



# ROOFTOP AIR CONDITIONER

# FHRT51

The **FHRT51** Air Conditioner is a transportable unit, developed primarily to provide air conditioning in temporary or transportable buildings or tents. It is a **compact** unit built into a rigid steel frame. The unit is designed to be placed outside, with supply air and return air ducted to the building or tent.

This single fan air conditioner with large volume air movement of **10.000** m<sup>3</sup>/hr is ideally suited to cool large office areas, data centres and workspaces. **FHRT51** (51 kW) unit has been designed for a fast rental installation and start up. **FHRT51** is a freestanding unit and can cool **as well as heating** specific areas by utilising **proportional** speed fan outlet at front of the unit. Installation literally takes minutes. The unit has an automatic thermostat, which regulates the local air temperature to the set level required and is capable of operating down to a temperature of -7°C.

## FEATURES

### FRAME

Structure with **sandwich** panels made of sturdy galvanized steel, painted with epoxy powder ensuring high resistance to atmospheric agents and aggressive environments. The panels are removable to allow a quick inspection and maintenance of the internal parts.

### COMPRESSOR

Scroll compress mounted on vibration dampers. Provided with resistance on the housing and thermal safet

### REFRIGERANT CIRCUIT

**Evaporator and condenser:** the coil is made of copper pipes and aluminium fins. Drying filter, Shrader valves, minimum and maximum pressure switch. Defrosting thermostat and solenoid valve in version S.

### FAN

**Treatment air:** Centrifugal double suction fan, built with sturdy blades in galvanized sheet, statically and dynamically balanced. (10.000 m<sup>3</sup>/h;  
**External fan motor:** Axial fan motor.

### TESTING

Tests are performed to check the tightness of the refrigeration circuit. Electrical discharge tests and functional tests are performed as well.



### HOT GAS DEFROST

Enables to use the rooftop in environments with temperature up to -7°C. It is a special **three way inversion** injection system to accelerate the defrosting of the ice formed in the evaporator.

### AIR FILTER

The air filter, supplied as standard with the unit, is washable and easily replaceable. It is in Polyurethane and High-efficiency filter.

### MICROPROCESSOR

**Carel** Controls the defrosting cycles, the compressor timer, temperature and the alarm card. The dehumidifier is equipped with step sequence control.

### CONTROL PANEL AND ELECTRICAL CONTROL PANEL

Located inside the machine. IP protection degree. Made in compliance with the European standards 73/23 and 89/336.

### TECHNICAL STANDARDS

This dehumidifier meets the essential requirements included in the Directives of the European Community 2006/95/EC of 12 December 2006 on the safety of electrical products for use in Low Voltage; 2004/108/EC of 15 December 2004 in the field of electromagnetic compatibility; 2006/42/EC of 17 May 2006 in the fields of machinery safety.

The conformity is declared with reference to the following harmonized technical standards:

CEI-EN 60335-2-40, CEI-EN 55014-1, CEI-EN 55014-2.

We also declare that the product is manufactured in compliance with the RoHS Directive in force, that is 2002/95/EC, transposed with the Legislative Decree of 25 July 2005 no. 151 (article 5).

Compressors (scroll)	N°	2
Min. ambient air temperature	°C	-7
Max ambient air temperature	°C	42

Air flow (frequency control)	m <sup>3</sup> /h	10.000 max
Radial Fan ESP	n°	1
	Pa	80-400
Nominal power	kW	2.2
Nominal current	A	3.4

Cooling capacity ambient air 35°C : - inlet air 27°C 50% U.R.	kW	51
Heating capacity ambient air 7°C-86% : - inlet air 20°C	kW	48
Heating capacity ambient air 0°C-90% - inlet air 18°C	kW	43

El. Connections	terminals	4x10 mm <sup>2</sup>
Max abs. Power	kW	19.8
Max abs. current	A	50
MRA Starting current LRA El.	A	115
Supply Air connections	V/Ph/Hz	400/3+N/50
	Ø	500x2

Sound pressure level @ 5 m	dB(A)	52
Operating weight	kg	900
Transport weight	kg	950
Length	mm	2.040
Width	mm	1.950
Height	mm	1.900



APPLICATIONS

IRONING ROOMS

OFFICES

STORAGE

SERVER ROOM

RENTAL

HOTELS

INDUSTRY