

URHE CF

High efficiency heat recovery unit with refrigerant circuit without an external unit. Air flow from 588 to 1942 cfm

R410A



The units from the URHE_CF series represent the high efficiency solution to satisfy the temperature and humidity comfort and ventilation requirements in air conditioning systems that serve public spaces and the commercial sector, such as offices, bars, restaurants, etc. The URHE_CF units are particularly efficient machines in that they use a high efficiency cross flow plate heat exchanger of high capacity combined with a heat pump refrigerant circuit operating with refrigerant R410A. The use of a high capacity cross flow heat recovery unit permits a significant reduction in the operating time of the refrigerant circuit throughout the year, thereby reducing to the minimum the electrical energy consumption. The small unit dimensions allow an easy installation even in false ceilings, allowing excellent accessibility for the maintenance of all the internal components. The numerous accessories available on request, for example the high efficiency compact filters, the hot water coil or the silencers, complete the functions of the machine which is usually combined to an air conditioning system.

Characteristics

VERSIONS

- 4 sizes available in horizontal configuration for ground or ceiling void installation.
- Unit complete with temperature controller and ready for installation.

STRUCTURE AND PANELS:

- Structure in aluminium profiles with glass fibre reinforced nylon corner pieces.
- Sandwich panel 1 in thick with galvanised steel for the internal surface, preprepared for the external surface with injected polyurethane insulation (density 2.62 lb/ft³).

HEAT RECOVERY:

- Cross flow plate heat exchanger in aluminium optimised to ensure high outputs.

PLEATED FILTERS:

- Class G4, 80% gravimetric efficiency according to EN 779, thickness 1.9 in located before the heat recovery both in the supply and return air flow.

CENTRIFUGAL FANS:

- High pressure forward curved impeller directly coupled to the motor. The air flow is main-

tained constant by the use of an electronic controller..

REFRIGERANT CIRCUIT:

- Heat pump with refrigerant R410A, complete with high efficiency low noise rotary or scroll compressors (depending on size), 4 way refrigerant cycle reversing valve, evaporator coil, condenser coil, liquid receiver, thermostatic expansion valve, liquid sight glass, filter drier, high pressure pressostat, low pressure pressostat, safety valve, bypass valve (for the smaller sizes).

ELECTRICAL PANEL:

- The unit is provided with an electrical panel complete with power and control section (including the control for the 3 way valve for the supplementary hot water coil and associated actuators), ensuring the control of all the refrigerant circuit functions. Included are: NTC return air temperature sensor, external air temperature sensor, dampers and actuators in the free-cooling version, pressure switch in the supply air filter. Supplied loose is a remote mounted control terminal for automatic control of the unit.

ENVIRONMENTALLY FRIENDLY:

- Through the applied technology and the use of ozone friendly refrigerant R410A, the URHE_CF series is environmentally friendly. R410A is a refrigerant with high thermodynamic efficiency and this allows, together with the use of scroll compressors, to reduce CO₂ emissions.

Accessories

- **MBCH** hot water coil module
- **MBCX** electric heater module
- **FCT** high efficiency compact filters F7
- **BIT** base for floor mounting
- **BIM** base for floor mounting for additional modules
- **TPE** roof for external installation
- **TPM** roof for external installation of additional modules
- **FCH** free-cooling kit
- **RS485** board RS485
- **MSS** n° 1 silencer splitter module
- **TPMSS** roof for silencer splitter module
- **FGE** circular flanges

URHE_CF	10	15	25	33
MBCH	MBCH1	MBCH1	MBCH1	MBCH2
MBCX	MBCX1	MBCX2	MBCX3	MBCX4
FCT	FCT1	FCT1	FCT2	FCT3
BIT	BIT1	BIT1	BIT2	BIT3
BIM	BIM1	BIM1	BIM1	BIM1
TPE	TPE1	TPE1	TPE2	TPE3
TPM	TPM1	TPM1	TPM1	TPM2
FCH	FCH1	FCH1	FCH2	FCH2
RS485	RS485	RS485	RS485	RS485
MSS	MSS1	MSS1	MSS2	MSS2
TPMSS	TPMSS1	TPMSS1	TPMSS1	TPMSS2
FGE	FGE1	FGE1	FGE1	FGE1

