

Heat recovery unit

UTNR-T FRESH

Air flow rate 400-3.300 m³/h

Features



High efficiency heat recovery

Low-noise Brushless EC fans

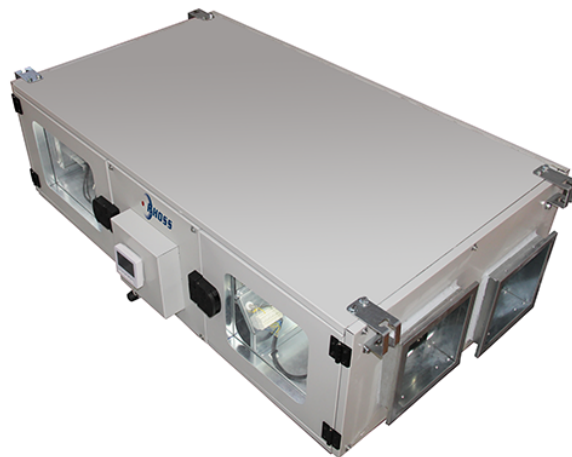
F7 and M5 high efficiency filters

Sandwich panels – thickness 40 mm

Mineral wool insulation class A1 fire reaction

Compact size

Competitive solution



Tax incentives*

Fresh air units with counterflow static heat recovery. Class A1 mineral wool insulation.

Construction features

- Recovery unit: very high efficiency static heat recovery, with aluminum plates with counter-current flows.
- Fans: supply and exhaust fans with highly efficient EC Brushless electric motors with 6 speeds.
- Structure: insulating sandwich panels 40mm thick. Coated externally in corrosion-resistant pre-painted galvanised steel and internally in galvanised steel. Insulation in mineral wool with high thermal and acoustic properties. Fire reaction class A1.
- Air tightness: EPDM gaskets on the panels and balloon gaskets on the inspection doors to ensure full air tightness.
- Stainless steel condensate drain pan, fully integrated in the panel. Side connection drain.
- Filters: compact cell filters with low pressure drop polypropylene media, removable from the side, with ISO ePM10 50%(M5) + ISO ePM1 50% (F7) class efficiency on supply side and ISO ePM10 50% (M5) on exhaust side.
- Factory-installed dirty filter differential pressure switches.
- Integrated defrosting / free-cooling by-pass system.

Thanks to the presence of a motorised damper on the heat recovery side, a bypass system can be created to manage freecooling or defrosting depending on thermo-hygrometric requests.

- Integrated control system with electrical box, regulator and user panel that can be remote-controlled up to 100m. No additional power and protection components required.

Separately supplied accessories

- KBEP – Single stage electric heater with antifreeze/pre-heating function, complete with safety thermostat.
- KBER – 3-stage post-heating electric heater, complete with safety thermostat.
- KBA – 2 rows hot water post-heating coil.
- KC5H1 – 5-rows water cooling coil and 1-row water post-heating coil.
- KSRE – Damper with ON/OFF servo control.

Controls

- Mode selection (Auto Heat, Auto Cool, Man. Heat, Man. Cool, Fan Mode).
- Room temperature measurement thanks to the probe integrated in the user panel.
- Fans speed control with 0-10V signal at 6 speed steps.
- Heat recovery bypass management in antifreeze/freecooling/freeheating mode.
- Weekly and daily programming.
- Modbus RTU serial interface via RS485 connection.
- Dirty filter monitoring.
- Automatic restart after power failure.
- Automatic fans speed control based on air quality probe (optional).
- Automatic electrical coil management by steps (optional).
- Management of heating/cooling/summer dehumidification functions (optional).
- Management of ON/OFF or modulating water coils valves (optional).
- Management of ON/OFF dampers (optional).

Technical data

MODEL UTNR-T FRESH		40	60	80	100	150	205	260	330
Supply filters		M5 + F7	M5 + F7	M5 + F7	M5 + F7	M5 + F7	M5 + F7	M5 + F7	M5 + F7
Return filters		M5	M5	M5	M5	M5	M5	M5	M5
TECHNICAL SPECIFICATIONS									
Nominal air flow rate	m³/h	400	600	800	1000	1500	2050	2600	3300
STANDARD FANS									
Motor type		EC	EC	EC	EC	EC	EC	EC	EC
❶ Supply available static pressure	Pa	75	75	100	100	100	125	125	150
❷ Specific fan power (SFP)	W/(m³/s)	570	611,2	578,6	576,1	844,8	586,2	589,8	628,5
❸ Sound pressure level	dB(A)	35	43	35	41	52	46	51	53
Speed No./Control Type		6 / 0-10V	6 / 0-10V	6 / 0-10V	6 / 0-10V	6 / 0-10V	6 / 0-10V	6 / 0-10V	6 / 0-10V
Power supply	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
COUNTERFLOW HEAT RECOVERY									
❹ Winter Efficiency	%	88,5	88,5	87,4	87,6	88,6	88,7	89,2	88,6
❺ Summer Efficiency	%	82,8	82,8	80,9	81,3	83,4	83,6	84,2	83,5
❻ Efficiency EcoDesign CE 1253/2014	%	82,9	82,9	81	81,4	83,5	83,7	84,3	83,6
OPERATING LIMITS									
Outdoor air inlet temperature limit	°C	-24<T<46	-24<T<46	-24<T<46	-24<T<46	-24<T<46	-24<T<46	-24<T<46	-24<T<46
DIMENSIONS AND WEIGHTS									
Length	mm	721	845	915	965	1015	1290	1720	1780
Height	mm	397	397	479	479	618	618	618	759
Depth	mm	1346	1346	1638	1638	1937	1937	1937	2219
❼ Weight	kg	92,3	104,2	137,3	144,5	193,9	233,1	291	368,3
Connections drain pan	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

Data at the following conditions:

- ❶ Values refer to the nominal air flow rate considering the pressure drops of the unit without accessories.
- ❷ Data according to CE 1253/2014 at nominal air flow rate and available static pressure without accessories.
- ❸ Sound pressure level at 1 m distance in open field.
- ❹ Winter conditions: outdoor air -5°C, 80% RH and room air 22°C, 50% RH.
- ❺ Summer conditions: outdoor air 35°C, 40% RH and room air 24°C, 50% RH.
- ❻ Values refer to CE 1253/2014 at balanced air flow rates.
- ❼ Unit weight without accessories.



RHOSS S.P.A.
Via Oltre Ferrovia, 32
33033 Codroipo (UD) - ITALY
tel. [+39 0432 911611](tel:+390432911611)
rhoss@rhoss.com

rhoss.com

RHOSS S.P.A. non si assume alcuna responsabilità per eventuali errori del presente stampato e si ritiene libera di variare senza preavviso le caratteristiche dei propri prodotti.