



MOBILAIR M 81

Portable Compressor

With the world-renowned SIGMA PROFILE 

Flow rate 5.3 to 8.3 m³/min (190 – 295 cfm)

MOBILAIR M 81

Where power meets efficiency

Durable, flexible and dependable – the MOBILAIR M 81 sets a new benchmark for performance on the construction site. This versatile all-rounder combines exceptional performance with outstanding efficiency. Powered by a premium Hatz engine “Made in Germany”, the M 81 complies with strict EU Stage V emissions standards, delivering environmentally responsible performance for any challenge. Its innovative pV Control allows flexible pressure adjustment from 6 to 14 bar, making it ideal for a wide range of applications. Whether compressed air treatment or high-performance generator, the MOBILAIR M 81 adapts effortlessly to every requirement.

With impressively low fuel consumption, the MOBILAIR M 81 delivers up to 8.3 m³ of quality compressed air per minute – maximum performance with minimal energy consumption.

Exceptionally versatile

Portable compressors can be precisely tailored to meet the needs of the specific task at hand. Thanks to the wide range of optional compressed air treatment components, they always deliver the required compressed air quality. Moreover, the choice of various chassis configurations with overrun brake, or stationary versions on skids / machine feet, means that these compressors can be perfectly suited to any work environment.

Durable and resilient

The M 81 is well-equipped for continuous construction site duty, even under the harshest of conditions. Even standard versions are capable of operating in ambient temperatures ranging from -10 °C to +45 °C. The optional low-temperature version features engine coolant preheating, whilst synthetic cooling fluid is used for the compressor.

Made in Germany

The various ranges of MOBILAIR portable compressor are all manufactured at KAESER’s headquarters 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-certified sound testing area for free-field sound level measurement, a facility for high-performance, high-quality powder coating, and efficient manufacturing logistics.

SIGMA PROFILE airend

At the heart of every MOBILAIR system lies a premium-quality airend featuring KAESER’s energy-saving SIGMA PROFILE rotors. The airend’s optimised flow characteristics enable it to deliver more compressed air for less energy.

Typical applications



Blasting work



Cable blowing



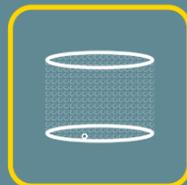
Construction hammers



Concrete spraying



Drilling



Bubble curtains



Impressively versatile

4 Suitable for refinery use

To ensure safe operation in refineries, portable compressors are optionally equipped with a spark arrestor and an engine shut-off valve, which automatically shuts the machine down upon intake of combustible gases.

5 Service-friendly

MOBILAIR compressors make maintenance simple. All maintenance points are conveniently accessible via two large flaps in the bodywork. KAESER also provides tailored maintenance contracts to meet your specific needs.

6 Oil separation with spin-on cartridges

The MOBILAIR M81 features spin-on cartridges for the oil separator tank, enabling fast and hassle-free maintenance. This quick-change capability ensures simple and cost-effective servicing.



1 Compressed air outlet

The M 81 has all of your compressed air needs covered with its various available compressed air connections. Compressed air can be drawn off via 3 x G $\frac{3}{4}$ claw couplings and 1 x G1 1/2 threaded connection.

2 SIGMA CONTROL SMART

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

3 Safe and easy to transport

No matter where the M 81 needs to be transported, safety is always a top priority at KAESER. These mobile all-rounders are therefore equipped as standard with a lifting eye and lashing points for secure transportation.

7 Perfect generator control

The M 81 is optionally available with a generator. Ensuring perfect interplay with the engine management system, the compressor controller delivers maximum compressed air availability relative to power demand.

8 Integrated compressed air treatment

The compressor always adapts perfectly to its task in accordance with the application, delivering demand-oriented compressed air quality thanks to the wide range of optional treatment components.

9 Generous tank capacity

When full, the fuel tank has sufficient capacity to last an entire work shift. The fuel level can be checked at a glance via the analogue gauge, and an automatic shutdown feature is activated when the fuel level becomes too low. For added convenience, a fuel level warning is displayed on the controller.

TELEMATICS @ MOBILAIR

TELEMATICS enables remote monitoring of the compressor's operating status. KAESER equips its portable compressors with a built-in modem, connecting them to the TELEMATICS portal. The integrated compressor controller determines and processes all operating data, which it subsequently forwards to the TELEMATICS portal. Central monitoring and processing of operating messages is performed in the dashboard. You can therefore view operating data, current messages, and system location online.

Compressed air treatment variants

System	Components	Output
System A - Cool - Condensate-free	Compressed air aftercooler → Centrifugal separator	Cool, condensate-free compressed air (100% saturated) for compressed air tools and temporary replacement of stationary compressors
System F - Cool - Condensate-free - Filtered	Compressed air aftercooler → Centrifugal separator → Filter	Cool, condensate-free compressed air (100% saturated), free from dirt particles and technically oil-free as per applicable regulations (ZTV-ING)
System B - Warmed - Dried	Compressed air aftercooler → Centrifugal separator → Reheating	Dried compressed air, warmed to min. 20 °C, for working at sub-zero temperatures and with long air lines
System G - Warmed - Dried - Filtered	Compressed air aftercooler → Centrifugal separator → Filter → Reheating	Dried compressed air, warmed to min. 20 °C, free from dirt particles, technically oil-free as per applicable regulations (ZTV-ING)

Technical data

Model	Compressor				4-cylinder diesel engine (water-cooled)			Complete system				
	Flow rate		Working pressure		Make	Model	Rated engine power	Fuel tank capacity	Operating weight	Sound power level ¹⁾	Sound pressure level ²⁾	Compressed air outlet ³⁾
	m³/min	cfm	bar	PSI								
M 81	8.3 6.4	295 230	10.3 14	150 200	Hatz	4H50TICD	55.4	130	1350	96	76	3 x G ¾ 1 x G 1½

¹⁾ Guaranteed sound power level LWA as per directive 2000/14/EC
²⁾ Surface sound pressure level LpA as per ISO 3744 (r = 10 m)
³⁾ G ½" = Connection thread size – Hoses with G ¾" claw couplings can be connected

Dimensions



Note: Dimensions may vary depending on version.

KAESER KOMPRESSOREN – Sustainability guaranteed

To learn more about the new standards KAESER has established in reliability, efficiency and sustainability, visit us at <https://www.kaeser.com/int-en/company/sustainability>.



RETHINK



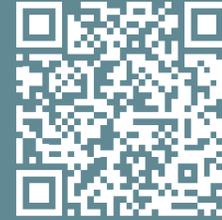
RESEARCH



REDUCE



REPAIR





pV Control

Maximum pressure (p) can be adjusted in steps of 0.1 bar. pV Control directly influences the maximum possible flow rate (V) and therefore offers even greater variability in terms of pressure and flow rate. This feature is particularly beneficial when working with longer hose lines.

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.



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Air Systems

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