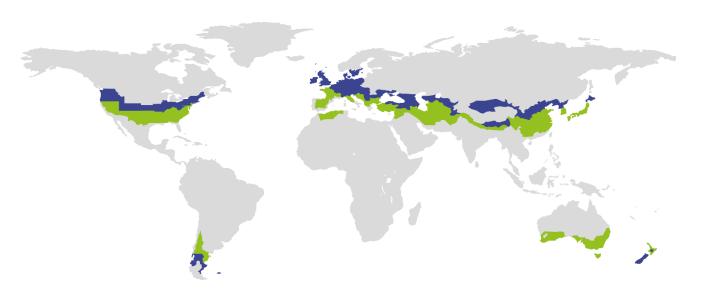
# **CERTIFICATE**

Certified Passive House Component Valid until 31st December 2021 Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: Air handling unit with heat recovery

Manufacturer: Swegon Operations AB

**Sweden** 

Product name: Ventilation unit series

**GOLD RX (Aluminium Rotor)** 

Specification: Airflow rate > 600 m<sup>3</sup>/h

Heat exchanger: Regenerative

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

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

Specific electric power  $P_{\text{el,spec}} \leq 0.45 \text{ Wh/m}^3$ Leakage  $< 3 \%^{-1/2}$ 

Performance number ≥ 10

Comfort Supply air temperature ≥ 16.5 °C

at outdoor air temperature of -10 °C

## Airflow range

540-9000 m<sup>3</sup>/h

at an external pressure of

222-359 Pa

Requirements non-residential buildings (Therefore also applicable for residential buildings)

#### Heat recovery rate

 $\eta_{HR} \ge 84 \%$ 

Specific electric power

Pel,spec 0.45 Wh/m<sup>3</sup> 3)



<sup>1)</sup> Carry-over from extract to supply air side.

<sup>&</sup>lt;sup>2)</sup> 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.

<sup>3)</sup> At the lower airflow rate might be exceeded.

### **Swegon Operations AB**

Box 300, 535 23 Kvänum, Sweden

Q.		ts	Airflow range		al Ire	. <u>0</u> 0 =	iry
Component ID	Unit model	Testing requirements	Min m3/b	Max	External pressure	Specific spe	Heat recovery
ŏ	Ď	Te o	m³/h	m³/h	Pa	Wh/m³	%
0558vl03	04	Non-residential	540	1000	222	0.45	85
0559vl03	05	Non-residential	540	1000	222	0.45	85
0560vl03	07	Non-residential	540	1820	265	0.45	86
0561vl03	80	Non-residential	1080	1780	259	0.45	84
0562vl03	11	Non-residential	1080	2465	281	0.45	85
0563vl03	12	Non-residential	1800	2600	281	0.45	84
0564vl03	14	Non-residential	1800	4285	316	0.45	84
0565vl03	20	Non-residential	2520	4000	308	0.44	84
0566vl03	25	Non-residential	2520	5500	328	0.45	84
0567vl03	30	Non-residential	3600	4000	308	0.44	84
0568vl03	35	Non-residential	3600	7500	347	0.45	85
0569vl03	50	Non-residential	5400	9000	359	0.45	85

Table 1: Certified values for each unit model.

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 1.

<sup>&</sup>lt;sup>1)</sup> At the lower limit of the air flow range the nominal value of 0.45 Wh/m³ might be exceeded.