

# EC

## EC RANGE: INDIRECT COMBUSTION MOBILE SPACE HEATERS

CLEAN HEAT  
WITH TOP PERFORMANCE



# EC RANGE

## THE SPACE HEATERS THAT PROVIDE CLEAN, IMMEDIATE AND ECONOMICAL HEAT FOR ALL USES

They feature a heat exchanger with a flue union to expel fumes and have a thermal efficiency of almost 90%. They are widely used in warehouses, horticulture and floriculture, livestock rearing and the building sector, for drying, thawing and heating. For use in closed environments the installation of a small flue connected to the outside ensures that fumes are removed. Indirect combustion space heaters of the EC range are versatile, reliable, easy to use and safe thanks to the safety devices that shut down the machine in the case of malfunctioning.

### MAXIMUM PERFORMANCE

The perfect combustion generated by an avant-garde burner that allows a optimum air-fuel mix together with the use of a combustion chamber that ensures that the fumes circulates four times (models EC 55 and EC 85), mean that the machine has a technical efficiency of almost 90%. Indeed, thanks to the increase of transit surface in the heat exchanger, the fumes are cooled more and therefore additional quantities of clean heat are produced.

### IMMEDIATE HEAT

Easy to transport anywhere it is needed, it can be started immediately providing hot air at maximum thermal power.

### RELIABILITY AND SAFETY

The design is based on long experience, the materials are carefully chosen and the production process is subject to the strictest control procedures. Maximum safety and minimum maintenance.

### EASY TO USE

All the models are light and compact and come complete with a handle, trolley and wheels as well as a simple and an easy-to-use control panel. The practical fuel filler cap means it is easy to fill the tank.

### TECHNICAL FEATURES

The combustion technology is based on the use of a heavy-duty burner composed of a fan, a high capacity oil filter, a fuel pump and a set of electrodes. This design ensures, even in the worse operating conditions:

- safe ignition even in dusty and damp premises without the risk of clogging air filters;
- regular supply of thermal power even when very low on fuel;
- pre-ventilation for cleaning the combustion chamber;
- can be connected to a thermostat, humidistat or timer.

### SAFETY THERMOSTAT

A safety thermostat on the combustion chamber extinguishes the flame automatically if the machine overheats.



### ELECTRODES - FUEL NOZZLES

The snap on deflector disk allows immediate access to the fuel nozzles and electrodes for quick and easy maintenance.



### COMBUSTION CHAMBER

The combustion chambers are manufactured using AISI 430 stainless steel with aluminised steel heat exchangers to guarantee a better heat exchange with the cooling air. In model EC 55 and EC 85, the new combustion chamber with four smoke revolutions allows increasing the heat exchange inside it, and so the combustion smokes cooling, obtaining in this way an output of almost 90%.



### FUEL CIRCUIT

The fuel feed lines are in hydrocarbon resistant rubber, with a reinforced textile (EC 22, EC 32) or metal (EC 55, EC 85) sheath, ensuring better resistance to cold climates and greater mechanical resistance to cutting surfaces or crushing. Furthermore these fuel lines can be safely fitted to the fuel pump, the fuel tank and the filter using high pressure crimp connectors or clamps.



### BURNER

The combustion head is professionally designed to ensure a perfect air-fuel mixture. The result is that all models offer almost total combustion, with a CO (carbon monoxide) level of 0 ppm (parts per million). The air can be regulated simply and intuitively using a practical and accurate graduated scale.



### CONVEYANCE FAN, FAN-PUMP MOTOR, DANFOSS FUEL PUMP

To enhance the dynamic performance of the fan a conveyance unit has been added to provide a ducted fan. Furthermore, this acts as a guard that ensures safety during maintenance.



### FUEL TANK CAP

The fuel tap has a heavy duty bayonet-type cap.



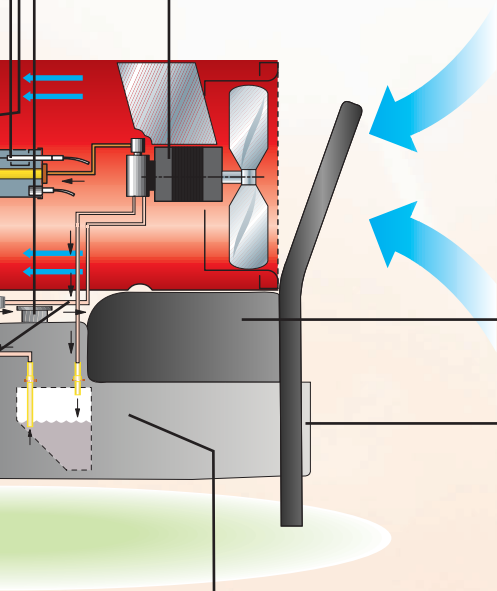
### POWER CORD BRACKET

A bracket on the body is provided for coiling the power cord during transport.



### FUEL TANK DRAIN PLUG

On all models there is a drain plug on the fuel tank that allows the fuel to be drained off.



### FUEL TANK

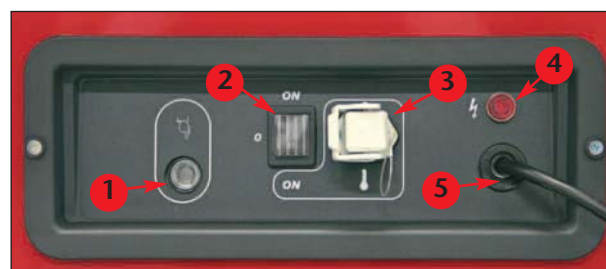
The innovative design gives the machine a strong and compact appearance. The tank for the EC 22 and EC 32 models comes in tough hydrocarbon-resistant polythene containing special additives for the use of the space heaters in particularly cold climates or in aggressive environments (livestock sheds). The more powerful EC 55 or EC 85 models have a strong steel tank, allowing a high storage capacity.



### ELECTRIC CONTROL PANEL

The electric panel, in tough flameproof plastic, is built onto the plastic fuel tank to ensure there is no infiltration of water, dust, etc ...).

On the models with a steel tank there is a plastic cover that prevents the infiltration of water, dust, etc.



### LEGEND

- 1 - Reset button with block (red), working (green) and stand-by (orange) indicator light
- 2 - Three way control switch:
  - position 0 for stop
  - position 1 for "continuous" on
  - position 2 for on with ambient



## ACCESSORIES

A complete range of accessories is available that allows the machine to be adapted to any need.

The installation of the accessories is simple and quick thanks to user-friendly solutions (comes ready with fittings for bayonets, etc.).

### ACCESSORIES FOR EC RANGE

- fuel gauge (figure 1)
- thermostat (figure 2)
- filler filter for fuel tank (figure 3)
- lifting brackets (EC 55 – EC 85) (figure 4)
- kit for connecting to external fuel tank (EC 55 – EC 85) (figure 5)
- pre-heating filter kit (EC 55 – EC 85) (figure 5)
- bi-composed flexible hose (figure 6 e 7)
- one-way hose connector (EC 55 – EC 85) (figure 6)
- two-way hose connector (EC 55 – EC 85) (figure 7)

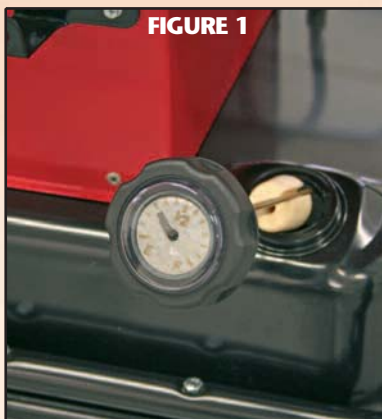


FIGURE 1

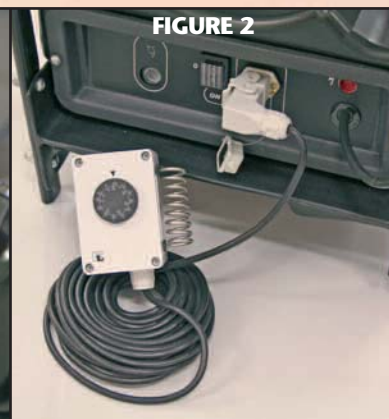


FIGURE 2



FIGURE 3



FIGURE 4

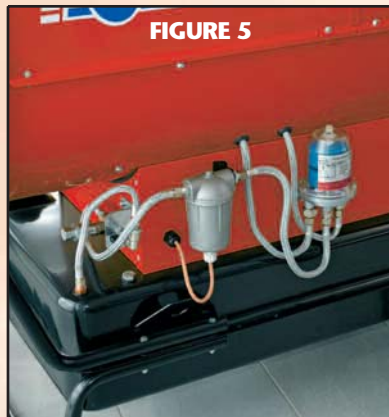


FIGURE 5

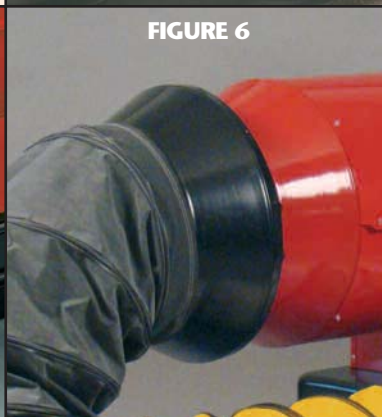


FIGURE 6



FIGURE 7



OIL

| MODEL | RATED HEATING POWER |              | EFFECTIVE HEATING POWER |              | THERMAL EFFICIENCY | AIR FLOW | TEMPERATURE RISE | CONSUMPTION | Ø FLUE | Ø OUTLET HOSE |                   | ELECTRICAL POWER | POWER ABSORP. | TANK CAPACITY | DIMENSIONS (LxWxH) | WEIGHT |
|-------|---------------------|--------------|-------------------------|--------------|--------------------|----------|------------------|-------------|--------|---------------|-------------------|------------------|---------------|---------------|--------------------|--------|
|       | kW-kcal/h Hi        | kW-BTU/h Hs  | kW-kcal/h Hi            | kW-BTU/h Hs  |                    |          |                  |             |        | %             | m <sup>3</sup> /h |                  |               |               |                    |        |
| EC 22 | 22-18,866           | 23.4-80,032  | 17.5-15,093             | 18.7-64,025  | 80                 | 550      | 95               | 1.85        | 120    | -             | -                 | 230, 1, 50       | 300           | 42            | 1,075x440x615      | 40     |
| EC 32 | 32-27,534           | 34.1-116,803 | 27.1-23,294             | 28.9-98,815  | 84.6               | 1,150    | 70               | 2.70        | 150    | 300           | -                 | 230, 1, 50       | 370           | 42            | 1,215x440x670      | 48     |
| EC 55 | 55-47,318           | 58.6-200,728 | 49.2-42,350             | 52.5-179,652 | 89.5               | 2,500    | 66               | 4.64        | 150    | 350           | 300               | 230, 1, 50       | 850           | 65            | 1,435x555x940      | 80     |
| EC 85 | 85-73,119           | 90.6-310,177 | 74.4-63,979             | 79.3-271,405 | 87.5               | 4,300    | 77               | 7.17        | 150    | 400           | 300               | 230, 1, 50       | 1,140         | 105           | 1,740x690x1,025    | 110    |