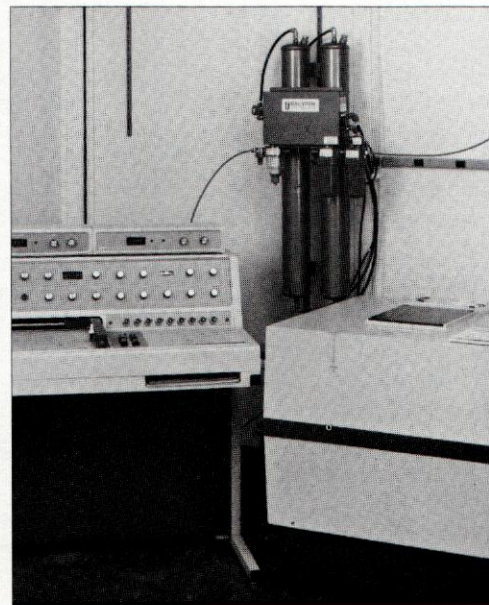


**Balston®**

# Compressed Air Dryers and Complete Dry Air Systems...

**Provide Clean, Dry Compressed Air to  
-100°F Pressure Dew Point**



**...from house compressed air or with self contained packages complete with compressor**

## **Ideal for use with:**

- NMR Spectrometers
- AA Spectrophotometers
- Lab Air Supply
- Moisture Sensitive Materials
- Air Lines Subject To Sub-Freezing Temperatures
- Electron Microscopes
- Thermal Analyzers
- Mask Aligners
- Pneumatic Instrumentation
- Robotics
- Lasers
- Dry Boxes
- Auto Samplers

This bulletin provides all the information you need to select, order and install the right Air Purification System. If you need technical assistance, please call or write. Balston, Inc., 260 Neck Road, Box 8223, Haverhill, MA 01835-0723. Toll Free 800-343-4048 or 508-374-7400.

## If a reliable source of compressed air is available...

### ...Select from this group of Balston Compressed Air Dryers

The Balston regenerating desiccant dryers reduce the pressure dew point of compressed air to below -100°F (-40°F for Types 75-10 and 75-25) without operator attention. Each dryer is delivered complete, ready for easy installation with oil removal filters, automatic drains, particulate afterfilter, moisture indicator and pretested controls. Some types also include a differential pressure indicator.

All dryers have 110 volt electrical requirements. To install, simply attach the inlet (60 psig minimum) and outlet air line, plug the electric cord into a wall outlet - no electrician required - and the unit is ready for trouble-free operation.

The rugged and reliable Balston dryers can be easily installed, operated, and maintained by personnel not trained in instrumentation. In addition to supplying analytical instruments with dry air, free of suspended impurities, the Balston dryers are useful when air comes into contact with moisture-sensitive materials, or when outside compressed air lines are subjected to sub-freezing temperatures.

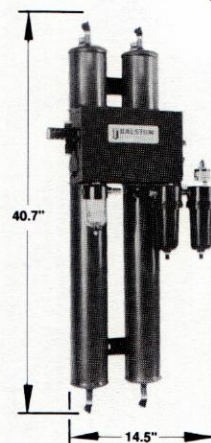
Balston dryers range in size from the miniature, portable Type 75-03 with 3.1 liters/min. capacity to the larger, wall mountable 75-25 with a capacity of 690 liters/min.



Types 75-03, 75-05



Type 75-10



Type 75-20

Refer to Page 4 for photographs and dimensions

### Principal Specifications

Type Number	Compressed Air Dryers				
	75-03	75-05	75-10	75-20	75-25
Pressure Dew Point (°F)	-100	-100	-40	-100	-40
Max. Dry (outlet) Air Flow Rate for Specified Dew Point: (SCFM, (LPM)) (1)					
Inlet Pressure 125 psig	.11 (3.1)	0.5 (14)	2.4 (68)	12.0 (340)	24.0 (690)
Inlet Pressure 100 psig	.09 (2.5)	0.4 (12)	2.0 (57)	10.0 (283)	20.0 (560)
Inlet Pressure 80 psig	.07 (2.1)	0.3 (9)	1.7 (48)	8.3 (235)	16.5 (467)
Inlet Pressure 60 psig	.06 (1.7)	0.2 (6)	1.3 (37)	6.5 (184)	13.0 (369)
Air Loss for Regeneration (SCFM, (LPM)) (4)	.09 (2.5)	0.1 (3)	0.5 (14.1)	2.5 (70.7)	7.0 (198)
Max. Inlet Air Pressure (psig)	125	125	125	125	125
Min. Inlet Air Pressure (psig)	60	60	60	60	60
Max. Inlet Air Temperature (°F) (2)	78	78	78	78	78
Pressure Drop at Max. Flow Rate (psi)	1	1	8	8	12
Inlet/Outlet Port Size (NPT)	1/4"	1/4"	1/4"	1/4"	1/2"
Electrical Requirements (3)	110 v./60 Hz.	110 v./60 Hz.	110 v./60 Hz.	110 v./60 Hz.	110 v./60 Hz.
Shipping Weight (lbs.)	20	25	35	50	95

**Note: The Dryers in this bulletin are not recommended for use with FT-IR Spectrometers. Please refer to Bulletin P-600 for Dryers intended for this application.**

### Ordering Information

Order by type number. The type number designates an Air Dryer which will provide dry air to the specifications shown in the performance tables.

For assistance, call 800-343-4048

#### Dryers Complete

Type Number	75-03	75-05	75-10	75-20	75-25
Replacement Filter Tubes					
Filter Tubes; 1st stage (box of 10)	100-12-BX	100-12-BX	100-12-BX	100-12-DX	100-18-DX
Filter Tubes; 2nd stage (box of 10)	—	—	—	100-12-BX	100-18-BX

#### Notes:

- Dew point will be lower than specified at lower air flow.
- Outlet dew point will increase at higher inlet compressed air temperatures.
- Power consumption - less than 10 watts.
- Total air required = air loss + process demand (up to max. dry air flow rate).

# Clean, Dry Compressed Air

## If a reliable source of compressed air *is not* available...

### ...Select from this group of Balston Clean Air Packages

Complete with air compressor, this ready-to-run system of matched components is engineered to deliver clean, dry compressed air with:

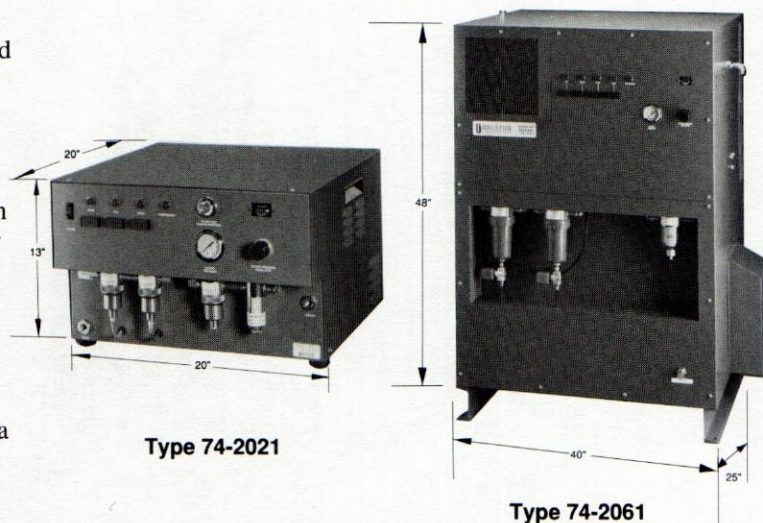
- No suspended liquids
- No particles larger than 0.01 $\mu$ m (74-2021)
- Pressure dew point below -100°F
- Non-methane hydrocarbons approximately 2 ppm

Select the Balston Clean Air Package you require from the performance chart. Each Balston Clean Air Package is delivered completely assembled, ready to run. In fact, each Clean Air Package has been run at our factory for a

minimum of eight hours. We supply documentation of the air purity measurements from the output of your package and a certificate of performance.

The Balston Miniature Clean Air Pack, Type 74-2021 has been designed with space conservation and portability in mind. It is an ideal choice for mobile labs, field analysis or when a portable source of clean, dry compressed air is desirable.

Balston Clean Air Package, Type 74-2061 (with dryer) is a larger, floor standing unit that provides enough air flow capacity (99 liters/min.), to operate several instruments or a complete lab air supply.



Type 74-2021

Type 74-2061

### Principal Specifications

Type Number	Clean Air Packages With Dryer	
	74-2021	74-2061
Flow Rate (SCFM, (LPM) at 100 psig)	.5 (14)	3.5 (99)
Suspended Liquids	None	None
Particles > 0.01 $\mu$	None	None
Non-Methane Hydrocarbons (ppm)	2 (estim.)	2 (estim.)
Pressure Dew Point (°F)	-100	-100
CO <sub>2</sub> Concentration (ppm) (estim.)	200	200
Compressor, Cooler and Oil Removal Filters	STD	STD
Dryer/Moisture Remover	STD	STD
Non-Methane Hydrocarbon Remover	NA	Optional (2)
0.01 $\mu$ m Absolute Final Filter	STD	Optional (2)
Output Pressure (psig)	100	90
Outlet Port Size (NPT)	1/4"	1/4"
Electrical Requirements (amps)	6.5	11
230 volt 60 Hz. Single Phase	—	1.5 H.P.
110 volt 60 Hz. Single Phase	1/3 HP	—
Min/Max Ambient Temperature Range (1)	30°F - 85°F	30°F - 85°F
Shipping Weight (lbs)	80	450

### Ordering Information

Order by type number. The type number designates a Complete Air Package which will provide Clean Air to the specifications shown in the performance tables.

For assistance, call 800-343-4048

Type Number	Clean Air Packages With Dryer	
	74-2021	74-2061
Service Kit	74007	74207

Service Kit includes replacement filter cartridges and other spare parts for basic service requirements for 1 year

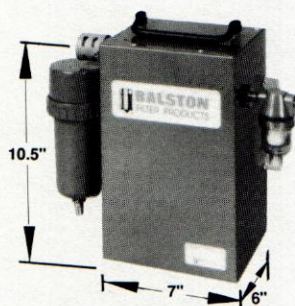
### Notes:

- 1 All 74 Series Clean Air Packages must be installed in a relatively clean, well ventilated area, with an Ambient Temperature of 30°F to 90°F.

Refer to Bulletin P-660 for Instruments and Accessories

- 2 Consult factory.

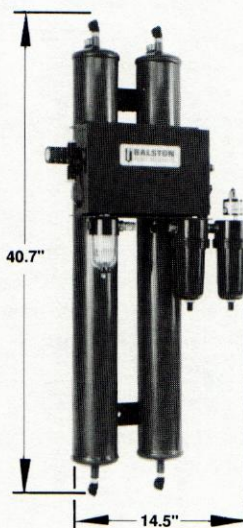
Compressed Air Dryers



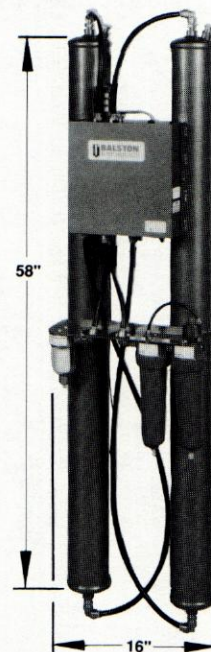
Types 75-03, 75-05



Type 75-10

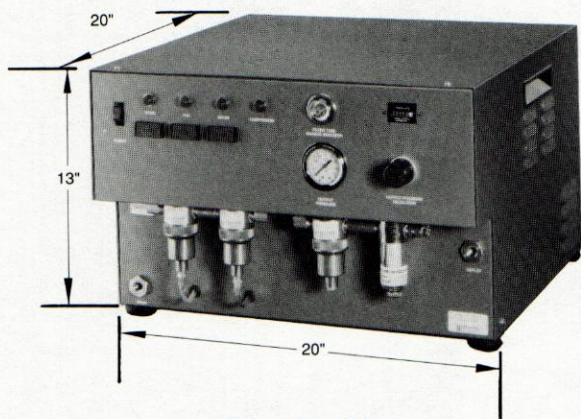


Type 75-20



Type 75-25

Clean Air Packages



Type 74-2021



Type 74-2061



The Filter Systems Division of Whatman

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