



MOBILAIR® M 59

Portable Compressors

With the world-renowned SIGMA PROFILE®
Flow rate 3.8 to 5.5 m³/min (135 – 195 cfm)

www.kaeser.com

MOBILAIR® M 59

Rugged and dependable, the powerful combination of a highly efficient KAESER rotary screw airend featuring the energy-saving SIGMA PROFILE and an environmentally-friendly engine – certified in accordance with EU Stage V – provides impressive fuel efficiency at lowest possible emissions levels.

This robust powerhouse is available in two different variants: the version equipped with an impact-resistant polyethylene enclosure is ideally suited to the toughest of conditions, whilst the lightweight version, featuring aluminium components and weighing in at under 750 kg, is extremely flexible when it comes to the matter of transportation. Both, however, have one thing in common – absolute operational flexibility thanks to efficient pV control.

Versatile and adaptable

The MOBILAIR M 59 can be perfectly tailored to meet the specific needs of the individual application, thanks to a wide range of optional treatment components that always deliver the exact level of compressed air quality required. The unbraked, lightweight version is particularly flexible: on account of the fact that it weighs under 750 kg, no special trailer licence is required to be able to tow it. For units specified with the PE enclosure, there is a selection of available chassis versions with overrun brake. It can also be specified as a stationary version equipped with either skids or machine feet, making the M 59 a perfect choice for any operational location.

Safe and simple

An electronically controlled start-up function, coupled with the ability to switch over manually from idle to full load operation, ensures a reliable start when operating in cold ambient conditions. Furthermore, the monitoring system can automatically shut down the compressor if needed.

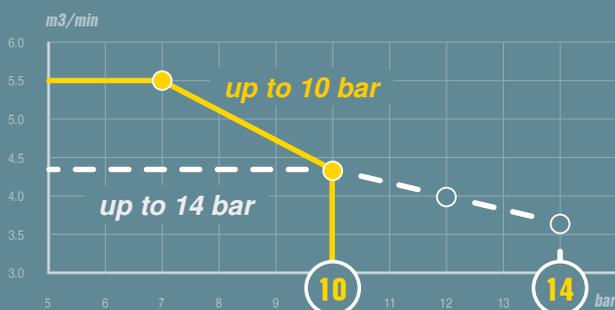
Durable and robust

The MOBILAIR M 59 is well equipped to face the gruelling continuous operation in harsh conditions required on many construction sites. 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 in the airend.

Made in Germany

The numerous different models of the MOBILAIR range of portable compressors are all manufactured at KAESER's headquarters in Coburg, Northern Bavaria. Equipped with the very latest technology, this recently modernised compressor plant boasts state-of-the-art equipment, including a TÜV-certified sound testing area for free-field sound level measurement, a complete powder-coating facility and efficient manufacturing logistics.

Choice of 2 pressure variants



pV control

Thanks to pV control, maximum pressure (p) – adjustable in steps of 0.1 bar between 6 and 14 bar – directly influences the maximum possible flow rate (V), thereby providing even greater flexibility in terms of both pressure and flow rate. This feature is particularly beneficial when working with longer hose lines.

Performance that inspires.





Clean, efficient operation



Low emissions

The M59 is certified in accordance with EU Directive 2016/1628, Stage V, to ensure clean-air operation wherever it is used – not just in Low Emission Zones. Furthermore, with a diesel particulate filter fitted as standard, this environmentally-friendly powerhouse also meets the stringent requirements of the Swiss Clean Air Act.



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, intuitive user interface, plus monitoring and system diagnostics.



Spin-on cartridges for low oil carry-over

For faster maintenance, the M 59 is fitted with a new spin-on cartridge for the oil separator tank. This makes replacement quick and easy, meaning services are child's play.



Service-friendly and easy to access

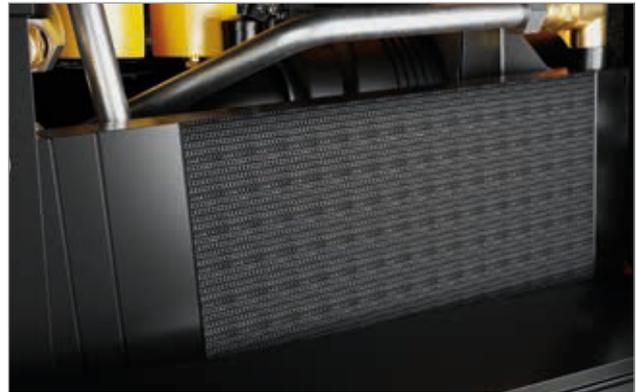
Both the lightweight and PE versions feature large gull-wing doors for easy access to all maintenance points, making service work quick and efficient. Optional customised service contracts are also available.

Design is in the details



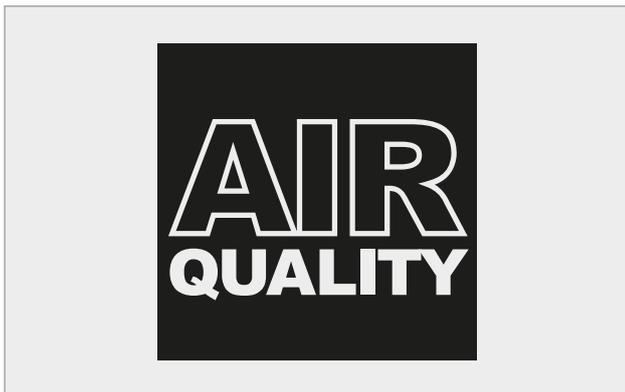
Patented Anti-Frost Control

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 therefore significantly extends their service life.



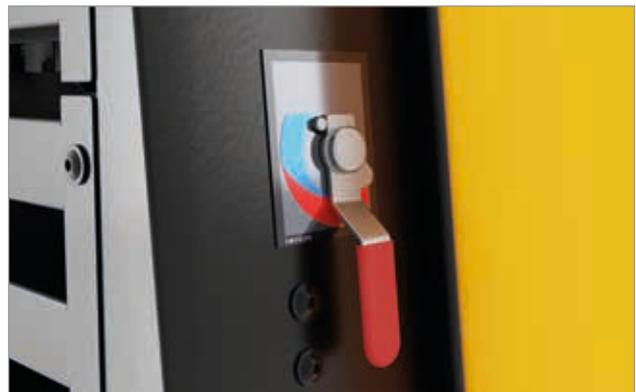
Cool and condensate-free

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 year. Any accumulating condensate is reliably removed via an electronic condensate drain.



Oil-lubricating or oil-free?

Depending on the application, the MOBILAIR M 59 can be optionally equipped with a tool lubricator for lubricating compressed air tools, or with a microfilter combination for blasting work requiring technically oil-free compressed air (see image on page 7).



Dry compressed air

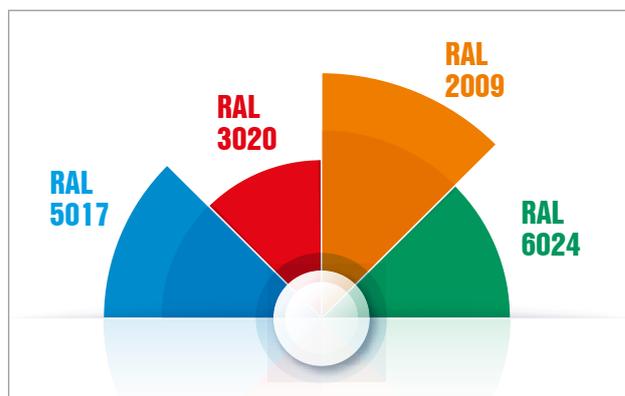
The plate-type heat exchanger reheats the cooled compressed air using heat from the compressor cooling fluid. This prevents condensation from forming outside the unit when the compressed air cools. The compressed air temperature can easily be adjusted as needed from the exterior of the machine.





Safe & easy to transport

Regardless of the destination, safety is KAESER's key concern when it comes to transporting the M 59. This mobile all-rounder is equipped with lifting eyes as standard, whilst the optional forklift pockets make transportation even more convenient.



Special PE colours

For PE enclosures, the following special colours are readily available: blue – equivalent to RAL 5017, red – equivalent to RAL 3020, orange – equivalent to RAL 2009 and green – equivalent to RAL 6024. Customised colours for the enclosure and metal components are available upon request.

A weighty difference...



Suitable for use in refineries

The M 59 is available with a certified spark arrester for refinery applications. The engine shut-off valve automatically shuts the machine down upon intake of combustible gases.

Example M59 PE / 10 bar



Perfect generator control

The M59 PE is available with the option of either an 8.5 or a 13 kVA generator. Ensuring perfect interplay with the engine management system, the SIGMA CONTROL SMART compressor controller delivers maximum compressed air availability relative to power requirement.

Available equipment

Closed floor pan

The closed floor pan immediately catches any liquids, thereby preventing ground contamination in environmentally sensitive zones. All drainage holes are sealed with screw plugs.

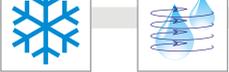
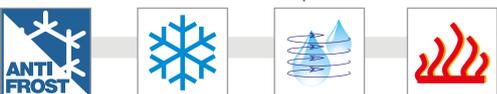
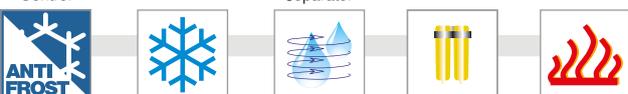
Pressure variants

Depending on the intended application, models are available in two pressure versions – 10 and 14 bar. Pressure can be reduced in increments of 0.1 bar, down as far as 6 bar, via the SIGMA CONTROL MOBIL. The pressure adjustment feature can also be electronically disabled to prevent tampering.

Industrie 4.0 @ MOBILAIR

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

Compressed air treatment variants

<p>System A</p> <ul style="list-style-type: none"> - Cool - Condensate-free 	<p>Aftercooler Centrifugal separator</p> 	<p>Cool, condensate-free compressed air (100 % saturated), for compressed air tools and temporary replacement of stationary compressors</p>
<p>System F</p> <ul style="list-style-type: none"> - Cool - Condensate-free - Filtered 	<p>Aftercooler Centrifugal separator Filter</p> 	<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>Anti-Frost Control Aftercooler Centrifugal separator Reheating</p> 	<p>Dried compressed air, reheated 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>Anti-Frost Control Aftercooler Centrifugal separator Filter Reheating</p> 	<p>Dried compressed air, reheated to at least 20 °C, free from contaminant particles and technically oil-free in accordance with applicable regulations</p>

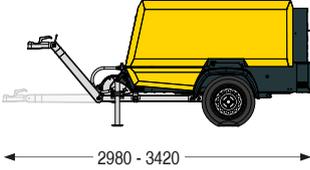
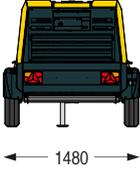
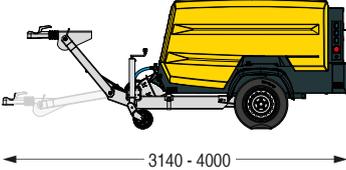
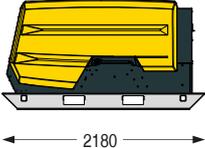
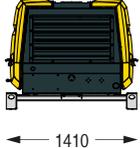
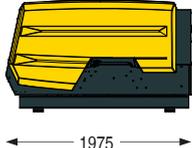
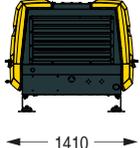
Technical specifications

Model	Pressure variant	Compressor				Diesel engine (water-cooled)			Complete system				Options						
		p/V control Flow rate per pressure setting				Make / model	Rated engine power kW	Speed at full load rpm	Fuel tank capacity l	Operating weight kg ¹⁾	Sound emissions dB(A) ²⁾	Compressed air connection 2 x G 3/4 1 x G 1	Compressed air treatment	Generator					
		@ 7 bar (100 psi)	@ 10 bar (145 psi)	@ 12 bar (175 psi)	@ 14 bar (200 psi)														
M 59	10 bar (145 psi)	5.5 m³/min (195 psi)	4.7 m³/min (165 psi)	-	-	Hatz 3D50TICD	42.0	2300 – 2700	60	740	69	2 x G 3/4 1 x G 1	A	-					
	14 bar (200 psi)	4.7 m³/min (165 psi)	4.7 m³/min (165 psi)	4.3 m³/min (150 psi)	3.8 m³/min (135 psi)														
M 59 PE	10 bar (145 psi)	5.5 m³/min (195 psi)	4.7 m³/min (165 psi)	-	-				Hatz 3D50TICD	42.0			2300 – 2700	80	900	69	2 x G 3/4 1 x G 1	A / B / F / G	8.5 kVA or 13 kVA
	14 bar (200 psi)	4.7 m³/min (165 psi)	4.7 m³/min (165 psi)	4.3 m³/min (150 psi)	3.8 m³/min (135 psi)														

¹⁾ Basic unit weight incl. chassis with height-adjustable tow bar, without options (lightweight version unbraked / PE version with overrun brake)

²⁾ Sound pressure level measured as per ISO3744 (r = 10m); guaranteed sound power level as per 2000/14/EC = 98 dB(A)

Dimensions

Lightweight version: Unbraked		
PE version: With overrun brake		
Version: Skid-mounted		
Version: Stationary		

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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