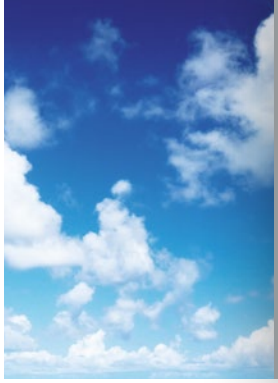
EN

District COOLING

by EURAPO

EURAPO

INTEGRATED
COMFORT
SYSTEMS



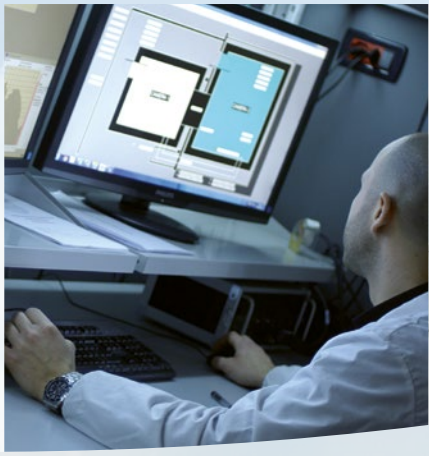
EURAPO DISTRICT COOLING RANGE

THE FIRST TO BE AWARDED EUROVENT CERTIFICATION

In the HVAC industry, Eurapo is one of the companies that has gained more in-depth experience in District Cooling technologies, namely systems for the central distribution of chilled water produced by a single source and delivered to small urban networks, neighbourhoods or entire cities.

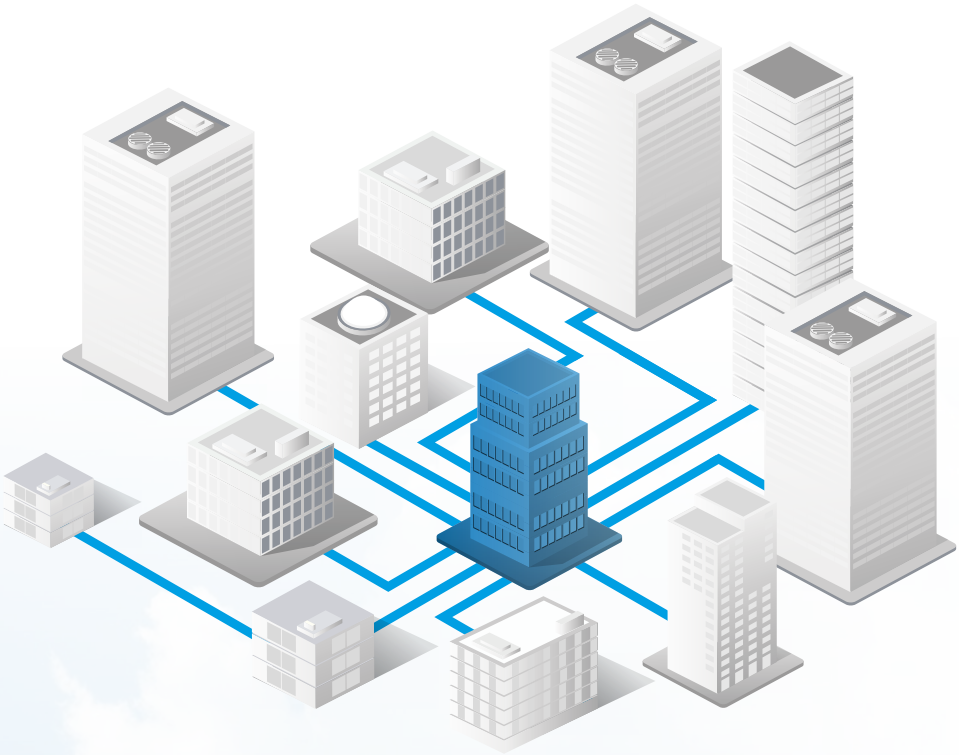
> **For quite a few years now, EURAPO has been producing and selling a full range of fan coil units and blower units for District Cooling applications for the most demanding global markets: Northern Europe, North America, Arab Emirates and the Middle East.**

The methodical efforts of the Eurapo **Research & Development Laboratories** have been rewarded with a positive response from the customers. Rivalling the most prestigious accredited international facilities, Eurapo laboratories are even adopted by other industries and universities engaged in specialized studies.
Here, it was possible to test the solutions devised, simulating climate scenarios in the target countries, sizing and accurately fine-tuning products to suit their final geographic location by using the technologically advanced calorimetric test chamber, aeraulic tunnel and enthalpy tunnel.
On the back of these results, **EURAPO is the first company in the world to have been awarded EUROVENT certification for a full District Cooling range**: an achievement that attests to the innovative quality of the product.

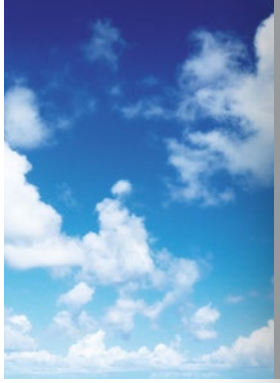


The EURAPO District Cooling range stands out for its exceptional technology and versatility. The range includes horizontal- or vertical- mount fan coils for recessing or with casings; ducted horizontal units, with high-pressure fans; and double-skin high-pressure units with sandwich panelling.
High-efficiency coils are designed with a suitable number of circuits to ensure operation with a high water temperature difference, which is a hallmark of District Cooling solutions.

District COOLING by EURAPO



Components are selected carefully based on the specific service requirements of the various countries where the units are due to be installed: Class F motors with an IP44 protection rating, running at 50 Hz and 60 Hz, stainless steel trays, high-protection control panels and high-efficiency filters.
The extensive array of accessories available includes delivery and return plenums, valves with different flow ratings for use in conjunction with a wide range of actuators, condensate drain pumps, heating elements, and controls for single units or OMNIBUS integrated management systems.
All across the vast range, the common denominators are efficiency and reliability, as attested by the capacities and air flow rates, which are also verified by independent laboratories, confirming the positive findings of EURAPO's own Laboratories.



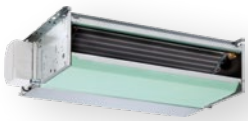
SIGMA

CONCEALED

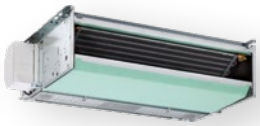
mod. SH

mod. SH/AF

mod. CH



mod. CH/AF



mod. SV

mod. SV/AF

mod. CV

mod. CV/AF

TECHNICAL DATA (4 rows District Cooling, Max speed-EST)

			516	520	522	524	528
Cooling	Total cooling capacity [kW]		3,09	4,14	5,34	6,37	7,97
Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Sensible cooling capacity [kW]		2,46	3,51	4,16	4,94	6,11
	Water flow [l/h]		295	451	511	627	808
	Pressure drop [kPa]		12,5	12,2	16,1	12,7	30,0
Further data	Air volume [m³/h]		792	1082	1304	1567	1995
	Sound power level [dB(A)]		59	58	63	64	70
	Sound pressure level [dB(A)]*		50	49	54	55	60
	Power input [W]		42	43	74	87	158
	Absorbed current [A]		0,37	0,38	0,63	0,75	1,26
	Water content [l] (2 pipes)		1,7	2,9	2,9	3,8	4,6

TECHNICAL DATA (4 rows District Cooling, Max speed-asynchronous)

			216	220	222	224	226	328
Cooling	Total cooling capacity [kW]		2,44	4,09	4,83	5,77	6,40	8,73
Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Sensible cooling capacity [kW]		1,90	3,06	3,71	4,46	4,65	6,77
	Water flow [l/h]		222	391	462	563	612	860
	Pressure drop [kPa]		8,5	13,0	13,8	10,9	18,7	27,0
Further data	Air volume [m³/h]		606	961	1115	1307	1507	2010
	Sound power level [dB(A)]		52	56	60	60	63	68
	Sound pressure level [dB(A)]*		41	47	50	50	54	59
	Power input [W]		66	86	117	137	149	210
	Absorbed current [A]		0,30	0,37	0,52	0,63	0,65	0,94
	Water content [l] (2 pipes)		1,7	2,9	2,9	3,8	3,8	4,6

* Sound pressure level in a 100 m³ room, 1,5 m distance and reverberating time of 0,3 s.

EBH

EBH model

EBH model with optional plenum

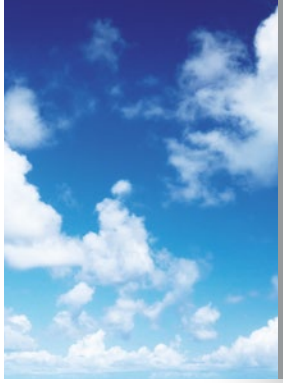
TECHNICAL DATA (District Cooling, Max speed-EST, at 50 Pa external static pressure)

			020	030	040	050	060
N. of rows			4	4	4	4	5
Cooling Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Total cooling capacity [kW]		4,95	7,68	10,71	12,65	22,33
	Sensible cooling capacity [kW]		3,67	6,13	8,41	10,20	16,16
	Water flow [l/h]		473	734	1024	1210	2130
	Pressure drop [kPa]		14,6	31,9	33,7	45,7	21,2
Further data	Air volume [m³/h]		1000	1980	2700	3560	4337
	Sound power level [dB(A)]		64	67	71	74	79
	Sound pressure level [dB(A)]**		53	56	60	63	68
	Power input [W]		134	264	366	546	771
	Absorbed current [A]		1,10	1,57	1,67	2,70	3,93
	Water content [l] (2 pipes)		2,9	2,9	3,8	3,8	8,4

TECHNICAL DATA (District Cooling, Max speed-asynchronous, at different Pa external static pressure)

			020	030	040	050	060	070*
N. of rows			4	4	4	4	5	5
Cooling Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Total cooling capacity [kW]		5,29	7,63	9,83	11,04	22,60	23,95
	Sensible cooling capacity [kW]		4,06	6,19	7,96	9,11	16,38	17,36
	Water flow [l/h]		506	730	940	1056	2156	2250
	Pressure drop [kPa]		17,1	33,3	29,5	36,7	21,6	20,8
Further data	Air volume [m³/h]		1145	2085	2680	3250	4414	5548
	Sound power level [dB(A)]		64	68	69	72	76	81
	Sound pressure level [dB(A)]**		53	57	58	61	65	72
	Power input [W]		173	329	451	588	1060	1801
	Absorbed current [A]		0,76	1,69	2,03	2,85	7,50	8,19
	Water content [l] (2 pipes)		2,9	2,9	3,8	3,8	8,4	8,4

*Performances are out of scope Eurovent FCP.
**Pressure level in open field at 1 m distance.



EDS

TECHNICAL DATA (District Cooling, Max speed-EST, at 50 Pa external static pressure)

		004	006	020	030	040	050	060
N. of rows		4	4	4	4	4	4	5
Cooling	Total cooling capacity [kW]	3,11	4,14	6,06	7,95	9,23	10,84	23,70
Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Sensible cooling capacity [kW]	2,44	3,26	4,83	6,65	7,47	8,92	17,52
	Water flow [l/h]	295	392	534	707	866	1020	2249
	Pressure drop [kPa]	11,9	22,7	19,4	31,2	25,7	37,0	23,4
Further data	Air volume [m^3/h]	974	1118	1555	2185	2618	3340	4764
	Sound power level [dB(A)]	64	62	67	70	70	74	81
	Sound pressure level [dB(A)]*	53	51	56	59	59	63	70
	Power input [W]	88	95	188	289	284	491	866
	Absorbed current [A]	0,75	0,81	1,47	1,28	1,30	2,25	3,93
	Water content [l] (2 pipes)	1,8	2,1	2,9	2,9	3,8	3,8	8,40

TECHNICAL DATA (District Cooling, Max speed-asynchronous, at 50 Pa external static pressure)

		004	006	008	020	030	040	050	060	070
N. of rows		4	4	4	4	4	4	4	5	5
Cooling	Total cooling capacity [kW]	1,62	2,62	3,40	5,61	8,12	10,23	11,13	22,60	23,59
Air temperature 24 °C d.b., 18 °C w.b. Water temperature 5,5/14,5 °C	Sensible cooling capacity [kW]	1,22	1,97	2,59	4,34	6,65	8,15	8,99	16,38	17,36
	Water flow [l/h]	154	250	324	535	775	976	1061	2156	2250
	Pressure drop [kPa]	4,0	10,5	16,3	17,1	32,5	30,9	38,5	21,6	20,8
Further data	Air volume [m^3/h]	400	596	848	1383	2230	3026	3472	4414	5548
	Sound power level [dB(A)]	53	55	57	64	67	67	71	76	81
	Sound pressure level [dB(A)]*	42	44	46	53	56	56	60	65	70
	Power input [W]	59	80	102	187	352	511	666	1060	1801
	Absorbed current [A]	0,26	0,35	0,46	0,84	2,28	2,37	3,98	7,50	8,19
	Water content [l] (2 pipes)	1,8	2,1	2,1	2,9	2,9	3,8	3,8	8,4	8,4

*Pressure level in open field at 1 m distance.

District
COOLING
by EURAPO

Eurapo Srl
Via A. Malignani, 12
33170 Pordenone - Italy
T +39 0434 572552
F +39 0434 28667
info@eurapo.it
www.eurapo.it

carecom.it

www.eurovent-certification.com
www.certiflash.com

As programs and technologies are always improving, description, data and drawings must be intended as merely indicative and can be modified without any notice.

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