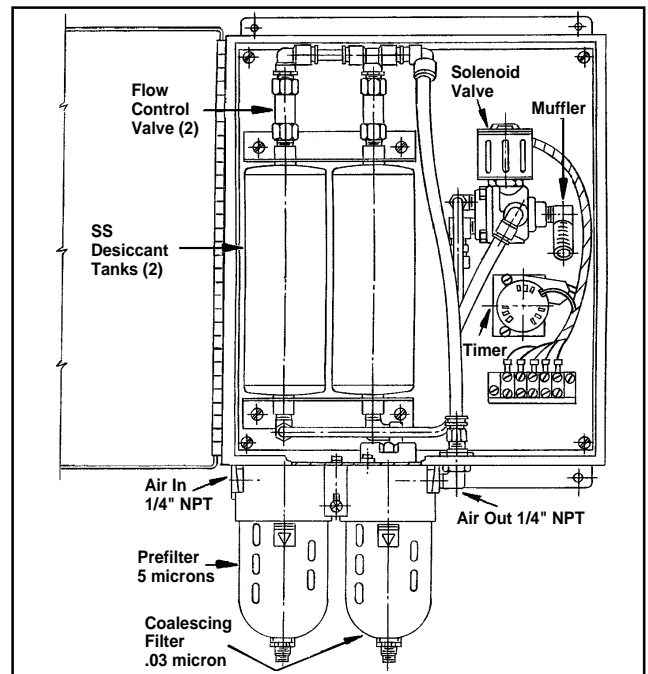
*Air dryer systems consist of 311C insert module, enclosure and two filters.*

### Recommended Operation

- The filters are equipped with automatic float drains. Make provision to collect the discharged liquid in a suitable location. There are 1/8" NPT connections in the bottom of each filter.
- The dryer system works best if the compressed air provided is pre-dried in a refrigeration type air dryer (35 to 50°F pressure dew point).
- The dryer can be continuously operated.
- The output air pressure/flow has a momentary pulse as the solenoid valve switches flow (every 30 sec.). To reduce the pulsation, install a check valve and accumulator (see page 13) at the outlet of the air dryer.

### Ordering Information

Part Number	Max Flow Rate (scfm)	Purge Flow Rate (scfm)
	80 psig Supply	80 psig Supply
OKC-416B-1	2.0	.35
OKC-416B-2	3.4	.68
OKC-415B-1	6.0	1.2
OKC-415B-2	9.0	1.8
OKC-415B-3	13.0	2.6



*Electric motor timer controls solenoid valve for automatic cycling of air dryer system.*

## PNEUMATIC OPERATION

### Description

Series 141/142 air dryer system has the unique feature of not requiring electric power for operation. Pneumatic timers and air operated relays are used for automatic control of the self-regenerative air dryer system. This pneumatic controlled air dryer can be installed in compressed air lines to decrease the dew point to  $-50^{\circ}\text{F}$ . A prefilter and coalescing filter both equipped with automatic drains are standard components of the system.

### Specifications

**Inlet Pressure** – 80 to 125 psig

**Maximum Inlet Temperature** –  $+125^{\circ}\text{F}$

**Dew Point** – See chart for typical conditions – page 12. The lower the outlet flow, the lower the dew point.

**Medium** – Compressed air

**Output Flow Capacity** – See chart for typical conditions – page 12

**Purge Flow** – See chart for typical purge flow – page 12

**Air Connections** – Inlet and outlet –  $1/4"$  NPT Female

**Mounting** – Mount unit with tanks vertical; four mounting holes

**Dimensions** –  $24" \times 14" \times 6"$  – See drawing page 12

**Control Pressure** – Regulator preset to 50 psig. All connections internal.

**Filter Rating** – Removes 99.99998% of all solid and liquid particles .03 microns and larger.

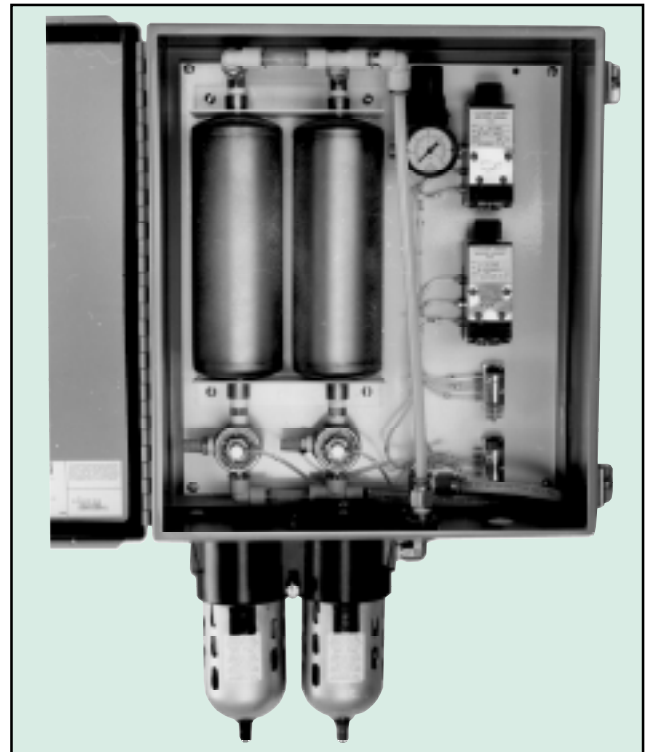
**Weight** – Approximately 43 pounds

### Recommended Operation

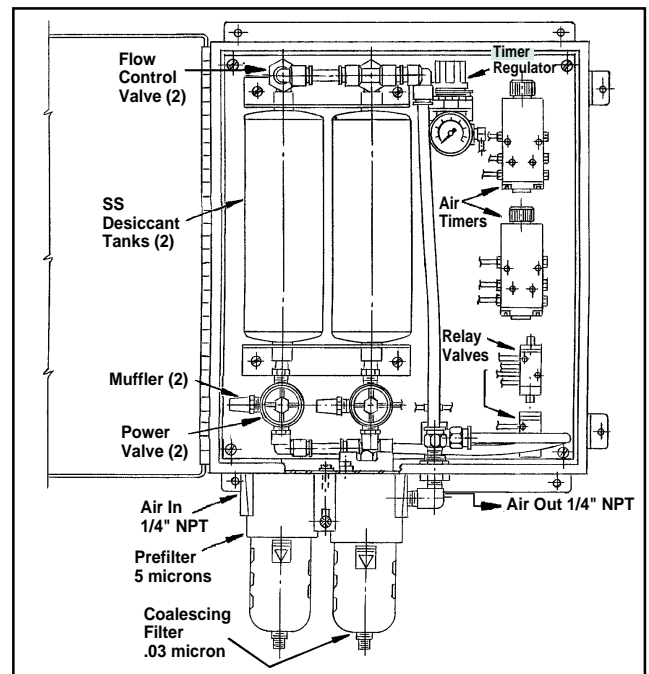
- The filters are equipped with automatic float drains. Make provision to collect the discharged liquid in a suitable location. There are  $1/8"$  NPT connections in the bottom of each filter.
- The dryer system works best if the compressed air provided is pre-dried in a refrigeration type air dryer ( $35$  to  $50^{\circ}\text{F}$  pressure dew point).
- The dryer can be continuously operated.
- The output air pressure/flow has a momentary pulse as the solenoid valve switches flow (every 30 sec.). To reduce the pulsation, install a check valve and accumulator (see page 13) at the outlet of the air dryer.
- The two timers are preset for periods of 30 seconds each. These should never be changed.

### Ordering Information

Part Number	Max Flow Rate (scfm)	Purge Flow Rate (scfm)
	80 psig Supply	80 psig Supply
OKC-142C-1	2.0	.35
OKC-142C-2	3.4	.68
OKC-141C-1	6.0	1.2
OKC-141C-2	9.0	1.8
OKC-141C-3	13.0	2.6



*Air operated air dryer system does not require any electric power.*

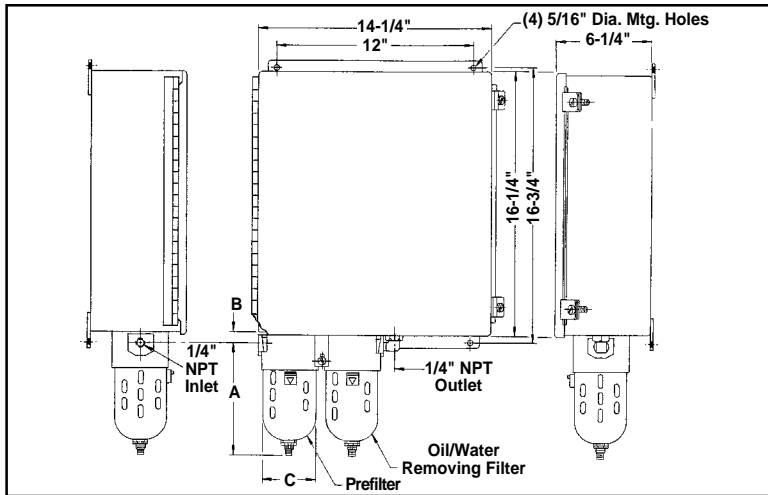


*Air timers and air relays automatically cycle the self-regenerating air dryer.*

# Standard Air Dryer System

## DIMENSIONS

### For Both Pneumatic and Electric Operation



#### Dimensions – In.

Series	A	B	C
OKC-141C	6.37"	.98"	3.35"
OKC-142C	5.60"	.90"	3.00"
OKC-415B	6.37"	.98"	3.35"
OKC-416B	5.60"	.90"	3.00"

### Operating Conditions for Standard Air Dryer Systems

Series	*-16			*-22			*-31			*-39			*-46		
Inlet pressure – PSIG	80			80			80			80			80		
Inlet temperature – °F	70			70			70			70			70		
Purge Flow – SCFM	.35			.68			1.2			1.8			2.6		
Outlet Flow – SCFM	2.0	1.4	1.2	3.4	2.7	2.2	6.0	4.8	4.0	9.0	7.2	6.0	13.0	10.4	8.8
Atmos. Dew Point – °F	-50	-60	-65	-50	-60	-65	-50	-60	-65	-50	-60	-65	-50	-60	-65
Dew Point @ 80 PSIG – °F	-18	-30	-35	-18	-30	-35	-18	-30	-35	-18	-30	-35	-18	-30	-35

\*Series

### Parts for Standard Air Dryer Systems

Description	Qty./Air Dryer	Part Number
Muffler for 141C/142C	2	APC-246-2
Muffler for 415B/416B	1	OKC-780
Desiccant Tank for 141C/142C/415B/416B	2	OKC-777
Prefilter Assembly for 142C/416B	1	OKC-740
Prefilter Assembly for 141C/415B	1	OKC-730
Prefilter Replacement Cartridge for 142C/416B	1	OKC-742
Prefilter Replacement Cartridge for 141C/415B	1	OKC-732
Coalescing Filter Assembly for 142C/416B	1	OKC-740
Coalescing Filter Assembly for 141C/415B	1	OKC-731
Coalescing Filter Cartridge for 142C/416B	1	OKC-742
Coalescing Filter Cartridge for 141C/415B	1	OKC-733
<b>Flow Control Valve</b>		
For 416B-1; 142C-1	2	Y4F-16-BR-DE
For 416B-2; 142C-2	2	Y4F-22-BR-DE
For 415B-1; 141C-1	2	Y4F-31-BR-DE
For 415B-2; 141C-2	2	Y4F-39-BR-DE
For 415B-3; 141C-3	2	Y4F-46-BR-DE
Timer for 415B/416B	1	OKC-781
Timer for 141C/142C	2	OKC-893
Solenoid Valve for 415B/416B	1	OKC-779
Power Valve for 141C/142C	2	OKC-892
Relay Valve for 141C/142C (Detent)	1	OKC-894
Relay Valve for 141C/142C (Spring Return)	1	OKC-1220
Pressure Regulator for 141C/142C	1	OKC-1222
Pressure Gage for 141C/142C	1	OKC-1221