

Global presence

Complete commercial and technical support delivered locally to our partners worldwide

Nissens Automotive A/S, Denmark
(Head Office)
Tel. +45 7626 2626
E-mail: nissens@nissens.com

Austria
Nissens Österreich GmbH
Tel. +43 316 24 2000
E-mail: austria@nissens.com

Benelux
Nissens Benelux S.A.
NL: Tel. + 32 4264 9822
FR: Tel. : + 32 4264 5563
E-mail: benelux@nissens.com

China
Nissens (Shanghai) Auto Parts Trading co., Ltd.
Tel. +86 21 64283556
Mobile: +86 18501718088
E-mail: anwu@nissens.com

Finland
Nissens Finland Oy
Tel. +358 2 518 6800
E-mail: finland@nissens.com

France
Nissen France, e.u.r.l.
Lisses: Tel. +33 1 6086 0436
Toulouse: Tel. +33 5 6289 4040
E-mail: nissenfrance@nissens.com

Germany
Nissens Deutschland GmbH
Tel. +49 2304 999 3020
E-mail: deutschland@nissens.com

Hungary
Nissens Hungária Kft.
Tel. +36 1 850 6600
E-mail: hungaria@nissens.com

Italy
Nissens Italia srl
Tel. +39 051 864023
E-mail: italia@nissens.com

Japan
Nissens Japan Co. Ltd.
Tel. +81 82 209 5602
E-mail: nissens@nifty.com

Middle East and Africa
Nissens Middle East and Africa
Tel. +216 23 266 066
E-mail: anbo@nissens.com

North America
Nissens North America, Inc.
Tel. + 1 817 329 5114
E-mail: northamerica@nissens.com

Poland
Chłodnice Nissens Polska sp. z o.o.
Tel. +48 61 88 02 042
E-mail: biuro@nissens.com

Portugal
Nissens Iberia, S.A.
Sevilla: Tel. +34 954 670 584
Zaragoza: Tel. +34 976 790 887
nissensiberia@nissens.com

Serbia/Montenegro
Nissens Serbia/Montenegro
c/o Swiss Trade d.o.o.
Tel. +381 034 30 50 40
E-mail: office@swisstrade-online.com

Singapore
Nissens Asia Pacific, Singapore c/o Tangro Asia Pte Ltd.
Tel. +65 6561 6978
E-mail: tangro@singnet.com.sg

Slovakia
Nissens Slovakia s.r.o.
Tel. +421 32 7708 500
E-mail: slovakia@nissens.com

Spain
Nissens Iberia, S.A.
Sevilla: Tel. +34 954 670 584
Zaragoza: Tel. +34 976 790 887
E-mail: nissensiberia@nissens.com

Sweden
Nissens Sverige AB
Tel. +46 31 52 87 62
E-mail: sverige@nissens.com

Switzerland
Nissens Schweiz AG
Tel. +41 62 823 55 44
E-mail: schweiz@nissens.com

Ukraine
Nissens Ukraine Ltd.
Tel. +380 44 494 1556/57
E-mail: ukraine@nissens.com

The United Kingdom
Nissens (UK) Ltd.
Tel. +44 2476 470 340
E-mail: nissensuk@nissens.com

TRUCK SOLUTIONS PROVIDER

CLIMATE
COMFORT
SYSTEMS

ENGINE
COOLING
SYSTEMS

ENGINE
EFFICIENCY
SYSTEMS

Trust the **Truck Experts**

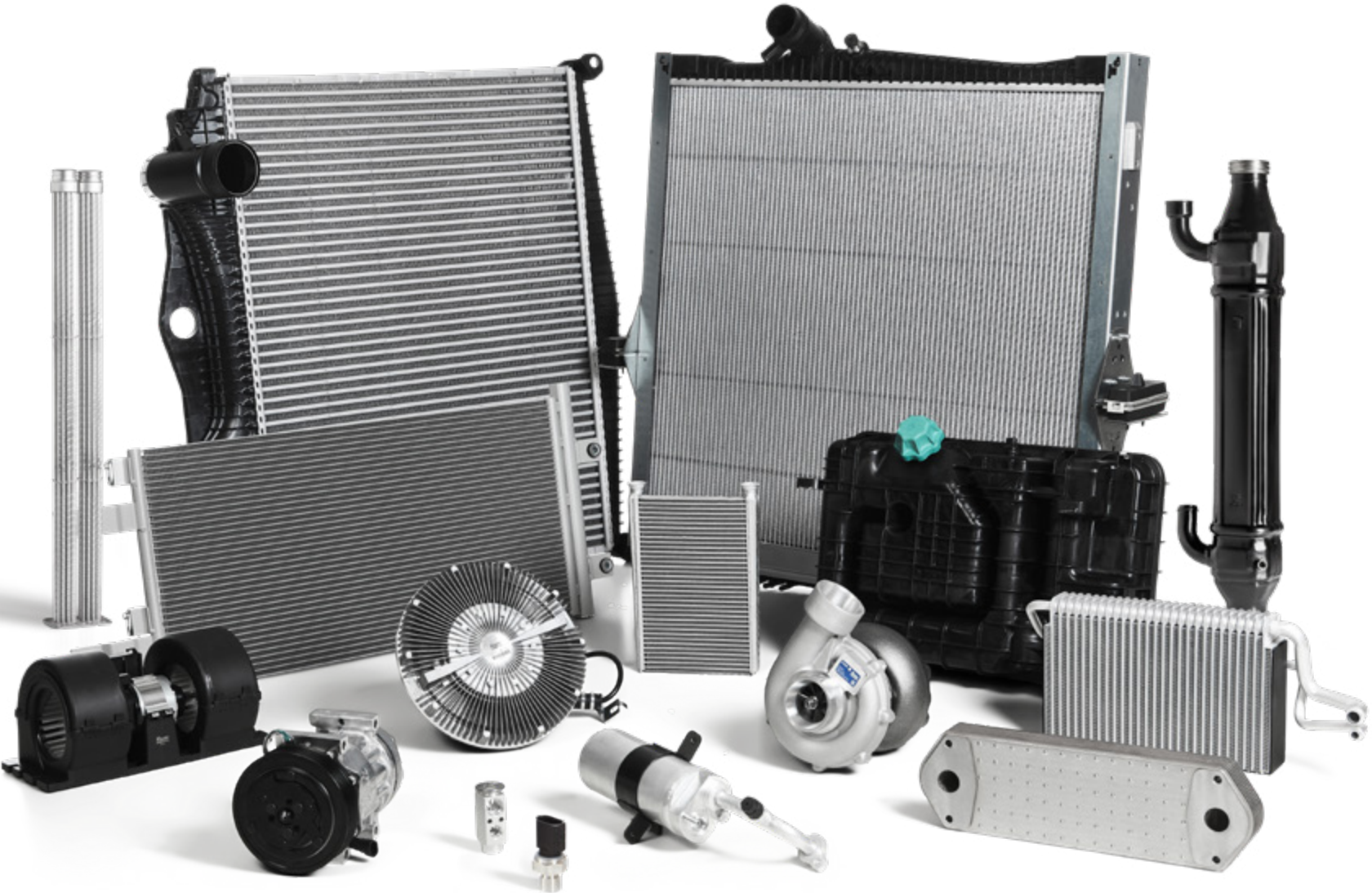
Reliability and a deep understanding of commercial vehicle applications are essential in the heavy-duty sector. Looking ahead to the future and seizing the current opportunities in the truck parts business, you can trust Nissens.

Our expertise is grounded in over a century of commitment to the aftermarket and demonstrated experience in the design, production, and worldwide distribution of automotive spare parts.

As your partner who's **Delivering the Difference**, we fully back your spare parts business and affordable mobility across all vehicle segments and technologies.

Today and in the future.

Learn the difference and trust your thermal management and efficiency systems expert.



Boosting the Truck Business

Aiming to deliver some of the best-performing truck products, our parts program has expanded to include turbochargers for heavy commercial vehicles, covering 60+ truck turbo parts, many of which fit Euro 5-6 engine models. Nissens Truck turbos are designed to ensure excellent engine output and long durability.

Competitive Product Range

Our heavy-duty parts program includes more than 800 parts that cater to 4,400 OE numbers, offering excellent truck parc coverage of over 85% within crucial product lines and Euro 6 applications.

The program includes replacement parts for popular truck models such as DAF, MAN, SCANIA, VOLVO, RVI, IVECO, and MERCEDES-BENZ. It provides related parts for three main product groups: Engine Cooling System, Climate Comfort System, and Engine Efficiency.

210+

Climate Comfort
system components

450+

Engine Cooling
system components

160+

Engine Efficiency
system components



Affordable Mobility

Our focus is to supply our customers with solutions for current-technology automotive parts, while looking ahead to the future and investing in new technology solutions. Thus, we can provide an easy access to appropriate spare parts and support your business' growth.



Aftermarket Dedication

As an aftermarket-driven manufacturer, we understand the market's needs. In addition to offering a wide range of products and technology for all vehicle segments, we provide valuable business support to our partners.



Genuine Nissens Quality

Our brand's premium quality standards mean the highest rate of raw materials and unique features, guaranteeing the product's easy installation, long lifespan, and supreme performance.



The Difference in Truck Racing

Extreme motorsport applications are the testimony to the supreme reliability of our products.

For years, Nissens' heat exchangers have been used in different types of motorsport, including high-profile racing events across various vehicle segments and technologies, and recently, in extreme competitions such as truck racing.

Most truck racing teams in the highly demanding FIA European Truck Racing Championship use regular Nissens radiators, oil coolers, and intercoolers, ensuring their trucks' excellent, and reliable cooling performance.

Radiator

Heat exchanger - essential for the engine thermal control

ENGINE COOLING SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Highly competitive product range, covering popular European trucks. The program includes 200+ radiators, covering more than 1,000 OE numbers.



Easy Installation

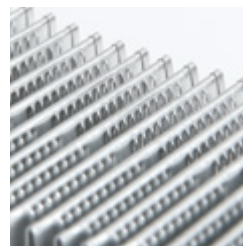
Perfect finish and product fit, enabling a quick and smooth product installation.



Reliability & Performance

Designed, manufactured and thoroughly tested to match OE product quality. Packaging with easy handling and excellent protection against transport damages. Nissens radiators are submitted to corrosion, vibration, pressure-impulse, thermal expansion and thermal performance tests.

Supreme thermal performance and extended lifespan thanks to a number of special features, improving critical components of the radiator.



Supreme Durability and Thermal Performance

Cores equipped with double-folded fins, reinforcing the fins against mechanical damages as well as increasing the total heat exchanging surface.



Critical Components Precision

Advanced technology and precision in welding of complex water tank elements, ensuring a long and trouble-free operation.

Perfect Fit

Perfect finish in every detail such as water tanks, connections, threads, bolts, gaskets, mounting brackets, etc. This enables a quick and trouble-free installation.

Highest Quality Raw Materials and Modern Technologies

Sturdy, durable and highly performing core construction produced with advanced aluminium brazing technology – controlled atmosphere brazing (CAB).

Top quality raw materials. Aluminium for truck radiators sourced solely from European suppliers.

Enhanced Pressure Impulse Stress Resistance

Specially designed metal profile installed between mounting frame and the radiator core to ensure enhanced durability of the radiator construction.

Thermal Expansion Resistance

Specially designed side panels with cuts to lower the influence of thermal expansion on the core construction.

Improved design of frame bolts. Nissens' pin-bolts ensure much higher flexibility of the radiator construction when exposed to thermal expansion effects. Nissens' pin-bolts are also delivered with no-frame radiators for selected models.

Thermal Stress Resistance

Reinforced plastic tanks enriched by fibreglass (PA66-GF30) and produced with no recycled plastics.



Role & Operation

The radiator is placed frontally in the vehicle and typically, other heat exchangers in the engine compartment, such as the intercooler or condenser, are attached to it.

The role of the radiator is essential for the cooling of combustion engines. In such engines, there may be as many as 6,000 fuel explosions per minute, each generating 1,500°C temperature. The cooling liquid circulates through a cooling jacket down to the engine block, down the engine block and the engine equipment such as pistons, valves, gaskets, rings, engine head etc. The circulating coolant receives the combustion heat, cools down again flowing throughout the radiator that exchanges its heat with the atmospheric air.

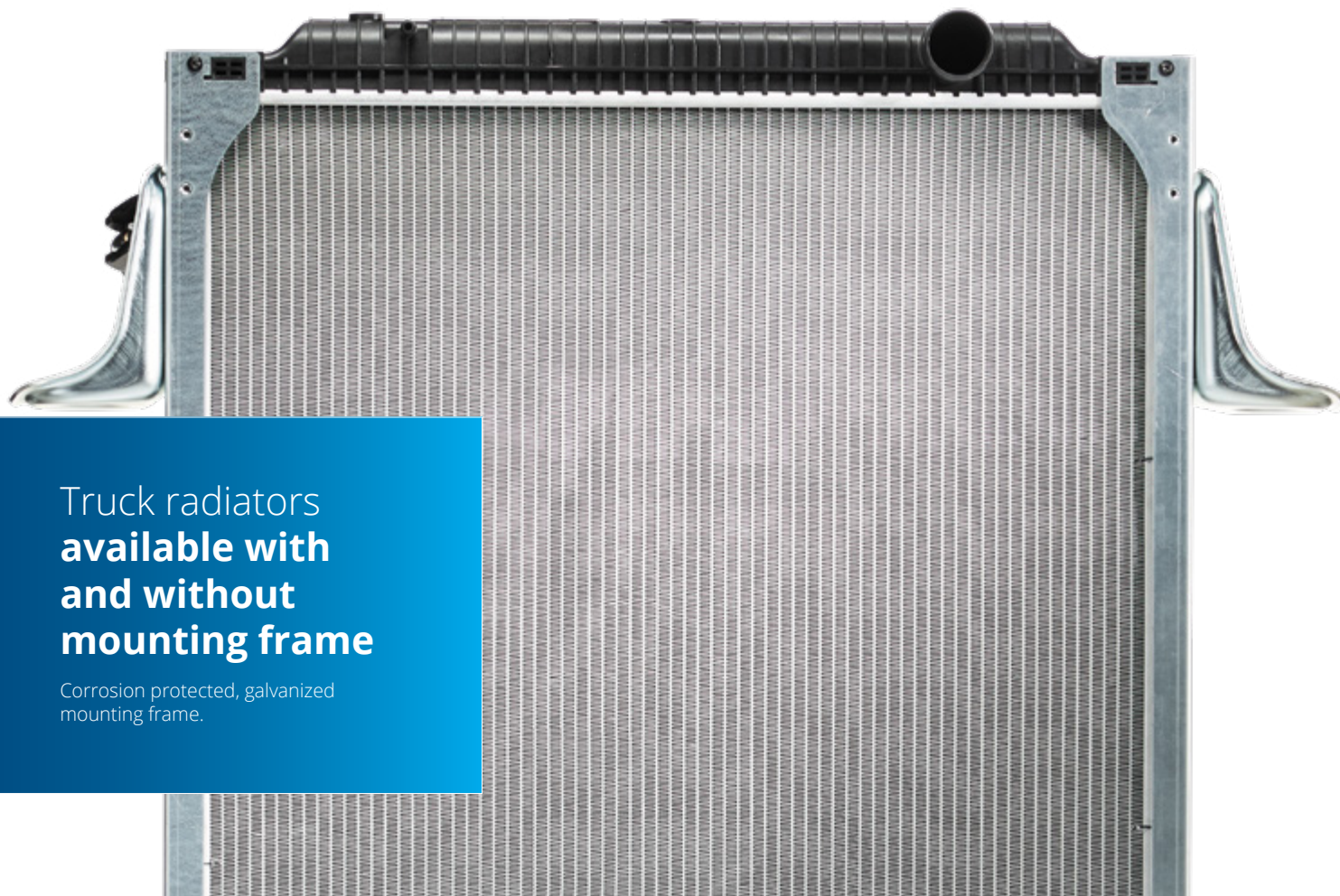


Important to know

- Scale, which precipitates from water applied instead of a proper coolant, may block the radiator core, limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the radiator tubes, limiting the flow, thus deteriorating its operation.
- Thermostat failures are often the cause of improper cooling system operation.
- Due to the frontal placement, the radiator is particularly exposed to light mechanical damages (insects, stone chipping, high-pressure water cleaning), causing leakages.
- A leaking or non-performing radiator will expose the engine to an excessive thermal overload and, in extreme cases, cause it to seize.

Truck radiators
available with
and without
mounting frame

Corrosion protected, galvanized
mounting frame.



Nissens
DELIVERING THE DIFFERENCE

Intercooler

Heat exchanger boosting air-charged engines

ENGINE EFFICIENCY SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Nissens' truck intercoolers program includes more than 80 items, covering almost 400 OE numbers.



Easy Installation

Perfect finish and product fit, enabling a quick and smooth product installation.



Reliability & Performance

Designed, manufactured, and thoroughly tested to match OE quality. Nissens' intercoolers are submitted to corrosion, vibration, pressure-impulse, thermal expansion, and thermal performance tests. Packaging with easy handling and excellent protection against transport damages.

Supreme thermal performance and extended lifespan thanks to a number of special features applied for Nissens' intercoolers.



Excellent Cooling Performance

Tubes equipped with turbulators, ensuring better air flow and larger surface to exchange the heat. Compact fin construction with louvres increasing the heat exchange.



Perfect Finish in Every Detail

Connections and mounting points are designed with a complete fit for the vehicle layout, enabling a firm and easy installation.

Thermal Stress Resistance

Specially designed side panels with cuts to lower the influence of thermal expansion on the core construction.



Durability

All Nissens' truck intercoolers are custom-welded, ensuring an exceptionally strong and durable welding seam.

Optimal fin thickness, enhancing the core construction's durability and prolonging the product lifespan.



Role & Operation

The intercooler significantly improves the combustion process in turbo-charged systems, thus increases the engine power effect. The key role of the intercooler is to reduce the temperature of the hot air compressed by the turbocharger, before reaching the engine's combustion chamber. This has a distinctive impact on the charge effect as the cooled air has a much higher density in terms of air molecules per cubic centimeter. This has a significant impact on the charge effect, as the cooled air provides a remarkably better engine output.



Important to know

- A malfunctioning intercooler causes an engine efficiency drop and can lead to serious damage to the turbocharger, exhaust filters (DPF/FAP) or the entire engine.
- Pay attention to symptoms of a defective or leaking intercooler, such as a noticeable drop in the engine power effect, increased fuel consumption, or unnatural smoke from the exhaust system.
- Intercoolers must always be replaced after the vehicle's turbocharger has failed and whenever a new turbo is installed. Carbonized oil and metal chips from the damaged turbo may clog the intercooler channels, causing the newly installed turbo to fail.



Turbocharger

Increases engine efficiency and thus its power output

ENGINE EFFICIENCY SYSTEM FOR TRUCKS

THE DIFFERENCE



Easy Handling

No fees, no charges, no return of old units.

Complete, Factory New Turbos!



Range & Availability

Wide and attractive product range covering the most popular vehicle models.

80+ turbo models in the range

900+ OE references covered

Very competitive aftermarket price level.

High product availability.



Efficient, Reliable & Safe

Nissens turbos are a completely safe choice for the car's performance, fuel economy and environment, ensuring compatibility with strict EC (European Commission) environmental standards.

Our turbos undergo an advanced series of tests, performed both internally and by independent technological institutes, within:

- Durability and performance
- Field test
- Vehicle exhaust emissions acc. European Commission (EC) norms
- Engine power output
- Vehicle fuel economy



Technical Support

Well-organized technical support setup with six local technical centers, including technical hotlines available at strategic locations in Europe.

A comprehensive training concept covering the component and understanding of the entire efficiency system (NTC EEF) is available for the wholesalers' network and independent garages worldwide.

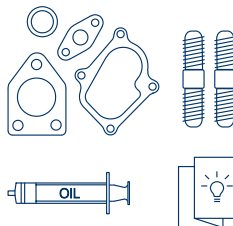


Easy Installation

Fits the engine layout and the relevant connections smoothly. Fully compatible with vehicle systems.

First Fit Product:

All that is important for the installation is included in the product box.



Relevant gaskets set

Stretch bolts (if applied by OE)

Lubricant oil

Installation guide



Long-Life Product

Our comprehensive approach to product development, including the design phase, materials applied and tests performed, ensures a proven, reliable operation of the turbo that matches the lifetime of the engine.



Power of Titanium

The titanium alloy can handle extreme loads without the risk of wheel deformation and outbalancing.

The compressor wheels in our turbos for specific truck models are made of a titanium alloy, resulting in much higher heat resistance and excellent protection against corrosion.

Optimized Design

Component developed according to advanced quality standards – Genuine Nissens Quality, and tested to match the OE quality.

Only the highest-rated component materials applied. Internal moving parts manufactured within proper tolerances, and are precisely calibrated.

Critical components in special design and re-engineering focus, specifically:

- Turbine and Compressor Housing
- Shaft and Turbine Wheel
- Compressor Wheel
- Actuator and Rod End
- Main and Thrust Bearing
- Wastegate/Variable Flow Mechanism
- Electrical Parts



Role & Operation

Turbine-driven device that forces extra air into the engine's combustion chamber.

The turbo consists of a turbine and a compressor coupled by a common shaft. Operation of the turbo depends on the engine's exhaust gases. The energy of the exhaust gas flow is extracted and enables the turbocharger compressor to pump the air.

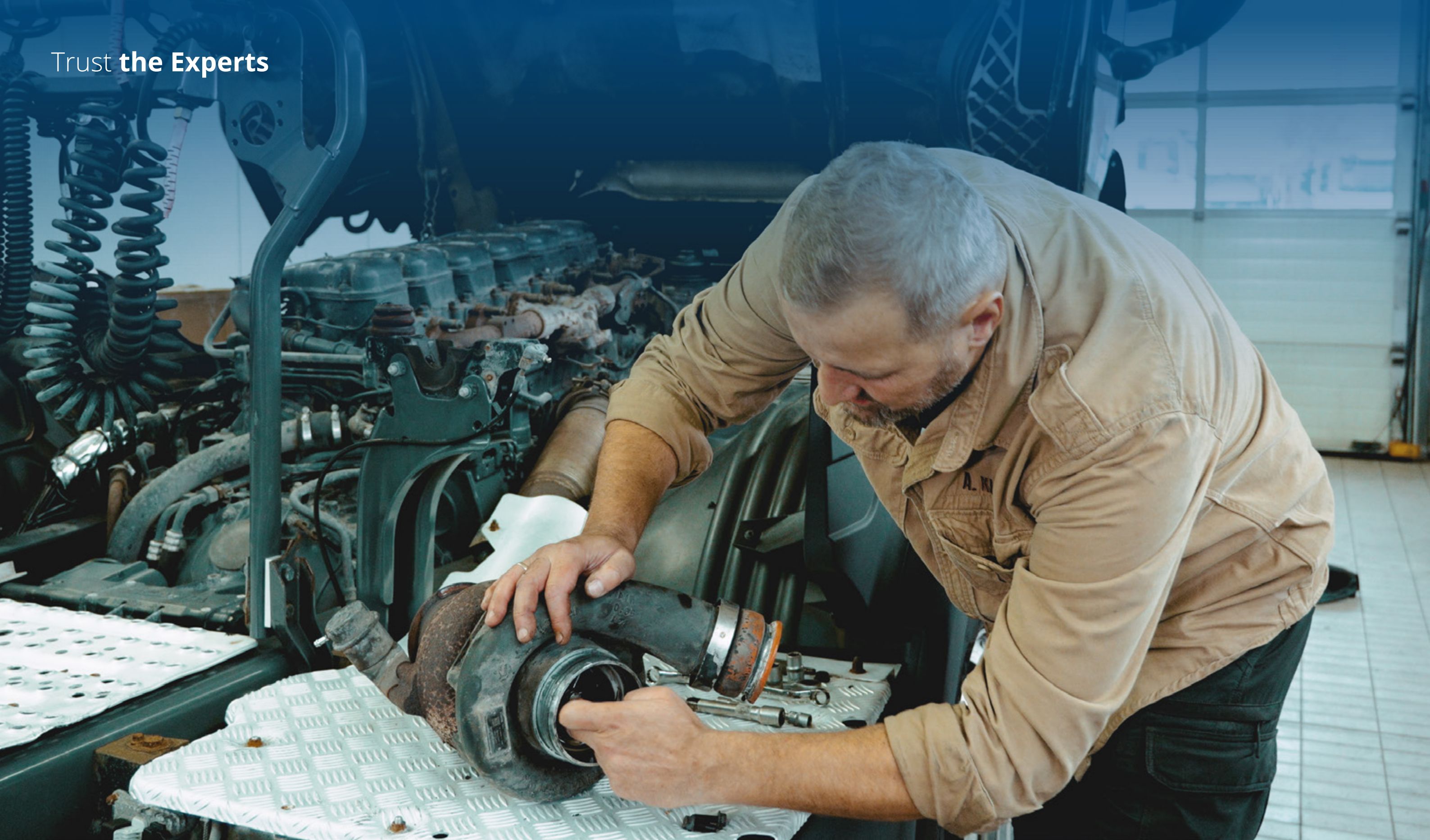
The part's operation depends on various components across different systems in the vehicle, i.e. exhaust system, air intake/pressure system, lubrication, and engine management with electric parts, and in some cases including the cooling system.



Important to know

- The turbo is a highly sophisticated and fragile component. It operates in extremely demanding and tough conditions: up to 250,000 RPM and 1,100° C of hot exhaust. Improper working conditions and specifically dirt and foreign objects inside the system can easily damage the turbo.
- Turbo functionality relies on various systems in the vehicle. Regular vehicle service, good condition of the engine and proper combustion, as well as properly operating systems such as engine lubrication, air intake system, exhaust system including EGR and DPF/catalyst (if applicable), are of crucial importance for the turbo's proper operation and vitality.
- Lubrication is one of the most critical aspects of turbo's operation. It eliminates friction and cools down its key components. Limited oil flow to and/or from the turbo will lead to accelerated wear and tear on the turbo.

Trust **the Experts**



Nissens[®]
DELIVERING THE DIFFERENCE

experts

Scan the QR code and watch
our expert performing
turbo replacement
in a popular truck model.



EGR Coolers

Improve the EGR system's effectiveness

THE DIFFERENCE



Easy Handling

No fees, no charges, no return of old units.

Complete, Factory New EGR Coolers and Stop Valves!



Range & Availability

The initial range covers the most popular European truck models, catering to 15+ spare part models, covering 35+ OE numbers, and is expected to expand shortly.



Genuine Nissens Quality

The highest-grade, industry acknowledged materials, and comprehensive product testing are applied to our EGR coolers to ensure the component's long, reliable operation in extreme conditions that are typical for harsh environments, such as heat of combustion and exhaust gases flows.

Easy Installation

Fits the engine layout and the relevant connections smoothly. Fully compatible with the vehicle's systems.

Along with the EGR Cooler units, the Nissens range includes a series of stop valve models for installation in the EGR's manifold.

Proven Performance

Nissens EGR components offer a harmonious exhaust gas recirculation process, leading to reliable engine combustion with proper exhaust emissions.

Long Lifespan

Nissens EGR coolers undergo various durability test series to ensure the product's extended, trouble-free operation.



Role & Operation

The exhaust gas recirculation (EGR) system is a system that reduces nitrogen oxide (NOx) emissions in combustion engines.

The EGR cooler is a water-to-air heat exchanger that routes exhaust gases between the turbo and the EGR valve. It is often integrated with the EGR module.

Inside the cooler's housing are a series of tubes for the hot exhaust gas flow. A cooling coat surrounds the tubes, passing the engine coolant through them.

When the hot exhaust gas circulates through the cooler, it exchanges heat with the coolant flowing around the tubes, transferring it to the vehicle's cooling system. Ultimately, the vehicle's radiator dissipates the additional heat.

Applying the EGR cooler improves the overall effectiveness of the EGR system in lowering the formation of harmful NOx gases.



Important to know

- The EGR system components operate in the extreme temperature ranges of the exhaust gases. The most common issues with the EGR relate to improper quality of the exhaust gases and related systems.
- An excessive carbon/soot formation that builds up inside the system is one of the most common causes of the EGR valves and cooler failures. Excessive oil consumption, and thus combustion contamination, malfunction of crankcase ventilation, turbocharger failures, improper fuel, and/or improper fuel injection can lead to excessive carbon fouling and the soot build up, restricting the opening/closing function of the valve.
- Leaks in the EGR coolers often originate from failures within the engine cooling system. For example, improper coolant application or excessive thermal and pressure stress, can lead to a leak in the coolant circuit, namely inside the EGR cooler. When such a leak occurs, the coolant can enter the exhaust system, leading to white smoke emissions, engine overheating, and severe contamination of the exhaust system.



Fan Clutch

EC fan engagement

THE DIFFERENCE



Competitive Range

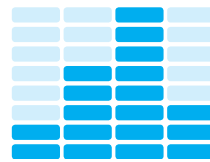
Nissens' program for fan clutches covers the most popular European truck applications, 140+ items covering 500+ OE numbers.



Reliability & Performance

Designed and manufactured for the aftermarket, in accordance with the highest quality standard, including compliance with ISO 16949. Tested for a stable and trouble-free, long-life operation.

Each detail is designed to achieve maximum performance and a high level of modulation, thus improved fuel consumption, less noise and less stress on the engine.



High Modulation Ability

Perfect modular control of Nissens' fan clutches offers a long line of benefits:

- Freeing of engine power for other tasks
- Reduction of fuel consumption
- Extension of engine life thanks to high temperature control
- Lifespan extension of fan drive belt as a result of smoother speed transitions
- Low noise emission

Extended Durability

Temperature-resistant ball bearing with long lifespan, designed to match the lifetime of the application in question.

Smooth Speed Transition

High-quality silicone oil carefully developed for fine-tuned modular operation.

Precise Operation

Individually-tested electromagnet, manufactured by use of advanced, fully-automated technology. Fine-tuned precision rotor with heavy-duty alloy.

Trouble-free Connection

Well-protected wires and connections.



Role & Operation

The fan clutch is a device controlling the engagement of the EC fan. A valve inside the clutch regulates the flow of a special silicon oil. The oil transmits the engine's torque, thus rotates the fan.

The fan clutch can be driven by a belt and pulley or directly by the engine when mounted on the engine's crankshaft. Depending on the cooling needs, the fan can be engaged partially or fully - saving the engine power used for the power transmission.

There are two design types of the sensor causing the clutch to engage. One with a bi-metallic, thermostatic sensor controlling the engagement and another controlled electronically by ECU signals, influenced by engine/transmission oil temperature, coolant temperature, AC system pressures or ambient air temperature.



Important to know

- The clutch must never be repaired nor opened. The fan clutch is filled with viscous oil and opening the unit will interfere with the system.
- Proper fan clutch modulation is crucial for optimized fan speed, as this affects cooling and engine performance. A good quality clutch can modulate the fan speed with a smooth activation between engagement and disengagement.
- Common symptoms of the fan clutch failure: overheating at idle or when driving in urban traffic, ineffective climate system performance, drop in engine power, grinding noises from the engine compartment or no warm air produced by the heater.

Bolts for fan blade installation are **always included!**



Oil Cooler

Engine and transmission oil cooling

ENGINE COOLING SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Nissens' oil coolers range includes 40+ items, covering 180+ OE numbers.



Reliability & Performance

All Nissens' oil coolers are designed and manufactured specifically for the aftermarket, while still matching OE quality. Nissens' oil coolers are tested in Nissens' advanced in-house test facilities to ensure compliance with the high quality demands – thus promising a long service life.

The oil cooler development process includes in-house test series, where the oil cooler is pressure-impulse tested with 100,000 impulses at a pressure of up to 10 bar.



High Quality Packaging

All Nissens' oil coolers are packed in our compact and elegant box design. The solid packing system minimizes possible risks of transport and storage damages to the products and the Nissens box further optimizes logistics costs and protects the environment.

Long Life Product

Improved turbulator design ensures a more precise brazing process, which gives the entire component supreme durability and stress resistance.

Temperature Resistant

Thermal expansion tested to perform during fluctuations of temperatures, ranging from 10°C to 90°C.



Role & Operation

The oil applied for lubrication also plays a significant cooling role. The oil cooler receives the lubricant's heat and exchanges it with ambient air.

It is typically the automatic gear box oil or hydraulic equipment that needs a dedicated oil cooler.

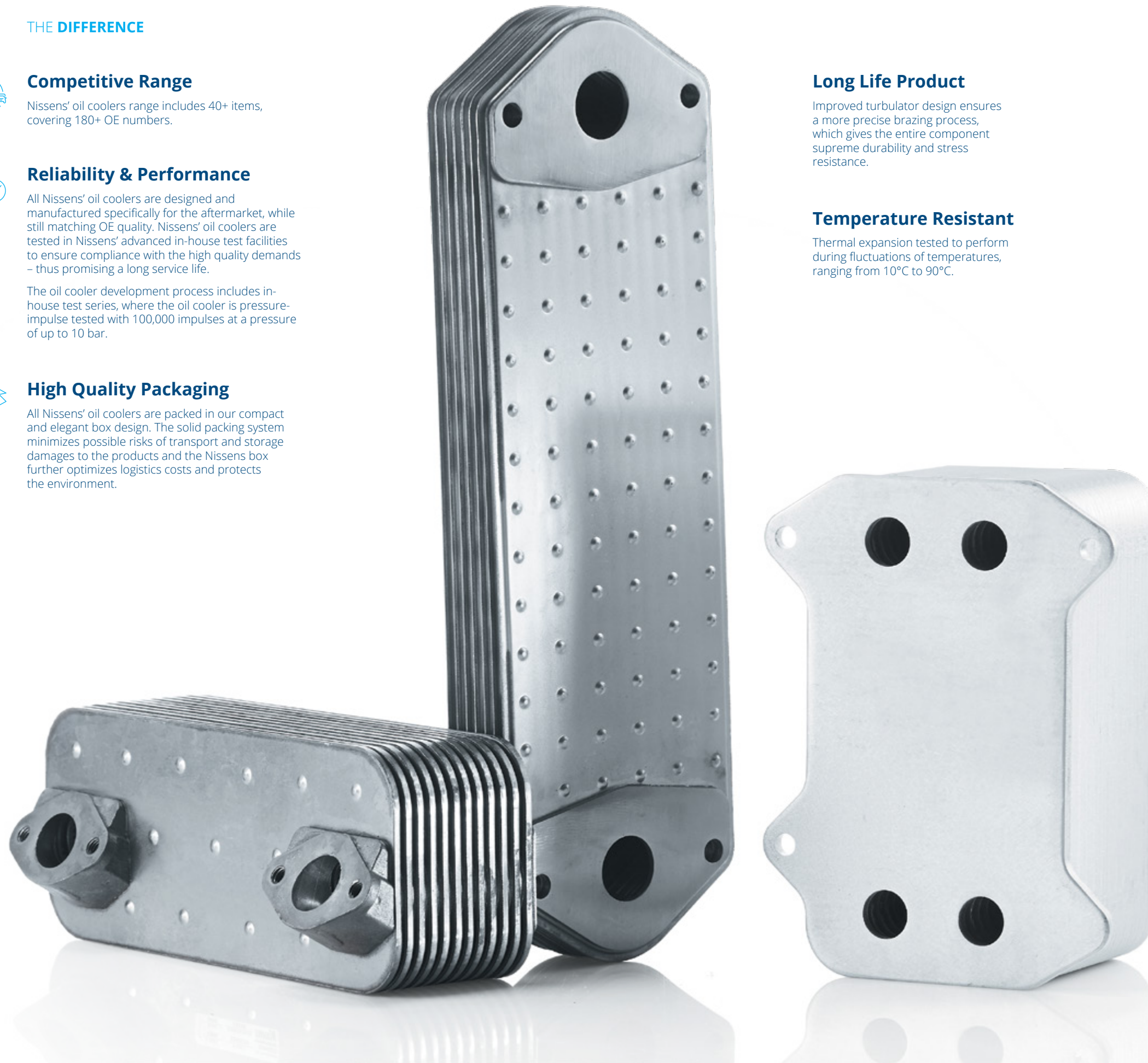
However, for truck applications, a dedicated engine oil cooler is a standard component, ensuring proper thermal protection of the engine. Here, the lubricant contributes significantly to the entire cooling system, as operation in tough conditions requires additional cooling for the high-performing engine.

The oil cooler is typically made of aluminium or stainless steel and is mounted separately in the engine compartment or on the engine block.



Important to know

- Be aware of regular oil change and proper oil filtration. Low quality or contaminated oil can clog the thin channels of the oil cooler, limiting the inside flow and performance.
- A leaking or non-performing oil cooler is one of the most common causes of automatic gearbox's break down. The oil is crucial for the gearbox's proper operation as it lubricates, cleans and conditions its seals.
- In case of leakages, the lack of oil will cause the engine to overheat and seize.
- Exposure to high stress, like high temperatures or high mileages, can shorten the oil cooler's lifespan significantly.



Condenser

Heat exchanger - crucial for the refrigerant state change in the system

CLIMATE COMFORT SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Competitive product range for trucks. 40+ condenser models covering 130+ OE numbers.



Reliability & Performance

Designed, manufactured and tested to match OE quality. Packaging with excellent protection against transport damages.

Extended product lifespan thanks to a special protection applied to condenser models particularly exposed to corrosion.



Easy Installation

Perfect finish and product fit, enabling a quick and smooth product installation.

O-rings included in the product box (First Fit).



Easy Installation with First Fit

All what is needed for a proper installation included in the product box.



Long-life Product

High resistance corrosion protection technology applied to selected condenser models.

Transport Protection

Inlet and outlet connections covered by tight closures protecting against impurities and moisture absorption.

Packaging with specially designed cardboard U-profiles to protect the condenser verges against tight strapping and tensions during transportation.

Perfect Fit

Perfect finish in every detail such as connections, threads, bolts, mountings, etc., smoothly fitting the vehicle mounting points.

Perfect Surface Finish

Optimized aluminum brazing processes significantly reduce surface impurities caused by residues of brazing pre-treatment agents.



Role & Operation

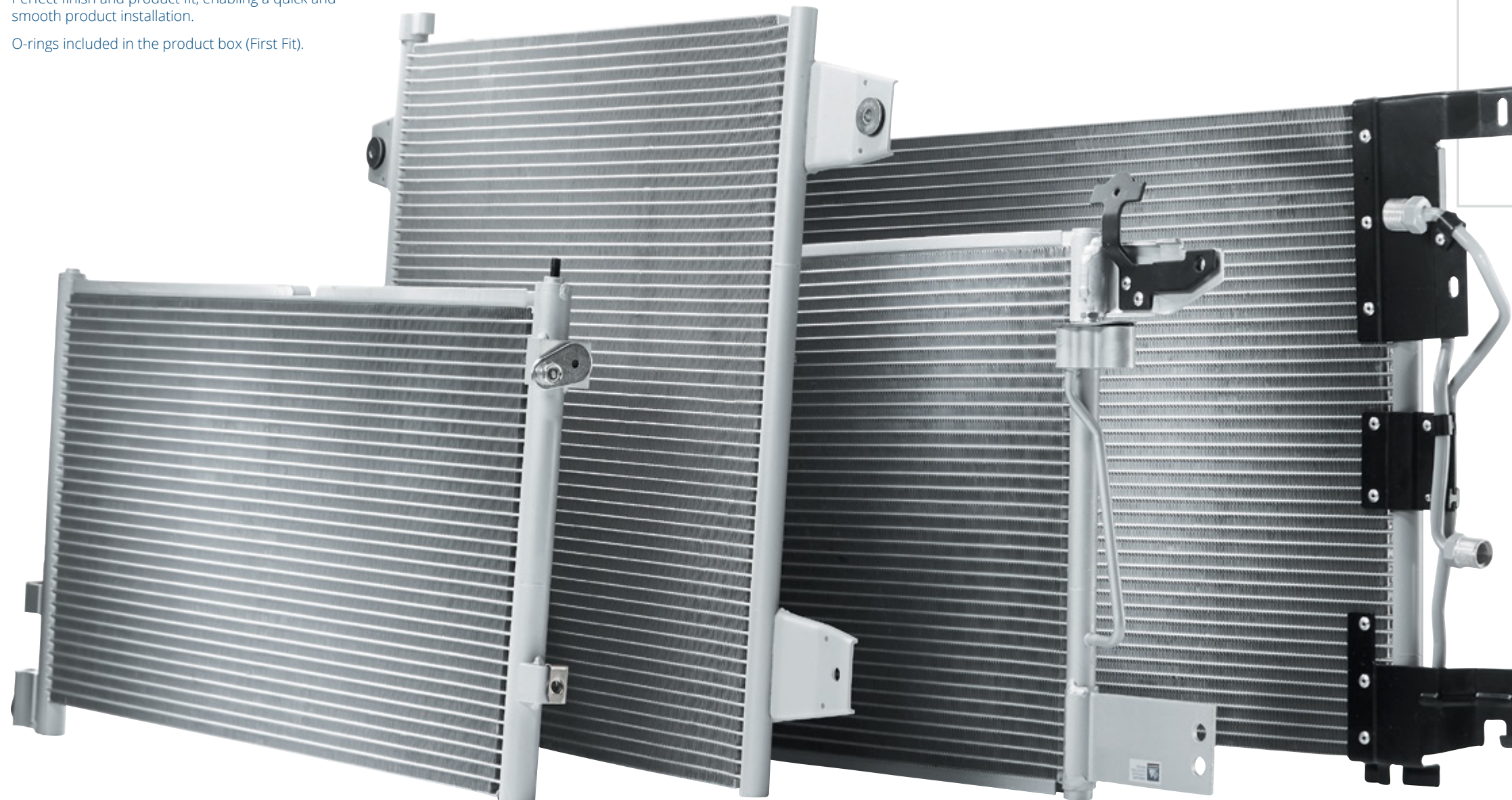
The condenser is placed at the front of the vehicle and is typically attached to other heat exchangers in the engine compartment, like the engine cooling radiator or intercooler.

The role of the condenser is to ensure that the state of the refrigerant changes from gaseous to liquid form. The change of state is called the condensation process where the refrigerant heat is extracted and exchanged with the ambient air.



Important to know

- The condenser is particularly exposed to corrosion, which, quickly, may weaken the mechanical construction and performance of the component as well as reduce its tightness.
- Corroded or missing fins significantly reduce the performance of the condenser thus the reliability of the entire AC system.
- A leaking or non-performing condenser leads to an excessive overload of the other components in the AC loop – mainly the compressor, exposing it to overheating and, in extreme cases, to seize up.



Compressor

The heart of the air conditioning system

CLIMATE COMFORT SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Truck product range of 40+ items covering more than 400 OE numbers.



Reliability & Performance

Nissens' advanced life & performance test series.

Test-proven excellent pumping performance, minimized noise and vibration levels, supreme product durability.



Easy Installation

First Fit - all what is needed in the product box. Warranty & installation guide, installation video and Nissens' technical support materials are available.



Easy Installation with First Fit

All that is needed for a proper installation included in the product box.



PREFILLED PAG OIL



O-RINGS



ELECTRICAL ADAPTER (MULTI FIT APPLICATIONS)



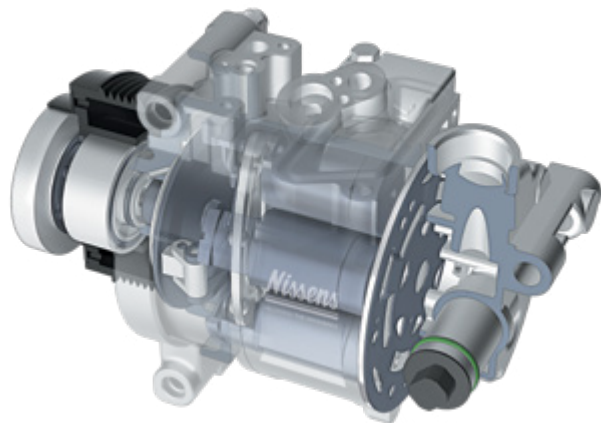
PRE-FILTER (WHEN NEEDED)

Improved Durability and Performance

Improved design of critical components such as pulley, clutch hub, bearing and wobble plate to resist higher stress, tensions and temperatures.

High Precision Displacement Control

Valves of OE matching quality (MCV/ECV), fully tested before and when placed in the compressor. Additionally, random stock tests performed.



Role & Operation

The refrigerant is compressed by the compressor and transported through the system to create high and low pressure.

The compressor is crucial for the efficiency of the AC system. During an AC cycle, the compressor enables the refrigerant to change its state from gas to liquid and to flow through the different components of the system as well as through high and low pressure sides.



Important to know

- Proper lubrication has an extensive effect on the product vitality and lifespan.
- Proper installation procedure, including system flushing, is crucial for the compressor's vitality.
- Condenser's performance influences the compressor's performance and workload.

Factory new compressors,
no need for exchange

Solutions for heavy-duty applications



Universal compressors with fittings to fit more OE applications



Agricultural compressors for popular agricultural vehicles

Thermal Expansion Valve (TXV)

Proper working parameters of the AC system

CLIMATE COMFORT SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Nissens' Expansion Valves offering has been developed to match the aftermarket needs and, along with the attractive product selection and wide applications coverage, related tools and concepts including technical training are offered by us to help grow your AC business.



Reliability & Performance

Nissens Expansion Valves are developed according to our renowned, high-quality standards, which include a comprehensive test and validation series. These cover, among others, strict control of the valve's pressure performance, tightness, opening and set-point setting, as well as its precise inner elements' finish and cleanliness.

The TXV range from Nissens joins our well-established collection of AC parts: compressors, condensers, receiver-dryers, evaporators and fans.



Quick & Proper Installation

First Fit Product

O-rings included in the product box. Mounting bolts included when applicable



Precise, optimal operation

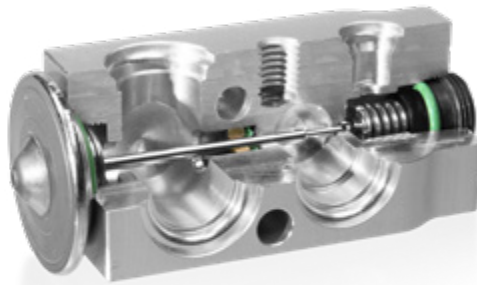
The power (sensing) element is the most important component in the Expansion Valve. Our specially designed charge formula ensures the valve's optimal operation for specific system needs in the given vehicle application.

Proper setting for operation stability

Our valve's output pressure and opening characteristics are thoroughly tested and appropriately adjusted to ensure the valve's stable and appropriate function within the common range of the refrigerant temperatures and pressures that occur during the AC cycle.

Perfectly tight, clean and fitting

Inner tightness and cleanliness are among the crucial qualities of our Expansion Valves, along with the fitment and durability provision. We make sure each Nissens Expansion Valve is a perfect and safe replacement product.



Role & Operation

The Thermal Expansion Valve (TXV) is one of the major control components of the AC loop. It's a precise metering device that controls the amount of refrigerant released into the evaporator.

The TXV separates the high-pressure and low-pressure sides of the AC loop. It is preset to maintain the superheat condition within the evaporator and, by this, to ensure the system's most optimal operation and output matching the needs for cold air production.



Important to know

- The TXV valve's malfunction leads to the AC system's worsened performance, and exposes the AC compressor to abnormal load, thus premature, severe failures such as overheating, seizure and slugging.
- Getting stuck in an open or closed position is one of the most common TXV failures. It disables the required refrigerant flow control and pushes the system parameters out of balance. System inner contamination is the major culprit leading to valve blockages.
- It is highly recommended to replace the TXV valve along with the AC compressor. A thorough and effective AC system flushing procedure must always precede the TXV and/or the AC compressor's replacement.



Safe and reliable system performance

Advanced performance tests have proven, Nissens Expansion Valve is a safe, perfectly finished product designed to maintain the required refrigerant parameters (superheat), and thus the AC system's optimal thermal performance and proper balance. Furthermore, it ensures safe operation and long life span of the AC compressor, preventing it from slugging or failures related to lubrication and overheating.

TXV SENSING ELEMENT'S BEHAVIOR TEST, PRESSURE OUTPUT VS TEMPERATURE

A back-to-back test of sensing element's behavior was performed to build comparison of the outlet pressure performance generated by opening set points of various TXV brands. Nissens' item number #999222 was used for the test, along with the OE and other AAM equivalents.

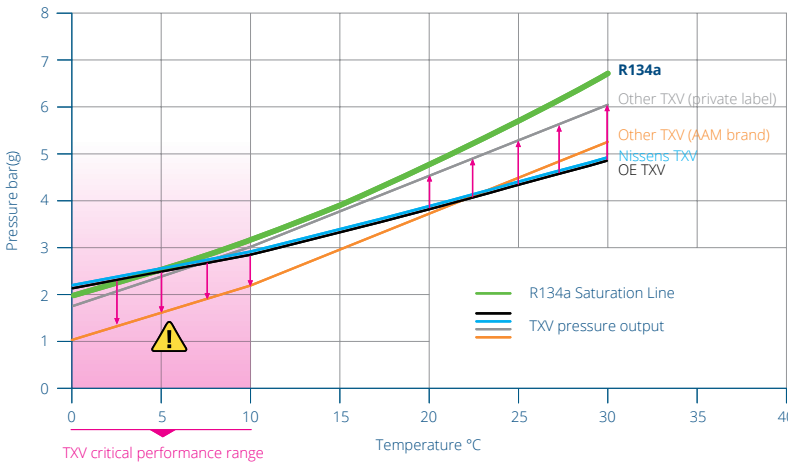
The Test Conclusions

Nissens TXV's opening behavior is based on a proper sensing element charge, and thus an appropriate set-point configuration that matches the OE unit and the system-specific requirements for the refrigerant parameters.

Significant deviations in the sensing element's behavior, and thus opening setting of the other tested TXV brands.

The other tested valves' setting does not follow the OE valve's characteristics across various temperatures and considerably differs in the critical performance range (i.e. below 10°C).

The notable, large deviations from the OE pattern may lead to a significant reduction of the system thermal efficiency, and thus provoke severe failures of the AC compressor (e.g. slugging, lubricant dilution, overheating). Furthermore, the large deviations and different from OE behavior, reveal an improper charge technology applied for the sensing element at the other brand's valves.



Program Highlights

10+

Product range

45+

OE applications covered



Valve Technology

Block type



Program Scope

Passenger Cars
Light Vans
Trucks



Nissens
DELIVERING THE DIFFERENCE

Interior Blower

Ensures a proper air intake, flow and distribution which are required for the climate system to operate

CLIMATE COMFORT SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

Nissens' truck blowers range consists of 20+ items and covers 100+ OE numbers.



Reliability & Performance

Conforms with the ISO 7637, ISO 16750 standards and the directive of Electromagnetic Compatibility (EMC).

Advanced in-house performance, mechanical and electrical test series ensuring a high-quality, long-life product characterized by reliable, high-performing operation as well as minimized noise emission.



Easy Installation

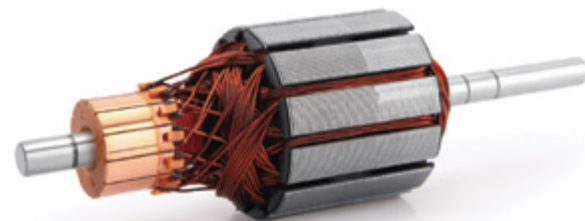
Plug & Play modules ready for an instant installation. Nissens' online catalogues with detailed product information, high-quality technical drawings and rotational 360° pictures as well as close-up pictures of electrical connections/sockets. Installation videos for the most demanding and popular blower models.

Improved Resistance to Mechanical Damage and Wear

Only high-quality plastics, no recycled plastic mixtures.

High Precision Speed Control

OE control unit and electrical resistors to ensure high performance.



Smooth Operation of the Electrical Motor

High-quality electric motor armature ensuring reliable operation of the motor and strong protection against destructive current peaks and overvoltage.

Trouble-free Operation

A special material mixture applied to the carbon brushes developed by Nissens, ensuring excellent reliability and supreme overvoltage protection.



Role & Operation

The interior blower ensures a proper amount of ambient air intake and flow of air throughout heat exchangers – heater and evaporator. Flowing through the heat exchangers, the air can be either warm or cold and thanks to the blower, the air is distributed in the car cabin.

Typically, the blower is situated in the HVAC (Heat-Ventilation-Air-Conditioning) module located between the cabin and the engine compartment.

The interior blower is an electrical device considered fragile, due to plastic elements, and electrically sensitive to vehicle system failures.



Important to know

- Clogged or worn cabin air filter reduce the interior blower's lifespan significantly.
- Most common reasons for interior blower's failure are failures in the vehicle's electrical system, reduced flow in the air intake system and improper product handling during installation.
- The interior blower in commercial vehicle applications (taxis, buses, trucks etc.) is often exposed to faster wear due to higher mileage and more working hours.



Evaporator

Cabin heat exchanger producing cold air



Role & Operation

A heat exchanger in the low-pressure side of the AC system, installed between the expansion valve and the compressor. Typically, located in a HVAC (Heat-Ventilation-Air-Conditioning) module behind the vehicle dashboard.

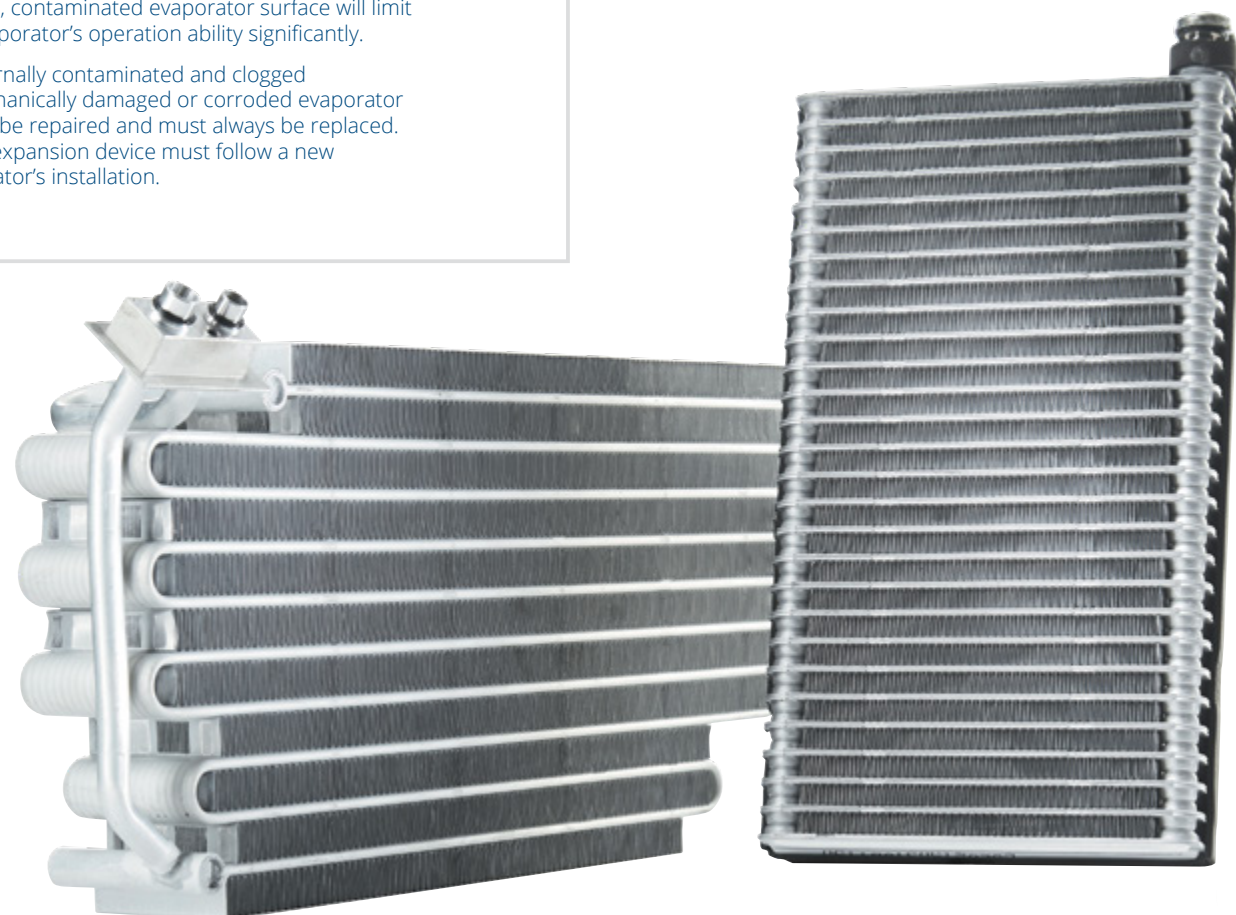
The evaporator ensures that the refrigerant evaporates, thus change its state from a liquid to a gaseous form. Ambient air, blown on the evaporator's surface, enables the evaporation process inside, and during the transition process of the refrigerant's state, the blown air flowing through the evaporator's surface turns cold and can be directed into the vehicle cabin.

Furthermore, the evaporator dehumidifies the intake air, which is of high importance for the system's ability to demist the vehicle panes.



Important to know

- A non-performing interior blower disables the evaporator's functionality and may lead to serious damage of the compressor.
- Clogged or worn out cabin air filter, as well as a soiled, contaminated evaporator surface will limit the evaporator's operation ability significantly.
- An internally contaminated and clogged or mechanically damaged or corroded evaporator cannot be repaired and must always be replaced. A new expansion device must follow a new evaporator's installation.



OE Matching Quality

Designed, manufactured and tested to match the quality of OE products.

Product Range for Most Popular Applications

Nissens' evaporator range for trucks covers the market's most popular applications: 10+ items covering 20+ OE numbers.

Easy Installation

Perfect finish and a flawless fit, turns the installation of Nissens' evaporator into a smooth process. The part fits ideally into the HVAC's mounting cassette.

Receiver Drier / Accumulator

AC loop protection



Role & Operation

The receiver drier is a filtering unit located on the high-pressure side of the AC loop between the condenser and the expansion valve. The role of the receiver is to filter particles and debris flowing in the circuit as well as to absorb any moisture. Furthermore, it also stores oil and refrigerant.

The accumulator is a similar filtering device but applied only in vehicles with orifice tube as an expansion device. The accumulator is located on the system's low-pressure side and besides the filtering and the lubricant/refrigerant storing function as in the receiver drier, it also ensures that no liquid form of the refrigerant gets into the compressor.



Important to know

- The receiver drier/accumulator must be replaced every two years or whenever the circuit has been opened.
- The inside filtering and desiccant layers can be worn out, after a long period, and cause the receiver drier to lose its ability to properly filter the refrigerant and oil.
- The receiver drier's condition is crucial for the compressor's vitality - a high level of moisture in the AC system can cause corrosion and reduce compressor's lubrication significantly. Unfiltered particles, debris, metal chips etc. flowing in the loop will cause the compressor to fail the compressor to fail and in the worst case to seize up.
- Too much oil in the system reduces the drier's ability to filter the system properly - the desiccant gets too oily.



OE Matching Quality

Designed, manufactured and tested to match OE product's quality.

Wide Product Range

Nissens' receiver drier (and accumulator) range for trucks covers the market's most popular applications: 30+ items covering 90+ OE numbers.

Perfect Transportation and Storage Protection

All Nissens receiver driers and accumulators are thoroughly packed to avoid any transportation damage. Furthermore, to ensure the product usability after an extended period of storage, all inlets and outlets are protected by means of special caps that prevent any impurities and moisture from entering the receiver drier.

Heater

Warm air production and safety by demisting the panes

CLIMATE COMFORT SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

The truck heater range includes 30+ items, covering 70+ OE numbers.



Reliability & Performance

All Nissens' heaters are designed, manufactured and tested to match OE quality. The heater development process includes a number of life tests. It is examined in terms of: vibration, pressure-impulse, thermal expansion, corrosion and bursting, eliminating the risk of leakage, insufficient heating performance or quality problems such as odours or oil residues, etc.



Easy Installation

Nissens' heaters are thoroughly finished in every detail. They fit smoothly into the mounting cassette in the dashboard/HVAC module, thus ensuring a smooth and quick installation. If required, selected heater models are equipped with additional connections and extra foam rubber.



Optimized Airflow

Extra foam added on selected heater models to ensure an optimized airflow.

Better Mechanical and Thermal Stress Resistance

Tanks, made of high-quality plastics where no recycled plastic mixtures are applied - ensuring strong mechanical and thermal stress resistance.

High Heating Performance

Specially designed turbulators inside the heater core tubes ensure up to 15% higher heating performance.

High Thermal Stress Resistance

Tank gaskets made from EPDM material, preventing bursts and shrinkage when the unit is aging and exposed to extreme temperatures during normal operational conditions.

Efficient Heat Exchange

Nissens' special designed fins with louvres inside the core tubes ensure a highly efficient heat distribution.

Perfect Fit

Foam strips are included in the packaging for a tight and secure fit.



Role & Operation

The heater is an integral part of the engine cooling system. However, it contributes significantly to the climate system as well, ensuring the production of warm air. The heater is often located behind the dashboard or in the HVAC module.

Hot coolant from the engine block passes through the heater, warming up the intake air blown on its surface by the interior blower. The air gets warmer and can be forwarded into the car cabin.

As the heater produces warm air during cold days in autumn and winter, it significantly improves safety by shortening the demisting of the vehicle's panes.



Important to know

- Scale, that precipitates from water applied instead of a proper coolant, may block the heater core, limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the heater tubes, limiting flow, thus operation.
- A worn-out or broken thermostat valve may cause a restricted coolant flow thus hampering the heater's proper operation.
- Due to its position in a damp environment, the heater is often exposed to corrosion which may cause leakages.
- Lack of coolant caused by leakages (in other components as well) will result in improper heater operation.



Expansion Tank

Engine Cooling coolant protection and re-distribution in system

ENGINE COOLING SYSTEM FOR TRUCKS

THE DIFFERENCE



Competitive Range

The expansion tank range includes 40+ items, covering 200+ OE numbers.



Reliability & Performance

All Nissens' expansion tanks are designed, manufactured and tested to match OE quality. The expansion tank development process includes a number of tests, such as vibration, pressure-impulse, thermal expansion, and burst, eliminating the risk of leakage or insufficient cooling performance.



Easy Installation

Nissens' expansion tanks are part of our 'First Fit' program, which means that they come with sensors and caps included in the packaging, whenever applicable. This ensures a quick and smooth installation.



Quick Installation

Nissens 'First Fit' concept has been applied to our Expansion Tank range. Products come with sensors and caps, whenever applicable, ensuring a quick installation.

Including Sensors

All sensors undergo functional testing and are pre-mounted on the expansion tank for a quick installation.



High-Quality Plastic

Nissens applies high-quality material, e.g. PA66GF33 or PP Plastic. This ensures durable heat and stress resistance. All materials are tensile tested and no recycled materials are used.



High Performance Welding

All expansion tanks are welded with advanced machinery to ensure the strongest possible connection of the top and bottom part. Each individual tank is leak tested before shipment.

High Quality Pressure Cap

Pressure caps are included in the box and individually tested for correct opening pressure.



Role & Operation

The expansion tank absorbs excess coolant and minimizes excess pressure in the engine cooling system.

An expansion tank helps to maintain a minimal pressure increase during heated water expansion, helps reduce coolant hammer, and helps protect the engine cooling system from stress. Furthermore, the expansion tank ensures that there is no spillage by re-distributing excess coolant into the system.

To help avoid and prevent premature failures, your expansion tank should be checked annually.



Important to know

- A blocked expansion tank can cause leaking or bursting in the engine cooling system as the connections, fixtures and components get stressed and damaged due to excess pressure.
- If the expansion tank is leaking, the engine could overheat as the level of coolant in the system could decrease.
- Note the level of coolant in the expansion tank when the engine's cold. Once the engine reaches operating temperature, the level must rise. If it doesn't, the system is not operating properly.



Pressure sensors

Support for proper working parameters of the AC system

THE DIFFERENCE



High car parc coverage

The range covers the most popular applications with an ongoing development and introduction of new parts.



One-stop Shopping

Our aim is to supply the market with a holistic product selection within the AC category, enabling reliable performance of the climate comfort system and a first-time-right installation of its critical component, i.e., the AC compressor.

The sensor range from Nissens fits our well-established collection of AC parts: compressors, condensers, receiver-driers, evaporators, fans and thermal expansion valves.



Easy Installation with First-Fit parts

All that is needed for a proper installation included in the product box (when applicable).



O-RINGS (PRE-MOUNTED)



Reliable Operation

Nissens' sensors undergo a comprehensive test series, including: performance, insulation resistance, connections, and interface fitment tests.

High Durability

To secure long, trouble-free operation, besides complete functional testing, we examine our sensors in terms of pressure and burst resistance.

Program Highlights



Types of sensors

Pressure



Program Scope

Passenger Cars
Light Vans
Trucks



Role & Operation

Sensors facilitate the maintenance of proper parameters within the thermal systems, e.g. monitoring and controlling the pressure of the refrigerant in the AC system.

Since the proper parameters of the medium are crucial for the entire system's operation, the role of the sensor is critical. It enables the vehicle and its systems to operate correctly. Furthermore, the sensor's vitality is essential for the longevity of other advanced components in the system. For example, the proper functioning of the AC compressor or the AC fan relies on the correct operation of the sensor.



Important to know

- The sensor's malfunction leads to the AC system's worsened performance and exposes the AC compressor as well as the AC fan to improper starting thus to a quicker wear.
- The sensor measures the pressure in a specific spot in the AC loop. The readout value is used by the control unit (HVAC, Body control unit, or Engine control unit):
 - to switch the compressor clutch (on/off) or to control a variable compressor,
 - to switch additional cooling fans.

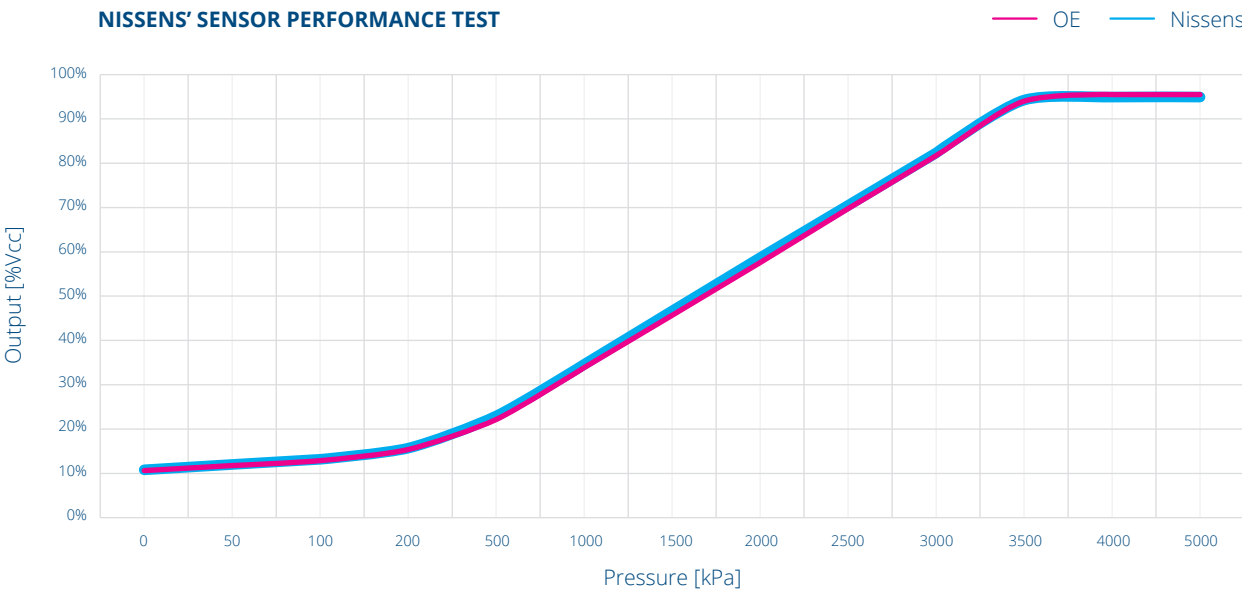


Genuine Nissens Quality - precision in every detail

The sensor's role is critical for the proper functioning of various systems and a trouble-free operation of other essential system components.

Genuine Nissens Quality standards are applied throughout all of the development, manufacturing, and testing processes to secure the most optimal and proper operation of the sensor, and its long lifespan.

NISSENS' SENSOR PERFORMANCE TEST



Effective Business Solutions

We're a solid business partner and **the aftermarket-dedicated manufacturer** conforming to the highest standards.

No matter which step of your journey with the premium Nissens product program

you are at, we are ready to guide you to commercial success.

Take advantage of our wide offer of effective business tools created and based on over a century-long experience in the aftermarket.



GENUINE NISSENS QUALITY

REACH regulations
MVBEB Block Exemption Regulation (European GVO)
RTR Right to Repair

IATF 16949
ISO 14001
CLEPA & FIGIEFA

DELIVERING THE DIFFERENCE

01 PRODUCT SELECTION



NISSENS' CUSTOMER PORTAL

Intuitive, accurate product selection and purchase in our Customer Portal solution.

- Detailed technical product data, including OE numbers, AAM alternative product numbers, etc.
- High-quality and detailed technical drawings with various useful dimensions
- High-quality color pictures
- Close-up pictures of the electrical connections (if applicable)
- Rotating 360° pictures
- Installation videos (for the most demanding installations and for popular blower models)

customerportal.nissens.com



MASTER DATA

We share high-quality, complete, up-to-date master data that conforms with OE data.

Wide range of online solutions for data integration.

KNOWN INDUSTRY PLATFORMS

Nissens' entire product range data is available on the professional cataloguing industry platforms TecDoc/TecCom, and Nissens is acknowledged as a TecDoc certified data supplier.



02 PRODUCT PACKAGING



EXCELLENT PACKAGING

Careful protection against transport damage and easy product handling from supply processes to final destination delivery.

- Solid, environmentally friendly cardboard boxes
- Elegant and unified design across all categories
- Easy and standardized product identification
- Protective inserts and profiles
- Desiccant bags, protecting the electrical components against moisture
- Tight seals preventing impurities from entering the components

03 LOGISTICS SOLUTIONS



BUSINESS DEVELOPMENT

Our Business Development Model is a perfect tool to grow your business even more. We offer our partners a valuable review of real sales opportunities per product group for their ongoing development.

- 360-degree outlook on your real potential with a resources priority plan to optimize your sales and profits
- Thorough GAP analysis
- Tailored step-by-step plan for your growth cultivation



COST-EFFICIENT LOGISTICS

Supreme Product Availability & Efficient Logistical Solutions to develop our Partners' Business

We offer fully tailored logistics solutions such as:

- Supply-chain cost and time optimization
- Highly flexible delivery - orders ranging from one item to entire containers
- Stock management support to ensure high stock rates at seasonal peaks.

04 AFTER-SALES SUPPORT



KNOWLEDGE SHARING

Nissens Training Concept enables you and your customers to understand the system, and all technical aspects of its operation. Furthermore, technical support and technical marketing materials are available to our customers worldwide.

- Advanced technical training academy including train-the-trainer program, onsite and online trainings, e-learning and a LMS system
- Personal technical support and warranty assessment (available for select markets)
- Technical marketing materials for workshops (installation guides, posters etc.)



PRODUCT TECHNICAL SUPPORT

Easy-to-use webpage for automotive professionals with a library of more than 100 technical assets such as technical stories, installation guides tips, bulletins, and tools dedicated to technicians.

15+ languages supported, great explanatory pictures and videos, Nissens e-learning modules are included.

nissens.com/support

+ Sustainable & Responsible Approach

Environmental footprint

Our spare parts prolong the lifespan of vehicles, limiting the environmental impact.

We continuously reduce the environmental strain, among others, by:

- + Packaging optimization
- + Raw materials use optimization
- + Logistics solutions optimization

Corporate Social Responsibility

We respect our employees and customers around the world.

Our heritage, culture, and behavior are the foundation of our CSR commitments to the surroundings.



Nissens Automotive A/S has been certified bronze in the prestigious EcoVadis Sustainability Rating



MEET US TO LEARN MORE

Our dedicated team of experts looks forward to hearing about your specific business needs and the challenges you may face. Together we will choose the most suitable and effective solution for you to grow further.

To arrange a meeting with one of Nissens' specialists, visit www.nissens.com/meet





Scan the QR code and watch
our expert performing
turbo replacement
in a popular truck model.

Trust **the Experts**

Alongside our established reputation as a premium-quality aftermarket components and systems supplier, we are excited to share our technical knowledge resources to support independent sector's professionals.

We enable technicians to increase their knowledge and skillset within the automotive Air-Conditioning, Engine Cooling, and Engine Efficiency systems via a variety of technical support solutions and the top-notch technical program covering, among others:

- **Technical training**
- **Product-dedicated hotline**
- **Technical articles**
- **Troubleshooting and best service practice tips**
- **Product-specific technical bulletins**
- **Product installation guide**
- **Important vehicle data**

Technical support assets & information
are available at www.nissens.com/experts

