

Rectangular heating batteries type CWAR

Rectangular warm water coils

- Available with 2 or 4 rows and various sizes: from 400 x 200 mm to 1000 x 500 mm

Application

- The CWAR rectangular heating coils are designed for warming or heating the air in HVAC systems.
- The CWAR must be installed in a dry environment with temperatures ranging from 5 °C to 60 °C, and a relative humidity of up to 80%. The CWAR is designed for the transportation of air which is free of raw materials, lipids, chemical fumes and other impurities. The casing is made of galvanized steel.

Specifications

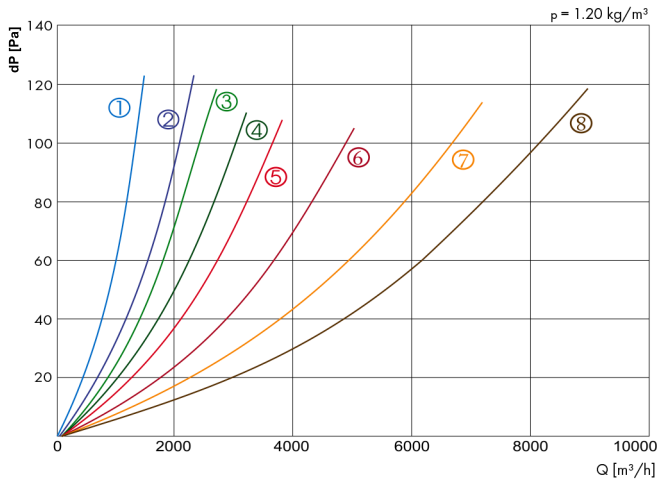
- The hot-water heat exchangers are designed for a maximum water temperature of 100 °C and a maximum working pressure of 1.6 MPa.
- The coils are composed of copper tubes with aluminium fins
- The heaters are not equipped with a control system and require an external control system.

Type	Technical data						Q m ³ / h	ΔPw kPA	Qw l/s
	P[kW]			ΔTa [°C]					
	ΔTw (80/60°C)	ΔTw (60/40°C)	ΔTw (45/35°C)	ΔTw (80/60°C)	ΔTw (60/40°C)	ΔTw (45/35°C)			
CWAR 400 x 200-2	11.7	7.5	6.6	26.9	17	15	1300	16,3/7,2/21,5	0,14/0,09/0,16
CWAR 400 x 200-4	19.3	12.6	10.9	44	29	25	1300	11,2/5,0/14,4	0,23/0,15/0,26
CWAR 500 x 250-2	19.4	13.6	10.7	29	20	16	2000	48,1/33,6/50,4	0,2/0,16/0,2
CWAR 500 x 250-4	32.3	22	18	48	33	27	2000	45,7/22,3/49,7	0,39/0,26/0,4
CWAR 500 x 300-2	22.6	14.5	12.8	29	19	17	2300	12,8/5,6/16,7	0,27/0,17/0,31
CWAR 500 x 300-4	34.8	22.7	19.7	45	29	25	2300	7,7/3,5/10,0	0,42/0,27/0,55
CWAR 600 x 300-2	26.5	17.3	15	29	19	17	2700	18,4/8,2/24,1	0,32/0,21/0,65
CWAR 600 x 300-4	43.2	28.7	24.4	47	32	27	2700	12,3/5,8/16,2	0,51/0,38/0,65
CWAR 600 x 350-2	28	18.7	16	27	18	15	3100	25,8/12,2/34,4	0,33/0,22/0,38
CWAR 600 x 350-4	46.7	30.9	26.5	45	30	25	3100	9,4/4,3/12,4	0,62/0,37/0,75
CWAR 700 x 400-2	38.4	23.9	21.6	25	15	14	4600	3,2/1,3/4,2	0,46/0,29/1,1
CWAR 700 x 400-4	68.5	44.7	38.7	44	29	25	4600	8,0/3,7/10,4	0,82/0,54/1,11
CWAR 800 x 500-2	66.7	42.2	37.6	25	16	14	7800	5,2/2,25/6,72	0,79/0,50/0,90
CWAR 800 x 500-4	109	68.7	61.2	41	26	23	7800	3,65/1,58/4,75	1,40/0,82/1,88
CWAR 1000 x 500-2	85.6	55.2	48.5	27	17	15	9500	9,2/4,2/12,2	1,02/0,66/2,29
CWAR 1000 x 500-4	139	89.9	78.4	43	28	24	9500	6,4/2,92/8,4	1,65/1,08/2,29

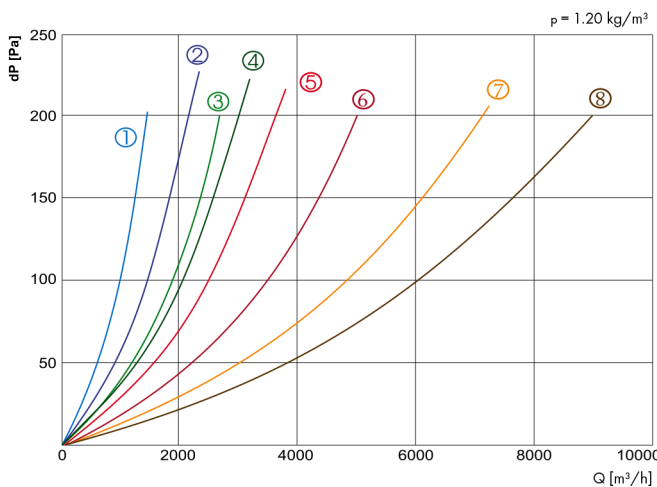
Symbols & specifications

- ΔT_w = Water regime
- ΔT_a = Temperature difference air at 0°C inlet air temperature
- Q = Air flow
- P = Power of the battery
- Q_w = Water flow
- ΔP_w = Pressure loss of water

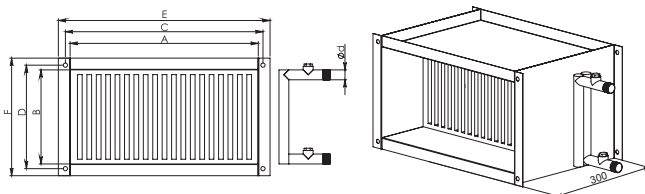
Pressure loss diagram



- ① CWAR 400x200-2
- ② CWAR 500x250-2
- ③ CWAR 500x300-2
- ④ CWAR 600x300-2
- ⑤ CWAR 600x350-2
- ⑥ CWAR 700x400-2
- ⑦ CWAR 800x500-2
- ⑧ CWAR 1000x500-2



- ① CWAR 400x200-4
- ② CWAR 500x250-4
- ③ CWAR 500x300-4
- ④ CWAR 600x300-4
- ⑤ CWAR 600x350-4
- ⑥ CWAR 700x400-4
- ⑦ CWAR 800x500-4
- ⑧ CWAR 1000x500-4



	Dimensions							
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Ø	kg
CWAR 400 x 200	400	200	420	220	440	240	3/4"	7.1
CWAR 500 x 250	500	250	520	270	540	290	3/4"	7.5
CWAR 500 x 300	500	300	520	320	540	340	3/4"	9.7
CWAR 600 x 300	600	300	620	320	640	340	3/4"	10.8
CWAR 600 x 350	600	350	620	370	640	390	3/4"	9.4
CWAR 700 x 400	700	400	720	420	740	440	1"	13
CWAR 800 x 500	800	500	820	520	840	540	1"	16.8
CWAR 1000 x 500	1000	500	1020	520	1040	540	1"	19.3