

AIR HEATING (COOLING) UNITS

▶ VENTS AOW Series



- ▶ Air unit with the water heat exchanger with heating capacity up to 45 kW and the air capacity up to 3850 m³/h. Designed for cost-saving and efficient air heating and cooling in various premises.

▶ VENTS PVZ Series



- ▶ Air curtains are designed against cold or hot air stream penetration into door or window openings. Can be equipped with water heating coils or electrical heating batteries. Available standard sizes: 600x350, 700x400, 800x500, 900x500 mm.



**Air heating (cooling) unit
VENTS AOW**

Air capacity – up to 3850 m³/h

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**Air curtain
VENTS PVZ**

Air capacity – up to 84000 m³/h

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Series
AOW



Air heating (cooling) units with the water heat exchanger for cost-saving and effective air heating or cooling.

■ **Applications**

Designed for air heating or cooling by water heat medium with subsequent uniform air distribution by the fan and louvre shutters. The units provide quick heating or cooling of large premises due to high efficient air heater and powerful fan and are suitable for local air heating or cooling of working areas in hangars or large industrial premises. Further applications include workshops, garages, car showrooms, stock houses, trade facilities, super- and hypermarkets, shops, sport halls, conference halls, poultry and cattle farms, greenhouses and other similar premises. The unit design enables quick and

easy mounting and reduces total investment costs for heating (cooling) system.

■ **Design**

AOW unit consists of axial fan and aluminium-copper ribbed water heating coils located in steel casing with polymeric covering. The water coils are equipped with internally threaded pipes for connection to the heat medium.

■ **Motor**

AC motors with external rotor and built-in thermal overheating protection with automatic restart.

■ **Control and regulation**

Both smooth or step speed control is performed by the thymistor or autotransformer controller. Motor speed decrease allows reducing air flow and value of heating or cooling energy transfer. The heat medium flow can be regulated in various ways.

■ **Mounting**

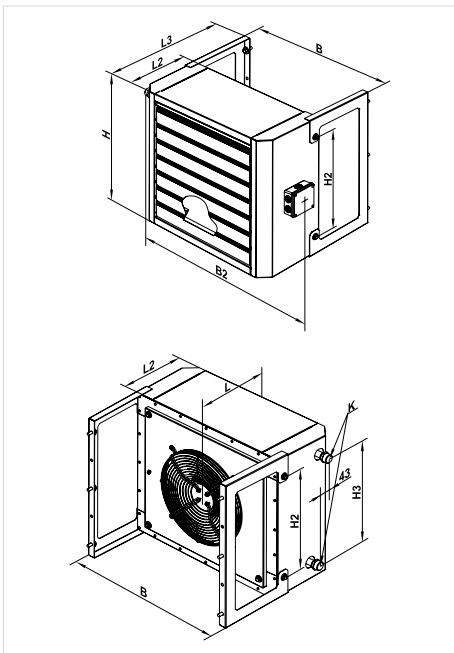
The heat fan can be installed vertically on walls or columns or horizontally on ceiling or beams.

Air heating (cooling) advantages:

- ▶ quick attaining of the set temperature in the premises,
- ▶ low system response time allows applying varying temperature conditions,
- ▶ high thermal capacity,
- ▶ investment costs for air heating (cooling) system are much lower as compared to the similar water heating (cooling) system.

Designation key: _____

Series	Rated power, kW
VENTS AOW	25; 30; 45



Overall dimensions:

Type	Dimensions [mm]										Mass [kg]
	B	B2	H	H2	H3	L	L2	L3	K	Number of tube raw	
AOW 25	680	785	605	450	468	360	286	600	G 3/4"	2	37,0
AOW 30	680	785	655	500	518	360	286	650	G 3/4"	2	40,0
AOW 45	780	885	710	550	570	380	300	700	G 3/4"	2	50,0

Technical data:

	AOW 25	AOW 30	AOW 45
Unit supply voltage [V / 50 Hz]	230	230	230
Fan power [W]	136	191	255
Fan current [A]	0,6	0,85	1,12
Fan rotation speed [rpm]	1350	1440	1360
Noise level at 3 m [dBA]	53	55	58
Maximum heat medium temperature [°C]	100	100	100
Protection rating	IP 44	IP 44	IP 44
Insulation class	F	B	F

Technical data for heating mode:

Air capacity [m³/h]	Water inlet temperature [°C]	Supply air temperature [°C]	AOW 25			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m³/h]	Water pressure loss [kPa]
2200	90/70	-15	34,5	26	1,5	7,5
		-10	32	29	1,4	6,6
		-5	30	32	1,3	5,8
		0	28	35	1,2	5,2
		5	26,2	38,5	1,2	4,5
		10	24,2	41,4	1,1	3,9
		15	22,1	44,2	1,0	3,3
	80/60	-15	30,4	21,2	1,3	6,0
		-10	28,3	24,3	1,2	5,3
		-5	26,2	27,4	1,2	4,6
		0	24,1	30,4	1,1	4,0
		5	22,1	33,3	1,0	3,3
		10	20,1	36,1	0,9	2,8
		15	18,1	38,8	0,8	2,3
	70/50	-15	26	16	1,1	4,6
		-10	24	19,2	1,1	4,0
		-5	22	22	1,0	3,4
		0	20	25	0,9	2,8
		5	18	28	0,8	2,3
		10	15,9	30,6	0,7	1,9
		15	13,8	33	0,6	1,4
	60/40	-15	22	11	1,0	3,4
		-10	20	14	0,9	2,8
		-5	18	17	0,8	2,3
0		16	20	0,7	1,8	
5		14	22	0,6	1,4	
10		12	25	0,5	1,0	
15		9,0	27	0,4	0,7	

AIR HEATING (COOLING) UNITS
AOW

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Technical data for heating mode:

Air capacity [m ³ /h]	Water inlet temperature [°C]	Supply air tempera- ture [°C]	AOW 30			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m ³ /h]	Water pressure loss [kPa]
3000	90/70	-15	48,4	27,2	2,1	7,4
		-10	45,4	30,3	2,0	6,6
		-5	42,4	33,4	1,9	5,9
		0	39,5	36,4	1,7	5,2
		5	36,7	39,4	1,6	4,5
		10	33,8	42,1	1,5	3,9
		15	31	44,9	1,4	3,3
	80/60	-15	42	22	1,9	6,0
		-10	39	25,2	1,7	5,3
		-5	36,7	28,2	1,6	4,6
		0	33,8	31,1	1,5	3,9
		5	30,9	34,0	1,4	3,4
		10	28,1	36,7	1,2	2,8
		15	25,3	40	1,1	2,3
	70/50	-15	36,6	17	1,6	4,7
		-10	33,7	20	1,5	4,0
		-5	30	22,9	1,4	3,4
		0	28	25,7	1,2	2,9
		5	25	28,5	1,1	2,4
		10	22	31,1	1,0	1,9
		15	19,4	33,7	0,9	1,5
	60/40	-15	31	11,7	1,3	3,5
		-10	27,6	14,6	1,2	2,9
		-5	24	17,4	1,1	2,4
0		21	20	1,0	1,9	
5		19	22,7	0,8	1,5	
10		16	25,2	0,7	1,1	
15		13	27,5	0,6	0,7	

Technical data for cooling mode:

Air capacity [m ³ /h]	Water inlet temperature [°C]	Supply air tempera- ture [°C]	AOW 25			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m ³ /h]	Water pressure loss [kPa]
2200	7/12	35	9,1	26	1,6	7,5
		30	5,8	22,5	1,0	6,1
		25	3,2	21	0,6	2,1
		20	2,0	18	0,3	0,9

Technical data for cooling mode:

Air capacity [m ³ /h]	Water inlet temperature [°C]	Supply air tempera- ture [°C]	AOW 30			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m ³ /h]	Water pressure loss [kPa]
3000	7/12	35	11,4	27	2,0	11,2
		30	7,3	22,9	1,3	5,0
		25	3,9	21,1	0,7	1,6
		20	2,4	17,7	0,4	0,7

Technical data for heating mode:

Air capacity [m ³ /h]	Water inlet temperature [°C]	Supply air tempera- ture [°C]	AOW 45			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m ³ /h]	Water pressure loss [kPa]
3850	90/70	-15	63,0	28,4	2,8	11,9
		-10	59,2	31,5	2,6	10,6
		-5	55,4	34,6	2,4	9,4
		0	51,6	37,5	2,3	8,3
		5	47,9	40,4	2,1	7,3
		10	44,3	43,2	2,0	6,3
		15	40,6	45,9	1,8	5,4
	80/60	-15	55,6	23,3	2,4	9,7
		-10	51,8	26,4	2,3	8,5
		-5	48,0	29,3	2,1	7,4
		0	44,3	32,2	2,0	6,4
		5	40,6	35,0	1,8	5,5
		10	37,0	37,8	1,6	4,6
		15	33,4	40,4	1,5	3,8
	70/50	-15	48,1	18,1	2,1	7,6
		-10	44,3	21,1	1,9	6,6
		-5	40,6	23,9	1,8	5,6
		0	36,9	26,8	1,6	4,7
		5	33,2	29,5	1,5	3,9
		10	29,6	32,2	1,3	3,2
		15	26,0	34,8	1,1	2,5
	60/40	-15	40,4	12,8	1,8	5,7
		-10	36,7	15,7	1,6	4,8
		-5	32,9	18,5	1,4	3,9
		0	29,2	21,3	1,3	3,2
		5	25,6	23,9	1,1	2,5
		10	21,9	26,4	1,0	1,9
		15	18,1	28,8	0,8	1,3

Technical data for cooling mode:

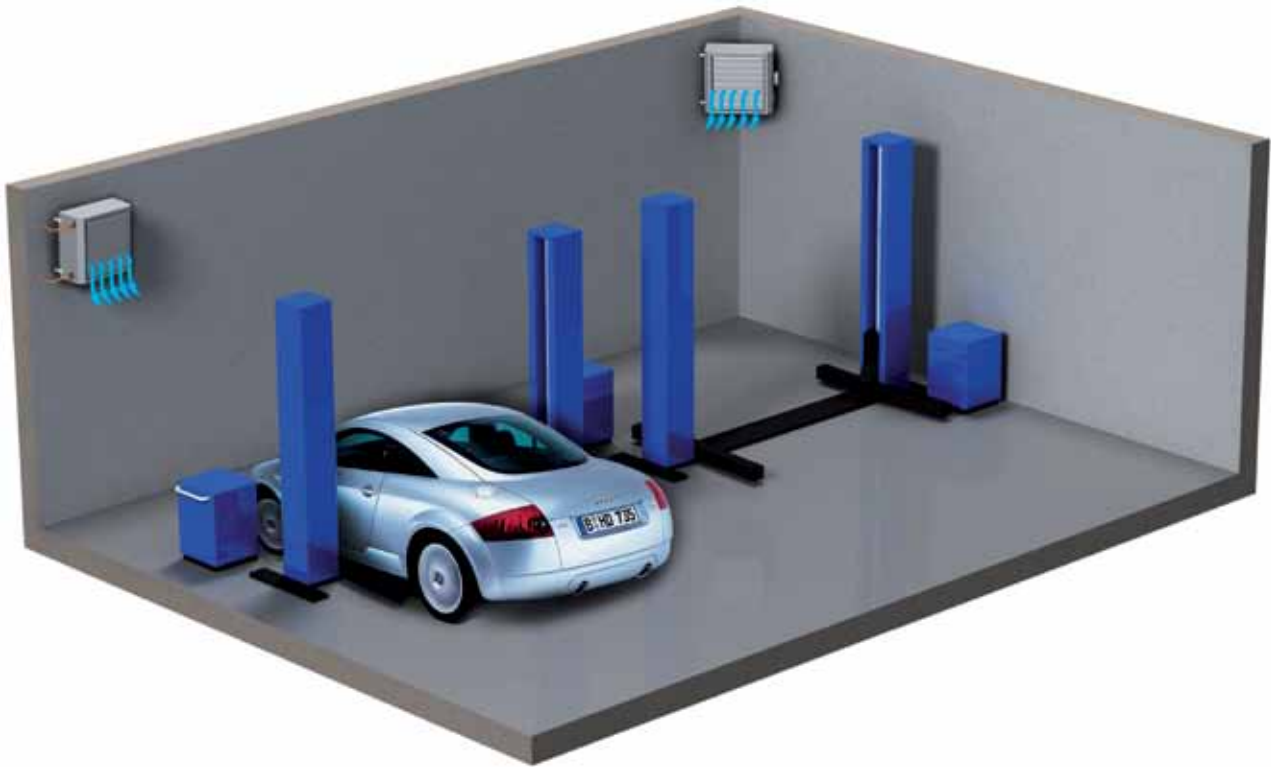
Air capacity [m ³ /h]	Water inlet temperature [°C]	Supply air tempera- ture [°C]	AOW 45			
			Power [kW]	Outlet temperature [°C]	Water flow rate [m ³ /h]	Water pressure loss [kPa]
3850	7/12	35	18,0	24,9	3,1	31,8
		30	10,8	21,7	1,9	12,9
		25	7,3	19	1,3	6,3
		20	3,2	17,4	0,5	1,4



AOW unit gym heating example.



AOW unit greenhouse heating example.



AOW unit garage cooling example.



AOW unit stockhouse heating example.