

TRS Heat recovery unit with enthalpic heat exchanger



TRSCPR

TRSCP

These units allow the extraction of a fixed amount of air from the room to be replaced with fresh air. Static type heat recovery unit with high efficiency in counter-flow, consisting of flat sheets of special paper. This particular material allows a "total" type heat exchange as both sensible heat and the latent heat (moisture) are recovered with average efficiency of 75% on the temperature (depending on the models) and 60% on the enthalpy, with high performance even in summer. The air flows are kept separated by a suitable sealing.

Features

- Available in 6 sizes for horizontal installation
- High efficiency superior to that obtained from the units with only the recovery of sensible heat
- Free-cooling during spring and autumn thanks to automatic by-pass function
- Double suction centrifugal fans, directly coupled to high-efficiency "Brushless DC" electric motors, equipped with adjustable speed using an electronic regulator to vary the flow rate
- Control of the units between the control panel with LCD display (TRSCP accessory) or Kit with wired control panel with LCD display and remote control (TRSCPR accessory)
- Enthalpic heat recovery unit with hexagonal shape to increase the exchange surface
- Enthalpic heat recovery unit can be easily removed laterally for cleaning or replacement
- Self-supporting galvanized steel metal panels with insulation.
- Compact size for installation in suspended ceilings
- Inlet air filter, both on the external air inlet side and on the fresh air from the room side
- Synthetic filter on the internal air inlet with class G4
- Filters laterally removable for cleaning or replacement
- Quiet operation
- The installation does not require the condensate discharge system

Accessories

It is mandatory to use one of the two accessories as they are essential to the operation of the units:

- **TRSCP:** Wired control panel with LCD display for controlling the On-Off functions, speed selection, weekly programmable timer, automatic Free-Cooling function. IR receiver for operation coupled to the IR remote control accessory. Recessed wall mounting in "module 502" electrical boxes.
- **TRSCPR:** Remote control and wired control panel with LCD display for control of the On-Off functions, speed selection, weekly programmable timer, automatic Free-Cooling function. IR receiver for operation coupled to the IR remote control accessory. Recessed wall mounting in "module 502" electrical boxes.

Compatibility of accessories						
	TRS15	TRS25	TRS35	TRS50	TRS80	TRS100
TRSCP	✓	✓	✓	✓	✓	✓
TRSCPR	✓	✓	✓	✓	✓	✓

Technical data

HEAT RECOVERY UNIT			TRS15	TRS25	TRS35	TRS50	TRS80	TRS100
Winter operation								
Efficiency	Temperature	%	77	76	77	76.5	73	73.5
	Enthalpy	%	62	62	63	62.3	59	59.5
	Power recovered at full speed	kW	1.3	2.2	3.1	4.3	6.5	8.2
Summer operation								
Efficiency	Temperature	%	63	62	63	62.5	59	59.5
	Enthalpy	%	60	60	61	60	57	57.5
	Power recovered at full speed	kW	0.5	0.8	1.2	1.7	2.5	3.2
Nominal air flow rate	Maximum	m ³ /h	150	250	350	500	800	1000
	Average	m ³ /h	150	250	350	500	800	780
	Minimum	m ³ /h	100	160	270	360	625	650
Useful static pressure (*)	Maximum	Pa	85	85	90	100	150	150
	Average	Pa	70	65	60	60	100	100
	Minimum	Pa	50	30	30	30	40	40
Input power	Maximum	W	80	90	120	135	300	310
	Average	W	55	60	80	110	190	200
	Minimum	W	30	35	45	60	110	125
Sound pressure level	Maximum	dB(A)	26	27	31	33	38	39
	Average	dB(A)	24	26	29	31	36	37
	Minimum	dB(A)	22	22	25	27	32	33
Power supply		V/ph/Hz	230/1/50					

Performance values refer to the following conditions:

(*) Values referring to the nominal flow net of heat recovery unit and filter pressure drops

Sound pressure level (A-weighted) measured in free field at a distance of 1.5 metres from the inlet of the unit. The operation noise level generally differs from the values shown, depending on operating conditions, reflected noise and surrounding noise.

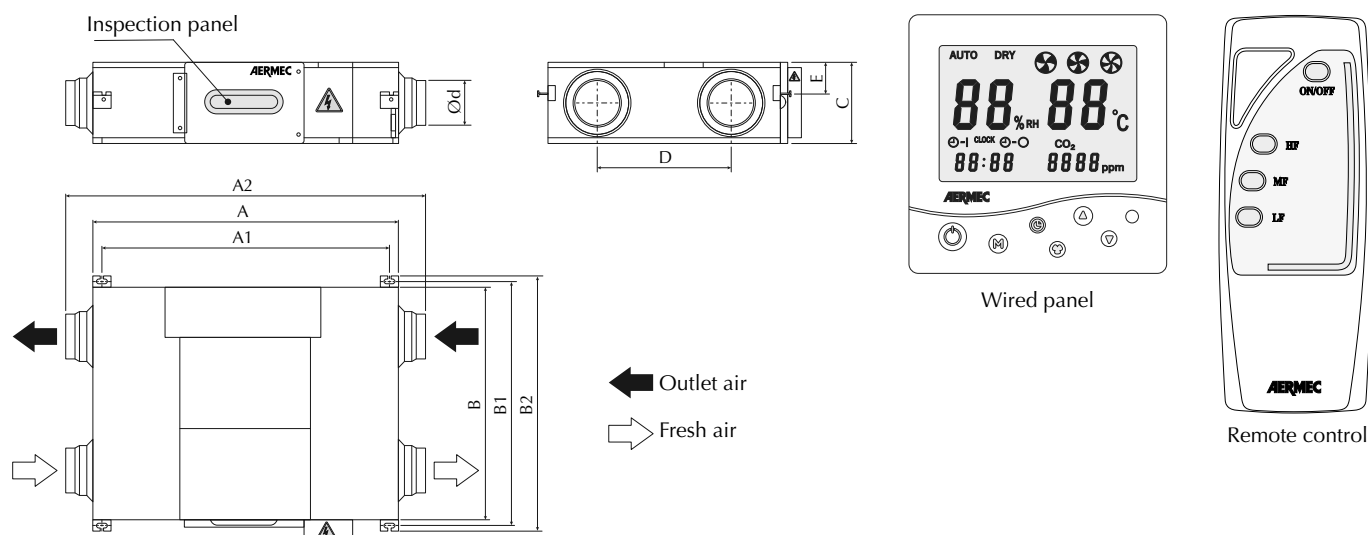
■ Nominal conditions in winter operation:

- external air: -5°C W.B.; R.H. 80%
- room air: 20°C W.B.; R.H. 50%

■ Nominal conditions in summer operation:

- external air: 32°C W.B.; R.H. 50%
- room air: 26°C W.B.; R.H. 50%

Dimensions (mm)



	A	A1	A2	B	B1	B2	C	D	E	Ød	Weight (kg)
TRS15	885	815	1074	666	720	779	272	342	110	100	27
TRS25	885	815	1074	666	720	779	272	342	110	150	27
TRS35	885	815	1074	806	860	919	272	482	110	150	32
TRS50	970	910	1130	997	1053	1112	312	728	38	200	42
TRS80	1322	1252	1486	882	936	994	390	431	169	250	63
TRS100	1322	1252	1486	1132	1186	1244	390	681	169	250	76

Aermec reserves the right to make all modification deemed necessary for improving the product at any time with any modification of technical data.

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