Product Reference

XAS 68-88 KD, XAS 48-88 KD G S5 APP

Standard Scope of Supply

The Atlas Copco **XAS 68-88(-7-10-12) (PACE), XAS 48-88(-7) KD G** are single-stage, oil-injected, rotary screw type air compressors, powered by a liquid-cooled, three-cylinder Kubota diesel engine.

The unit hosts the new generation C67 screw element in its air end, combined with a Kubota made diesel engine model V1505-CR-T-E5B, complying with the EU Stage 5 emission standard.

Special attention has been given to the overall product quality, user friendliness, ease of serviceability, and economical operation to ensure best in class cost of ownership.

The Unique feature of this new range is the optional PACE functionality coupled with the intuitive Xc2003 controller.
This pioneering technology enables multiple pressure and flow settings, ensuring you match air flow and pressure to your application needs.

Features	Benefits
• PACE (on selected models)	• The versatility of the Xc2003 controller gives you the flexibility to tune your machine to a wider range of applications. This feature makes the compressor very versatile as the same unit can be used for various application. This increases the utilization and hence the ROI as against a standard compressor. The PACE functionality ensures that the air flow matches the desired operating pressure to maximize output without compromising on the fuel efficiency.
• Designed with environmental protection in mind • Compact, sound attenuated, corrosion resistant enclosure	• The unit comes with a Spillage Free frame as Standard with 110% fluid containment and Stage 5 emission compliant engine, this makes the compressor suitable for use in all areas of the EU. For OND compliance the unit is enclosed in a sound attenuated Zincor steel enclosure. Compact and maneuverable, saving valuable space on your job site, and during transportation.
• HardHat™ hood and 3-layer painting of metal parts	• High residual value and low repair costs

Main data

Model		XAS 68-10	XAS 88-7	XAS 68-12 PACE		XAS 88-10 PACE	
		8162010088	8162010086	8162010087		8162010085	
Minimum effective receiver pressure	bar(g)	2	2	2		2	
Maximum effective receiver pressure (Unloaded)	bar(g)	12.5	8.8	12		10.3	
Normal effective working pressure	bar(g)	10.3	7	12	10.3	10.3	7
Actual free air delivery	l/s	58.9	82	54.4	58.6	56.3	82
Fuel consumption							
at 100% FAD (full load)	kg/h	7.48	7.48	7.48		7.48	
at 75% FAD	kg/h	5.37	5.37	5.37		5.37	
at 50% FAD	kg/h	3.67	3.67	3.67		3.67	
at 25% FAD	kg/h	3.09	3.09	3.09		3.09	
Specific fuel consumption at 100% FAD	g/m³	26.4	26.4	26.4		26.4	
Maximum typical oil content of compressed air	ppm	10	10	10		10	
Max. sound power level (Lw @ 2000/14/EC)	dB(A)	98	98	98		98	
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	70	70	70		70	
Compressed air temperature at outlet valve without aftercooler	°C	85	85	85		85	
Compressed air temperature at outlet valve with aftercooler	°C	35	35	35		35	
Max. ambient temperature at sea level without aftercooler	°C	50	50	50		50	
Max. ambient temperature at sea level with aftercooler	°C	45	45	45		45	
Min. starting temperature with cold start equipment	°C	-20	-20	-20		-20	
Min. starting temperature without cold start equipment	°C	-10	-10	-10		-10	
Engine		Kubota	Kubota	Kubota		Kubota	
Type		V1505-CR-T-E5B	V1505-CR-T-E5B	V1505-CR-T-E5B		V1505-CR-T-E5B	
Emission stage		EU Stage 5	EU Stage 5	EU Stage 5		EU Stage 5	
Coolant		ParCool Green	ParCool Green	ParCool Green		ParCool Green	
Number of cylinders		4	4	4		4	
Bore	mm	78	78	78		78	
Stroke	mm	78.4	78.4	78.4		78.4	
Swept volume	l	1.498	1.498	1.498		1.498	
Engine power at normal shaft speed @ ISO 9249G	kW	33	33	33		33	
Full Load	rpm	3000	3000	3000		3000	
Unload	rpm	1800	1800	1800		1800	
Capacity of oil sump:	l	5.5	5.5	5.5		5.5	
Capacity of cooling system	l	8.5	8.5	8.5		8.5	
Capacity of compressor oil system	l	8	8	8		8	
Net capacity of air receiver	l	12	12	12		12	
Air volume at inlet grating (approx.)	m³/s	0.93	0.93	0.93		0.93	
Capacity of standard fuel tanks	l	45	45	45		45	
Safety valve - minimum opening pressure	bar(g)	9.8	9.8	14.5		14.5	

Model		**XAS 68-7 G** 6 kVA 230/400 V	**XAS 68-7 G** 6,5 kVA 110 V	**XAS 88-7 G** 6,5 kVA 110 V
		8162010095	8162010094	8162010089
Minimum effective receiver pressure	bar(g)	2	2	2
Maximum effective receiver pressure (Unloaded)	bar(g)	8.8	8.8	8.8
Normal effective working pressure	bar(g)	7	7	7
Actual free air delivery	l/s	58.7	58.7	82
Fuel consumption				
at 100% FAD (full load)	kg/h	7.48	7.48	7.48
at 75% FAD	kg/h	5.37	5.37	5.37
at 50% FAD	kg/h	3.67	3.67	3.67
at 25% FAD	kg/h	3.09	3.09	3.09
Specific fuel consumption at 100% FAD	g/m³	26.4	26.4	26.4
Maximum typical oil content of compressed air	ppm	10	10	10
Max. sound power level (Lw @ 2000/14/EC)	dB(A)	98	98	98
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	70	70	70
Compressed air temperature at outlet valve without aftercooler	°C	85	85	85
Compressed air temperature at outlet valve with aftercooler	°C	35	35	35
Max. ambient temperature at sea level without aftercooler	°C	50	50	50
Max. ambient temperature at sea level with aftercooler	°C	45	45	45
Min. starting temperature with cold start equipment	°C	-20	-20	-20
Min. starting temperature without cold start equipment	°C	-10	-10	-10
Engine		Kubota	Kubota	Kubota
Type		V1505-CR-T-E5B	V1505-CR-T-E5B	V1505-CR-T-E5B
Emission stage		EU Stage 5	EU Stage 5	EU Stage 5
Coolant		ParCool Green	ParCool Green	ParCool Green
Number of cylinders		4	4	4
Bore	mm	78	78	78
Stroke	mm	78.4	78.4	78.4
Swept volume	l	1.498	1.498	1.498
Engine power at normal shaft speed @ ISO 9249G	kW	33	33	33
Full Load	rpm	3000	3000	3000
Unload	rpm	1800	1800	1800
Capacity of oil sump:	l	5.5	5.5	5.5
Capacity of cooling system	l	8.5	8.5	8.5
Capacity of compressor oil system	l	8	8	8
Net capacity of air receiver	l	12	12	12
Air volume at inlet grating (approx.)	m³/s	0.93	0.93	0.93
Capacity of standard fuel tanks	l	45	45	45
Safety valve - minimum opening pressure	bar(g)	9.8	9.8	9.8
Alternator		MECC ALTE	MECC ALTE	MECC ALTE
Type		T16F - 130	S16F – 180A	S16F – 180A
Power	kVA	6	6,5	6,5
Output voltage	V	230/400	110	110
Standard		IEC 34-1	IEC 34-1	IEC 34-1
Number of phases		3	1	1
Fault current protection, residual current release, Idn	A	0,03	0,03	0,03
Circuit-breaker: Number of poles		4	2	2
Circuit-breaker: Rated current (In)	A	10	63	63
Air/Electricity operating mode*		Simultaneous	Simultaneous	Semi-Simultaneous

* Simultaneous: full FAD and full electric power available at the same time
Semi-simultaneous: air and electric power available at the same time, but not both at full load

Model		**XAS 48-7 G** 12 kVA 230/400 V	**XAS 68-7 G** 12 kVA 230/400 V	**XAS 88-7 G** 9 kVA 230/400 V
		8162010091	8162010096	8162010090
Minimum effective receiver pressure	bar(g)	2	2	2
Maximum effective receiver pressure (Unloaded)	bar(g)	8.8	8.8	8.8
Normal effective working pressure	bar(g)	7	7	7
Actual free air delivery	l/s	39	58.4	82
Fuel consumption				
at 100% FAD (full load)	kg/h	7.48	7.48	7.48
at 75% FAD	kg/h	5.37	5.37	5.37
at 50% FAD	kg/h	3.67	3.67	3.67
at 25% FAD	kg/h	3.09	3.09	3.09
Specific fuel consumption at 100% FAD	g/m³	26.4	26.4	26.4
Maximum typical oil content of compressed air	ppm	10	10	10
Max. sound power level (Lw @ 2000/14/EC)	dB(A)	98	98	98
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	70	70	70
Compressed air temperature at outlet valve without aftercooler	°C	85	85	85
Compressed air temperature at outlet valve with aftercooler	°C	35	35	35
Max. ambient temperature at sea level without aftercooler	°C	50	50	50
Max. ambient temperature at sea level with aftercooler	°C	45	45	45
Min. starting temperature with cold start equipment	°C	-20	-20	-20
Min. starting temperature without cold start equipment	°C	-10	-10	-10
Engine		Kubota	Kubota	Kubota
Type		V1505-CR-T-E5B	V1505-CR-T-E5B	V1505-CR-T-E5B
Emission stage		EU Stage 5	EU Stage 5	EU Stage 5
Coolant		ParCool Green	ParCool Green	ParCool Green
Number of cylinders		4	4	4
Bore	mm	78	78	78
Stroke	mm	78.4	78.4	78.4
Swept volume	l	1.498	1.498	1.498
Engine power at normal shaft speed @ ISO 9249G	kW	33	33	33
Full Load	rpm	3000	3000	3000
Unload	rpm	1800	1800	1800
Capacity of oil sump:	l	5.5	5.5	5.5
Capacity of cooling system	l	8.5	8.5	8.5
Capacity of compressor oil system	l	8	8	8
Net capacity of air receiver	l	12	12	12
Air volume at inlet grating (approx.)	m³/s	0.93	0.93	0.93
Capacity of standard fuel tanks	l	45	45	45
Safety valve - minimum opening pressure	bar(g)	9.8	9.8	9.8
Alternator		MECC ALTE	MECC ALTE	MECC ALTE
Type		T20FS-160/A	T20FS-160/A	T20FS-160/A
Power	W	12	12	12**
Output voltage	V	230/400	230/400	230/400
Standard		IEC 34-1	IEC 34-1	IEC 34-1
Number of phases		3	3	3
Fault current protection, residual current release, Idn	A	16	16	16
Circuit-breaker: Number of poles		4	4	4
Circuit-breaker: Rated current (In)	A	16	16	13
Air/Electricity operating mode*		Semi-simultaneous	Semi-simultaneous	Semi-simultaneous

* Simultaneous: full FAD and full electric power available at the same time
Semi-simultaneous: air and electric power available at the same time, but not both at full load
** limited to 9 kVA by main circuit breaker

Dimensions

See dimension drawing

Principle Data

Compressor Element

The quality of a compressor can be measured through the reliability, efficiency and durability of the compressor element used. Through decades of expertise in the design of compressor elements, the result is the production of most efficient and reliable compressors in the market. When the screw element is efficient durability excels, maintenance intervals decrease and fuel consumption goes down.

The **XAS 68-88 KD, XAS 48-88 KD G** compressors utilize an Atlas Copco C67 element which is driven from the diesel engine. Inlet air is filtered through a heavy duty two stage air filter.

Air/Oil Separator

Air and oil separation are achieved through a centrifugal oil separator combined with a filter element. The vessel is either CE or ASME/CRN/MOM/AS1210 approved and stamped accordingly.

Designed for a higher maximum working pressure, the separator is equipped with a high pressure sealed and certified safety relief valve (automatic blow-down valve).

Cooling System

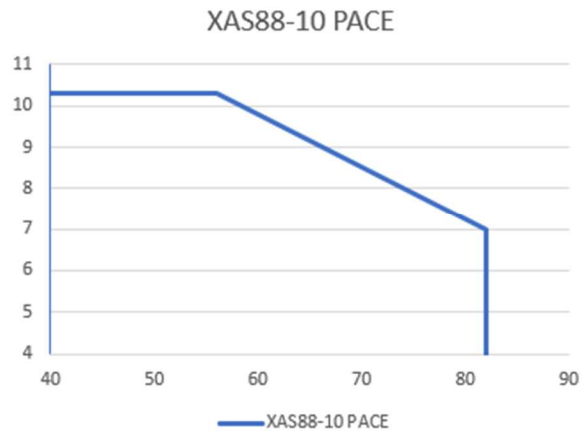
The cooling system consists of integrated side-by-side aluminum coolers with an axial fan to ensure optimum cooling. The fan is protected by a guard for operator safety. There is an access port for easy cleaning of coolers.

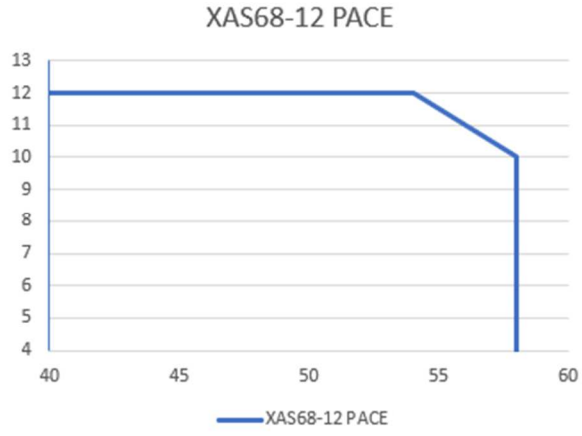
The cooling system is suitably designed for continuous operation in ambient conditions up to 50°C (122°F) and 45°C (113°F) with aftercooler, with canopy doors closed.

Compressor Regulating System / PACE

Introduction of intuitive PACE functionality allows the compressor to operate at any pressure setting between 7 and 10 or 12 bar. The compressor can have 2 pressure presets and we can use the controller to toggle between the pressure presets

Economic power consumption is assured by the fully automatic 100% step-less speed regulator that adapts engine speed to air demand.





Engine

A Kubota V1505-CR-T-E5B common rail turbocharged four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full load.

Cold start options are available for temperatures down to -20°C.

The 45-liter fuel tank is sufficiently sized to allow 7 hours autonomy at 75% load.
An optional 60 liter fuel tank is available for even greater autonomy*.

* This option may increase the unit's weight above 750 kg in certain cases

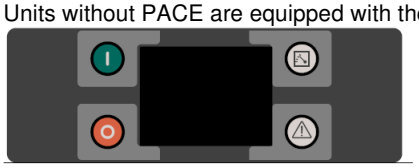
Electrical System

The **XAS 68-88 KD, XAS 48-88 KD G** are equipped with a 12 Volt negative ground electrical starting system.

Instrumentation

The instrument control panel is located on the rear corner, of the compressor canopy with easy access.

Units without PACE are equipped with the Xc1004 controller.



- Displayed while running
  - Hours
  - RPM
  - Outlet pressure

PACE units are equipped with the Xc2003 controller.

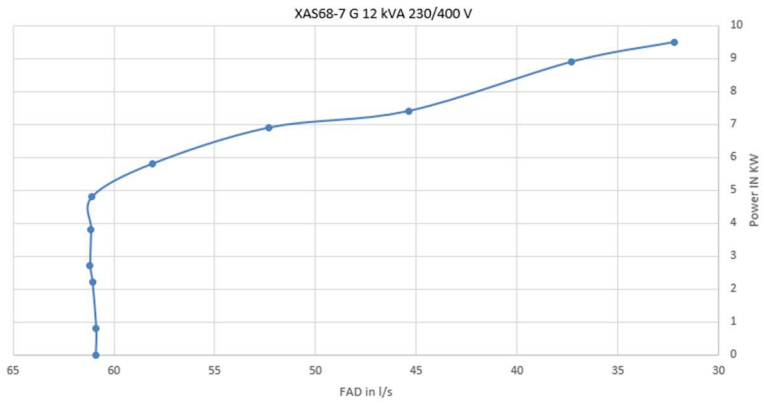
The intuitive Atlas Copco XC2003 controller is easy to operate with all functions conveniently at your fingertips. The controller also manages the engine ECU operating system, and a number of safety warnings and shut downs on various parameters (listed below).

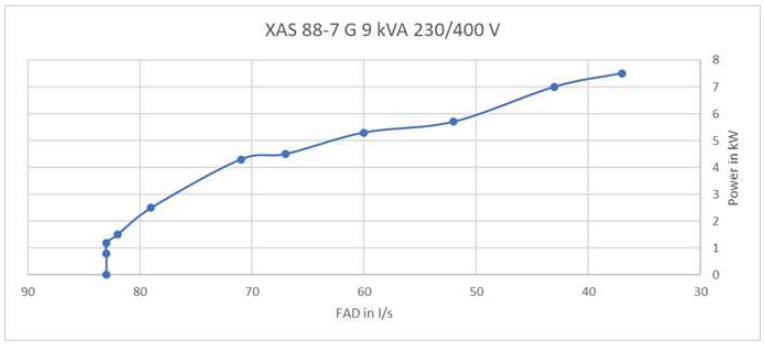
XC2003 Controller Functionality:

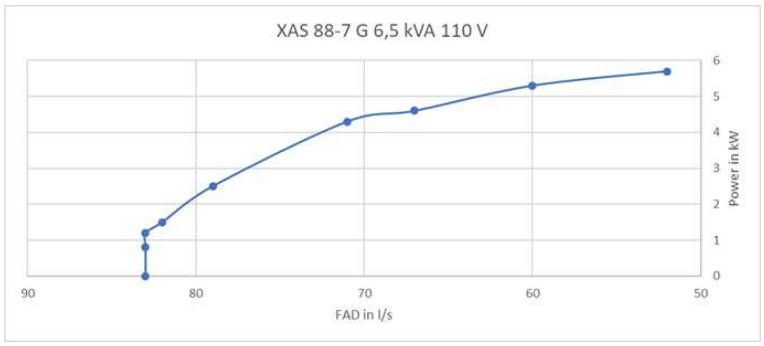
- Displayed while running
  - Hours
  - RPM
  - Outlet pressure
- Compressor measurements displayed
  - Running hours
  - Clock
  - Battery voltage
  - Running hours
  - Regulating pressure
  - Emergency stop count
  - Minor and major service counters in hours and days
- Warnings and Shutdowns
  - High temperature engine coolant
  - High temperature compressor oil
  - Engine oil pressure
  - High DPF soot level
- Settings
  - Manual regeneration of DPF
  - Reset service timers
  - Diagnostics for engine ECU
  - Language settings
  - Unit of measure changes
- Operational Buttons
  - Start and stop of the unit
  - View measurements, settings and alarms
  - Multi position cursor to navigate menus
- Engine measurements displayed
  - Current fuel rate
  - Engine coolant temperature
  - Engine oil pressure
  - DPF Soot level
  - Engine RPM
- Alarms
  - View current & historical alarms present
  - History of last 20 alarms and events with time and date stamps
  - DM1 & DM2: View current engine codes (SPN/FMI)
  - ECO mode

Generator

The XAS 48-7 G, XAS 68-7 G and XAS 88-7 G models come with an on-board generator.
For semi-simultaneous units, the possible air take-off depends on the electric load. For these models, the relationship between FAD and electric power is indicated in below graphs.







Simultaneous units always have full air flow and electric power available at the same time.

Bodywork

The compressor's frame comes standard with ASTM A653 Zincor steel platework with powder coat paint finish providing excellent corrosion protection. The canopy is sound attenuated to meet the most current legal noise requirements.

Undercarriage

The **XAS 68-88 KD, XAS 48-88 KD G** compressors are available with a choice of undercarriages, providing utmost flexibility in installation or towing requirements.

All undercarriage types can be partially disassembled and/or adjusted vertically upwards, to allow for sideways **truck loading**, up to 9 units per truck.
With the Fixed without brakes undercarriage type, even sideways **container loading** is also possible, allowing up to 8 units per container.

Options

The following options are available:

- Undercarriage
  - Adjustable without brakes
  - Adjustable with brakes
  - Fixed without brakes
  - Fixed with brakes
  - Support mounted
  - Extended support mounted
- Towing eyes
  - Ball coupling
  - DIN
  - NATO
- Towbar supports
  - Support leg
  - Jockey wheel
- Road light systems
  - Normal
  - LED
  - Reflectors only
- Quality air equipment
  - Aftercooler with optional bypass valve
  - Lubricator
  - Reheater
  - Non return valve
  - PD filter
- Pressure vessel
  - CE approved
  - Multi-approved (ASME/CRN/MOM/AS1210)
- Anti-theft device
- Additional fuelfilter
- Safety cartridge
- Toolbox
- Compact Toolbox
- Cold weather equipment (thermostatic bypass valve and synthetic oil)
- Hose reel
- Refinery equipment
  - Spark arrester
  - Inlet shutdown valve
- Customized appearance
  - Special labelling
  - Special coloured hood
  - Special coloured frame
  - Special coloured bumper
- Connectivity
  - Fleetlink™ SmartBox
- Big (60 liter) fueltank

Supplied Documentation

The unit is delivered with documentation regarding:

- Hard copies of the Atlas Copco Operators Safety and Instruction Manual, Atlas Copco Parts Book, Kubota Engine Manual and Parts book, as well as electronic copies available on request.
- Warranty Registration card for engine and Atlas Copco Compressor (Units must be registered upon receipt).
- Certificate for air/oil separator vessel and safety valve approval (Upon request only).

Warranty Coverage

Please refer to product presentation for warranty info
Extended Warranty Programs are available; please contact your local sales representative for more info.