



## Alfa Laval air cooled heat exchanger model G

Flexible, modular design for general purpose cooling



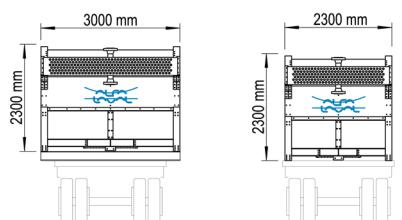
Ensuring efficient and reliable cooling of your processes is key to staying productive and profitable. With ACHE model G for well-defined cooling needs, project execution has never been easier or faster thanks to the modular design, which ensures rapid ordering and delivery. ACHE model G can be used for general cooling duties in gas compression, downstream refrigeration and fuel gas compression applications.

### Model G

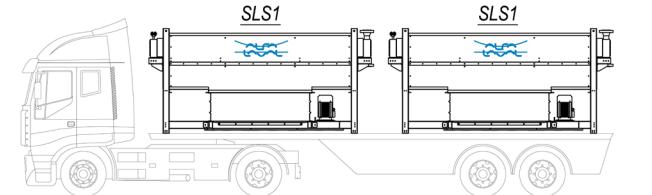
ACHE model G is a modular air-cooled heat exchanger that provides reliable and cost-effective cooling of natural gas, water and/or synthetic oils — cooling duties that can be found around a natural gas compressor, for example. A flexible modular design allows the cooling units to be easily customized to the needs and options within ACHE model G's design limits. ACHE model G has been designed by experts in the field — Alfa Laval Olmi — a reliable and well-known supplier of air-cooled heat exchangers to industry.

### Modular design

To meet tight budgets and schedules, Alfa Laval's engineering team has developed a modular air-cooler design. The modular design provides the flexibility to adapt to different conditions and requirements, while the pre-defined key parameters common to all ACHE model G units ensure a rapid ordering and delivery process.



TYPICAL ARRANGEMENT



### Designed for easy transport

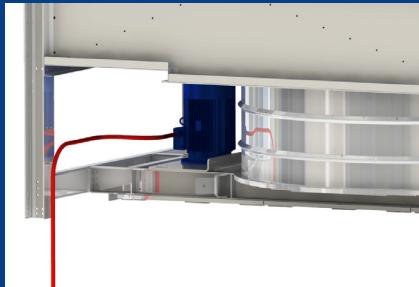
Transporting air-cooled heat exchangers can be a time-consuming and expensive exercise, especially if the units are oversized. All ACHE model G units can be transported on a normal truck or in a 40-ft container for convenient transport to the customer's site by land or sea.

# Three simple steps

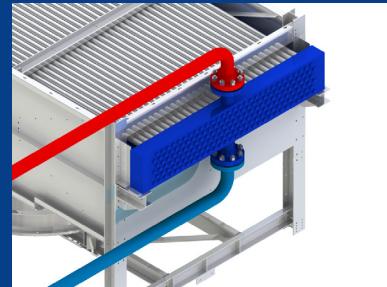
With ACHE model G, you are only three simple steps away from plugging the unit into your system. This simple procedure not only reduces the time and cost of on-site erection, but also makes installation safer.



1. Install and fix the module on the supporting structure



2. Cable motor and check belt



3. Match module process flanges to piping

ACHE model G is a modular air-cooled heat exchanger that is fast and easy to:

- Size and buy—pre-configured modules in flexible configurations
- Manufacture and deliver—pre-engineered blocks in compact design for rapid transportation
- Erect and install—bolt down the modules, plug in the power cables, connect the flanges and start

Selected main applications include:

- **Gas compression**

Compressing gas is demanding. ACHE model G enables robust, cost-effective solutions adapted to the pressures, gas composition and maintenance needs of the specific application. Compression skids, which are often used at the wellhead to bring natural gas to the required pipeline pressure, require purpose-built cooling solutions that withstand harsh operating conditions. Unmanned compression stations that secure pressure in a gas pipeline must operate reliably with minimal maintenance.

- **Refrigeration units and industrial gas compression**

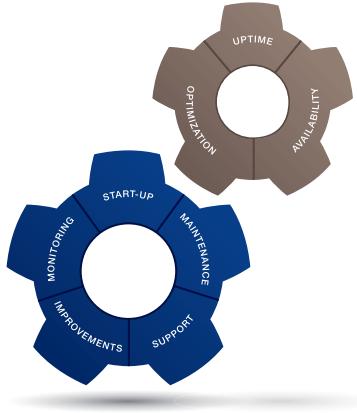
Refrigeration units (refrigerant condensers) and compression of industrial gas ( $N_2$  and air) has many applications in all fields; the fluids, gas or vapor involved work in cycles in a well-proven standardized package. ACHE model G meets requirements for very stable operations, contributing to the compactness of the whole system.

- **Synthetic oil cooling**

Synthetic oils are utilized in lubricated systems and in the transfer of heat when other auxiliary fluids fail. ACHE model G, with or without inserts inside the tubes, can minimize the surface area even where fluid viscosity plays an important role, enabling safe operation and simple constructability.

- **Fuel gas compression**

Fuel gas compression applications are often sited in remote areas where water supply is either restricted or unavailable. ACHE model G is designed to provide both interstage and discharge cooling in the compressor package.



# Service and maintenance

Our global network of local service technicians is ready to assist you on site whenever you need help. We know the importance of keeping service stops short and our organization is both flexible and available at short notice. We have the capacity to perform complex, large-scale service work and always do our best to minimize plant downtime. By working closely with our customers, we can prepare for planned service stops well in advance to make sure work is executed efficiently in the shortest possible time. Our specialists can help with everything from audits and advice on maximizing your return on investment, to performing a full reconditioning on any type of air-cooled heat exchanger.

## Extending performance with the Alfa Laval 360° Service Portfolio

Alfa Laval 360° Service Portfolio contains all the services needed to secure and enhance performance throughout your equipment's life cycle. Our service offer includes:

- **Commissioning**
- **Supervision**, engineering and project management
- **Repair and Reconditioning**, including advanced welding and post-welding heat treatment.
- **Audits**, including all types of testing (ultrasonic, X-ray and gamma ray, hydro, pressure, dye penetrant, etc.)
- **Spare parts** and supply of material
- **Service tools** and equipment required for the service
- **Training**

We can also create a Performance Agreement — a customized service agreement for you that includes any or all of the above services.

## Technical data

Pressure equipment certification and standards	PED 2014/68/EU, ASME VIII div.1, API661
Design pressure	0–100 bar(g)
Design temperature	–40 °C– +250 °C

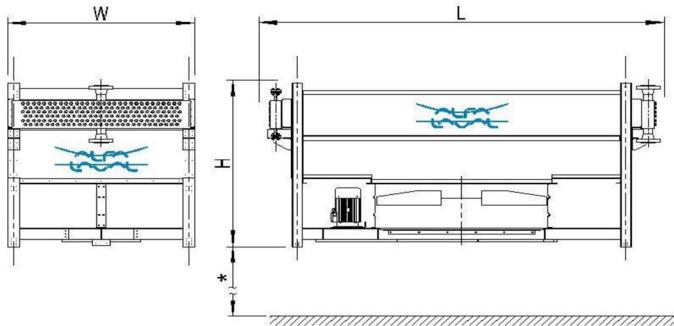
## Design and materials

Pressure vessel and structure	
Header and tube	Plugged header in: Carbon steel Stainless steel 304 or 316
Fins	Aluminium KL – knurled footed
Structure	Bolted structure in hot-dip galvanized carbon steel

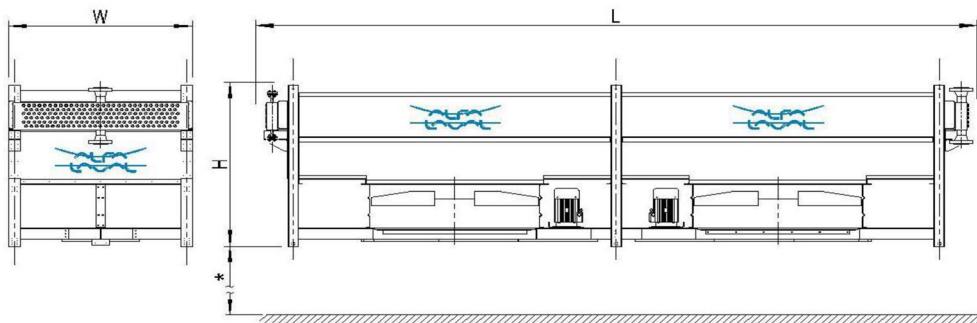
## Fan and electrical components

Fan	Max. sound pressure level 85 dB(A) at 1 m from equipment Aluminium blades
Transmission type	Toothed belt
Fan motors	High efficiency, explosion-proof
Electrical control and options	Frequency converter (VFD) PLC integrated functions for local and/or remote control Automatic louver with actuator and positioner Temperature transmitters

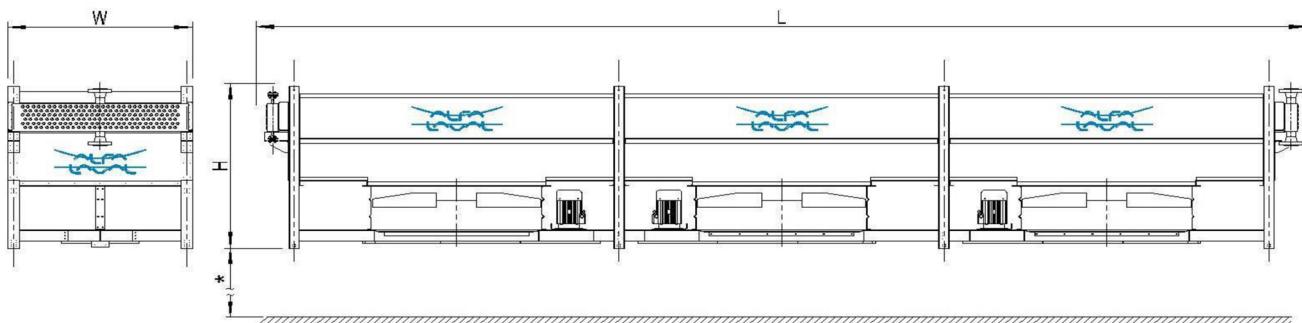
## Dimensions



Type	Nr. of fans	Fan diameter (mm)	Shipping module dimensions L1 × W1 × H1 (mm)	Air cooler complete dimensions L1 × W1 × H2 (mm)
SLS1	1	2,100	5,000 × 2,300 × 2,300	5,000 × 2,300 × 4,305*
XLS1	1	2,500	5,000 × 3,000 × 2,300	5,000 × 3,000 × 4,305*



Type	Nr. of fans	Fan diameter (mm)	Shipping module dimensions L1 × W1 × H1 (mm)	Air cooler complete dimensions L1 × W1 × H2 (mm)
SLS2	2	2,100	9,050 × 2,300 × 2,300	9,050 × 2,300 × 4,305*
XLS2	2	2,500	9,050 × 3,000 × 2,300	9,050 × 3,000 × 4,305*



Type	Nr. of fans	Fan diameter (mm)	Shipping module dimensions L1 × W1 × H1 (mm)	Air cooler complete dimensions L1 × W1 × H2 (mm)
SLS3	3	2,100	13,100 × 2,300 × 2,300	13,100 × 2,300 × 4,305*
SLS3 SHORT	3	2,100	11,900 × 2,300 × 2,300	11,900 × 2,300 × 4,305*
XLS3	3	2,500	13,100 × 3,000 × 2,300	13,100 × 3,000 × 4,305*

\* Equipment performance requires minimum 2,000 mm supporting structure for air intake underneath the module (extended columns, if any, are available as option).