

SCHULZ

Air Dryers ADS



NON CYCLING AIR DRYERS

The ADS Schulz line of air dryers was designed to facilitate inspection and maintenance operations. The panels are easily removable and allow immediate access to internal components. ADS Schulz dryers are equipped with a quick-disconnected automatic drain valve which does not require any special tools for maintenance and cleaning.

PERFORMANCE

ADS Schulz dryers have excellent performance, even in situations where ambient and inlet temperatures are elevated.

ECONOMY

ADS Schulz dryers are designed to match the displacement of the air compressors, consequently, it is not necessary to oversize the dryer, resulting in savings in energy consumption.

FUNCTIONALITY

The dryer's operation is monitored by an electronic controller which digitally indicates the temperature and dew point, controls the drain valve through a timer, and the condenser fan through a probe. The refrigerant is circulated through the system using high-efficiency compressors. These compressors have totally new design that brings low levels of power consumption and high dependability.

Schulz non-cycling compressed air dryers have been developed for applications with inlet and room temperatures up to 100 °F. Removable panels facilitate easy and quick access to internal components. With an integrated electronic panel, this dryer is an extremely cost-effective option.



SELECT THE BEST OPTION FOR YOUR COMPANY!

Correction factor for operating pressure changes									
Inlet air pressure	psig	60	80	100	120	140	160	180	203
	barg	4	5.5	7	8	10	11	12	14
Factor (F1)		0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27

Correction factor for ambient temperature changes								
Ambient temperature	°F	≤80	90	95	100	105	110	115
	°C	≤27	32	35	38	40	43	45
Factor (F2)		1.10	1.07	1.04	1.00	0.93	0.83	0.70

Correction factor for inlet air temperature changes						
Air temperature	°F	≤90	100	110	122	130
	°C	≤32	38	43	50	55
Factor (F3)		1.11	1.00	0.80	0.65	0.53

Correction factor for DewPoint changes					
DewPoint	°F	38	41	45	50
	°C	3	5	7	10
Factor (F4)		0.92	1.00	1.7	1.25

Select the best air dryer:

$$\text{Minimum Dryer Flow} = \frac{\text{Inlet Flow}}{F1 \times F2 \times F3 \times F4}$$

These specifications are measured at the following conditions: Ambient temperature 38 °C (100 °F), Air inlet pressure at 7 barg (100 psig) and 38 °C (100 °F), and dew point at 5 °C (41 °F). Maximum operating conditions: Ambient temperature 45 °C (113 °F), air inlet temperature 55 °C (131 °F), and inlet pressure 14 barg (203 psig).

Model	Flow			Connections in/out	Nominal Air Pressure	Máx. Air Pressure	Voltage	Nominal	Wire	Refrigerant Type	Dimensions	Weight
	scfm	l/min	m³/h		psig (barg)	psig (barg)	V	A	AWG	type	HxWxL / AxLxC	lb (kg)
ADS 10	10	283	17	3/8" NPT-F	100 (7)	232 (16)	115/1/60	2,5	14GA	R134a	17.1/8" x 12.3/16" x 12"	46 (21)
ADS 15	15	425	25	3/8" NPT-F			115/1/60	2,6	14GA			48 (22)
ADS 20	20	566	34	1/2" NPT-F			115/1/60	2,7	14GA		18.11/16" x 14.9/16" x 18.11/16"	55 (25)
ADS 35	35	991	59	1/2" NPT-F			115/1/60	3,2	10GA			62 (28)
ADS 50	50	1.415	85	1/2" NPT-F			115/1/60	3,4	14GA			70 (32)
ADS 75	75	2.123	127	1" NPT-F		203 (14)	115/1/60	5,1	10GA	R407C	29.1/8" x 13.9/16" x 15.3/8"	75 (34)
ADS 100	100	2.830	170	1-1/4" NPT-F			115/1/60	8,0	14GA		29.1/8" x 13.9/16" x 16.5/16"	86 (39)
ADS 125	125	3.538	212	1-1/4" NPT-F			115/1/60	7,6	10GA			88 (40)
ADS 150	150	4.245	255	1-1/2" NPT			115/1/60	7,7	14GA		34.13/16" x 21.7/8" x 22.13/16"	90 (41)
ADS 175	175	4.953	297	1-1/2" NPT-F			115/1/60	7,7	10GA			119 (54)
ADS 220	220	6.226	374	1-1/2" NPT-F			230/1/60	5,2	14GA		38.3/8" x 21.7/8" x 24.5/8"	123 (56)
ADS 300	300	8.490	509	2" NPT-F				5,9	10GA			207 (94)
ADS 375	375	10.613	637	2" NPT-F				9,1	6GA		43.1/2" x 26.3/16" x 28.9/16"	212 (96)
ADS 480	480	13.584	815	2-1/2" NPT-F				9,4	6GA			317 (114)



HIGH TEMPERATURE AIR DRYERS

Schulz SMH High Temp Dryers eliminate the need for separate aftercooler and moisture separators, conserving valuable floor space. This also means less equipment to install and maintain. Plus, it saves energy normally lost with an aftercooler. With SMH High Temp Dryers it is no longer necessary to upsize the dryer compensate for. High inlet temperature or high ambient temperature conditions. Schulz SMH dryers are designed to accept up to 194 F inlet air temperatures and operate in 113 F ambient conditions. For proper sizing to required dew points, refer to the Nominal CFM Rating performance table below.

STANDARD FEATURES

- Built in aftercooler circuit with separate drain
- Lower pressure drops
- Energy efficient refrigeration compressors
- All units run at less than 70 db(A) sound levels
- DMC electronic controllers operate each dryers



MODEL	Nominal CFM ratings*			Connections in/out	Flow CFM	Heat Rejection btu/h	Electrical Voltage	Nominal Voltage	Refrigerant Type	Dimensions (inch)			Weight lb
	50 PDP	45 PDP	41 PDP							L	H	W	
SMH-030-UP-TD	28	26	21	1/2" NPT-F	2700	2700	115/1/60	4.7	R134a	16,8	16,4	25,6	73
SMH-040-UP-TD	42	39	32	1/2" NPT-F	2770	2770	115/1/60	4.7	R134a	16,8	16,4	25,6	75
SMH-050-UP-TD	64	59	48	1" NPT-F	3380	3380	115/1/60	7.1	R134a	16,8	16,4	25,6	82
SMH-075-UP-TD	88	81	66	1-1/4" NPT-F	4950	4950	115/1/60	7.5	R134a	17,5	17,3	35,4	99
SMH-100-UP-TD	113	104	85	1-1/4" NPT-F	6800	6800	115/1/60	9.4	R134a	17,5	17,3	35,4	108
SMH-150-UP-TD	159	147	120	1-1/4" NPT-F	13490	13490	115/1/60	13.0	R407C	18,5	20,1	35,4	135

*Nominal CFM conditions are: 50 PDP at +176F inlet Air, 100 PSIG and 90 F ambient conditions.

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