DUPLEX MEDICAL BREATHING AIR DRYER/PURIFICATION PACKAGE

- ✔ COALESCING PRE-FILTERS WITH AUTOMATIC TIMED AUTO DRAIN VALVES. HOUSINGS HAVE INTERNAL CORROSION RESISTANT ELECTRO-PLATING. OPTIONAL STAINLESS STEEL HOUSINGS ARE AVAILABLE.
- ✔ PARTICULATE AFTER FILTERS TO REMOVE DESICCANT FINES AND CONTAMINANTS.
- ✔ ACTIVATED CARBON FINAL FILTERS REMOVE TRACE ODOURS/CONTAMINANTS.
- ✔ BRASS/BRONZE PIPE AND FITTINGS FOR ALL INTERCONNECTING INLET AND OUTLET PIPING, COPPER PURGE AIR LINE WITH BRASS ORIFICE UNION.
- ✔ ISOLATION VALVES ALLOW REMOVAL OF EACH DRYER/FILTRATION SET FROM LINE SERVICE FOR MAINTENANCE WHILE THE OTHER REMAINS IN SERVICE.
- ✔ PNEUMATICALLY CONTROLLED POPPET-STYLE INLET SWITCHING VALVES WITH 3 YEAR WARRANTY.
- ✔ PLC CONTROL WITH TEXT DISPLAY/KEYPAD INTERFACE AND PASSWORD PROTECTION ALLOWS MAXIMUM USER FLEXIBILITY.
- ✔ ASME CODE COMPLIANT AND CRN REGISTERED DESICCANT TOWERS WITH STAINLESS STEEL INLET AND OUTLET RETAINING SCREENS.

MEDICAL AIR DRYING SYSTEMS - CSA Z7396.1-09 COMPLIANT

191 Shearson Cres, Cambridge, ON N1T 1J5 Canada
Tel: 1-888-622-2034 Fax: 519-622-1949
info@airpowerproducts.com

AIR POWER PRODUCTS LIMITED

PREMIUM FEATURES

Switching valves are a main wear and tear component on twintower regenerative air dryers. APPL medical drying/purification systems use poppet-style valves for inlet switching and dryer isolation, and also for purge exhaust valves on 100 CFM and larger models. These valves have brass bodies, stainless steel shafts and springs, and PTFE sealing discs. Pop-up position indicators mounted on top of the actuators provide a quick visual indication of whether the valve is currently in the open or closed position. Maintenance is very rare, but when required, the valve body can remain on the dryer piping, and the operator and main wear components may be removed from the body as a complete assembly for servicing. The standard APPL warranty for all other components is 12 months from date of start up or 15 months from date of shipment, whichever comes first. Warranty for these time-proven rugged switching valves is confidently extended to 3 year from date of shipment. Also covered by our three year warranty is our ½" viton diaphragm operated purge exhaust valves used on units of 75 CFM and smaller. See our warranty text.

STANDARD SYSTEM ALARMS

- Tower Switching Failure alarm
  Failure to depressurize (each tower)
  Failure to repressurize (each tower)
- Low Outlet Pressure
- High Humidity
- Audible Buzzer (95 dba)
- Silence and Reset Buttons

STANDARD OPERATION FEATURES

- Automatic Alternation of dryers every 24 hours ensures equal operating time.
- Automatic switching to standby dryer on alarm activation.
- "Purge Economizer Controls" with digital dewpoint display ensure maximum operating efficiency.

"PURGE ECONOMIZER CONTROLS"

Standard equipment on APPL duplex medical dryers includes "Purge Economizer Controls". This advanced system includes a precision hygrometer with digital dewpoint display. Dewpoint settings are easily adjustable within the hygrometer operating range. The dual output hygrometer controls both the "Purgeless" function for the cycle control, and also the "High Humidity" alarm function. The "Purgeless" period represents an extension to each tower's drying time, during which normal purging would take place if operated on a fixed time cycle. The PLC maintains a count of "Total" operating hours, and also of "Purgeless" hours. These hours are both displayed on the messaging centre. The operator can see the purge time savings at a glance, and may calculate purge air saved (in SCFM), and financial savings based on the Purge Economizer Control function.

OPTIONAL FEATURES

APPL offers options which will reduce operating costs and initial capital costs for installation. Some options to consider will be as follows:

1) Pre-piping of the dual line regulator assembly and the emergency reserve manifold. These piping components can be installed and pre-piped on the system, reducing the installation time, and space requirement for the entire system. The components can be mounted on the back of the system, allowing the installer to provide one air inlet connection to the system intake, and a single air output to the facility services. The user's emergency reserve system requires connection to a dedicated port provided between the dryer outlet and dual line regulator inlet connection.

2) The vacuum assisted purge option provides a reduction in the purge air volume consumed by the dryer. A savings in purge air consumption of approximately 75% can be realized with this system. The system will incorporate a small rotary vane vacuum pump which will expand purge air volume to reduce consumption. The system includes the user option of operating with the vacuum assist purge, or switching to standard pressure swing (non-vacuum assisted) purging during maintenance periods. Selecting this feature with APPL's standard "Purge Economizer Controls" feature on these systems, will provide the most cost effective operation possible in the medical breathing air marketplace.

191 Shearson Cres, Cambridge, ON N1T 1J5 Canada
Tel: 1-888-622-2034 Fax: 519-622-1949
info@airpowerproducts.com

APPL
AIR POWER PRODUCTS LIMITED

"APPL" DUPLEX DRYER MODELS SELECTION

APPL MODEL	CAPACITY @100 PSIG SCFM	CONNECTION SIZE – NPT	WEIGHT LBS.	OVERALL DIMENSIONS - INCHES		
				LENGTH	DEPTH	HEIGHT
AP-25X2-MED	25 x 2	1/2"	320	60	30	72
AP-50X2-MED	50 x 2	1/2"	400	60	30	72
AP-75X2-MED	75 x 2	3/4"	490	64	30	76
AP-100X2-MED	100 x 2	1"	600	64	30	75
AP-150X2-MED	150 x 2	1-1/2"	850	78	36	80
AP-200X2-MED	200 x 2	1-1/2"	1140	76	36	82
AP-280X2-MED	280 x 2	2	1490	82	38	86

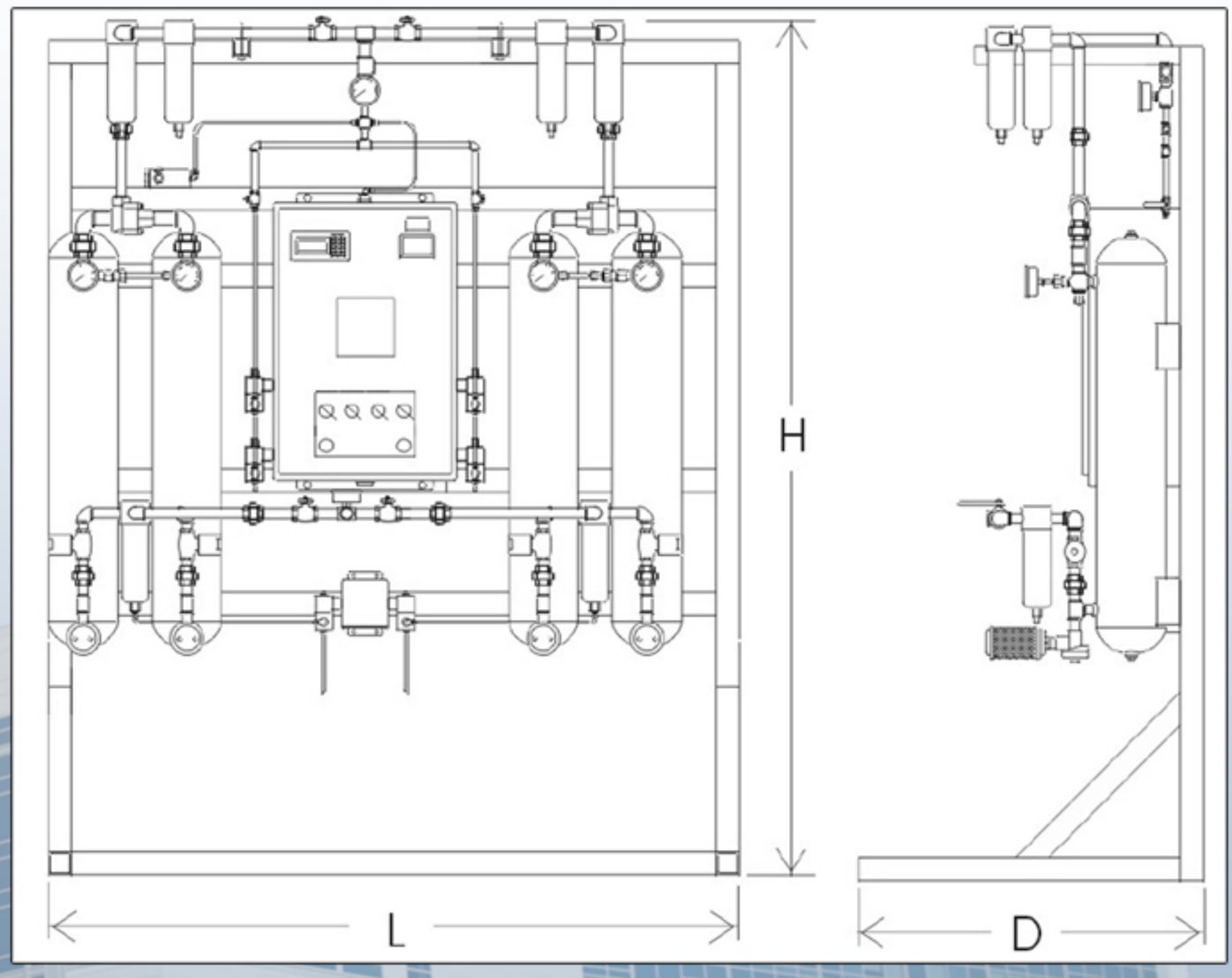
NOTES:

1) Capacities shown are inlet volumes to dryer.
2) Purge air consumption is approximately 15% of dryer inlet volume based on 100 PSIG operation.
3) Capacities are based on an outlet dew point of minus 40°C.
4) Electrical power requirement is approximately 60 watts on 1/60/120V power supply.
5) Larger capacity systems are available upon request.
6) Specification and dimensions are subject to change without notice.

GENERAL ARRANGEMENT

CONFIGURATION

APPL Duplex desiccant dryers are designed to minimize floor space requirements, while allowing maximum access for service. Models up to AP-75X2-MED may be placed against a wall while providing full access from the front for servicing. Model AP-100X2-MED and larger will require clearance of approximately 18" at the rear for servicing. In the event of a power failure, all four inlet valves will return to their normally open positions, and all towers will go into drying service providing many hours of low dew point operation. Any alarm condition will instigate the automatic switching from one dryer to the other. If high dew point alarms occur on both dryers for more than 30 minutes, the system will switch off line (all inlets will close), and emergency reserve bottles must go into service. The system is designed for maximum reliability and ease of service. Almost 30 years of air dryer manufacturing experience, with over 15 years in the medical drying/purification industry, assures our customers that they will receive the best quality in design and service available.



QUALITY ASSURANCE

Air Power Products Limited has been serving Canadian industry since 1980. APPL received ISO9001 registration in 2001, and today is registered to the most current standard level ISO9001-2008, under BSI Management Systems registration #FM64620. All APPL dryer vessels are CRN registered for pressure service as either vessels or fittings (as dictated by volumetric size). For systems using piping larger than ¾" pipe, CRN registration of the system piping and pressure components is also our standard. CRN registrations are applied for in the province of end use.

191 Shearson Cres, Cambridge, ON N1T 1J5 Canada
Tel: 1-888-622-2034 Fax: 519-622-1949
info@airpowerproducts.com