



# 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 tend.

This single fan air conditioner with large volume air movement of 10.000 m³/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^3/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.

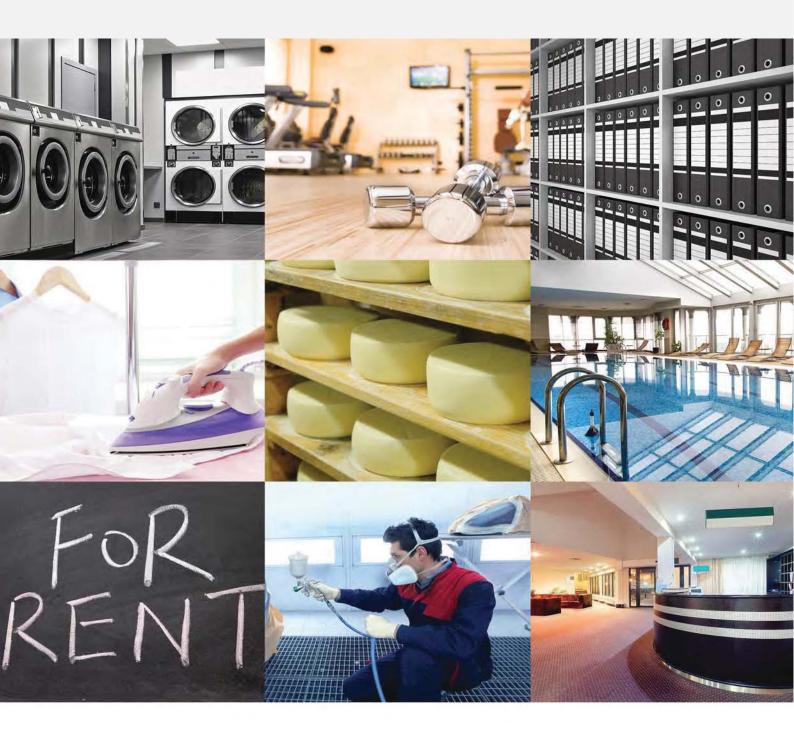
The conformity is declared with reference to the following harmonized technical standards:

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).

# FHRT51

Compressors (scroll) Min. ambient air temperature Max ambient air temperature	N° °C °C	2 -7 42
Air flow (frequency control) Radial Fan ESP  Nominal power Nominal current	m3/h n° Pa kW A	10.000 max 1 80-400 2.2 3.4
Cooling capacity ambient air 35°C : - inlet air 27°C 50% U.R.  Heating capacity ambient air 7°C-86% : - inlet air 20°C	kW	51 48
Heating capacity ambient air 0°C-90% - inlet air 18°C	kW	43
El. Connections Max abs. Power Max abs. current MRA Starting current LRA El. Supply Air connections	terminals kW A A V/Ph/Hz	4x10 mm <sup>2</sup> 19.8 50 115 400/3+N/50 500x2
Sound pressure level @ 5 m Operating weight Transport weight Length Width Height	dB(A) kg kg mm mm mm	52 900 950 2.040 1.950 1.900



**APPLICATIONS** 

**IRONING ROOMS** 

**OFFICES** 

STORAGE

SERVER ROOM

RENTAL

HOTELS

**INDUSTRY**