



AFTER COOLERS SEPARATORS & DRAINS



Nortek Belair After Coolers, Separators & Drains

AIR COOLED AFTER COOLER

Features:

- ◆ Advanced Technology Designs
- ◆ Up to 60% Smaller than Conventional Fin and Tube Designs
- ◆ Rugged Bar & Plate Design
- ◆ Reduced Air Side Fouling
- ◆ Competitive Prices
- ◆ Shipments Available From Stock

Specifications

RATINGS:

Maximum Working Pressure 250 PSI

Maximum Working Temperature 250° F

MATERIALS:

CoolerAluminum

Shroud Powder Painted Steel

Fan Guard Linc Plated Steel

Fan Blade Polypropylene Blades Aluminum Hub

Mounting Brackets Powder Painted Steel

Motor Specifications

Model Size	HP RPM	Motor Frame	Single Phase			Three Phase			
			Voltage	HZ	Full Load Amps 230 V	VOLTAGE	HZ	Full Load Amps 230 V	
CAA-130	1/3 3450	IEC 63	115/230	60	2.6	208-230/460	60	1.2	
						200/220			
						380/440			
CAA-225	1/2 3450	IEC 71	115/230	60	3.4	208-230/460	60	1.2	
						200/220			
						380/440			
CAA-450	1/2 1725	NEMA 56C	115-230/460	60	4.4	208-230/460	60	2.0	
						190/200 208/220			
						380/400 416/440			
CAA-800	1 1725	NEMA 56C	115-230/460	60	6.4	208-230/460	60	3.4	
						190/200 208/220			
						380/400 416/440			
CAA-1400	2 1725	NEMA 56C	115/230	60	10	208-230/460	60	6.2	
						190/200 208			
						380/400 416			
CAA-2000	5 1725	NEMA 184TC	230	60	23	208-230/460	60	13.4	
						190/200 208			
						380/400 416			
CAA-3000	7.5 1725	NEMA 213TC	Consult Factory			208-230/460	60	19.2	
						190/200 208			
						380/400 416			
CAA-3500	7.5 1725	NEMA 213TC					208-230/460	60	19.2
							190/200 208		
							380/400 416		
CAA-4500	10 1725	NEMA 213TC				208-230/460	60	25.0	
						190/200 208			
						380/400 416			

*Electric motors are TEFC and are not thermally protected.

*Actual rating may vary with motor brand. Check motor nameplate for actual rating.

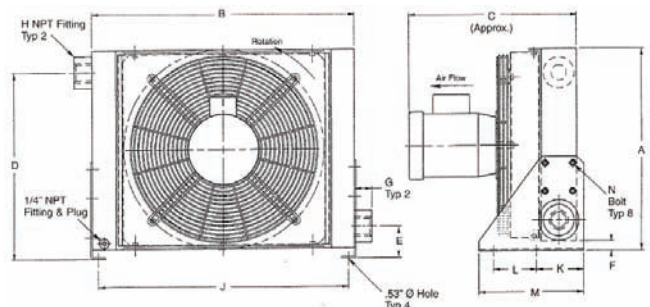
*Motor RPM is reduced by 1/6 for 50 Hz service.

Air Motor Data

Model Number	Air Pressure To Motor (PSI)	Motor Air Consumption (CFM)	Air Motor Connection Size	FAN RPM
CAA-130	30	10	1/4" NPT	3450
CAA-225	60	17	1/4" NPT	3450
CAA-450	40	25	1/4" NPT	1725
CAA-800	40	25	1/4" NPT	1725
CAA-1400	50	70	1/2" NPT	1725
CAA-2000	60	150	1 1/4" NPT	1725
CAA-3000	80	200	1 1/4" NPT	1725
CAA-3500	80	200	1 1/4" NPT	1725
CAA-4500	100	240	1 1/4" NPT	1725

*DO NOT EXCEED fan RPM listed above. *Air pressure to motor MUST be regulated and lubricated.
*Mufflers are included with all motors.

Dimensions



Nortek Belair After Coolers, Separators & Drains

Model Size	A	B	C (Approx.)	E	F	G	H (NPT)	I	J	K	L	M	N	NET (Approx.)	Weights Shipping (Pounds)
CAA-130	12.64	15.94	14.72	10.86	2.52	0.75	1.18	1.00	14.65	3.94	3.50	8.19	M8x10 Bolt	30	40
CAA-225	16.30	19.88	15.59	14.53	2.52	0.75	1.77	1.50	18.66	3.94	3.50	8.19	M8x10 Bolt	50	60
CAA-450	21.00	26.38	17.75	18.81	3.15	1.00	1.77	2.00	25.19	4.92	4.53	10.98	M10x20 Bolt	95	137
CAA-800	23.19	30.31	18.74	21.02	3.15	1.00	1.77	2.00	29.13	4.92	4.53	10.98	M10x20 Bolt	125	163
CAA-1400	27.72	37.00	22.60	25.23	4.33	1.85	1.77	2.50	37.80	5.91	7.87	16.00	M12x20 Bolt	195	240
CAA-2000	35.90	40.94	24.76	30.83	4.33	1.85	1.77	3.00	37.80	5.91	7.87	16.00	M12x20 Bolt	296	350
CAA-3000	37.44	42.91	29.84	30.55	10.91	2.08	1.77	4.00	43.62	5.39	7.87	15.47	M12x20 Bolt	320	380
CAA-3500	44.25	48.82	30.28	34.25	11.57	1.57	1.77	4.00	49.29	5.39	7.87	15.47	M12x20 Bolt	440	505
CAA-4500	57.87	52.76	33.82	43.98	17.56	3.35	2.00	4.00	50.55	7.80	10.00	20.00	3/4x1-1/2 Bolt	550	645

Sae 4-boli flanges may be converted to NPT by adding "-AD" to the end of the model code
 *Dimensions in inches, *Air connections may be reversed

*We reserve the right to make reasonable changes without notice.

SEPARATORS AND DRAINS

Specifications

Materials:

Moisture SeparatorAluminum Housing with Stainless Steel or Plastic Internals

RATINGS:

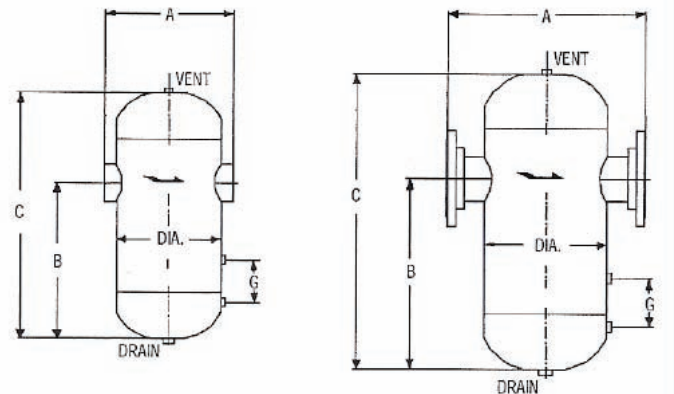
Maximum Working250 PSI
 Maximum Working Temperature150° F
 Minimum Recommended Temperature.....35° F

Dry-flow T Moisture Separator

Gas, laden with moisture, enters the inlet of the separator where a deflector plate directs the flow in a downward centrifugal motion. The entrained moisture is then separated out of the flow by a reduction in velocity. The separated liquid is sent to the outer walls of the separator and falls below the re-entrainment breaker plate where it is prevented for reentering the flow stream .A dry, clean flow then results, exiting upwards through the outlet of the separator.

With correct sizing and proper drainage, these separators are designed to eliminate 99% of all entrained liquids and particles that are 10 microns and larger in size.

The Model "T" Separators can be fabricated from carbon steel or stainless steel and are manufactured in accordance with the ASME Code Section VIII, Division I.



Dimensions and Weights

Pipe Size	Threaded Or Socket Weld	150# & 300# Flanged					NPT Drain	Threaded Or Socket Weld	150# Flanged	300# Flanged
								Design Customer Specification	Design 150 PSIG @ 450° F	Design 500 PSIG @ 650° F
	A	A	B	C	DIA	G	STD	Weight	Weight	Weight
1"	6 3/8"	10 1/2"	10 1/2"	16"	5 9/16"		1"	29	33	35
1 1/4"	6 3/8"	10 1/2"	10 1/2"	16"	5 9/16"		1"	30	35	37
1 1/2"	7 5/8"	11 1/2"	12 1/2"	19"	6 5/8"		1"	55	50	56
2"	7 7/8"	11 1/2"	12 1/2"	19"	6 5/8"		1"	57	55	59
2 1/2"		16"	15"	22"	8 5/8"		1"		100	110
3"		18"	18"	26"	10 3/4"	5 3/4"	1"		140	150
4"		20"	22"	31"	12 3/4"	5 3/4"	1 1/2"		195	220
5"		22"	26"	36"	14"	7 7/8"	1 1/2"		230	290
6"		24"	30"	41"	16"	7 7/8"	1 1/2"		350	380
8"		28"	37"	50"	18"	7 7/8"	2"		475	610

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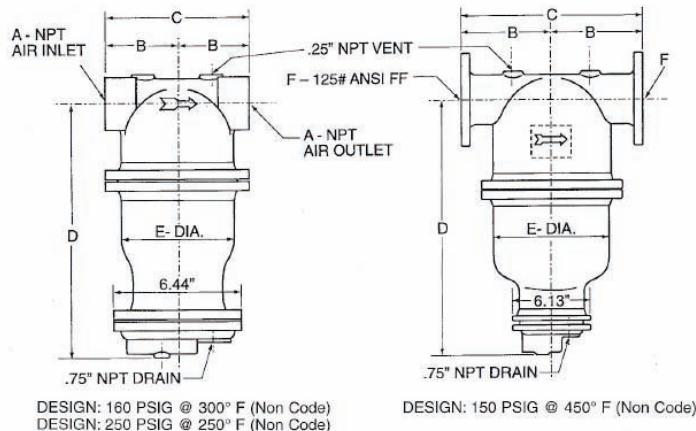
Dry-flow CS Moisture Separator

- ◆ Dry-Flo model CS separators are cast iron which meets ASTM-A-278 Class 35 standards.
- ◆ All pressure parts are designed and built to meet ASME Code, Section VIII for unfired pressure vessels.
- ◆ Removes over 99% of all particulates in excess of 10 microns in size over a wide range of flow rates.

- ◆ Compact trap design features stainless steel moving parts and permits easy access for service.
- ◆ Manual draining is also available
- ◆ Unit is lightweight-can be supported by just the piping.
- ◆ Optional heating element prevents freezing.

Dimensions and Weights

A	B	C	D	E	F	Weight
0.50"	2.75"	5.50"	11.88"	4.13"		22
0.75"	2.75"	5.50"	11.88"	4.13"		22
1.00"	3.00"	6.00"	13.63"	5.25"		27
1.25"	3.00"	6.00"	13.63"	5.25"		27
1.50"	3.75"	7.50"	13.63"	5.88"		34
2.00"	4.06"	8.13"	15.38"	6.63"		44
2.50"	4.68"	9.38"	19.38"	7.75"		68
3.00"	5.50"	11.00"	20.88"	9.13"		97
	7.13"	14.25"	20.38"	9.00"	3.00"	105
	7.94"	15.88"	23.50"	11.25"	4.00"	142



WATER COOLED AFTER COOLERS

Hot Compressed air leaving compressor contain large quantities of water in vapor form. By using an efficient Aftercooler and corresponding Nortek Belair separator and drain valve, over 50% of this water can be extracted from the air before it passes into the system, thereby greatly reducing condensation and maintenance problems. The capital cost of an aftercooler is easily recovered by the saving in equipment downtime and maintenance cost. An aftercooler is essential for a Membrane, Refrigerated or Desiccant dryer installation.

Standard Features

- ◆ Shell and Tube Reliability
- ◆ Forged Brass End Hubs (Optional Stainless Steel)
- ◆ Copper Tubes (Optional Copper Nickel, Stainless Steel)
- ◆ All Brass Tube Sheet and Shell Assemblies Help Reduce Galvanic Corrosion
- ◆ All Stainless Construction (Optional)
- ◆ Cast Iron End Bonnets (Optional Brass & Stainless Steel)
- ◆ Cleanable Air side

Specifications

Model	Capacity @ 100 PSIG		Max.W.P PSIG	Air Connections	Water connections	Dimensions L x Diameter (inches)	Recommended Options	
	2 STG	Rotary					Moisture Separator	Drain valve
60-WAF	40	60	200	1/1/2" NPT	1/1/2" NPT	28 x 4	65-LS	BTS-25-1
125-WAF	80	125	200	1 1/2" NPT	1 1/2" NPT	20 x 5	125-LS	BTS-25-1
225-WAF	150	225	200	1 1/2" NPT	1 1/2" NPT	36 x 5	200-LS	BTS-25-1
450-WAF	310	450	200	2 1/2" NPT	2 1/2" NPT	36 x 6	450-LS	BTS-50-1
700-WAF	440	700	200	3" NPT	3" NPT	45 x 6	600-LS	BTS-50-1
1000-WAF	640	1000	200	3" NPT	3" NPT	45 x 6	900-LS	BTS-50-1
1700-WAF	1250	1700	200	3" NPT	3" NPT	63 x 6	1500-LS	BTS-50-1
2500-WAF	1600	2500	200	3" NPT	3" NPT	72 x 6	2500-LS	BTS-75-1
3200-WAF	2100	3200	150	4" NPT	4" NPT	90 x 8	3500-LS	BTS-75-1
3500-WAF	2800	3500	150	4" FLG	4" FLG	80 x 12	3500-LS	BTS-75-1

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