

# SO.ERRE

tecnologia dell'aria



**ENERGY RECOVERY FANS**



# BEGINNING, BENEFITS, MODELS

## Tempero

### Tempero: "Beginning"

*The product conception, as usual, was to satisfy the requirements of our clients.*

*These requests led to the development of a range of innovative products to enhance ambient comfort by "tempering" the incoming air to rooms while at the same time reducing energy consumption.*

*This new product line had to be of superior design, provide for easy installation, be economical, and above all, provide reliable performance and silent operation.*

*To merge the clients' needs and the technical requirements was not easy. It meant actually creating a new series of products, different from those currently on the market, which consolidated the need with superior technology.*

*We at O.ERRE are proud to introduce the "TEMPERO" energy recovery fan, a truly innovative product which is highly efficient, energy saving and very cost effective, complete with a stylish design, offering complete indoor comfort to the client.*

*Heartfelt thanks to all those Clients that give us feedback and stimulus.*

### Tempero: "Benefits"

#### Benefits to the customers

#### Guaranteed by

Indoor comfort



High temperature uniformity of the "tempered" room

Saving



High energy saving recovery system

Quick and easy installation



Minimum or no invasive procedures to the building structure

Adaptability



Adaptable to any 100/120 mm existing ducts

High efficiency



High efficiency flow rate and quiet running for better ventilation

Appeal



Innovative design with compact dimensions

Quick wall installation



Thanks to 3 screws only

Cost advantages



Cost effective with low energy consumption

### Tempero: "Models"

#### Tempero 100

*"Basic version" suitable for climates and temperatures between  $-5^{\circ}$  C and  $+35^{\circ}$  C.*

#### Tempero 100 T

*Same main features of the basic version with added Timer control.*

#### Tempero 100 PH

*Suitable for outdoor minimum temperatures of:  $-25^{\circ}$  C.*



ENERGY RECOVERY FANS

**Tempero**



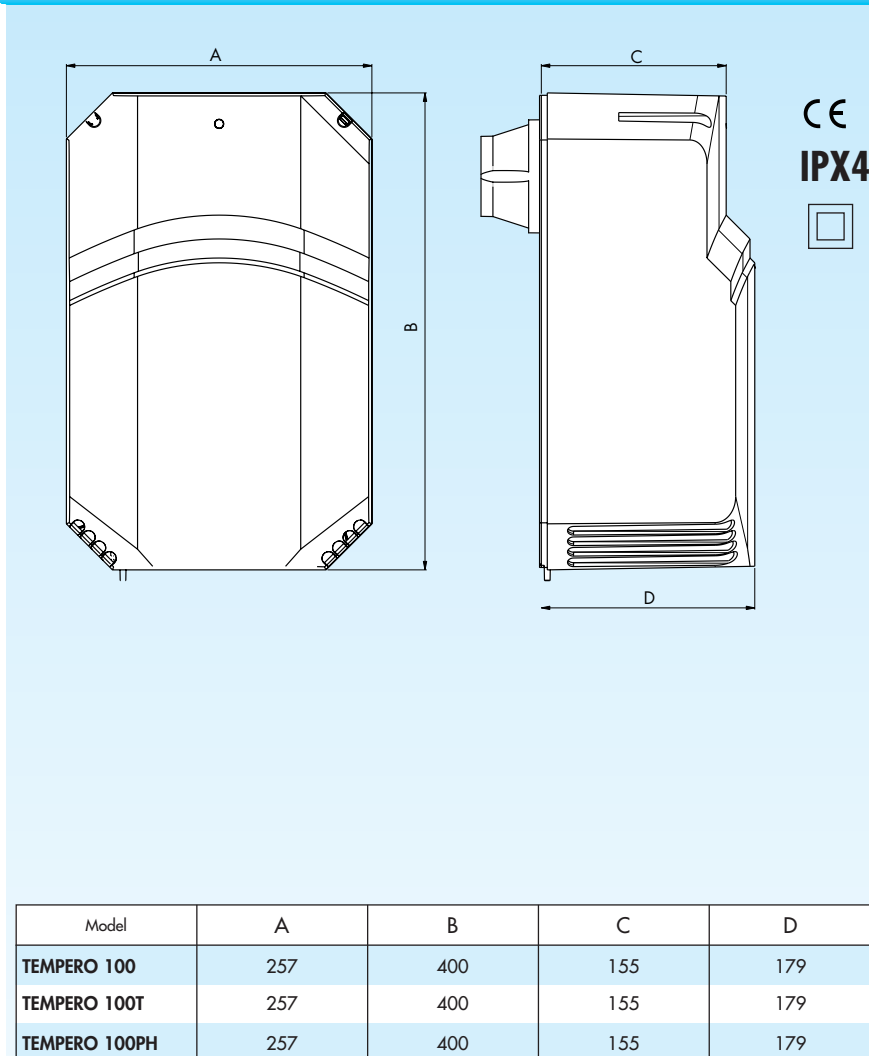


# ENERGY RECOVERY FANS

## Tempero

### Dimensions

- Fan provided with an energy recovery system
- Ideal for domestic applications
- Suitable for single room application
- Wall and/or panel application
- Body in white ABS with inner components in polypropylene
- Cross Flow Air Exchanger welded PVC plates
- Two centrifugal fans with sleeve bearings motors
- Filters in polyurethane to grant higher protection and longer function
- Every model equipped with "operating warning light"
- Pre-heating system (PH model only) consists of a 350 W coil with thermostat, fitted in a box of self extinguishing material.
- Single speed
- 3 models available: Basic, Timer and Pre-heater for cold climates
- In accordance with EN 60335-2-80
- High performance in terms of balance between energy recovery, consumption, flow rate and noise level



### Technical data

Model	Ref.	Flow rate "IN" m <sup>3</sup> /h	Flow rate "OUT" m <sup>3</sup> /h	dB(A) 3 m	Weight Kg	Hz	W	Effic (%)	Temp °C	Ø hole mm	Nom Volt
100	OW 684 3	60	70	34	3,3	50Hz	40	70	-5 +35	100/120	220/240
100T	OW 685 0	60	70	34	3,3	50Hz	40	70	-5 +35	100/120	220/240
100PH	OW 686 8	60	70	34	3,3	50Hz	400	70	-25 +35	100/120	220/240



# ENERGY RECOVERY FANS

## Tempero

*Tempero* is an extractor fan provided with an energy recovery system ideal for single room domestic applications.

It offers healthier and better indoor environment by moderating the temperature of the incoming air plus economic advantages due to energy saving.

The flow of extracted air transfers thermal energy to the fresh incoming air, first through the surface of the internal ducting pipe fitted into the existing duct and then through the “cross flow plates” heat recovery core located in the unit. During this process the incoming and outgoing air flows are completely separated.

During winter season, **Tempero** guarantees an efficient energy recovery of up to 70%.

During summer season, **Tempero** reduces substantially the energy required for air conditioning.

Suitable for wall applications, it can be easily fitted to 100 and 120 mm new or existing ducts, offering the opportunity to renovate, substituting old/non functioning axial fans without further invasive procedures to the building structure.

The heat recovery core of PVC cross flow plates is equipped with two easily removable filters for simple and regular cleaning.

**Tempero** has been conceived and designed to work as a usual air extractor fan with the advantage of added energy conservation.

In normal conditions **Tempero** will not produce enough condensation to require drainage.

It has been equipped with a dedicated condensation drainage hole thus eliminating the build up of excess condensation related to the certain environmental conditions (temperature, humidity ...) and/or continuous use.

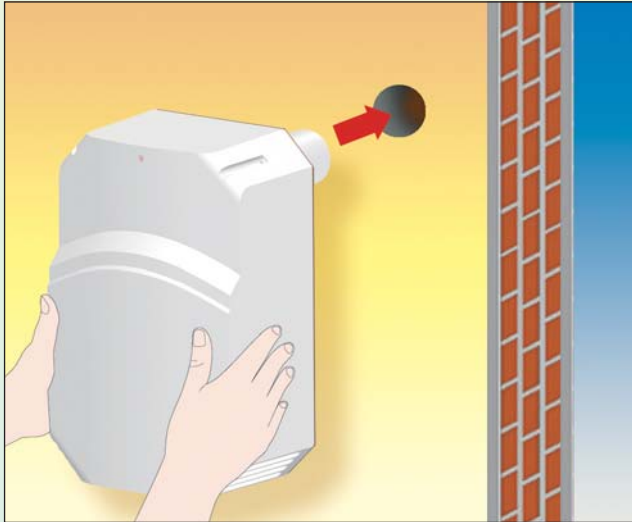
**Tempero** has been designed to work also in cold climates of  $-25^{\circ}\text{C}$ , thanks to a pre-heating coil available for the PH model only.

The **Tempero** PH model pre-heater, is a 350 W coil fitted in the ducting pipe. When the outside temperature falls below  $-5^{\circ}\text{C}$  a thermostat activates the coil thus heating incoming air to about  $15-20^{\circ}\text{C}$  avoiding ice build-up on the recovery module.



# ENERGY RECOVERY FANS

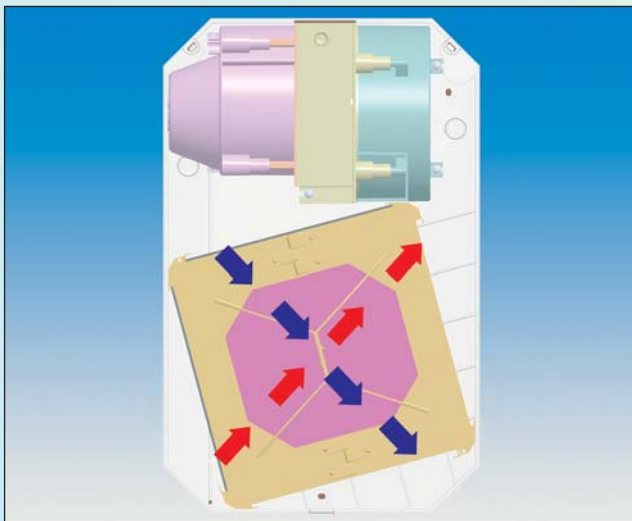
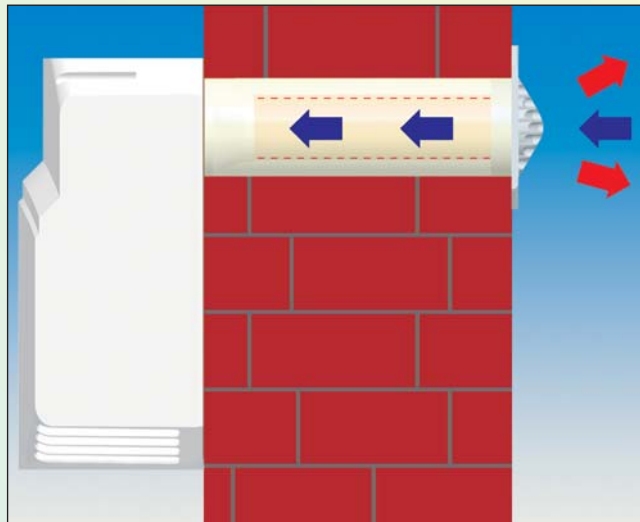
## Tempero



*Tempero can be easily installed on new or existing ducts (diameter 100/200 mm).*

*Possibility of renovating old/non functional fans thus granting a healthier and better indoor environment with minimal or no invasive procedure to the building structure.*

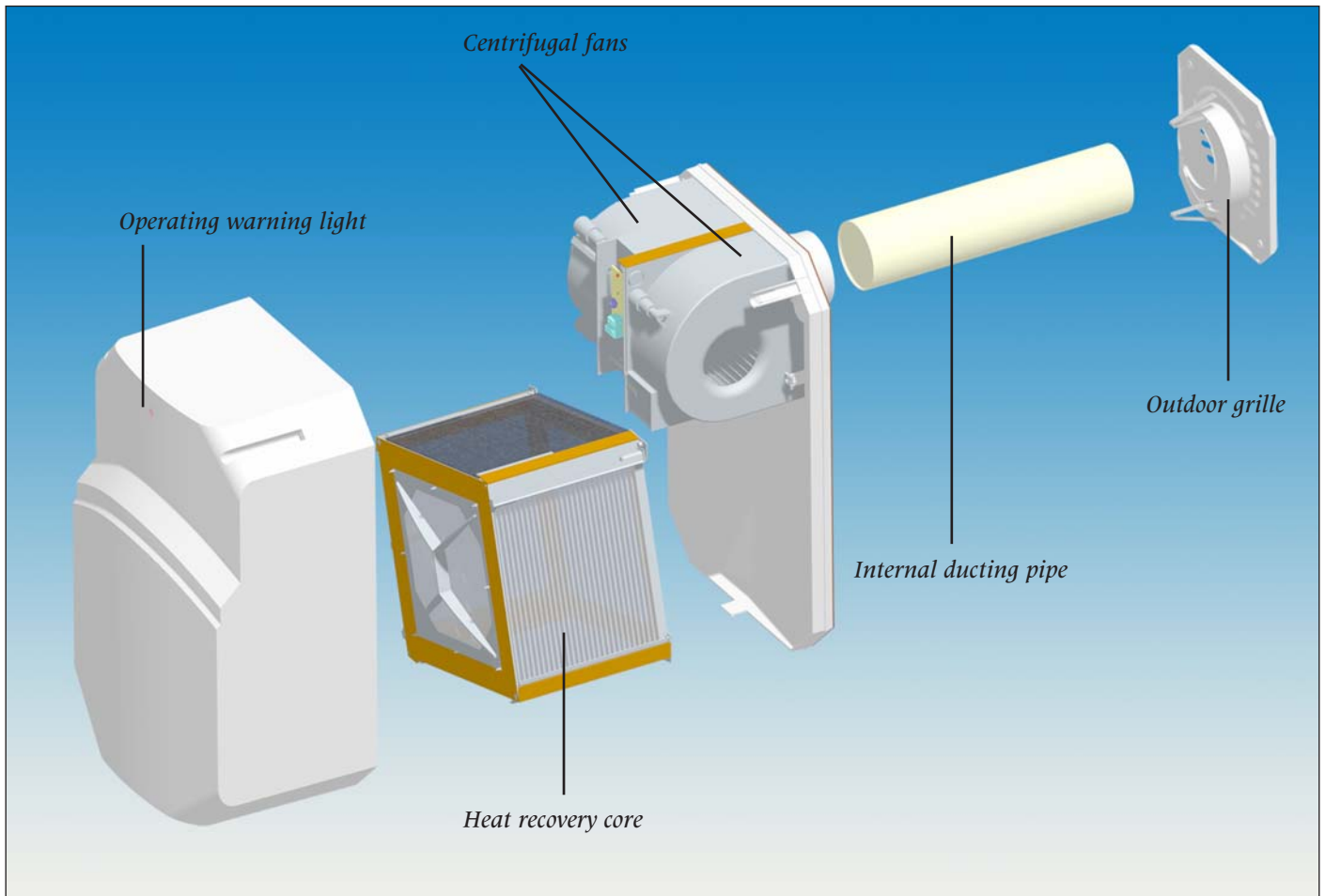
*Tempero is supplied with a PVC ducting pipe (diameter: 63mm), which should be fitted internally to the existing duct (diameter 100/120 mm) up to a maximum wall depth of 400 mm. If the depth of wall exceeds 400 mm a replacement pipe is required.*



*Extracted air stream transfers thermal energy to the fresh incoming air, first through the surface of the PVC ducting pipe and of the motors' heat and then through the "cross flow plates" heat recovery core located into the unit.*



# ENERGY RECOVERY FANS **Tempero**



## Timer and (PH) operations

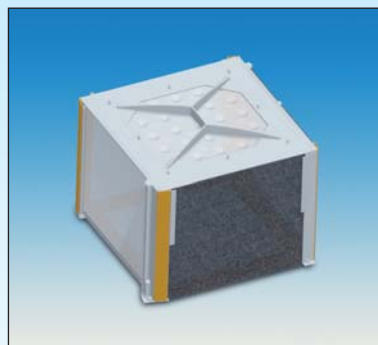
### Timer

When switched on, the fan will start rotating after 5 seconds and will overrun after being switched off according to the pre-set overrun timer period. Adjustable overrun timer from 2 min. up to 30 min. Standard setting: 15 min.

### Pre-heater (PH)

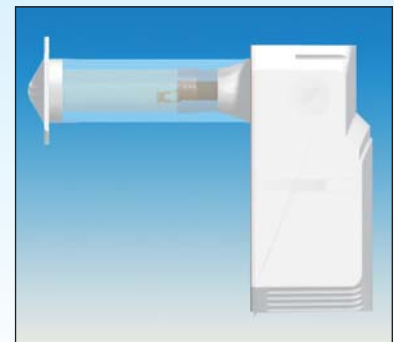
The PH model is equipped with a pre-heating system, consisting of a 350 W coil fitted into the PVC ducting pipe and activated by a thermostat. Starting with an outside temperature lower than  $-5^{\circ}\text{C}$  incoming air will be heated-up to about  $15\text{-}20^{\circ}\text{C}$  thus avoiding ice build-up on the recovery module and granting the highest levels of efficiency.

## Details



Cross Flow Air Exchanger welded PVC plates.

Heating coil 350 W for cold climates.



## NEW FACTORY



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