

ASSEMBLY KIT OF HOT WATER PRODUCTION

Mod. HW/EV

INTRODUCTION

This kit has been specifically designed for educational aims and it consists of a framework where two different hot water boilers can be installed: the first device is a wall-mounted gas fired boiler with atmospheric burner, being suitable for systems of small potentiality and used for independent heating systems; the second boiler is installed on the floor and includes an oil burner: it is used in heating plants with central heat distribution.

TRAINING PROGRAM

Refer to the available diagrams in order to carry out the following operations:

- assembly of floor-installed boiler, chimney, fuel circuit, hot water and cold water circuits, protection and safety devices, so to build a central heating plant
- assembly of wall-mounted boiler, of the delivery and return water circuit, of gas feeding circuit, of sanitary circuit
- assembly of electric system
- filling the circuit with water and bleeding the air from the system
- starting the plant and checking the tripping of safety and protection devices

With optional item flue-gas analyzer:

- combustion control and check with flue-gas analysis
- combustion efficiency determination

TECHNICAL SPECIFICATIONS

- Steel structure mounted on wheels, painted and treated in the oven
- Central heating system including:
 - Cast iron floor-installed boiler with thermometer, control thermostat and safety thermostat
 - 17 kW oil burner
 - Fuel tank with level indication
 - Flue-gas collection and exhaust system with thermometer
 - Air separator, expansion vessel, bleed valves
 - Fuel shut off valve, safety pressure switch, safety valve
 - Delivery and return manifolds, on-off valves, pressure gauge
 - 2 auxiliary pumps
- Independent heating system including:
 - wall-mounted gas fired boiler
 - gas feeding line with pressure gauge and volumetric counter
 - zone valves
- Automatic water filling device including:
 - pressure reducer
 - check valve
 - stop valve
 - filter
 - pressure gauge for reading system pressure
- Pipes painted with different colours
- Switchboard
- Emergency button
- Quick connections for connection with dissipators

Power supply: 230 Vac 50 Hz single-phase - 500 VA
(Other voltage and frequency on request)

Dimensions: 200 x 70 x 210 cm

Net weight: 216 kg



REQUIRED

UTILITIES (PROVIDED BY THE CUSTOMER)

- Tap water at 1 bar min.
- Fuel for wall-mounted boiler: natural gas or LPG (specify before ordering)
- Water drain
- Chimney $\varnothing = 145$ mm (for oil boiler)
- Flue-gas exhaust duct $\varnothing = 100$ mm (for wall-mounted boiler)
- Air intake duct $\varnothing = 145$ mm (for wall-mounted boiler)

SUPPLIED WITH

EXPERIMENTAL HANDBOOK



OPTIONAL (REF. ACCESS. AND INSTRUMENTS)

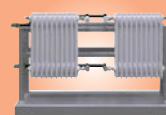
FLUE-GAS ANALYZER MOD. FGA-1



FLUE-GAS ANALYZER - BASIC VERS. MOD. FGA-E

As an alternative to mod. FGA-1

POWER DISSIPATION KIT MOD. DW-E/EV



POWER DISSIPATION KIT WITH RADIATORS MOD. DW-R/EV