

**KAESER**  
**COMPRESSORS**

*Built for a lifetime.™*



# Boosters

## DN C Series

Pressures to 650 psig

Capacities 102 to 692 cfm

[kaeser.com](http://kaeser.com)

# DN C Series Boosters

## **Compact and accessible**

*Newly designed and requiring less than half of the installation space of previous models, these compact complete packages have everything you need to ensure a dependable supply of quality high pressure compressed air. The completely new and meticulous design of these packages not only provides optimized cooling air flow, but also enables excellent access for maintenance and service work. Another key advantage is that these new booster packages are perfectly matched for seamless networking with their “suppliers”—making them fully compatible with Industry 4.0 environments.*

## **Innovation you can trust**

With a cutting edge research and development team committed to building industry-leading products, Kaeser continues to deliver better solutions to meet our customers' compressed air needs. Kaeser's expertise and world-wide reputation for superior reliability and efficiency offer great performance and peace of mind.

## **Rugged reliability**

Kaeser's boosters meet our rigorous “built for a lifetime” standard. Designed and built with Kaeser's generations of manufacturing experience, you can rest assured that these boosters will continue to deliver the high pressure air you need with the exceptional reliability you expect from a Kaeser booster compressor.

## **Service-friendly**

From the ground up, these boosters have been designed with the user in mind. Fewer wearing parts and using premium quality materials ensure reduced maintenance requirements, longer service intervals, and extended service life. The all-in-one, enclosed package design saves on valuable floor space without sacrificing on maintenance accessibility. DN C Boosters offer the best in simplified service for reduced downtime and installation flexibility.

## **Guaranteed efficiency**

In our systems design approach, Kaeser chooses the components that work together in the most energy efficient way possible. Each and every component — from inlet filter to discharge flange — has been carefully designed with performance in mind. With Kaeser's superior system controls, we guarantee an effective system with lower operating costs.



# Reliability, Simplicity, and Performance



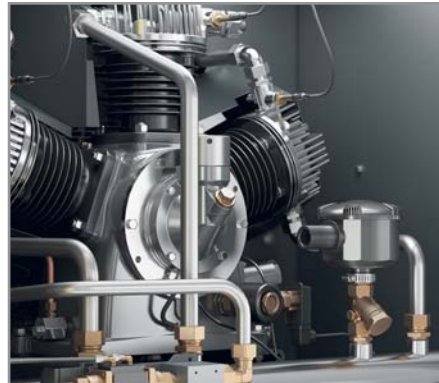
## Premium efficiency motors

Kaeser uses only premium efficiency Totally Enclosed Fan Cooled (TEFC) motors with class F insulation for extra protection from heat and contaminants. Remote grease fittings make maintenance a breeze. Each of the three motor windings is actively monitored through its own PT100 temperature sensor. Standard voltages are 460 V or 575 V (3-phase, 60 Hz). Other voltages are available.



## Automatic belt tensioning

Our V-belt drive with an automatic tensioning device provides optimum power transfer, long belt life, and simple maintenance.



## Durable, high pressure pumps

The high pressure pumps feature lower rotational speeds to promote extended operational life and consistent efficiency. Our advanced technology means cylinders are bored with precision and finished by a special process that ensures minimum oil consumption and negligible wear for durability.



## Comprehensive sensors

The comprehensive array of sensors and switch contacts for monitoring pressures, temperatures, oil pressure, and oil level ensures reliable operation and, thanks to Sigma Control 2™, enables remote monitoring and visualization of operating status and recorded data.



## Intelligent control and protection

To protect your investment and ensure the most efficient operation possible, we control these boosters with our Sigma Control 2™. This intelligent controller comes standard with multiple pre-programmed control profiles so you can select the one that best fits your application. Sigma Control 2 monitors more than 20 critical operating parameters, shuts the unit down to prevent damage, and signals if immediate service is required. It also tracks preventive maintenance intervals and provides notice when PMs are due. An RFID sensor provides secure access and simplifies managing maintenance intervals. An SD card slot with included SD card enables fast, easy software updates, storing key operational parameters, and offers long-term data storage for analyzing energy consumption and booster operation. Sigma Control 2 has superior communications capabilities. An Ethernet port and built-in web-server come standard in the controller making integration into the Sigma Network possible. ModBus, EtherNet/IP, Profibus®, Devicenet®, Profinet®, or other industrial communications interfaces are also available as plug-in options for seamless integration into plant control/monitoring systems.

# Options



## Nitrogen compression

DN C boosters for nitrogen (N<sub>2</sub>) compression are sealed to prevent penetration from outside air and come equipped with additional sensors. Effective pressure reduction during idling periods saves energy while ensuring high nitrogen quality.



## Adjustable machine mounts

DN series units installed on racks, frames, or in containers can be equipped with individually adjustable machine mounts for reliable stability.



## Water-cooling

Water-cooled DN series boosters are available for applications in which the compressed air discharge temperature must be below the ambient temperature. Water-cooling provides the best heat dissipation and is ideal for use with heat recovery systems.

# Sigma Air Manager 4.0



## Superior system control

Sigma Air Manager (SAM) 4.0 is a master control system for all compressed air production and treatment components. The unique 3D<sup>advanced</sup> Control continuously analyzes the various parameters

(e.g. switching and control efficiency) and calculates the ideal combination of compressors to achieve optimum efficiency.

SAM 4.0 enables predictive maintenance with its built-in maintenance reminders and messaging capabilities. These features not only boost operational reliability and efficiency, but also significantly reduce energy costs.


SAM 4.0 features Kaeser Connect which displays your compressed air system information in real-time on your desktop or laptop computer via a standard internet browser. Simple HTML pages show the compressors' operational state, SAM's operating and system pressure data, as well as service and alarm messages.



# Optimized cooling air flow

These boosters feature separate cooling air flows for the compressor block, drive motor, and control cabinet, taken in through openings on the right side of the enclosure. At the end of the cooling air flow circuit, these streams are combined and vented through the exhaust air outlet in the top of the enclosure. This clever design feature prevents cool inlet air from mixing with warm exhaust air for enhanced efficiency. By keeping thermal load to a minimum, a separate, energy-intensive cooling system for idling is only necessary under extreme conditions.



 Inlet and cooling air

 Cooling air outlet

# The new complete solution

DN series boosters are delivered as complete turnkey systems and are precisely tailored to the upstream compressor(s). Thanks to the Sigma Control 2 controller, they are ready for connection and are self-monitoring. This is a huge advantage in keeping installation time and costs to a minimum.

Kaeser is the first manufacturer in the booster sector to offer such user-friendly, complete solutions; all neatly contained within one compact enclosure.

**Sigma Control 2™  
Controller**

**High Capacity  
Cooling Fan**

**Efficient Cooler**

**Integrated Sensors**

**Sound Enclosure**

**IE3 Energy-saving  
Motor**

**Plug and Play**

# Technical Specifications

Model	Inlet Pressure (psig)	Max Discharge Pressure (psig)	Flow at Max Discharge (cfm)	Motor Horsepower (hp)	Dimensions (1) W x D x H (in.)	Weight (lb.)
DN 22C	190	580	258	30	50½ x 72 x 77½	2,800
DN 30C	190	650	342	40		3,020
DN 37C	190	650	438	50		3,086
DN 45C	190	650	470	60		3,109

(1) Dimensions shown are for units with air-cooled aftercoolers. For water-cooled units, consult factory. Special models available for nitrogen.

**Specifications are subject to change without notice.**



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