

DA Series Refrigerated Air Dryer

DA Series Dryers combine the newest technology in heat transfer with Airtek's proven refrigeration system. Designed to provide the best combination of performance and economy, the DA Series Dryer is the best choice when initial cost and/or space constraints are part of the decision making process. Available in models from 10 to 625 SCFM, Airtek quality and performance are inherent in the DA design and manufacturing process. The DA Series dryer (60 to 625 SCFM) incorporate an intergrated heat exchanger with



Micro Mesh[™] separator. These heat exchangers enable the package to be built on a smaller footprint.

All components are housed in a rugged, yet attractive powder coated cabinets to complete the package that offers economic value with Airtek's proven performance and reliability. For maximum reliability, it is recommended that a particulate filter be installed before the DA Series Dryer.

Drains

Airtek's DA Series dryers (60-625 scfm) come standard with automatic timed drains. These solid state drains offer adjustable drain time.

Environmentally Friendly

All Airtek DA Series Dryers use Environmentally friendly R-134A refrigerant

Simple Controls

The solid state DA Series (60-625 scfm) control panel consists of easy-to-read LED indicators for key dryer functions including Power-On, Dryer-Running, and High Evaporator Temperature.

Power On	Drain
Dryer Run	
High Temp. (Steady) Change Element (Blinking)	Drain Open 💿
High/Low Ref. Shutdown	Drain Alarm
Start/Stop	Drain Test



Typical Air and Refrigeration Flow

DA Series Refrigerated Air Dryer

DA Series Non-Cycling Refrigerated Dryer													
	Capacity @			ight	Connections								
Model	39°F DP SCFM	Ref HP	Len Inches	igth (mm)	Wic Inches	lth (mm)	Heig Inches	ght (mm)	Lbs.	(Kg)	In Out Inch (FNPT)	In Out (mm)(FNPT)	
DA-10	10	1/6	18"	(457)	15"	(381)	14"	(356)	71	(32)	1/2"	(12.7)	
DA-20	20	1/6	18"	(457)	15"	(381)	14"	(356)	74	(34)	1/2"	(12.7)	
DA-30	30	1/4	18"	(457)	15"	(381)	14"	(356)	77	(35)	1/2"	(12.7)	
DA-40	40	1/4	18"	(457)	15"	(381)	14"	(356)	79	(36)	1/2"	(12.7)	
DA-60	60	1/3	21"	(533)	22 5/8"	(575)	25"	(635)	100	(45)	1"	(25.4)	
DA-80	80	1/2	21"	(533)	22 5/8"	(575)	25"	(635)	118	(54)	1"	(25.4)	
DA-100	100	1/2	21"	(533)	22 5/8"	(575)	25"	(635)	123	(56)	1 1/2"	(38)	
DA-125	125	3/4	21"	(533)	22 5/8"	(575)	25"	(635)	151	(59)	1 1/2"	(38)	
DA-150	150	3/4	21"	(533)	22 5/8"	(575)	25"	(635)	176	(80)	1 1/2"	(38)	
DA-200	200	1	29"	(737)	25 1/4"	(641)	35 1/2"	(902)	194	(88)	1 1/2"	(38)	
DA-250	250	1 1/2	29"	(737)	25 1/4"	(641)	35 1/2"	(902)	201	(91)	1 1/2"	(38)	
DA-325	325	1 1/2	29"	(737)	25 1/4"	(641)	35 1/2"	(902)	219	(98)	2"	(50.8)	
DA-400	400	2	45 1/2"	(1156)	27 3/4	(705)	35 1/2"	(902)	358	(162)	2"	(50.8)	
DA-500	500	3 1/2	45 1/2"	(1156)	27 3/4"	(705)	35 1/2"	(902)	363	(165)	2"	(50.8)	
DA-625	625	3 1/2	45 1/2"	(1156)	27 3/4"	(705)	35 1/2"	(902)	370	(168)	2"	(50.8)	

1. Rated conditions meet recommended Standard NFPA/T3.27.2-198 (ANSI B93, 45M) and CAGI Standard No. ADF 100 for Class H 33°F - 39°F (1°C - 4°C) pressure dew point, are based on 100 PSIG (6.9 Bar) inlet air pressure, 100°F (38°C) inlet air temperature, 85°F (29°C) cooling water temperature and 100°F (38°C) Ambient air temperature. Maximum air side pressure drop is 5 psi (0.3 Bar).

2. All weights are approximate, for exact weights of DA Dryers call factory.

INLET AIR PRESSURE CORRECTION								AMBIENT AIR TEMPERATURE CORRECTION									INLET AIR TEMPERATURE CORRECTION					
		50 3.5	75 5.2	100 6.9	125 8.6	150 10.3		3	TEMP ^o F ^o C	90 32	100 38	110 43	-	-	-	C	TEMP ^o F oC	80 27	90 32	100 38	110 43	120 49
FACTOR	R	0.8	0.9	1	1.02	1.05			FACTOR	1.05	1	0.9	-	-			FACTOR	1.5	1.22	1	.83	.69
EX	EXAMPLE CONDITION							EXAMPLE CALCULATIONS														
ES/ECP	500	COR	RECT	ED F	OR:																	
Inlet Pressure Inlet Temperature Ambient Tempera	Inlet Pressure						CORRECTED CAPACITY = STANDARD CAPACI = 520 SCFM (13.9 Nm ²) = 329 SCFM (8.8 Nm ³)									, , ,		.69)				
Standard Equipment											Optional Equipme											
R-134A Refrigerant								Fan Cycling Switch (60-625 scfm)									Pre-Filter / Particulate (Recom					

3 Micron Coalescer (10-40 scfm) Micro Mesh[™] Separator (60-625 scfm) Hot Gas Bypass Valve Expansion Valve (60-625 scfm) Crankcase Heater (200-625 scfm) Scroll Compressor (500-625 scfm) High/Low Refrigerant PressureShutdown (80-625 scfm)



Float Drain (10-40 scfm) Timed Drain with ISO Strainer (60-625 scfm) Power On Light (60-625 scfm) Start/Stop Switch (60-625 scfm) High Evaporator Temp Light **Dryer Run Light**

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Patents: Refrigerated Dryers 5, 207, 072; 5,099, 5,062, 571. Twin Tower Dryers Using Multi Port Feature, 6,099,620. The equipment indicated in the catalog is meant for use in operating "compressed air driven" apparatuses. At no time should any Airtek equipment be used for breathing air situations unless all government regula-tions regarding breathing air are met.

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nmended) After-Filter / Coalescing Ambient Filter **3-Valve Bypass**