



Atlas Copco



DrillAir Range

For ground engineering, drill & blast,



DrillAir - Putting you in control

At Atlas Copco, we know the drill when it comes to compressed air, whatever the flow or pressure. A DrillAir compressor offers the perfect harmony between pressure and flow and puts you in full control of these parameters, while saving fuel.

When it comes to efficient drilling, there is no such thing as a one-size-fits-all. Depending on the depth of hole and the size of hammer, the right compressor makes all the difference. Choose the right product for your core business and get the **flexibility** to adapt to changes in drilling depth and hammer size.

A DrillAir is **easy to move, easy to operate** and **easy to service**. The whole compressor fits on one truck with the drill rig, the new Xc4004 controller gives you a wealth of functionalities at the touch of a button and a DrillAir's service intervals stretch up to 1000 hours and those of the engine to 500 hours.

**FUEL
EFFICIENT**



1 TRUCK



TO CARRY THE
COMPRESSOR AND THE RIG

stageV
COMBUSTOR

**LOW
TOTAL COST**



Xc4004
SMART AIR
CONTROLLER



Technology for efficient drilling

Drill faster and drive down fuel costs

A DrillAir compressor is packed with technology that boosts your drilling efficiency while saving on fuel. Thanks to **AirXpert 2.0**, our performance management system, you have full control over the compressor's flow and pressure. AirXpert 2.0 is also a combination of software enhancements and the best possible components to increase your compressor's efficiency. Either flow or pressure is adjustable by the operator, the compressor automatically adjusts the other parameter.

Thanks to AirXpert 2.0, combined with the best engines on the market and our in-house designed Atlas Copco screw element, a DrillAir compressor allow you **to drill more meters per hour**.

Better performance – Dynamic Flow Boost

Dynamic Flow Boost gives you **10% addition flow** when flushing and during drill stem refill. It means faster flushing, stem refilling and a **shorter time to finish** the drill job.

More versatility – Atlas Copco XPR

Atlas Copco's patented XPR technology **extends the working pressure range** downwards, to 15 bar. This pressure setting helps prevent soil cavitation during overburden drilling, as well as enabling the same compressor to be used for both geothermal and foundation drilling. XPR is only available on the Y35, as an option.

High reliability – OilXpert

Smart electronics **increase the lifetime of the DrillAir's critical components**. OilXpert is our technology to regulate the oil temperature, keeping condensate levels in check, prolonging the lifetime of the compressor oil and, ultimately,

Stop compressing air – start controlling it!

Smart Air Xc4004 controller

The Smart Air Xc4004 controller features the latest innovations. We believe a controller should put you in complete control, while being intuitive, and most importantly easy to use and navigate.

Smart controls also **protect your investment**: improve your efficiency while decreasing the operating costs of your equipment through advanced insights.

Advanced features:



Smart user interface with key parameters at first sight.



Mirror application for remote control.



Audible, clear warning system for any deviations.



Robust design which resists water and dust (IP67 rated).



Takes efficiency, control and connectivity to the next level.



Easy to use interface

- 7 inch anti-glare LED screen.
- Simultaneous view of pressure and flow increase control on the output flow required by your application.
- Visible fuel and AdBlue® levels as well as running hours avoid unnecessary downtime.
- Personalised interaction through metrics and language settings.

Powerful insights increase uptime

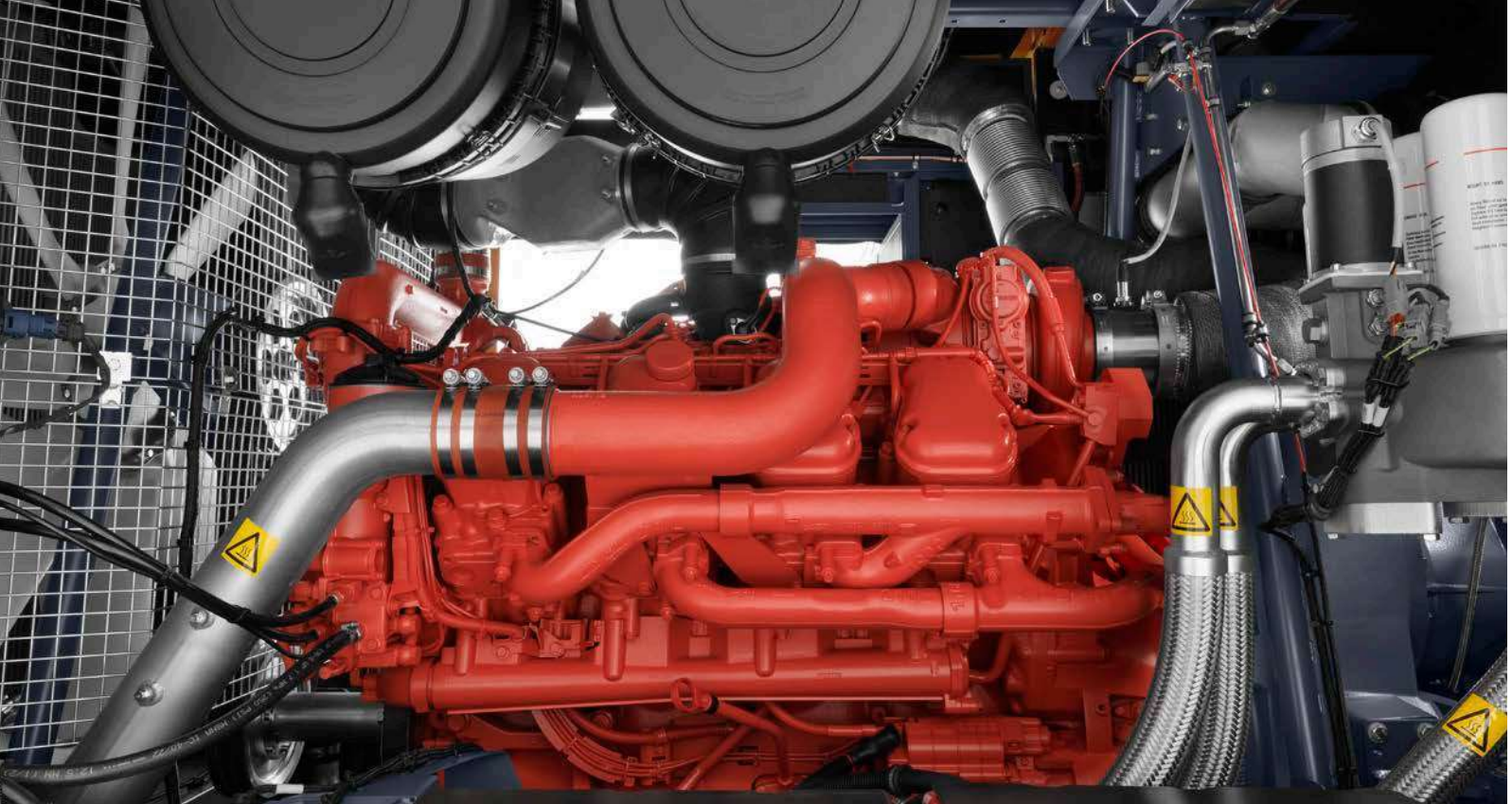
- Easy access to trends of 15 parameters.
- Increase uptime through preventive maintenance.



Save time through remote controlling

- Mirror application: control feed air compressor through second controller at point of use.
- All machine parameters remotely adjustable: auto load/unload, dynamic flow boost, multi pressure / flow settings, emergency stop...
- Hard wired or RRC radio remote connection.





Unleash your DrillAir's potential



Engines of the newest generation

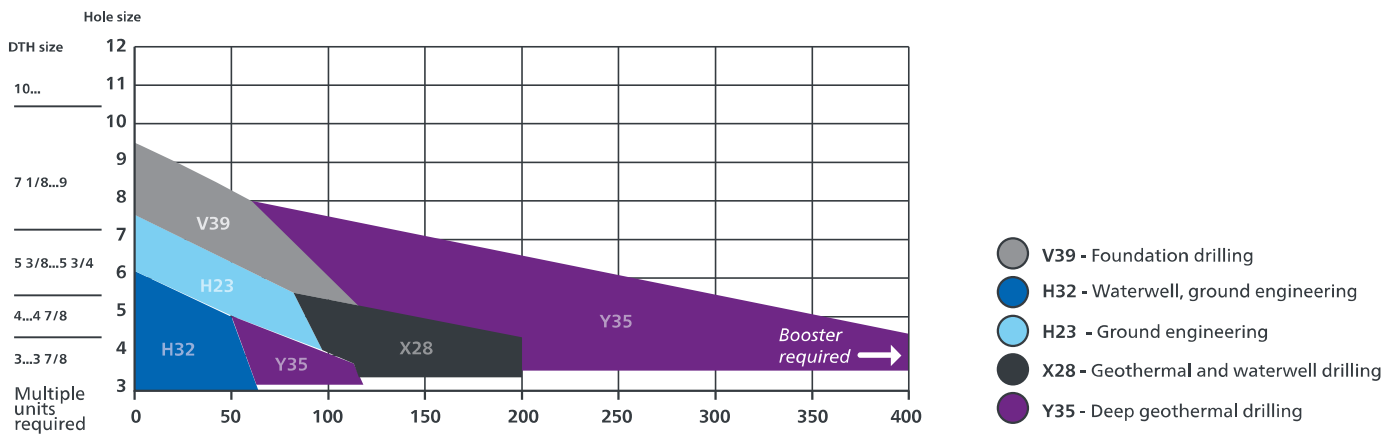
We selected the most powerful and recent engines for our DrillAir range of compressors, all **compliant with Stage V**, the most recent European emission legislation.

Stage V engines **reduce the emission of harmful NO_x and particulate matter to near-zero levels**, protecting the environment. Scania uses selective catalytic reduction (SCR), a diesel oxidation catalyst (DOC) and a diesel particulate filter (DPF) technology to meet the Stage V emission legislation. By injecting a urea based additive, AdBlue®/DEF (diesel exhaust fluid), into the after-treatment system, a chemical reaction takes place that converts the harmful nitrogen oxides (NO_x) into diatomic nitrogen (N₂) and water.

These state-of-the-art Scania engines minimize both your operating cost as well as the environmental impact of your machine. Thanks to the combination of this engine and our in-house designed oil-injected screw element, our DrillAir compressors offer **industry-leading fuel efficiency rates**.

Which unit is right for your job?

Thanks to AirXpert 2.0, you have the versatility to run your DrillAir compressor at various flow and pressure settings. When choosing a DrillAir unit, just consider your core business to enjoy the best possible efficiency, while knowing it will tackle those additional applications too.



- V39 - Foundation drilling
- H32 - Waterwell, ground engineering
- H23 - Ground engineering
- X28 - Geothermal and waterwell drilling
- Y35 - Deep geothermal drilling



Technical data

		V21	H23	H32
Normal effective working pressure range	bar (g)	16-25	13-20	13-20
Nominal flow at max working pressure	m ³ /min (l/s)	21.3 (355) at 25 bar	22.8 (380) at 20 bar	33 (550) at 20 bar
Flow in Dynamic flow boost	m ³ /min (l/s)	NA*	NA*	38.52 (642) at 13 bar
AirXpert 2.0		Yes	Yes	Yes
XPR		NA	NA	NA
Fuel consumption at 100%	l/h	51.86	50.51	72.76
Fuel consumption at 75%	l/h	38.32	37.94	51.16
Fuel consumption at 50%	l/h	32.39	30.86	41.77
Fuel consumption at 25%	l/h	26.37	24.91	30.95
Engine make		Scania DC 09	Scania DC 09	Scania DC 13
Engine power (DIN 627 1)	kW	232	232	368
Emission compliance		Stage V	Stage V	Stage V
AdBlue® tank capacity	l	70	70	70

*Dynamic Flow Boost disabled due to noise restrictions.

Dimensions and weight:

For DrillAir V21 and H23

		Wagon	Support-mounted	Tandem
Dimensions (L x W x H)	m	4.9 x 2.1 x 2.2	4 x 2.1 x 2.2	6 x 2.1 x 2.5
Fuel tank capacity	l	700	700	520
Weight (excl fuel, AdBlue®)	kg	5426	4750	6461
Weight (incl fuel, AdBlue®)	kg	6274	5598	7309



V28	X28	V39	Y35
16-25	16-30	16-25	22-35 (15-35 with XPR)
30.3 (505) at 25 bar	29.04 (484) at 30 bar	39.3 (655) at 25 bar	34.8 (580) at 35 bar
32.94 (549) at 16 bar**	33.9 (565) at 16 bar	43.92 (732) at 16 bar	38.88 (648) at 15 and 22 bar
No	Yes	Yes	Yes
NA	NA	NA	Down to 15 bar
77.03	74.24	82.1	82.6
55.09	55.14	58.4	59.9
43.82	45.36	45.3	48.1
36.79	35.95	NA	38.7
Scania DC 13	Scania DC 13	Scania DC 16	Scania DC 16
368	368	478	450
Stage V	Stage V	Stage V	Stage V
70	70	70	70

** Pneumatic regulating system with dual pressure valve

Dimensions and weight:

For DrillAir X28, V28 and H32

		Wagon	Support-mounted	Tandem
Dimensions (L x W x H)	m	4.9 x 2.1 x 2.2	4 x 2.1 x 2.2	6 x 2.1 x 2.5
Fuel tank capacity	l	700	700	520
Weight (excl fuel, AdBlue®)	kg	5936	5260	6454
Weight (incl fuel, AdBlue®)	kg	6786	6110	7304

For DrillAir Y35, V39

		Wagon	Support-mounted	Tandem
Dimensions (L x W x H)	m	6.2 x 2.2 x 2.5	4.1 x 2.2 x 2.5	6.9 x 2.4 x 3.1
Fuel tank capacity	l	750	1200	1200
Weight (excl fuel, AdBlue®)	kg	6916 (without forklift slots: 6796)	6324	8518

Power Technique Solutions Portfolio

Atlas Copco's Power Technique Business Area has a forward-thinking philosophy. For us, creating customer value is all about anticipating and exceeding your future needs – while never compromising our environmental principles. Looking ahead and staying ahead is the only way we can ensure we are your long term partner.

Air compressors

Ready to go



- 1-5 m³/min
- 7-12 bar

Versatility



- 5.5-22 m³/min
- 7-20 bar

*Diesel and electric options available

Productivity partner



- 19-116 m³/min
- 10-345 bar

Handheld tools

Pneumatic tools



- Breakers (2.5 – 40 kg)
- Rockdrills (5 – 25 kg)
- Underground Rock Drills
- Additional Air Tools

Hydraulic tools



- Breakers (11 – 40 kg)
- Additional Hydraulic Tools
- Powerpacks

Petrol engine driven tools



- Breakers & Tie Tampers (25 kg)
- Combi Drills (23 Kg)

Generators



- Portable
- Mobile
- Industrial

*Multiple configurations available to produce power for any size application

Light towers



- Diesel LED and MH
- Electric LED
- Battery LED

Dewatering pumps



- Submersible
- Surface
- Small portable

*Diesel and electric options available

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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/m ³	36	35.1	30.5
Maximum typical oil content of compressed air	mg/m ³	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.)	m ³ /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.

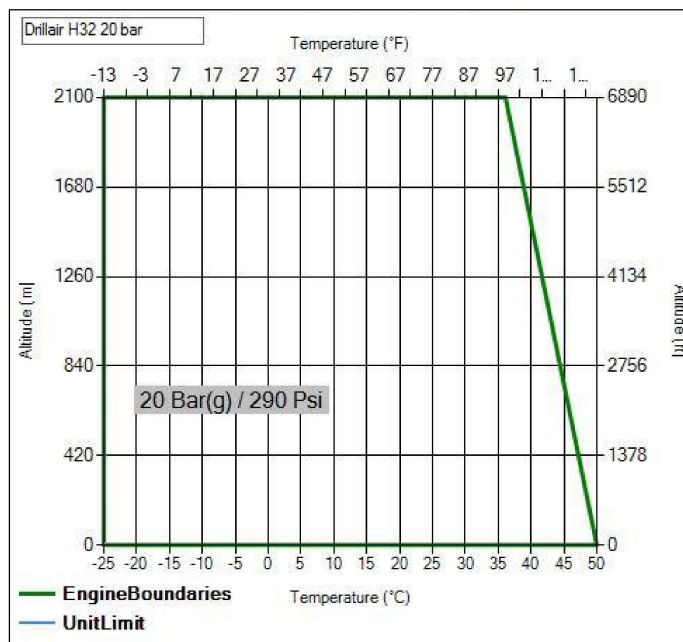
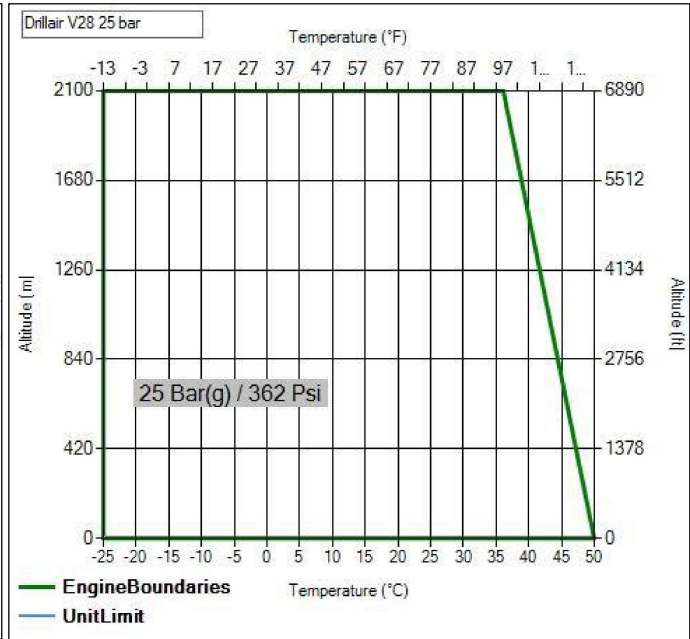
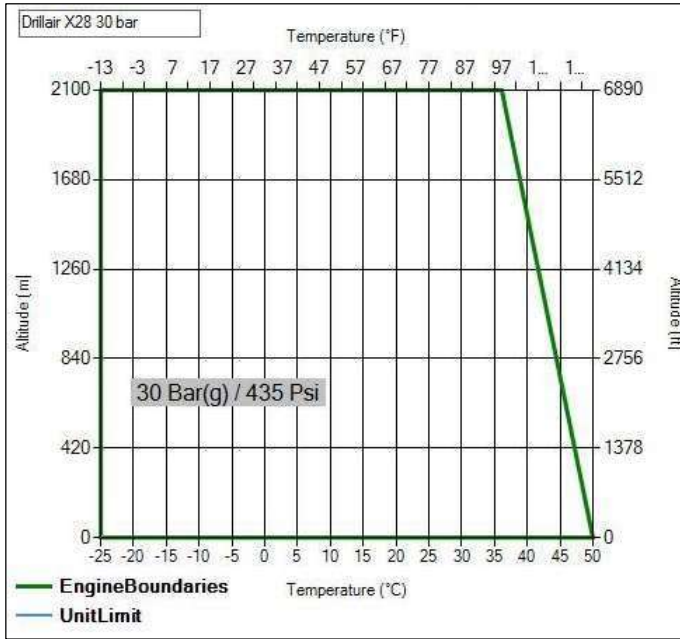
Automax pressure functionality for ease of putting units in parallel.

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.