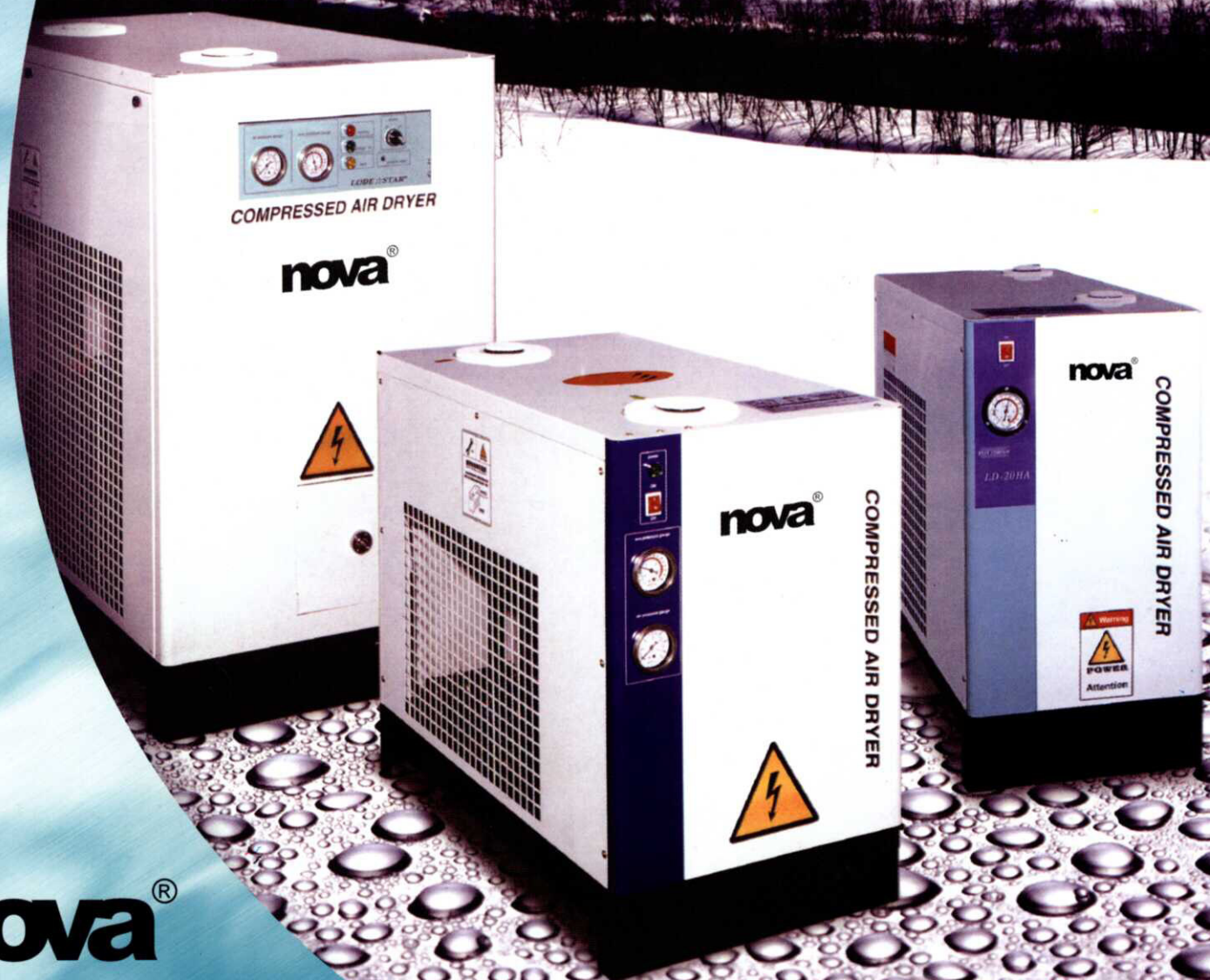


Refrigerant

Compressed Air Dryer

- *High temperature series*
- *Normal temperature series*



nova[®]

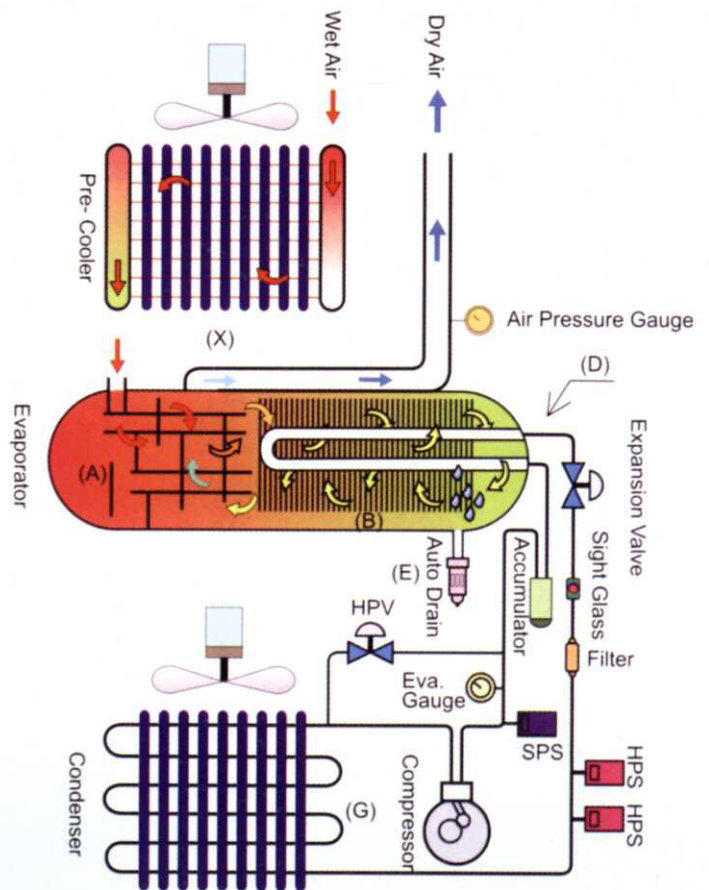
How They Work ?

Advanced compressed air enter an air-to-fan air heat exchanger(Pre-cooler)(X) it will be cooled by fan air (at the HA type only has).

The compressed air enter an air-to-air heat exchanger ((A) pre-cooler/re-heater) where it is cooled by the out going air. The air then enters an air-to-refrigerant heat exchanger(B) where it is cooled by the refrigeration system(G) to the desired dew point temperature. As the air is cooled in the heat exchanger, water vapour condenses into liquid droplets.

The air and water then enter separator(D) where liquid water is removed from the air system. An automatic drain (E) discharges the water to drain finally arges the water to drain finally the air passes back through the air-to-air heat exchanger and exits the dryer.

As long as the temperature of the compressed air as it travels through an air system, does not fall below the dew point temperature produced in the dryer, no more water vapour will condensed into troublesome liquid in downstream air lines.



HA/NA Series

Selection guide

Dryers are rated at 65°C(HA)/45°C(NA) saturated and 7kgf/Cm² inlet condition, 35°C ambient and an outlet pressure dew point of 2°C. When operating on a 50Hz.

To adjust dryer capacity for other conditions, use Table 1, 2, 3 and 4.

Example:

What is the capacity of a model 100 HA when the compressed air at the inlet to the dryer is at 10Kgf/Cm² and 40°C, the ambient temperature is 30°C and a 10°C dew point is desired ?

Answer:

13Nm³/Min x 1.19(Table 4) x 1.11(Table 1) x 1.02(Table 3)=17.51 Nm³/Min

Specifications:

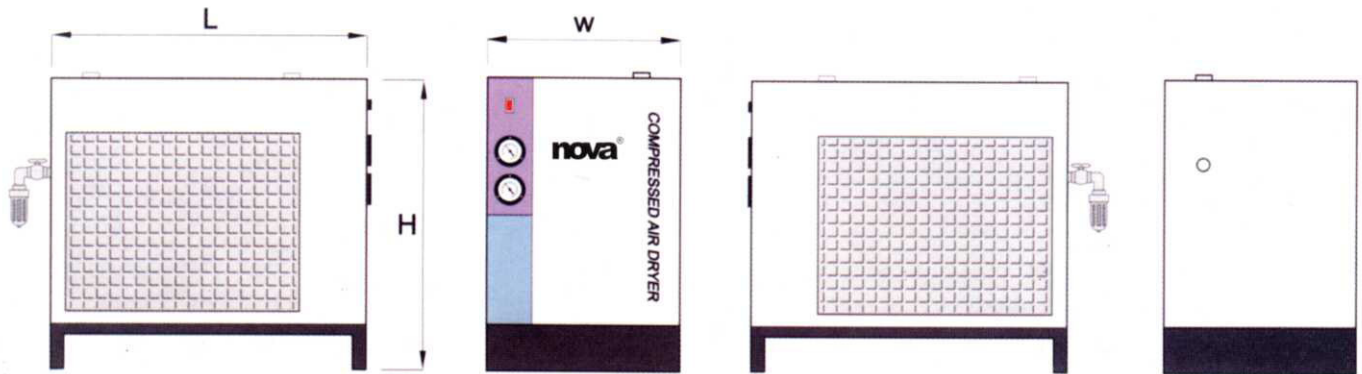


Table1: Correction Factors (Multipliers) for Inlet Air Temperature

Inlet Air Tem.	40	45	50	55	60	65	70	75	80
Multiplier(HA)	1.11	1.08	1.05	1.03	1.01	1.00	0.83	0.68	0.60
Multiplier(NA)	1.01	1.00	0.83	0.74	0.69	0.61	0.56	0.48	0.42

Table2: Correction Factors (Multipliers) for Dew Point Temperature

Dew Point Tem.	2	5	8	10
Multiplier	1.0	1.1	1.2	1.3

Table3: Correction Factors (Multipliers) for Ambient Temperature

Ambient Tem.	10	15	20	25	30	35	40	50	55
Multiplier	1.11	1.10	1.09	1.08	1.02	1.00	0.96	0.84	0.58

Table4: Correction Factors (Multipliers) for Inlet Air Pressure

Inlet Pressure	2	3	4	5	6	7	8	9	10
Multiplier	0.42	0.61	0.73	0.82	0.93	1.00	1.08	1.15	1.19

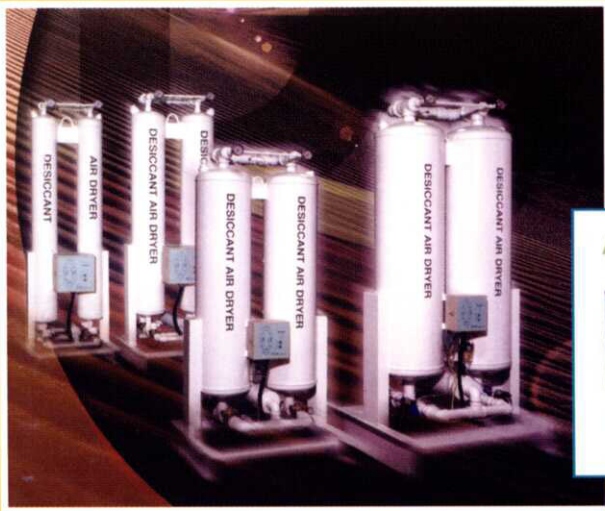
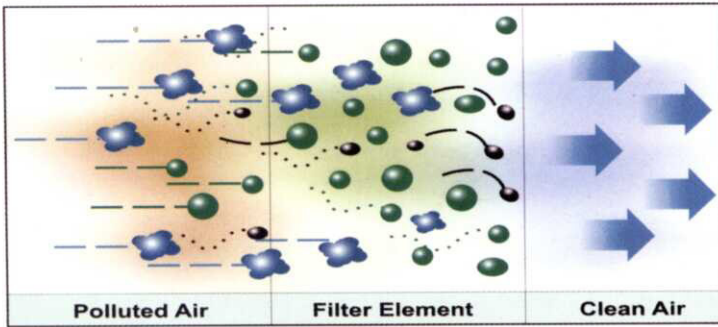
Model	5		10		15		20		30		50		75		100		150		200		250		300		400			
Frequency(Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60		
Flow Rate	Nm ³ /min		0.6	0.67	1.2	1.33	1.7	1.89	2.5	2.78	3.8	4.22	6.8	7.56	9	10.00	13	14.44	18	20.00	23	25.56	28	31.11	34	37.78	45	50.00
	SCFM		21	23	43	48	60	67	88	98	135	150	240	267	300	333	459	510	635	706	812	902	953	1059	1130	1256	1588	1764
Inlet Air Tem.	Working: 65°C(HA) / 45°C(NA)																											
Environment Tem.	Working: 35°C																											
Pressure Dew Point	2°C																											
Working Pressure	Working: 7 Kgf / cm ²																											
Refrigerant	R134a														R-22													
Power Supply	1 phase 220V														3 phase 220/380/440V													
Compressor Motor(HP)	1/5		1/3		1/2		3/4		1		1 1/2		2		3		4		5		6		7 1/2		8			
In/Outlet Conn.	1/2"		3/4"		3/4"		1"		1 1/2"		2"		2 1/2"		3"		3"F		4"F		4"F		4"F		5"F			
Type	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA	HA	NA
Physical Dimension (mm)	Height	470	390	600	600	650	600	760	650	750	750	780	800	1200	1000	1200	1000	1400	1150	1150	1300	1500	1300	1550	1400	1600	1500	
	Width	400	350	350	350	350	350	350	400	400	500	500	700	700	700	700	700	700	750	700	750	700	2000	2000	2400	2000		
	Depth	500	400	640	640	770	640	770	770	920	920	990	920	1270	1270	1270	1270	1515	1515	1665	1665	1665	1665	850	800	950	950	
Net Weight (Kg)	27	22	45	45	50	45	70	60	110	90	130	105	210	160	270	220	400	320	460	370	480	390	570	480	890	49		

Others voltages can be demanded to make as suitable your request for set unit on local.

Compressed Air Filter



MECHANISMS OF FILTRATION



Heatless Regenerative Type Desiccant Air Dryer RD Series

Application:



PSA Series Nitrogen Generator N_2



N2 Systemation Flow



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