

# ATLAS COPCO MARINE AIR SYSTEMS



Working Air Compressors  
MAS 110-160

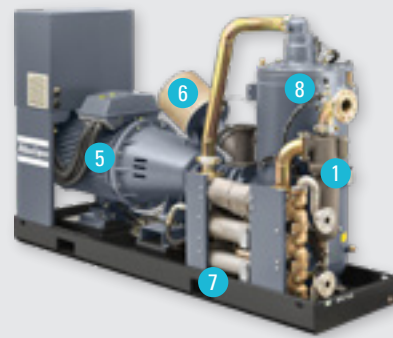
*Sustainable Productivity*

*Atlas Copco*

## **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 Elektronikon® Graphic regulation ensures reliable and safe operation.
- 4 Marine motor approved by notified body for non-essential or essential on-board duty.



- 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.

## **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.
- Elektronikon® Graphic regulation ensures reliable and safe operation.
- Control panel with hour counter, amp meter, high-temperature outlet, motor overload, low cooling water, motor heating on (lamp), auto operation sign, analog signals to customer and general alarm.

### **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.



## TECHNICAL SPECIFICATIONS

Compressor type	Maximum working pressure*		Capacity FAD**			Installed motor power***		Cooling water flow		Weight	
	Standard		Standard			kW	hp	Standard		Standard	
	bar(e)	psig	l/s	m <sup>3</sup> /h	cfm			m <sup>3</sup> /h	gpm	kg	lbs
MAS 110 – 6 bar	6	87	350	1260	742	125	170	10.1	44.5	1938	4264
MAS 110 – 8.6 bar	8.6	125	320	1152	678			10.1	44.5		
MAS 110 – 10.4 bar	10.4	151	288	1037	611			10.1	44.5		
MAS 110 – 13.8 bar	13.8	200	241	868	511	150	204	10.1	44.5	2073	4561
MAS 132 – 6 bar	6	87	407	1465	863			12.2	53.7		
MAS 132 – 8.6 bar	8.6	125	376	1354	797			12.2	53.7		
MAS 132 – 10.4 bar	10.4	151	345	1242	731			12.2	53.7		
MAS 132 – 13.8 bar	13.8	200	292	1051	619	185	250	12.2	53.7	2103	4627
MAS 160 – 6 bar	6	87	484	1742	1026			14.0	61.6		
MAS 160 – 8.6 bar	8.6	125	428	1541	907	14.0	61.6				

- \* Other working pressures and 50 Hz upon request.
- \*\* Unit performance measured according to ISO 1217, Annex C, Edition 4 (2009).
- \*\*\* Marine motor approval for either non-essential or 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

### General information applicable for all units

Max. ambient temperature****	45-55 °C / 113-131 °F
Max. cooling water inlet temperature (fresh/sea)	40/32 °C / 104/90 °F
Max. cooling water pressure	10 bar(e) / 145 psig
Compressed air connection size	DN 80 / PN 16
Cooling water inlet and outlet size	DN 40 / PN 16

### FAD\*\* in marine conditions and measured at the following working pressures

	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

## 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	✓	✓	✓



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