

Breathing Air Purification for the Medical Market

Market Application Publication

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A medical air supply is regarded as a vital part of every hospital infrastructure and is one of the few gases that is manufactured on-site. Specific standards for medical air are set forth by the National Fire Protection Association (NFPA 99: Standard for Health Care Facilities). Medical air is normally generated in the hospital's equipment room which houses their boilers, vacuum pumps, air compressors, generators and other equipment required for day to day operation.

A 300 bed hospital required replacement of their antiquated medical air system. They turned to a leading medical air packager for a solution. The packager, a partner with Parker domnick hunter, manufactures medical air treatment skids complete with an oil-less air compressor, CO monitor, piping, valves, regulators and (2) Parker domnick hunter Rx Modular Medical Dryers, (2) Parker ZANDER Microfilter prefilters and (2) Parker ZANDER Microfilter afterfilters. For the hospital's air requirements, the skid was fitted with (2) DME040-Rx dryers which come with Dewpoint Dependent Switching (DDS) as standard. The inclusion of the DDS as standard is a plus for the packager as they do not have to purchase the component separately. The above mentioned hospital viewed DDS as a positive due to the energy savings it provides them.

Parker domnick hunter Rx series dryers with filtration provide clean, dry compressed air to healthcare facility patients being assisted by a breathing ventilator. As part of a level 1 breathing air system, Parker domnick hunter provides a reliable, energy efficient compressed air treatment solution to medical air

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system packagers. The packagers integrate the Rx Series dryers equipped with 2 to 3 levels of filtration to remove moisture down to near a 0°F (-17.8°C) pressure dewpoint and particles to 0.01 micron.

Features and Benefits:

- **Complies with NFPA-99: Standard for Health Care Facilities**
- **3 purification stages including prefilter, dryer and afterfilter**
- **Small footprint due to modular design**
- **Saves energy with the dewpoint dependent switching (DDS) energy management system**

ENGINEERING YOUR SUCCESS.

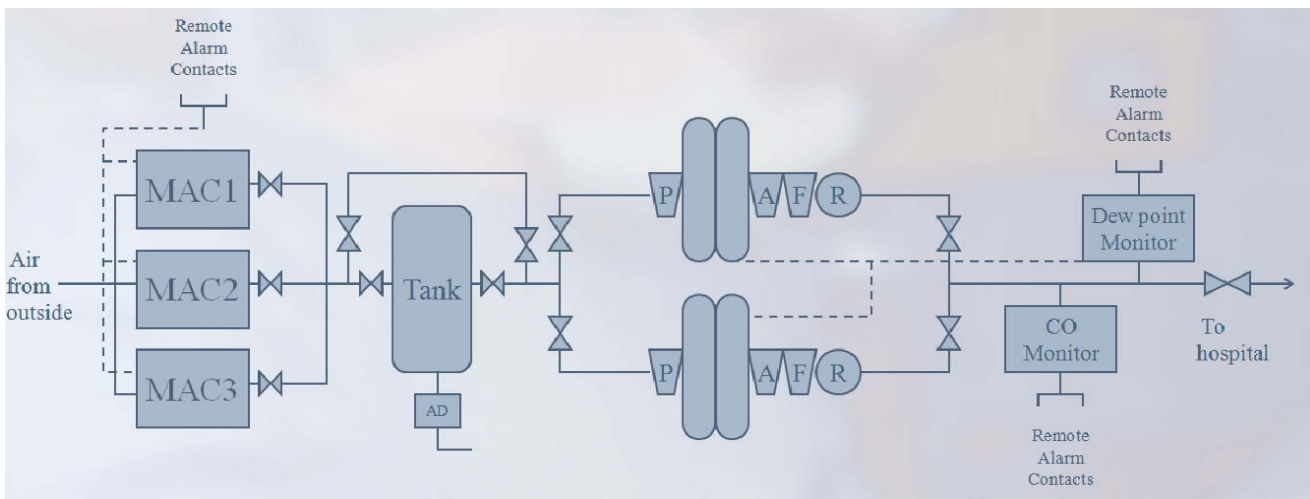
Aftermarket

The DME-Rx dryer is designed to generate continued aftermarket business throughout the life of the unit. In order to show kit and element replacement, the below table shows recommended service from 12 months forward only.



Description of Service Replacement		Typical Recommended Service (Beginning at 12 months)		
Component	Operation	12 Months	24 Months	30 Months
Dryer	Replace the active exhaust silencers - Parker domnick hunter Silencer Service Kit	✓		
Filtration	Replace Parker ZANDER inlet and outlet filter elements, control air filters and service drains.	✓		
Dryer	Replace/Calibrate dewpoint transmitter.	✓		
Dryer	Replace the valve seats and seals. - Parker domnick hunter Valve Service Kit		✓	
Dryer	Replace desiccant - Parker domnick hunter Desiccant Service Kit			✓

NFPA99 Level 1 Medical Breathing Air Flow Schematic



Technical Specifications

Product code	Flow Rate @ 0°F (-17.8°C) pdp 100 psi g (7 bar g)		Dimensions						Weight (approx.)	
	scfm	l/s	Height		Width		Depth		lbs	kg
			ins	mm	ins	mm	ins	mm		
DME012-Rx	26	12	32.9	835.7	11.2	284.5	11.9	302.3	70	32
DME015-Rx	35	17	39.5	1003.3	11.2	284.5	11.9	302.3	81	37
DME020-Rx	46	22	46.0	1168.4	11.2	284.5	11.9	302.3	92	42
DME025-Rx	58	28	52.5	1333.5	11.2	284.5	11.9	302.3	103	47
DME030-Rx	72	35	59.0	1498.6	11.2	284.5	11.9	302.3	114	52
DME040-Rx	106	47	68.8	1747.5	11.2	284.5	11.9	302.3	132	60
DME050-Rx	135	57	56.4	1432.6	8.7	221.0	22.3	566.4	176	80
DME060-Rx	156	71	62.9	1597.7	8.7	221.0	22.3	566.4	198	90
DME080-Rx	211	94	72.7	1846.6	8.7	221.0	22.3	566.4	229	104

The use of genuine Parker domnick hunter filter elements, desiccant and replacement components assures optimum system performance in every application.