

Pneumatic Equipment

Refrigerated Air Dryer (HA) Completed with After Cooler (RAA Series)

Ordering Code

Model	Flow rate	Cooler
RAA : Refrigerated air dryer	05 : 0.6Nm ³ /min 10 : 1.2Nm ³ /min 15 : 1.7Nm ³ /min 20 : 2.5Nm ³ /min 30 : 3.8Nm ³ /min 50 : 6.8Nm ³ /min 75 : 8.5Nm ³ /min 100 : 13.0Nm ³ /min 150 : 17.0Nm ³ /min 200 : 23.0Nm ³ /min 250 : 27.0Nm ³ /min 300 : 32.0Nm ³ /min 400 : 45.0Nm ³ /min	NA : Without after cooler HA : Completed with after cooler HI : High pressure type

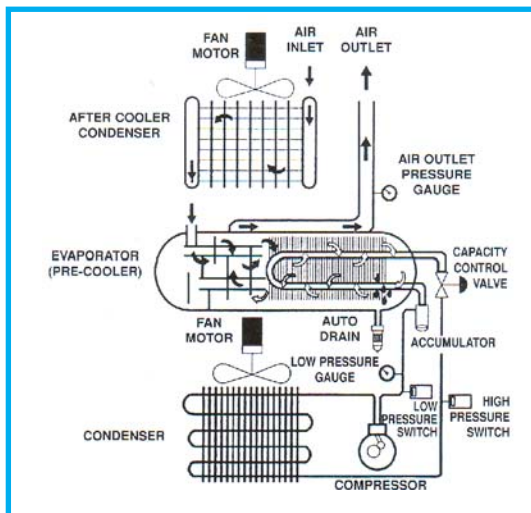


Specifications

Capacity		05	10	15	20	30	50	75	100	150	200	250	300	400
Flow Rate	NM ³ /Min	0.6	1.2	1.7	2.5	3.8	6.8	8.5	13	17	23	27	32	45
	SCFM	21	43	60	88	135	240	300	459	600	812	953	1130	1588
Inlet Temperature	HA	75°C												
Ambient Temperature		35°C												
Outlet air dew point		5 - 10 °C												
MAX. Operating Pressure		9.9kg/cm ² HI series (Max. 19kg/cm ²)												
Freon type	HA	R134a						R22 (R134a, R407c, R404a)						
Freon compressor capacity (HP)		1/5	1/3	1/2	3/4	1	1.5	2	3	4	5	6	7.5	8
Power source		240 VAC (Single phase)						240 VAC / 380 VAC / 440 VAC (Three phase)						
Port size		1/2"	3/4"		1"	1-1/2"	2"	2-1/2"	3"	3"	4"		5"	
Size (mm)	Height	470	600	600	760	760	760	1190	1200	1400	1500	1500	1550	1550
	Width	400	350	350	400	400	500	700	700	700	750	750	2000	2000
	Depth	500	630	630	820	935	935	1165	1265	1500	1650	1650	800	950
Weight	HA	27	45	50	70	110	130	210	270	400	460	480	570	890

Ambient Temperature °C	Inlet Temperature °C				55				65				75			
	Pressure Dew Point °C				5				10				15			
25	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	
30	1.12	1.20	1.25	1.07	1.20	1.25	0.97	1.15	1.20	0.89	1.04	1.19	0.96	1.14	1.22	
32	0.96	1.14	1.22	0.88	1.06	1.20	0.82	0.97	1.12	0.73	0.88	1.06	0.90	1.10	1.20	
35	0.90	1.10	1.20	0.82	1.00	1.16	0.75	0.90	1.07	0.67	0.82	0.99	0.80	1.02	1.13	
40	0.80	1.02	1.13	0.73	0.89	1.08	0.67	0.80	0.98	0.59	0.73	0.89	0.62	0.82	0.95	
	0.62	0.82	0.95	0.62	0.70	0.87	0.52	0.65	0.77	0.47	0.59	0.70				

Inlet Air pressure (kgf/cm ²)	3	4	5	6	7	8	9	10
Correction factor	0.73	0.79	0.87	0.93	1.00	1.08	1.13	1.19



The warm and moist compressed air from the compressor is pre-cooled by the after - cooler before being cooled and dehumidified by the pre - cooler. The air is then cooled to the set temperature of the evaporator due to the evaporation head of freon gas. The water vapour is cooled down to get condensed and becomes waterdrops, which accumulated in the electronic auto-drain before being automatically discharged out. The cooled and dehumidified compressed air reenters the pre-cooler, get warmed by the warm and moist (wet) compressed air, and becomes non-perspiring, dry compressed air over the pipe before going out of the air outlet. Adjust the cooling temperature of the evaporator by means of the capacity control valve to prevent the freezing of the evaporator.