

**NEW !
THERMAL MASS REFRIGERANT
DRYERS**

HTMD

ENERGY SAVING





ENERGY SAVING REFRIGERANT DRYERS

Water vapour in compressed air systems will cause the following problems: piping corrosion, wear of pneumatic equipment, hydraulic leak of pneumatic cylinders. These can result in: lost production, uncontrollable manufacturing costs. Installing a High-Tech Mattei Dryer will avoid these effects.

Mattei HTMD refrigerant compressed air dryers are equipped with the following:

- Air/refrigerant copper heat exchanger complete with condensate separator containing stainless steel demister mesh
- air/air heat exchanger (standard starting from HTMD 12 model)
- separate condensate drain operated by a timer-operated solenoid valve with adjustable opening time (standard from HTMD 03 to HTMD 64)
- separate "intelligent" condensate drain which is activated only when liquid is present, thus avoiding any compressed air leaks (standard from HTMD 77 to HTMD 170)
- both types of condensate drains are fitted outside the canopy and are preceded by a valve, with obvious servicing advantages
- energy saving on/off regulation: when the air compressor works in on and off load cycles, the HTMD dryer will operate only when necessary thanks to its thermal mass refrigerant storage capacity

Mattei HTMD dryers are designed to deliver top performance 24 hours a day and to enable an easy maintenance.



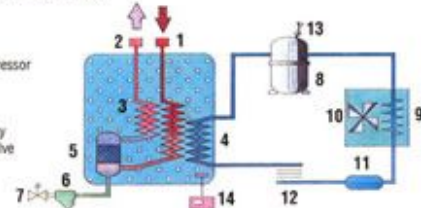
Condensate drainer with electronic level check (B)



Electronic condensate drainer with timer (A)

LEGEND

1. Inlet of wet compressed air
2. Outlet of dry compressed air
3. Air-air exchanger
4. Energy storage
5. Condensate separator
6. Mechanical filter
7. Condensate drain solenoid valve
8. Refrigerant compressor
9. Condenser
10. Cooling fan
11. Filter
12. Expansion capillary
13. Freon charging valve
14. Thermostat



Model		03	05	08	12	20	32	41	64	77	100	140	170	
Air flow at the inlet	30°C l/min	366	610	976	1458	2430	3870	4972	7727	9357	12179	17081	20692	
temperature of:	35°C l/min	300	500	800	1200	2000	3206	4103	6406	7702	10033	14010	17059	
	40°C l/min	243	405	646	996	1660	2698	3423	5316	6435	8319	11695	14146	
	45°C l/min	212	363	457	840	1400	2286	2854	4502	5386	6997	9560	11745	
Refrigerant		R 134 a												
Installed power	kW	0.12	0.18	0.28	0.28	0.4	0.62	0.61	0.93	0.98	1.38	1.52	2.25	
Required power maximum	kW	0.2	0.3	0.4	0.4	0.6	1	1	1.4	1.7	2.3	2.6	3.3	
Electric voltage	V/Ph/Hz	230±10% / 1 / 50											400±10% / 3 / 50	
Working pressure	bar	7												
Maximum working pressure	bar	16												
Compressed air connections	∅	1/2"BSP				3/4"BSP			1"BSP		1 1/2"BSP		2" BSP	
Condensate drainer with timer*	(A)	Available												
Electronic Condensate drainer*	(B)	Available (Type 101)												
Weight	Kg	24	25	28	33	72	90	118	150	180	218	314	330	
Height	mm	475	475	475	610	800	800	1000	1000	1080	1080	1300	1300	
Length	mm	350	350	350	350	585	585	550	550	705	1000	1025	1025	
Width	mm	421	421	421	422	488	488	745	745	745	745	745	745	
Distance between compressed air in/out connections	mm	214	214	214	222	427	427	516	516	538	538	550	550	

*Optional not included in standard setting up

1) Data refers to the free air delivery of the compressor at standard conditions 20°C and 1 bar absolute and at the following working conditions: dewpoint at pressure + 3°C, dewpoint at atmospheric pressure - 21°C, working pressure 7 bar, room temperature + 25°C, performance as per ISO 7183. 2) Power absorbed under normal operating conditions. 3) Power absorbed at maximum operating conditions, which means condensing temperature of + 55°C and evaporating temperature of + 7°C.

Correction factors in relation to relative pressure

Working pressure (bar)	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Multiplier K1	0.74	0.84	0.91	0.96	1	1.04	1.06	1.09	1.11	1.12	1.14	1.15	1.17	1.18

Correction factors in relation to the dew-point

Dew-point °C	3	5	7	9
Multiplier K2	1	1.12	1.24	1.38

Correction factors in relation to room temperature

Room temperature °C	25	30	35	40	43
Multiplier K3	1	0.95	0.89	0.83	0.79

Correct performance of the dryer (m³/h) = Normal capacity with compressed air inlet at 35 °C x K1 x K2 x K3

Ing. Enea Mattei S.p.A. reserve the right to change or replace the data contained in this publication, at any moment and without notice

ITALY
ING. ENEA MATTEI SpA
Strada Padana Superiore, 307
20090 VIMODRONE (Milano)
Tel +39 02253051 (16 linee) Fax +39 0225305243
E-MAIL: info@mattei.it
www.matteiaircompressors.com

SINGAPORE Representative Office Asia Pacific
ING. ENEA MATTEI SpA
No. 2 Kallang Pudding Road
#06-10, MacTech Industrial Building
Singapore 349307
Phone +65 6741 8187 - Fax. +65 6741 6826
E-MAIL: mattei@singnet.com.sg

GREAT BRITAIN
MATTEI COMPRESSORS Ltd
Admington Lane, Admington
Shipston-on-Stour - Warwickshire CV36 4JJ
Phone +44 1789 450577 - Fax +44 1789 450698
E-MAIL: info@mattei.co.uk

FRANCE
MATTEI COMPRESSEURS Sarl
Parc des Tuileries - 22 Rue de Derrière la Montagne
BP 215 - 77646 Chelles Cedex
Phone +33 1 60081212 - Fax +33 1 60085252
E-MAIL: info@mattei.fr

GERMANY
MATTEI KOMPRESSOREN
Deutschland GmbH
Schüttelgrabenring 3b, Haus 3 - 71332 Waiblingen
Phone +49 7151 5002560 - Fax +49 7151 5002565
E-MAIL: info@mattei-kompressoren.de

U.S.A.
MATTEI COMPRESSORS Inc
9635 Liberty Road, Suite E-J
Randallstown, MD 21133
Phone +1 410 5217020 - Fax +1 410 5217024
E-MAIL: info@matteicomp.com



Since 1994 Mattei operates with a quality system certification UNI EN ISO 9001