SPECTRE

Decentralized alterning-flow heat recovery unit

Product informations

SPECTRE, is a decentralized alternating flow heat rrecovery unit in **energy class A**, ideal for the controlled mechanical ventilation of individual rooms. It can be installed in flat and office renovations and in all situations where a ducted system cannot be installed for space reasons. (Watch the **video**)

Product features

- Simple and fast maintenance, the extraction of the fan unit does not affect the terminal board
- More efficient: 150 mm long ceramic heat exchanger for greater efficiency ***(up to 93%)***
- Silent: external grille designed to ensure better air flow and reduce noise from outside; engine positioned inside the wall beyond the exchanger
- Power on/off
- Speed 1 and 2
- ABS front cover
- Equipped with a tilting front to prevent unwanted air from entering when the product is switched off
- Standard tube length **500 mm**; available as accessory **700 mm** tube
- Minimum wall depth 250 mm for 160 and 200 mm for 100 - maximum depth 3 m (2.5 m if 90° bend is present)
- Ease of maintenance and cleaning
- Double dust filter washable and easily accessible for maintenance
- DC motor fan, brushless with control electronics, on ball bearings
- LED visual indicators for command reception and filter cleaning
- The last function set is memorized and restored automatically in the event of a power failure
- It does not require a condensate drain

TECNOGAS
I percorsi della tecnologia.
Via Marco Polo 33
35020 Albignasego
Padova – Italy
P.IVA: 03859580288
Tel: +39 049 8625910
Mail: info@tecnogas.net

Technical characteristics of the product

SPECTRE is equipped with a high efficiency ceramic heat exchanger with efficiencies of up to 93%. The motor fan is positioned after the exchanger, inside the wall, for this reason *SPECTER* is very silent (only 4 dB in the night function). The ABS front cover closes every time the device turns off to prevent unwanted air from entering. The degree of protection is IPX4. Finally, thanks to its low energy consumption, *SPECTRE* is considered a class A appliance.

Functioning

The product is equipped with a ceramic heat exchanger which accumulates heat during the extraction of air from the room, while during the phase of introducing air from outside, the appliance transfers heat to the incoming cold air stored in the exchanger. The operation of the recuperator is cyclical 70 seconds in extraction and 70 seconds in intake.

Accessories available for SPECTRE

The ***BASE 1.0*** version does not include the remote-control, as it is equipped with on-board controls (ON/OFF + 2 speeds).
The ***ACTIVE 2.0*** and ***3.0*** versions include a remote-control with display thanks to which it is also possible to adjust the humidity level, activate the night function and manage up to 16 units in a Master/Slave system with a simple dip switch configuration.
It is also possible to purchase the remote-control panel with display separately which includes the same functions as the remote-control and the version with CO_2 probe.

Modes and functions of the remote control with display

- *AUTOMATIC MODE:* the product runs in automatic mode as per factory settings
- *SURVEILLANCE MODE:* the unit remains in sleep mode but keeps the sensors activated; in case of parameters like humidity change, it will automatic start running
- *AIR FLOW DIRECTION:* this function is available if the products are at least two: it allows to only intake

TECNOGAS
I percorsi della tecnologia.
Via Marco Polo 33
35020 Albignasego
Padova – Italy
P.IVA: 03859580288
Tel: +39 049 8625910
Mail: info@tecnogas.net

or only extract air simultaneously for a desired time
- *MANUAL FUNCTION:* Running mode with heat recovery at the manually set speed (the sensors excluded)
- *SPEED:* 3 adjustable speed levels
- *HUMIDITY LIMIT SELECTION:* humidity sensor with 3 set levels: min 40%, medium 55%, max 70%
- *BOOST FUNCTION:* it allows the air extraction at the maximum speed for a certain time
- *FILTER:* after 3000 hours operations the unit requires ordinary maintenance. Pushing this button, after maintenance, the normal operation can be restored
- *NIGHT FUNCTION:* it allows to minimize the flow rate and noise during night

Optional filters

ISO COARSE filters, compared to the standard dust filter, allow more efficient filtration of particles larger than 10um in diameter (such as hair, hair, pollen, sand, dust in general). The filters are only available for 160 mm diameter and with different degrees of filtration:

- **ISO COARSE 30%:** reduces the nominal flow rate by about 5%.
- **ISO COARSE 45%:** reduces the nominal flow rate by about 15%.
- **ISO COARSE 60%:** reduces the nominal flow rate by about 25%.

Acoustic damper

The acoustic damper makes it possible to reduce noise from outside when the product is turned off and is only available for the **160 mm** diameter version.

Available versions

The ***SPECTRE BASE 1.0*** version's main technical features:

- On-board or remote wall-mounted controls (**not supplied**)
- Remote control (**not included**)
- Switching on/off
- Two adjustable speeds

TECNOGAS
I percorsi della tecnologia.
Via Marco Polo 33
35020 Albignasego
Padova – Italy
P.IVA: 03859580288
Tel: +39 049 8625910
Mail: info@tecnogas.net

The ***SPECTRE ACTIVE 2.0*** version's main technical features:

- Wire connection between the units
- Display remote control (accessory sold separately)
- Integrated humidity and twilight sensors which allow several automatic functioning modes (see remote control)
- Up to 16 units communicating in sequence in the same system in master/slave mode, through easy dip switches configuration
- 3 adjustable speeds (plus night version)

The ***SPECTRE WIRELESS 3.0*** version's main technical features:

- Remote connection between the units
- Display remote control (accessory sold separately)
- Integrated humidity and twilight sensors which allow several automatic functioning modes (see remote control)
- Up to 16 units communicating in sequence in the same system in master/slave mode, through easy dip switches configuration
- 3 adjustable speeds (plus night version)

Technical Features

TECHNICAL DATA									
SKU	MODEL	HOLE	VOLTAGE (V)	FREQUENCY (HZ)	FLOW RATE (M^3/H)	MAX FLOW RATE (PA)	POWER (W)	NOISINESS DB(A)$_{3M}$	WALLL DEPTH
14400	BASE 1.0	Ø 100 MM	220-240	50	30	72	6,9	37	MIN. 200 MM - MAX 3 M*
14401	ACTIVE 2.0	Ø 100 MM	220-240	50	30	72	6,9	37	MIN. 200 MM - MAX 3 M*
14402	WIRELESS 3.0	Ø 100 MM	220-240	50	30	72	6,9	37	MIN. 200 MM - MAX 3 M*
11420	BASE 1.0	Ø 160 MM	220-240	50	60	54	6,7	30	MIN. 250 MM - MAX 3 M*
14421	ACTIVE 2.0	Ø 160 MM	220-240	50	60	54	6,7	30	MIN. 250 MM - MAX 3 M*
14422	WIRELESS 3.0	Ø 160 MM	220-240	50	60	54	6,7	30	MIN. 250 MM - MAX 3 M*

2,5 m in case of 90° elbow

TECNOGAS
I percorsi della tecnologia.

Via Marco Polo 33
35020 Albignasego
Padova – Italy

P.IVA: 03859580288
Tel: +39 049 8625910
Mail: info@tecnogas.net

SPECTRE

PERFORMANCE DATA												
SKU	NIGHT SPEED			SPEED 1			SPEED 2			SPEED 3		
	FLOW RATE M^3/H	POWER W	NOISINESS $DB(A)_{3M}$	FLOW RATE M^3/H	POWER W	NOISINESS $DB(A)_{3M}$	FLOW RATE M^3/H	POWER W	NOISINESS $DB(A)_{3M}$	FLOW RATE M^3/H	POWER W	NOISINESS $DB(A)_{3M}$
14400	-	-	-	10	4.7	18	-	-	-	30	6.9	37
14401	5	4.0	13	10	4.7	18	20	5.6	28	30	6.9	37
14402	5	4.0	13	10	4.7	18	20	5.6	28	30	6.9	37
14420	-	-	-	20	4.2	9	-	-	-	60	6.7	30
14421	10	3.9	4	20	4.2	9	40	5.5	21	60	6.7	30
14422	10	3.9	4	20	4.2	9	40	5.5	21	60	6.7	30

DIMENSIONS							
A	B	C	D	E	F	G	H
250 MM	233 MM	40 MM	500 MM	Ø 100/160 MM	48 MM	212 MM	212MM

SKU	MODEL	PRICE
00000014400	SPECTRE BASE 1.0 - Ø 100 MM	€457.8 VAT EXCLUDED
00000014401	SPECTRE ACTIVE 2.0 - Ø 100 MM - MASTER	€562.8 VAT EXCLUDED
00000014403	SPECTRE ACTIVE 2.0 - Ø 100 MM - SLAVE	€520.8 VAT EXCLUDED
00000014402	SPECTRE WIRELESS 3.0 - Ø 100 MM - MASTER	€667.8 VAT EXCLUDED
00000014404	SPECTRE WIRELESS 3.0 - Ø 100 MM - SLAVE	€625.8 VAT EXCLUDED
00000014420	SPECTRE BASE 1.0 - Ø 160 MM	€478.8 VAT EXCLUDED
00000014421	SPECTRE ACTIVE 2.0 - Ø 160 MM - MASTER	€583.8 VAT EXCLUDED
00000014423	SPECTRE ACTIVE 2.0 - Ø 160 MM - SLAVE	€541.8 VAT EXCLUDED

TECNOGAS
I percorsi della tecnologia.
Via Marco Polo 33
35020 Albignasego
Padova – Italy
P.IVA: 03859580288
Tel: +39 049 8625910
Mail: info@tecnogas.net

SPECTRE

SKU	MODEL	PRICE
00000014422	SPECTRE WIRELESS 3.0 - Ø 160 MM - MASTER	€688.8 VAT EXCLUDED
00000014424	SPECTRE WIRELESS 3.0 - Ø 160 MM - SLAVE	€688.8 VAT EXCLUDED
00000014418	CONTROL PANEL FOR SPECTRE 3.0	€441.0 VAT EXCLUDED











