DryPower

refrigeration dryers
22-190 m³/min.

**Purifying your compressed air,
increasing your efficiency.**

MTA®

Cooling, conditioning, purifying.

DryPower

DryPower features a modular design whereby multiple heat exchangers ensure optimum performance throughout its broad capacity range. The highly efficient DRYMODULE exchangers allow lowest dew point levels in all conditions with minimum energy consumptions. The extremely compact packaged design simplifies positioning and maintenance, whilst sophisticated microprocessor technology and scroll compressors offer the User the most advanced technical solutions.

Easy to install

DryPower's compact design and thoughtful component layout provide extreme installation flexibility. The single-sided entry for the condenser air flow and frontal access for all controls and refrigeration components ensure that DryPower ocupies less valuable plant floor space.

Easy to operate

A combination of analogue gauges and digital displays allows DryPower's operation to be easily monitored at a glance. Microprocessor-based controls provide warnings and alarms ensuring correct dryer operation. Numerous remote monitoring and operation options are also offered.

Easy to maintain

Easily removable panels allow quick access to the interior components. The refrigeration circuit itself is in a separate compartment at the dryer front. The control enclosure is hinged for easy troubleshooting. Removable condenser inlet air filters (optional) facilitate cleaning.

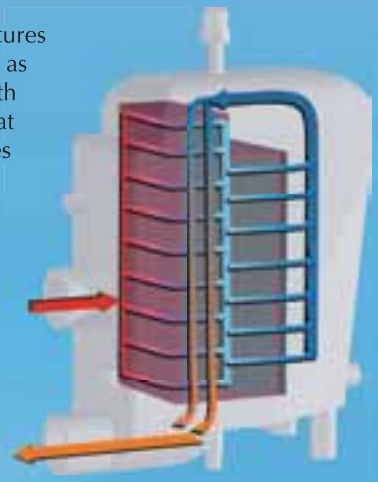
Cooling, conditioning, purifying.

Drymodule Heat Exchanger

3-in-1 configuration:
The air-to-air exchanger, evaporator and demister are housed in a single aluminium module. This ensures a very compact, robust and energy efficient design.

Modular design:
Each DryPower dryer features multiple *DRYMODULE* exchangers, up to a maximum of 10. Maintenence is simplified and service life is increased.

PERMASEP condensate removal:
DRYMODULE's unique cross-flow design features *PERMASEP*, with the condensate being separated as soon as it is created, along the entire cooling path (in traditional solutions all condensate is removed at the end of the cooling circuit). *PERMASEP* improves dew points and reduces energy consumptions.



Low air velocities:
DRYMODULE's wide air circuit results in low air velocities, improving condensate removal and reducing pressure drops.

Oversized demister separator:
DRYMODULE's demister separator is up to 5 times larger than typical solutions, improving consensate separation. Unlike centrifugal separators, the demister configuration works perfectly even at reduced air flows.

Scroll compressor technology

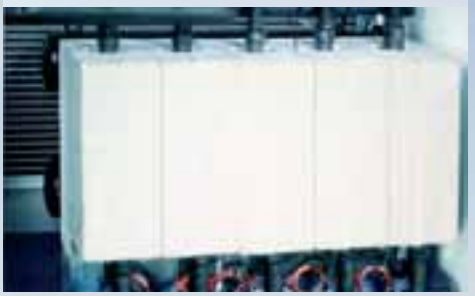
Scroll compressors (standard from 77 m^3/min) offer energy savings of around 20%. The extremely robust design tolerates liquid refrigerant returns, reducing the chance of compressor damage. Reduced vibrations increase dryer longevity, and there is no need to pre-heat the dryer at start-up.

Efficient and environmental

The high efficiency *DRYMODULE* heat exchanger coupled with non-ozone depleting R-407C refrigerant help make DryPower the best choice for the environment. Staging of twin compressors (MG 150-190) provide notable partial load energy savings.

Robust design

DryPower's high quality construction materials ensure a long service life. The *DRYMODULE* heat exchanger is made entirely in aluminum. Air manifolds are in electro-coated steel. The galvanized steel panels are powder-coated. The dryer is IP54 protected.



Cooling, conditioning, purifying.

Advanced microprocessor technology

DryPower features MTA's advanced tDRY microprocessor control technology. A comprehensive digital display keeps the User fully informed, whilst extensive programming allows personalized dryer operation according to each individual need.
Maintenance operations are simplified, and remote Supervision can easily be actived.

- Digital display of the dewpoint.
- Digital display of the air inlet and outlet temperatures.
- Multi-level menus with multiple password protection and extensive programming possibilities.
- 15 worded or coded alarms ensuring faultless dryer operation.
- Condensate drain control and programming, including manual drain test function.
- Programmable User alarm.
- Service warning, informing User that preventive maintenance should be carried out.
- Possibility to choose between two dew points, allowing even higher energy savings when conditions permit it (eg. summer operation).
- Remote on/off function.
- Volt-free general alarm contact for remote alarm indication.
- Standard TTL serial interface.
- Possibility to connect the dryer to a supervisor system via RS485 (Modbus and other leading versions).
- Alarm history (memorizes the last 50 alarms).

Full range of options

DryPower offers the right solution for all individual needs:

- Air or water-cooled versions;
- Centrifugal fans;
- Copper fin air-cooled condenser.

iDRAIN condensate drain

MTA's unique iDRAIN condensate drain (patent pending), supplied as standard, automatically adapts its operation in zero-load conditions, as well as (on MG150-190) in partial load operation. The result is notable reductions in energy losses.

Furthermore the wide drainage orifice, which permits forced condensate drainage, ensures that the chance of impurities blocking the drain (a frequent danger on typical drains) is all but eliminated, and also reduces maintenance needs.

All models are also available with an electronic zero-loss drain.

Model	Airflow		Nominal absorbed power	Air connections	Overall dimensions (mm)				Weight (kg)
	m³/h	m³/min	kW		A	B	C		
							air	water	
MG 022	1.320	22,0	2,16	DN 80	660	1.351	1.400	1.264	244
MG 028	1.680	28,0	3,15	DN 80	660	1.351	1.400	1.264	254
MG 037	2.220	37,0	3,64	DN 80	660	1.351	1.400	1.264	276
MG 045	2.700	45,0	4,62	DN 100	712	1.263	1.400	1.264	318
MG 060	3.660	61,0	6,62	DN 100	910	1.940	1.447	1.310	380
MG 077	4.620	77,0	6,04	DN 150	910	1.940	1.447	1.310	526
MG 090	5.400	90,0	6,91	DN 150	910	1.940	1.447	1.310	551
MG 110	6.600	110,0	8,99	DN 150	910	1.940	1.447	1.310	624
MG 150	9.000	150,0	11,55	DN 200	930	3.000	2.079	1.927	1.077
MG 190	11.400	190,0	14,23	DN 200	930	3.000	2.079	1.927	1.102

Data refers to air-cooled model at the following conditions: air FAD 20 °C/1 barA, pressure 7 bar(g), ambient temperature 25 °C, air inlet temperature 35 °C, pressure dew point 3 °C, according to ISO 8573.1 standards.
Weights are net (without packing). The refrigerant used is R407C.

Maximum working pressure 14 bar g; maximum ambient temperature 46 °C (higher on request); maximum inlet temperature 65 °C.
Water-cooled units require a 20-45 °C cooling water inlet temperature. For differing conditions contact MTA.
Power supply: 400 V +/-10% / 3Ph / 50Hz (460 V +/-10% / 3Ph / 60Hz available on request).

The correction factors in the following table should be used as a guide only; for accurate selecion at conditions differing from the above the selection software should be utilised.

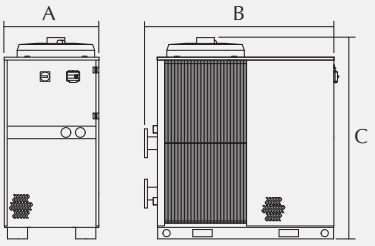
CAPACITY correction factors (indicative values): CAPACITY = RATED VALUE (7 barg) x K1 x K2 x K3 x K4.

working pressure	bar	3	4	5	6	7	8	9	10	11	12	13	14
correction factor	K1	0,67	0,80	0,88	0,94	1,00	1,05	1,09	1,13	1,16	1,18	1,21	1,23

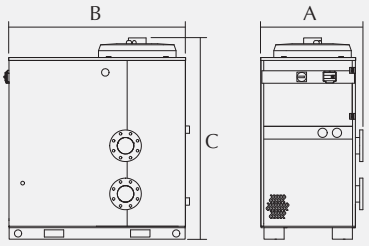
air inlet temperature	°C	30	35	40	45	50	55	60	65
correction factor	K2	1,26	1,00	0,82	0,67	0,55	0,47	0,45	0,43

ambient temperature	°C	20	25	30	35	40	46
correction factor	K3	1,06	1,00	0,94	0,88	0,82	0,74

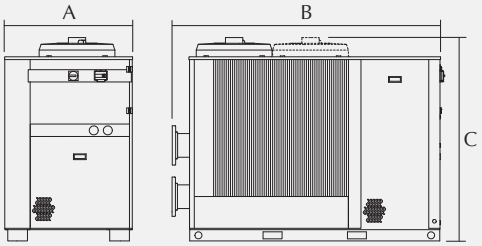
pressure dew point	°C	3	4	5	6	7	8	9	10
correction factor	K4	1,00	1,06	1,12	1,18	1,24	1,27	1,27	1,27



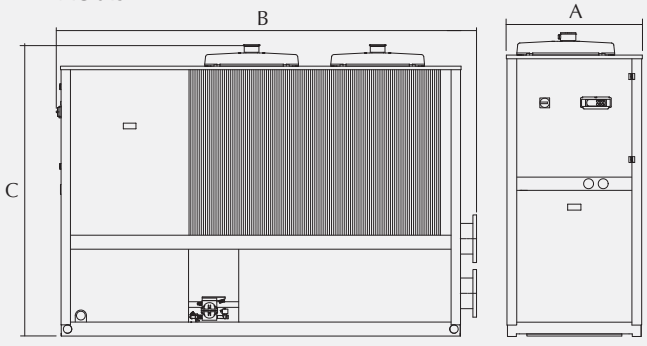
MG 022 - 037



MG 045



MG 060 - 110 (1 fan only for MG 060)



MG 150 - 190

Complete your compressed air treatment system with M.T.A. aftercoolers, separators, filters, adsorption dryers, drains, oil-water separators and chillers.

ENERGY FOR THE FUTURE

MTA was born over 25 years ago with a clear objective: improving mankind's relationship with two distinct natural resources, air and water, and optimising their transformation into energy sources. And as each application differs, so MTA offers a personalised energy solution perfectly aligned to each individual need. At MTA energy is our business, and improving your relationship with your energy is our aim.

STRATEGIC DIVERSIFICATION

MTA covers three distinct market segments. As well as Compressed Air & Gas Treatment solutions, MTA offers products for Industrial Process Cooling, as well as Air Conditioning solutions. MTA is renowned for the innovation it brings into each of these three sectors; in fact our strategic diversification offers our Customers unique benefits unseen in their individual fields.

FAR REACHING BUT ALWAYS CLOSE BY

MTA is present in over 80 countries worldwide. 8 MTA Sales Companies cover 4 continents. Expert knowledge and an accurate attention to application consultancy and service support guarantees that our Customers can look forward to long term peace of mind and an optimized energy solution. We always remain close to our Customers, so wherever you may be, we are close by.

www.mta-it.com

M.T.A. S.p.A.

Viale Spagna, 8 ZI
35020 Tribano (PD) - Italy
Tel. +39 049 9588611
info@mta-it.com

Compressed air treatment
Fax +39 049 9588612

Process cooling
Fax +39 049 9588661

Air conditioning
Fax +39 049 9588604

Milan branch office
Tel. +39 02 95738492

MTA worldwide

MTA is represented in over 80 countries worldwide. For information concerning your nearest MTA representative please contact M.T.A. S.p.A.

International Sales Companies:

MTA Australasia
Tel. +61 3 9702 4348
www.mta-au.com

MTA China
Tel. +86 21 5417 1080
www.mta-it.com.cn

MTA France
Tel. +33 04 7249 8989
www.mtafrance.fr

MTA Germany
Tel. +49 2163 5796-0
www.mta.de

MTA Romania
Tel. +40 368 457 004
www.mta-it.ro

MTA Spain
Tel. +34 938 281 790
www.novair-mta.com

MTA UK
Tel. +44 01702 217878
www.mta-uk.co.uk

MTA USA
Tel. +1 716 693 8651
www.mta-it.com

MTA®
Cooling, conditioning, purifying.

ISO 9001 BUREAU VERITAS Certification
Nº 220817

M.T.A. is ISO9001 certified, a sign of its commitment to complete customer satisfaction.

CE

M.T.A. products comply with European safety directives, as recognised by the CE symbol.

DMGYY001GE ed. 01/11 Replace the DMGYY001GD