



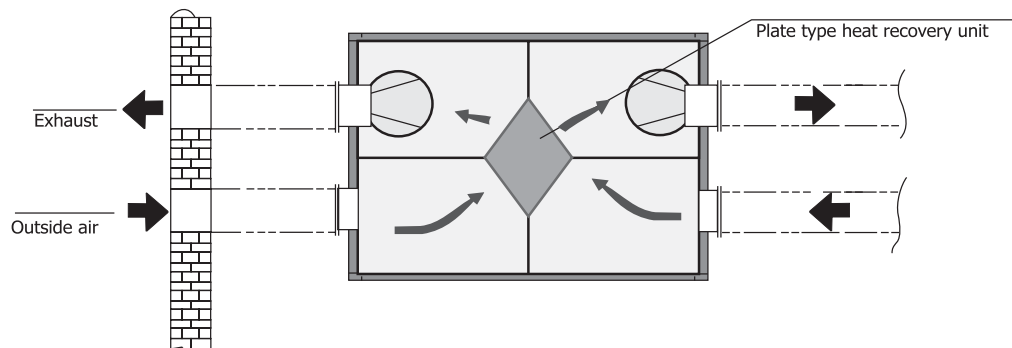
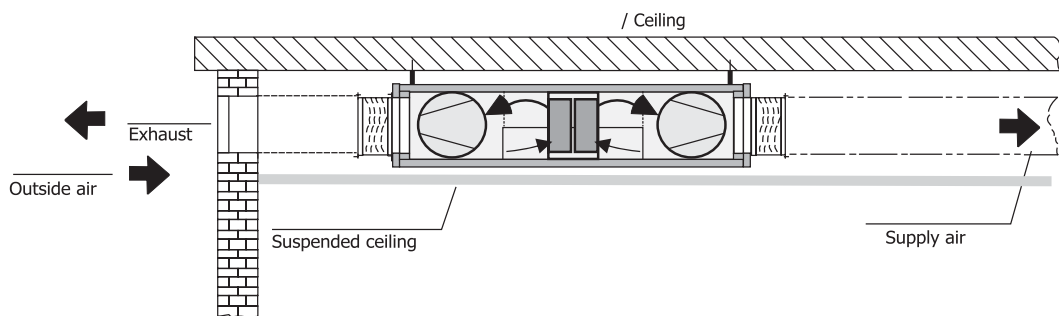
The "IHRA" model heat recovery units have single skin construction 6mm NFAF insulation on inner surfaces. Their very low profiles enables them to be used without any sacrifice from the accommodable premises. They can be mounted within suspended ceilings, raised floors or within sandwich walls.

In the "IHRA" model units the basic principle is to heat the fresh air from outside with the heat of the exhausted indoor air. Therefore they enable the ventilation of closed places without any need for a heat source. They are very suitable for use at the disquotechs, night clubs, restaurants, bars, cafes etc with this speciality they have.

The "IHRA" model units are mounted within the suspended ceilings with the help of standard hanger profiles and tie-rods. Therefore they don't need any constructive metal or concrete foundations.

An additional speciality of the "IHRA" model units is to overcome the incapability of the singular and/or multiple split air conditioners of supplying fresh air to the premises they are conditioning. Thanks to this speciality they can be used together with split A/C units or with variable refrigerant flow A/C units.

The "IHRA" series units cover a wide range of application with their nine different models with air flow ranging from 250 m³/h to 5000 m³/h.



Casing

The "IHRA" series heat recovery units are composed of four symmetrical modules constructed at CNC machines. The inner surfaces are insulated with NFAF 6 mm thick. There are Access panels on side walls to service the filters. Upon demand electronic control modules controlling the fan and electric heater capacities may be assembled.



Supply & Exhaust Fans

Radial fans with forward curved blades and direct coupled electric motor are used as supply and exhaust fans. Both supply and exhaust fans are identical and they have the same technical characteristics. The fans are tested and certified at the producer firm's laboratories in accordance with the AMCA Standard Nr. 1210/85. Since the electric motors are direct coupled to the fans they are free from the problems of tightening or changing the V-belts.

Heat Recovery Unit

Plate type heat exchangers are being used in the "IHRA" model recovery units. These units with aluminium plates and working with the cross flow principle attain efficiencies ranging from 40% to 70%. In the following graphs the heat recovery efficiencies of each unit is given.

In the units, a condensate pan is placed at the exit side of the exhaust air as standard equipment.

In case heat recovery efficiencies in excess of the values given in the graphs you are kindly requested to consult the factory.

Filters

Eu2 class panel type regenerative filters are used in the "IHRU" model heat recovery units. The filters are located at the fresh air entry side. The filters are mounted on rails and can be removed for cleaning or changing by the removal of the side access panel.

Another accessory that may be supplied together with the "IHRA" series heat recovery units is the wall mounted control module with cable or the cableless IR type remote controller. With the use of these units both of the fans may be controlled in three steps as high, medium or low. Likewise the electric heater is also controlled at three steps.



Inner control unit



Outer control unit



Capacity Charts

Capacity			
Type	Fan Type	V (m ³ /h) ⁽¹⁾	DP(Pa) ⁽²⁾
IHRA-01	Plug Fan	200-500	150
IHRA-02	Plug Fan	500-1000	320
IHRA-03	Plug Fan	1000-2000	250
IHRA-04	Radyal Fan	2000-3000	330
IHRA-05	Radyal Fan	3000-4000	340