



## MOBILAIR<sup>®</sup> M 82

#### **Portable Compressor**

With the world-renowned SIGMA PROFILE<sup>\$\dot</sup> Flow rate 5.5 to 8.4 m<sup>3</sup>/min (195 – 295 cfm)

# MOBILAIR<sup>®</sup> M 82

The powerful combination of a highly efficient KAESER SIGMA PROFILE rotary screw airend and an energy-saving engine, certified in accordance with EU Directive 2016/1628, Stage V, 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.

#### Versatile

The MOBILAIR M 82 can be perfectly tailored to meet the specific needs of the individual application, thanks to a wide range of optional compressed air treatment components. Moreover, the option of a chassis with overrun brake, as well as a stationary version mounted on skids or machine feet, means that the M82 is ideally suited to all working environments.

#### Safe and simple

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

#### Durable

The MOBILAIR M 82 is well equipped to meet the demands of continuous construction site operation, even under the harshest of climatic conditions. The standard version, for example, is capable of operating in ambient temperatures 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**

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



#### M 82: Generator option

The optional synchronous three-phase generator (IP 54) is available with power of 8.5 or 13 kVA. These brushless, maintenance-free generators can be switched over from continuous operation to energy-saving automatic start, depending on power requirement. The generator control panel can be equipped with a lockable cover flap if required.

### **Convenient layout and accessibility**





### **Pure power and performance**



#### Low emissions

The M82 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, the MOBILAIR M 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 an operating mode display, intuitive user interface plus monitoring and system diagnostics.



#### **SIGMA PROFILE** airend

At the heart of every M 82 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.



#### Service-friendly and easy to access

Thanks to intelligent component layout, all maintenance points are easily accessible via the large wing doors, making service work quick and efficient. Optional customised service contracts are also available.

### **Details that count**



#### **Anti-Frost Control**

Specially developed by KAESER for portable compressors, the 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 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 the year. The axial centrifugal separator reliably removes the condensate, which is then evaporated.



#### **Oil-lubricating or oil-free?**

Depending on the application, the MOBILAIR M 82 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.



#### 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.



### Always the right choice





#### **Heat exchanger bypass**

Infinitely variable compressed air discharge temperatures are optionally available via a ball valve in the plate-type heat exchanger, which is particularly useful for blasting applications.



#### Suitable for use in refineries

The M 82 is available with a certified spark arrestor for refinery applications. In addition, the engine shut-off valve automatically shuts down the unit upon intake of combustible gases to ensure maximum safety.





#### M 82 - Kubota engine

Assuring clean air not just in Low Emission Zones, a diesel particulate filter is fitted downstream from the Kubota engine as standard. It is therefore certified in accordance with EU Directive 2016/1628, Stage V 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

#### **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**

Models are available in a variety of pressure versions, ranging from 7 to 14 bar. Pressure can easily be reduced in increments of 0.5 bar down to 6 bar, using the SIGMA CONTROL SMART's simple arrow keys. Pressure adjustment can also be electronically disabled to prevent unauthorised changing of operating parameters.

#### Industrie 4.0 @ MOBILAIR

With the TELEMATICS 24 option, Industrie 4.0 comes to the construction site. Optionally available for various countries and following approval of the data usage contract, KAESER can equip the M 82 ex works – at no extra cost – with a modem and connect it to the telematics portal. The best part: KAESER pays the portal fees for 24 months. You can therefore view operating data, current messages and system location online. Through anonymous evaluation of the machine data by KAESER, you help to make system operation and usage even more efficient and reliable.

### **Compressed air treatment variants**

| System A<br>- Cool<br>- Condensate-free               | Compressed air<br>aftercooler     Centrifugal<br>separator       Image: Complex separator   |       | Cool, condensate-free compressed<br>air (100% saturated), for<br>compressed air tools and<br>temporary replacement of<br>stationary compressors            |
|---|---|-------|--|
| System F<br>- Cool<br>- Condensate-free<br>- Filtered | Compressed air<br>aftercooler Separator Filter  |       | Cool, condensate-free compressed<br>air (100% saturated), free from<br>contaminants and technically<br>oil-free as per applicable<br>regulations (ZTV-ING) |
| System B<br>- Warmed<br>- Dried                       | Anti-Frost<br>Control     Compressed air<br>aftercooler     Centrifugal<br>separator     Reheating       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control     Image: Control     Image: Control     Image: Control     Image: Control       Image: Control |       | Dried compressed air, reheated to<br>a min. of 20°C, for working at<br>sub-zero temperatures and with<br>longer compressed air lines                       |
| System G<br>- Warmed<br>- Dried<br>- Filtered         | Anti-Frost Compressed air aftercooler Separator Filter Reheating  |       | Dried compressed air, reheated to<br>a min. of 20°C, free from<br>contaminants and technically<br>oil-free as per applicable<br>regulations (ZTV-ING)      |
| <b>Fresh air</b><br>As partial flow                   | Activated carbon filter Does not provide protection against carbon monoxide (CO) or other noxious   | gases | Odour-free fresh air connected via a<br><b>separate</b> quick-release coupling<br>(Only in combination with<br>F or G systems)                             |

### **Technical specifications**

| Model | Compressor               |                          |                     |                          | 4-cylinder diesel engine (water-cooled) |            |                          | Complete system  |                    |                     |                         |                            |                          |
|-------|--------------------------|--------------------------|---------------------|--------------------------|---|------------|--------------------------|------------------|--------------------|---------------------|-------------------------|----------------------------|--------------------------|
|       | Flow rate                |                          |                     | Working Make<br>pressure |   | er         | Rated<br>engine<br>power | engine full load | Fuel tank capacity | Operating<br>weight | Sound<br>power<br>level | Sound<br>pressure<br>level | Compressed<br>air outlet |
|       | m³/min                   | cfm                      | bar                 | PSI                      |   |            | kW                       | rpm              | I.                 | kg 1)               | dB(A) 2)                | dB(A) 3)                   |                          |
| M 82  | 8.4<br>6.8<br>6.1<br>5.5 | 295<br>240<br>215<br>195 | 7<br>10<br>12<br>14 | 100<br>145<br>175<br>200 | Kubota                                  | V3307-CR-T | 54.6                     | 2400             | 140                | 1580                | ≤ 98                    | 67                         | 1 x G 1½,<br>3 x G ¾     |

1) Applies to standard unit incl. chassis with overrun brake, without air treatment Guaranteed sound power level as per 2000/14/EC Measuring surface sound pressure level as per ISO 3744 (r: 10m)

2) 3)

**Dimensions** 



### The world is our home

As one of the world's largest manufacturers of compressors, blowers and compressed air systems, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of wholly owned subsidiaries and authorised distribution partners in over 140 countries.

By offering innovative, efficient and reliable products and services, KAESER KOMPRESSOREN's experienced consultants and engineers work in close partnership with customers to enhance their competitive edge and to develop progressive system concepts that continuously push the boundaries of performance and technology. Moreover, decades of knowledge and expertise from this industry-leading systems provider are made available to each and every customer via the KAESER group's advanced global IT network.

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







#### KAESER KOMPRESSOREN SE

P.O. Box 2143 – 96410 Coburg – GERMANY – Tel +49 9561 640-0 – Fax +49 9561 640-130 E-mail: productinfo@kaeser.com – www.kaeser.com