

GEU 590 AC

Description

GEU 590 AC is a heat recovery ventilation unit equipped with counter-current heat exchanger, supply and extract fan, F7 supply filter, G4 extract filter, Optima 250 automatics and control panel.

GEU 590 AC can be delivered with the following:

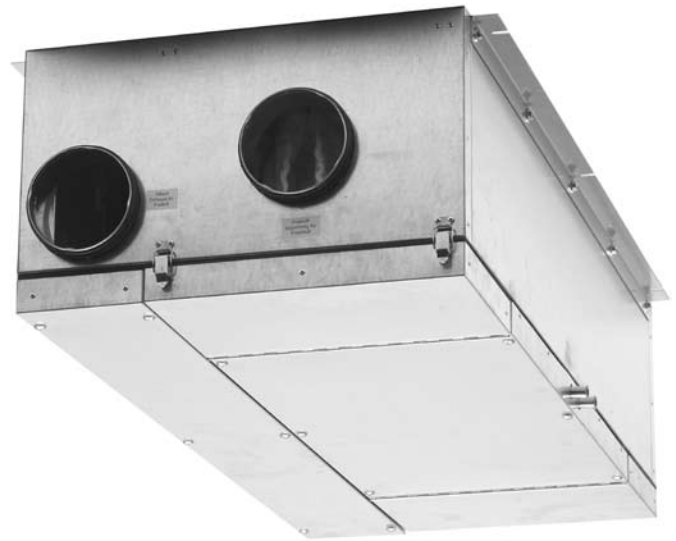
- Water- or electrical heating surface for Ø160 mm duct
- Fresh air damper with spring return motor for Ø160 mm duct
- Fresh air damper with motor for Ø160 mm duct
- Exhaust damper with motor for Ø160 mm duct
- Thermostat valve or motor valve

Suitability

GEU 590 AC is used for domestic ventilation systems where balanced ventilation and heat recovery is needed.

Types

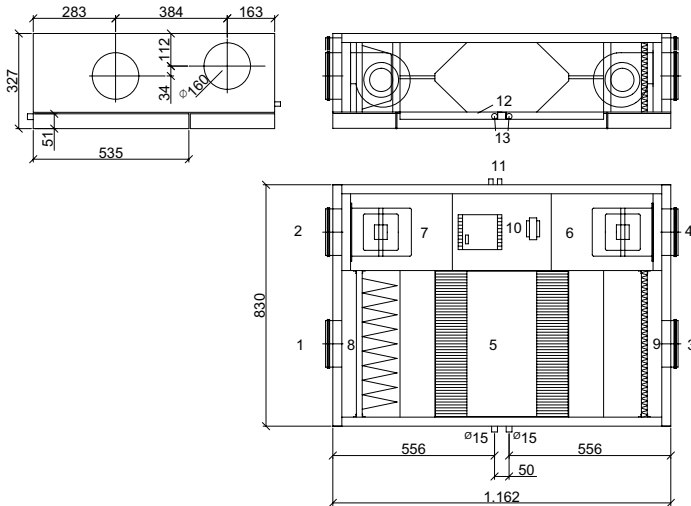
It is possible to obtain the GEU 590 AC in right- hand left-hand version.



Dimensions

GEU 590 AC

Dimensions in mm

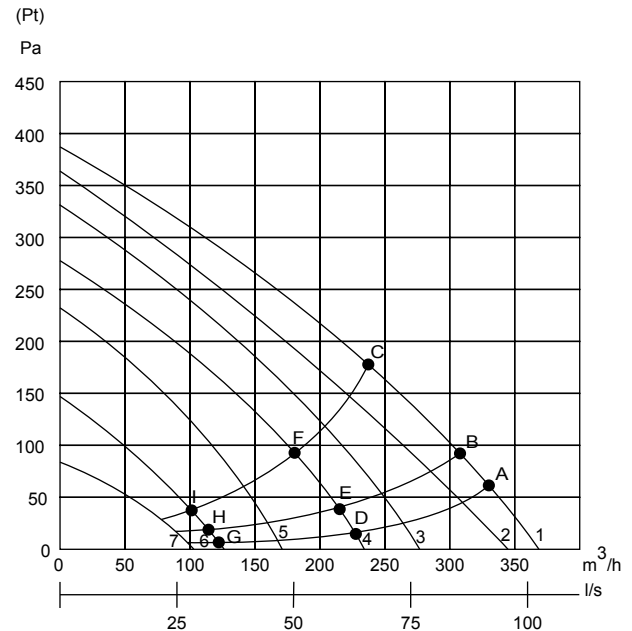


- 1: Fresh air (outdoor air)
- 2: Exhaust
- 3: Extract
- 4: Supply
- 5: Counter current heat exchanger
- 6: Supply fan

- 7: Extract fan
- 8: Fresh air filter F7
- 9: Extract filter G4
- 10: Electrical box
- 11: Wire passage
- 12: Condensation tub
- 13: Condensation drain

Output

The performance diagram shows the pressure (P_t) available for the duct system on both extract and supply. Pressure loss in the unit has been deducted.

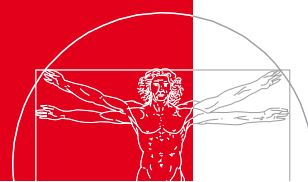


Curves: 1: 100% 2: 75% 3: 60% 4: 50%
 5: 40% 6: 30% 7: 20%

Power input (per ventilator)

	A	B	C	D	E	F	G	H	I
Watt	117	116	111	68	68	66	38	38	37

GEU 590 AC



Technical data

Power supply

1 x 230 V + N + PE, 10 A, 50 Hz

Fans

D2E 133(AC)

Condenser

4 μ F

Isolation class

B

Protection class

IP 44

Motor capacity (Max. per motor)

Rpm

1700

Current input (Max. per motor)

175W

Power consumption (Max. per motor)

0.77A

Individually, the fans may be set to 3 different speeds.

Construction

Main dimensions:

(h x l x d) ex. connecting pieces

327 x 1162 x 830 mm

Cabinet:

Fully closed hot galvanised plate with 30 mm Isolation.

Duct connection:

Ø160 mm with rubber ring seal

Front:

Cover with Ø6 mm screws and snap bolts on the filter cover

Center current heat exchanger:

Seawater resistant aluminium

Condensation tub:

Stainless steel

Condensation drain:

Ø15 mm stainless steel

Filters:

Supply:

F7 filter

Extract:

G4 filter

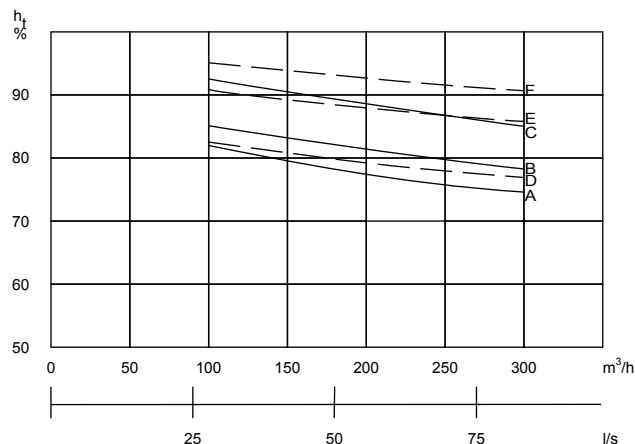
Weight:

55 kg

Automatics

GE 590 AC is delivered with Optima 250 DESIGN automatics and display.

Temperature efficiency



		A	B	C	D	E	F
Exhaust	°C	20	20	20	20	20	20
Relative humidity	%	30	50	70	30	50	70
Fresh air	°C	4	4	4	-12	-12	-12

Icing up of the heat exchanger at low outdoor temperatures has not been taken into account.

Sound data

Measuring point	1 m in front of the unit			Extract duct			Supply duct			
	Airflow	1	2	3	1	2	3	1	2	3
		Lo dB			Lwu dB			Lwi dB		
63 Hz	48	55	57	78	84	89	89	92	92	
125 Hz	41	46	51	65	75	79	83	90	91	
250 Hz	31	34	39	61	71	78	76	85	87	
500 Hz	26	28	32	53	61	67	70	78	83	
1000 Hz	22	23	25	43	50	56	62	72	75	
2000 Hz	21	21	24	34	44	50	59	68	72	
4000 Hz	-	-	21	23	37	45	50	63	68	
8000 Hz	-	-	-	-	25	34	43	55	63	
Average		Lo dB(A)			Lwu dB(A)			Lwi dB(A)		
		30	34	38	56	65	72	72	80	84

1: Measured at 30% and an airflow of 125 m³/h

2: Measured at 50% and an airflow of 230 m³/h

3: Measured at 100% and an airflow of 370 m³/h