

Certificate

Certified Passive House Component

For cool, temperate climates, valid until 31 December 2018

Passive House Institute
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Category: **Heat recovery unit**
Manufacturer: **Swegon Operations AB**
53523 Kvänum, Sweden
Product name: **GOLD RX Series**

This certificate was awarded based on the following criteria:

Thermal comfort	$\Theta_{\text{supply air}} \geq 16.5 \text{ °C}$ at $\theta_{\text{outdoor air}} = -10 \text{ °C}$
Effective heat recovery rate	$\eta_{\text{HR,eff}} \geq 75\%$
Electric power consumption	$P_{\text{el}} \leq 0.45 \text{ Wh/m}^3$
Performance number	≥ 10
Airtightness	Interior ¹⁾²⁾ and exterior air leakage rates less than 3% of nominal air flow rate
Balancing and adjustability	Air flow balancing possible: yes Automated air flow balancing: yes
Sound insulation	It is assumed that large ventilation units are installed in a separate building services room. Sound levels documented in the appendix of this certificate
Indoor air quality	Outdoor air filter F7 Extract air filter F5
Frostprotection	No frost protection strategy is required until falling under -15°C .

- 1) Carry-over from extract air to supply air side
- 2) Due to heat exchanger condition the risk of carry-over from extract air to supply air side exists. In order to avoid carry over into the supply air side, pressure conditions in the device must be set as given by the manufacturer.

Further information can be found in the appendix of this certificate.

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Certified for air flow rates of (total series)
540 – 9000 m³/h

Requirements non residential buildings (Therewith device also applicable for residential buildings)

$\eta_{\text{HR,eff}} \geq 84\%$

Electric power consumption
0.45 Wh/m³ ³⁾



CERTIFIED COMPONENT

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Heat recovery rate and specific power consumption depending on the individual unit size

Unit size	ID	Airflow range		Max external pressure	Electric power consumption	$\eta_{HR,eff}$
		Min	Max			
		m ³ /h	m ³ /h	Pa	Wh/m ³	%
04	0558vI03	540	1000	222	0,45	85
05	0559vI03	540	1000	222	0,45	85
07	0560vI03	540	1820	265	0,45	86
08	0561vI03	1080	1780	259	0,45	84
11	0562vI03	1080	2465	281	0,45	85
12	0563vI03	1800	2600	281	0,45	84
14	0564vI03	1800	4285	316	0,45	84
20	0565vI03	2520	4000	308	0,44	84
25	0566vI03	2520	5500	328	0,45	84
30	0567vI03	3600	4000	308	0,44	84
35	0568vI03	3600	7500	347	0,45	85
50	0569vI03	5400	9000	359	0,45	85

1) At the lower limit of the air flow range the nominal value of 0.45 Wh/m³ might be exceeded.

The efficiency values electric power consumption and heat recovery rate have been determined under standard external pressure differences as shown in the table. The project specific calculation with the manufacturer's software based on real project data (especially respecting the external pressure difference) could differ from the values given in the table.