A COMPLETE COMMERCIAL & TECHNICAL SUPPORT OFFERED LOCALLY TO OUR PARTNERS, WORLDWIDE
Every vehicle, powered by a combustion engine, needs a proper cooling for the engine. The combustion process causes very high temperature ranges, exposing the engine’s block and its equipment to an extremely high thermal stress. Furthermore, turbo-charged combustion systems that have recently become widely applied both for diesel and petrol engines, also need a proper air cooling to obtain the right charge performance. Engine power transmission via automatic gear boxes and many advanced engine constructions also require oil cooling.

For the past nine decades, Nissens has been driven by the dedication to deliver a comprehensive product range to the automotive engine cooling system. Our thermal know-how, manufacturing experience and deep insight in thermal systems mean that we are flexible to meet the emerging market needs and can supply a wide range of high-quality engine cooling spare parts.

Our impressive product portfolio of more than 4,500 parts covers everything from the fast moving to the more exotic parts of the European, Asian and American vehicle brands with more than 17,700 OE numbers.

Focusing on value-adding features, such as ‘First Fit’ and offering ‘First to Market’ products to the newest vehicle models, we offer our IAM partners an excellent product program in order to secure them the right position for growing and developing their business.

Every time your vehicle’s engine is started, Nissens is right there with you. With a comprehensive program of key components for all cooling needs, we enable your vehicle to operate and you to move!

Experience the difference.
Radiator
Heat exchanger - essential for engine thermal control

The radiator is placed in the front of the vehicle, often attached to other heat exchangers, such as the intercooler or condenser.

The radiator is essential for the cooling of combustion engines. In such engines, there may be as many as 4,000 petrol explosions per minute, each generating temperatures of up to 1,500°C. The cooling liquid, which is circulating through a cooling jacket, cools the engine block, as well as pistons, valves, gaskets, rings, engine head, and other elements of the engine.

The circulating coolant receives the combustion heat. Flowing through the radiator, it exchanges the heat with atmospheric air.

**OE Matching Quality**
Designed and manufactured towards the aftermarket, while thoroughly tested in accordance to OE requirements. Easy-handling packaging and excellent protection against transport damages. Nissens radiators are submitted to corrosion, vibration, pressure impulse, thermal expansion and thermal performance tests.

**Easy Installation**
Perfect finish and product fit, enabling a quick and smooth product installation. Whenever needed, additional installation parts are included in the box (First Fit).

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

**Competitive Range**
Highly competitive product range of +3,000 models in range covering +12,900 OE numbers and almost the entire European vehicle car park. +100 new models added each season.

**Perfect Fit**
Depending on vehicle model, everything that is needed for a proper installation is included in the product box.
Caps, O-rings, nuts, clamps, plugs, gaskets, circlips, bolts, fittings, screws, hose clips ... and more.

**Water residue may block the radiator core, limiting the coolant flow. Sediments and impurities from poor quality coolants, wrong coolant mixtures, or leak stop residues will also accumulate in the radiator tubes, limiting flow and cause limited performance.**

**Thermostat failures cause the cooling system to perform at incorrect temperatures, resulting in insufficient performance.**

**Due to the frontal placement, the radiator is particularly exposed to light mechanical damages (insects, stone chips, high-pressure water cleaning), causing leakages.**

**A leaking or non-performing radiator will expose the engine to an excessive thermal overload, which can cause it to seize.**
Intercooler
Heat exchanger boosting air-charged engines

The intercooler significantly improves the combustion process in turbo-charged systems, thus increasing the engine power effect.

The main 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 significant impact on the charge effect, as the cooled air has a much higher density in terms of air molecules per cubic centimeter. This increases the volume of intake air, resulting in a far better engine output.

Importantly:
- A malfunctioning intercooler causes an engine efficiency drop and can lead to serious damage of the turbocharger, exhaust filters (DPF/FAP) or the entire engine.
- Pay attention to symptoms of a defective or leaking intercooler such as noticeable drop of engine power, 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.

Nissens’ intercoolers are submitted to corrosion, vibration, pressure impulse, thermal expansion and thermal performance tests. Easy-handling packaging and excellent protection against transport damages. Perfect finish and product fit, enabling a quick and smooth product installation. Whenever needed, additional installation parts included in the product box (First Fit).

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

Competitive range of intercoolers covering the most popular car, van and truck models. Program of more than 520 items covering 1,700 OE numbers and more than 88% of the European car park.

OE Matching Quality
Designed and manufactured towards the aftermarket, while thoroughly tested in accordance to OE requirements. Nissens’ intercoolers are submitted to corrosion, vibration, pressure impulse, thermal expansion and thermal performance tests. Easy-handling packaging and excellent protection against transport damages.

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Important to know

- Mechanical and Thermal Stress Resistance
  Plastic tanks designed with special reinforcing inner cross-bars and specially strengthened inlets and outlets to protect the tank against stress caused by high temperatures and mechanical tensions.

- Excellent Cooling Performance
  Tubes equipped with turbulators, ensuring better air flow and larger surface to exchange the heat. Compact fin construction with louvers increasing the heat exchange.

- Designed and manufactured towards the aftermarket, while thoroughly tested in accordance to OE requirements. Nissens’ intercoolers are submitted to corrosion, vibration, pressure impulse, thermal expansion and thermal performance tests.

- Easy-handling packaging and excellent protection against transport damages.

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EC Fan
Radiator function support

The fan plays an important, supportive role for effective operation of the vehicle’s engine cooling system. The EC fan forces air through the exchangers, such as the radiator and/or intercooler.

The EC fan keeps the engine’s coolant from rising above operational temperature, thereby preventing the system from overheating. Its role is especially important at low engine revs and low speeds in slow-moving traffic.

Important to know

- Depending on the vehicle application, the EC fan can be engaged by means of a thermostatic switch or the vehicle’s ECM.

- A malfunctioning EC fan will have a negative impact on the engine cooling performance, which will cause excessive thermal stress on the engine.

- As an electrical device, the fan is often exposed to failure due to problems with the vehicle’s electrical system, such as overvoltage, poor fuse, non-performing alternator and thermostatic switch failure.

OE Matching Quality

Designed and manufactured for the aftermarket, while tested in accordance to OE requirements. Conforms with the ISO 7637, ISO 16750 standards and the Directive of Electromagnetic Compatibility (EMC).

Reliability & Performance

High-quality fan assemblies and fan components with proven cooling performance and stable, long-life operation.

Fan program perfectly matching the IAM needs: Product range with +490 items covering more than 1,860 OE numbers and a varied selection of fan components (e.g. motor and fan blade). Highly competitive prices.

Corrosion Protection

Special, anti-corrosive treatment of the motor cover according to the strict REACH regulation to avoid any electromagnetic disturbance to other electronic elements.

Trouble-Free Operation

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

Reliable and Secure Speed Control

Highest quality and re-engineered fan control boxes. Only high-temperature grade electronic components applied, ensuring increased durability and supremely safe operation of the device.

Reliable and secure fan speed control

EC fans equipped with OE quality control box

- Reengineered electronics, securing safe operation and quality in compliance with OE requirements.

- Comprehensive durability and safety test series performed on every electronic component.

- High thermal resistance, components certified according to AEC-Q100 qualification.

Trouble-Free Installation

High-quality wirings and electrical connections, ensuring a smooth installation.

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.

Improved Resistance to Mechanical Damage and Wear

Material matching OE requirements. Only high-quality plastics, no recycled plastic mixtures.
Fan Clutch

EC fan engagement

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, rotating 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.

OE Matching

- Quality
- Reliability
- Performance

Competitive Range

Nissens’ program for fan clutches covers the most popular European truck applications, +110 items covering +410 OE numbers.

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


Trouble-free Operation

Well-protected wires and connections.

Bolts for fan blade installation always included!
Oil Cooler

Engine and transmission oil cooling

Oil applied for lubrication plays a significant cooling role. The oil cooler receives the lubricant’s heat and exchanges it with the ambient air or the radiator coolant. It is typically the automatic gearbox oil that needs a dedicated oil cooler. Vehicles, driving with engine oil that is cooled by a separate exchanger, is a common sight. Especially in high-performing or downsized engine vehicles, a dedicated oil cooler is an important part of the system.

In some vehicle models, the oil cooler is built into the radiator water tank. Here, the coolant plays a supportive role to the heat exchange process. In modern vehicles, an automatic gearbox oil cooler is often designed as a stand-alone unit, 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 for automatic gearbox break down. The oil is crucial for the gearbox’s operation as it lubricates, cleans and conditions its seals.
- In case of leakages, the lack of oil will cause the engine to overheat and shut down.
- Exposure to high stress, like high temperatures or high mileages can shorten the oil cooler’s lifespan significantly.

OE Matching Quality

All Nissens’ oil coolers are designed and manufactured specifically for the aftermarket, while still maintaining accordance to the OE requirements. 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.

Reliability & Performance

The oil cooler development process includes an in-house test series, where the oil cooler is pressure-impulse tested with 100,000 impulses at a pressure of up to 10.0 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 optimises logistics costs and protects the environment.

Competitive Range

The range consists of 280 complete parts covering more than 1200 OE numbers and 8,400 car makes and models. Furthermore, Nissens offers a standard HP/NO oil cooler range of 150 part numbers.

Temperature Resistant

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

Long Life Product

Improved turbulator design, ensuring more precise brazing process, thus supreme durability and stress resistance of the component.

Easy Installation with First Fit

+80 models of Nissens’ oil coolers equipped with gaskets.
Excellent Product Concept
Real benefits for all players of the Independent Aftermarket

We offer an effective and easy business concept that meets the most advanced standards and demands of the IAM

- OE Matching Quality
- REACH regulations
- MVBER Block Exemption Regulation (European GVO)
- RTR Right to Repair
- ISO9001/TS16949
- ISO 14001
- CLEPA & FIGIEFA

Easy, Intuitive & Accurate Product Selection
Nissens’ excellent and very efficient catalogue and webshop system enables fast and exact product selection and purchase:

- Detailed technical product data, including OE numbers, IAM alternative product numbers etc.
- High-quality and detailed technical drawings with various useful dimensions
- High-quality color pictures (compressors, blowers, fan clutches)
- Close-up pictures of the electrical connections (blowers, fan clutches)
- Rotational 360˚ pictures (compressors, blowers, fan clutches)
- Installation videos (for the most demanding installations and for popular blower models)

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.

We share high-quality and complete up-to-date master data, based on OE with our customers and offer a wide range of e-commerce tools and integrations.

Supreme Product Availability & Efficient Logistical Solutions to develop our Partners’ Business
Tailor-made logistical solutions, including supply chain cost and time optimization. We always offer a highly flexible delivery - orders ranging from one item to entire containers and stock management support to ensure high stock rates at season peaks.

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

- Solid cardboard boxes
- Environmental friendly cardboard materials
- Elegant and unified design across all categories
- Easy and unified product identification label system
- Protective inserts and profiles whenever needed
- Desiccant bags, protecting the electrical components against moisture
- Tight sealings, preventing impurities from entering the components
- Whenever applicable, user installation and warranty guide included in the product box

Technical Knowledge & Support Available
Nissens Training Concept enables you and your customers to benefit from Nissens’ technical expertise within automotive thermal systems. Nissens’ dedicated trainers are qualified to conduct technical training sessions for you to understand the system and all technical aspects of its operation. Furthermore, technical support and technical marketing materials are available to our customers worldwide.

Today, the Training Concept consists of the following elements:

- Technical training academy, covering most relevant topics within system components, operation, troubleshooting as well as consumables, service and maintenance
- Personal technical support and warranty assessment (available on selected markets)
- Technical marketing materials for workshops (installation guides, posters etc.)

Do you wish to apply for a training session for your organization or customers or order technical marketing material, please visit www.nissens.com/training