

# DryPower VarioTwin

refrigeration dryers  
75-180 m<sup>3</sup>/min



pure energy



Purifying your compressed air,  
increasing your efficiency.



Cooling, conditioning, purifying.

# DryPower VarioTwin

There are many energy saving refrigeration dryer concepts on the market today. But only MTA's DryPower VarioTwin exactly matches the savings to the real dryer load across the full 0-100% load span. And all this in a compact and easy to use dryer solution, ideal for operation in even the most varied installations. Why compromise on your energy savings? Today MTA offers the solution.



## Easy to install

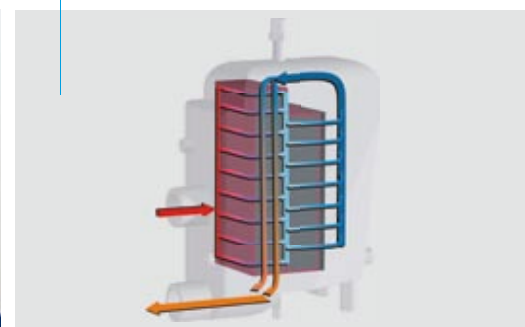
Compact design and thoughtful component layout provide installation flexibility. The single sided entry for condenser air and and front access for controls and refrigeration components allow DryPower VarioTwin to occupy less valuable plant floor space.

## Easy to use and maintain

The microprocessor's extensive display function simplifies the User interface. The refrigeration circuit and electrical panel are both in separate compartments with frontal access. IP54 protection is standard and all panels can be quickly removed.

## DRYMODULE heat exchangers

Up to 10 aluminium 3-in-1 exchangers are fitted. Each features unique PERMASEP condensate removal, reducing dew points and unwanted energy wastages. An oversized demister ensures perfect condensate removal across the full 0-100% load spectrum.



## A NEW DIMENSION IN ENERGY SAVINGS

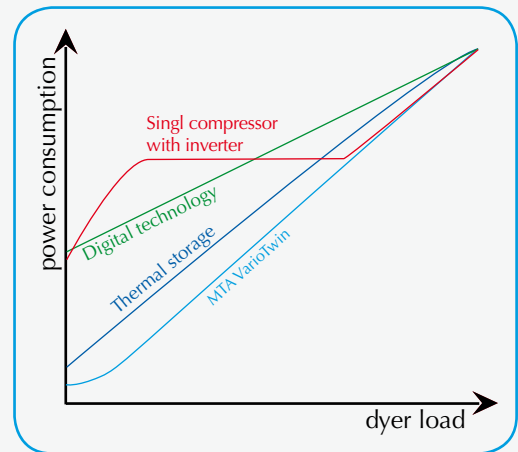
### Traditional energy saving technologies:

**Single compressor with inverter** – Good savings are achieved down to about 70% load, but below this there are usually no or minimal savings.

**Digital technology** – The savings, although linear down to about zero load, are far less than the load reduction.

**Thermal storage** – Achieves savings down to zero load, though not as high as with VarioTwin technology.

**Cycling technology** – With no thermal storage or inverter only minimal savings are achieved, consequently the term energy saving is not truly applicable; furthermore the compressor cycles on and off, creating dew point swings.



### The new dimension in energy savings:

Compressed air networks rarely operate at full load. But whilst air compressors typically run at 70% load the dryer is effected not only by the compressor load, but also by the ambient conditions. As the dryer will have been dimensioned for maximum summer conditions, so it will often run at 50% load or less. Consequently a dryer is needed which saves energy across the full 0-100% load spectrum. DryPower VarioTwin is such a dryer.

**Twin compressors with twin inverters** – MTA offers a patented technology using two inverters mated to two compressors, with one compressor larger than the other.

**5 distinct operating modes** – DryPower VarioTwin features 5 distinct operating modes to ensure perfect savings at all loads:

- Maximum load: both compressors run.
- High loads: both compressors run, both are inverter speed controlled.
- Medium/high loads: only the larger compressor runs.
- Medium/low loads: only the smaller compressor runs.
- Low loads: both compressors cycle on and off, with both compressors “soft starting” allowing frequent compressor starts.

**Frequency boost technology** – By boosting the maximum frequency at which the compressor operates MTA significantly increases the inverter's operating range, allowing higher savings over a broad operating spectrum.

### Perfect dew point control

The unique twin compressor / twin inverter configuration closely matches operation to the load, and consequently the dew point remains steady even in the presence of sudden load swings. The DRYMODULE exchanger guarantees perfect condensate removal.

### Advanced microprocessor technology

The microprocessor offers full programming and extensive User information via a multi level display. Numerous Supervisor options are offered, including connection to a GSM cell phone. Multiple alarms and an alarm history ensure peace of mind.

### Personalised to all needs

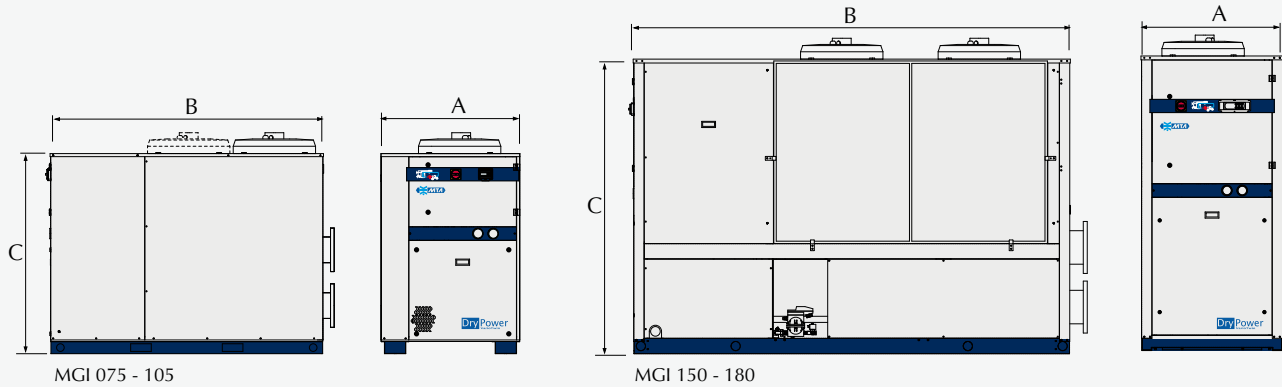
Chose between air or water-cooled configurations. Centrifugal fans, condenser air inlet filters, copperfinned (air-cooled) condenser coils and special exchanger manifold treatment are all available. The electronic hot gas by-pass option further enhances dew point control.



| Model  | Airflow           |                     | Nominal absorbed power<br>kW | Air connections | Overall dimensions<br>(mm) |       |       | Weight<br>(kg) |
|--------|-------------------|---------------------|------------------------------|-----------------|----------------------------|-------|-------|----------------|
|        | m <sup>3</sup> /h | m <sup>3</sup> /min |                              |                 | A                          | B     | C     |                |
| MGI075 | 4.500             | 75,0                | 7,80                         | DN 150          | 910                        | 1.790 | 1.447 | 526            |
| MGI090 | 5.400             | 90,0                | 10,90                        | DN 150          | 910                        | 1.790 | 1.447 | 551            |
| MGI105 | 6.300             | 105                 | 11,40                        | DN 150          | 910                        | 1.790 | 1.447 | 624            |
| MGI150 | 9.000             | 150                 | 16,50                        | DN 200          | 930                        | 2.860 | 2.064 | 1077           |
| MGI180 | 10.800            | 180                 | 21,20                        | DN 200          | 930                        | 2.860 | 2.064 | 1102           |

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 43 °C (higher on request); maximum inlet temperature 65 °C.  
Power supply: 400 V +/-10% / 3Ph / 50Hz.  
Water-cooled version also available.



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



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