

Technical Sheet

Heat recovery appliance Renovent Excellent 300 (Plus)



The Brink Renovent Excellent is a ventilation unit with heat recovery with an efficiency of 95%, a maximum ventilation capacity of 300 or 400 m³/h and low-energy fans. Features Renovent Excellent:

- steplessly adjustable air flow rates through a control panel;
- filter indication on the appliance and the possibility for filter indication on the multiple switch;
- a completely new intelligent frost protection system which ensures that also at low outdoor temperatures the appliance's performance remains optimal and that, if necessary, it activates the standard preheater.
- low sound level
- comes as standard with automatic bypass valve
- constant flow control
- low energy consumption
- high efficiency

Renovent Excellent 300/400 is available in two types:

- **Renovent Excellent™**
- **Renovent Excellent Plus™**

Compared to the Renovent Excellent, the Renovent Excellent Plus has a more extensive control board which increases the connection options.

These installation instruction describe both the standard Renovent Excellent and the Renovent Excellent Plus.

The Renovent Excellent (Plus) is available in the left-handed or right-handed version. A left-handed version has the filters on the left behind the filter door; a right-handed version has the filters on the right behind the filtered door. The position of the air ducts differs for these two versions! For the correct position of the connection ducts and dimensions see page 5.


When ordering an appliance always state the correct type; subsequent conversion to a different version is not possible.

The Renovent Excellent comes ready to plug in with a 230 V mains plug and a connection for a low-voltage multiple switch on the outside of the appliance.

Note: When replacing a Renovent Large by a Renovent Excellent, do realise that the positions of the ducts "From dwelling" and "From atmosphere" are different! (only for type 4/0 & 3/1) Carefully check the position of these ducts on the basis of the connection drawings on page 5.

Version types Renovent Excellent 300/400				
Type	Version L of R	Position air ducts	Power supply	Type code
Renovent Excellent	Left-handed version	4 top connections	Power plug	4/0 L
		2 top connections & 2 bottom connections	Power plug	2/2 L
		3 top connections & 1 bottom connection	Power plug	3/1 L
	Right-hand version	4 top connections	Power plug	4/0 R
		2 top connections & 2 bottom connections	Power plug	2/2 R
		3 top connections & 1 bottom connection	Power plug	3/1 R
Renovent Excellent Plus	Left-handed version	4 top connections	Power plug	4/0 L+
		2 top connections & 2 bottom connections	Power plug	2/2 L+
		3 top connections & 1 bottom connection	Power plug	3/1 L+
	Right-hand version	4 top connections	Power plug	4/0 R+
		2 top connections & 2 bottom connections	Power plug	2/2 R+
		3 top connections & 1 bottom connection	Power plug	3/1 R+

Technical information

	Renovent Excellent 300			
Supply voltage [V/Hz]	230/50			
Protection degree	IP30			
Dimensions (w x h x d) [mm]	675 x 765 x 564			
Duct diameter [mm]	Ø150/ Ø160			
External diameter condensate discharge [mm]	Ø32			
Weight [kg]	38			
Filter class	G3 (F7 optional for supply)			
Fan setting (factory setting)		1	2	3
Ventilation capacity [m³/h]	50	100	150	225
Permissible resistance ducts system [Pa]	3.76	11 - 28	26 - 66	56 - 142
Rated power (excl. preheater)[W]	9.0 - 9.2	13.7 - 15.2	22.0 - 29.2	46.8 - 66.2
Rated current (excl. preheater)[AA]	0.104 - 0.107	0.150 - 0.161	0.214 - 0.274	0.403 - 0.578
Max. rated current (with preheater switched on) [A]	6			
Cos φ	0,368 - 0.374	0.391 - 0.416	0.447 - 0.463	0.505

Packaging

Packaging unit per pallet
2

Warranty period

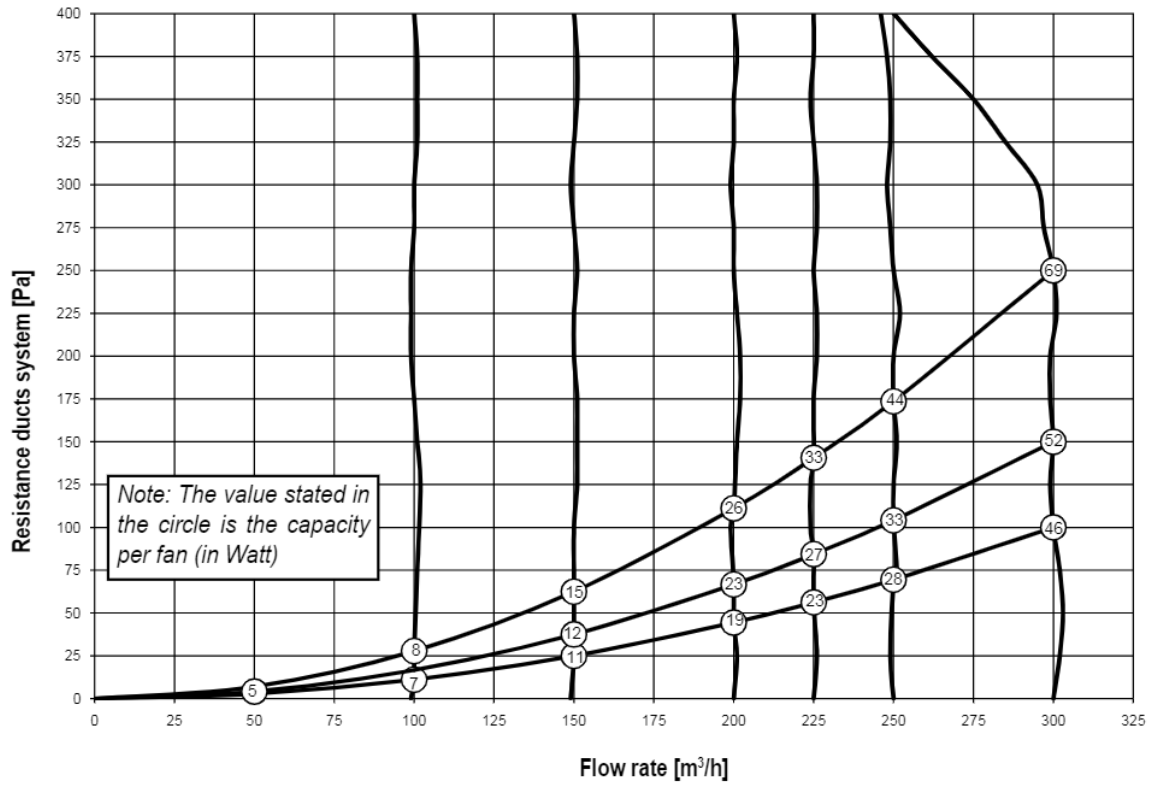
2 years on parts and 5 years on the heat exchanger.

Sound power

Sound power Excellent 300									
Ventilation capacity [m³/h]		90		150		210		300	
Sound power level L _w (A)	Static pressure [Pa]	50	100	50	100	50	100	50	100
	Housing emission [dB(A)]	30	33	38	38	44	46	50	52
	Duct "from dwelling" [dB(A)]	33	34	39	42	45	46	54	54
	Duct "to dwelling" [dB(A)]	44	47	52	55	60	60	67	67

In practice, the value may deviate 1 dB(A) as a result of measuring tolerances

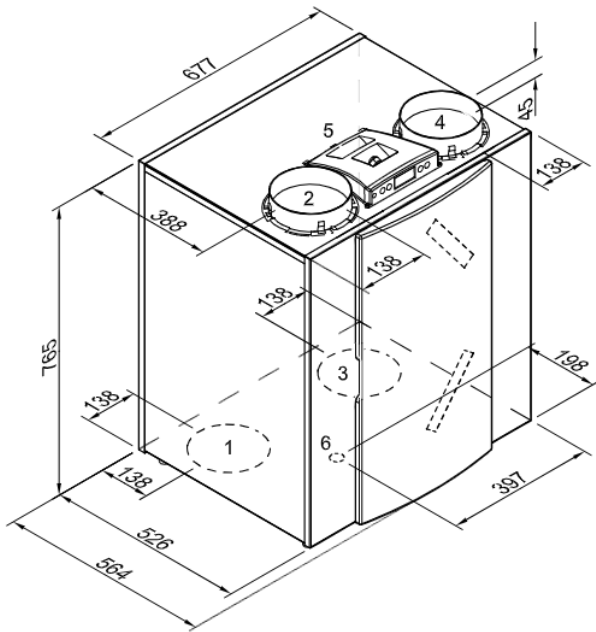
Fan graphs



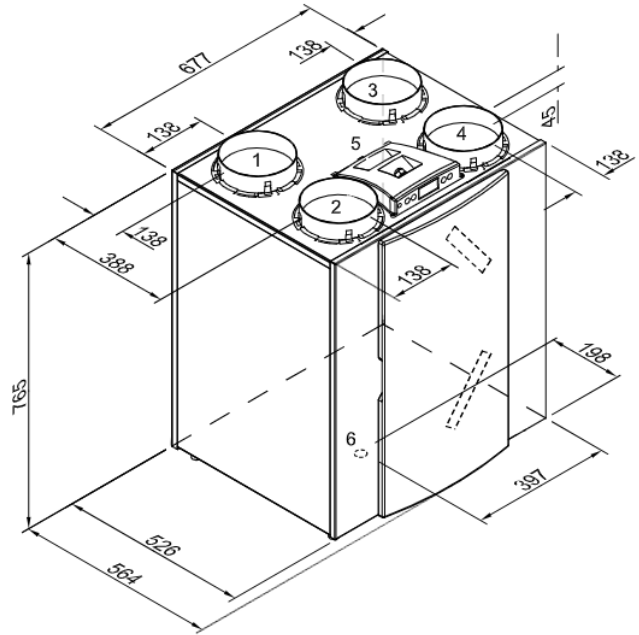
Fan graph Renovent Excellent 300

Connections and dimensions Renovent Excellent 300/400

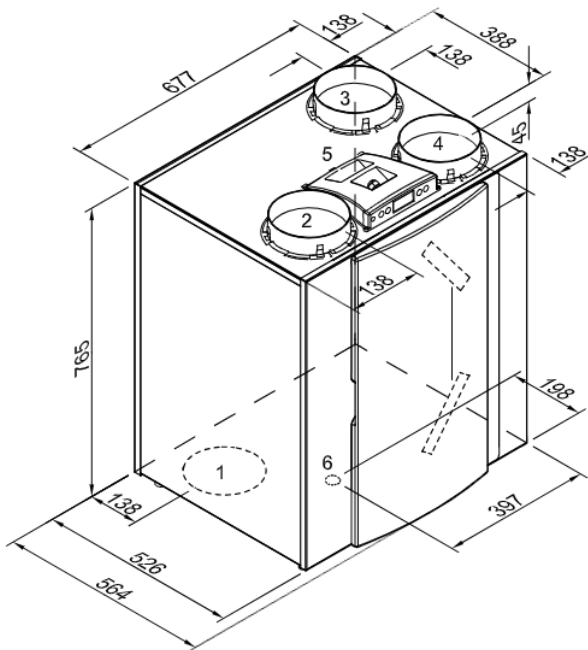
Renovent Excellent right-handed version







Renovent Excellent Right-handed 2/2



Renovent Excellent Right-handed 4/0



Renovent Excellent Right-handed 3/1

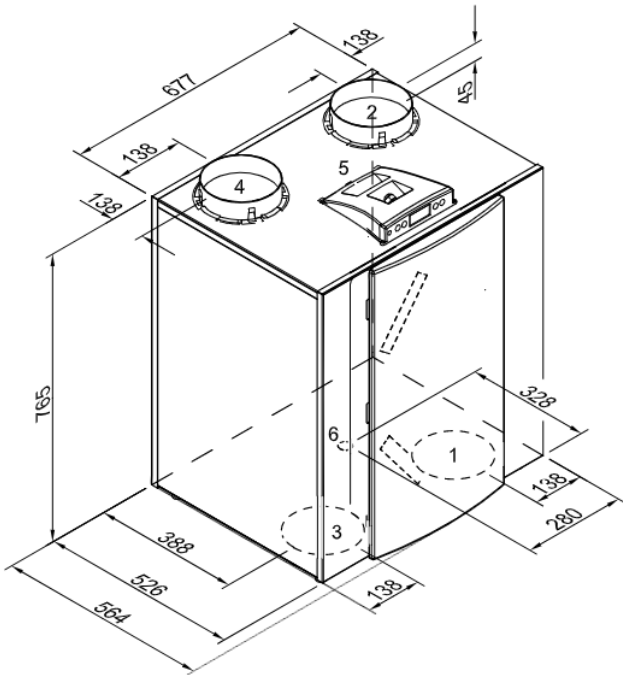
- 1 = To dwelling 
- 2 = To atmosphere 
- 3 = From dwelling 
- 4 = From atmosphere 

5 = Electric connections

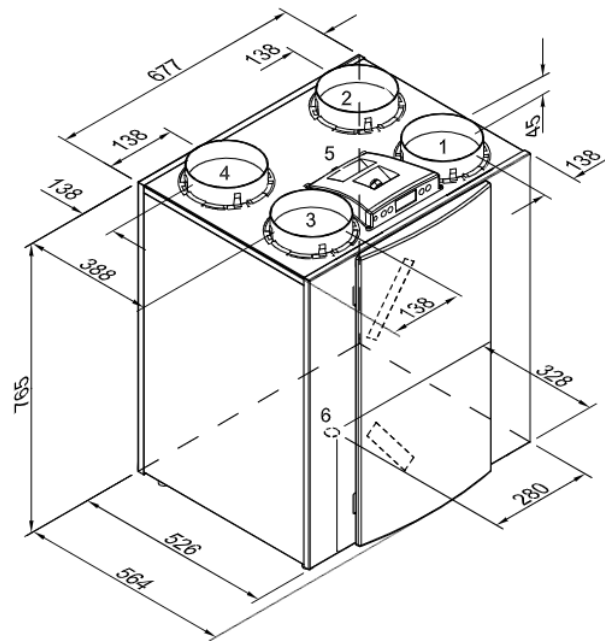
6 = Connection condensate discharge

7 = Wall mounting bracket (note the correct position of the rubber strip, washers and caps)

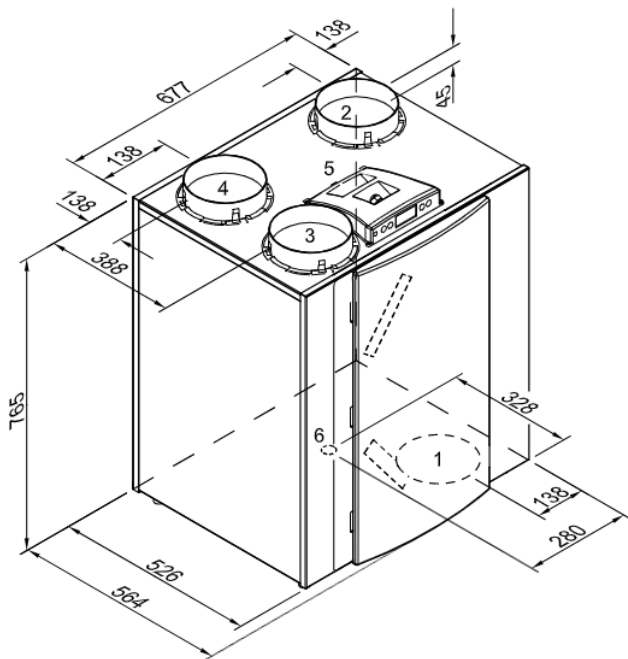
Renovent Excellent left-handed version



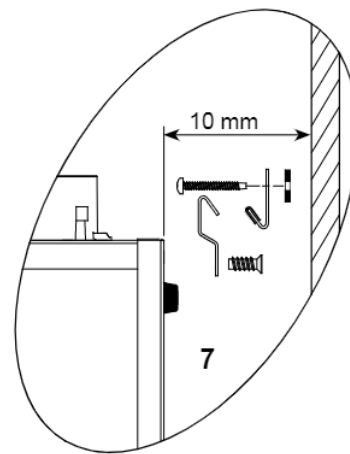
Renovent Excellent left-handed 2/2



Renovent Excellent left-handed 4/0



Renovent Excellent left-handed 3/1



Mounting wall suspension kit

Exploded view

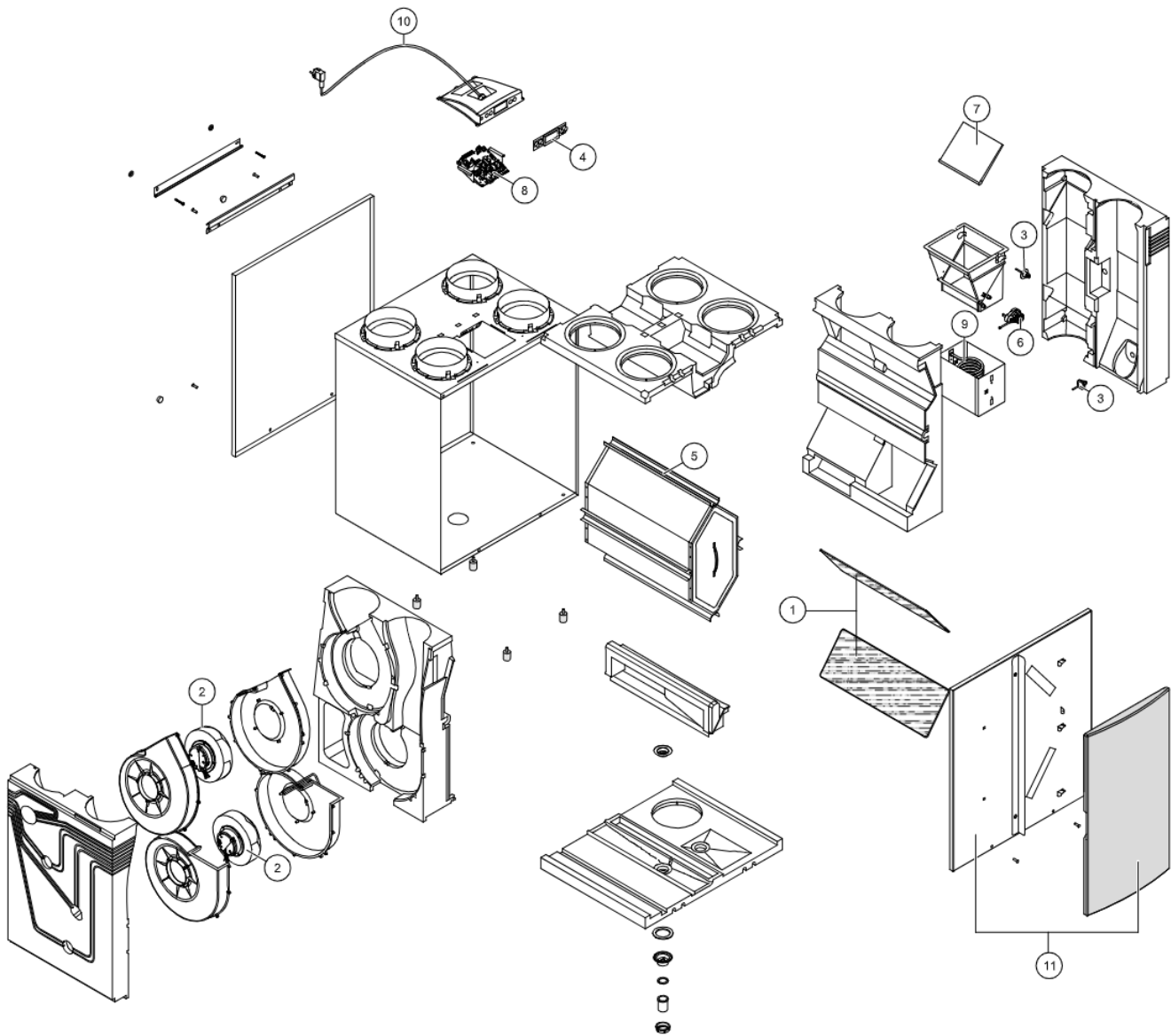
When ordering parts, in addition to the article code number (see exploded view), please state the type of the heat recovery appliance, the serial number, the year of production and the name of the part:

N. B.:

Appliance type, serial number and year of production are stated on the identification plate on the top of the appliance.

Example	
Appliance type	: Renovent Excellent 4/0 R
Serial number	: 420020113201
Year of production	: 2013
Part	: Fan
Article code	: 531774
Qty	: 1

Service parts



Service parts

No.	Article description	Article code
1	Filter kit 2x G3 filter (standard version)	531770
2	Fan Excellent 300 (1 pcs)	532003
	Fan Excellent 4300 (1 pcs)	531774
3	Temperature sensor	531775
4	Control panel	531776
5	Heat exchanger Excellent 300	531840
	Heat exchanger Excellent 400	531777
6	Motor bypass valve	531778
7	Bypass valve	531779
8	Control board (Plus version) When replacing, note the correct dip switch settings; see §8.1	531780
9	Heating coil 1000 W preheater	531781
10	Cable with power plug 230 volt with display cover*	531782
11	Filter door left	531934
	Filter door right	531935

* The mains cable has a print connector.
 When replacing it, always order a replacement mains cable Brink
To avoid dangerous situations, a damaged mains should only be replaced by a qualified person!

EN 308/EN 13141-7: Renovent Excellent 300

TNO innovation
for life

Technical Sciences
Leen van Vlietweg 501
7324 DT Apeldoorn
Postbus 242
7300 AH Apeldoorn
www.tno.nl
T +31 85 858 22 12
F +31 85 858 22 45
info@tno.nl

Declaration of Conformity according to EN 13141-7:2004 / EN308

TNO 2012 M10026
Determination of the energetic efficiency of the energy recovery appliance
"Renovent Excellent 300"
Test report in accordance with EN 13141-7:2004 / EN308

Date: February 2012
Author: H.A.J. Hermans
Sponsor: Brink Climate Systems B.V.
R.D. Bijgevoel 3
7951 DA Staphorst
Project number: 054-00225
Keywords: heat recovery efficiency

All rights reserved.
No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any other means, without the prior written consent of TNO.
In case the report has been checked on methodology, the legal and obligations of contracting parties are subject to the Dutch Terms and Conditions for contractors of TNO, or the relevant agreement concluded between the contracting parties. Substituting the report for inspection by parties who have a direct interest is permitted.
© 2012 TNO

NEN 5138: Renovent Excellent 300

TNO innovation
for life

Leen van Vlietweg 501
7324 DT Apeldoorn
Postbus 242
7300 AH Apeldoorn
www.tno.nl
T +31 85 858 22 12
F +31 85 858 22 45
info@tno.nl

Verklaring conform norm
TNO 2012 M10008
Bepaling van het energetische rendement van het warmterugwinapparaat "Renovent Excellent 300"
Meebrief volgens NEN 5138-2004

Datum: Februari 2012
Auteur(s): H.A.J. Hermans
Opdrachtgever: Brink Climate Systems B.V.
R.D. Bijgevoel 3
7951 DA Staphorst
Projectnummer: 054-00225
Sponsornummer: 050-APD-2010-00226
Taalcode(n): warmterugwinning
intermediair

Alle rechten voorbehouden.
Niets uit deze uitgave mag worden verspreid of openbaar gemaakt, ook indien van nature, of op andere wijze, dan door middel van elektronische of andere technische of andere middelen, zonder voorafgaande toestemming van TNO.
Indien dit rapport in opdracht werd uitgevoerd, wordt voor de rechten en verplichtingen van opdrachtgever en opdrachtnemer verwezen naar de algemene voorwaarden voor opdrachten van TNO, dan wel de betreffende overeenkomst die partijen gesloten overeenkomst.
Het is niet toegestaan het in dit rapport aan direct belanghebbenden te verspreiden.
© 2012 TNO

Passive House Certificate: Renovent Excellent 300

Certificate
Certified Passive House Component
For cool, temperate climates, valid until 31 December 2013

Passive House Institute
Dr. Wolfgang Feist
64263 Darmstadt
GERMANY

Category: Heat recovery unit
Manufacturer: Brink Climate Systems B.V.
7951 DA Staphorst, NETHERLANDS
Product name: Renovent Excellent 300 40 (31) (Plus)

This certificate was awarded based on the following criteria:

Thermal conduct	$\lambda_{\text{total}} \text{ at } +16.6^\circ\text{C}$ of $\lambda_{\text{total}} \text{ at } +10^\circ\text{C}$
Effective heat recovery rate	$\eta_{\text{eff}} = 75\%$
Electric power consumption	$P_{\text{el}} = 0.26 \text{ Wh/m}^3$
Airtightness	Interior and exterior air leakage rates less than 3 % of nominal air flow rate
Balancing and adjustability	Airflow balancing possible: yes Automated air flow balancing: yes
Sound insulation	Sound pressure level $L_{p, \text{A}}$ (15 dB(A)) based on 1 m^2 equivalent absorption area not met. Here $L_{p, \text{A}} = 47 \text{ dB(A)}$ Unit should be installed so that it is acoustically separated from living areas.
Indoor air quality	Outdoor air filter at least F7 Extract air filter at least G4
Frost protection	Frost protection for the heat exchanger with continuous fresh air supply down to $t_{\text{outside}} = -15^\circ\text{C}$ (1)

(1) Only with additional anti freezing protection.

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

www.passivehouse.com 0532960

CERTIFIED COMPONENT
Passive House Institute

Conformiteitsverklaring Renovent Excellent 300

DECLARATION OF CONFORMITY

Manufacturers: Brink Climate Systems B.V.
Address: R.D. Bijgevoel 3
7951 DA Staphorst, The Netherlands
Product: Heat recovery unit type:
Renovent Excellent 300/400
Renovent Excellent 300/400 Plus

The product described above complies with the following directives:
2006/95/EC (low voltage directive)
2004/108/EC (EMC directive)
RoHS 2002/95/EC (substances directive)

The product bears the CE label:

CE

Staphorst, 24-02-11

W. Hijzen
W. Hijzen
managing director

42 Renovent Excellent

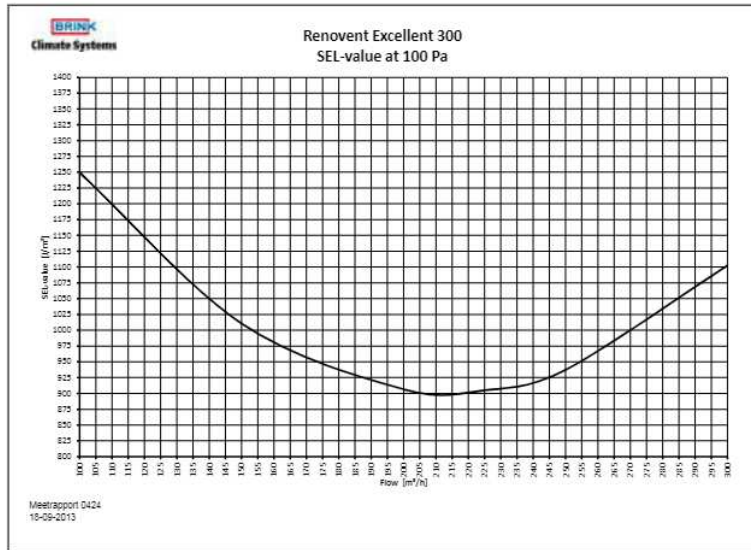
NF 205: Renovent Excellent 300



Ü-Zeichen: Renovent Excellent 300



Renovent Excellent 300 - SEL-waarde 100 Pa



Modifications reserved

Brink Climate Systems B. V. continuously strives after improvement of products and reserves the right to change the specifications without prior notice.



BRINK CLIMATE SYSTEMS B.V.

P.O. Box 11 7950 AA Staphorst
Tel. +31 (0) 522 46 99 44
Fax +31 (0) 522 46 94 00
info@brinkclimatesystems.nl
www.brinkclimatesystems.nl