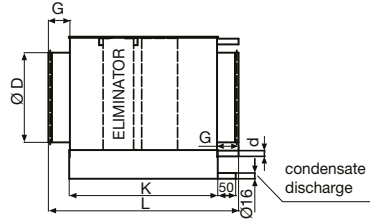
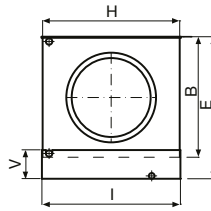


MKW – water coolers



Technical parameters

MKW – water cooler

- intended for circular pipes
- the casing of the water heater is made of galvanized sheet metal
- the tray for condensate draining is made of aluminum
- aluminum slats on copper tubes
- the connection is a collet transition with a thread that is not included in the delivery or by soldering (see table)
- maximum working pressure is 25 bar

Installation and operation

- the air velocity in the pipeline must not exceed 4 m/s, otherwise it is necessary to add another droplet eliminator after consultation with the EDV technical department
- mounting exclusively in a horizontal position
- an air filter must be installed in front of the cooler (protection against pollution)
- we recommend placing the cooler behind the heater
- during assembly, it is necessary to remember to drain and fill the system and ensure access for service
- as part of the projection, the cooler must be designed with regard to the amount of condensate generated

Type	ØD [mm]	H [mm]	B [mm]	Ø d [mm]	L [mm]	G [mm]	K [mm]	I [mm]	E [mm]	V [mm]	weight [kg]
MKW – 100	100	273	208	9.5	480	40	405	278	248	60	7.9
MKW – 125	125	273	208	9.5	480	40	405	278	248	60	7.9
MKW – 160	160	303	250	12	480	40	405	308	290	60	9.7
MKW – 200	200	333	280	12	480	40	405	338	320	60	11.5
MKW – 250	250	383	335	16	575	60	455	388	375	60	14.2
MKW – 315	315	503	437	22	575	60	455	508	497	80	19.5
MKW – 355	355	593	437	22	625	60	505	598	497	80	25.4
MKW – 400	400	593	437	22	665	80	505	598	497	80	25.8
MKW – 500	500	688	640	28	665	80	505	693	700	80	37.6

- the condensate drain with the odor siphon must be checked for the possibility of drying out and ensure a sufficient height of the water column to overcome the pressure loss of the siphon
- to determine the minimum safe level difference in the siphon, you can roughly proceed by taking the total fan pressure Pt in mm of the water column, this value will be increased by approx. 50% (the value obtained in this way represents the practical recommended value of the height of the water column in the siphon, so that the odor barrier cannot be overcome by overpressure blowing or suction by vacuum fan)
- passing air must not contain solid, fibrous, sticky and aggressive additives. It must also be free of chemical substances that cause corrosion of the materials used, i.e. destroy aluminum, copper and zinc
- based on consultation with the technical department, it is possible to offer a suitable source of cold

7¹

Type	Flow rate [m³/h]	Δp [Pa]	T [°C]
MKW 100	100	17	14.8
	150	26	16.1
MKW 125	125	17	14.8
	150	26	16.1
MKW 160	160	18	15.6
	200	30	17.6
MKW 200	200	21	15.9
	250	39	18.3
MKW 250	250	23	16.2
	315	34	18
MKW 315	315	20	15.5
	400	33	17.8
MKW 355	355	27	17.1
	400	49	19.4
MKW 400	400	27	17.1
	500	49	19.4
MKW 500	500	23	16.6
	600	41	18.4

Δp [Pa] – dependence of air pressure loss on its flow rate (applies to inlet air 32°C/40% RH; cooling water 6/12°C)

T [°C] – dependence of the outlet air temperature on its flow rate (valid for inlet air 32°C/40%RH; cooling water 6/12°C)

MKW – water coolers

Type	Air amount [m³/h]	Exchanger + eliminator pressure loss [Pa]	Output temperatures		Power		Cooling water-1 (6/12°C)		Cooling water-2 (6/12°C)	
			T1 [°C]	T2 [°C]	Q1 [kW]	Q2 [kW]	Water flow [l/s]	pressure loss [kPa]	Water flow [l/s]	pressure loss [kPa]
MKW 100	100	10+7	14.8	13.2	0.81	0.5	0.032	4	0.020	1.8
	150	16+10	16.1	14.8	1.13	0.6	0.045	7.4	0.025	1.9
	215	24+12	17.6	15.7	1.5	0.8	0.06	12.3	0.032	4
MKW 125	320	37+20	19.3	16.7	1.94	1.1	0.077	19.3	0.043	6.8
	max. 430	63+40	20.5	17.4	2.37	1.32	0.095	28.1	0.052	9.6
MKW 160	145	10+8	15.6	13.8	1.1	0.65	0.044	2.7	0.031	1.1
	250	20+10	17.6	15.5	1.68	0.94	0.067	5.7	0.04	2.3
	355	28+16	19.1	16.7	2.15	1.12	0.085	8.8	0.045	2.8
	550	61+35	20.7	17.6	2.92	1.53	0.12	16.4	0.061	4.8
	630	77+45	21.3	17.9	3.14	1.73	0.125	18	0.07	6.2
	max. 750	106+70	22	18.3	3.53	1.92	0.14	21.6	0.076	7.2
MKW 200	225	13+8	15.9	13.9	1.75	1.1	0.07	7.4	0.05	4.1
	390	24+15	18.3	15.9	2.59	1.49	0.103	14.8	0.06	5.6
	550	39+20	19.7	16.9	3.25	1.86	0.13	22.6	0.074	8.2
	630	49+30	20.4	17.2	3.53	2.02	0.14	25.8	0.08	9.4
	max. 750	67+40	21.1	17.7	3.95	2.27	0.155	31	0.09	11.6
	MKW 250	360	15+8	16.2	14.7	2.77	1.52	0.11	11.1	0.06
550		24+10	18	15.7	3.76	2.15	0.15	19.3	0.085	7.1
630		28+15	18.6	16.1	4.13	2.31	0.165	22.8	0.09	7.8
750		34+24	19.3	16.6	4.63	2.67	0.185	30	0.106	10.4
max. 900		44+30	20.2	17	5.15	3	0.2	32	0.12	13
MKW 315	560	13+7	15.5	14.4	4.45	3.23	0.18	6.9	0.13	3.9
	985	23+10	17.8	15.8	6.73	3.75	0.27	14	0.15	5
	1,200	29+15	18.7	16.2	7.72	4.3	0.31	17.8	0.17	6.3
	1,410	35+20	19.4	16.7	8.63	4.94	0.35	22	0.2	8.3
	max. 1,600	43+25	20	17.1	9.3	5.3	0.37	24.3	0.21	9
MKW 355	900	17+10	17.1	15.3	6.24	3.41	0.25	4.8	0.15	1.5
	1,590	31+18	19.4	16.8	9.36	4.8	0.37	9.5	0.19	3
	2,280	55+35	20.9	17.8	12	6.29	0.48	15	0.25	4.8
MKW 400	2,650	72+48	21.5	18	13	7	0.52	17.2	0.28	5.8
	max. 3,000	89+60	21.9	18.3	14.2	7.58	0.56	19.6	0.3	6.6
MKW 500	1,600	18+5	16.6	15.2	11.8	6.3	0.47	8.3	0.25	2.6
	2,450	27+14	18.4	16	16	8.85	0.64	14.2	0.35	5
	3,200	37+30	19.6	16.9	19	10.7	0.75	18.7	0.42	6.8
	max. 4,000	56+35	20.5	17.4	21.9	12.6	0.85	23.3	0.5	9.2

T1, Q1 and cold values. water 1 –
applies to supply air 32°C, RH 40 %
T2, Q2 and cold values. water 2 –
applies to supply air 25°C, RH 50 %

Notice

The cooler must be installed in the duct route with the air flow in the direction of the arrow on the cooler case. If the cooler is mounted upside down, the condensate is not led into the receiver and flows out of the cooler.

For the reliable operation of the cooler, it is necessary to ensure protection against freezing, or regulation of performance (defrosting cycle). In the order, it is necessary to state the request for right or left version.



design and consultation
of the regulator
tel. 602 679 469

		[m³/h]	100	150	215	320	430
MKW 100	Q [kW]		0.81	1.13	1.5	1.94	2.37
MKW 125	Q [kW]		0.81	1.13	1.5	1.94	2.37
		[m³/h]	145	250	355	550	630
MKW 160	Q [kW]		1.1	1.68	2.15	2.92	3.14
		[m³/h]	225	390	550	630	750
MKW 200	Q [kW]		1.75	2.59	3.25	3.53	3.95
		[m³/h]	360	550	630	750	900
MKW 250	Q [kW]		2.77	3.76	4.13	4.63	5.15
		[m³/h]	560	985	1,200	1,410	1,600
MKW 315	Q [kW]		4.45	6.73	7.72	8.63	9.3
		[m³/h]	900	1,590	2,280	2,650	3,000
MKW 355	Q [kW]		6.24	9.36	12	13	14.2
MKW 400	Q [kW]		6.24	9.36	12	13	14.2
		[m³/h]	1,600	2,450	3,200	4,000	–
MKW 500	Q [kW]		11.8	16	19	21.9	–

Q [kW] – dependence of cooling performance on air flow (valid for inlet air 32°C/40% RH; cooling water 6/12°C)