

APD Series Tropical Type Refrigerated Air Dryer 8.5-132m³/min (300-4660CFM)

Through rigorous testing of component configurations, SCALA pinpointed the optimal balance between efficiency and durability to ensure product longevity in hot and high humidity conditions – with the result being a product that will excel in any climate.

- *Compact Cross Flow Aluminium Heat Exchanger*
- *Advanced Thermal Sensors and Controls*
- *Safeguards against Load Variance*
- *Precision Pressure Dew Point*

ALUMINUM HEAT EXCHANGER

- The high performance Cross Flow Heat Exchanger provides superior heat transfer with no internal piping or gaskets, assuring maintenance free operation under the most challenging conditions.
- The cross-flow design allows the air-to-air heat exchanger to pre-cool the hot incoming air, transferring heat to the cold air returning from the evaporator.
- Pre-cooling the inlet air reduces cooling load on the refrigerant, decreasing the size and energy consumption of the refrigeration circuit and increasing total system longevity.
- Cabinet is constructed from two-tone galvanized sheet metal, designed with ease of access in mind, protecting internal components from the elements and simplifying routine maintenance.

CONDENSER

- High Fin Tube Condenser is coated with blue plastic film specially designed to prevent corrosion from Ammonia, Water, and Ferrous oxide, common in operating environments, caused by waste water and facility contamination.

HOT GAS BYPASS VALVE

- Standard Hotgas Bypass Valves are replaced with advanced mechanical designs, allowing linear control of system dew point within +/- 0.10 ° C variance, preventing ice formation, fluctuations in outlet moisture.

CONTROL PANEL

- Advanced control panel allows quick access to real time data and diagnostics to ensure dryer operates at customer's precise requirements .
- NEW FEATURE: After an automatic shutdown, an intergrated heat sensing switch restarts the machine when temperatures return to normal - reducing downtime and maintaining consistent performance.

COMPRESSOR

- scroll compressors, which are hermetically sealed and equipped with anti-vibration mounts and overload protection. Scroll compressors reduce full load energy consumption by 20% compared to piston designs and improve the longevity of the refrigeration circuit.

SAFETY FIRST — ENVIRONMENTAL FRIENDLY

- Utilizes CFC R407C refrigerant in compliance with the Montreal Protocol
- Heat Exchanger is PED approved
- Electronic components comply with CE standard

LOW ENERGY CONSUMPTION



Aluminum Heat Exchangers



Product Specifications -APD Series

Model	Rated Flow			Refrigerant	Power	Voltage
	m ³ /h	m ³ /min	cfm		kw	
APD480	510	8.5	300	R407C	1.13	230/1/50
APD660	660	11	388	R407C	2.3	230/3/50
APD900	840	14	494	R407C	3	400/3/50
APD1080	1080	18	635	R407C	3.8	400/3/50
APD1320	1320	22	777	R407C	4	400/3/50
APD1800	1800	30	1059	R407C	5	400/3/50
APD2160	2160	36	1271	R407C	6	400/3/50
APD2700	2700	45	1589	R407C	7	400/3/50
APD3300	3300	55	1942	R407C	8	400/3/50
APD3900	3900	65	2295	R407C	9.8	400/3/50
APD4320	4320	72	2542	R407C	11.3	400/3/50
APD5280	5280	88	3106	R407C	15	400/3/50
APD6480	6480	108	3812	R407C	17	400/3/50
APD7920	7920	132	4660	R407C	19	400/3/50

Rated Flow Capacity – Compressed air inlet: 7 barg and 45°C; ambient air temperature: 35°C; . At rated conditions, pressure drop is less than 0.26bar.

Correction Factor For Different Working Conditions

Operating Pressure -F1 bar	4	5	6	7	8	9	10	11	12	13	14
Factor 1	0.77	0.86	0.93	1	1.05	1.08	1.1	1.12	1.13	1.14	1.15
Inlet Temperature - F2 °C	35	40	45	50	55	60	65				
Factor 2	1.21	1.1	1	0.8	0.7	0.6	0.55				
Ambient Temperature - F3 °C	25	30	35	40	45	50					
Factor 3	1.15	1.11	1	0.95	0.85	0.75					
Pressure Dew Point - F4 °C	3	5	7	10							
Factor 4	1	1.1	1.21	1.38							

Model	Inlet/ Outlet	Dimensions (mm)			Weight	Recommended Filters	
	BSP-F	L	W	H	kg	Prefilter	After Filter
APD480	1.1/2"	470	800	800	85	SF0370M	SF0370H
APD660	2"	760	800	1175	135	SF0515M	SF0515H
APD900	2"	900	1050	1440	150	SF0745M	SF0745H
APD1080	2"	900	1050	1440	180	SF0745M	SF0745H
APD1320	2.1/2"	900	1050	1440	280	SF1060M	SF1060H
APD1800	3"	900	1050	1440	300	SF1280M	SF1280H
APD2160	3"	900	1050	1440	330	SF1280M	SF1280H
APD2700	DN100	1150	1550	1650	450	SF1650M	SF1650H
APD3300	DN100	1150	1350	1650	500	SFL2200M	SFL2200H
APD3900	DN100	1150	1350	1650	600	SFL2200M	SFL2200H
APD4320	DN100	1150	1350	1650	650	SFL2900M	SFL2900H
APD5280	DN150	1150	1800	2050	800	SFL3700M	SFL3700H
APD6480	DN150	1150	1800	2050	900	SFL4400M	SFL4400H
APD7920	DN200	1150	2200	2100	1150	SFL5100M	SFL5100H

Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.