



MOBILAIR® M 27E, M 31E, M 50E

Portable Compressors

Portable e-power: 400V-3ph-50Hz

Flow rate 1.9 to 5.0 m³/min

e-power

The new M27E, M31E and M50E portable compressors truly come into their own wherever an electrical power connection is available. Their whisper-quiet electric drive makes them the perfect choice for use in noise protection and low emission zones. Compressed air applications in tunnels, excavation pits and buildings, for example, are tamed by the compressors' emissions-free drive.

Meticulous construction ensures trouble-free operation in ambient temperatures ranging from -10 °C to +40 °C. A low-temperature version is also optionally available for use in colder conditions. Versatility is further enhanced by the chassis, as it can be equipped with or without an overrun brake and is available with a fixed or height adjustable tow bar.

M27E

A 32A CEE power socket is all it takes to connect the M27E to the necessary power supply. This compact powerhouse delivers 2.6 m³/min at 7 bar and can be adjusted to requirement thanks to integrated compressed air treatment equipment.

M50E

The M50E's 25kW drive power delivers an impressive 5.0 m³/min at 7 bar, or 3.8 m³/min with the 10 bar version. With an operational weight of well under 750 kg — even with an integrated compressed air aftercooler — the chassis-mounted version can also be towed without the need for a service brake.

M31E

The M31E can be configured with pressure stages of 7, 10, 12 or 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 to adapt to the specific work process.

IE3 - Premium efficiency motor



Featuring IE3 premium efficiency motors (with star-delta start-up) suitable for on-site use with IP55 protection and Class F insulation, the road-going compressors are an excellent

choice for flexible bridging of industrial compressor stations – as maybe necessary when performing service work for example – thanks to their low energy and maintenance costs.



Rotary screw compressors for outdoor installation

MOBILAIR e-power compressors can also be used to provide a temporary or permanent compressed air supply. The polyethylene enclosure of the road-going versions and the galvanised, powder-coated steel enclosure of the stationary models resist all weather conditions and subsequently eliminate the need for an additional protective cover. The stationary versions can be safely installed on machine mounts or on galvanised skids.



e-power – the alternative for an emission-free construction site



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. Where required, due to climatic conditions or the application itself, the Anti-Frost Control can be replaced by a normal thermostatic valve.



On-board compressed air treatment

The compressor units can be optionally equipped with a compressed air aftercooler to provide cool and condensate-free compressed air. Accumulated condensate is collected in a canister to safeguard the environment. Furthermore, the M27E and M31E models are available with a plate heat exchanger to enable compressed air return heating.



SIGMA CONTROL SMART

Operation of e-power compressors is performed using just six keys, making them exceptionally simple and intuitive to use – start/stop control and pressure adjustment couldn't be easier. The colour display indicates any faults, shows all operating states and even has a countdown to the next scheduled service. A lockable metal flap protects the control panel from malicious damage and unauthorised access.



Pole-reversing switch

Should the SIGMA CONTROL SMART indicate that the compressor will not start due to incorrect motor rotation, there is no need for rewiring. The phase sequence can be simply corrected via the pole-reversing switch that is fitted as standard, ensuring that nothing stands in the way of the task at hand.

Your benefits at a glance:

- Easy power connection; electrical outlet (32A or 63A) on the unit
- Suitable for indoor and outdoor use
- Hose-reel option (does not need to be fully reeled out during operation)
- Compressed air aftercooler fo condensate-free compressed air
- Patented Anti-Frost
 Control: Prevents tools
 from freezing up

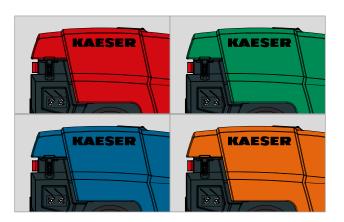
- Reduced operating costs (electrical power installed on-site)
- Required pressure adjustable in 0.1 bar steps
- Low operational weight (less than 750 kg) also without run-on brake
- Perfect for use in noise protection and low emission zones
- Significantly lower maintenance costs compared to diesel-powered machines
- No noise nuisance: super-quiet performance





Automatic operation

If the compressor is equipped with the optional DUAL Control, the required cut-in and cut-out pressure can be configured simply via the SIGMA CONTROL SMART. Information about the prevailing air network pressure is sent to the machine (via an additional quick coupling) where it is processed for control and regulation purposes. The DUAL Control feature also contains the automatic start-stop function, which can also be individually configured.



PE enclosure

Made from roto-moulded polyethylene, the double-walled sound enclosure ensures long-term value retention and is both corrosion and scratch-resistant. The following special colours for the PE enclosure are readily available: Blue (equivalent to RAL 5017), Green (equivalent to RAL 6024), Red (equivalent to RAL 3020), Orange (equivalent to RAL 2009). Other enclosure colours and custom paintwork for metal components are available upon request.

Available equipment

Tool lubricator

Depending on the application, an optional 2.5-litre tool lubricator can be installed to provide integrated air tool lubrication. An adjustment wheel regulates the intensity of the oil mist in the compressed air. We recommend the use of an external hose lubricator from our accessories range for long hose lengths and whenever a height difference exists between the compressor and tool.

Hose reel

The pre-installed hose reel holds 20 m of lightweight hose which does not need to be fully reeled out for operation. Safe stowing not only enhances hose service life and availability, but also protects it from damage (kinking, stretching, being run over) and soiling.

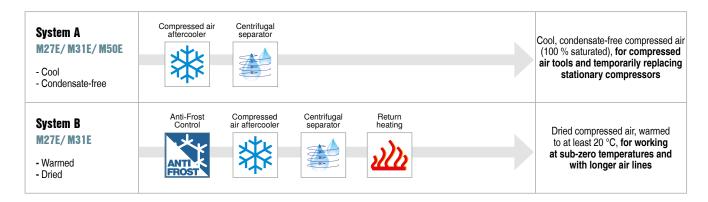
Environmental protection

Should any leakage occur during the service life of the unit, the optional closed floor pan reliably collects all service fluids. If required, the compressors can also be filled ex works with food grade fluid.

Anti-theft protection

Effective property protection does not necessarily require a high-tech solution. The compressors can be fitted with a heavy duty bracket and storage enclosure for a security chain (not supplied) that extends from the chassis, thereby ensuring that nothing disappears from the construction site.

Compressed air treatment systems



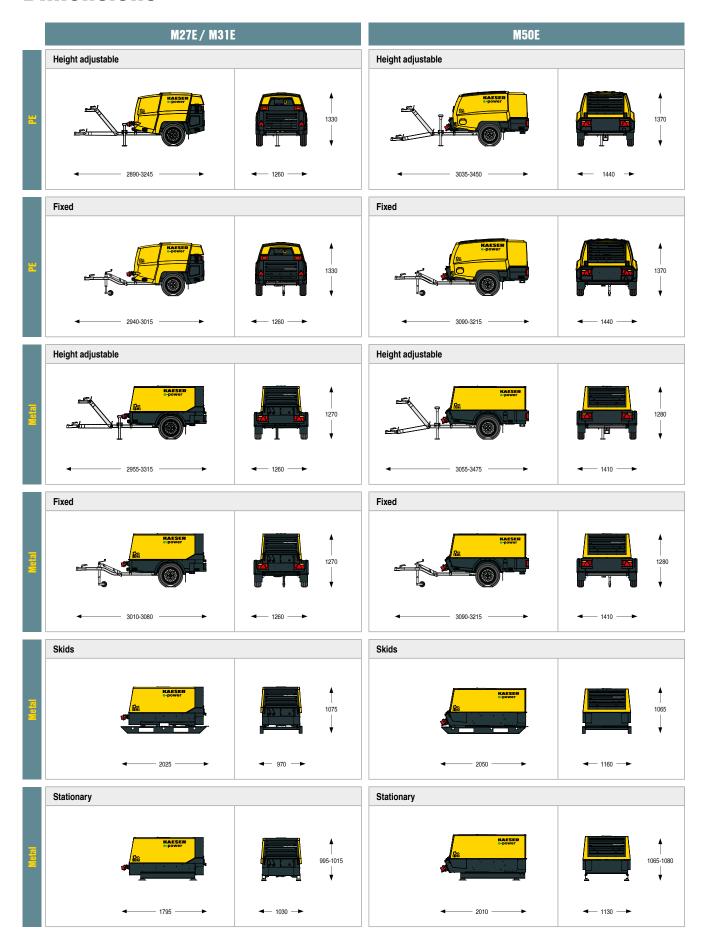
Technical specifications

Model	Compressor				Electric motor (IE3) – 400V			Complete unit			
	Flow	Flow rate		rating ssure	Make	Rated motor power	CEE power socket	Operational weight 1)	Sound power level 2)	Sound pressure level 3)	Compressed air outlet
	m³/min	cfm	bar	PSI		kW	A	kg	dB(A)	dB(A)	
M 27E	2.6	92	7	100	Siemens	15	32	530	≤ 97	63	2 x G ¾
M31E	3.15 2.6 2.3 1.9	110 92 81 67	7 10 12 14	100 145 175 200	Siemens	22	63	585	≤ 98	64	2 x G ¾
M 50E	5.0 3.8	180 135	7 10	100 145	Siemens	25	63	690	≤ 98	62	2 x G ¾ 1 x G 1

Standard unit with PE enclosure without treatment system on unbraked height-adjustable chassis

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

Dimensions



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.

