

# Coolers and cooling modules for the automotive industry





**Mercedes G-Class** 



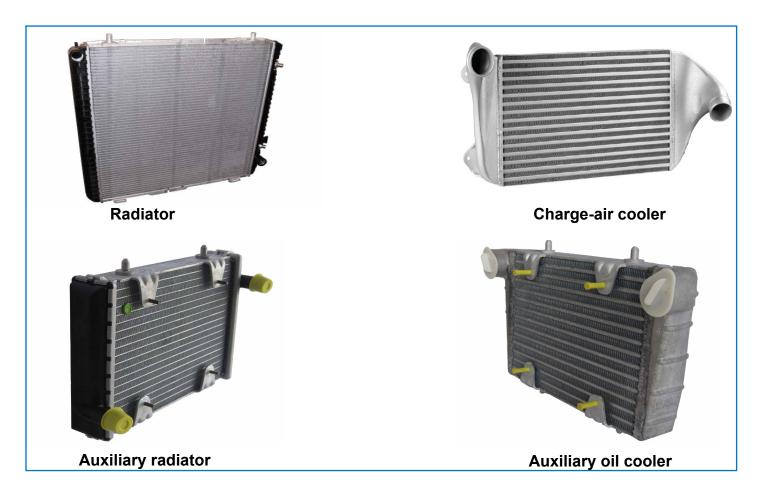
Its distinctive design embodies individual class across the board. The AMG G 65 is the most powerful G model, which is the first model in the G series with a 12-cylinder engine.

For this elite off-road vehicle AKG has developed and produced a charge-air cooler and a radiator, along with an auxiliary radiator and an auxiliary oil cooler, which are precisely coordinated with each other to keep the vehicle at the optimal operating temperature.

Basic vehicle data:	
Туре	: e.
Engine	: AI
Rated power	: 46
Top Speed	: 23
Acceleration 0-100 km/h	: 5.
Equipment supplier:	: Al

g. AMG G 65

- MG 6.0 liter V12 BiTurbo
- 63kW (630 HP) ; 1000 Nm at 2,300 4,300 rpm
- 30 km/h (approx. 143 mph)
- 3 sec.
  - KG since 2001





Audi quattro GmbH R8



The R8 is a sports car in the Audi quattro GmbH line that has a 10-cylinder mid-engine. The Coupé offers, in combination with the quattro all-road drive, rapid acceleration and excellent traction under any weather conditions or on curvy roads. As an Audi supplier of many years, AKG is building two high-performance transmission oil coolers for a very small space, which cool the transmission of the sports car to the perfect temperature without any loss in performance.

### Basic vehicle data:

Туре	
Engine	
Rated Power	
Top Speed	
Acceleration 0-100 km/h	h

: Audi R8 V10 plus 5.2 FSI quattro

- : 5.2 liter V10 diesel engine
- : 449kW (610 HP) ; 560 Nm at 6,500 rpm
  - : 330 km/h (approx. 143 mph)
- : 3.2 sec.







- Short development times for the radiators and cooling modules
- Large diversity of radiator fins for the specific application to meet the required performance data
- Integration of components in installation-ready modules



## Aebi Schmidt Cleango 500 CityJet



The Aebi Schmidt *Cleango 500* is a compact sweeper made by Aebi Schmidt. The *Cleango* is used for street cleaning in municipalities and industrial areas and has a disc brush system under the driver's cabin. The cooling module that is used is specially designed for cleaning vehicles to ensure optimal cooling performance.

# Basic vehicle data:

Type Engine Rated Power Top Speed : Aebi Schmidt Cleango 500 CityJet : 6-cylinder diesel engine

: 105 kW (142 HP)

: 50 km/h (approx. 143 mph)



# Radiators, charge-air and oil coolers with fan cowl,fan and hydrostatic drive

# **Mercedes Econic**



The Mercedes Econic is a widely used and popular truck that can be used for a wide range of tasks because of its variable body options. With its BlueEFFICIENCY Power engine, it is compliant with emissions standard 6 and yet does not have to compromise on engine performance. AKG is a competent partner in innovative and high-performance cooling systems and guarantees optimal cooling performance with the cooling module being used.

#### **Basic vehicle data:** Type Engine Rated Power Gross vehicle weight

#### : Mercedes Econic 2635 LL

: 6-cylinder 7.7 Liter diesel motor 936 LA

: 260 kW (354 HP) ; 1,400 Nm at 1,500 rpm

: 26 tons



Radiator / charge-air cooler



# Electro and hybrid

- AKG develops high-performance cooling systems for electric drives
- Development of a cooling system for lithium-ion batteries through evaporation cooling (coolant)
- Development of cooling for electric vehicles and fuel-cell vehicles

Cooling systems – Charge-air coolers/	A charge-air cooler cools process air water-cooled for the engine <b>char</b> -
ge-air coolers: to cre	eate a denser mass of process at equal volume (increased density).
Radiators/ HT/NT:	A radiator cools the cooling medium.
Oil coolers:	Oil coolers are used for cooling transmission, hydraulic and motor oil, as well as fuel. Here AKG offers several product types.
Condensers:	Condensers are used for cooling the coolant.
Add-on parts:	Depending on complexity, AKG also supplies a fan, fan controller, hydraulic components, cowls, frames.

# Advantages of AKG cooling modules and systems:

- System supplier for high-performance cooling systems
- Reduction of the development and assembly scope for our customers
- Advantages through the reduction of costs, installation space and weight
- New ways to simplify assembly and logistics for our customers
- Complete responsibility for modules and systems
  - Technology competence
  - Service orientation
  - Handling of the entire value chain
  - Fulfillment of all technical requirements
- Competence and Resources
  - Design and simulation software
  - Extensive testing equipment and cutting-edge measurement technology
  - Advanced project management (APQP)



#### The AKG Group presence worldwide!

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