



MOBILAIR® M 81/M 82

Portable Compressors

With the world-renowned SIGMA PROFILE

Flow rate 5.5 to 8.4 m³/min (195 – 295 cfm)

MOBILAIR® M 81/M 82

The powerful combination of the highly efficient KAESER SIGMA PROFILE rotary screw airend and an energy-saving engine certified in accordance with directive 2004/26/EC 2004/26, Stage IIIB, provides impressive fuel efficiency and super-clean performance. Together with other innovative features, this compact powerhouse is yet another dependable and efficient compressed air partner from KAESER KOMPRESSOREN.

Versatile

The MOBILAIR M81/M82 can be specifically tailored to meet the needs of the relevant application thanks to the wide range of optional compressed air treatment components. Moreover, the selection of chassis with run-on brake, as well as stationary models on skids or machine mountings, enables the M81/M82 to be perfectly adapted to suit the specific work environment.

Safe and simple

The ability to switch over manually from idling to full load operation ensures a reliable, gentle start when operating the unit in cold ambient conditions. Furthermore, the monitoring system can automatically shut the compressor down if necessary.

Durable

The M81/M82 is well-equipped for continuous gruelling construction site duty under the harshest of conditions. Even the standard versions are capable of operating in an ambient temperature range from -10 °C to +45 °C. The optional low-temperature versions feature engine coolant preheating, and synthetic cooling fluid is used for the airend.

Made in Germany

MOBILAIR portable compressors are manufactured at KAESER's headquarters located in Coburg, Northern Bavaria. Equipped with the very latest technology, the recently modernised portable compressor plant boasts state-of-the-art equipment, including a TÜV (German Technical Inspection Agency) certified sound testing area for free-field sound level measurement, a complete powder-coating facility and highly efficient manufacturing logistics.



M 82: Generator option

The optional synchronous three-phase generator (IP 54) is available with a power of 8.5 or 13 kVa. According to power requirement, the brushless and maintenance-free generator can be switched over from continuous operation to energy-saving automatic start. If required, the generator control panel can be equipped with a lockable cover.

Convenient layout with room to spare





Pure power and performance



Low emission

More than simply providing clean air for low emission zones, both the M81 and M82 are certified in accordance with European directive 2004/26/EC 2004/26, Stage IIIB. Furthermore, with a diesel particulate filter fitted as standard, the MOBILAIR 82 meets the stringent requirements of the Swiss Clean Air Act.



SIGMA CONTROL SMART

This advanced compressor controller ensures optimised compressed air availability, fuel efficiency and exhaust gas management using state-of-the-art electronic engine management. Functions include operating mode display, intuitive user interface, monitoring and system diagnostics.



SIGMA PROFILE airend

At the heart of every M81/M82 system lies a premium quality airend featuring KAESER's SIGMA PROFILE rotors. The airend's optimised flow characteristics enable it to deliver more air while using less energy.



Excellent accessibility, optimum serviceability

Thanks to intelligent component layout, all maintenance points are easily accessible via the large gull-wing doors, which makes service work fast and efficient. Optional custom service contracts are also available.

Details that count



Patented Anti-Frost Control

Specially developed by KAESER for portable compressors, the patented Anti-Frost Control automatically adjusts operating temperature in relation to ambient. In combination with the optional tool lubricator, this feature prevents air tools from freezing up and significantly extends their service life.



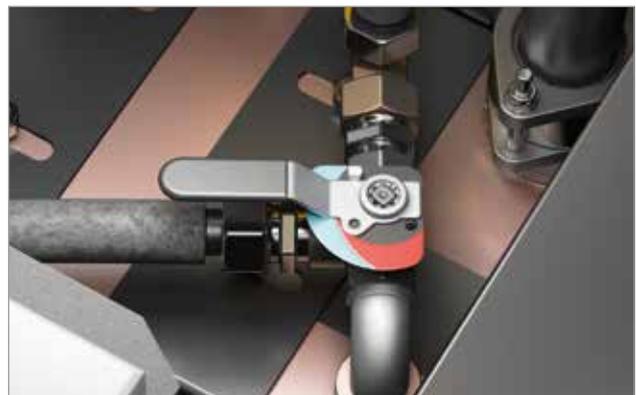
Cool and dry

The compressed air is cooled to 7 °C above ambient temperature. Installed at an angle, the compressed air aftercooler ensures frost-proof performance even at the coldest times of the year. The axial centrifugal separator reliably removes the condensate which is then evaporated.



Oiled or oil-free?

Depending on the application, the MOBILAIR 81/82 can be optionally equipped with a tool lubricator to lubricate compressed air tools, or with a microfilter combination for blasting work requiring technically oil-free compressed air.

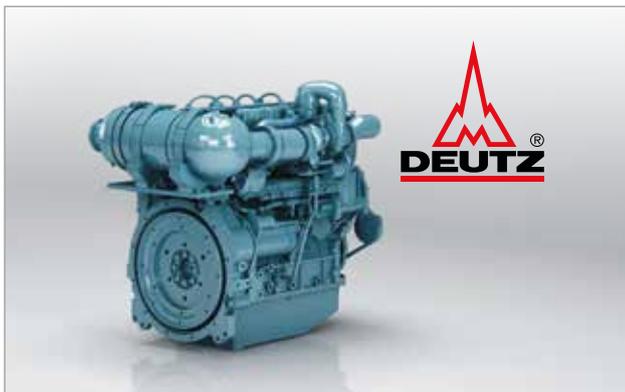


Thermostat

Machines with the optional compressed air aftercooler and return heating combination allow users to easily adjust the compressed air discharge temperature to meet the needs of the application.



Always the right choice



M81 – Deutz engine

The powerful and efficient Deutz drive engine is equipped with a maintenance-free oxidation catalytic converter as standard and is certified in accordance with European directive 2004/26/EC 2004/26, Stage IIIB, and US exhaust emissions standard EPA Tier 4 final.



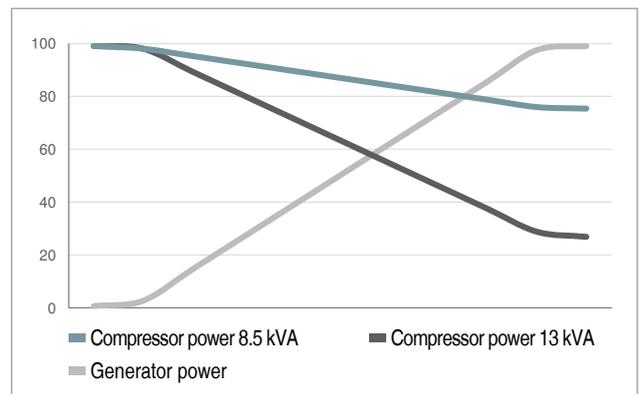
Suitable for refinery use

The M 81 is available with a certified spark arrestor for refinery applications. In addition, the engine shut-off valve automatically shuts the unit down upon intake of combustible gases to ensure maximum safety.



M82 – Kubota engine

Ensuring clean air not just in low emissions zones, a diesel particulate filter is installed as standard downstream from the Kubota drive engine. The M 82 is therefore certified in accordance with European directive 2004/26/EC 2004/26, Stage IIIB, and US exhaust emissions standard EPA Tier 4 final.



Perfect generator control

Ensuring perfect interplay with the engine management system, the M 82's advanced SIGMA CONTROL SMART compressor controller delivers maximum compressed air availability relative to power requirement.

Available equipment

Sealed floor pan

The sealed floor pan catches all liquids and therefore prevents soil contamination in environmentally sensitive zones. All drainage holes are sealed with screw plugs.

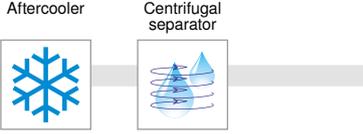
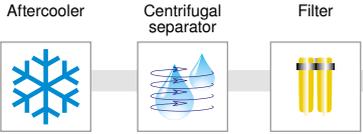
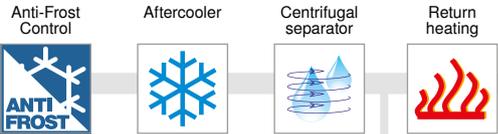
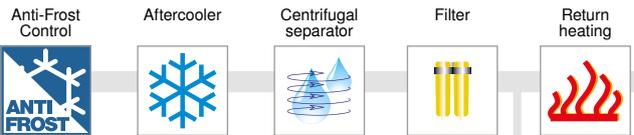
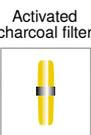
Pressure variants

Models are available in various pressure versions ranging from 7 to 14 bar. Pressure can be reduced easily in steps of 0.5 bar down to 6 bar using the SIGMA CONTROL SMART's arrow keys. The pressure adjustment feature can also be electronically disabled to safeguard parameter settings against unintentional or unauthorised changes.

GPS/GSM monitoring

The MOBILAIR Fleet Management online tool provides operators with a range of data including working pressure, fuel tank fill level, service alerts, location and machine load. The system optimises service processes by sending notifications regarding fault causes and upcoming scheduled maintenance measures, for example.

Compressed air treatment systems

<p>System A</p> <ul style="list-style-type: none"> - Cool - Condensate-free 		<p>Cool, condensate-free compressed air (100 % saturated), for compressed air tools and temporarily replacing stationary compressors</p>
<p>System F</p> <ul style="list-style-type: none"> - Cool - Condensate-free - Filtered 		<p>Cool, condensate-free compressed air (100 % saturated), free from contaminant particles and technically oil-free in accordance with applicable regulations</p>
<p>System B</p> <ul style="list-style-type: none"> - Warmed - Dried 		<p>Dried compressed air, warmed to at least 20 °C, for working at sub-zero temperatures and with longer air lines</p>
<p>System G</p> <ul style="list-style-type: none"> - Warmed - Dried - Filtered 		<p>Dried compressed air, warmed to at least 20 °C, free from contaminant particles and technically oil-free in accordance with applicable regulations</p>
<p>Fresh air</p> <p>As partial flow</p>	 <p>Does not provide protection against carbon monoxide (CO) or other noxious gases</p>	<p>Odour-free fresh air connected via a separate quick-release coupling</p> <p>(Only in combination with F or G systems)</p>

Technical specifications

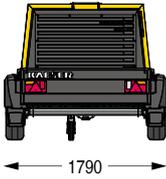
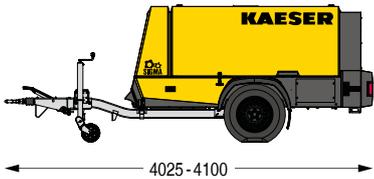
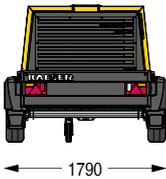
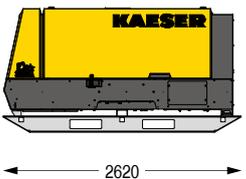
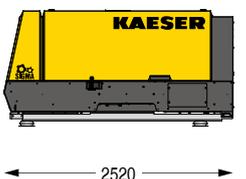
Model	Compressor				4-cylinder diesel engine (Water-cooled)				Complete system				
	Flow rate		Working pressure		Make	Type	Rated engine power	Speed at full load	Fuel tank capacity	Operational weight	Sound power level	Sound pressure level	Compressed air outlet
	m ³ /min	cfm	bar	psi									
M 81	8.4	295	7	100	Deutz	TD 2.9	55,4	2400	140	1570	≤ 98	67	1 x G 1½, 3 x G ¾
	6.8	240	10	145									
	6.1	215	12	175									
	5.5	195	14	200									
M 82	8.4	295	7	100	Kubota	V 3307-CR-T	54,6	2400	140	1580	≤ 98	67	1 x G 1½, 3 x G ¾
	6.8	240	10	145									
	6.1	215	12	175									
	5.5	195	14	200									

¹⁾ Applies to standard unit without air treatment with overrun brake chassis

²⁾ Guaranteed sound power level as per 2000/14/EC

³⁾ Measuring surface sound pressure level as per ISO 3744 (r: 10m)

Dimensions

Height adjustable version	 4370 - 4615	 1790 1525
Fixed version	 4025 - 4100	 1790 1525
Skid-mounted version	 2620	 1510 1385
Stationary version	 2520	 1510 1285 - 1345

The world is our home

As one of the world's largest compressed air system providers and compressor manufacturers, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of branches, subsidiary companies and authorised partners in over 100 countries.

With innovative products and services, KAESER KOMPRESSOREN's experienced consultants and engineers help customers to enhance their competitive edge by working in close partnership to develop progressive system concepts that continuously push the boundaries of performance and compressed air efficiency.

Moreover, the decades of knowledge and expertise from this industry-leading system provider are made available to each and every customer via the KAESER group's global computer network.

These advantages, coupled with KAESER's worldwide service organisation, ensure that every product operates at the peak of its performance at all times and provides maximum availability.



KAESER KOMPRESSOREN SE

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