

Automatic control system C6

Intuitive automation ensures energy saving ventilation system operation, clever functioning on users' demand and new generation control for indoor air quality. Intelligent approach to the users' needs let us create two types of the control panels, which let the users just to enjoy the comfort, fresh air and the sense of sustainable wellbeing.



Control panel C6.1

- Colored touch-sensitive LED display
- Indication of parameters
- Setting of all parameters from the panel



Control panel C6.2

- Modern panel with touch buttons
- Factory preset parameters
- Smart and easy control

Features:

- Temperature maintenance modes: Supply air / Extract air / Room / Balance;
- Air flow indication: m³/h; l/s;
- Constant air volume control (CAV);
- Variable air volume control (VAV)*;
- Directly controlled volume (DCV);
- External water coil control;
- External DX unit control;
- Weekly operation schedule;
- Holidays planning;
- Air quality control*;
- Operation on demand*;
- Cool recovery;
- Temperature saving function;
- Free cooling;
- Ventilation control by external contacts;
- Control via internet browser;
- Control with smartphones;
- Filter clogging indication;
- Water mixing system warming-up;
- Rotor warm-up and cleaning function;
- Heat exchanger frost protection;
- Heat exchanger failure indication;
- Water heater frost protection;
- Electric heater overheat protection;
- Low air flow indication;
- Emergency shut down in case of fire;
- Emergency shut down when temperature reaches critical limits;
- Intelligent self-diagnostic;
- Indication of the heat exchanger thermal efficiency (%);
- Indication of heat exchanger energy recovery (kW);
- Energy consumption counters for heater and whole unit (kWh);
- Indication of the whole unit power consumption (kW);
- Specific power (SPI) indication;
- Unit operation parameters history storage and analysis;
- Possibility to choose desired control panel.

* these functions require additional accessories.

Mobile application "Komfovent Home"

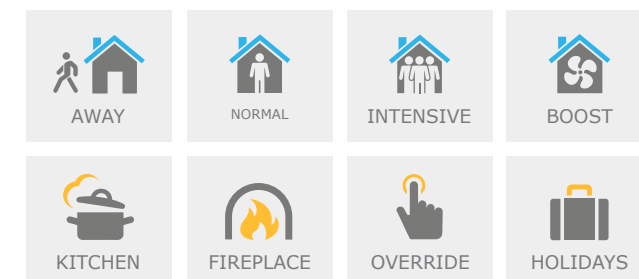


Only 1 W!

C6 SMART HOME

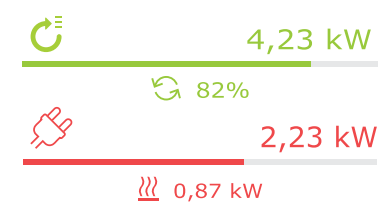
- Intuitive control
- Ready for home use
- Integrated power meter
- 1 W in standby mode
- Integrated web server

Various operation modes



- 8 operation modes are preprogrammed for all situations.
- Intelligent energy saving mode ensures minimum power consumption.
- Automatic air quality control selects the most appropriate mode and ensures the comfort conditions in the room.

Unit energy counters



- Efficiency and power consumption indication gives the possibility to monitor and set up unit operation in a proper way.
- Energy counters helps to determine operation costs of the air handling unit and additional heater.

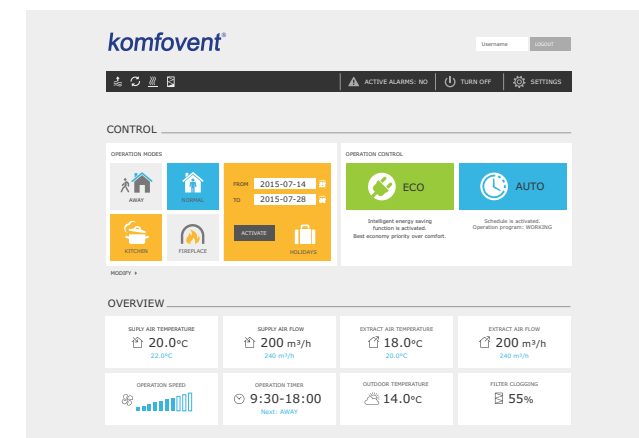
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For advanced users



- Advanced users are able to adjust AHU's operation in accordance with the specific needs, as many additional information and settings are provided.

Remote control



- Full monitoring of the parameters, energy consumption, air quality results and a lot of other useful information is available in the user friendly web interface.

- Komfovent Home application software for smartphones replicates control panel possibilities and allows to control your home ventilation from any place, wherever you are.



DOMEKT intelligently controlled residential ventilation



LEADER IN COMFORT



UNIQU APPROACH IN ENERGY SAVING



INTUITIVE AUTOMATION



SMART CONTROL VIA INTERNET

Komfovent DOMEKT

DOMEKT air handling units (AHU) are designed for the ventilation of residential premises. DOMEKT is a standardized series of the air handling units with a heat recovery for the air flow between 50 m³/h and 1 000 m³/h.



Capacity range from 50 to 1000 m³/h



Features and benefits of DOMEKT units:

- Energy efficient solution.
- PLUG & PLAY concept – units are fully prepared for installation.
- DOMEKT air handling units are especially silent.
- Energy saving high performance EC fans in DOMEKT units.
- Integrated automatic control.
- Wide choice of automatic control functions already included as a standard – no options are needed.
- Integrated web server for clever control.
- Control via Smartphone available.

A compact air handling units' design helps to integrate them in a limited dedicated space for installation.

All DOMEKT units are based on the principle of PLUG & PLAY: each unit has the integrated control system and is delivered with a complete automatic control installed and prewired inside the unit. A modern control panel is included with each DOMEKT unit supplied.

Due to the availability of clever design and functions the units offer a great opportunity to keep running costs low, they are safe, reliable and durable in operation. The air is filtered and supplied clean and fresh to the premises, which is especially advisable to allergic people.

DOMEKT air handling units. Specifications

UNIT SIZE	200	250		300		400				450		500			600	650	700				800	900				1000	UNIT SIZE														
AHU type	Domekt R	Domekt R	Domekt CF	Domekt CF	Domekt R	Domekt PP	Domekt R	Domekt R	Domekt R	Domekt P	Domekt P	Domekt CF	Domekt R	Domekt PP	Domekt R	Domekt R	Domekt CF	Domekt R	Domekt R	Domekt S	Domekt R	Domekt R	Domekt R	Domekt P	Domekt P	Domekt CF	Domekt CF	Domekt S	Domekt R	Domekt P	Domekt P	Domekt CF	Domekt CF	Domekt S	Domekt R	Domekt P	Domekt P	Domekt CF	Domekt CF	Domekt S	AHU type
Heat exchanger type	rotary	rotary	counter cross-flow	counter cross-flow	rotary	double plate	rotary	rotary	rotary	plate	plate	counter cross-flow	rotary	double plate	rotary	rotary	counter cross-flow	rotary	rotary	supply air unit	rotary	rotary	rotary	plate	plate	counter cross-flow	counter cross-flow	supply air unit	rotary	plate	plate	counter cross-flow	counter cross-flow	supply air unit	rotary	plate	plate	counter cross-flow	counter cross-flow	supply air unit	Heat exchanger type
AHU version	vertical	flat	vertical	flat	vertical	vertical	vertical	horizontal	flat	vertical	horizontal	vertical	vertical	vertical	vertical	horizontal	flat	universal*	horizontal	flat	vertical	horizontal	flat	vertical	horizontal	vertical	horizontal	flat	universal*	vertical	horizontal	universal*	flat	flat	flat	flat	flat	flat	AHU version		
SEC	A	A	A	A	A	A	A+	A	A	B	B	A	A	B	A+	A	A	A+	A	B	A	A	A	B	B	A	A	B	A+	B	B	A+	A+	B	B	A+	A+	B	SEC		
Reference flow rate	m³/s	0,05	0,047	0,041	0,06	0,063	0,058	0,056	0,082	0,092	0,093	0,093	0,08	0,092	0,087	0,12	0,12	0,11	0,12	0,11	0,12	0,15	0,14	0,14	0,16	0,16	0,13	0,15	0,16	0,19	0,15	0,16	0,19	0,19	0,19	0,19	0,19	m³/s	Reference flow rate		
	m³/h	180	170	149	216	227	210	202	295	331	336	336	288	331	314	441	441	398	441	386	449	541	503	499	571	571	468	540	578	684	552	575	700	700	700	700	700	m³/h			
Maximal air flow at 100 Pa	m³/h	258	240	211	299	324	300	287	422	472	480	480	430	472	449	630	630	568	630	584	642	773	719	750	797	797	665	766	826	993	788	821	1000	1000	1000	1000	1000	1000	m³/h	Maximal air flow at 100 Pa	
Dimensions	B, mm	320	605	510	605	502	340	495	515	700	390	390	600	535	340	645	647	890	640	570	475	645	647	870	490	495	490	490	475	905	490	495	910	1100	700	B, mm	Dimensions				
	H, mm	625	310	747	295	610	700	547	565	330	920	600	650	610	700	950	700	295	700	600	297	950	700	424	1090	600	1145	790	350	905	1090	600	905	527	350	H, mm					
	L, mm	600	845	595	1252	598	740	600	650	1170	900	1000	600	680	740	1070	930	1450	1115	1130	873	1070	930	1240	1000	1170	1020	1500	973	1355	1000	1170	1810	1650	893	L, mm					
Unit weight	kg	42	40	41	43	25	42	64	60	67	62	55	55	71	42	140	90	70	110	90	35	140	90	80	85	75	95	37	195	90	78	267	161	46	kg	Unit weight					
Duct connections	mm	∅ 125 (5x)	∅ 125 (1x) / ∅ 160 (4x)	∅ 125 (4x)	∅ 160 (4x)	∅ 100 (1x) / ∅ 160 (4x)	∅ 125 (5x)	∅ 125 (1x) / ∅ 160 (4x)	∅ 160 (4x)	∅ 125 (1x) / ∅ 200 (4x)	∅ 160 (4x)	∅ 200 (4x)	∅ 160 (4x)	∅ 125 (1x) / ∅ 160 (4x)	∅ 125 (5x)	∅ 125 (1x) / ∅ 250 (4x)	∅ 125 (1x) / ∅ 200 (4x)	∅ 200 (4x)	∅ 200 (4x)	∅ 125 (1x) / ∅ 200 (4x)	∅ 160 (2x)	∅ 125 (1x) / ∅ 250 (4x)	∅ 125 (1x) / ∅ 250 (4x)	∅ 125 (1x) / ∅ 250 (4x)	∅ 200 (4x)	∅ 250 (4x)	∅ 200 (4x)	∅ 250 (4x)	∅ 200 (2x)	∅ 315 (4x)	∅ 200 (4x)	∅ 250 (4x)	∅ 315 (4x)	∅ 315 (4x)	∅ 250 (2x)	mm	Duct connections				
Thermal efficiency of heat recovery	%	82	82	89	86	84	76	87	85	82	56	56	80	85	71	85	85	88	85	84	-	84	85	82	55	55	87	85	-	88	55	55	82	82	-	%	Thermal efficiency of heat recovery				
Max. operating current with electric air heater	A	4,7	6	-	1,7	3,2	5,5	5,5	6,6	7,2	10,8	10,8	6,3	7,1	6,7	7,2	7,2	7,3	7,6	7,1	14,2 / 10,0	11,6	11,6	11,6	14,1	14,1	12	12	14,9 / 10,6 / 14,9	7,6	9,8	9,8	9,8	9,8	15,4 / 24,1	A	Max. operating current with electric air heater				
Max. operating current with water air heater	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,9	3,3	-	-	-	3,3	3,3	2,4	A	Max. operating current with water air heater				
Supply voltage	V/Hz	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230	V/Hz	Supply voltage		
Electric power input of the fan drive at reference flow rate	W	27	43	33	32	34	23	23	55	72	33	33	41	72	60	57	67	81	57	77	63	83	85	70	69	75	72	78	75	85	71	79	57	56	82	W	Electric power input of the fan drive at reference flow rate				
Electric power input of the fan drive at maximum flow rate	W	66	90	90	90	76	67	71	126	165	93	93	103	170	167	125	155	177	145	179	172	180	180	166	181	181	177	180	181	182	181	181	162	167	182	W	Electric power input of the fan drive at maximum flow rate				
Heater type: E – electric, W – water or HCW – changeover coils		E	E	-	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E/HCW	E	E	E	E	E	E	E	E	E	E/W	E/HCW	E	E	E	E/HCW	E	E/W	Heater type: E – electric, W – water or HCW – changeover coils				
Electric air heater capacity	kW	0,8	1,0	-	0,5 / 1	0,5	1,0	1,0	1,0	1,0	2,0	2,0	0,5 / 1,5	1,0	1,0	1,0	0,5 / 1,5	1	1,0	3,0 / 6,0	2,0	2,0	2,0	2,5	2,5	0,5 / 1,5	0,5 / 1,5	3,0 / 6,0 / 9,0	3,0	4,5	4,5	4,5	3,0	9,0 / 15,0	kW	Electric air heater capacity					
Control panel type		C4.1	C6.1 / C6.2	C4.1	C6.1 / C6.2	C6.1 / C6.2	C4.1	C6.1 / C6.2	C6.1 / C6.2	C6.1 / C6.2	C3.1	C3.1	C6.1 / C6.2	C6.1 / C6.2	C4.1	C6.1 / C6.2	C6.1 / C6.2	C6.1 / C6.2	C5.1	C6.1 / C6.2	C5.1	C6.1 / C6.2	C6.1 / C6.2	C6.1 / C6.2	C3.1	C3.1	C6.1 / C6.2	C6.1 / C6.2	C5.1	C5.1	C3.1	C3.1	C5.1	C5.1	C5.1	Control panel type					

• Thermal insulation thickness – 50 mm.
 • Standard filter class (supply/exhaust) – M5, F7 class air filters – on request.
 * Domekt R 600 UV, Domekt R 900 UV, Domekt CF 900 U data.

The definitions of terms
 • **Specific energy consumption (SEC)** (expressed in kWh/(m².a)) means a coefficient to express the energy consumed for ventilation per m² heated floor area of a dwelling or building.

• **Reference flow rate** (expressed in m³/s) is the abscissa value to a point on a curve in the flow rate/pressure diagram which is on or closest to a reference point at 70 % at least of the maximum flow rate and 50 Pa for ducted units and at a minimum pressure for non-ducted units. For bidirectional ventilation units, the reference air volume flow rate applies to the air supply outlet.

Selection software
 The units are selected using an informative and useful software, available to be downloaded to your PC from our website: www.komfovent.com/software. Technical data sheets present important technical parameters at a specified working point of the selected unit: efficiency, SFP, acoustics and other required data.

