



ENERGY

CONDENSING

Condensing vertical space heaters for inside installation

Tecnoclima cabinet warm air heaters ENERGY are the ideal solution for heating and controlled ventilation of medium large areas such as workshops, laboratories, industrial halls, warehouses, gyms, shopping centers, exhibition halls, theaters, churches, etc.



HEATING	SUPPLY	HEATING CAPACITY	AIR FLOW RATE	EFFICIENCY
	 gas oil	kW from 68 to 1.090	m³/h from 4.600 to 71.000	 ~ 103%

Peculiarity:

- Maximum energy efficiency and environmental comfort thanks to power modulation and condensation operation at reduced thermal load.
- Heat exchanger made entirely of stainless steel AISI 304 with aerodynamic profile and turbulent imprints.
- High efficiency ~ 103%.
- Can be combined with gas or diesel blown air burners, with two-stage or modulating operation.
- 8 models with thermal capacity from 20 kW to 1.100kW and air flow from 4.600 to 71.000 m³/h.
- Suitable for ducted or direct diffusion systems with air outlet plenum.



▼ Description

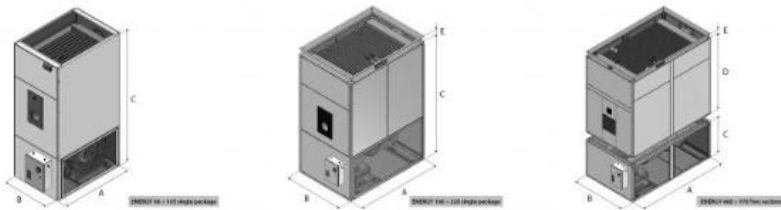
The equipment consist mainly of an isolated cabinet receiving the air flow produced by the ventilator group. The cabinet contains a high-efficiency INOX stainless steel heat exchanger which transfers the thermal power by means of direct exchange between combustion products and the air flow to be treated. Such air is heated when passing onto the exchanger's hot surface and it is then distributed to the premises. The centrifugal fan's characteristics make the equipment suitable to be installed where air is to be distributed through pipings or – more generally – where high static pressure is required. During summertime, this equipment can also perform room ventilation only. The direct exchange technology employed by this equipment requires lower installation costs but first and foremost it allows a tangible reduction of operating costs. The most important feature of this system is that heat is directly transferred to the premises to be heated, thereby avoiding inefficient transformation stages. The result is a much higher overall performance of the system.

The ENERGY unit is manufactured with valuable STAINLESS steel materials, thereby guaranteeing a safe, long-lasting functioning also at flue gas condensation conditions. This peculiar feature allows to monitor in a continuous and consistent way the equipment's heating capacity output according to the immediate needs of end users. Moreover, operating economy is maximized thanks to the functioning mode at condensation conditions. This equipment is also suitable to fully treat outside air, whose temperature changes from time to time according to the season. All functions are managed in a fully automatic way by means of a complete and well-tested electronic controller that is interfaced with temperature sensors.

A wide choice of accessories (such as filters, remote controls, diffusion plenums, regulation dampers, aspiration grids, kit for high static pressure, etc.) come in to complete the product. Product safety is certified by renowned and professional International Authorities.

- **Heat exchanger** three smokes rounds, with combustion chamber made of AISI 430 stainless steel, smoke pipes in AISI 304 stainless steel including radiant diaphragm, exhaust manifold with condensate discharge, inspection doors, chimney connection and burner mounting plate with insulation.
- **External casing** in pre-painted galvanized steel with insulation.
- **Side panel** for air inlet section.
- **Side grid** for air inlet section.
- **Fan section** with one or more high performance centrifugal fans, complete with electric motor and variable belt transmission.
- **Electrical board** for control and protection of the warm air heater designed for single phase electrical motor supply 230V / 50 Hz and 400V 3+N / 50 Hz for three phase electrical motor with **FAN-LIMIT** double-thermostat (n° 1 with manual reset and n° 1 with automatic reset).
- **For oil burner version:** double stage or modulating forced draught oil burner complete with electric device, nozzle and flexible pipes.
- **For gas burner version:** double stage or modulating forced draught gas burner complete with electric device and gas train.

▼ Dimensions



ENERGY 60 + 105 single package

ENERGY 160 + 320 single package

ENERGY 460 + 970 Two sections

Model	Overall dimensions mm					Chimney Ø mm	Weight kg	Weight (with package) kg
	A	B	C	D	E			
ENERGY 60	812	544	1.580	-	-	150	135	140
ENERGY 105	1.060	774	1.926	-	-	200	255	260
ENERGY 160	1.300	900	2.120	-	100	250	450	457
ENERGY 220	1.500	1.000	2.120	-	100	250	535	542
ENERGY 320	1.700	1.200	2.350	-	100	300	750	760
ENERGY 460	2.090	1.270	1.000	1.870	100	330	1.180	1.190
ENERGY 640	2.500	1.500	1.000	2.120	100	370	1.650	1.660
ENERGY 970	3.500	1.500	1.200	2.120	100	380	2.150	2.160

