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# **ADI70/115 Series**

Compressors for CO<sub>2</sub>  
and Gas Grid Injection

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# ADI70/115 Series

## CO<sub>2</sub> and Gas Grid Injection applications

These gas compression stations are designed onto an easy handling skid composed of a multi stage reciprocating pump, belt driven by an electric motor inverter controlled.

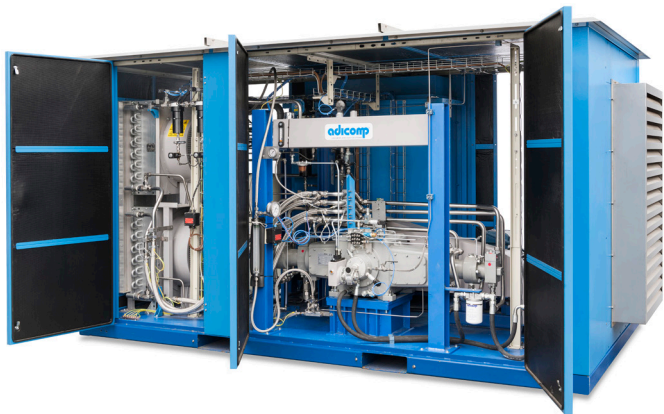
- **ADI70:** available operating pressures up to 90.0 bar(g).
- **ADI115:** available operating pressures up to 90.0 bar(g).

### HOW IT WORKS

Single or double acting horizontal reciprocating gas compressor. It is designed with one or two conrods and several sizes of cast iron cylinders to be adaptable to different solutions. It can be a single, double or three stages unit, installed on an adequate steel structure. Complete with:

- suction valve
- cross -head
- inter-stage and final air-cooled fan assisted after-cooler
- coalescent type oil filter
- shut-off valves at suction and discharge
- safety valves at each stage

All necessary instrumentation is included in accordance with manufacturer standard. A proportional by-pass valve is used to recirculate the excess gas to reduce the flow rate from the value at minimum motor speed down to 0%.



#### Plug & Play

All Adicomp compressors are designed and made to maximize an easy installation. No special operations are required, except of installation on site and electricity and gas supply. Everything is already set up in the company and, thanks to the commissioning service, you can fine-tune the set-up of the package on site.



#### Energy savings, flow control

At Adicomp, we keep an eye on energy savings and our compressors are designed to adapt to the flow of gas, which usually is not constant. To do this, our packages can be fitted with in-verters and by-pass valves.



#### Full control over operation

Thanks to the use of a state of art PLC programming you can control the operation of all parts of the compression package, thereby ensuring a perfect use, even remotely.



#### Air or water cooled

All Adicomp compressors can be either air cooled or water cooled.



#### Experience counts

In almost 25 years of activity, we provided several hundreds of compressors worldwide, facing extremely different solutions that allowed us to acquire a high level of know-how acknowledged by the market.



#### Tailor-made attitude

At Adicomp, products are manufactured to meet specific customer requirements. Not vice versa. We listen to customer requirements and then transmit them to the engineering department to provide the best solutions. Flexible and reliable, always.

ONE OF THE 9500 SYSTEMS INSTALLED

### Compression system for gas grid injection

## ADI115-37

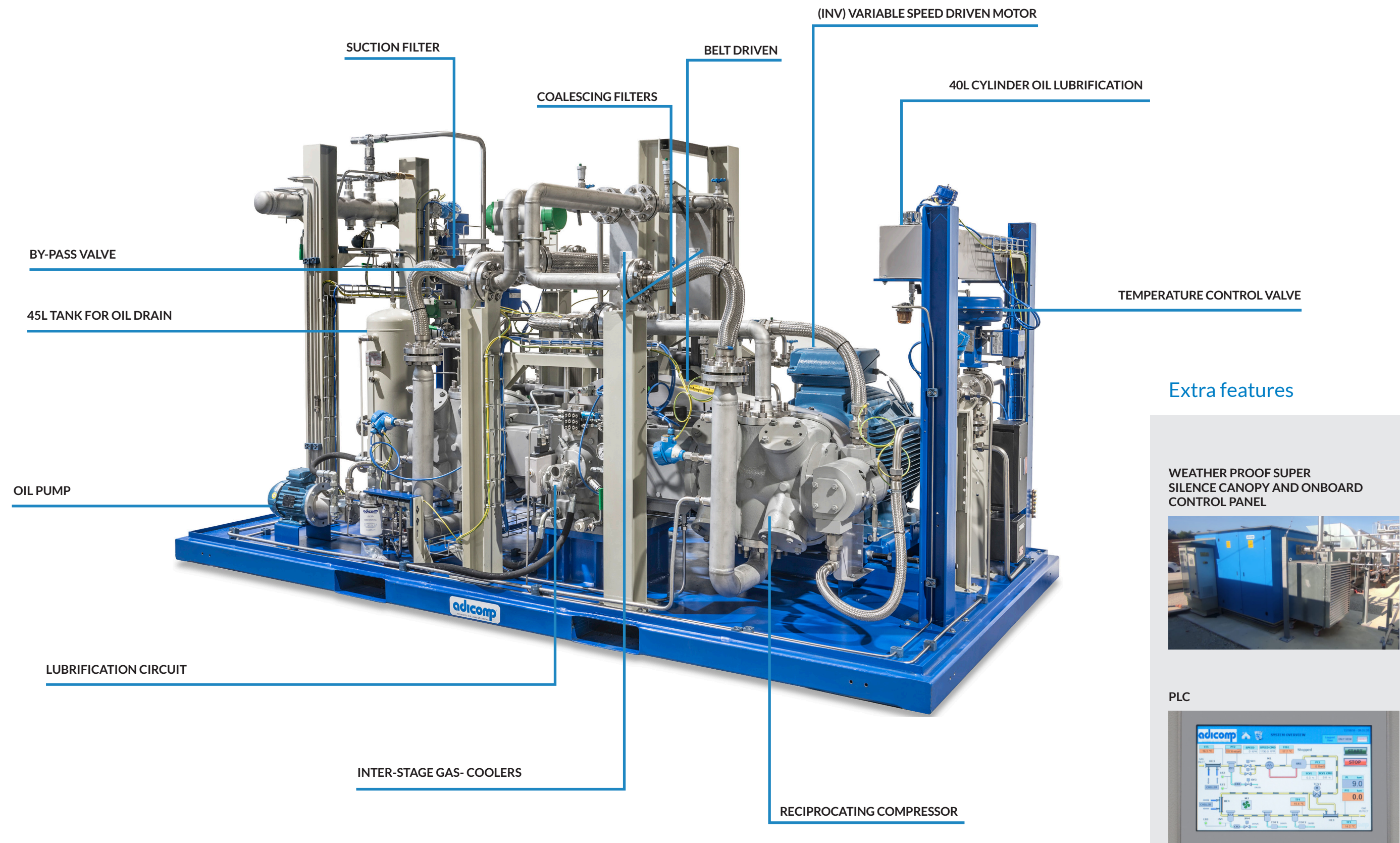
TOTAL POWER INSTALLED: 45 kW  
INLET PRESSURE: 10 bar(g)  
WORKING PRESSURE: 68 bar(g)  
FLOW RATE: 0<335 Nm<sup>3</sup>/h  
AMBIENT TEMPERATURE: -10/+40°C  
LOCATION: FRANCE



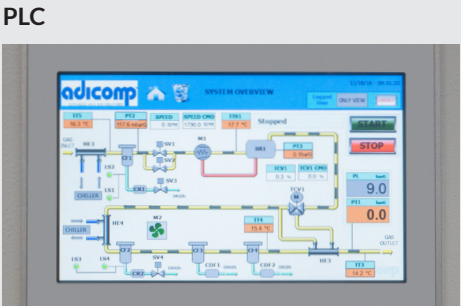


# ADI70/115 Series

## Main features



### Extra features



# ADI70/115 Series

## Options available

**(OF) OPEN FRAME (STANDARD VERSION)**  
Open frame version suitable for indoor installation.

**(S) SILENCED**  
Sound proof enclosure, suitable for indoor installation (no weather proof).

**(WS) - WEATHER PROOF**  
Compressor is designed and built for ambient temperature from -10°C to +40°C, with a special roof and outdoor painting treatment of the canopy that make the station suitable for outdoor operations.

**(WP) - WEATHER PROOF**  
The compressor station is designed and built for an ambient temperature from -20°C to 40°C. Electric heaters thermostatically controlled keep the internal temperature above 0°C in presence of cold climate. While the compressor is working the temperature inside the canopy is kept, with automatic louvres, above 0°C by recycling warm air flow generated from the air cooler.

**SILENCERS**  
Special sound-proof damper designed to reduce the noise within the required noise limitation.

**(GOH) – GAS/WATER HEAT EXCHANGER**  
Compressor water cooled. This optional consists of plate-plate or shell tube heat exchanger water cooled to cool down the temperature of gas.

**(OW) DISCHARGE GAS/WATER HEAT EXCHANGER**  
At outlet side this option consists in a further cooling of the gas, downstream of the after-cooler, by a stainless-steel compressed gas/refrigerated water heat exchanger, a water separator and an automatic drainer. This option brings the compressed gas dew-point temperature in pressure down to about 5°C such as eliminating most of the water content and allowing the coalescent filter to work at the best.

**(GH) GAS/GAS HEAT EXCHANGER**  
When the need to control the temperature of the gas exiting from the compressor is necessary, a gas/gas heat exchanger is installed for delivering the gas with a stabilized temperature.

**(TC) – AUTOMATICALLY CONTROLLED OUTLET GAS TEMPERATURE**  
Automatic system (either electronically or mechanically) used to control outlet gas temperature. Additional heat exchanger must be installed at compressor outlet.

**(BY2) – PROPORTIONAL BYPASS VALVE**  
Proportional bypass valve is used to recirculate compressor capacity. It is available either electro pneumatic or fully electrical. This option, when in combination with inverter system, will be activated only at compressor minimum speed. Bypass valve can be either controlled based on inlet or outlet pressure and can be normally open or normally closed based on the client needs.

**(PL) - PLC**  
Control panel is equipped with PLC. Controller manage start and stop and also emergency system. When PLC is installed, 7” touch screen is also available and synoptic diagram is available to easily monitor compressor parameters.

**(MB) MODBUS, (PB) PROFIBUS & (PN) PROFINET REMOTE CONTROL SYSTEMS**  
Every Adicomp compressor can be connected through a Modbus, Profibus or Profinet gateway for data transmission either if it is equipped with S1-20 or PLC controller. Modbus and Profibus added to the main controller can perform following operations:

- read any parameter inside the controller (Pressure, Temperature, alarms, etc);
- write on any settable parameter inside the table. Usually, it is used to modify the target pressure and start/stop compressor.

**(LM) – 8000 h MAINTENANCE KIT**  
This kit allow compressor to extend maintenance intervals to 8000 h allowing client to save operational costs. It consists in additional instruments to monitor compressor parameters and it works in combination with PLC system (PL option).

## Main technical data

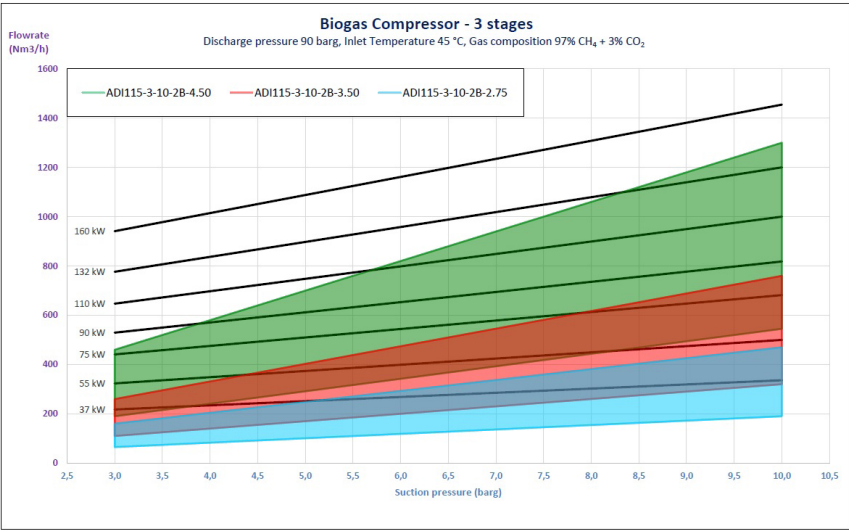
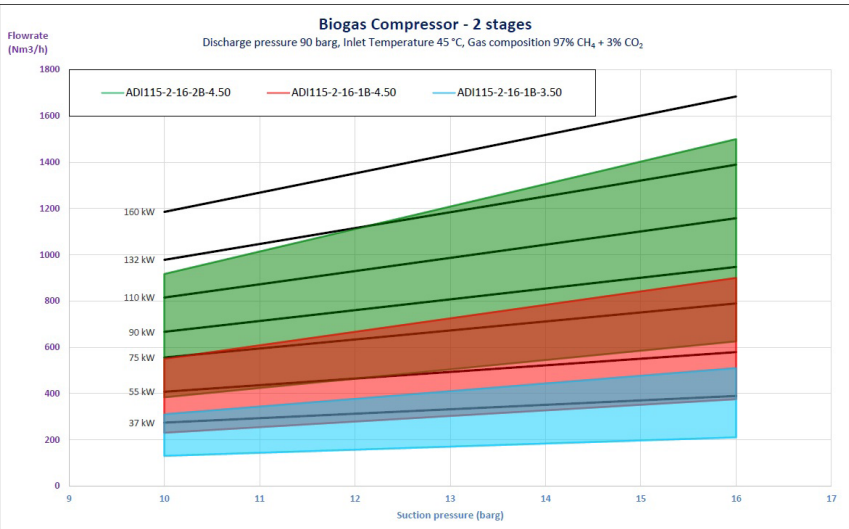
**ADI70/115** Specifically designed in compliance with ATEX or NEC/Nema/UL standards for electrical apparatus and PED or ASME for pressure equipments.

**Suction pressure:** up to 16 bar(g)  
**Operating pressure:** up to 90 bar(g)  
**Free Gas Delivery:** up to 1700 Nm<sup>3</sup>/h  
**Adsorbed power:** 7.5 < 200 kW

- APPLICATIONS**
- Gas grid injection
  - Field gathering
  - Vapor recovery
  - CO<sub>2</sub> liquefaction

### MODELS

ADI70/115-7.5	ADI115-30	ADI115-110
ADI70/115-9	ADI115-37	ADI115-132
ADI70/115-11	ADI115-45	ADI115-160
ADI70/115-15	ADI115-55	
ADI70/115-18.5	ADI115-75	ADI115-200
ADI70/115-22	ADI115-90	







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