



# CompAir

by Gardner Denver

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GB



## TURBOSCREW

# Unique technology with best-in-class efficiency

Stage V compliant compressor with unique benefits



Keeping your workforce moving

C200TS-24 - C270TS-9

# Efficiency Leader

# Highest Energy Efficiency

**C200TS-24 - C270TS-9**  
DLT 2703

**Pressure range** 9 to 24 bar (130.5 to 348 psi)

**Volume flow** 20 to 27 m<sup>3</sup>/min (706 to 953 cfm)

**Engine power** 180 to 224 kW

## CompAir Portable Compressors

In high-precision construction projects, the efficiency and reliability of compressors is of the utmost importance. CompAir offer a wide range of portable compressors, with a reputation within the industry for the highest quality and reliability, which meet the requirements of numerous mobile compressed air applications.

The C-series from CompAir is constantly evolving and guarantees high energy efficiency, low emissions and many other innovations, which make daily operations and maintenance tasks much easier.

The TurboScrew compressors with their unique bi-turbo technology provide class-leading diesel efficiency, the lowest weight of 3,500kg and future-proof stage V compliance.

## TurboScrew - The Preferred Choice

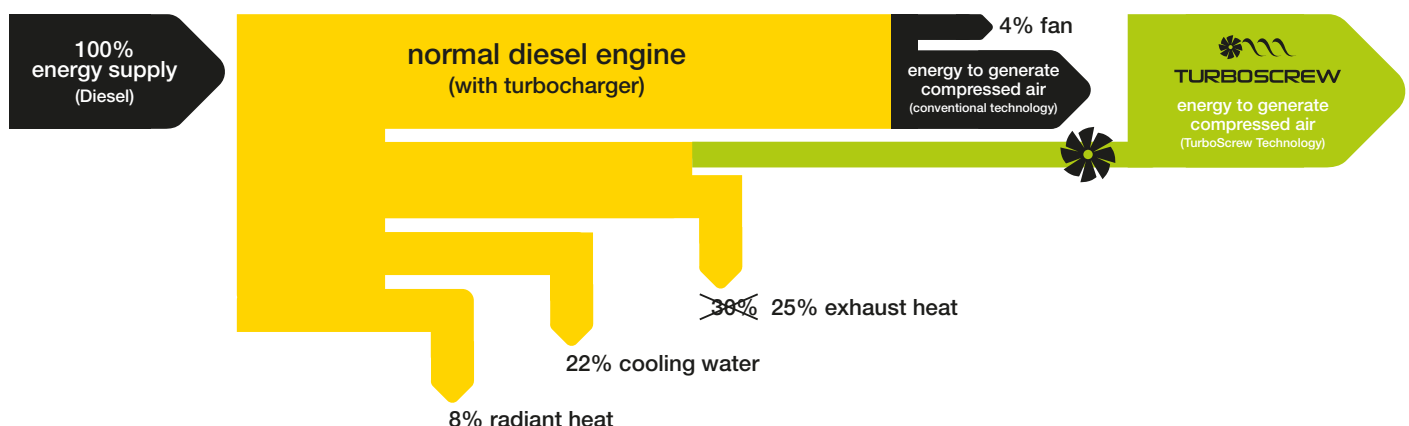
CompAir's patented TurboScrew compression system is a radical new approach to energy conservation. It uses a Cummins turbo assisted engine powering a CompAir screw compressor unit with the addition of an engine exhaust gas drive turbine, pre-compressing the suction inlet air before it enters the compression chamber.

Using the TurboScrew technology, the engine delivers approximately 14% more energy to the compressor

than conventional technologies (measured under full load condition).

With average site conditions where the demand varies between idle, part load and full load, the TurboScrew consumes up to 30% less diesel than most of the conventional compressors on the market, resulting in significant cost savings.

## Energy-Saving Bi-Turbo Technology





# Stage V Compliant

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Up to 30% less diesel consumption representing up to 20% of total lifecycle costs

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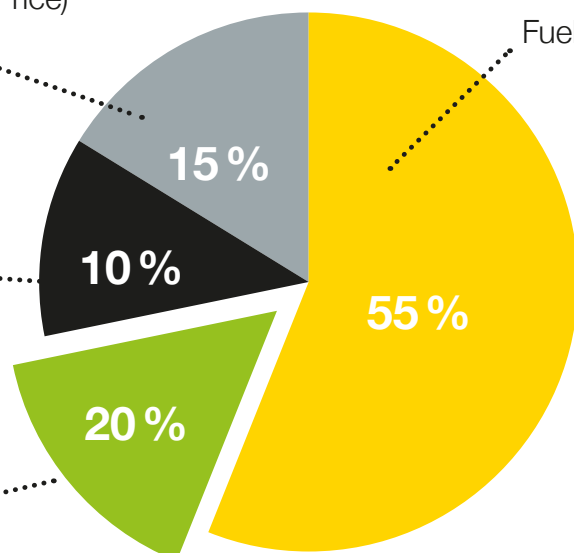
## Potential Fuel Savings

Based on average site running conditions, over lifetime of 10,000 hours, fuel savings of up to 30% can be achieved when compared with equivalent conventional compressors of this output range. This represents up to 20% of total lifetime costs.

Investment (Purchase Price)

Service & Maintenance

Fuel cost



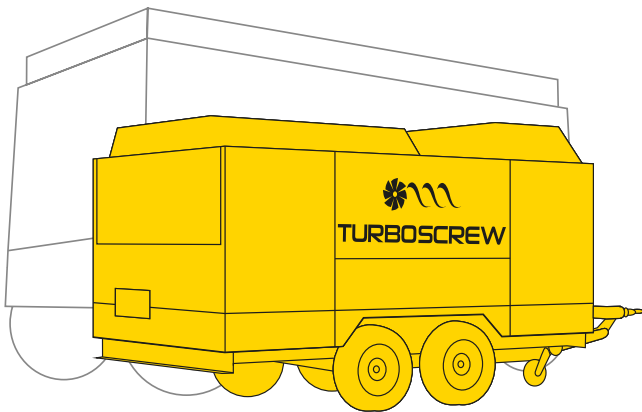
**TurboScrew fuel savings = 20% of lifetime cost**

# Unique Features

# its size makes it so versatile

## The TurboScrew Quality Features

### Small footprint & the lightest in its class



The TurboScrew features a low overall weight that is up to 2,000kg lighter than comparable compressors, combined with extremely compact dimensions. The compressor can therefore be towed by a vehicle with a maximum towing weight of 3,500kg and is great for getting to hard-to-access sites.

### Reliable Cummins QSB 6.7 Engine

A robust 6-cylinder turbo-charged and water-cooled diesel engine with an additional integrated turbocharger for the pre-compression of the inlet air of the compressor.

The engine powers a CompAir screw compressor unit with the addition of an engine exhaust gas driven turbine, pre-compressing the inlet air prior to it entering the compression chamber.

### Wide Regulation Range

TurboScrew operates between 1,200 and 2400 rpm and adapts precisely to the varying air demand, in turn saving energy.

### Soft Start

Extends the engine life time by reducing engine stress during start-up and allowing the engine to reach running temperature with the compressor unloaded.

### TurboSave

Lubricates the turbo charger in the pre and after run time of the engine and protects it from malfunction.

### Turn Signal Light

Diesel and AdBlue levels are displayed on the controller for instant feedback on fluid levels

### 24 V Electric System

Ensures sufficient power reserves in case of cold starts and a safe run-up ability.

### Easy Access Side Wing Doors

Offering excellent accessibility for easy maintenance.

### Bolted Single Sheets

The steel canopy is mass galvanised and electrostatically coated, offering excellent protection against damage and corrosion. With bolted single sheets, exchange is both quick and easy.

### Easy-to-Use Compressor Controller

Quick and easy operation, status overview, automatic controlled warm-up and cool-down time and Electronic monitoring of engine, compressor and SCRT system.



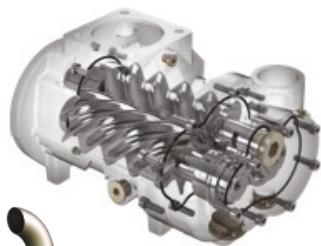
# GERMAN ENGINEERING DESIGN & MANUFACTURE



# Towable by large SUV car

## Premium efficiency airend

The high-output compression element is the heart of the compressor and CompAir keeps the design and manufacture in-house, using modern CNC rotor grinding machinery and online laser technology. With the new MOBILE 5 extended warranty the airend is covered up to **five years or 10,000 operating hours.\***



\*Terms and conditions apply.

## Case Study



### Deep compaction – Extreme Duty for all compressors

Deep compaction is one of the toughest applications for any compressor. Compressed air used as a tool is a proven medium in deep compaction. Deep compaction serves ground improvement by increasing the load capacity (shear strength, compressed strength) and / or reducing the sensitivity setting (stiff modules, cross contraction ratios) of one or more loose rock layers.

Three C 210 TS-12 compressors were used, Horst Komaritzan, CompAir's on-site Technical Consultant, believes "This is a monthly fuel saving per machine in the order of 3,000 litres of diesel as against comparable compressors from other suppliers".

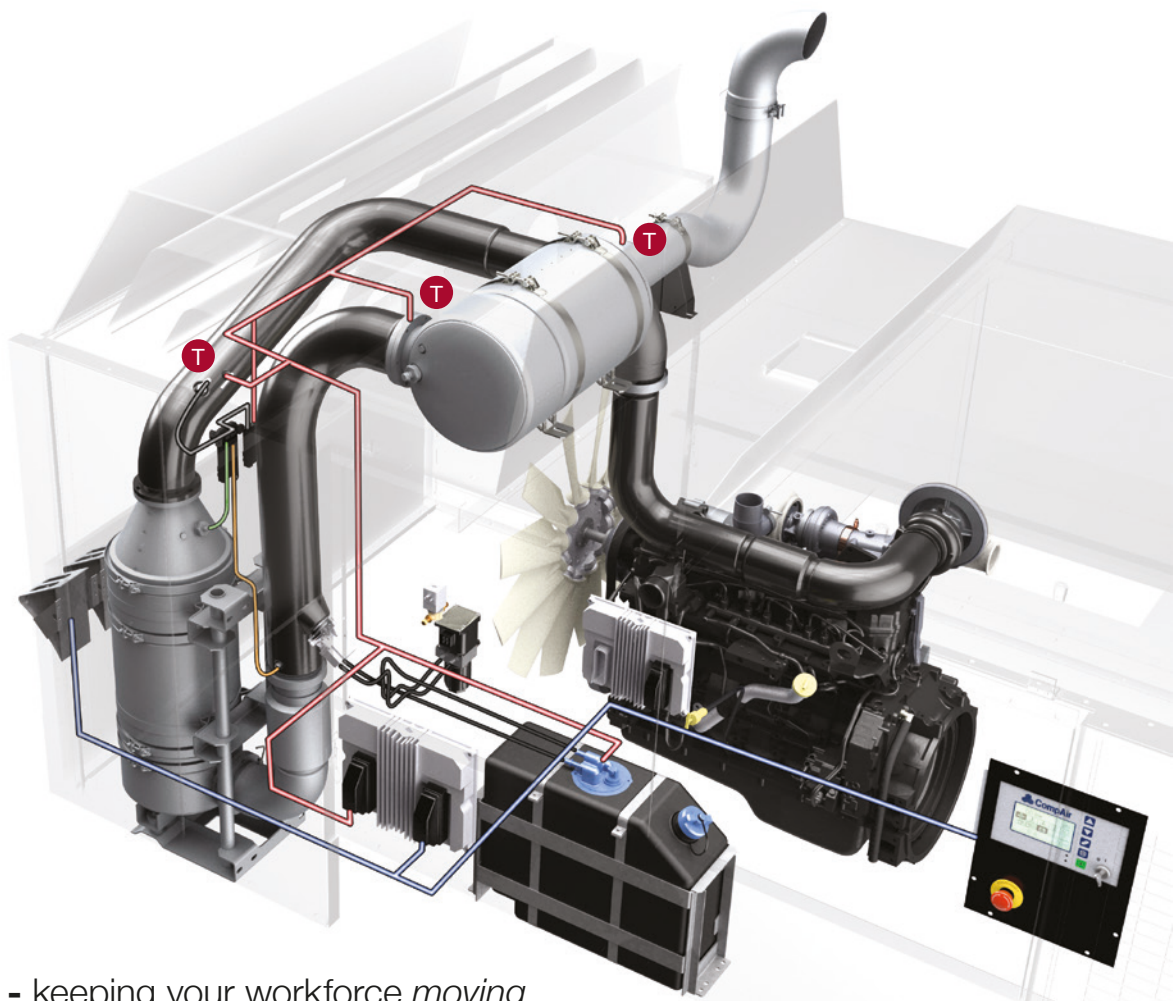
## Stage V

### Clean Operation

European and global directives and standards regarding non-road mobile diesel machinery emissions, are gradually becoming more stringent, and CompAir remain firmly at the forefront of the technology.

TurboScrew is compliant with the latest Stage 5 emissions standard, by utilising an innovative exhaust after treatment system incorporating diesel particulate filters (DPF) which has been designed and developed by our in-house engineers to exceed the requirements set.

But TurboScrew doesn't stop there. The unique bi-turbo technology offers up to 30% diesel savings compared to conventional compressors of this class.



**CompAir** - keeping your workforce *moving*



# Future- Proof

## SCRT® System from CompAir

The modular SCRT® system (Selective Catalytic Reduction Technology) developed in partnership by CompAir removes not only the soot particles but also the gaseous nitrogen oxide pollutants (NO<sub>x</sub>), almost completely from the diesel exhaust gases. The environmentally harmful nitrogen oxide emissions of diesel engines can be reduced by well over 90% in this way. CompAir's Exhaust Aftertreatment makes a serious difference for the environment as a whole.

Using a revolutionary Sintered Metal Filter (SMF™), means that the cleaning intervals are extended up to three times longer than using a ceramic filter in the process. The SMF™ for which CompAir's partner was awarded a German Environmental Award, are incredibly reliable, low-maintenance and benefit from a fantastic long service life. The cleaning also adds no cost because the user or operator is able to do it, thus reducing downtime and allowing a quick service turnaround.

## Case Study



## TurboScrew used successfully for four years, and counting!

As a specialist in corrosion protection, Krebs Unternehmensgruppe has several sites along the German North and Baltic coast. Due to the lack of high-voltage current connections, the company relies on diesel driven compressors.

In 2015 they purchased 8 C250TS-12 TurboScrew compressors which are being used for the blasting and coating of large monopiles with a diameter of more than 9 meters.

After four years and more than 13,000 operating hours, Krebs Unternehmensgruppe is more than satisfied with the reliable operation of the compressors and the energy savings of more than 25% compared to traditional technology. An investment which has paid off rapidly, thanks to the energy savings.

# Customer Service

# Highest Reliability

## Tailored compressor solutions to fit your application

CompAir offers a number of options and accessories allowing customers to configure the compressor according to their specific application.

## Typical TurboScrew Applications

- Water well drilling
- Geothermal drilling
- Ship refurbishment
- Oil-barrier
- Building refurbishment
- Bridge refurbishment
- Pneumatic lancing
- Dry ice blasting / sand blasting
- Ground exploration
- Earth loosening work... and many more

## CompAir Genuine Spare Parts

Genuine CompAir parts and lubricants ensure that reliability and efficiency is maintained at the highest standards.

CompAir spare parts and lubricants are distinguished by:

- Long service life, even under harshest conditions
- Minimum losses contributing to energy savings
- High reliability improving operational up-time

## AirPlus

Available options for this range

- Towing eye: car to ball, 76mm, DIN 40mm
- Adapter 13/7 pole for connection cable to the towing vehicle
- Preheating that allows the reliable start of the engine in ambient temperatures down to -25°C
- Special paint colour and labelling to customer specification
- Without chassis
- Skid mounted, with forklift receptacles

For models up to 14 bar:

- Aftercooler with reheater
- Filtration





# Efficiency Leader



## Performance Protection for Portable Compressors

When you buy a CompAir C-Series portable compressor, peace of mind comes as standard now. The first of a kind Mobile 5 Warranty offers genuine performance protection for up to 5 years. The main compressor elements and controls<sup>1</sup> are covered at zero additional cost.

Having your compressor serviced by authorised personnel in accordance with CompAir's maintenance schedules, ensures you enjoy comprehensive protection for up to 5 years (up to a maximum of 10,000 operating hours).

Mobile 5 from CompAir – keeping your workforce working.

<sup>1</sup> Terms, conditions & exclusions apply.

## Case Study



## Operating in Hazardous Conditions

"It was a real challenge to complete a project of this scale in the time available," says Cay Grunau from Hydrotechnik. "It took over six hours to drive the 315-tonne, 55-metre-long monopile around 30 metres down into the seabed.

This meant that the CompAir compressors ran continuously for around 20 hours, but, because of their high fuel efficiency, we were still able to save about 2000 litres of fuel on this particular project compared with similar compressors."

# Technical Overview

## Technical Data - C200TS-24 to C270TS-9

Type		C200TS-14	C210TS-12	C220TS-10	C230TS-9	C240TS-14	C250TS-12	C260TS-10	C270TS-9	C200TS-24	C210TS-21	C230TS-17	
<b>Operational data</b>													
Volume flow <sup>1)</sup>	m <sup>3</sup> /min	20	21	22	23	24	25	26	27	20	21	23	
	cfm	706	741.6	776.9	812	847.5	882.8	918	953	706	741.6	812	
Operating pressure	bar	14	12	10	9	14	12	10	9	24	21	17	
	psi	203	174	145	130.5	203	174	145	130.5	348	304.5	246.5	
<b>Engine</b>		GD-M2											
Installed engine power	kW	180					224						
Engine off load speed	1/min	1200						2400					
Engine full load speed	1/min	2400											
<b>Operating weight <sup>2)</sup></b>													
Portable compressor adjustable towbar braked	kg	3300					3340						
Skid mount	kg	3545					3585						
Base mount	kg	3385					3425						
<b>Filling capacities</b>													
Engine oil	l	17						350					
Diesel tank	l	350						38					
Adblue tank capacity	l	38						70					
Compressor oil	l	65					70			55			
<b>Dimensions &amp; connections</b>													
Length	mm	5198 - 5424											
Width	mm	1960											
Height	mm	2636											
Compressed air outlet		3 x 3/4" and 1 x 2"									1 x 2"		
<b>Sound level</b>													
Sound pressure level <sup>3)</sup>	dB(A) LPA	71											

<sup>1)</sup> Acc. to ISO 1217 Ed. 4 2009 Annex D

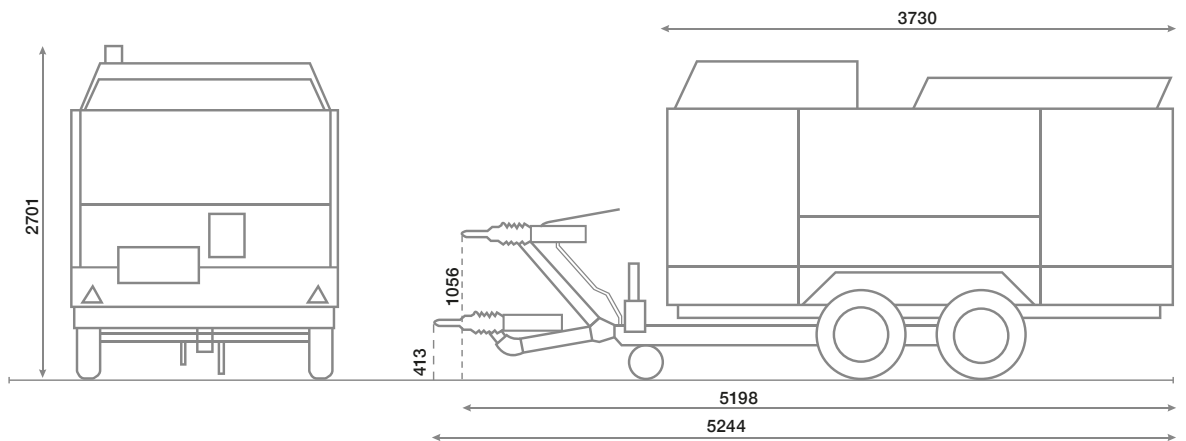
<sup>2)</sup> Operating weight without options

<sup>3)</sup> Noise level acc. to PNEUROP PN8NTC2.2 at 7 m

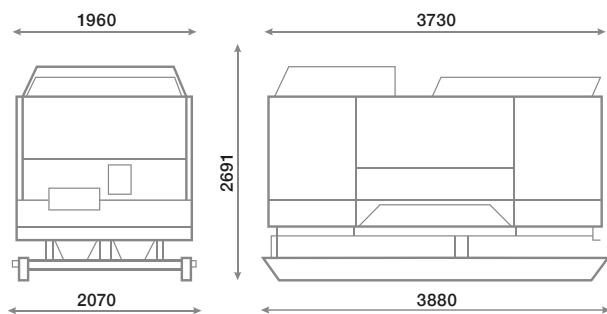


## Technical Drawings

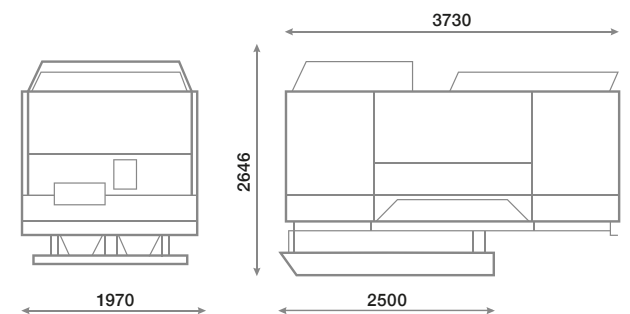
[mm]



Skid mount



Base mount



**CompAir** - keeping your workforce *moving*

# Global experience - truly local service

With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications. An extensive network of dedicated CompAir sales companies and distributors across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.



## Portable Compressors (EU & Non EU Range)

C10-12 - C270TS-9  
1 to 27 m<sup>3</sup>/min from 7 to 24 bar

### Air Plus offers many variations and options:

- Aftercooler
- Ultra-fine filters
- Integrated generator
- Bunded bottom box
- Hose reel
- Chalwyn Valve
- Exhaust spark arrestor
- Exhaust gas particulate filter
- Customer colours

## Tools

- Chipping Hammers
- Rockdrills
- Pickhammers
- Breakers

### Vibration damped tools:

- Rockdrills
- Pickhammers
- Breakers

## Accessories:

- Large selection of pointed chisel, slat chisel and spade
- In line lubricator
- Water separator with or without oiler
- Air hoses

## Services

- Technical support and advice
- Worldwide service network
- Reliable supply of spare parts
- Individual customer solutions
- Seminars and trainings