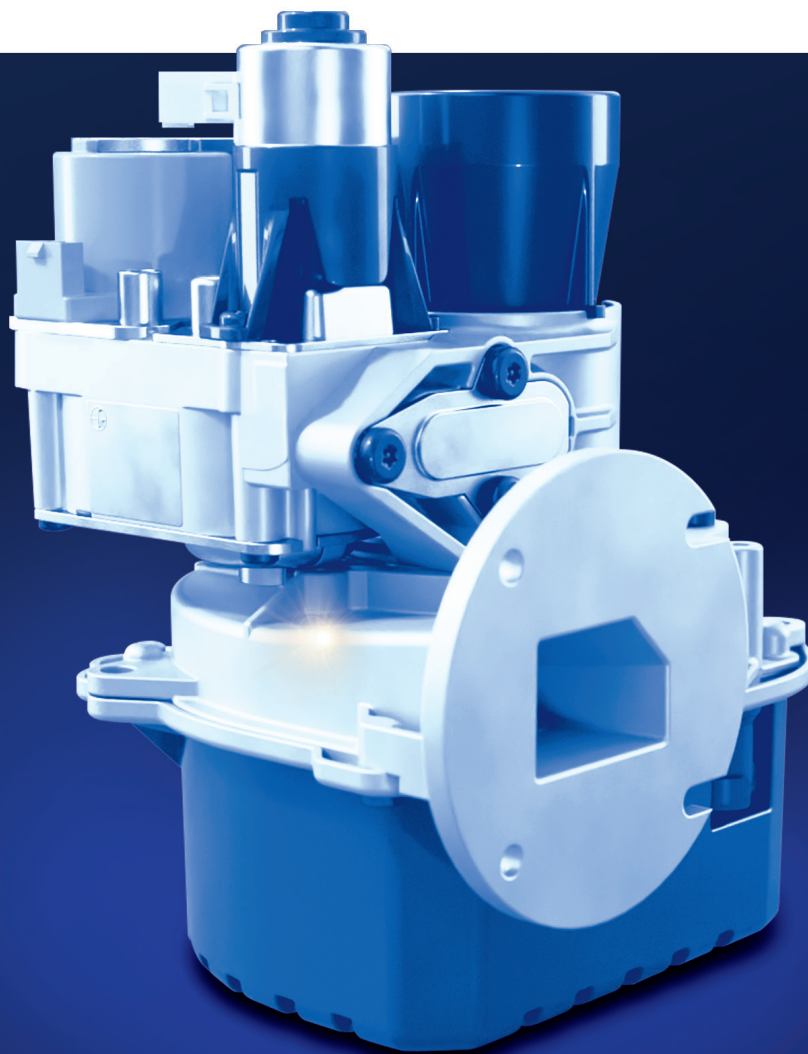


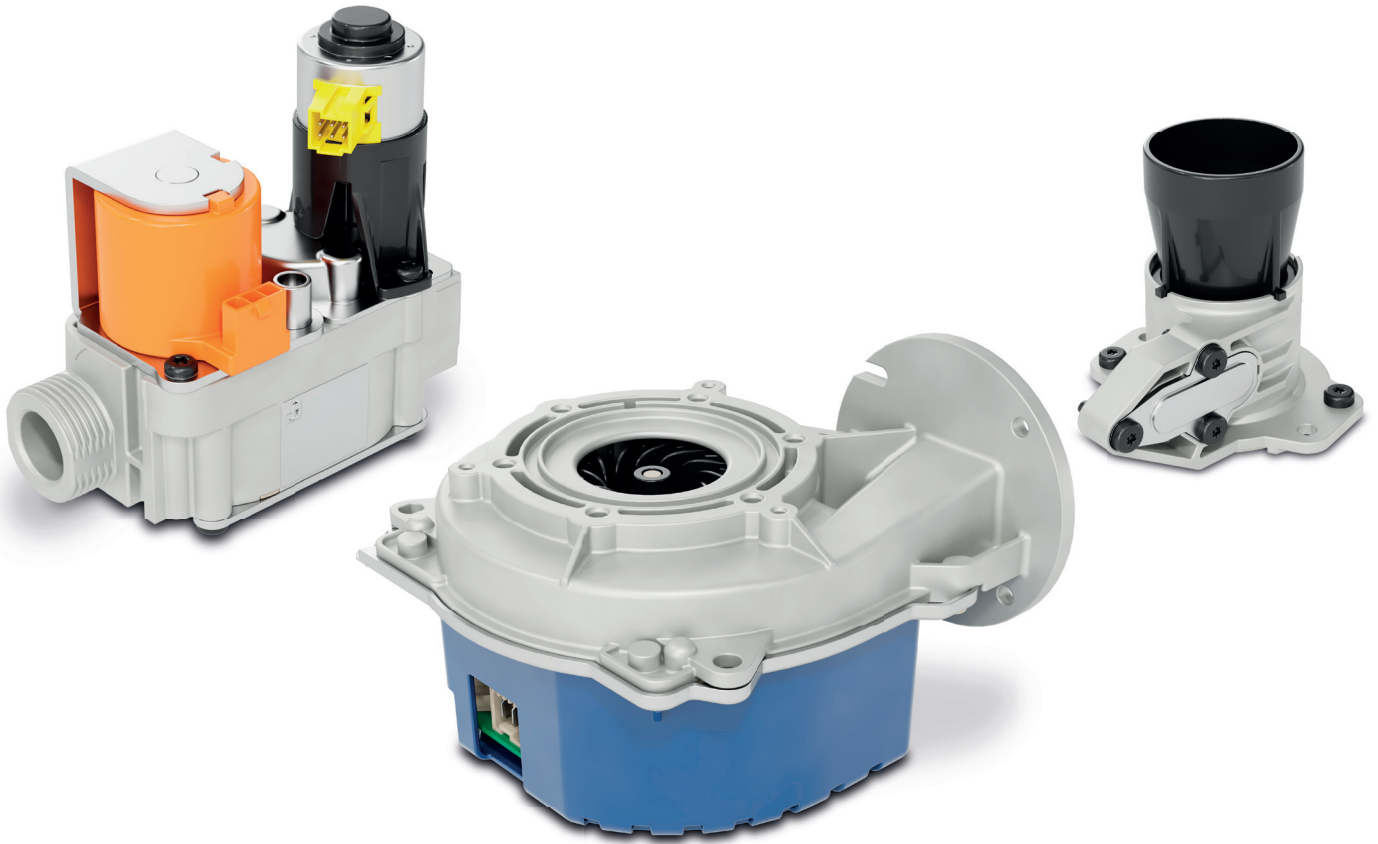
SIT 877 INTEGRA



*INTEGRATED SYSTEM
FOR GAS BURNING APPLIANCES*

SIT 877 INTEGRA

Dissembled view



■ **V**ersion with integrated fan driver

■ **V**ersion with Elektra CMS integrated

■ **V**ersion with hall sensor only



General description

877 INTEGRA is a modular integrated system specifically designed to operate in domestic appliances using premix burners with Elektra Combustion Management system and with automatic ignition.

877 INTEGRA consists of a high efficiency and high modulation brushless fan, two automatic shut-off gas valves, gas pressure regulator, gas modulator driven by linear actuator operated by a stepper motor and an air-gas mixing device. As far regards the electronic, it is

available in three different arrangement: with hall sensor only, with integrated fan driver, with fan driver and Elektra Combustion Management System.

877 INTEGRA is particularly compact in dimensions and allows to get an extremely wide modulation range in the appliance, up to 1:20.

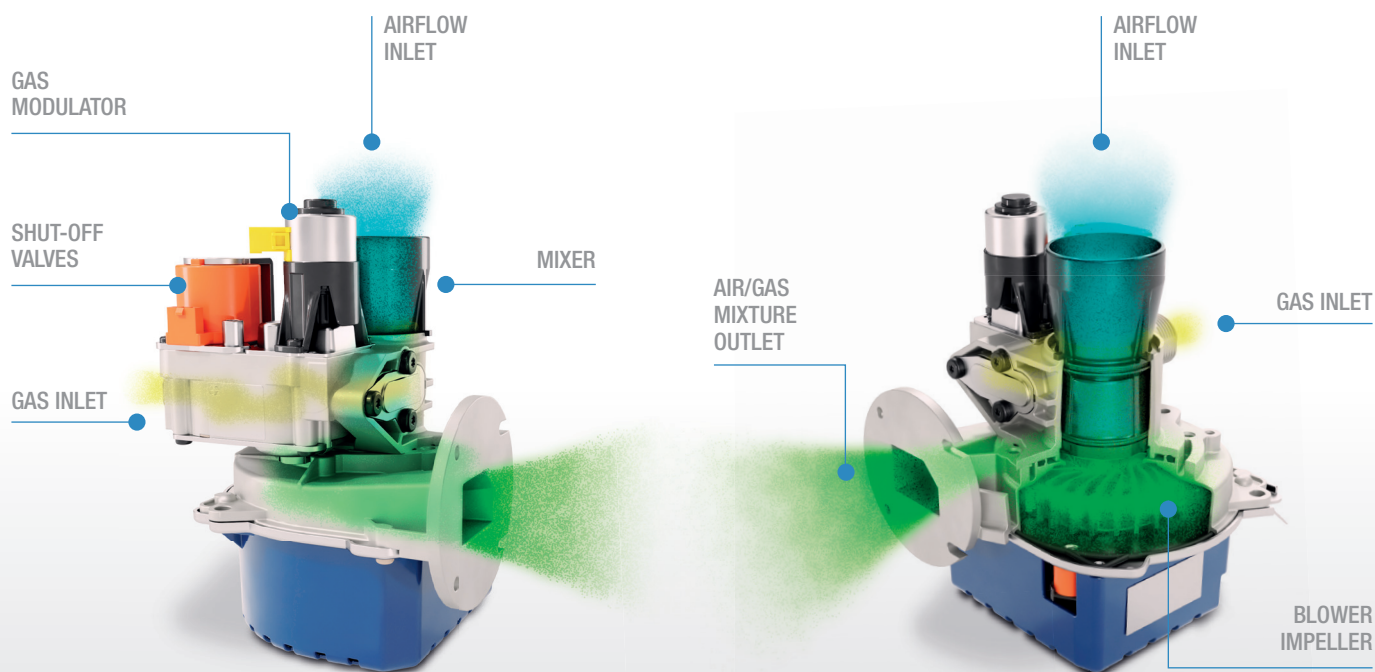
Moreover, the connections could have several angular relative positions and so to be easily fitted in the appliance.

Working principle

Operating at variable speed, the fan generates the airflow required for the combustion that reaches the mixer.

When the shut-off valves are open, the gas flows through the pressure regulator, which ensures a constant outlet

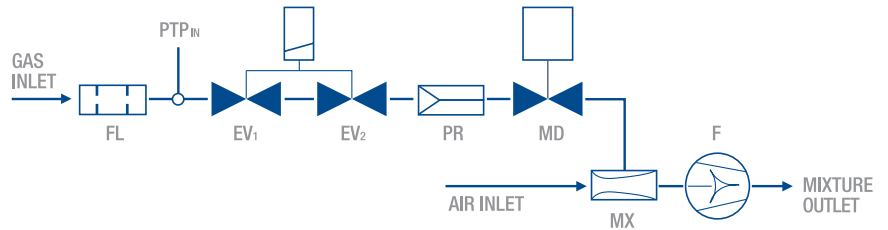
pressure, and finally through the flow modulator that adjusts the right quantity in accordance with the required heating power request. Finally, the gas flow is mixed with the airflow and conveyed to the burner.





Main Features

- Inlet filter (FL)
- Inlet pressure test point (PTP_{IN})
- Two automatic shut-off valves (EV₁, EV₂)
- Pressure regulator (PR)
- Modulator operated by linear actuator driven by stepper motor (MD)
- Mixer (MX)
- Blower (F)



GENERAL DATA

Use Specification

- Gas families _____ 2nd and 3rd families
- Ambient temperature range _____ from -15 to 70 °C
- Maximum gas inlet pressure _____ 60 mbar
- Strainer _____ Inlet filter with mesh 195 µm
- Safety valves _____ class C+C
- Installation position _____ Solenoid at any position between vertical and horizontal – but not upside down

Mechanical Connection

- Gas Inlet _____ G¾ according to ISO 228
- Inlet pressure test point _____ ø 9 mm
- Air inlet _____ ø 50 mm
- Mixture outlet _____ see dimensional drawing (other connections are available)

Electrical Data

- Automatic shut-off valves _____ 22 VDC Pick & Hold or 230 VRAC Pick & Hold
- Stepper motor _____ Unipolar 24 VDC
- Fan power supply _____ 230V -50Hz
- Fan driver supply _____ 24 VDC

Electrical Connection

- Automatic shut-off valves _____ Male MOLEX Minifit3 pins (see Figure 1)
- Stepper motor _____ Male connector compatible to cable connector STOCKO STO-GRID, MH 790-06-001 –118 (see Figure 2)
- Fan power supply _____ LUMBERG 3642-03 (see Figure 3)
- Fan driver control _____ MOLEX Minifit5569-05 (see Figure 4)



Figure 1 - EV electrical connection



Figure 2 - Motor electrical connection

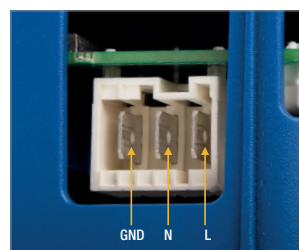


Figure 3 - fan power supply connector

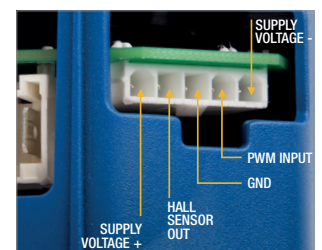
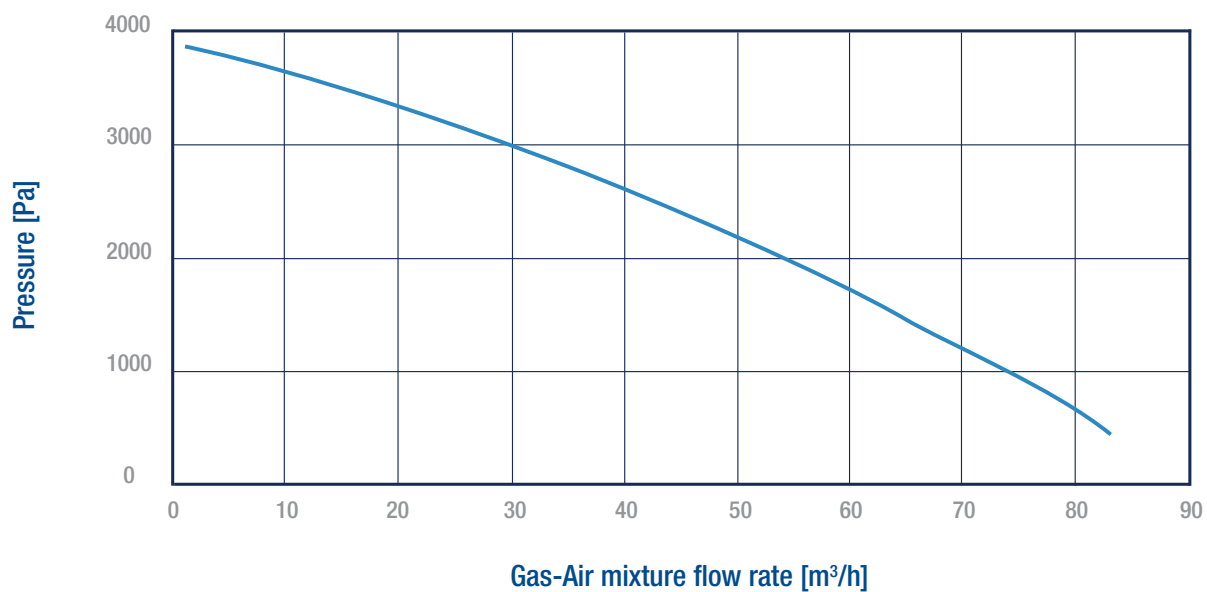


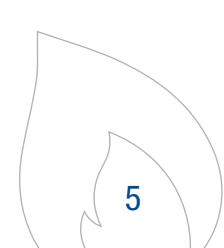
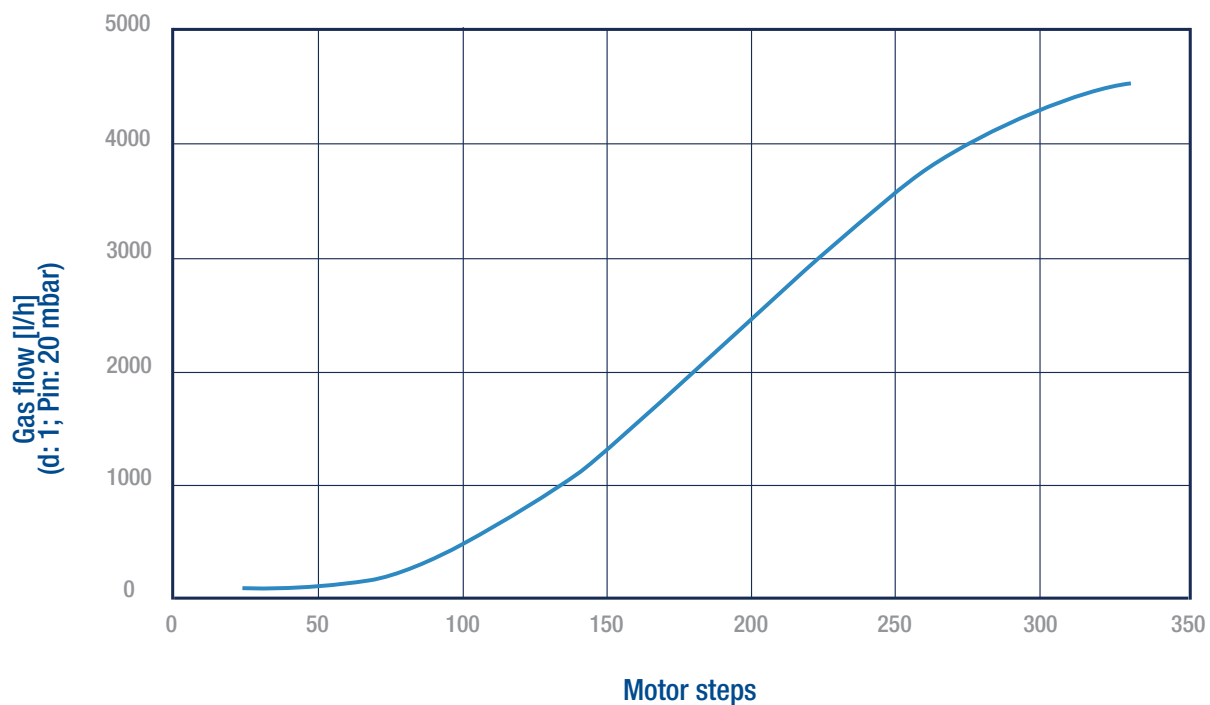
Figure 4 - fan driving interface



Fan Characteristic



Modulator Characteristic



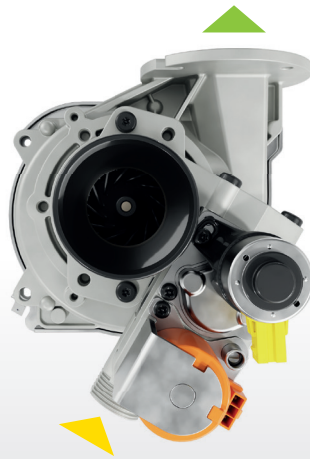




ALLOWED ANGLES FOR THE VALVE INLET



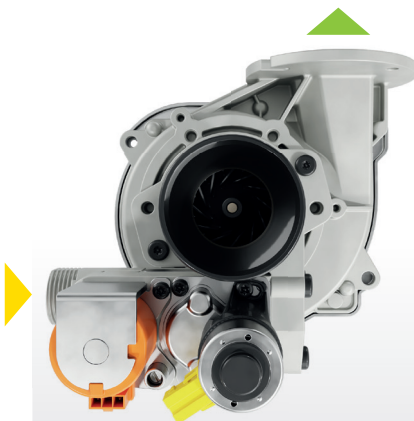
0°



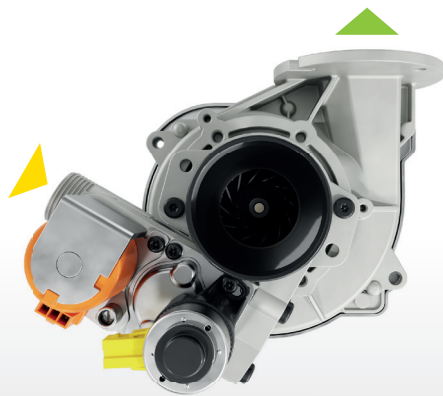
30°



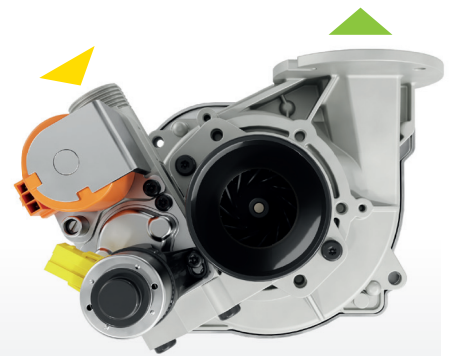
60°



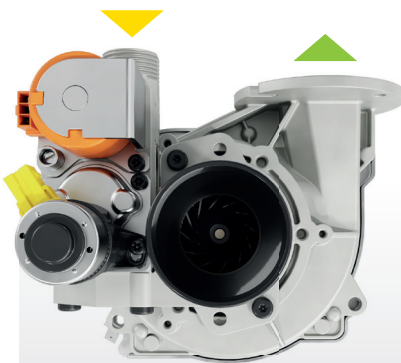
90°



120°



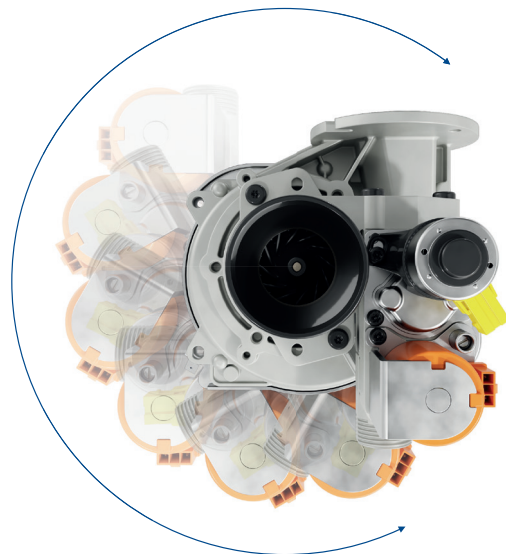
150°

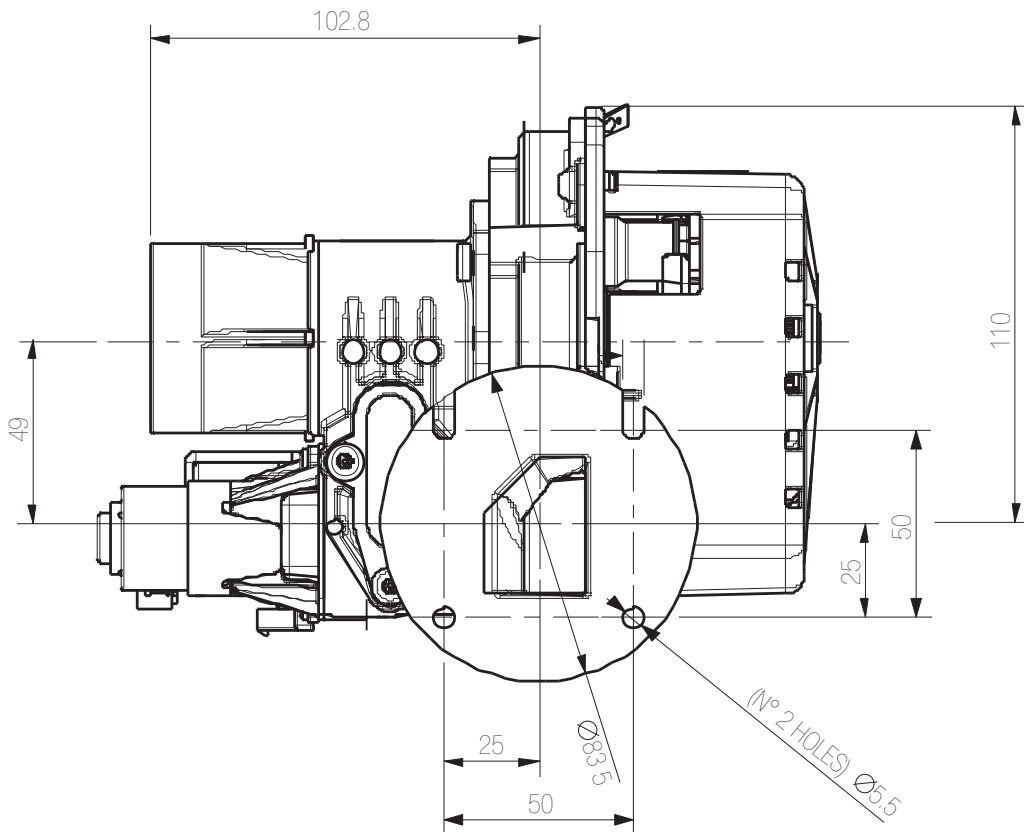
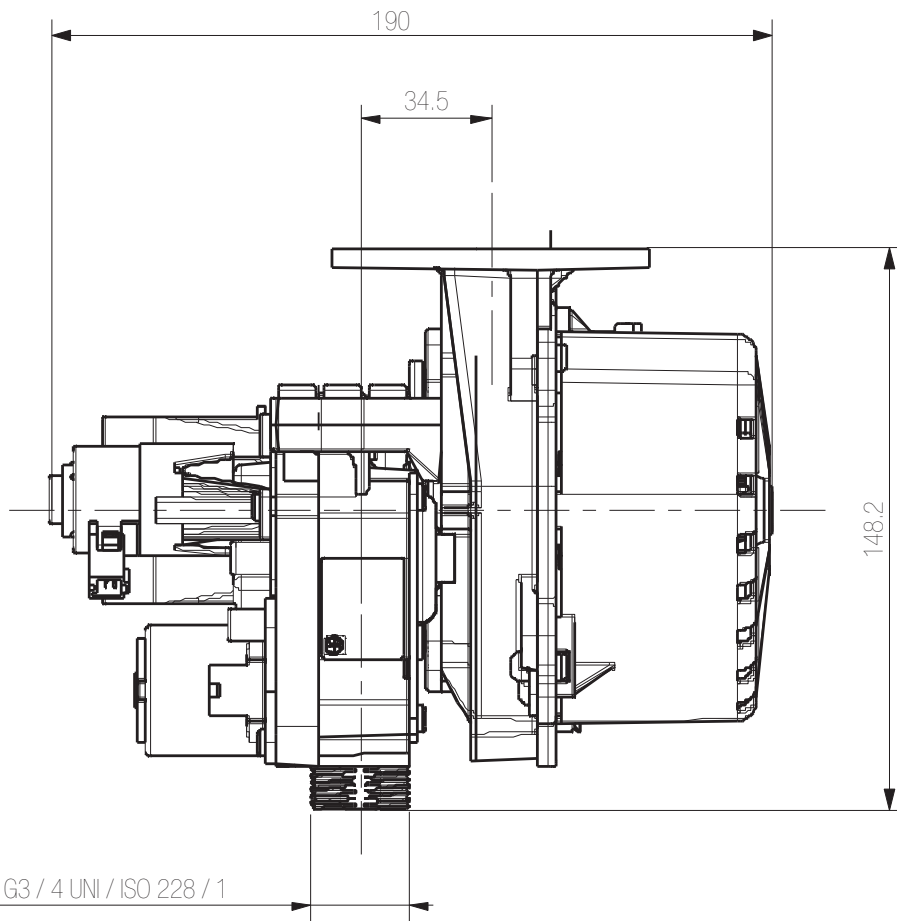


180°

▲ Mixture outlet

▲ Gas inlet







Viale dell'Industria, 31-33 - 35129 Padova - ITALY
Tel. +39 049 8293111 - Fax +39 049 8070093
www.sitgroup.it - info@sitgroup.it