



CHOOSE MAKO - SAVE SPACE & MAINTAIN HIGH CAPACITY

Over 100 years of combined experience allowed us to develop unique design features that allow Mako breathing air compressors to deliver high working capacities while staying compact, cost-efficient and user-friendly.

Turn to a trusted manufacturer!

MAKO BREATHING AIR SYSTEMS

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A SIGN OF QUALITY

About Mako

Over 100 years of compressor block manufacturing experience lies at the foundation of our MAKO products. This allowed us to develop a unique, robust design that forms the heart of every product. **All of our 3- and 4-stage compressor blocks guarantee:**

- Durability** and long operating life
- Resilience** during continuous duty
- Reliability** with extended service intervals
- Simple maintenance** with easy access to all parts
- Minimal interference** thanks to low vibration and noise levels
- Highest standards** ensured by ISO 9001-certified Quality Management System
- Safety through** no compromise quality assurance on all our models
- Cost-effectiveness** that comes with proven, time-tested design features
- Flexibility** due to a wide and customizable range
- Compact, ergonomic design** for reduced space usage and increased operator comfort & safety.

Primary markets served:



Oil & Gas industry



Fire Services



Diving



Industrial Safety



02

BREATHING AIR COMPRESSORS



Essentials

Whether it's everyday use or more demanding applications, all MAKO products guarantee the highest levels of **reliable performance, efficiency and safety** even within the constraints of space, noise, or budget. Exceeding industry standards, our range features the perfect model for any requirement.



Safety



Convenience



Cost efficiency



Flexibility

Standard features:

- NEMA design ODP 1.15 SF electric motor
- Easy accessibility to all maintenance items
- Small package footprint and overall dimensions
- Auto-drain with muffler/reservoir system for collection of condensate
- Anti-vibration mounts
- Fully automatic control system

Instrumentation & controls:

- PLC controller¹
- Illuminated on/off push buttons
- Hours run meter
- Emergency stop button
- Inter-stage & final-stage pressure gauges
- Individual shutdown indicators for High Air Temperature, High Air Pressure, and Low Oil Level/Pressure

Optional equipment:

- Integrated or wall-mounted CO & Moisture (CMM) Monitor
- Audible shutdown alarm
- Dual pressure switch
- Pemtech CO and H₂S sensors

¹not available with Water-cooled Packages



Horizontal Breathing Air [HBA]

The low-profile model

The open-frame **Horizontal Breathing Air** compressor provides all the features of MAKO designs, adapted for smaller spaces and tighter budgets.

Standard features:

- 50 Deg.C ambient block designed & tested in Redditch, UK.
- Package designed to sustain & work efficiently in Middle East region, Off-shore oil rigs.
- Efficient filtration system to deliver air for breathing air applications.
- Efficient water cooled diesel engine which is superior to competitors air cooled engines which are on the verge of phase out due to emission norms.
- Usability better than competition for compressor controls, pressure gauges etc.
- Rugged frame designed for ease of handling & sustain in marine environment.

Optional equipment:

- MAKO MK2C purification (model HBA06)
- Diesel or gas engine drive
- Pemtech CO and H2S sensors

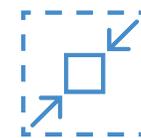


Cost efficiency



Electrical Motor Set

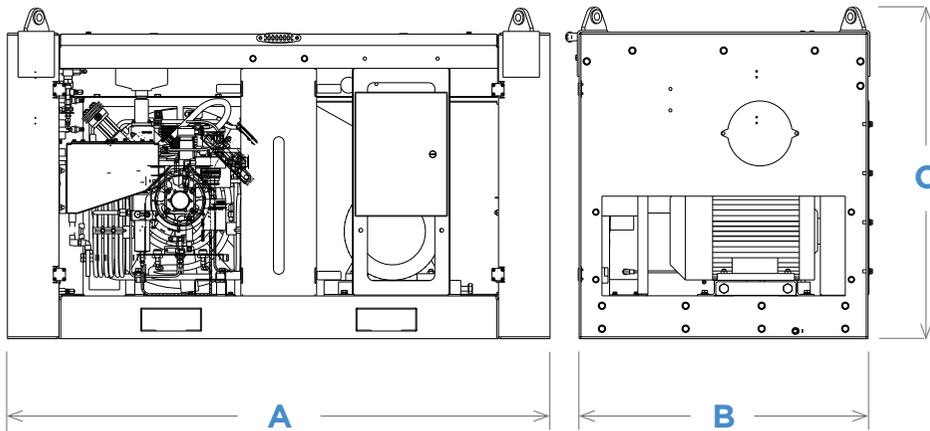
Diesel Engine Set



Compact



Horizontal Breathing Air [HBA]



Technical Data:

Model	Configuration	Power Source	Driver Rating	Max. Pressure	Stages	Charging Rate	Compressor RPM	Certification
HBA06-360E	Horizontal	460V, 60Hz, 3Phase	10HP	350 barg	4	22.3 m ³ /hr	1380	NA
HBA06-D350	Horizontal	Diesel Engine	20HP	350 barg	4	22.3 m ³ /hr	1380	NA

Dimensions:

Model	Configuration	A (mm)	B (mm)	C (mm)	Total Weight (Kg)
HBA06-360E	Horizontal	1790	1000	1080	700
HBA06-D350	Horizontal	1790	1000	1080	720

* Excluding handle and lifting lugs, the dimension of the unit is 1790mm x 960mm x 1000mm (LxWxH)



Vertical Breathing Air Module [BAM]

Built to be installed up against a wall, the Breathing Air Module provides unsurpassed value and peace of mind. Five hinged maintenance inspection doors provide superior access to all components.

For heavy-duty assignments

MAKO Vertical Breathing Air Module ensures **high capacity filling while maintaining low noise level**. Modular design ensures complete flexibility.

Features:

- Control panel with final stage pressure gauge and visual and audible alarms
- High pressure compressor with a rapid charging rate
- MAKO industrial-duty 3- or 4-stage compressor block
- Fully enclosed, sound attenuating enclosure with heavy-duty powder coat finish
- UL-listed, NEMA 12 electrical enclosure

Optional equipment:

- MAKO MK2C purification (model HBA06)
- Replacement indicator kits



High efficiency



Quiet operation

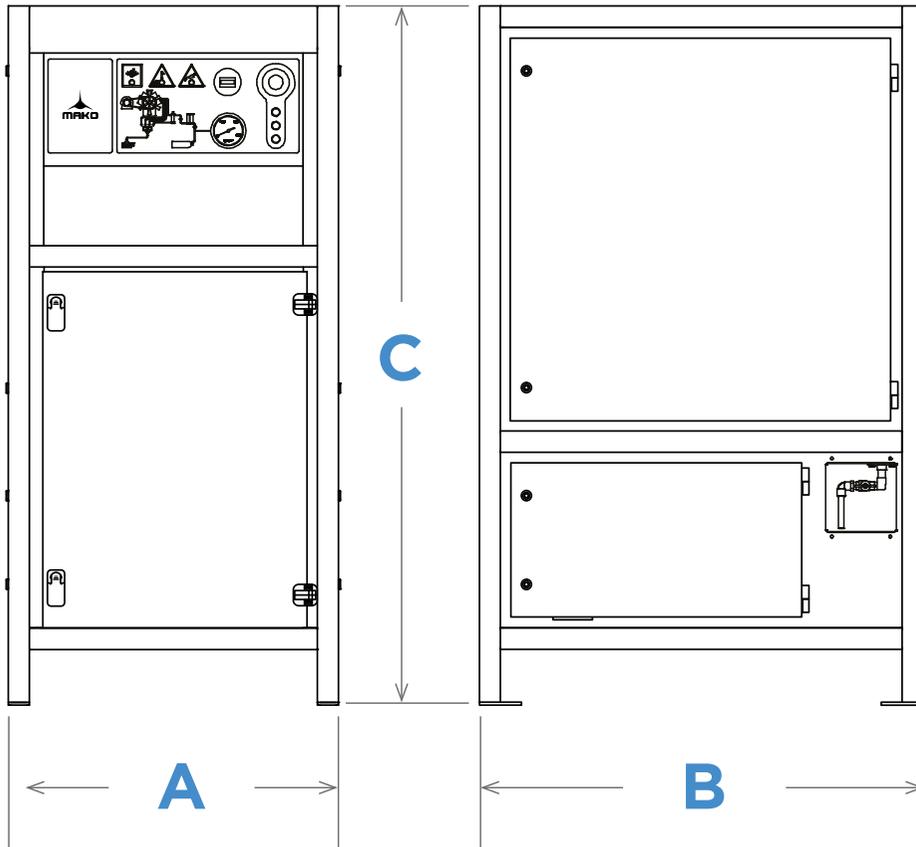


Efficient filtration system
to deliver air for
breathing air applications



Vertical Breathing Air Module [BAM]

BAM06



Technical Data:

Model	Configuration	Power Source	Driver Rating	Max. Pressure	Stages	Charging Rate	Compressor RPM
BAM06-360E	Vertical	460V, 60Hz, 3Phase	10HP	350 barg	4	22.3 m ³ /hr	1380
BAM06-350E	Vertical	400V, 50Hz, 3 Phase	10HP	350 barg	4	22.3 m ³ /hr	1380

Dimensions:

Model	Configuration	A (mm)	B (mm)	C (mm)	Total Weight (Kg)
BAM06-360E	Vertical	794	1067	1673	526
BAM06-350E	Vertical	794	1067	1673	526



MAKO Blue Synthetic Lubricant

The product combines **highly stable oils with unique additive technologies** to provide excellent thermal and oxidative stability.

Standard features:

- Approved for breathing air application
- Complete anti-wear and anti-corrosion protection

Lubricant Chart

Features	Mineral Oil	PAO	MAKO
Wide Temperature Performance	na	✓	✓
High Lubricity	na	✓	✓
Low Evaporation	na	✓	✓
Increased Efficiency	na	✓	✓
Excellent Solvency	na	na	✓
Clean Lubrication (no deposits)	na	na	✓
Biodegradability	na	na	✓
Extreme High-Temperature Performance	na	na	✓

✓ = applicable; na = **not** applicable

Selected physical properties

Property	Test Method	Results
Viscosity, cSt. @ 40°C	ASTM D445	91.4
Viscosity, cSt. @ 100°C	ASTM D445	9.3
ISO Viscosity Grade		100
Pour Point °C/°F	ASTM D97	-29 / -30
Flash Point °C/°F	ASTM D92	-260 / 500
Demulsibility @ 130°F	ATSM D1401	Excellent

Convenient package sizes

Package Size	Part Number
Quart	003MBQ-S
Gallon	003MBG-S
55 Gallon Drum	003MBD-S



Filtration

MAKO designs and manufactures its purification systems and cartridges to **guarantee the highest air quality**. No adhesives are used in production, limiting odors and taste.

- Filtration products exceed international standards: EN 12021/CGA, Grade D&E/NFPA 1989/CSA
- Stainless steel springs incorporated into the cartridge assures properly packed media
- Filters are mounted inside cabinet to safeguard against accidental damage

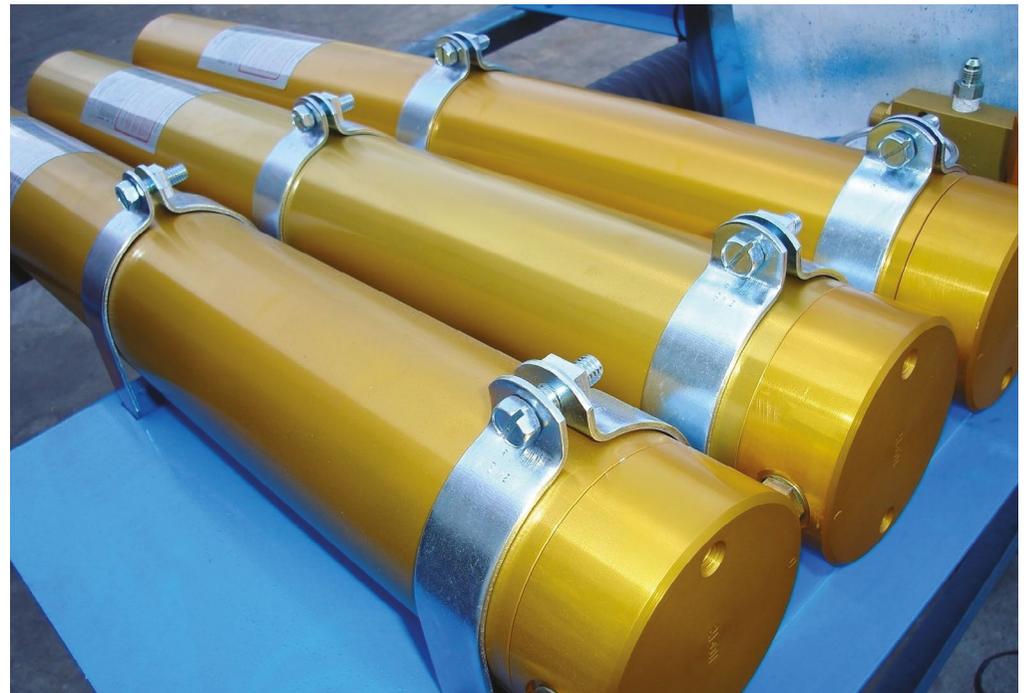
Standard features:

- Visual CO and moisture indicators do not require depressurization
- System inoperable without cartridge in chamber when cartridge CMM monitor option is used
- Non-corrosive replaceable cartridge
- Anodized aluminum alloy chambers rated for 6000 psig with a 4:1 safety factor

Technical data:

Model	Capability at 70° F Inlet Cubic Ft.
MK2C*	34,200
MK5C	82,200
MK10C	171,425
MK420C	428,570

* Purification cartridge used on the HBA06 and BAM06 models.



03

WARRANTY & OEM SPARE PARTS

Warranty

MAKO products are built to last. In case any replacements are required, take advantage of our warranty to ensure the best performance of your equipment.

Product warranty options:

Standard: 24 months

All products include a standard warranty on manufacturing and performance under normal operating conditions. Factory new products are issued as a replacement. The warranty period is twenty-four (24) months from initial start-up or thirty (30) months from shipment by MAKO.

OEM replacement parts

All MAKO products feature dedicated proprietary and consumable parts. To ensure the highest levels of safety and performance, we provide genuine MAKO replacements, available through authorized resellers and servicing distributor partners.



MAKO Compressors

MAKO Compressors is part of Gardner Denver, Inc. specializing in Breathing Air Systems since 1952.

Reavell

Gardner Denver UK from their state of the art facility in Redditch, England, Reavell designs and manufactures high quality reciprocating piston compressors.

Compressor notes

1. All technical details are subject to change.
2. Performance figures are typical and are not the full range available.
3. Figures based on inlet conditions of 20 °C/68 °F, 1,013 Bar/14.7 PSL.
4. Charge rates measured in accordance with Reavell standard No. 27 Type 'A'.
5. Electric motors are available in 50 & 60 Hz. Single & 3 Phase versions and with multiple voltage options.
6. Tested and certified to equivalent of UL 1450 Standards.
7. Sound pressure level at 1m/3 ft.



mako.enquiries.mideast@irco.com

