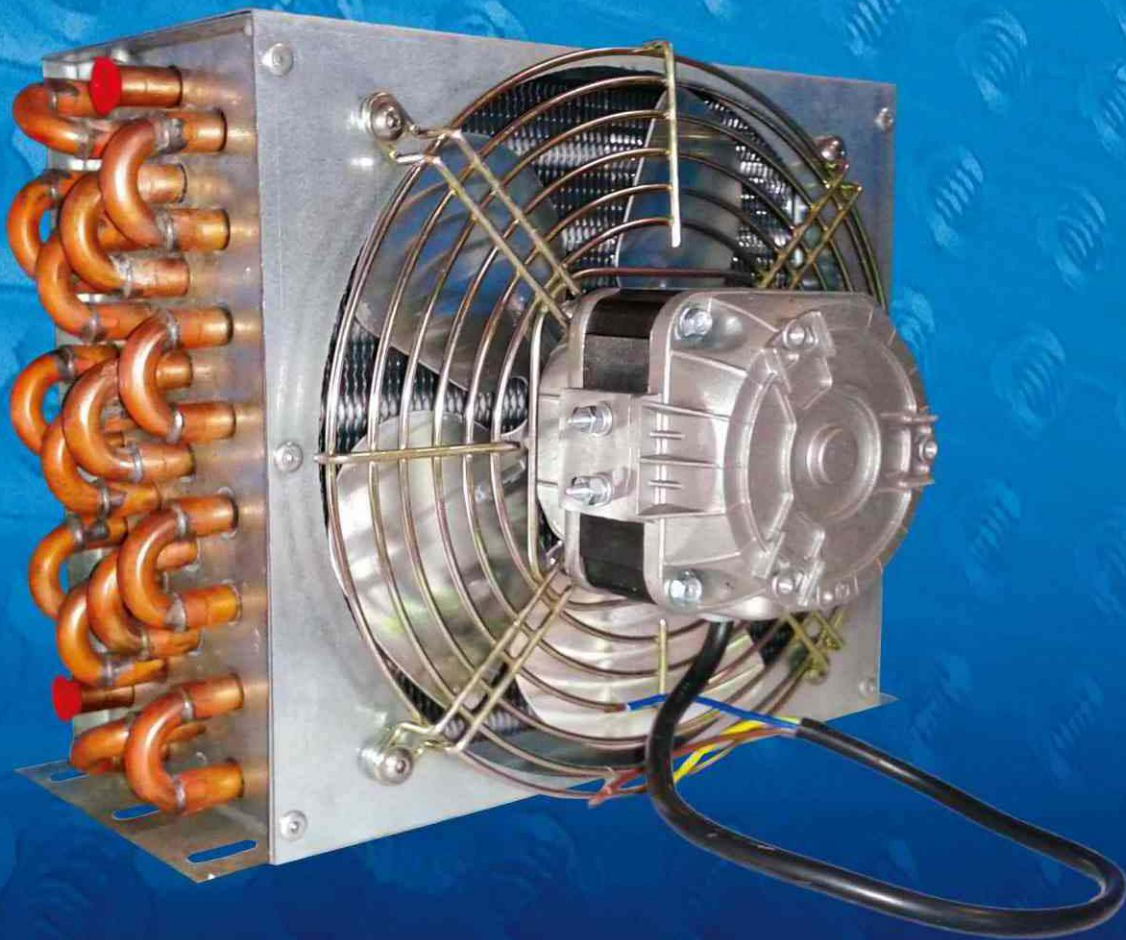




S8-SERIES AIR COOLED CONDENSERS



**PRZEDSIĘBIORSTWO PRODUKCJI URZĄDZEŃ
CHŁODNICZYCH TARCZYN SP. Z O.O.**

ul. Błońska 85, 05-555 Tarczyn

tel. +48 22 727 86 86

fax: +48 22 727 81 61

kom. +48 697 702 206

www.ppuch.pl

info@ppuch.pl

Application:

S8-series air cooled condensers with capacities between 605W and 6971kW are dedicated to Freon cooling systems.

The capacities in the tables are calculated for R 404A with ambient temperature at 25°C, condensation point at 40°C, and temperature difference $\Delta t = 15K$.

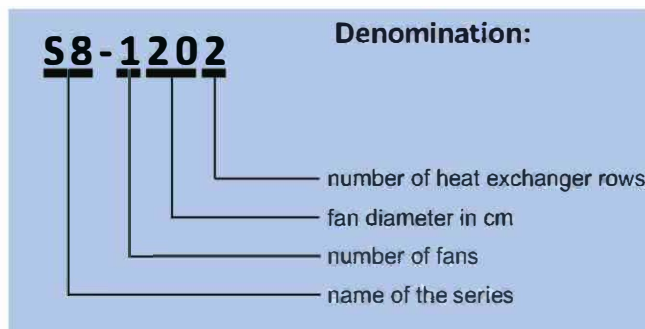
Design:

The condenser coils are built with 5/16" internally finned copper tubes mechanically expanded inside aluminium fins which are equipped with flanges covering the whole fin spacing distance, thus ensuring perfect thermal contact. All coils are tested at 30 bar pressure and filled with dry nitrogen to a slight overpressure. Galvanized steel casing (painted with RAL 9016 or another requested colour as an option). The condensers are designed to be mounted vertically.

All condenser fans are protected by a safety mesh, and adjusted to 230V-50Hz power supply.

Fan characteristics:

- $\varnothing 172$ – 5W/230V
- $\varnothing 200$ – 7W/230V
- $\varnothing 230$ – 11W/230V
- $\varnothing 254$ – 16W/230V
- $\varnothing 300$ – 25W/230V



Power calculation for the required working conditions:

$$Q_{rz} = Q_{st} * Wk * Wo * Wr * Wh * Wm$$

Q_{rz} - real capacity of the condenser in the required conditions

Q_{st} - condenser capacity from the table (standard working conditions)

Wk - correction coefficient for different cooling agents

Cooling agent			
R404A; R507	R22	R134a	R407C
1,00	0,96	0,93	0,87

Wo - correction coefficient for different ambient temperatures

Ambient temperature							
15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
1,03	1,02	1	0,99	0,97	0,95	0,94	0,93

Wr - correction coefficient for the difference between the condensation point and ambient temperature

Wr \ $\Delta t(K)$	8	9	10	11	12	13	14	15	16	17	18	19	20
R22; R134a; R404A; R507	0,53	0,60	0,67	0,73	0,80	0,87	0,93	1,00	1,07	1,13	1,20	1,27	1,33
R407C	0,46	0,54	0,62	0,69	0,77	0,85	0,93	1,00	1,08	1,15	1,23	1,31	1,38

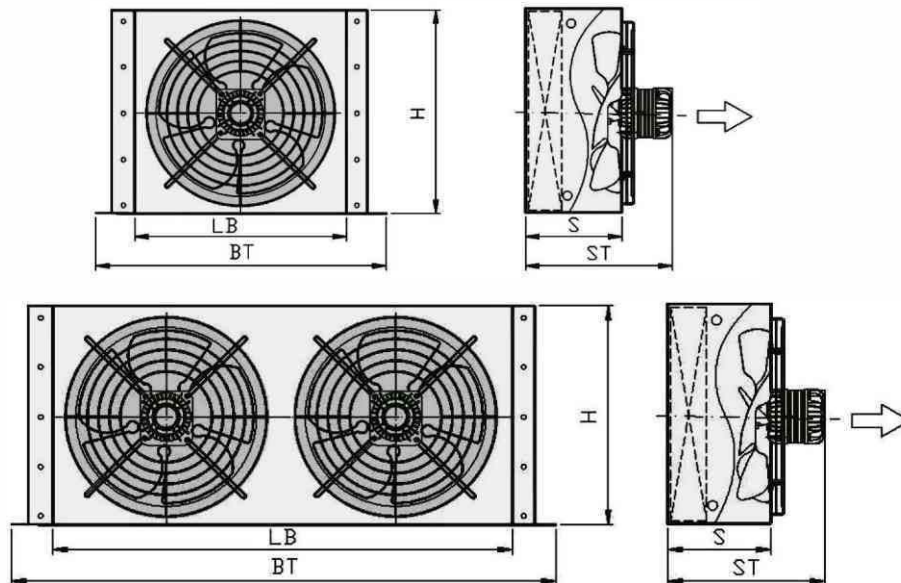
Wh - correction coefficient for different elevations above sea level

Elevation	0	600	800	1000	1200	1400	1600	1800	2000
Wh	1,00	0,96	0,94	0,93	0,91	0,90	0,88	0,87	0,85

Wm - correction coefficient for different fin materials

Material	Aluminium	Epoxy-coated aluminium	Copper
Wm	1,00	0,97	1,03

Technical data



No.	Condenser type	Surface [m ²]	Capacity for R-404A	No. of fans – air flow [pcs] - [m ³ /h]	Dimensions [mm]				Inlet-Outlet [mm]	Weight [kg]	Noise 5 m away [dB]
					BT	LB	H	ST - S			
1	S8-1172	1,11	605	1-290	243	190	203	173-110	8 - 8	2,6	21
2	S8-1173	1,67	797	1-250	243	190	203	193-130	8 - 8	3,0	22
3	S8-1174	2,23	928	1-230	243	190	203	218-155	8 - 8	3,4	24
4	S8-2172	2,35	1277	2-560	453	400	203	173-110	8 - 8	5,3	31
5	S8-2173	3,52	1659	2-500	453	400	203	193-130	8 - 8	5,9	32
6	S8-2174	4,69	1938	2-480	453	400	203	218-155	8 - 8	6,3	33
7	S8-1202	1,45	868	1-440	273	220	228	177-110	8 - 8	3,3	22
8	S8-1203	2,18	1178	1-400	273	220	228	197-130	8 - 8	3,7	23
9	S8-1204	2,9	1385	1-370	273	220	228	222-155	8 - 8	4,1	25
10	S8-2202	3,03	1812	2-880	513	460	228	177-110	8 - 8	6,6	31
11	S8-2203	4,55	2372	2-800	513	460	228	197-130	8 - 8	7,3	32
12	S8-2204	6,07	2712	2-750	513	460	228	222-155	8 - 8	7,8	33
13	S8-1232	1,83	1267	1-750	303	250	253	183-110	8 - 8	3,6	22
14	S8-1233	2,75	1744	1-690	303	250	253	203-130	8 - 8	4,1	23
15	S8-1234	3,66	2072	1-640	303	250	253	228-155	8 - 8	4,7	25
16	S8-2232	3,81	2559	2-1500	573	520	253	183-110	8 - 8	7,3	31
17	S8-2233	5,72	3302	2-1380	573	520	253	203-130	8 - 8	8,2	32
18	S8-2234	7,62	4184	2-1300	573	520	253	228-155	8 - 8	9,0	33
19	S8-1252	2,25	1655	1-800	333	280	278	186-110	8 - 8	4,6	22
20	S8-1253	3,39	2007	1-740	333	280	278	206-130	8 - 8	5,3	23
21	S8-1254	4,51	2365	1-700	333	280	278	231-155	8 - 8	6,0	25
22	S8-2252	4,67	3305	2-1580	633	580	278	186-110	8 - 8	9,6	31
23	S8-2253	7,01	4007	2-1480	633	580	278	206-130	8 - 8	10,6	32
24	S8-2254	9,35	4706	2-1380	633	580	278	231-155	10-10	11,6	33
25	S8-1302	3,59	2367	1-1300	403	350	353	253-130	8 - 8	6,5	23
26	S8-1303	5,39	3060	1-1200	403	350	353	273-150	8 - 8	7,7	24
27	S8-1304	7,18	3767	1-1100	403	350	353	298-175	8 - 8	8,8	27
28	S8-2302	7,39	4703	2-2600	773	720	353	253-130	10-10	12,9	33
29	S8-2303	11,08	6156	2-2400	773	720	353	273-150	12-12	14,4	34
30	S8-2304	14,77	6971	2-2280	773	720	353	298-175	12-12	15,9	35

Notes

