# Product Reference XATS 68 - XAS 88 KD APP



# **Standard Scope of Supply**

The Atlas Copco **XATS 68-XAS 88 KD** is a single-stage, oil-injected, rotary screw type air compressor range, powered by a liquid-cooled, four-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 or V1505-T, complying with the EU Stage 3A emission standard. Different pressure variants are available.

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.

# **Features**

- Compact, fuel-efficient engine
- Designed with environmental protection in mind
- Compact, sound attenuated, corrosion resistant enclosure
- HardHat<sup>™</sup> hood and 3-layer painting of metal parts

# **Benefits**

- Saves up to 12% of fuel on typical applications in this range.
- The unit comes with a Spillage Free frame as standard with 110% fluid containment and EU Stage3A 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, weighing less than 750 kg.

High residual value and low repair costs



# Main data

Model		XATS 68 KD	XAS 78 KD	XAS 88 KD
Minimum effective receiver pressure	bar(g)	2	2	2
Maximum effective receiver pressure (Unloaded)	bar(g)	12,5	8,8	8,8
Normal effective working pressure	bar(g)	10,3	7	7
Actual free air delivery	m³/min	3,5	4,5	5,0
Fuel consumption				
at 100% FAD (full load)	kg/h	8,17	8,17	8,17
at 75% FAD	kg/h	6,83	6,83	6,83
at 50% FAD	kg/h	5,3	5,3	5,3
at 25% FAD	kg/h	2,93	2,93	2,93
Specific fuel consumption at 100% FAD	g/m³	39,81	30,83	30,83
Maximum typical oil content of compressed air	mg/m³	5	5	5
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	°C	78,5	83,2	83,2
Max. ambient temperature at sea level	°C	50	50	50
Min. starting temperature with CS equipment	°C	-20	-20	-20
Min. starting temperature without CS equipment	°C	-10	-10	-10
Engine		Kubota	Kubota	Kubota
Туре		V1505-T	V1505-T	V1505-T
Emission stage		EU Stage3A	EU Stage3A	EU Stage3A
Coolant		ParCool	ParCool	ParCool
Number of cylinders		4	4	4
Bore	mm	78	78	78
Stroke	mm	78,4	78,4	78,4
Swept volume	l I	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	1850	1850	1850
Capacity of oil sump: - Initial fill	I	5,5	5,5	5,5
Capacity of oil sump: - Refill (max)	I	5,35	5,35	5,35
Capacity of cooling system	I	8,5	8,5	8,5
Capacity of compressor oil system	I	8	8	8
Net capacity of air receiver	I	12	12	12
Air volume at inlet grating (approx.)	m³/s	0,93	0,93	0,93
Capacity of standard fuel tanks	1	60	60	60
Safety valve - minimum opening pressure	bar(g)	14,1	9,9	9,9



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Model		XAS 68 KDG 6kVA 110 V	XAS 68 KDG 6kva 400 v	XAS 88 KDG 6,5kVA 110 V
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	m³/min	3,5	3,5	5,0
Fuel consumption				
at 100% FAD (full load)	kg/h	6,68	6,68	8,17
at 75% FAD	kg/h	5,61	5,61	6,83
at 50% FAD	kg/h	4,12	4,12	5,3
at 25% FAD	kg/h	3,1	3,1	2,93
Specific fuel consumption at 100% FAD	g/m <sup>3</sup>	30,67	30,67	30,83
Maximum typical oil content of compressed air	mg/m <sup>3</sup>	5	5	5
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	°C	80,8	80,8	82
Max. ambient temperature at sea level	°C	50	50	50
Min. starting temperature with CS equipment	°C	-20	-20	-20
Min. starting temperature without CS equipment	°C	-10	-10	-10
Engine		Kubota	Kubota	Kubota
Туре		V1505-T	V1505-T	V1505-T
Emission stage		EU Stage3A	EU Stage3A	EU Stage3A
Coolant		ParCool	ParCool	ParCool
Number of cylinders		4	4	4
Bore	mm	78	78	78
Stroke	mm	78.4	78.4	78.4
Swept volume	1	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	1850	1850	1850
Capacity of oil sump: - Initial fill	P	5.5	5.5	5.5
Capacity of oil sump: - Refill (max)	I	5,35	5,35	5,35
Capacity of cooling system	1	8.5	8.5	8.5
Capacity of compressor oil system	I	8	8	8
Net capacity of air receiver	I	12	12	12
Air volume at inlet grating (approx.)	m³/s	0.93	0.93	0.93
Capacity of standard fuel tanks	I	60	60	60
Safety valve - minimum opening pressure	bar(g)	9,9	9,9	9,9
	(0)		,	
Alternator		MECC ALTE	MECC ALTE	MECC ALTE
Туре		S16F-150/A	T16F-130A	S16F-180/A
Insulation class		Н	Н	Н
Rated output, class H temp. rise	kVA	6	6	6,5
Standard		IEC 34-1	IEC 34-1	IEC 34-1
Number of phases		1	3	1
Fault current protection, residual current release, Idn	А	0,03	10	0,03
Circuit-breaker 1ph: Number of poles		2	4	2
Circuit-breaker 1ph: Thermal release (It)	А	50	10	63
Circuit-breaker 1ph: Magnetic release	%In	300-500	300-500	300-500
Circuit-breaker 1ph: Rated current (In)	А	50	10	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 KDG 12kVA 400 V	XAS 68 KDG 12kVA 400 V	XAS 88 KDG 9kVA 400 V
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	m³/min	2,5	3,5	5,0
Fuel consumption				
at 100% FAD (full load)	kg/h	4,89	6,68	8,17
at 75% FAD	kg/h	3,96	5,61	6,83
at 50% FAD	kg/h	3,12	4,12	5,3
at 25% FAD	kg/h	2,29	3,1	2,93
Specific fuel consumption at 100% FAD	g/m <sup>3</sup>	36,51	30,67	30,83
Maximum typical oil content of compressed air	mg/m <sup>3</sup>	5	5	5
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	°C	76	80,8	83,2
Max. ambient temperature at sea level	°C	50	50	50
Min. starting temperature with CS equipment	°C	-20	-20	-20
Min. starting temperature without CS equipment	°C	-10	-10	-10
Engine		Kubota	Kubota	Kubota
Туре		V1505-T	V1505-T	V1505-T
Emission stage		EU Stage3A	EU Stage3A	EU Stage3A
Coolant		ParCool	ParCool	ParCool
Number of cylinders		4	4	4
Bore	mm	78	78	78
Stroke	mm	78,4	78,4	78,4
Swept volume	I	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	1850	1850	1850
Capacity of oil sump: - Initial fill	1	5,5	5,5	5,5
Capacity of oil sump: - Refill (max)	I	5,35	5,35	5,35
Capacity of cooling system		8,5	8,5	8,5
Capacity of compressor oil system		8	8	8
Net capacity of air receiver	I	12	12	12
Air volume at inlet grating (approx.)	m³/s	0,93	0,93	0,93
Capacity of standard fuel tanks		60	60	60
Safety valve - minimum opening pressure	bar(g)	9,9	9,9	11,6
Alternator		MECC ALTE	MECC ALTE	MECC ALTE
Туре		T20FS-160/A	T20FS-160/A	T20FS-160/A
Insulation class		Н	Н	Н
Rated output, class H temp. rise	kVA	12,5	12,5	12,5**
Standard		IEC 34-1	IEC 34-1	IEC 34-1
Number of phases		3	3	3
Fault current protection, Insulation resistance	kOhm	10	10	10
Circuit-breaker 3ph: Number of poles		4	4	4
Circuit-breaker 3ph: Thermal release (It)	А	16	16	13
Circuit-breaker 3ph: Magnetic release	%ln	300-500	300-500	300-500
Circuit-breaker 3ph: Rated current (In)	А	16	16	13
Air/Electricity operating mode*		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 **XATS 68 - XAS 88 KD** 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 is 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, with canopy doors closed.

### Engine

A Kubota V1505 naturally aspirated or V1505-T 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 60-liter fuel tank is sufficiently sized to allow full shift autonomy (8 hours).







For the curve of XAS78, please refer to XAS88.

# **Electrical System**

The XATS 68 - XAS 88 KD is equipped with a 12 Volt negative ground electrical starting system.

### Instrumentation

The instrument control panel is located at the rear of the compressor canopy with easy access. The standard instrument package includes an operating pressure gauge, a starter switch, a running hour counter, and 2 warning lamps.

The starter switch has an integrated lockout mechanism to prevent starter motor damage.



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# **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 XATS 68 - XAS 88 KD 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 0
  - Adjustable with brakes 0
  - Fixed without brakes 0
  - Fixed with brakes 0
  - DoT approved 0
  - Support mounted 0
  - Extended support mounted 0
  - Towing eyes
    - AC 0
    - Ball coupling 0
    - DIN 0
    - GB 0
    - ITA 0
    - NATO 0
  - Towbar supports
    - Support leg 0
    - Jockey wheel 0
    - Road light systems
      - Normal 0
      - LED 0
      - DoT approved non-LED 0
      - Reflectors only 0
- Quality air equipment
  - Aftercooler with optional bypass 0 valve
    - Lubricator 0
    - Reheater 0
    - Non return valve 0

- Pressure vessel
  - CE approved 0
  - Multi-approved 0
    - (ASME/CRN/MOM/AS1210)
- Anti-theft device
- Additional fuelfilter
- Safety cartridge .
- Toolbox
- Cold weather equipment (thermostatic
- bypass valve and synthetic oil)
- Hose reel
  - Refinery equipment
    - Spark arrester 0
      - Inlet shutdown valve 0
    - Customized appearance
      - Special labelling 0
        - Special coloured hood 0
        - Special coloured frame 0 0
        - Special coloured bumper
    - Connectivity Fleetlink™ 0

# **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.

