



Standard Scope of Supply

The Atlas Copco X28, V28, and H32 S5 are two-stage, oil-injected, rotary screw type air compressors powered by a liquid-cooled, eight-cylinder turbocharged Scania diesel engine.

The unit hosts the new generation C190 + J34 screw element in its air end, combined with a Scania diesel engine model DC13, complying with the EU Stage 5 emission standard. Along with DPF, DOC and SCR in the exhaust treatment system, cooling circuit, air/oil separation and control systems. The unit is mounted on support beams and the engine is supported by rubber buffers in a spillage-free frame.

An undercarriage with a fixed towbar, brakes and pintle eye is available as an option.

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

Features

- Designed with environmental protection in mind
- Compact, sound attenuated, corrosion resistant enclosure
- 2-layer painting

Benefits

- The unit comes with a spillage-free frame as standard with 110% fluid containment and a 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. The large U-Flex canopy doors allow superior access and make maintenance easy.
Compact and maneuverable, saving valuable space on your job site, and during transportation, less than 750 kg.
- High residual value

Main data

Model		X28	V28	H32
Minimum effective receiver pressure	bar(g)	14.4	14.4	11.5
Maximum effective receiver pressure (Unloaded)	bar(g)	32	27	22
Maximum working pressure	bar(g)	30	25	20
Actual free air delivery				
at pressure setting 13 bar	l/s	-	-	642
at pressure setting 16 bar	l/s	566	549	-
at pressure setting 16 bar	l/s	-	-	590
at pressure setting 20 bar (H32-P1)	l/s	-	530	550
at pressure setting 25 bar (V28-P1)	l/s	514	505	-
at pressure setting 30 bar (X28-P1)	l/s	485	-	-
Fuel consumption at pressure setting P1				
at 100% FAD (full load)	kg/h	62.7	63.6	61.2
at 75% FAD	kg/h	46.6	52.9	44.2
at 50% FAD	kg/h	37.6	41	34.8
at 25% FAD	kg/h	29.8	29.2	26
At 0% FAD (unload)	kg/h	27.7	24.1	21.1
Specific fuel consumption at 100% FAD	g/m³	36	35.1	30.5
Maximum typical oil content of compressed air	mg/m³	5	5	5
Max. sound pressure level (Lw @ 2000/14/EC)	dB(A)	107	107	107
Compressed air temp. at outlet valve standard (ambient+)	°C (°F)	105 (221)	105 (221)	105 (221)
Compressed air temp. at outlet valve with aftercooler (ambient+)	°C (°F)	60 (140)	60 (140)	60 (140)
Max. ambient temperature (standard)	°C (°F)	47 (116.6)	47 (116.6)	47 (116.6)
Max. ambient temperature with aftercooler	°C (°F)	45 (113)	45 (113)	45 (113)
Min. starting temperature with cold weather equipment	°C (°F)	-25 (-13)	-25 (-13)	-25 (-13)
Min. starting temperature without cold weather equipment	°C (°F)	-10 (-14)	-10 (-14)	-10 (-14)
Number of compression stages		2	2	2
Engine		Scania	Scania	Scania
Type		DC13	DC13	DC13
Emission stage		Stage V	Stage V	Stage V
Coolant		Liquid	Liquid	Liquid
Number of cylinders		6	6	6
Bore	mm	130	130	130
Stroke	mm	160	160	160
Swept volume	l	12.7	12.7	12.7
Engine power at normal shaft speed @ ISO 9249G	kW	368	368	368
Full Load	rpm	1800	1800	1800
Unload	rpm	1350	1350	1350
Capacity of oil sump	l	45	45	45
Capacity of cooling system	l	73	73	73
Capacity of compressor oil system	l	78	78	78
Net capacity of air receiver	l	159	159	159
Air volume at inlet grating (approx.)	m³/s	13	13	13
Capacity of standard fuel tanks	l	600	660	660
Capacity of DEF tank	l	70	70	70

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 the 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 X28, V28 and H32 compressors utilize an Atlas Copco C190 + J34 element that is driven by the diesel engine. Inlet air is filtered through a heavy-duty two-stage air filter.

Air/Oil Separator

Air-oil separation is achieved through a centrifugal oil separator combined with a filter element.

The vessel is CE-approved as standard. It is also optionally available in the following approvals: ASME/CRN/MOM/AS1210.

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 an integrated side-by-side aluminum oil cooler 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 the coolers.

The cooling system is suitably designed for continuous operation in ambient conditions up to 47°C (116°F) and 45°C (113°F) with the aftercooler, with canopy doors closed.

Compressor Regulating System

The compressor is provided with an inlet valve assembly and a blow-off system which are controlled via instructions sent from the DrillAirXpert controller. The user interface to the DrillAirXpert controller is the main Compressor Control Module (CCM).

The butterfly valve in the inlet valve assembly allows an open, closed or angular setpoint. The system allows for a pre-set point for pressure or flow. These are easily set in the CCM.

A toggle switch is part of the system to allow for the preset of two working points of pressure and flow.

Fuel savings are integrated into the DrillAirXpert system, which controls the engine speed in relation to air demand.

This variable regulating system has a 'Dynamic Flowboost' function that gives extra air at lower pressures.

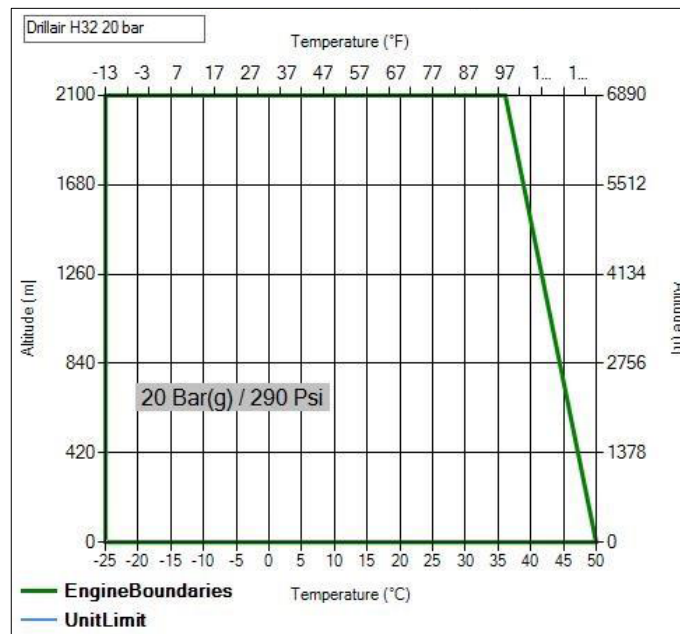
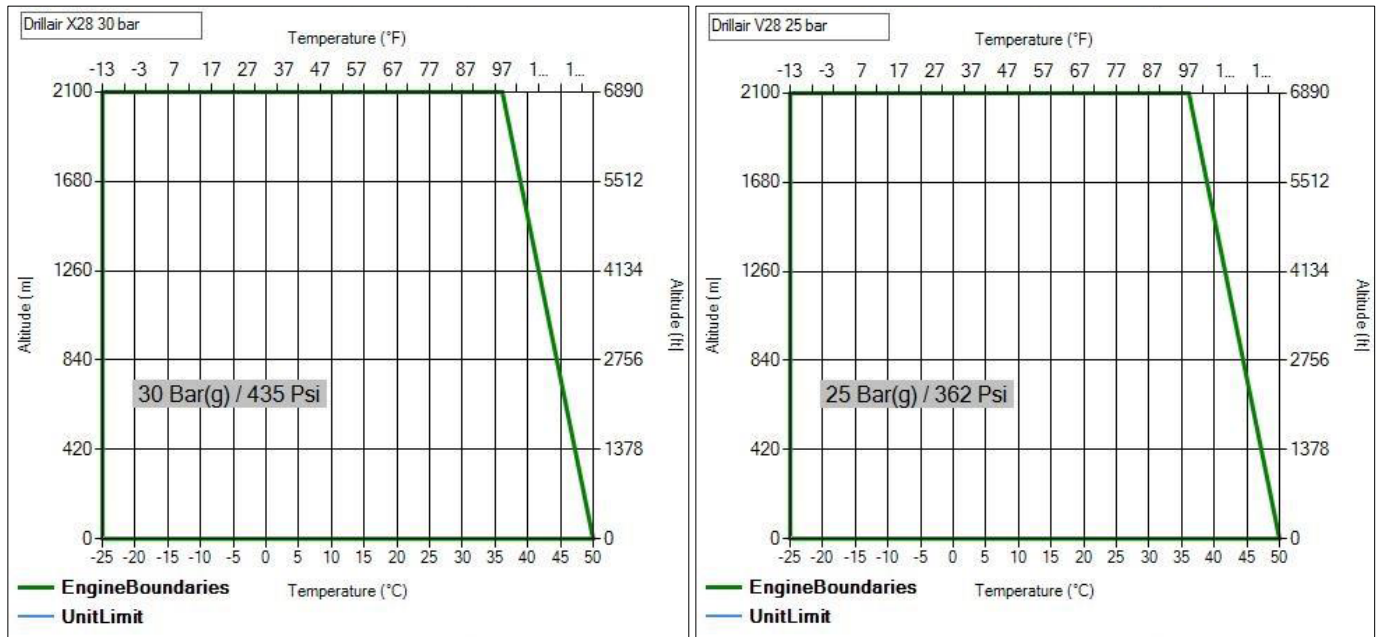
Automax pressure functionality for ease of putting units in parallel.

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

Engine

Scania

The Scania DC13 turbocharged, six-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor at full load. Cold start options are available for temperatures up to -25°C (-13°F).



Dimensions

See dimension drawing

Electrical System

The **X28, V28 and H32** are equipped with a 24 volt negative ground electrical starting system.

Instrumentation

The instrument control panel is located on the front of the compressor canopy.

The intuitive Atlas Copco Xc4004 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 shutdowns on various parameters (listed below).



XC4004 Controller Functionality:

- Main Screen
 - Vessel Pressure
 - Fuel level
 - Running Hours
 - RPM
 - Air Flow CFM
- Measurements
 - Fuel Consumption
 - Engine Coolant Temperature
 - Compressor Element Temperature
 - Vessel Pressure
 - Engine Load
 - Engine Oil Pressure
 - DPF Soot Load
 - Fuel Temperature
 - Battery Voltage
 - Regulatory Pressure
 - Loaded/Unloaded Hours
 - Successful/Unsuccessful Starts
 - Service Timers (2)
- Service
 - Data trending
 - Project Backup
- General Settings
 - DPF Stationary Regeneration
 - Engine Diagnostics
 - Auto Start/Load/Stop
 - Languages
 - Units of Measure
- Operational Controls
 - Preset flow or operating pressure
- Alarm
 - Active Alarms
 - Event Log History
 - Alarm Log History

Bodywork

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

Undercarriage

The **X28, V28 and H32** compressors are available with an undercarriage alternative, providing the utmost flexibility in installation and towing requirements.

- Single axle trailer setup with:
 - Undercarriage with road homologation and fixed towbar
 - 205R14C wheels for trailer use
 - Hydraulic trailer brakes
 - Heavy-duty torsion axle
 - Jockey wheel
 - Single point lifting structure
 - Pintle eye

Supplied Documentation

The unit is delivered with documentation regarding:

- Hard copies of the Atlas Copco Operators Safety and Instruction Manual and Parts Book as well as electronic copies are available on request. Electronic copies of the Scania Engine Manual and Parts book are also 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 the product presentation for warranty information.

Extended warranty programs are available; please contact your local sales representative for more information.