

**MNC**

REFRIGERATED AIR DRYERS



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## MNC

### Refrigerated Air Dryers

#### Clean dry compressed air

Clean and dry compressed air is essential in every efficient and profitable manufacturing and process operation worldwide. Our vast experience includes food, beverage, chemical, laboratory, medical and natural gas applications.

Mattei understand your needs and carries the MNC range of high-performance, energy-saving compressed air and gas purification products to provide clean and dry compressed air and gases at an affordable price with unrivaled reliability.



#### SIMPLY SUPERIOR

Refrigeration dryers must be designed to handle the worst case operating condition they may encounter - the highest possible inlet temperature of the hottest day of the year.

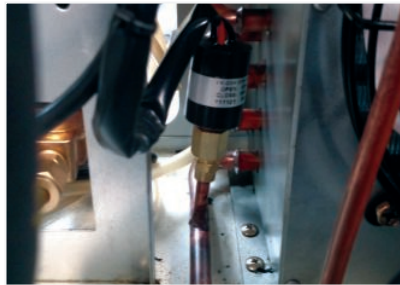
Mattei MNC refrigerated air dryers are built with this in the mind to provide years of reliable service.

- At the heart of the dryer is a 3 in 1 stainless steel braze plate heat exchanger that features the pre-cooler/re-heater, evaporator and moisture separator in one compact design.
- Highly efficient design provides on average pressure drop of less than 3 psid.
- The stainless steel design provides superior corrosion resistance, providing greater piece of mind.
- The larger models (from the MNC0250 460/3/60) utilize scroll compressors. Scroll compressors provide several benefits including greater energy efficiency and increased reliability over other types of refrigerant compressors.

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**SIMPLE MICROPROCESSOR - SIMPLE MICROPROCESSOR BASED CONTROL THAT PROVIDES DEW POINT TEMPERATURE, FUNCTIONALITY MONITORING AND TIMER DRAIN CONTROL.**



**OVERSIZED CONDENSER FOR HIGH AMBIENT TEMPERATURE - OVERSIZED CONDENSER USES A HIGH PRESSURE FAN SWITCH TO PROTECT REFRIGERATION CIRCUIT.**



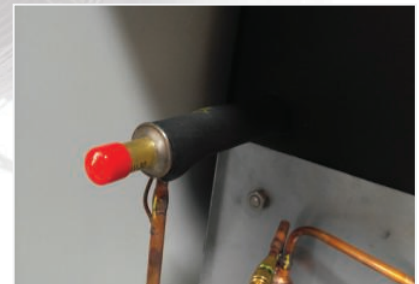
**A REFRIGERANT PRESSURE GAUGE IS CONVENIENTLY LOCATED ABOVE THE CONTROLLER TO PROVIDE OPTIMUM PIECE OF MIND.**



**ADJUSTABLE TIMER DRAIN STANDARD - TIMED SOLENOID DRAIN IS FULLY ADJUSTABLE AND EXTREMELY RELIABLE.**



**3 IN 1 PATENTED STAINLESS STEEL HEAT EXCHANGER PROVIDES MAXIMUM DURABILITY AND CORROSION RESISTANCE. THE ALL IN ONE INTEGRATED DESIGN REDUCES PRESSURE DROPS.**



**AUTOMATIC EXPANSION VALVE - THE TXV ENSURES STABLE DEW POINT PERFORMANCE EVEN IN CHANGING AMBIENT CONDITIONS.**

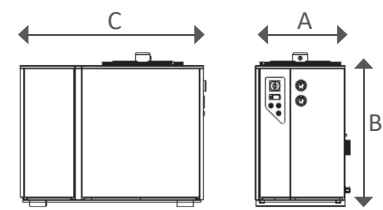


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MODEL	INLET & OUTLET CONNECTIONS <sup>(1)</sup>	RATED FLOW <sup>(2)</sup>	REFRIGERANT GAS	ABSORBED POWER <sup>(3)</sup>	DIMENSIONS (INCH)			APPROX WEIGHT	POWER SUPPLY (V/PH/60HZ)		
					A	B	C		115/1	230/1	460/3
MNC	NPT/FLG	scfm		kW	inch	inch	inch	lbs			
MNC-0015	½"	15	R134a	0.22	15	18	17	55	•		
MNC-0020	½"	20	R134a	0.23	15	18	17	62	•		
MNC-0030	½"	30	R134a	0.24	15	18	17	70	•		
MNC-0045	½"	45	R134a	0.25	15	18	17	77	•		
MNC-0055	¾"	55	R134a	0.47	15	20	19	84	•		
MNC-0085	¾"	85	R134a	0.49	15	20	19	92	•		
MNC-0110	1"	110	R134a	0.92	16	29	26	143	•		
MNC-0135	1"	135	R134a	0.92	16	29	26	143	•		
MNC-0175	1½"	175	R134a	0.96	16	29	26	152	•		
MNC-0215	1½"	215	R407c	0.94	16	34	30	196		•	
MNC-0250	1½"	250	R407c	1.05	16	34	30	222		•	
MNC-0250	2"	250	R134a	1.47	18	47	35	253			•
MNC-0340	2"	340	R407c	1.69	18	47	35	253		•	
MNC-0340	2"	340	R134a	1.47	18	47	35	256			•
MNC-0470	2"	470	R407c	2.50	18	47	35	297			•
MNC-0550	2½"	550	R407c	2.60	18	47	35	319			•
MNC-0725	2½"	725	R407c	3.46	18	47	35	397			•
MNC-0950	2½"	950	R407c	3.60	23	47	40	712			•
MNC-1150	3"	1150	R407c	5.04	23	47	40	771			•
MNC-1350	3"	1350	R407c	6.54	23	47	40	882			•
MNC-1750	4 FLG	1750	R407c	7.20	40	73	64	1433			•
MNC-2000	4 FLG	2000	R407c	7.20	40	73	64	1480			•

SPECIFICATIONS	MNC-0015 to 0725	MNC-0950 to 2000
Design operating pressure range	0 to 232 psig	0 to 189 psig
Maximum inlet temperature	158°F	158°F
Maximum ambient temperature	110°F (R407c models) or 122°F (R134a models)	



MNC-0015 - MNC-2000

PRESSURE CORRECTION FACTORS <sup>(5)</sup>																
Inlet air pressure	psig	58	72	87	100	115	130	145	160	175	190	204*	218*	232*		
Correction factor		0.72	0.82	0.92	1.00	1.06	1.09	1.11	1.15	1.18	1.19	1.21	1.23	1.26		

INLET TEMPERATURE CORRECTION FACTORS <sup>(5)</sup>																
Inlet air temperature	°F	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
Factor		1.27	1.19	1.09	1.00	0.91	0.78	0.71	0.63	0.56	0.52	0.48	0.44	0.40	0.36	0.33

AMBIENT TEMPERATURE CORRECTION FACTORS <sup>(5)</sup>							
Ambient temperature	°F	70	80	90	100	105	110
Factor		1.18	1.16	1.06	1.00	0.96	0.90

(1) ½" to 3" are NPT threaded connections, 4" and up with ANSI flanged connections. (2) Rated flow capacity for rating dryers are in accordance with ISO7183 (Option A2.) Compressed air at dryer inlet: 100 psig and 100F; ambient air temperature: 100F; operating on 60 Hz power supply. (3) Nominal absorbed power at rating operating conditions using 115/1/60 or 460/3/60 power supply (as applicable). For absorbed power at other voltages or conditions, contact info@matteicomp.com. (4) Specify voltage requirements when ordering. For absorbed power at other voltages or conditions, contact info@matteicomp.com for assistance. (5) To be used as a rough guide only. All applications should be confirmed by Mattei. Contact Mattei for sizing assistance. (6) 2 year warranty with pre-filtration and non-corrosive piping systems installed.