# ATLAS COPCO MARINE AIR SYSTEMS



Authorised Distributor

## Working Air Compressors MAS 110-160

# i Small footprint, superior efficiency for bulk handling



- 1 Cyclonic moisture separator, with automatic and manual drain, mounted behind the aftercooler.
- 2 Anti-vibration pads under motor and gearbox.
- 3 Control cubicle with integrated Elektronik®n Graphic regulation ensures reliable and safe operation.
- 4 Marine motor approved by notified body for non-essential or essential on-board duty.

# FEATURES AND BENEFITS

Optimized efficiency

- Several starter types: Star/Delta, DOL, and Soft Starter.
- Upon request: VSD (Variable Speed Drive), diesel and hydraulically driven.

Flexible installation and operation

- Flanged air and water connection, on same side of unit for easy installation.
- Marine motor with reduced starting current avoids stress on generator system.
- Elektronikor® Graphic regulation ensures reliable and safe operation.
- Control panel with hour counter, amp meter, hightemperature outlet, motor overload, low cooling water, motor heating on (lamp), auto operation sign, analog signals to customer and general alarm.



- 5 Motor and compressor are flanged to each other for permanent alignment during transport, installation and operation.
- 6 Air inlet filter with easily replaceable, highly efficient dry paper cartridge ensures a long compressor lifetime.
- 7 One oil-retaining frame with reduced dimensions.
- 8 Common combined air receiver/oil separator vessel installed on each compressor.

#### Saving space

- Small footprint (L x W x H): 3000 x 799 x 1850 mm.
- Frame-mounted, fully interconnected, no extra pipework.
- Including oil and aftercooler, water separator, air inlet filter.
- Without canopy to minimize equipment volume.

Ease of operation

- Voltage-free contacts to customer installation (open-closed): automatic operation, general warning, general shut down, load-unload, motor running and local-remote.
- Analog signals to customer installation (4-20 mA): outlet pressure and motor current.



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# TECHNICAL SPECIFICATIONS

| Compressor<br>type    | Maximum<br>working pressure |      | Capacity FAD* |      |      | Installed<br>motor power*** |     | Cooling water flow |      | Weight   |      |
|-----------------------|-----------------------------|------|---------------|------|------|-----------------------------|-----|--------------------|------|----------|------|
|                       | Standard                    |      | Standard      |      |      |                             |     | Standard           |      | Standard |      |
|                       | bar(e)                      | psig | l/s           | m³/h | cfm  | kW                          | hp  | m³/h               | gpm  | kg       | lbs  |
| MAS 110 - 6 ba        | ir 6                        | 87   | 350           | 1260 | 742  |                             |     | 10.1               | 44.5 | 1020     | 4264 |
| MAS 110 - 8.6 bar 8.6 |                             | 125  | 320           | 1152 | 678  | 105                         | 170 | 10.1               | 44.5 |          |      |
| MAS 110 - 10.4        | bar10.4                     | 151  | 288           | 1037 | 611  | 125                         | 170 | 10.1               | 44.5 | 1938     | 4264 |
| MAS 110 - 13.8        | 8 bar13.8                   | 200  | 241           | 868  | 511  |                             |     | 10.1               | 44.5 |          |      |
| MAS 132 - 6 ba        | nr 6                        | 87   | 407           | 1465 | 863  |                             |     | 12.2               | 53.7 |          |      |
| MAS 132 - 8.6         | bar 8.6                     | 125  | 376           | 1354 | 797  | 150 204                     | 204 | 12.2               | 53.7 | 2073     | 4561 |
| MAS 132 - 10.4        | bar10.4                     | 151  | 345           | 1242 | 731  | 150 204                     |     | 12.2               | 53.7 | 2073     | 4501 |
| MAS 132 - 13.8        | 8 bar13.8                   | 200  | 292           | 1051 | 619  |                             |     | 12.2               | 53.7 |          |      |
| MAS 160 - 6 ba        | ar 6                        | 87   | 484           | 1742 | 1026 | 105                         | 250 | 14.0               | 61.6 | 2102     | 4627 |
| MAS 160 - 8.6         | bar 8.6                     | 125  | 428           | 1541 | 907  | 185                         | 250 | 14.0               | 61.6 | 2103     | 4627 |

 Other working pressures and 50 Hz upon request.
Unit performance measured according to ISO 1217, Annex C, Edition 4 (2009).

Annex C, Edition 4 (2009). \*\*\* Marine motor approval for either non-essential or essential duty.

essential duty. \*\*\*\*Depending on marine notified body.

Reference conditions:

Absolute inlet pressure: 1 bar(a)/14.5 psig. Ambient temperature: 20 °C/68 °F.

Relative humidity: 0%.

Cooling water inlet temperature: 20 °C/68 °F. Cooling water temperature rise: 10 °C/50 °F.

### OPTIONS

| Options                                  | MAS 110 | MAS 132 | MAS 160 |
|--|---------|---------|---------|
| Fresh or sea water coolers               |         |         |         |
| Pressure vessel approvals                |         |         |         |
| DIN, ANSI or JIS flanges                 |         |         |         |
| Modulating control                       |         |         |         |
| Remote current monitoring                |         |         |         |
| Essential or non-essential certification |         |         |         |
| Closed canopy to reduce noise with 14 dB | (A)     |         |         |
| Test certificate                         |         |         |         |
| Witness performance test                 |         |         |         |

# General information applicable for all unitsMax. ambient temperature45-55 °C / 113-131 °FMax. cooling water inlet<br/>temperature (fresh/sea)40/32 °C / 104/90 °FMax. cooling water pressure10 bar(e) / 145 psigCompressed air connection sizeDN 80 / PN 16Cooling water inlet and outlet sDN 40 / PN 16

|   | FAD** in marine conditions and measured<br>at the following working pressures |          |  |  |  |  |
|---|---|----------|--|--|--|--|
| F |   | Standard |  |  |  |  |
|   | 6 bar version at  | 6 bar    |  |  |  |  |
|   | 8.6 bar version at  | 8.6 bar  |  |  |  |  |
|   | 10.4 bar version at   | 10.4 bar |  |  |  |  |
|   | 13.8 bar version at   | 13.5 bar |  |  |  |  |
|   |   |          |  |  |  |  |



1850 mm 72.8"





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