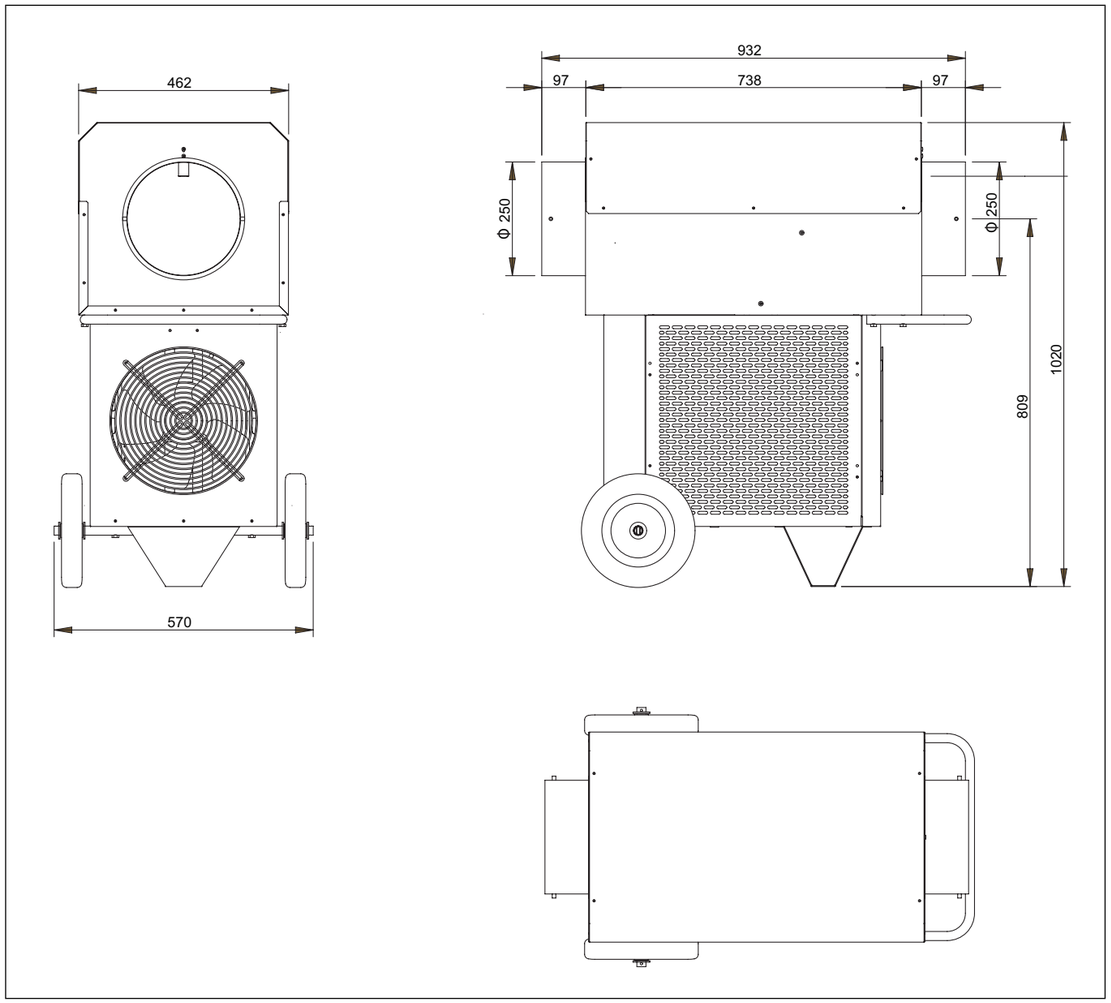
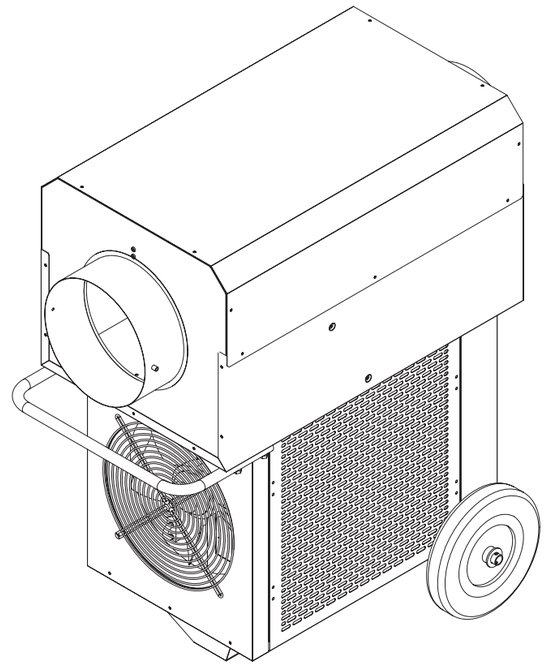
OVERALL DIMENSIONS



Ferroli	PORTABLE SELF-CONTAINED UNIT	Article no.: BTP00299 Revision: 00 Revision date: May 18, 2006



SERIES:
PORTABLE SELF-CONTAINED UNIT

DESCRIPTION OF THE UNIT

This portable self-contained air-cooling unit operates by means of a steam compression cycle. It employs refrigerant gas R407C. The unit is equipped with a condenser section with a louvered pack possessing an axial fan for moving the air, a rotary compressor, and a humidification section with a three-speed fan. It is also equipped with circular flanges for making the connection, by means of hoses, from the inlet and outlet sections to the room to be climate controlled. Any condensate that forms is conveyed to the condenser's louvered pack where it is evaporated, thereby increasing the unit's overall efficiency. Any excess condensate that is not evaporated is discharged at the base of the unit. The unit also possesses a handle and a pair of wheels of a size that is suitable for moving the unit in difficult environments

DESCRIPTION OF THE COMPONENTS

Load-bearing structure
The load-bearing structure is constructed of galvanized sheet metal with a thickness from 15/10 for the base to 8/10 for the closing panels.

Compressor
The hermetic rotary compressor is equipped with overheating amperometric protection against overloads. It is installed on rubber supports to prevent problems resulting from vibrations. The compressor is specifically designed to use refrigerant gas R 407C which does not harm the ozone.

Condenser section fan unit
This is an axial fan whose motor is directly coupled to it. The motor is an asynchronous single-phase motor with a run capacitor and is equipped with overheating protection. The fan blades are made of a polymer material. The fan unit is mounted on a support bracket. A metal grill prevents access to the fan while it is in motion.

Humidification section fan unit
The fan unit consists of a centrifugal fan with shaft-hub coupling to the motor. The motor is an asynchronous single-phase motor with a run capacitor and with two speeds. The motor is equipped with internal overheating protection. The fan is made of a polymer material. The motor is supported by a galvanized sheet metal bracket; there is a metal mesh between them to prevent accidental access to the fan.

Refrigeration circuit
The circuit is built with copper tubing whose seals and connections have been tested. The circuit also possesses pressure valves and valves for recharging the circuit.

Expansion system
The gas is expanded by means of a copper capillary tube with calibrated cross-section and length.

Heat exchange coils
The heat exchange coil is constructed of copper tubing and a continuous louvered aluminum pack. The louvers are directly locked by means of the mechanical expansion of the copper tubing to achieve a high level of heat transmission.

Insulation
The portion of the unit affected by the inlet air flow and the treated air is insulated with very thick thermal insulation so as to limit external heat loss and the formation of condensate on the unit's exterior.

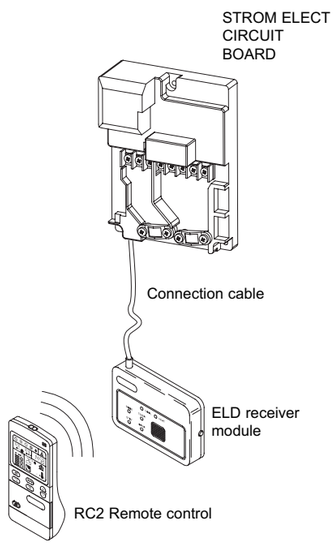
Condensate discharge
Any condensate that forms is collected in a tray which discharges it at set times onto the condenser's louvered pack where it is evaporated, thereby increasing the unit's overall efficiency. Any excess condensate that is not evaporated is discharged at the base of the unit.

Wheels
The wheels' diameter and thickness are suitable for moving the unit. The wheels' hubs and disks are made of a polymer material, and the rotating part is made of rubber.

Handle
The unit is equipped with a handle made of steel tubing installed in the optimal position for moving the unit.

USER INTERFACE

The user interface can employ an infrared remote control and a receiver or a wall-mounted control panel. The figure to the right shows the version with an infrared remote control. This control possesses a battery-powered liquid crystal display which must be placed in the room to be monitored or at the very least in a protected area, because it has a limited protection rating with regard to water

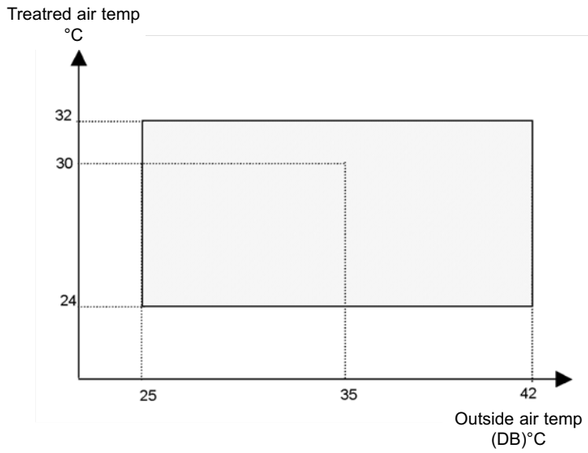


TECHNICAL DATA

MODEL			UM
Cooling capacity*		3500	W
Total power consumption *		1440	W
Refrigerant		R407C	Type
Refrigerant charge		970	gr
Power supply		230-1-50	V-Ph-Hz
Internal fan air flow rate**	max	750	m³/h
	min	650	m³/h
Internal fan power consumption	max	105	W
External fan air flow rate		1300	m³/h
External fan power consumption	max	75	W
Maximum external dimensions	H	1020	mm
	L	930	mm
	W	462	mm
Unit weight		55	kg

NOTES:
* Operating conditions: Outside air temperature 35°C.
Internal air temperature or inlet air temperature 30°C, relative humidity 60%.
Internal air fan at max. speed.
** Air flow rate with 6 m of circular ducts with a diameter of 250 mm at the inlet and 6 m of perforated circular ducts with a diameter of 250 mm at the outlet.

OPERATING LIMITS



EXAMPLE OF INSTALLATION