

O X Y G E N 8

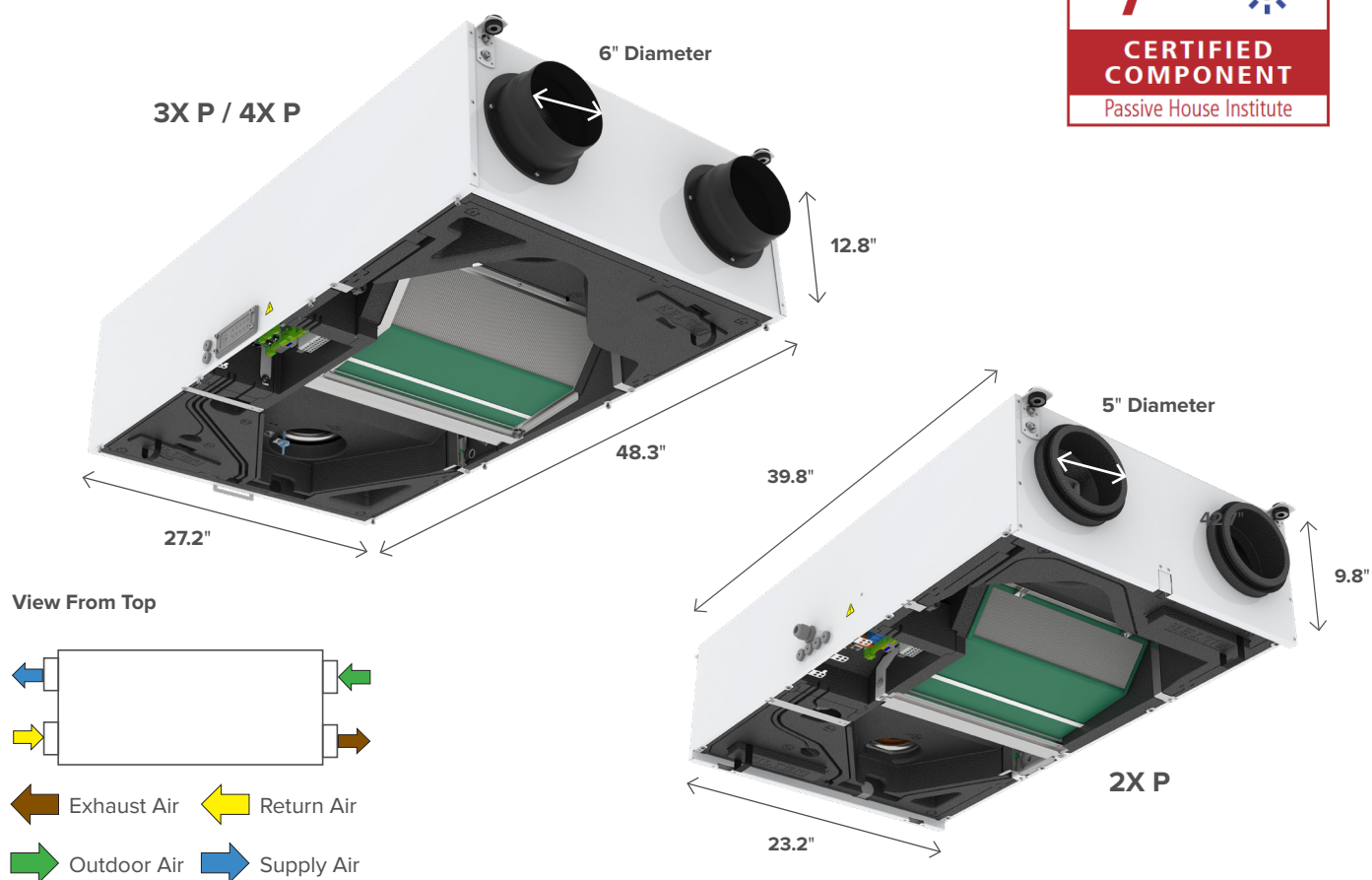


SALDA

Passive House Certified
Residential H/ERV

Salda 2X P/3X P/4X P

Horizontal Installation (Ceiling Hung)



HRV Unit Performance

Model	Size (L x W x H) in.	Airflow Range (cfm)	Nominal Airflow (cfm)	SRE %	Passive House Certified	Passive House Airflow Range	HRR %	Weight (lbs)
2X P	39.8 x 23.2 x 9.8	18 – 129	65	85%	Yes	33 – 82	82	68.3
3X P	48.3 x 27.2 x 12.8	29 – 206	130	86%	Yes	61 – 146	85	119
4X P	48.3 x 27.2 x 12.8	74 – 341	130	86%	No			126

SRE% is calculated based on: Summer OA 90/75 °F, RA 75/63 °F; Winter OA 30/29 °F, RA 70/53 °F | Unit requires condensate connection.

ERV Unit Performance

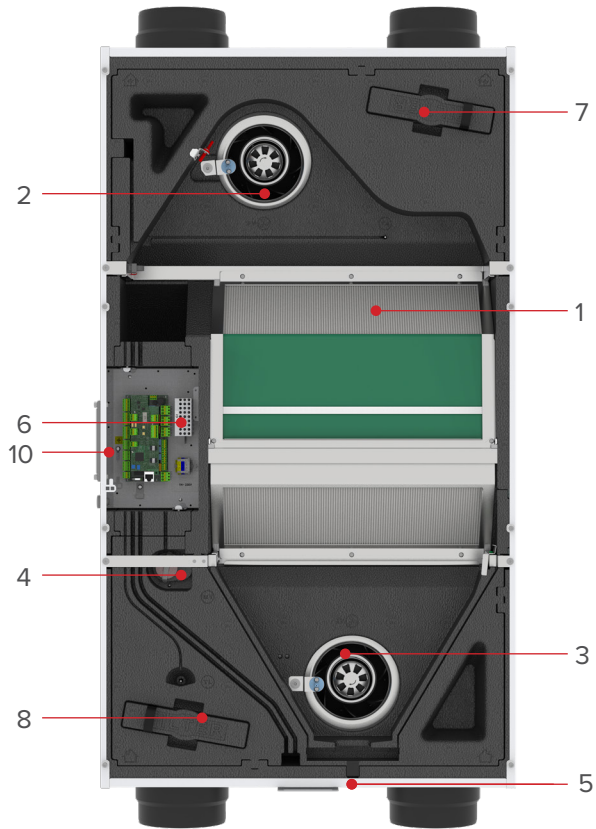
Model	Size (L x W x H) in.	Airflow Range (cfm)	Nominal Airflow (cfm)	Summer Conditions		Winter Conditions		Passive House Certified	Passive House Airflow Range	HRR %	Weight (lbs)
				SRE %	LRE %	SRE %	LRE %				
2X P E	39.8 x 23.2 x 9.8	40 – 129	85	78	55	78	58	Yes	49 – 75	82	68.3
3X P E	48.3 x 27.2 x 12.8	62 – 206	130	76	70	76	72	Yes	62 – 154	84	119
4X P E	48.3 x 27.2 x 12.8	74 – 341	130	76	70	76	72	No			126

SRE% and LRE% are calculated based on: Summer OA 90/75 °F, RA 75/63 °F; Winter OA 5/4 °F, RA 70/53 °F | Unit requires a condensate connection.

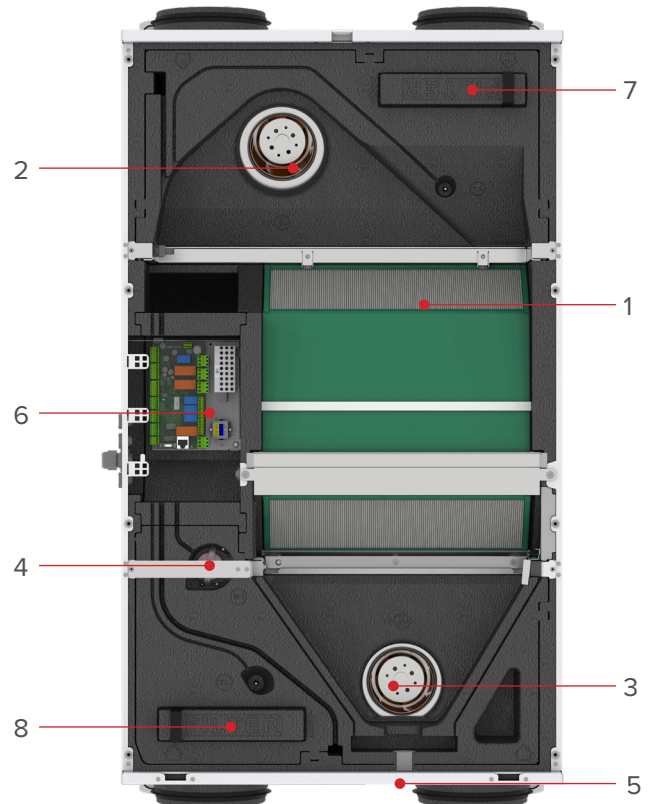
System Overview

Indoor Residential Applications

Horizontal Installation

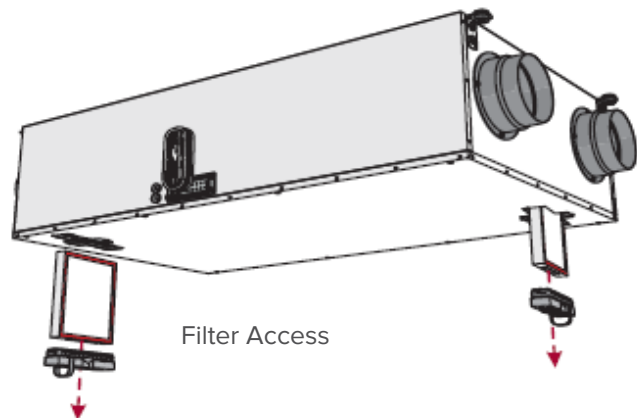


Salda 3X/4X P Bottom View



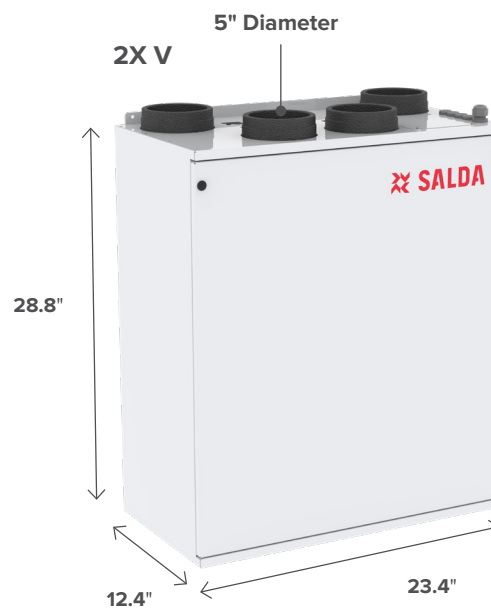
Salda 2X P Bottom View

1. Counter-flow Heat Exchanger
2. Supply Air
3. Exhaust Fan
4. Bypass Damper
5. Drain Connection (HRV Only)
6. Controller
7. RA Filter (Panel/Pocket)
8. OA Filter (Panel/Pocket)

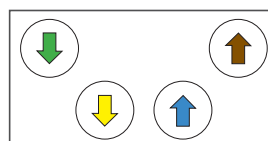


Salda 2X V/3X V/4X V

Vertical Installation (Floor/Wall Mounted)



View From Top



HRV Unit Performance

Model	Size (L x W x H) in.	Airflow Range (cfm)	Nominal Airflow (cfm)	SRE %	Passive House Certified	Passive House Airflow Range	HRR %	Weight (lbs)
2X V	23.4 x 12.4 x 28.8	27 – 107	85	89%	Yes	27 – 68	82	59.5
3X V	23.6 x 21.2 x 35.4	63 – 230	165	89%	Yes	63 – 160	81	92.6
4X V	23.6 x 21.2 x 35.4	108 – 341	200	88%	No			94.8

SRE% is calculated based on: Summer OA 90/75 °F, RA 75/63 °F; Winter OA 30/29 °F, RA 70/53 °F | Unit requires condensate connection.

ERV Unit Performance

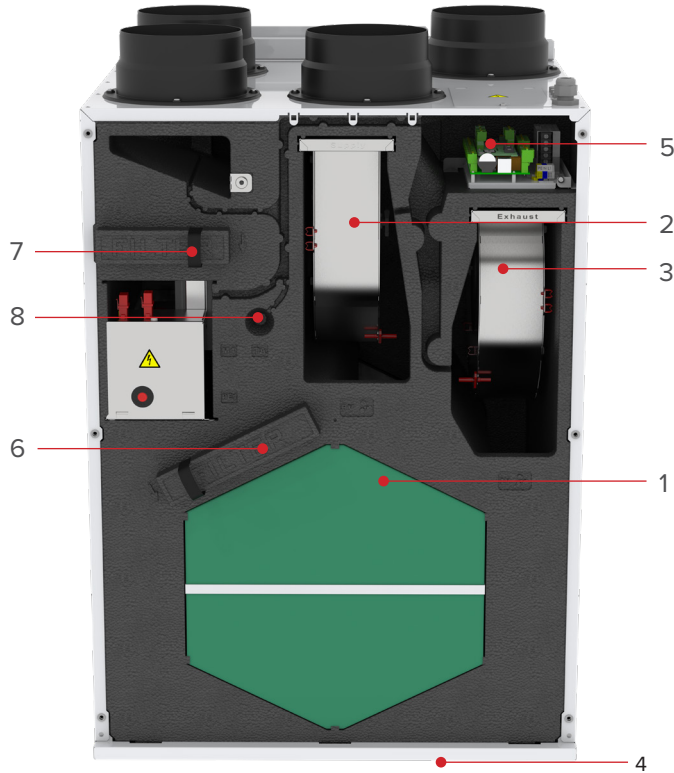
Model	Size (L x W x H) in.	Airflow Range (cfm)	Nominal Airflow (cfm)	Summer Conditions		Winter Conditions		Passive House Certified	Passive House Airflow Range	HRR %	Weight (lbs)
				SRE %	LRE %	SRE %	LRE %				
2X V E	23.4 x 12.4 x 28.8	27 – 108	85	80	74	80	76	Yes	27 – 67	80	59.5
3X V E	23.6 x 21.2 x 35.4	63 – 230	165	79	74	79	76	Yes	63 – 168	82	92.6
4X V E	23.6 x 21.2 x 35.4	108 – 341	200	77	71	76	74	No			94.8

Assumed conditions: Summer OA 90/75 °F, RA 75/63 °F; Winter OA 5/4 °F, RA 70/53 °F

Salda System Overview

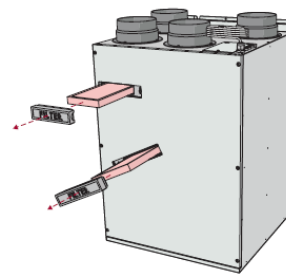
Indoor Residential Applications

Vertical Installation

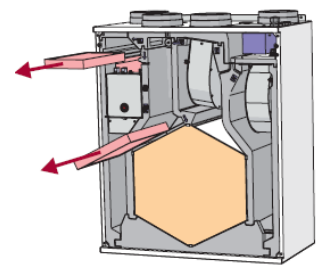


Salda 3X/4X V View from Access Side

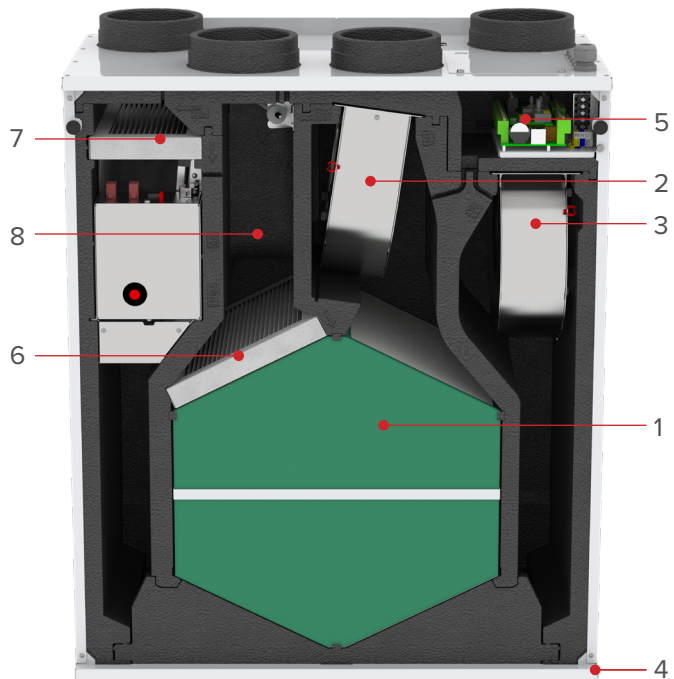
1. Counter-flow Heat Exchanger
2. Supply Air
3. Exhaust Fan
4. Drain Connection (HRV Only)
5. Controller
6. RA Filter (Panel/Pocket)
7. OA Filter (Panel/Pocket)
8. Bypass Damper



Filter Access



Filter Access



Salda 2X V View from Access Side

Description & Features

Salda residential H/ERVs provide high heat/total energy recovery and user-friendly controls. The compact overall size of the unit allows for installation in tight spaces.

Every Salda unit is tested for airtightness in order to assure exceptional quality of assembly.

Applications

Multi-unit residential buildings, Passive House applications and single family homes

Features

- EC fans with high-efficiency counter-flow heat exchanger
- Casing leakage (third party verified <1.2%)
- Smart and user-friendly handling via Wall mounted controller
- Certified by Passive House (Salda 2X and 3X)
- Expanded Polypropylene (EPP) with thermal and acoustic insulation ~1" (20-30 mm)

Top Class Casing

- Thermal and acoustic insulation
- Galvanized steel plate
- External side is powder-coated

Heat Exchanger

- Counter-flow heat exchanger (sensible only) with efficiency up to 91% (EU 1253/2104) / 85% (PHI)
- HRV: Counter-flow heat exchanger (sensible only) with efficiency up to 91% / 85% (PHI)
- ERV: Counter-flow heat exchanger (total recovery) with efficiency up to 85% / 84% (PHI)

Fans

- ECM type - SFP <0.66 W/CFM

Integral Bypass

- For economizer and/or defrost

Filters

- MERV13 (OA Filter) and MERV8 (RA Filter)

Controls

Pre/Post Electric Heat Control

0-10V

Demand-Control Ventilation Sensor Connections

CO₂, RH, Occupancy

Extensive Control Options

Passive House airflow modes (away, normal and boost)

Air Temperature Sensors and Damper Control

- Return, Supply, Outdoor
- Supply Temperature Sensor (Shipped Loose)
- Outdoor, Exhaust Damper Control

Control Options



CO₂ Sensor



RH Sensor



MB Gateway



Wall Controller



Touch Screen Wall Controller

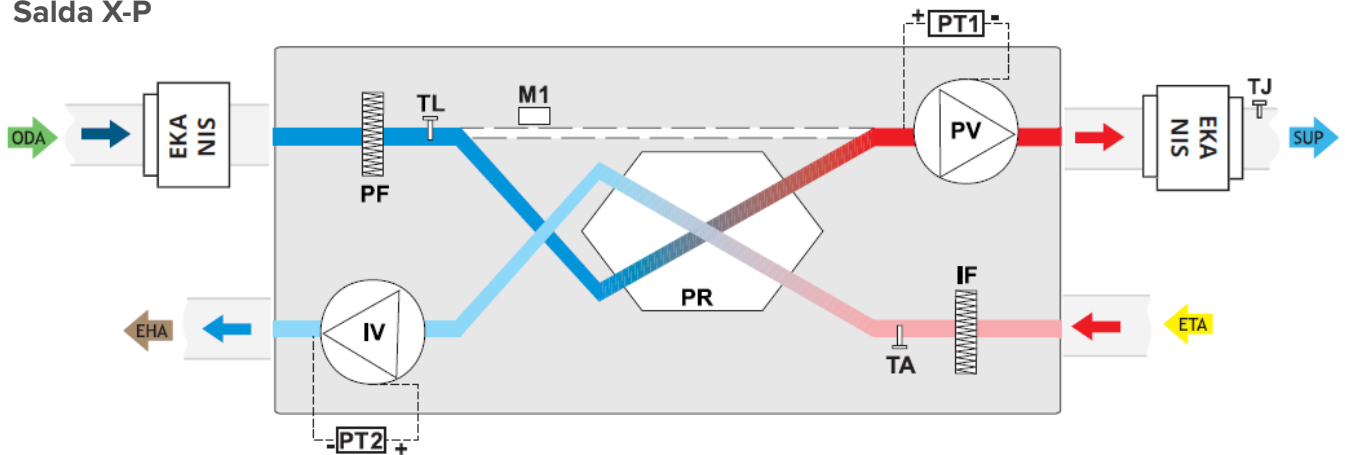


SALDA AIR App

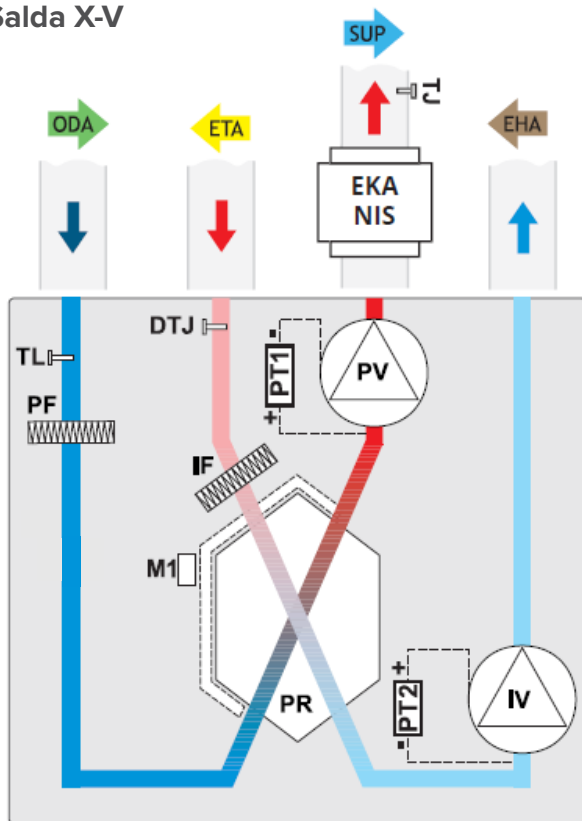
Adjust temperature, fan speed, and mode settings, and monitor the status of the air handling unit. Available on iOS and Android.

Controls Diagrams

Salda X-P



Salda X-V



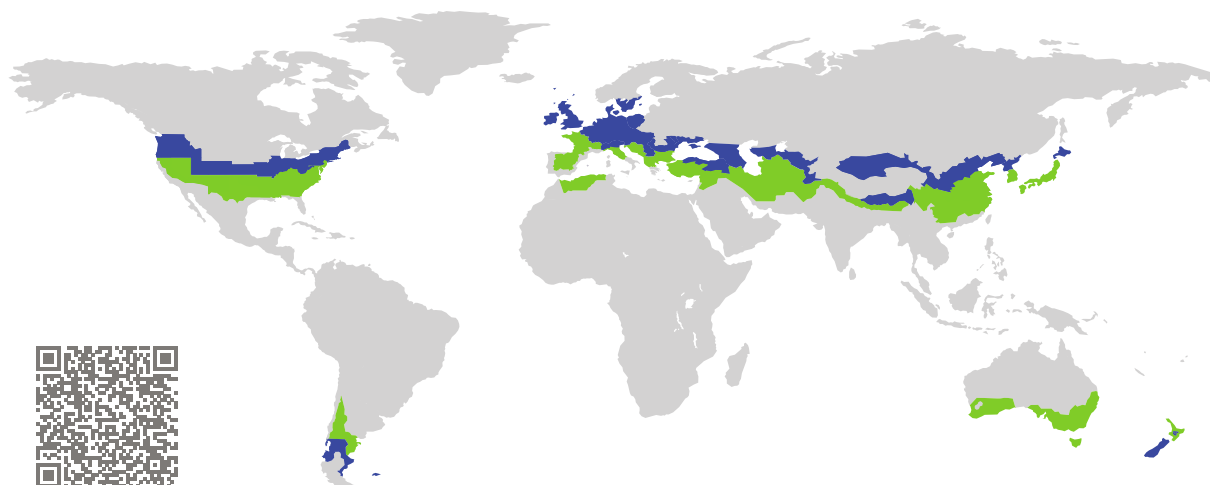
Label Legend

- IV** Exhaust Air Fan
- PV** Supply Air Fan
- PR** Plate Heat Exchanger
- PF** Filter for Outside Air
- IF** Filter for Return Air
- M1** Bypass Damper Actuator
- DTJ** Air Temperature and Humidity Sensor
- TL** Outdoor Air Temperature Sensor
- TA** Return Air Temperature Sensor
- TJ** Supply Air Temperature Sensor (Ship Loose)
- EKA** Duct Mounted Electric Heater (Optional)
- PT1** Supply Air Fan Pressure Transmitter
- PT2** Exhaust Air Fan Pressure Transmitter

CERTIFICATE

Certified Passive House Component

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
Lithuania
Product name: **SMARTY 2X P**

Specification: Airflow rate < 353 cfm
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate $\eta_{HR} \geq 75 \%$
Specific electric power $P_{el,spec} \leq 0.76 \text{ W/cfm}$
Leakage < 3 %
Comfort Supply air temperature $\geq 61,7^\circ\text{F}$ at outdoor air temperature of 14°F

Airflow range

33 – 82 cfmh

Heat recovery rate

$\eta_{HR} = 84 \%$

Specific electric power

$P_{el,spec} = 0.63 \text{ W/cfm}$

cool, temperate climate



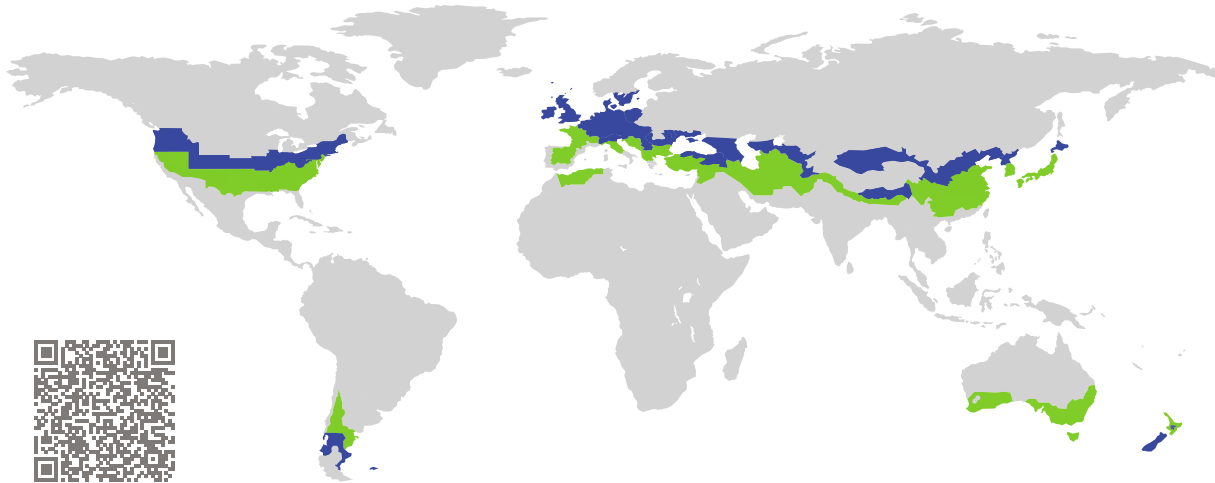
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Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
Lithuania
Product name: **SMARTY 2X V**

Specification: Airflow rate 353 cfm
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate $\eta_{HR} \geq 75 \%$
Specific electric power $P_{el,spec} \leq 0.76 \text{ cfm}$
Leakage $< 3 \%$
Comfort Supply air temperature $\geq 61.7^\circ\text{F}$ at outdoor air temperature of -14°F

Airflow range

27 – 68 cfm

Heat recovery rate

$\eta_{HR} = 82 \%$

Specific electric power

$P_{el,spec} = 0.63 \text{ W/cfm}$

cool, temperate climate



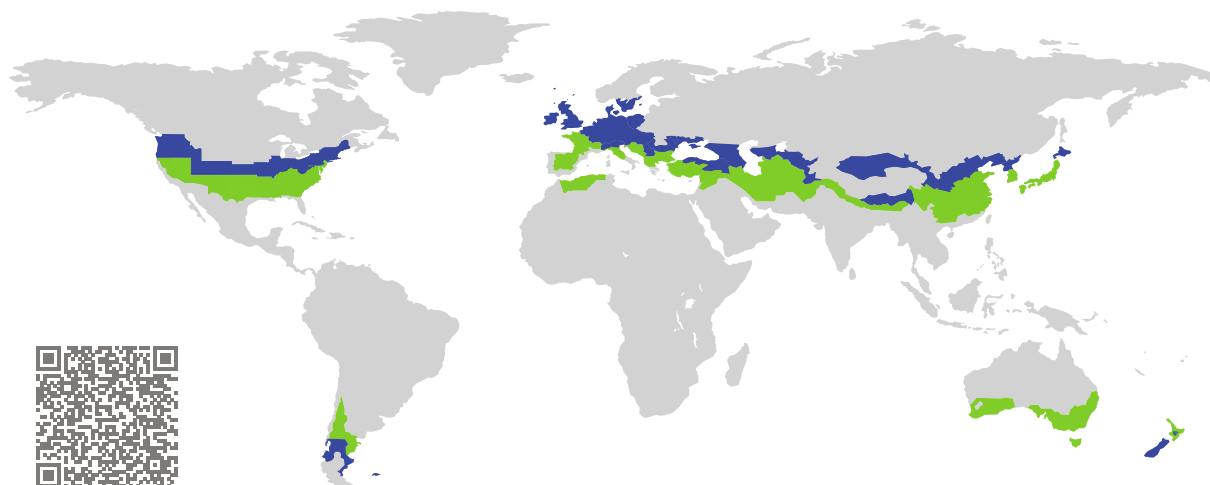
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Category: **Air handling unit with heat recovery**

Manufacturer: **SALDA UAB
Lithuania**

Product name: **SMARTY 3X P**

Specification: Airflow rate < 353 cfm

Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate η_{HR} $\geq 75 \%$

Specific electric power $P_{el,spec}$ $\leq 0.76 \text{ W/cfm}$

Leakage $< 3 \%$

Comfort Supply air temperature $\geq 61.7^\circ\text{F}$ at
outdoor air temperature of 14°F

Airflow range

61 - 146 cfm

Heat recovery rate

$\eta_{HR} = 85 \%$

Specific electric power

$P_{el,spec} = 0.53 \text{ W/cfm}$

cool, temperate climate



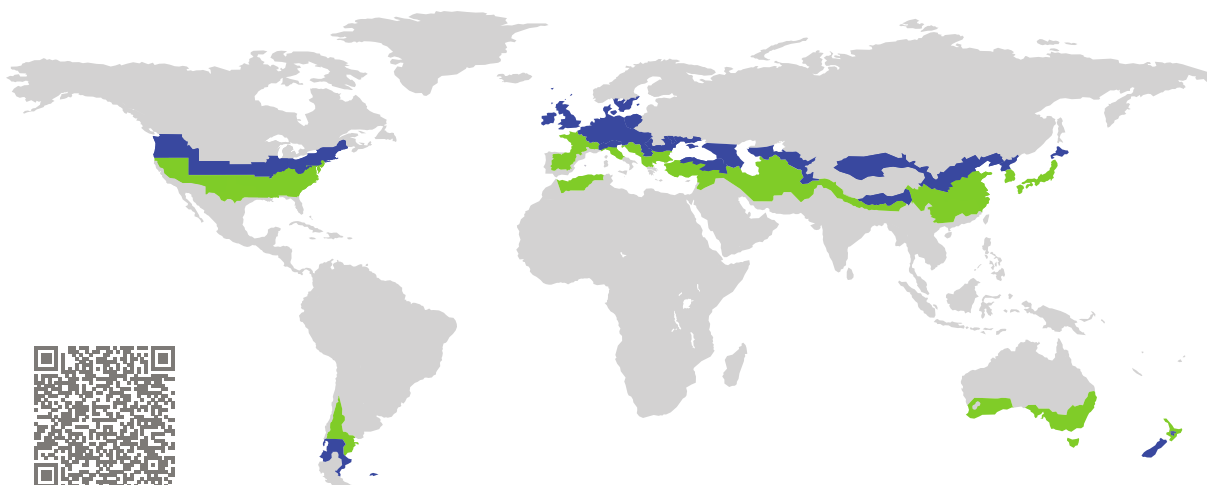
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Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
Lithuania
Product name: **SMARTY 3X V**

Specification: Airflow rate < 353 cfm
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

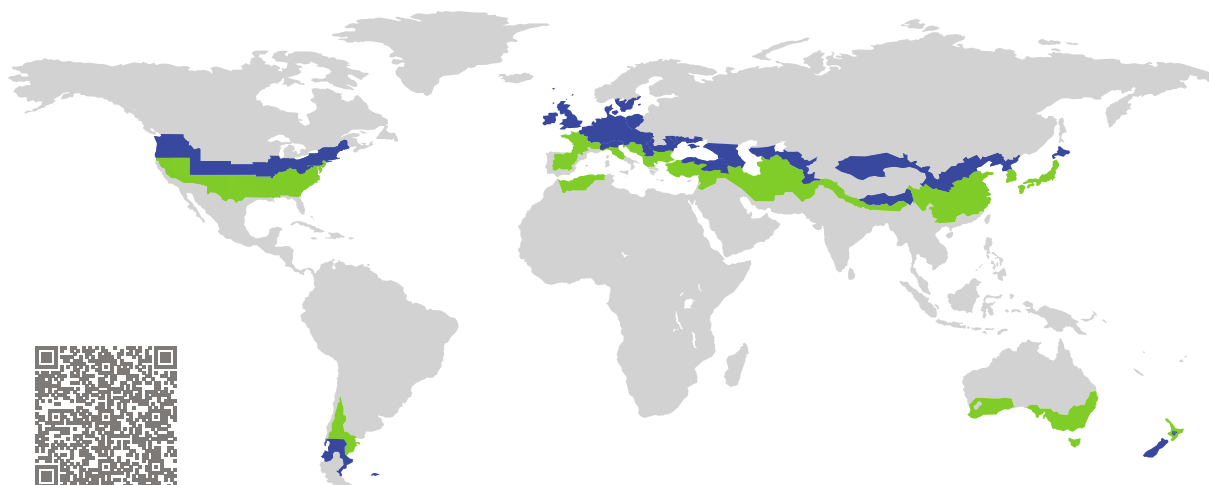
Heat recovery rate $\eta_{HR} \geq 75 \%$
Specific electric power $P_{el,spec} \leq 0.74 \text{ W/cfm}$
Leakage < 3 %
Comfort Supply air temperature $\geq 61.7^\circ\text{F}$ at outdoor air temperature of 14°F

Airflow range
63 - 160 cfm
Heat recovery rate
$\eta_{HR} = 81 \%$
Specific electric power
$P_{el,spec} = 0.51 \text{ W/cfm}$

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Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
Lithuania
Product name: **SMARTY 2X P 1.1 E**

Specification: Airflow rate < 600 m³/h
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate $\eta_{HR} \geq 75\%$
Specific electric power $P_{el,spec} \leq 0.45 \text{ Wh/m}^3$
Leakage < 3 %
Comfort Supply air temperature $\geq 16.5^\circ\text{C}$ at outdoor air temperature of -10°C

Airflow range
82–129 m ³ /h
Heat recovery rate
$\eta_{HR} = 82\%$
Specific electric power
$P_{el,spec} = 0.38 \text{ Wh/m}^3$
Humidity recovery
$\eta_x = 69\%$

cool, temperate climate



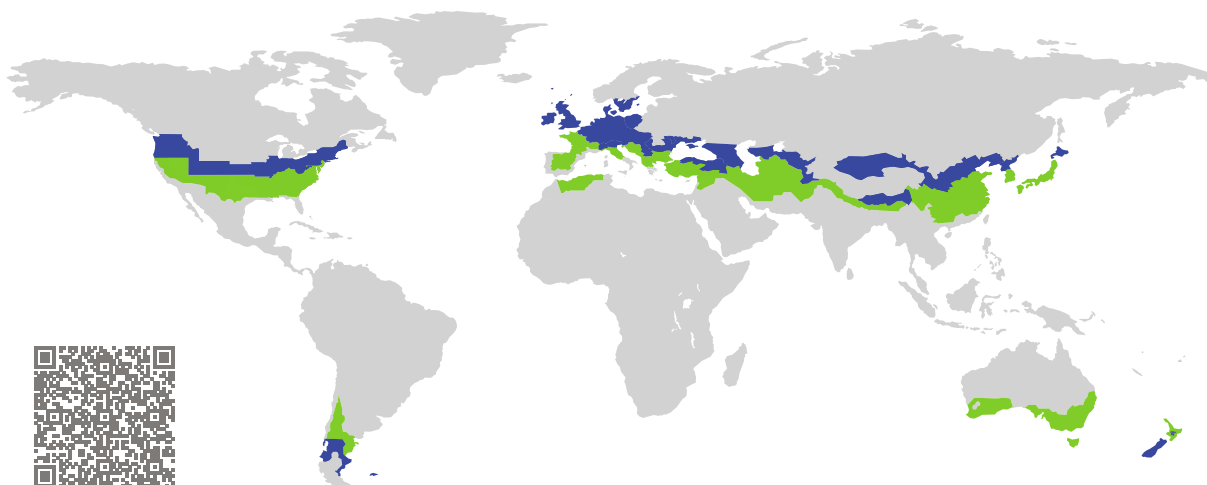
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Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
Lithuania
Product name: **SMARTY 2X V 1.1 E**

Specification: Airflow rate < 600 m³/h
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate $\eta_{HR} \geq 75\%$
Specific electric power $P_{el,spec} \leq 0.45 \text{ Wh/m}^3$
Leakage < 3 %
Comfort Supply air temperature $\geq 16.5^\circ\text{C}$ at outdoor air temperature of -10°C

Airflow range
46–115 m ³ /h
Heat recovery rate
$\eta_{HR} = 80\%$
Specific electric power
$P_{el,spec} = 0.39 \text{ Wh/m}^3$
Humidity recovery
$\eta_x = 73\%$

cool, temperate climate



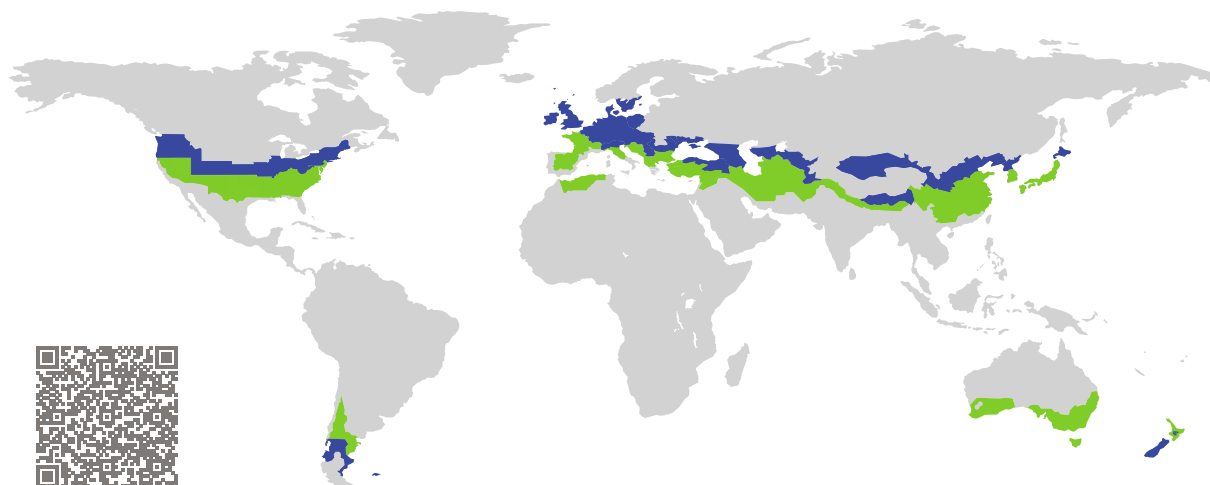
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Category: **Air handling unit with heat recovery**
Manufacturer: **SALDA UAB**
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Product name: **SMARTY 3X P 1.1 E**

Specification: Airflow rate < 600 m³/h
Heat exchanger: Recuperative

This certificate was awarded based on the product meeting the following main criteria

Heat recovery rate $\eta_{HR} \geq 75\%$
Specific electric power $P_{el,spec} \leq 0.45 \text{ Wh/m}^3$
Leakage < 3 %
Comfort Supply air temperature $\geq 16.5^\circ\text{C}$ at outdoor air temperature of -10°C

Airflow range

104–262 m³/h

Heat recovery rate

$\eta_{HR} = 84\%$

Specific electric power

$P_{el,spec} = 0.30 \text{ Wh/m}^3$

Humidity recovery

$\eta_x = 67\%$

cool, temperate climate



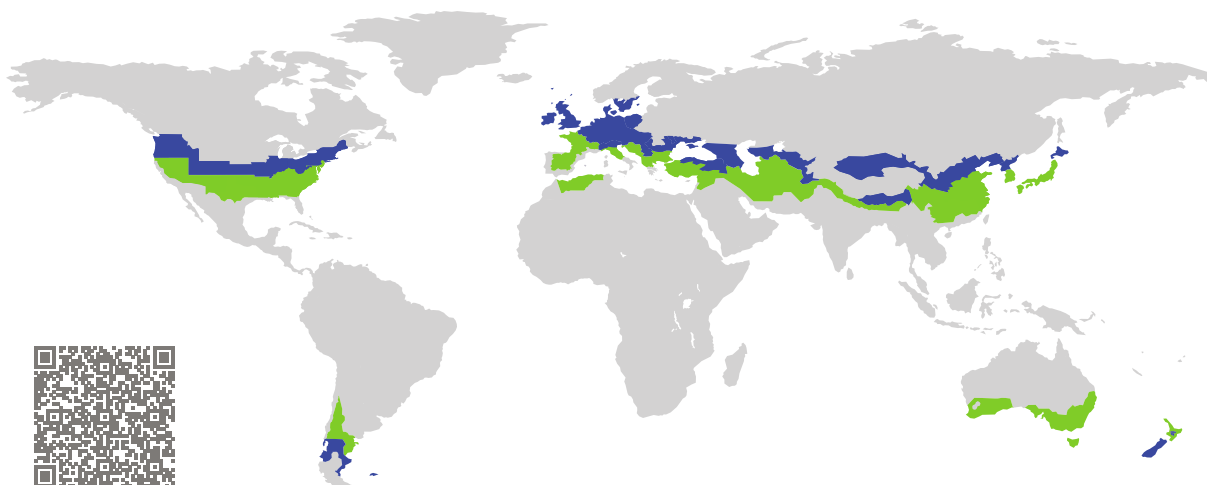
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Specific electric power $P_{el,spec} \leq 0.45 \text{ Wh/m}^3$
Leakage < 3 %
Comfort Supply air temperature $\geq 16.5^\circ\text{C}$ at outdoor air temperature of -10°C

Airflow range
107–286 m ³ /h
Heat recovery rate
$\eta_{HR} = 82\%$
Specific electric power
$P_{el,spec} = 0.30 \text{ Wh/m}^3$
Humidity recovery
$\eta_x = 77\%$

cool, temperate climate



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