komfovent®

DOMEKT

Smart
Home Comfort

Range review

Energy saving
- Modern energy efficient EC fans.
- High efficiency rotary exchangers.
- High efficiency counterflow plate heat exchangers.
- High filtration class and low resistance air filters.

Design
- Minimalist design.
- Airtight doors. Locks without thermal bridges. Ergonomic handles.
- Plastic duct connections ensure better tightness and reduce thermal bridges.
- Additional duct connection is intended for the short-term removal of polluted air from the stove or sanitary rooms.

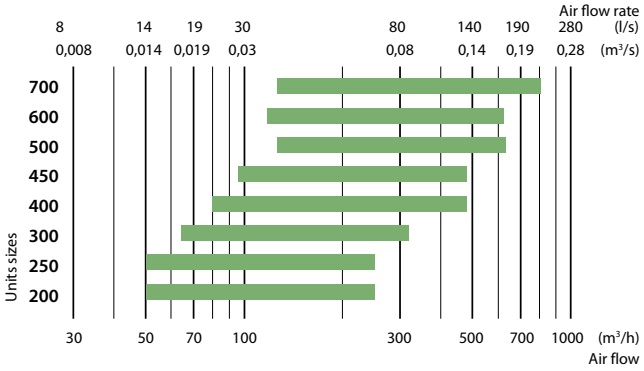
Smart control
- "Komfovent Control" app.
- Ability to control via a web browser.
- Integration into a smart home management system.
- Demand control ventilation according to the air quality parameters by connecting additional sensors.

Casing technology EPP (expanded polypropylene)
- No thermal bridges, no condensation.
- Improved thermal insulation.
- Better aerodynamics.
- Reduced weight.
- Hydrophobic.
- Applied to DOMEKT R 300 V, CF 200 F, CF 200 V, CF 300 V.

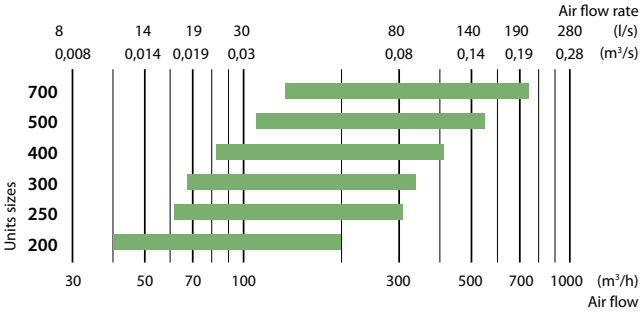
Reliability and durability
- The housing of the units is made of galvanized steel with a powder coated finish.
- Fan motors are protected from humidity and dust, and equipped with long-life bearings.

Low noise level
- Perfectly balanced fans.
- All of the unit's components are aerodynamically matched.
- The casing is insulated with mineral wool and special composite materials.

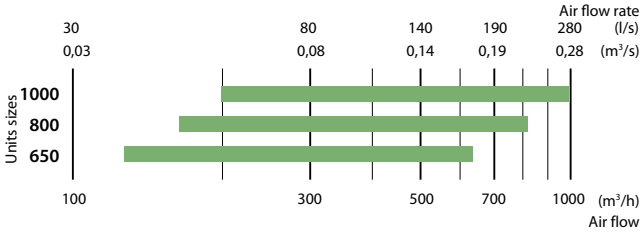
Domekt R | with rotary heat exchanger



Domekt CF | with counter flow heat exchanger



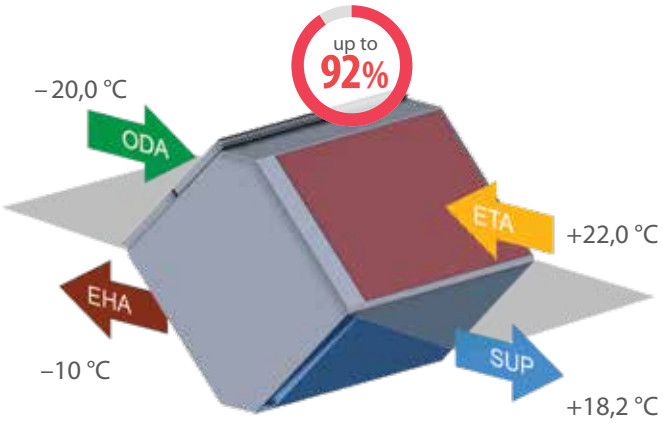
Domekt S | supply air handling unit



Counterflow plate heat exchangers

Operating principle
The plate heat exchangers are made of aluminium or plastic plates, which have gaps for air to flow. Fresh outdoor air and extract outdoor air flows in opposite directions through every second gap of the entire surface of the plates. Extract air transmits thermal energy to fresh outdoor air. Air flows do not mix. During winter, when the air is extracted from the room, the air cools in the heat and the humidity in it turns into ice, which makes plate heat exchangers more suitable for a medium and warm climate zone where there is no significant frost and no danger of icing. In cold weather, the automatic control system solves the problem of icing, but a lot of heat is lost, resulting in decreased seasonal efficiency and increased payback time.

Advantages
- High thermal efficiency.
- Very low air mixing between flows.
- Perfect solution for premises with high humidity, as it effectively eliminates humidity in the cold seasons.



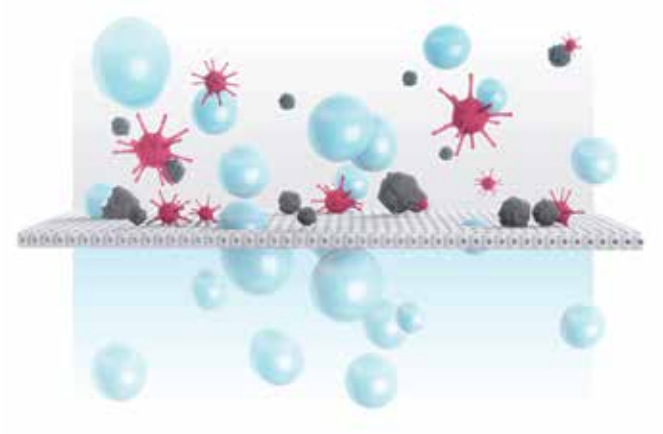
- outdoor intake
- supply air
- extract indoor
- exhaust air

Enthalpy heat exchanger – higher comfort

During the winter time counterflow heat exchangers dries the air of premises. In order to solve this issue, an enthalpy counterflow plate heat exchanger was developed. Its properties were close to the rotary heat exchanger – enthalpy can operate without freezing up to -15°C, recovers humidity during the winter, and more efficiently saves the cold in the summer.

Operating principle
Outlet air humidity is recovered to inlet air through a special patented membrane, which does not allow outside dirt and bacteria to get into the premises.

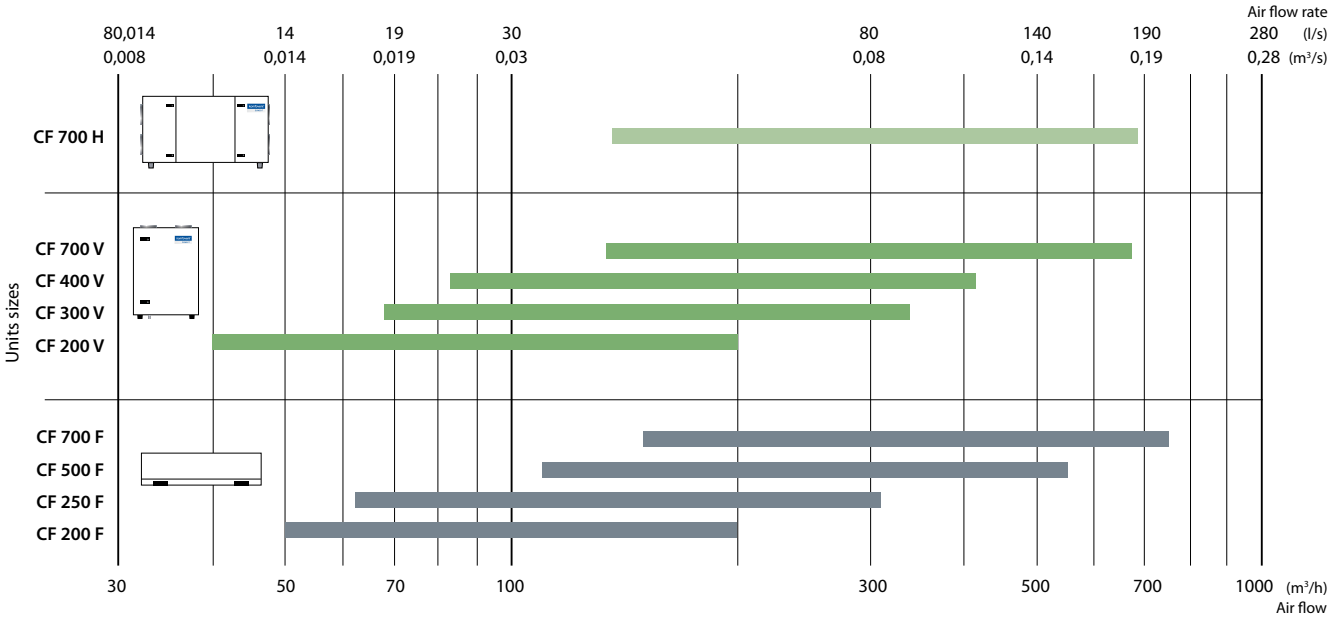
Patented membrane
Compared to cellulosic enthalpy heat exchangers, which have a limited life span, patented enthalpy heat exchanger manufactured from a special membrane achieves the best results in heat and humidity regeneration, moreover, the exchanger is very hygienic and durable.



Domekt CF

Air handling units with counterflow plate heat exchangers

Sizes and air volumes of Domekt CF units



Modifications of Domekt CF units

Unit	Heat exchanger		Supply/exhaust air filter class		Preheater	Heater			Cooler		Inspection side				Bypass	Control system		
	Condensing	Enthalpy	F7	M5	HE	HE	DH	HCW	HCW	HCDX	R1	R2	L1	L2	Inner	C6	C6M	C8
Domekt CF 200 F	●	○	○	●	●	●	△	△	△			○	○		●			●
Domekt CF 200 V	●	○	○	●	●	●	△	△	△		○		○		●		●	
Domekt CF 250 F	●	○	○	●	●	●	△	△	△		○	○	○	○	●	●		
Domekt CF 300 V	●	○	○	●	●	●	△	△	△	△	○		○		●		●	
Domekt CF 400 V	●	○	○	●	●	●	△	△	△	△	○		○		●	●		
Domekt CF 500 F	●	○	○	●	●	●	△	△	△	△	○	○	○	○	●	●		
Domekt CF 700 V	●	○	○	●	●	●	△	△	△	△	○		○		●	●		
Domekt CF 700 H	●	○	○	●	●	●	△	△	△	△	○		○		●	●		
Domekt CF 700 F	●	○	○	●	●	●	△	△	△	△	○	○	○	○	●	●		

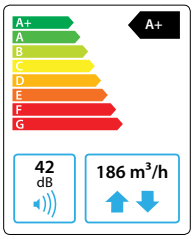
● standard equipment
○ possible choice
△ ordered separately duct heater/cooler

The markings are explained on p. 7.

NEW

Domekt CF 200 F C8

Maximal air flow, m³/h	186
Maximal air flow, l/s	52
Unit weight, kg	28
Supply voltage, V	1~230
Maximal operating current, A	3
Thermal efficiency of heat recovery, %	88
Reference flow rate, m³/s	0,036
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,21
Filters dimensions B×H×L, mm	250×232×46
Electric power input of the fan drive at reference flow rate, W	13
Electric power input of the fan drive at maximum flow rate, W	41
Electric air heater capacity, kW / Δt, °C	0,5 / 10,7
Maintenance space, mm	300
Control system	C8



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	50
Supply outlet	61
Exhaust inlet	50
Exhaust outlet	61
Casing	42

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	31

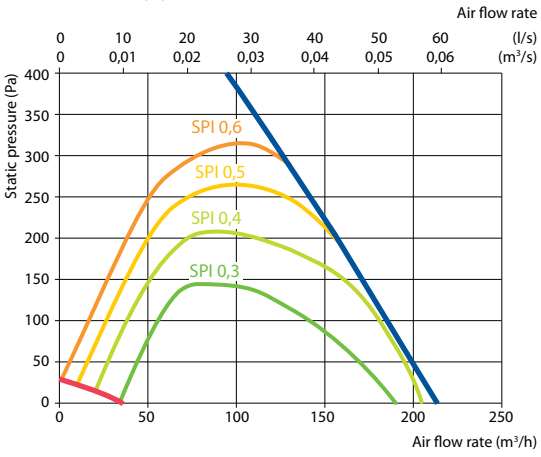
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger, °C	17,4	18	18,4	18,8	19,4	22,4	22,9	23,5

indoor +22°C, 20 % RH

Performance

Unit with standard equipment



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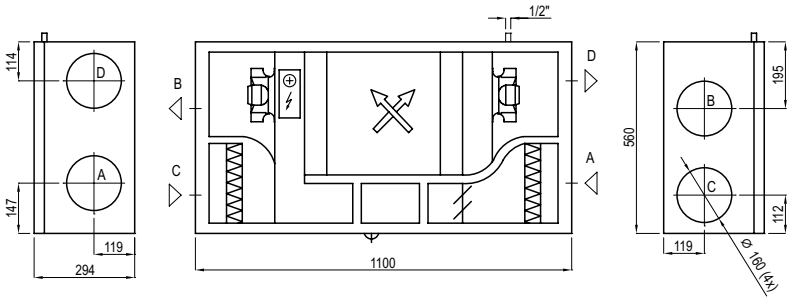

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A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

Closing damper		AGUJ-M-160+LF230/CM230
Silencer	A/D	AGS-160-50-600-M
	B/C	AGS-160-50-900-M
Water heater		DH-160
PPU		PPU-HW-3R-15-0,4-W2

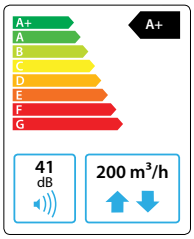
2-way valve (heater)	VVP47.10-0,25
Water cooler	DCW-0,2-1
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-160
Water heater-cooler	DHCW-160

C6.1

C6.2

Domekt CF 200 V C6M

Maximal air flow, m³/h	200
Maximal air flow, l/s	56
Unit weight, kg	42
Supply voltage, V	1~230
Maximal operating current, A	HE 8,3
Thermal efficiency of heat recovery, %	92
Reference flow rate, m³/s	0,039
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,22
Filters dimensions B×H×L, mm	365×132×46
Electric power input of the fan drive at reference flow rate, W	15
Electric power input of the fan drive at maximum flow rate, W	37
Electric air heater capacity, kW / Δt, °C	0,5 / 9,8
Electric preheater capacity, kW / Δt, °C	1 / 19,6
Maintenance space, mm	600
Control system	C6M



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	45
Supply outlet	59
Exhaust inlet	45
Exhaust outlet	59
Casing	41

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	30

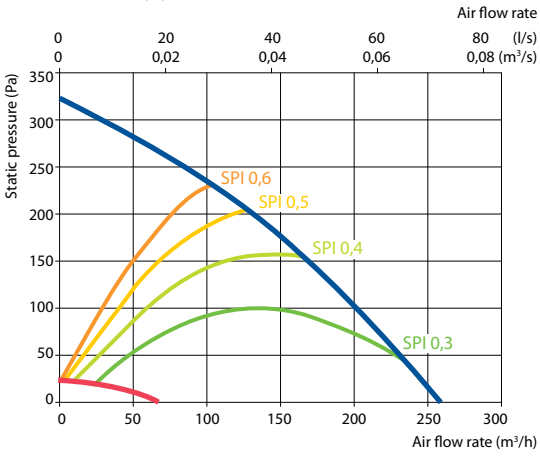
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	18,9*	19,0*	19,0*	19,0	19,6	22,3	22,9	23,4

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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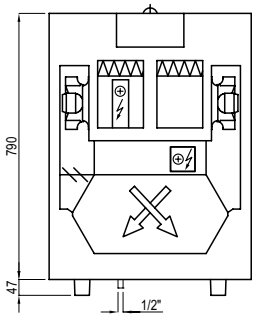

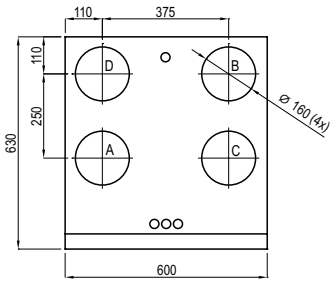

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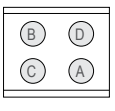


A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

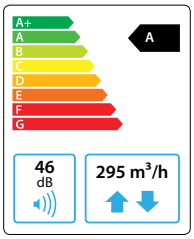
Closing damper		AGUJ-M-160+LF230/CM230
Silencer	A/D	AGS-160-50-600-M
	B/C	AGS-160-50-900-M
Water heater		DH-160
PPU		PPU-HW-3R-15-0,4-W2

2-way valve (heater)	VVP47.10-0,25
Water cooler	DCW-0,2-1
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-160
Water heater-cooler	DHCW-160

The newest data can be verified in the latest version of selection software.
UAB KOMFOVENT reserves the right to introduce the changes of parameters and sizes in the process of improvement of the air handling units.

Domekt CF 250 F C6

Maximal air flow, m³/h	295
Maximal air flow, l/s	82
Unit weight, kg	52
Supply voltage, V	1~230
Maximal operating current, A	8,3
Thermal efficiency of heat recovery, %	86
Reference flow rate, m³/s	0,0574
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,29
Filters dimensions B×H×L, mm	265×250×46
Electric power input of the fan drive at reference flow rate, W	32
Electric power input of the fan drive at maximum flow rate, W	89
Electric air heater capacity, kW / Δt, °C	0,5 / 6,7
Electric preheater capacity, kW / Δt, °C	1 / 13,4
Maintenance space, mm	300
Control system	C6



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	53
Supply outlet	65
Exhaust inlet	54
Exhaust outlet	65
Casing	46

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	35

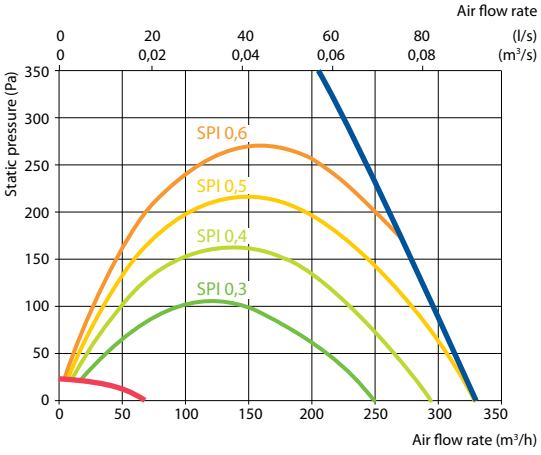
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	16,1*	17*	17*	17	17,9	22,6	23,5	24,4

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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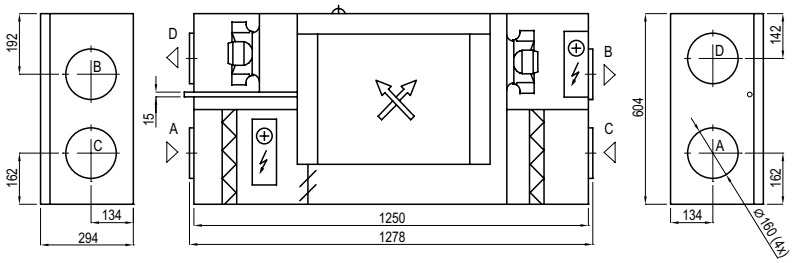

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A outdoor intake
B supply air
C extract indoor
D exhaust air

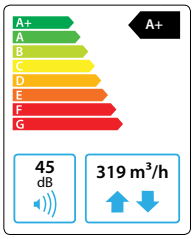
Accessories

Closing damper		AGUJ-M-160+LF230/CM230
Silencer	A/D	AGS-160-50-600-M
	B/C	AGS-160-50-900-M
Water heater		DH-160
PPU		PPU-HW-3R-15-0,4-W2

2-way valve (heater)	VVP47.10-0,4
Water cooler	DCW-0,2-1
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-160
Water heater-cooler	DHCW-160

Domekt CF 300 V C6M

Maximal air flow, m³/h	319
Maximal air flow, l/s	89
Unit weight, kg	42
Supply voltage, V	1~230
Maximal operating current, A	HE 8,3
Thermal efficiency of heat recovery, %	88
Reference flow rate, m³/s	0,062
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,29
Filters dimensions B×H×L, mm	365×132×46
Electric power input of the fan drive at reference flow rate, W	34
Electric power input of the fan drive at maximum flow rate, W	91
Electric air heater capacity, kW / Δt, °C	0,5 / 6,2
Electric preheater capacity, kW / Δt, °C	1 / 12,4
Maintenance space, mm	600
Control system	C6M



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	49
Supply outlet	65
Exhaust inlet	49
Exhaust outlet	65
Casing	45

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	34

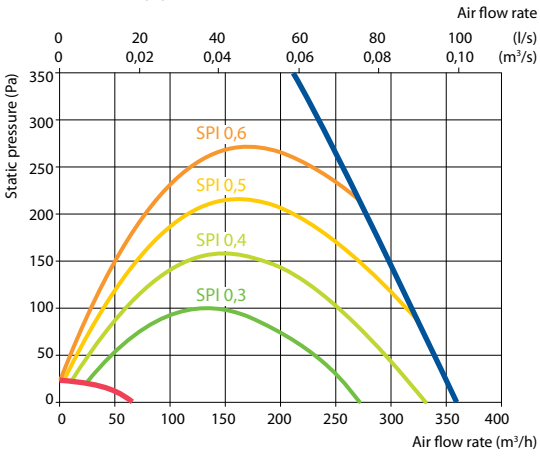
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	16,9*	17,6*	17,7*	17,7	18,4	22,5	23,3	24,1

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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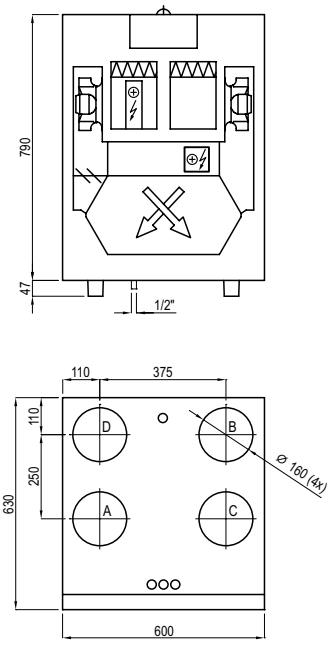

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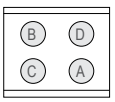

A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

Closing damper		AGUJ-M-160+LF230/CM230
Silencer	A/D	AGS-160-50-600-M
	B/C	AGS-160-50-900-M
Water heater		DH-160
PPU		PPU-HW-3R-15-0,4-W2
2-way valve (heater)		VVP47.10-0,4

Water cooler	DCW-0,2-1
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-160
Water heater-cooler	DHCW-160
Cooling unit	MOU-12HFN8+KA8140

The newest data can be verified in the latest version of selection software.
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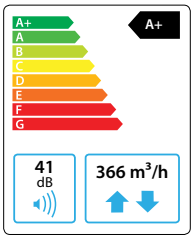
Domekt CF 400 V C6

Maximal air flow, m³/h	366
Maximal air flow, l/s	102
Unit weight, kg	54
Supply voltage, V	1~230
Maximal operating current, A	HE 10.5
Thermal efficiency of heat recovery, %	93
Reference flow rate, m³/s	0,071
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,25
Filters dimensions B×H×L, mm	350×235×46
Electric power input of the fan drive at reference flow rate, W	33
Electric power input of the fan drive at maximum flow rate, W	91
Electric air heater capacity, kW / Δt, °C	0,5 / 5,4
Electric preheater capacity, kW / Δt, °C	1,5 / 16,3
Maintenance space, mm	600
Control system	C6



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	58
Supply outlet	53
Exhaust inlet	58
Exhaust outlet	53
Casing	41

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	31

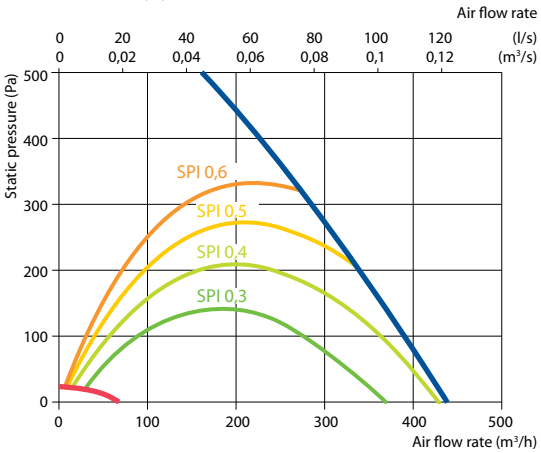
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	17,4*	17,9*	17,9*	17,9	18,6	22,5	23,2	24

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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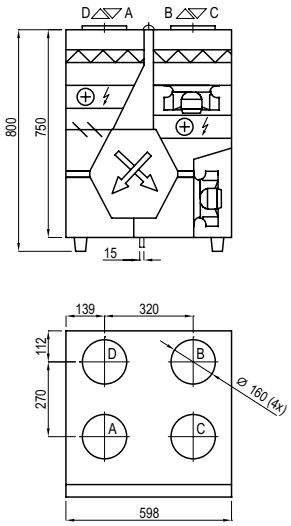

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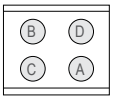


A outdoor intake
B supply air
C extract indoor
D exhaust air

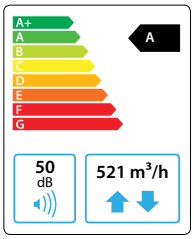
Accessories

Closing damper		AGUJ-M-160+LF230/CM230
Silencer	A/D	AGS-160-50-600-M
	B/C	AGS-160-50-900-M
Water heater		DH-160
PPU		PPU-HW-3R-15-0,4-W2
2-way valve (heater)		VVP47.10-0,4

Water cooler	DCW-0,4-3
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-160
Water heater-cooler	DHCW-160
Cooling unit	MOU-12HFN8+KA8140

Domekt CF 500 F C6

Maximal air flow, m³/h	521
Maximal air flow, l/s	145
Unit weight, kg	93
Supply voltage, V	1~230
Maximal operating current, A	HE 11,7
Thermal efficiency of heat recovery, %	87
Reference flow rate, m³/s	0,1013
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,34
Filters dimensions B×H×L, mm	484×250×46
Electric power input of the fan drive at reference flow rate, W	67
Electric power input of the fan drive at maximum flow rate, W	171
Electric air heater capacity, kW / Δt, °C	0,5 / 3,8
Electric preheater capacity, kW / Δt, °C	1,5 / 11,4
Maintenance space, mm	520
Control system	C6



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	56
Supply outlet	70
Exhaust inlet	56
Exhaust outlet	70
Casing	50

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	38

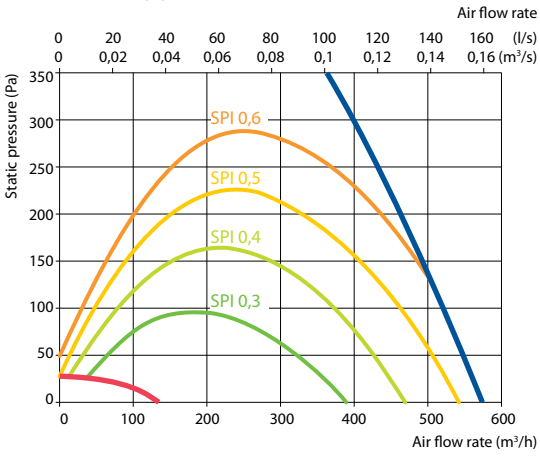
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	17,4*	18,0*	18,2*	18,2	18,8	22,4	23,2	24

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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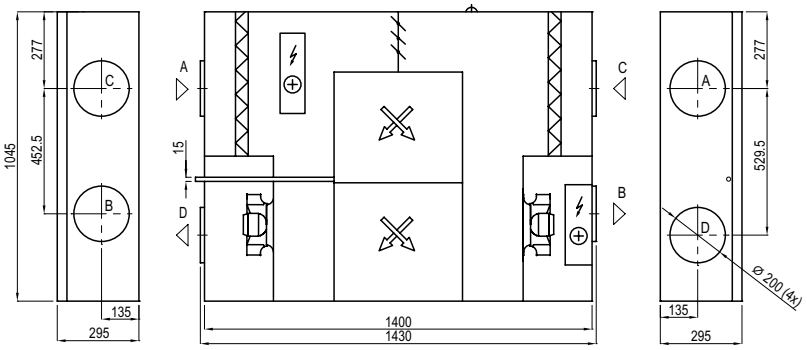

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A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

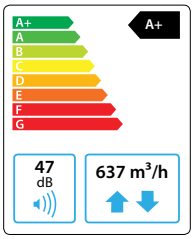
Closing damper		AGUJ-M-200+LF230/CM230
Silencer	A/D	AGS-200-50-600-M
	B/C	AGS-200-50-900-M
Water heater		DH-200
PPU		PPU-HW-3R-15-0,4-W2
2-way valve (heater)		VVP47.10-0,4

Water cooler	DCW-0,5-3
2-way valve (cooler)	VVP47.10-1,6
Outdoor grill	LD-200
Water heater-cooler	DHCW-200
DX cooler	DCF-0,5-3
Cooling unit	MOU-12HFN8+KA8140

The newest data can be verified in the latest version of selection software.
UAB KOMFOVENT reserves the right to introduce the changes of parameters and sizes in the process of improvement of the air handling units.

Domekt CF 700 V C6

Maximal air flow, m³/h	637
Maximal air flow, l/s	177
Unit weight, kg	100
Supply voltage, V	1~230
Maximal operating current, A	HE 11,7
Thermal efficiency of heat recovery, %	88
Reference flow rate, m³/s	0,124
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,30
Filters dimensions B×H×L, mm	390×300×46
Electric power input of the fan drive at reference flow rate, W	73
Electric power input of the fan drive at maximum flow rate, W	179
Electric air heater capacity, kW / Δt, °C	0,5 / 3,1
Electric preheater capacity, kW / Δt, °C	1,5 / 9,3
Maintenance space, mm	1000
Control system	C6



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	47
Supply outlet	67
Exhaust inlet	47
Exhaust outlet	67
Casing	47

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	36

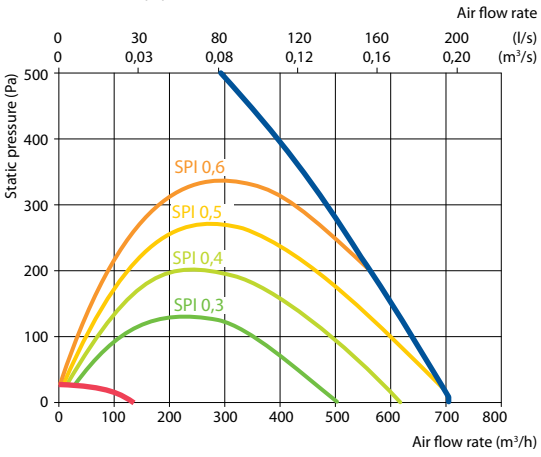
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	17,3*	17,9*	18,1*	18,1	18,8	22,4	23,2	23,9

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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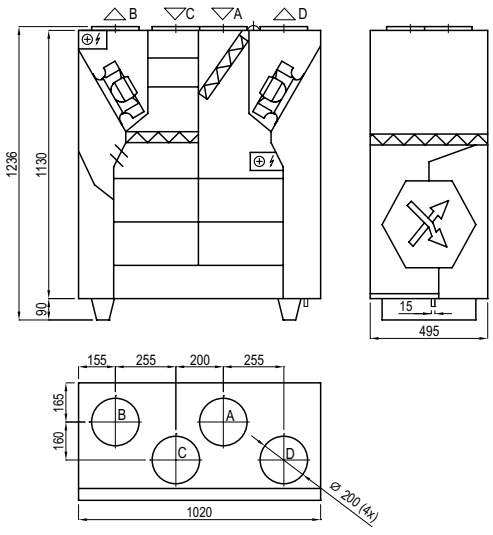

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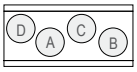


A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

Closing damper		AGUJ-M-200+LF230/CM230
Silencer	A/D	AGS-200-50-600-M
	B/C	AGS-200-50-900-M
Water heater		DH-200
PPU		PPU-HW-3R-15-0,4-W2
2-way valve (heater)		VVP47.10-0,4

Water cooler	DCW-0,7-5
2-way valve (cooler)	VVP47.15-2,5
Outdoor grill	LD-200
Water heater-cooler	DHCW-200
DX cooler	DCF-0,7-5
Cooling unit	MOU-18HFN8+KA8140

Domekt CF 700 H C6

Maximal air flow, m³/h	651
Maximal air flow, l/s	181
Unit weight, kg	115
Supply voltage, V	1~230
Maximal operating current, A	HE 11,7
Thermal efficiency of heat recovery, %	88
Reference flow rate, m³/s	0,127
Reference pressure difference, Pa	50
SPI, W/(m³/h)	0,29
Filters dimensions B×H×L, mm	390×300×46
Electric power input of the fan drive at reference flow rate, W	72
Electric power input of the fan drive at maximum flow rate, W	178
Electric air heater capacity, kW / Δt, °C	0,5 / 3,0
Electric preheater capacity, kW / Δt, °C	1,5 / 9,1
Maintenance space, mm	500
Control system	C6

Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	47
Supply outlet	67
Exhaust inlet	47
Exhaust outlet	67
Casing	47

A-weighted sound pressure level L_{PA}, dB(A)
10 m² normally isolated room, distance from casing – 3 m.

Surroundings	36

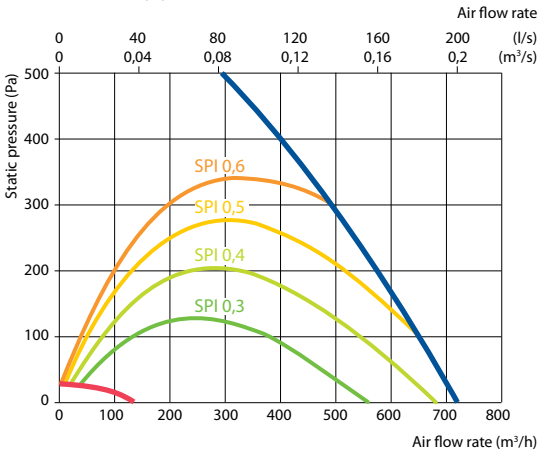
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	17,2*	17,7*	18*	18	18,8	22,4	23,2	23,9

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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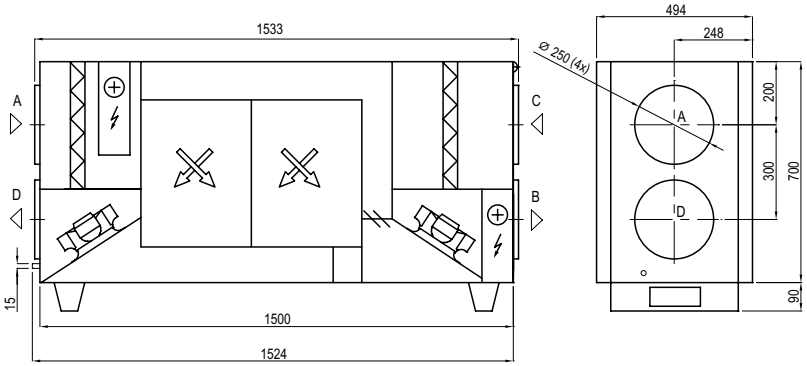

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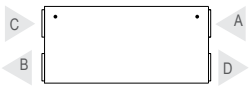


A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

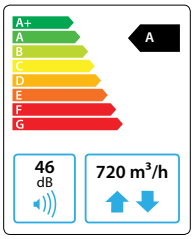
Closing damper		AGUJ-M-250+LF230/CM230
Silencer	A/D	AGS-250-50-600-M
	B/C	AGS-250-50-900-M
Water heater		DH-250
PPU		PPU-HW-3R-15-0,63-W2
2-way valve (heater)		VVP47.10-0,63

Water cooler	DCW-0,7-5
2-way valve (cooler)	VVP47.15-2,5
Outdoor grill	LD-250
Water heater-cooler	DHCW-250
DX cooler	DCF-0,7-5
Cooling unit	MOU-18HFN8+KA8140

The newest data can be verified in the latest version of selection software.
UAB KOMFOVENT reserves the right to introduce the changes of parameters and sizes in the process of improvement of the air handling units.

Domekt CF 700 F C6

Maximal air flow, m^3/h	720
Maximal air flow, l/s	200
Unit weight, kg	81
Supply voltage, V	1~230
Maximal operating current, A	HE 11,7
Thermal efficiency of heat recovery, %	82
Reference flow rate, m^3/s	0,14
Reference pressure difference, Pa	50
SPI, $W/(m^3/h)$	0,25
Filters dimensions B×H×L, mm	400×300×46
Electric power input of the fan drive at reference flow rate, W	70
Electric power input of the fan drive at maximum flow rate, W	177
Electric air heater capacity, kW / Δt, °C	0,5 / 2,8
Electric preheater capacity, kW / Δt, °C	1,5 / 8,3
Maintenance space, mm	450
Control system	C6



Acoustic data

A-weighted sound power level L_{WA}, dB(A) at reference flow rate

Supply inlet	53
Supply outlet	66
Exhaust inlet	53
Exhaust outlet	66
Casing	46

A-weighted sound pressure level L_{PA}, dB(A)
10 m^2 normally isolated room, distance from casing – 3 m.

Surroundings	35

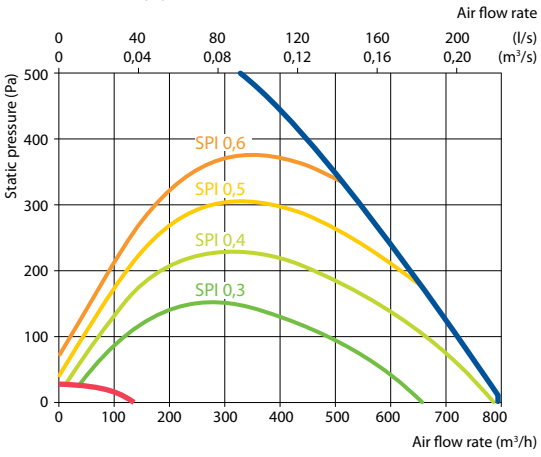
Temperature efficiency

	Winter					Summer		
Outside temperature, °C	-23	-15	-10	-5	0	25	30	35
After heat exchanger*, °C	15,5*	16,1*	16,8*	16,8	17,7	22,5	23,4	24,4

indoor +22°C, 20 % RH.
* calculations made after evaluation of the preheater.

Performance

Unit with standard equipment



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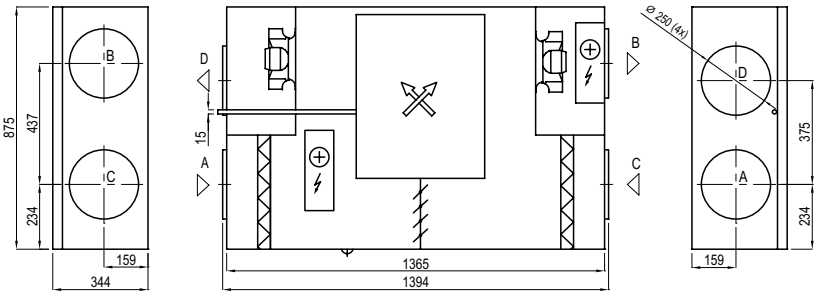

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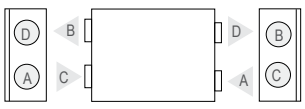

A outdoor intake
B supply air
C extract indoor
D exhaust air

Accessories

Closing damper		AGUJ-M-250+LF230/CM230
Silencer	A/D	AGS-250-50-600-M
	B/C	AGS-250-50-900-M
Water heater		DH-250
PPU		PPU-HW-3R-15-0,63-W2
2-way valve (heater)		VVP47.10-0,63

Water cooler	DCW-0,7-5
2-way valve (cooler)	VVP47.15-2,5
Outdoor grill	LD-250
Water heater-cooler	DHCW-250
DX cooler	DCF-0,7-5
Cooling unit	MOU-18HFN8+KA8140