HRP DOMO SMALL

The universal and compact heat recovery unit

HRP DOMO SMALL

innova
renewing energies

Compact unit for air renewal with passive recovery system. Vertical/horizontal installation, surface-mounted or built-in installation.

One size: 160 m³/h

COMPLETE
Complete ventilation unit with summer bypass and frost protection control.

RESIDENTIAL APPLICATIONS
Ideal for individual family units/flats.

AIR EXCHANGE AND PURIFICATION
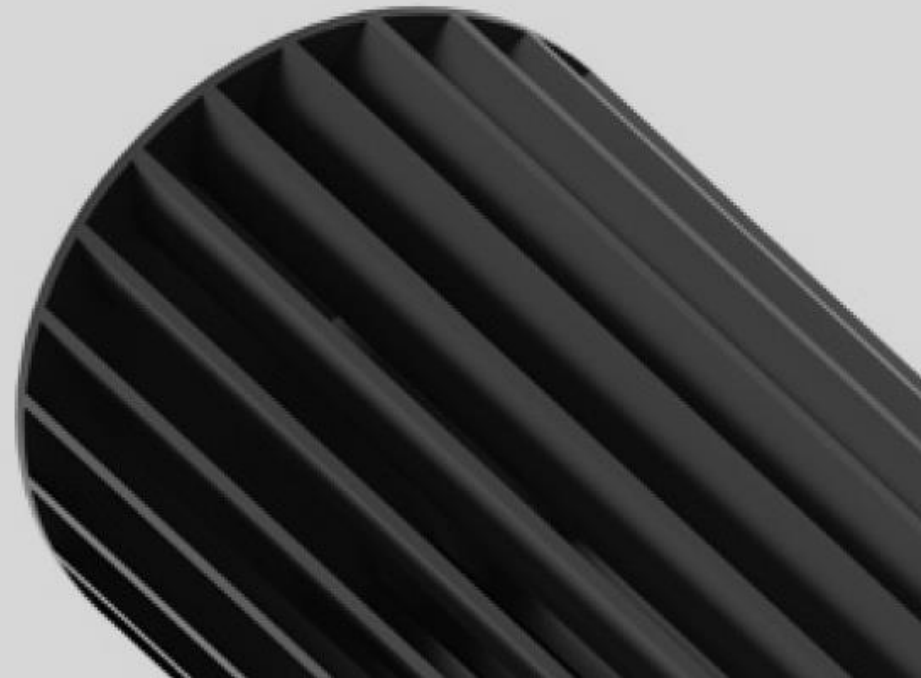High-efficiency air renewal and filtration, with ePM1 80% filters.

SMART TOUCH CONTROL PANEL
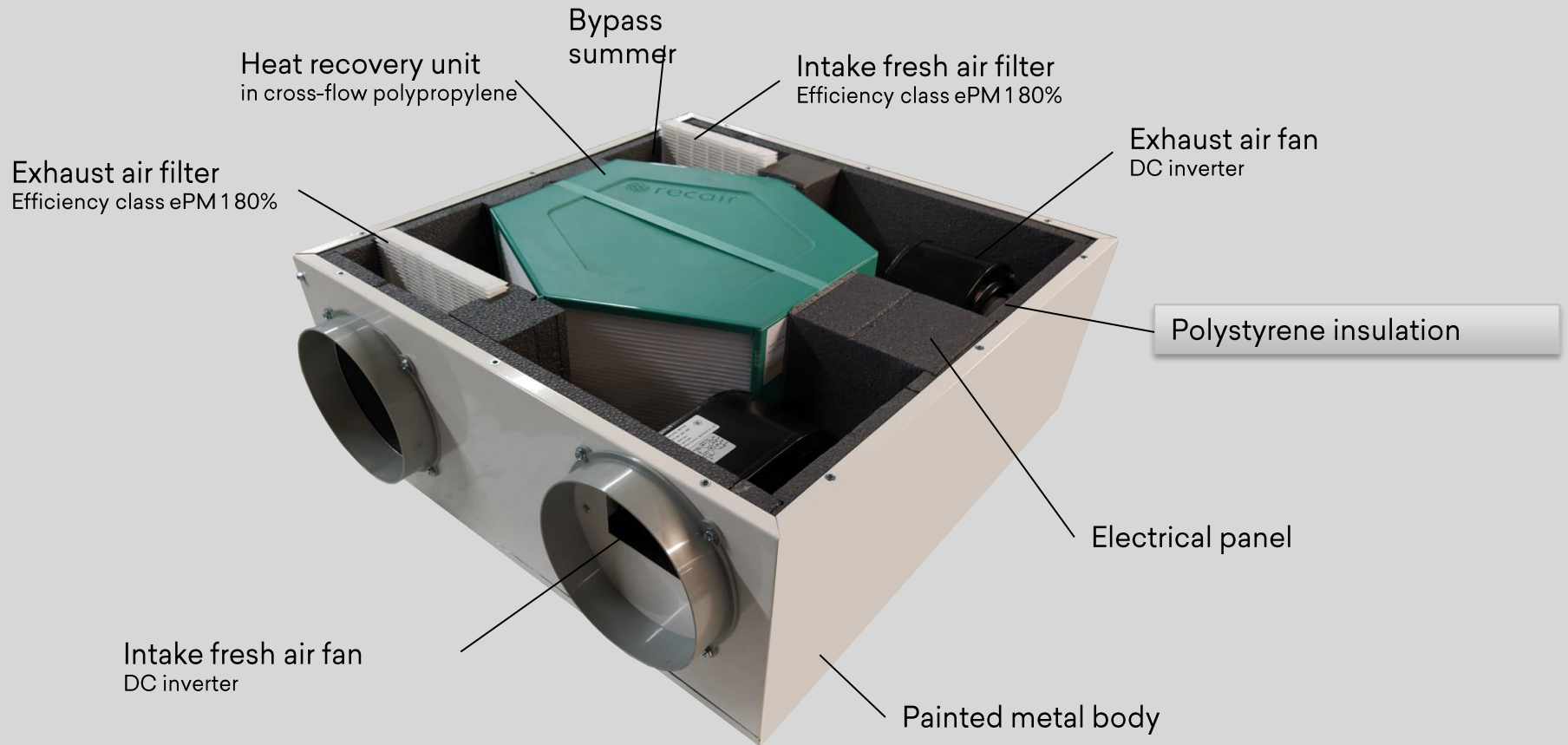Highly attractive and functional wall-mounted remote control panel.

HRP DOMO SMALL

COSTANT AIR FLOW DC INVERTER CENTRIFUGAL FAN

- intelligent" fans that keep the air flow rate constant by independently increasing or decreasing the speed according to pressure drop in ducts and air filter

- allow constant and accurate quantity of fresh air

HRP DOMO SMALL

COMPLETE HEAT RECOVERY, NO DISPERSION

Bypass summer

Heat recovery unit
in cross-flow polypropylene

Intake fresh air filter
Efficiency class ePM1 80%

Exhaust air fan
DC inverter

Exhaust air filter
Efficiency class ePM1 80%

Polystyrene insulation

Electrical panel

Intake fresh air fan
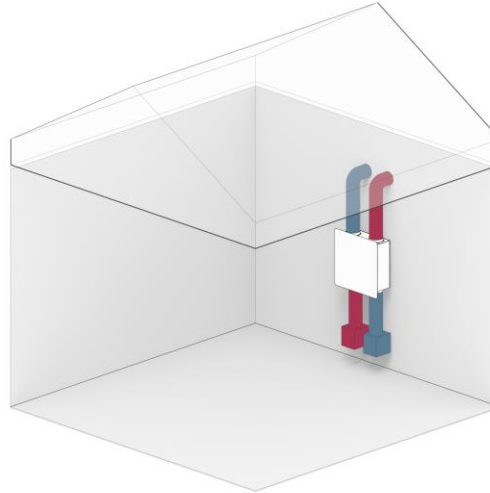DC inverter

Painted metal body

HRP DOMO SMALL

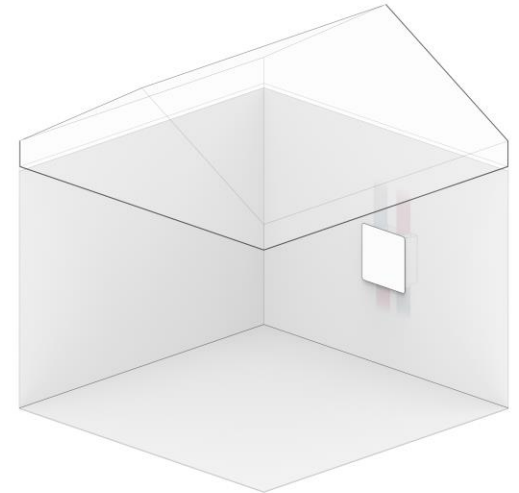SIMPLE, ADVANCED Wi-Fi OR ModBUS CONTROLS

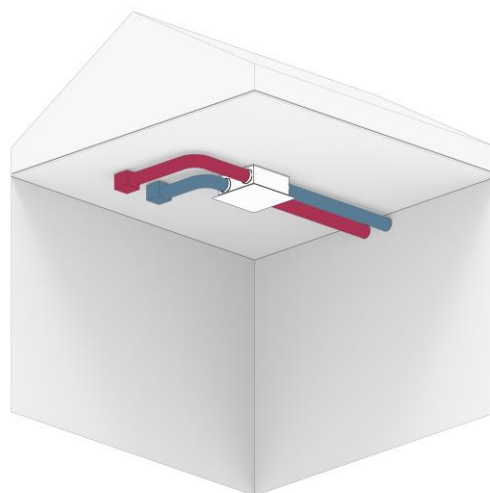# HRP DOMO SMALL

A SINGLE
PRODUCT CODE,
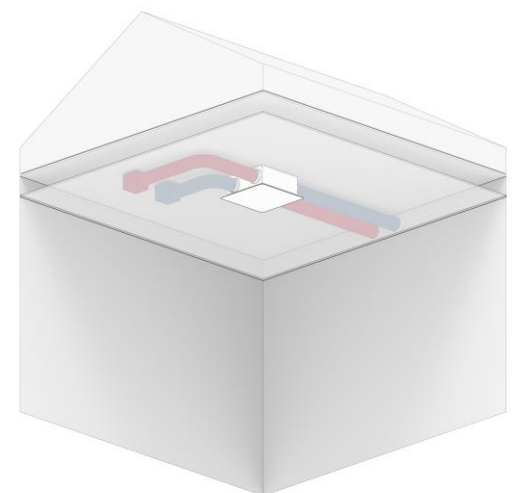FOUR
POSSIBLE
INSTALLATIONS

Vertical surface-mounted

Vertical built-in

Horizontal surface-mounted

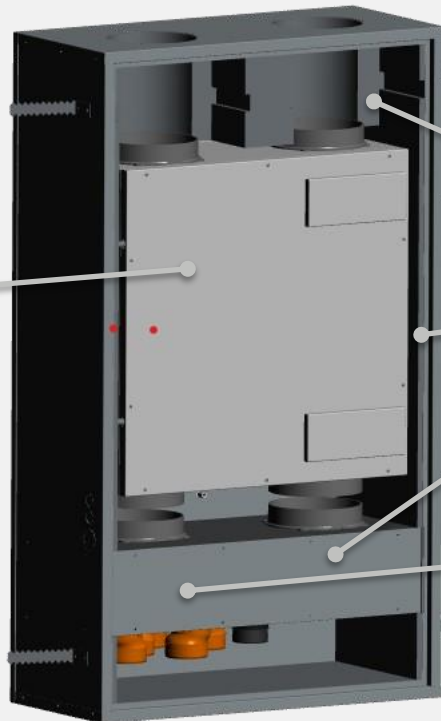Horizontal built in

HRP DOMO SMALL

![Innova - renewing energies logo]

ALL ACCESSORIES FOR A BESPOKE INSTALLATION
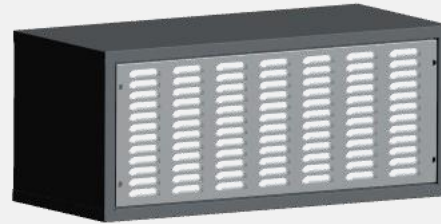
Built in plenum with external grille for exhaust and external air intake

**Built in formwork** includes:

- metal body with anchoring clamps

- polystyrene ducts to connect units/framework connections

- internal insulation in 30mm polystyrene

- exhaust air plenum with #6 connections with calibration damper for DN75 corrugated pipes

- intake fresh air plenum with #6 connections with calibration damper for DN75 corrugated pipes

Heat recovery unit
HRP DOMO SMALL 20

HRP DOMO SMALL

A COMPLETE UNIT,
FOR AN ELEGANT, **SURFACE-MOUNTED INSTALLATION**
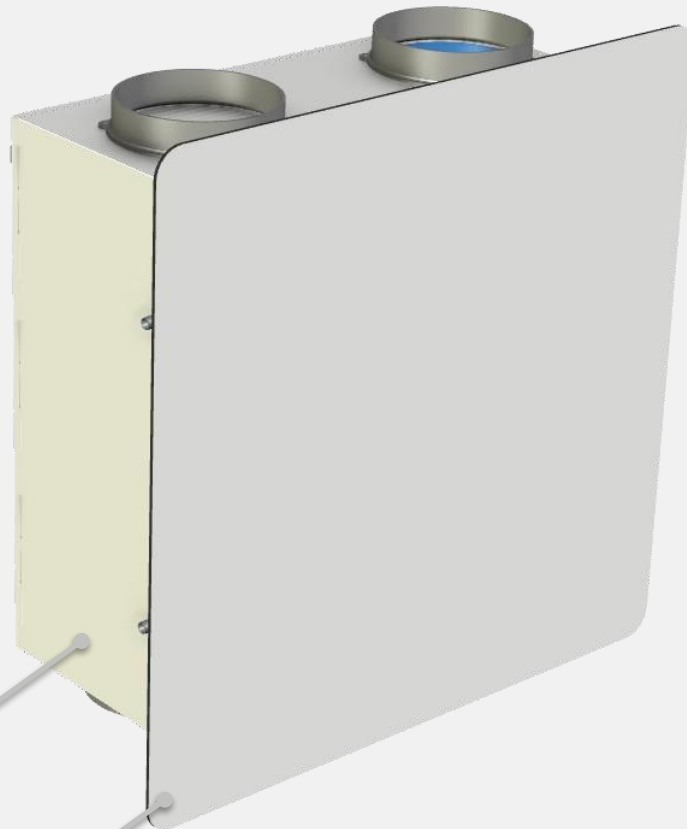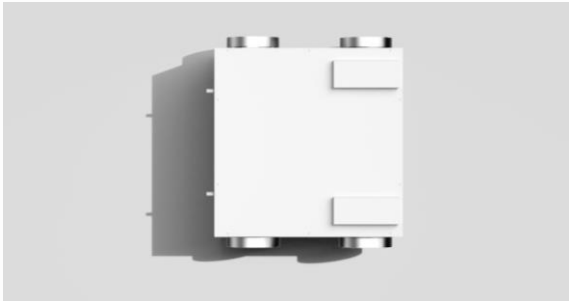
HRP DOMO SMALL

Aesthetic panel

HRP DOMO SMALL

One size:

HRP DOMO SMALL 20

Air flow rate = 160 m³/h   Available pressure head =100 Pa

Suitable for homes with areas up to 118 m² (*)

(*) with 0.5 Vol/h and a room height of 2.7m

HRP DOMO SMALL

COMPACT DIMENSIONS

250

580

580
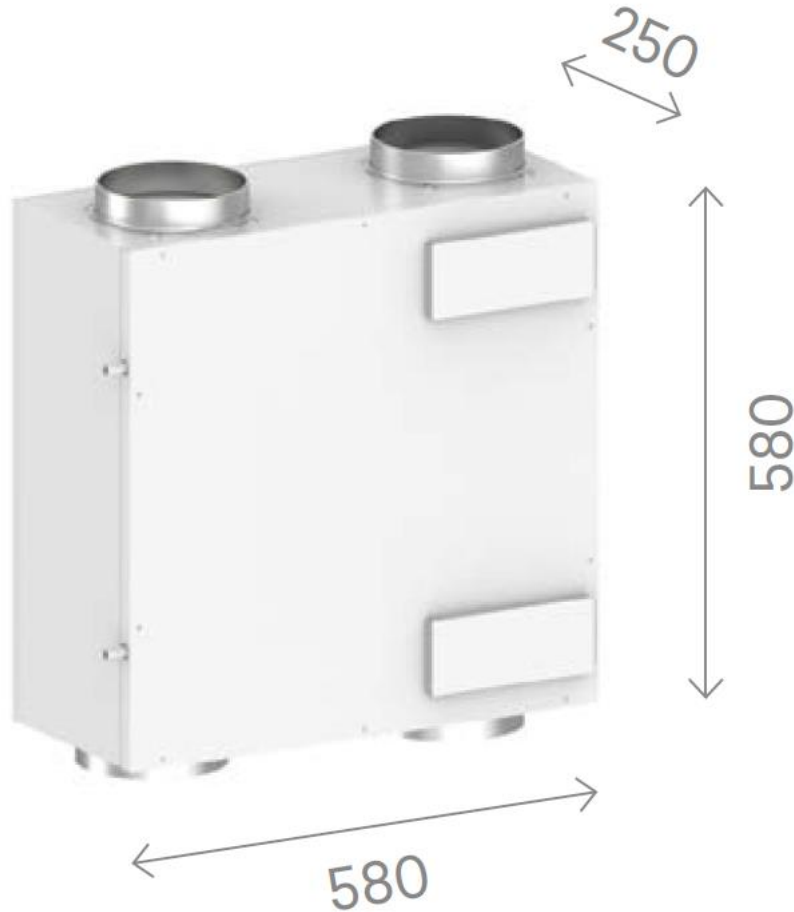
HRP DOMO SMALL

On board electronic control connected to
EDA649-EDB649-EWG649-EWW649 wall mounted panel
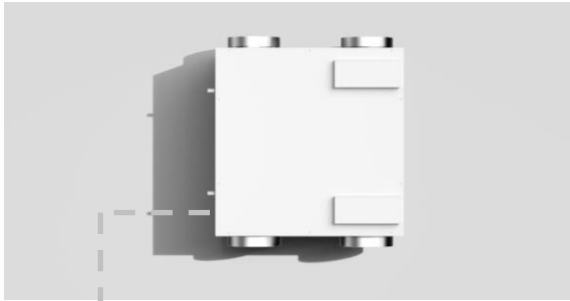
Thermostat-unit connection with 4-core cable

EDB649II colour white

EDA649II colour black

SMART Touch Thermostat
With **ModBUS** serial port

EWW649II colour white

EWG649II colour black

SMART Touch Thermostat
With integrated **Wi-Fi**

HRP DOMO SMALL

AIR DUCT FITTINGS:

STANDARD

VIEW FROM ABOVE
(if the unit is installed horizontally)

or

FRONT VIEW
(if the unit is installed vertically)

Single code/product for horizontal or vertical installation

EXHAUST AIR

EXTERNAL AIR

FRESH AIR

EXHAUST

EXHAUST

EXTERNAL AIR

FRESH AIR

EXHAUST AIR

HRP DOMO SMALL

AIR DUCT FITTINGS:

Connections may be inverted on site with reconnection of connectors of probes and fans on circuit board
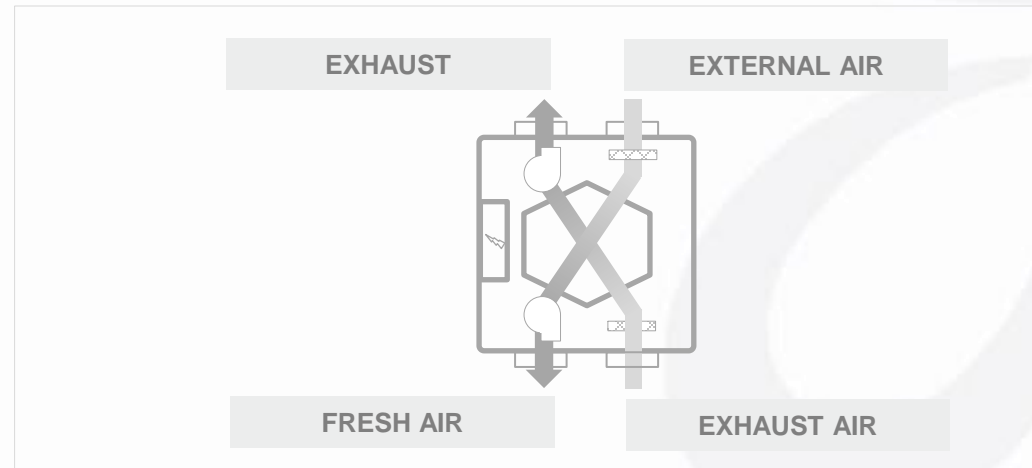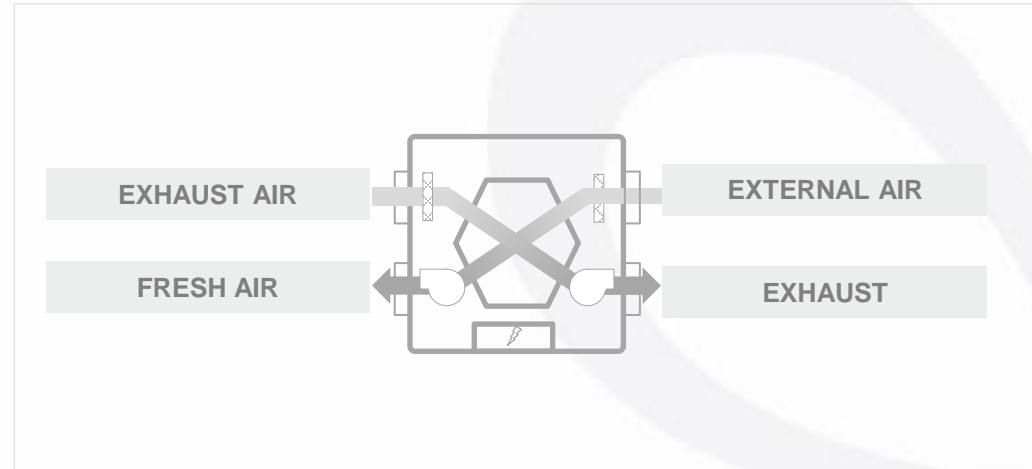
On-site connection inversion

VIEW FROM ABOVE
(if the unit is installed horizontally)

or

FRONT VIEW
(if the unit is installed vertically)

EXTERNAL AIR

EXHAUST AIR

EXHAUST

FRESH AIR

FRESH AIR

EXHAUST AIR

EXHAUST

EXTERNAL AIR

HRP DOMO SMALL
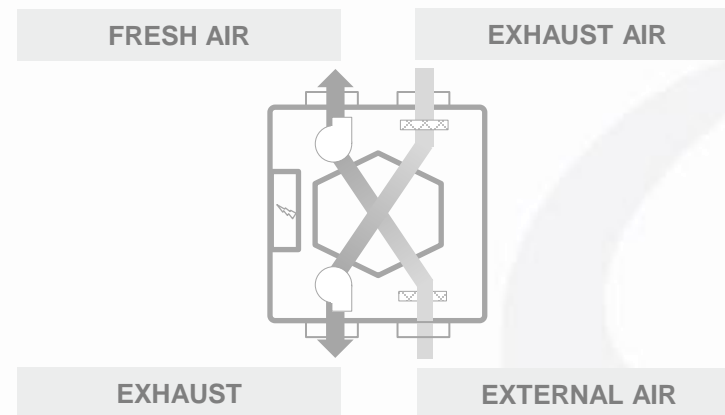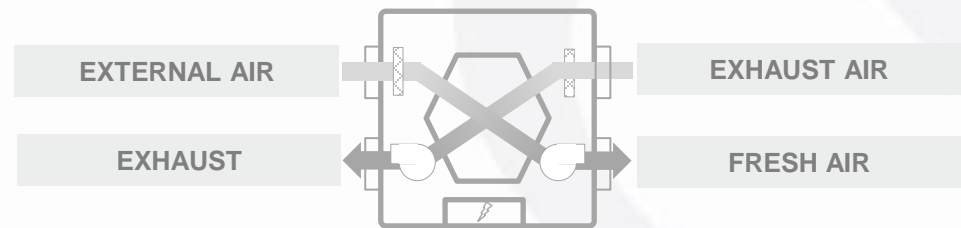
HYDRAULIC FITTINGS: CONDENSATE DRAIN

SIPHON

Supplied with the unit

Siphon for horizontal installation

Siphon for vertical installation

Horizontal installation

Condensate drain Diam. 20mm

Vertical installation

INGRESSO CAVI ELETTRICI

Condensate drain Diam. 20mm

HRP DOMO SMALL

PERFORMANCE:

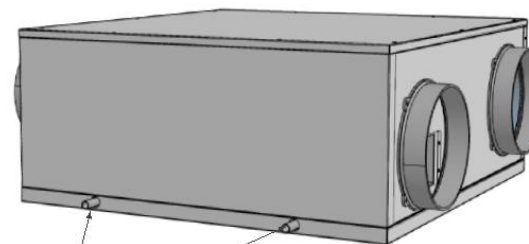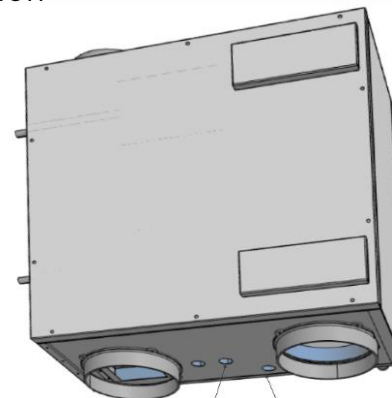| TECHNICAL SPECIFICATIONS		HRP DOMO SMALL
Size		20
AIR FLOW RATE		
Nominal fresh air flow rate	m³/h	160
Static pressure available	Pa	100
HEATING PERFORMANCE		
Energy class (1)		A
Recovery efficiency (2)	%	82
Static recovery heating power (2)	kW	0.4
GENERAL FEATURES		
Fan		Costant air flow centrifugal DC inverter - DC inverter motor
Fan Quantity	#	2
Static heat recovery unit		Cross-flow plates - polypropylene
Bypass summer		yes
Filters		Flat filters - #2 ePM1 80%
Sound pressure (3)	dB(A)	38.3

(1) Energy classification according to European Regulation 1253/2014 and 1254/2014, taking into account moisture probe accessories/VOC-CO2

(2) Outdoor temperature 7°C, relative humidity 72%. Indoor temperature 20°C, relative humidity 28%. Performance according to UNI 13141-7

(3) Sound pressure in open environment at distance of 3m according to UNI EN3744

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HRP DOMO SMALL

PERFORMANCE:

TECHNICAL SPECIFICATIONS		HRP DOMO SMALL
Size		**20**
Power input at the maximum fan speed	kW	0.10
Total power input	kW	0.10
Current absorbed at the maximum allowed conditions	A	0.8
Power supply	V/ph/Hz	230/1/50
SIZES		
Width	mm	580
Height	mm	250
Depth	mm	580
Connections diameter	mm	160
Condensate drain	mm	20
Weight	kg	31
OPERATING LIMITS		
Heating - Indoor air min/max	°C	15/35
Heating - Outdoor air min/max	°C	-20/20
Cooling - Indoor air min/max	°C	15/35
Cooling - Outdoor air min/max	°C	20/45

(1) Energy classification according to European Regulation 1253/2014 and 1254/2014, taking into account moisture probe accessories/VOC-CO2
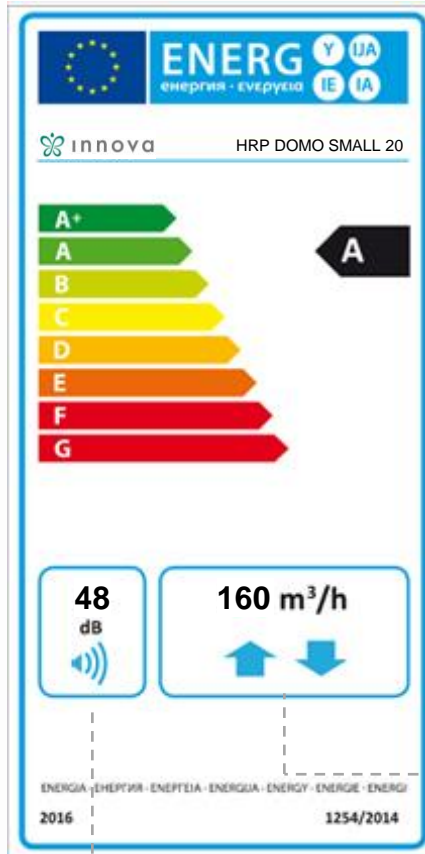
(2) Outdoor temperature 7°C, relative humidity 72%. Indoor temperature 20°C, relative humidity 28%. Performance according to UNI 13141-7

(3) Sound pressure in open environment at distance of 3m according to UNI EN3744

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HRP DOMO SMALL

innova
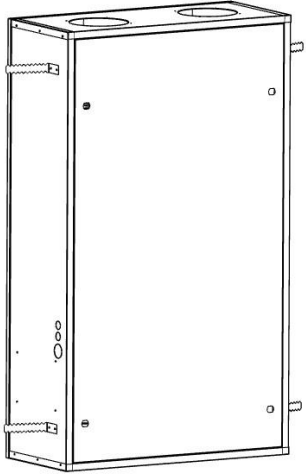renewing energies

ENERGY CLASS ERP:

HRP DOMO SMALL 20

Air flow rate

Noise power level dB(A)

HRP DOMO SMALL

ACCESSORIES SUPPLIED SEPARATELY:

FRAMEWORK

Insulated framework for built in installation with connections for internal air distribution

(delivery and extraction) for corrugated tube DN75/90 and connections for

external air distribution (exhaust air and fresh air intake) for hose DN160

Size W 700 mm x H 1200 mm x D 310 mm

Plenum with external grilles

Plenum with external grilles for exhaust and external air intake.

For built in installation.

May be positioned adjacent to the framework or at a distance.

If positioned at a distance, the plenum is connected to the framework using two

DN 160 hoses supplied separately.

Dimensions W 700 mm x H 300 mm x D 310 mm

www.innovaenergie.com
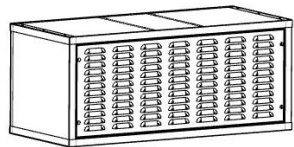
HRP DOMO SMALL

ACCESSORIES SUPPLIED SEPARATELY:

HRP DOMO SMALL
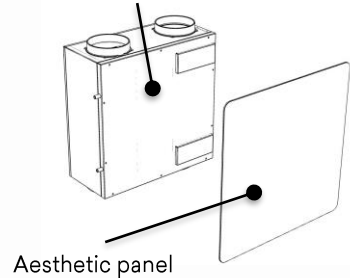
Aesthetic panel

Aesthetic cover panel

The metal panel color is white RAL 9003

Can be used in both vertical and horizontal installations

Dimensions 680 x 680 x 5 mm

HRP DOMO SMALL
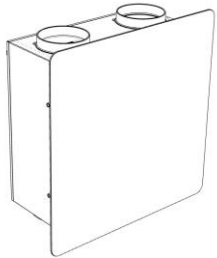
ACCESSORIES SUPPLIED SEPARATELY:

SQA AIR QUALITY SENSOR

Regulator for inner space VOC control with an integrated sensor.

Low/Medium/High VOC level jumper setting. If the sensor level is not satisfied, fan control is set to maximum speed/air flow.

Dimensions W 96.4mm x H 101mm x D 39mm

UMR HUMIDISTAT

On – off room humidistat signal for dehumidification control.

Range 30...90% RH. If the sensor level is not satisfied, fan control is set to maximum speed/air flow

Dimensions W 76mm x H 76mm x D 34mm

HRP DOMO SMALL

ACCESSORIES SUPPLIED SEPARATELY:

ACTIVATED CARBON FILTER

Active filter consisting of filtering medium F7 activated with mini granules of activated carbon;

Recommended for areas with a high rate of contaminating gases in the outside air (VOC, PAC, OZONE, SO2, NOX)

The activated carbon filter must be replaced regularly to ensure its effectiveness.

REPLACEMENT FILTERS ePM1 80%

Kit consisting of two filters ePM1 80% for the unit maintenance;

The filters are easily removable through the dedicated inspection doors;

HRP DOMO SMALL

CONTROL AND REGULATION DETAILS
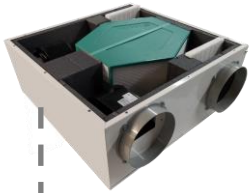
On board electronic control connected to
EDA649-EDB649-EWG649-EWW649 wall mounted panel

Thermostat-unit
connection with 4-core
cable

EDB649II colour white

EDA649II colour black

SMART Touch Thermostat
With ModBUS serial port

EWW649II colour white

EWG649II colour black

SMART Touch Thermostat
With integrated Wi-Fi

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HRP DOMO SMALL

WALL MOUNTED PANEL DETAILS

Basic functions:

Room set temperature modification

Season change S/W

Room set temperature

On/Off

Room temperature reading (if the exhaust probe in the unit is deactivated)

Maximum speed

Nominal speed

Silent mode (super-low speed)

Nominal speed
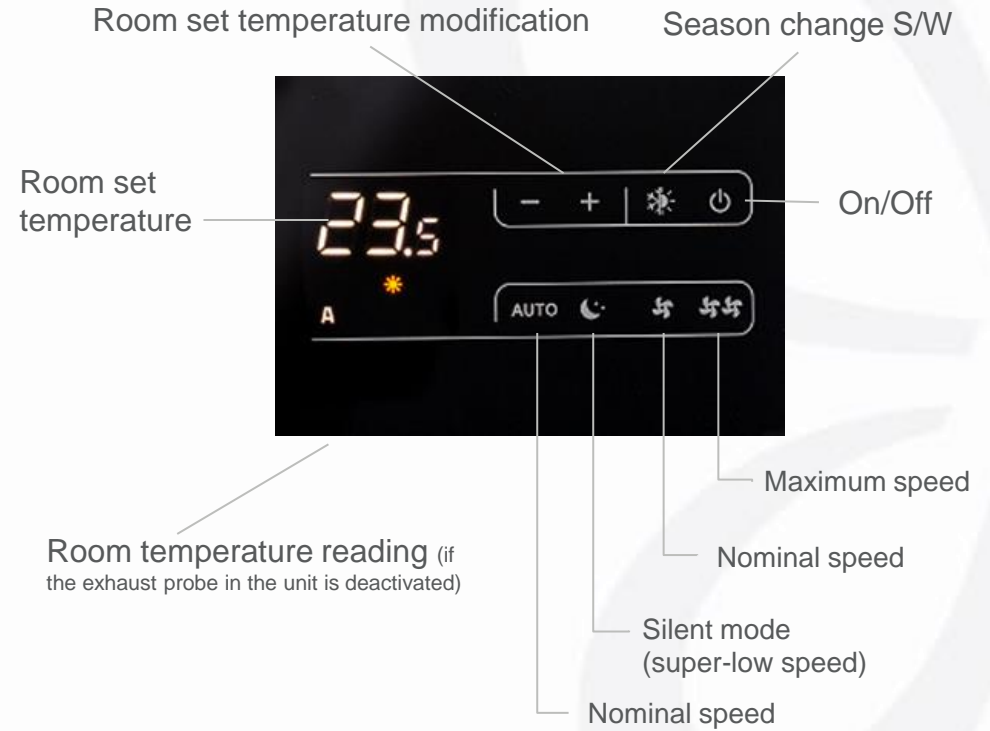
Fan speed/airflow settings

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CONTROL AND REGULATION DETAILS

CONNECTION OF UP TO 30 HEAT RECOVERY UNITS MANAGED BY THE SAME REMOTE CONTROL

REMOTE CONTROL

Remote control is mandatory for operation of the unit with capacitive touch for wall mounting.

The control manages automatic frost protection in winter using the room air and external air probe

REMOTE DISPLAY

+ B A -   A B   C D

H4   H2   AIR

Sonda aria ambiente
Sonda Espulsione
Sonda Aria Esterna

GRID   CP

FAN Exp   FAN Imm   N EV1 N EV2

3
1   BY PASS
2

CHILLER   BOILER

ALIMENTAZIONE 230/1/50

N   CL   OP

VALVOLA / BATTERIA DI POST
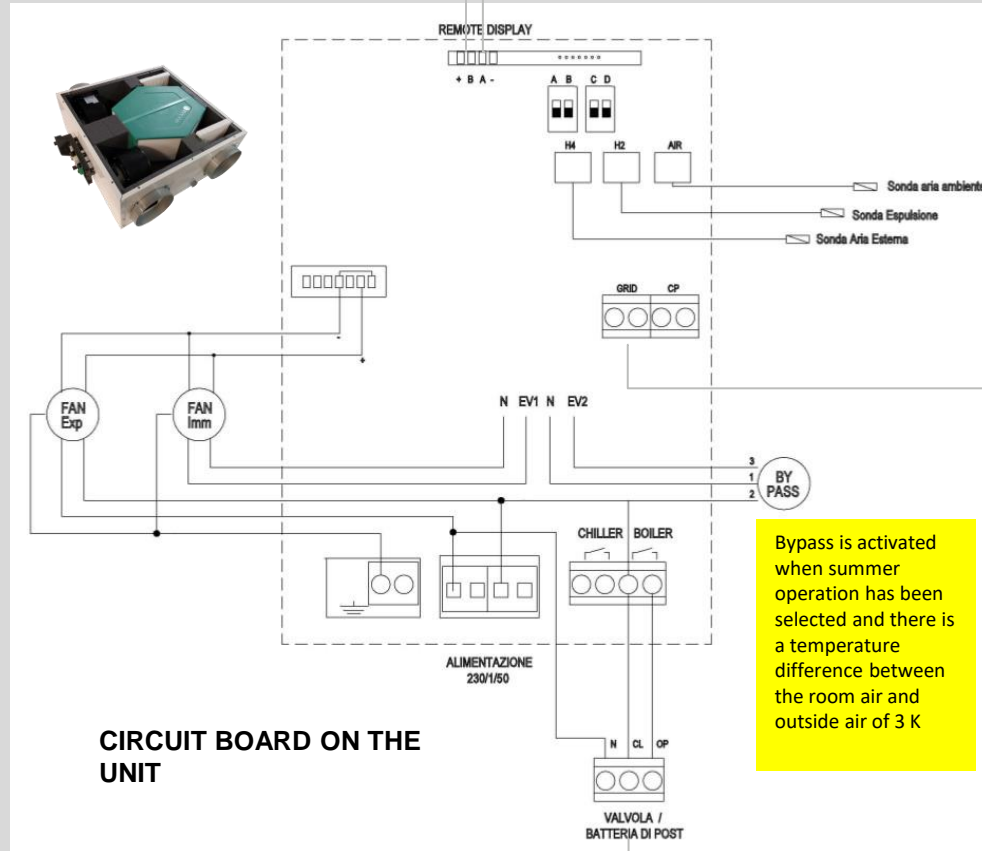
CIRCUIT BOARD ON THE UNIT

Bypass is activated when summer operation has been selected and there is a temperature difference between the room air and outside air of 3 K

OPTIONAL SENSORS

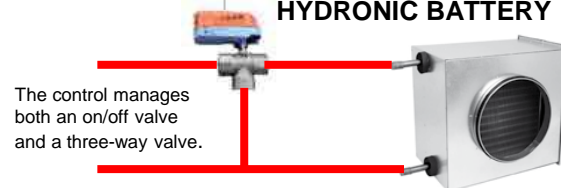**Air quality sensor** with Low/Medium/High jumper setting

Relative humidity sensor with desired setting

Both sensors may be connected in parallel.

If the sensor level is not satisfied, fan control is set to maximum speed/air flow.

HYDRONIC BATTERY

The control manages both an on/off valve and a three-way valve.

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MANAGEMENT OF UP TO 31 UNITS USING A SINGLE THERMOSTAT:
EDA649 / EDB649 / EWG649 / EWW649

CAVO SCHERMATO BICOLORE SEZ. MIN. 0,5 mm²

LINEA RS485 FINO A 30 DISPOSITIVI   120Ω

EDA649

INN-FR-B32

INN-FR-B32

UP TO

MAX 31

UNITS
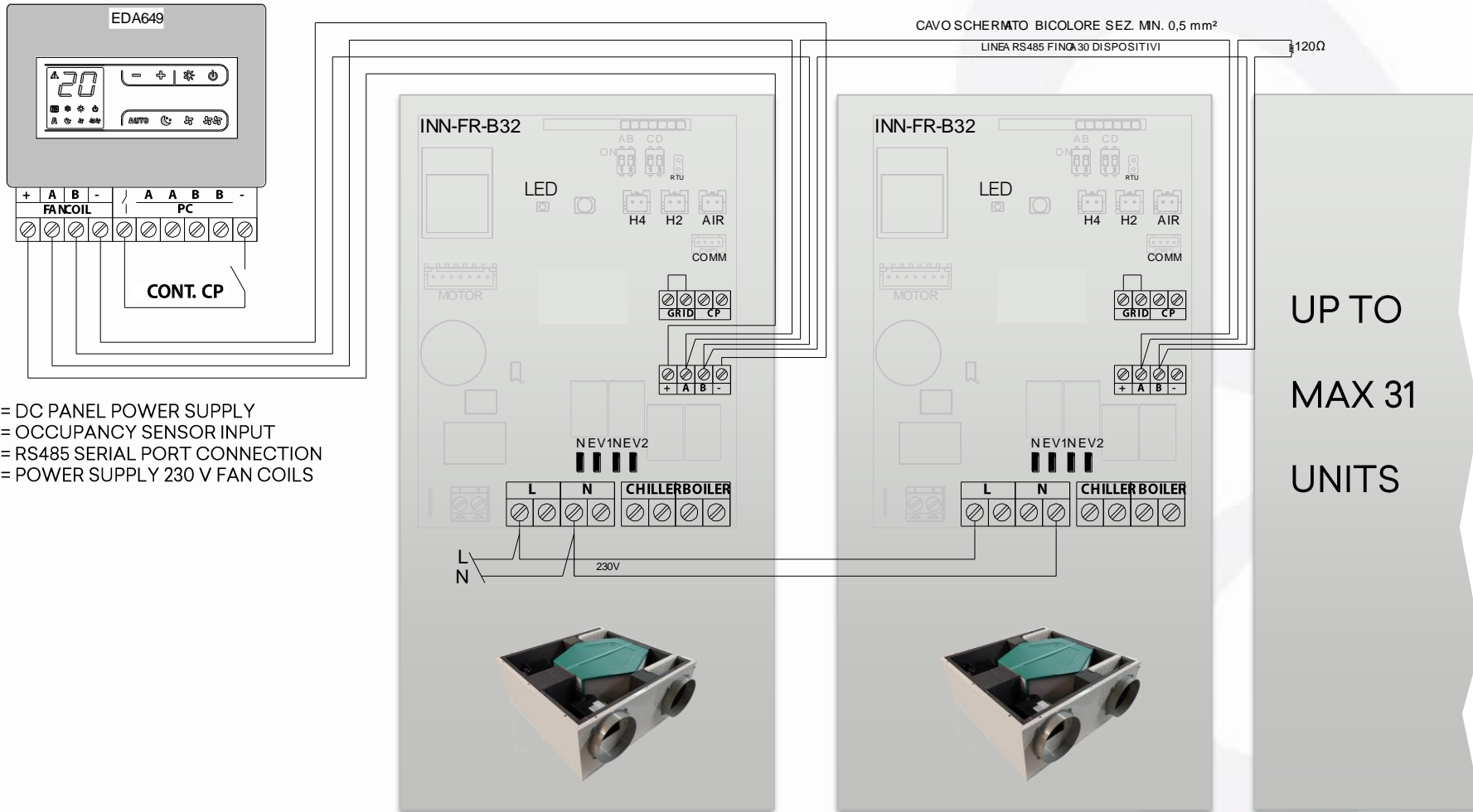
+ − = DC PANEL POWER SUPPLY
CP = OCCUPANCY SENSOR INPUT
AB = RS485 SERIAL PORT CONNECTION
L-N = POWER SUPPLY 230 V FAN COILS

CONT. CP

230V

HRP DOMO SMALL

WALL MOUNTED PANEL: EDA649 / EDB649 / EWG649 / EWW649

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renewing energies

Desired temperature

Modification of desired temperature

Season Change S / W

On/Off

Room temperature sensor

Automatic speed

Silent mode (super-low speed)

Nominal speed

Maximum speed
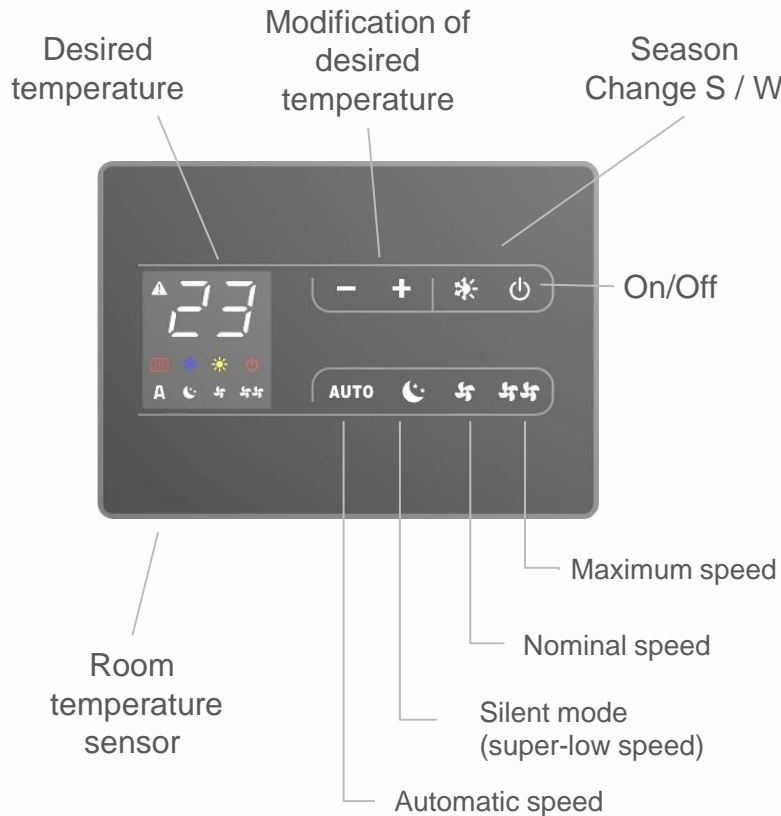
Brightness

After 20 seconds from the last action the panel brightness will be reduced for improved night-time comfort, and the room temperature will appear on the display. Press any button to restore maximum brightness.

Button functions

Icon	Function	Icon	Function
+	Increases the temperature by 0.5 °C	❄☀	Seleziona la stagione
−	Decreases the temperature by 0.5 °C	⏻	Accende o pone in stand by il fancoil
☾	Funzione notturna	❅	Funzionamento alla minima velocità
AUTO	Automatic operation with modulation	❅❅	Funzionamento alla massima velocità

LED Signals

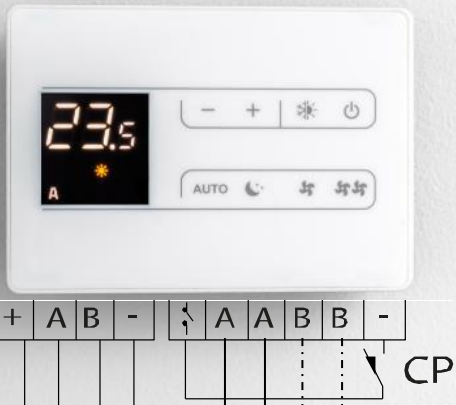| Icon	Signal	Icon	Signal
A	Automatic operation active	❄	Funzionam. raffrescamento attivo
❅	Funzionam. vel. minima attivo	⚠	Lampeggiante: funzionam. da remoto
❅❅	Funzionam. vel. max attivo	⚠	Fisso: allarme
☾	Funzionam. notturno super silent attivo	⏻	Segnalazione fancoil spento
☼	Funzionam. riscaldamento attivo	▥	Inactive

Alarm signals

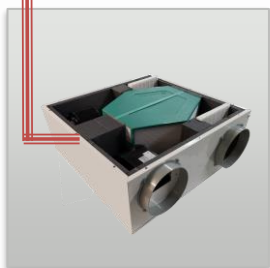| CODE	DESCRIPTION	CAUSE	SOLUTION
E1	Intake Probe Alarm	Probe breakage and read failure	Check probe connection or replace
E2	Fan alarm	Fan connector or feedback signal absent	Check connection of board connector to fan
E3	H4 exhaust Probe Alarm	Probe breakage and read failure	Check probe connection or replace
E5	H4 external air Probe Alarm	Probe breakage and read failure	Check probe connection or replace
NO LINK	Communication alarm	Check for green LED on board;	Check the status of indicator LED on board
ACL	Dirty filter alarm	Operating hours per dirty filter reached (default = 0)	Check state of filter and press and hold the on off button to reset the signal;

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CONNECTIVITY:

EDA649 colour black
EDB649 colour white

Modbus

+	A	B	-	⌇	A	A	B	B	-

CP

Modbus

BUTLER
(or BMS)

EWG649 colour black
EWW649 colour white

WiFi

+	A	B	-	⌇	A	A	B	B	-

OUTPUTS
DISABLED
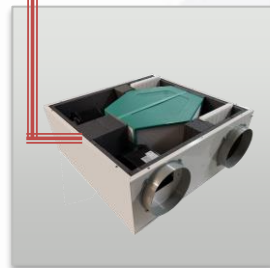
CP

APP

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BUTTON LOCK FUNCTION: EDA649 / EDB649 / EWG649 / EWW649

- By pressing both the ✚ and ━ buttons for 1 second, all buttons are locked locally, and this is indicated by "LOC" which appears on the display.

- All actions are prohibited to the user and whenever any button is pressed, "LOC" will appear.

- To deactivate the local button lock, press the ✚ and ━ buttons once more.

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SPECIAL FUNCTIONS: EDA649 / EDB649 / EWG649 / EWW649

**Advanced INSTALLER menu, available from 2020**

- To access, press and hold the power button ⏻ for 10 seconds

- The control will switch on and display the room temperature

- If press and held again, the following lettering will appear: **Ad**

- To navigate around in the menu, use the icons ➕ and ➖

- To select menu items and confirm the changes, press ⏻

- To exit the menu, press ⏻ for 10 seconds or wait 30 seconds without executing any commands. The display will switch off and the settings will be stored in memory

Ad	Control modbus address	**rb**	Mobdus reset
uu	Wi-Fi antenna enable	**Fr**	Factory reset
Ub	Buzzer volume control	**ot**	Room T-probe offset
br	Display brightness adjustment	**oH**	Room U.R. probe offset (inactive)
di	CP digital input management	**Sc**	Temperature display scale
rZ	Radiant zone management (only with EF1027)	**rE**	Resistance option (inactive)
Ld	Not used		

BUTLER,
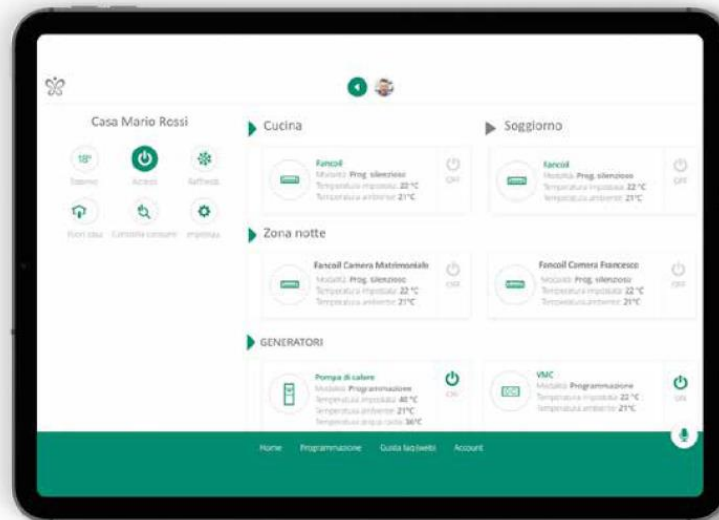# advanced system control

Room by room control

You can control each room with BUTLER by configuring a weekly calendar with time bands, creating settings for each room or area, modifying the settings so your home is at just the right comfort level for your needs.

Web Server BUTLER

20°
22°
23°
26°
24°
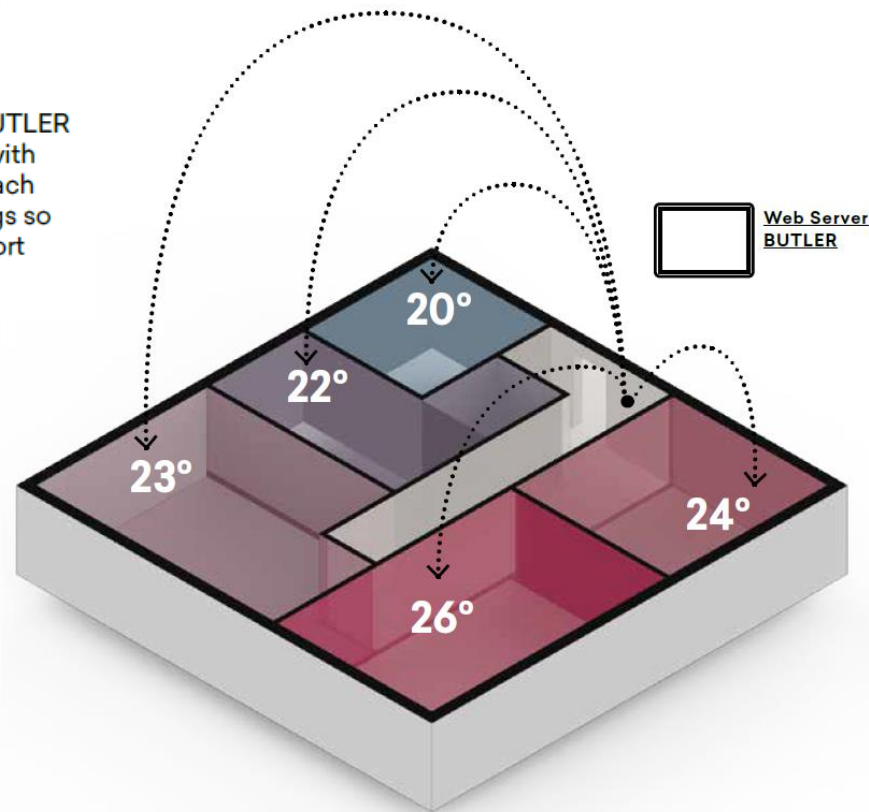
BUTLER,
advanced system control

Principal functions

- **Monitoring and control in local network or remotely**
  The system can be managed by any smartphone, tablet or computer

- **Personalised winter and summer programming**
  You can have different programmes for every season

- **Three temperature level setting on INNOVA fan coil network**
  For each room or area, you can select 3 different operating temperatures, which can be modified at any time

- **Weekly programming schedule**
  You can set the schedule for the different functions for each room; the same can be done for HRV and fan coils

- **PC-type network interface**
  Once the bus network has been set up between the heat pump and the fan coils, the connection to the web server is the same as a standard computer

- **Remote assistance**
  With the consent of the user, BUTLER can automatically enter the INNOVA cloud for diagnostics and assistance if it is needed

Weekly scheduling
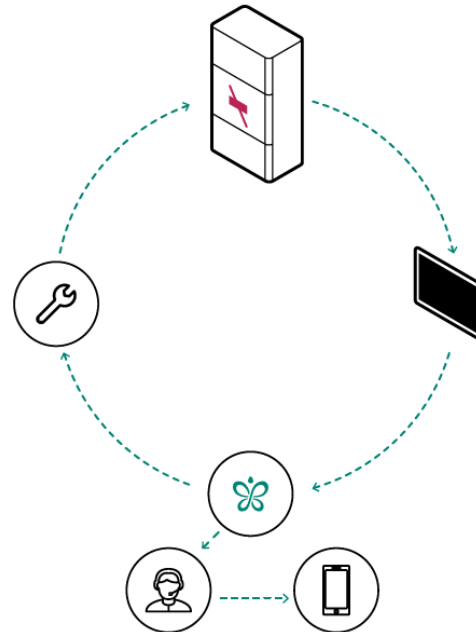

Domestic hot water settings
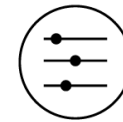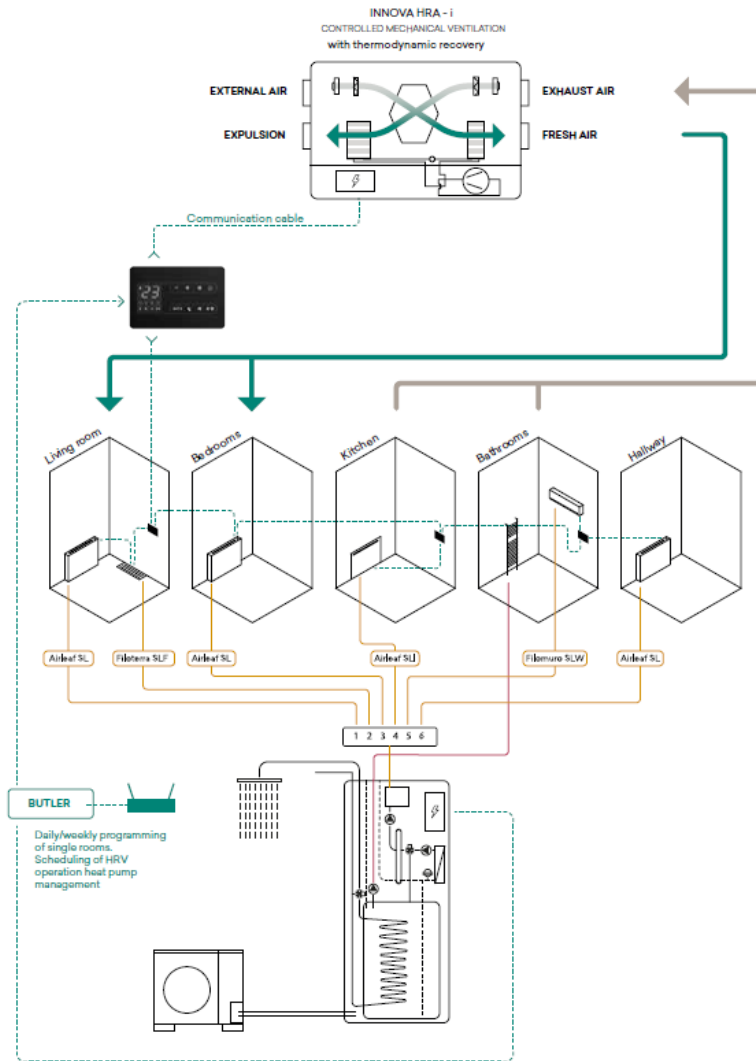
BUTLER,
advanced system control

Remote assistance

With the consent of the user, BUTLER can automatically enter the INNOVA cloud for diagnostics and assistance, if needed. Thanks to the internet connection, it is possible to check if the INNOVA products connected to the BUTLER are working correctly.
Any malfunctions can be automatically sent to the BUTLER at the support centre which can intervene by modifying the operating parameters or deciding to intervene in person, thus providing a fast and prompt service.

BUTLER,
advanced system control

INNOVA HRA - i
CONTROLLED MECHANICAL VENTILATION
with thermodynamic recovery

EXTERNAL AIR   EXHAUST AIR

EXPULSION   FRESH AIR

Communication cable

Living room   Bedrooms   Kitchen   Bathrooms   Hallway

Airleaf SL   Filoterra SLF   Airleaf SL   Airleaf SL   Filomuro SLW   Airleaf SL

1 2 3 4 5 6

BUTLER

Daily/weekly programming
of single rooms.
Scheduling of HRV
operation heat pump
management

Total control

The advantage of choosing a complete INNOVA system is that we are your single point of contact for scheduled maintenance and support. A complete, quality service.

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End of presentation
Thank you for your time