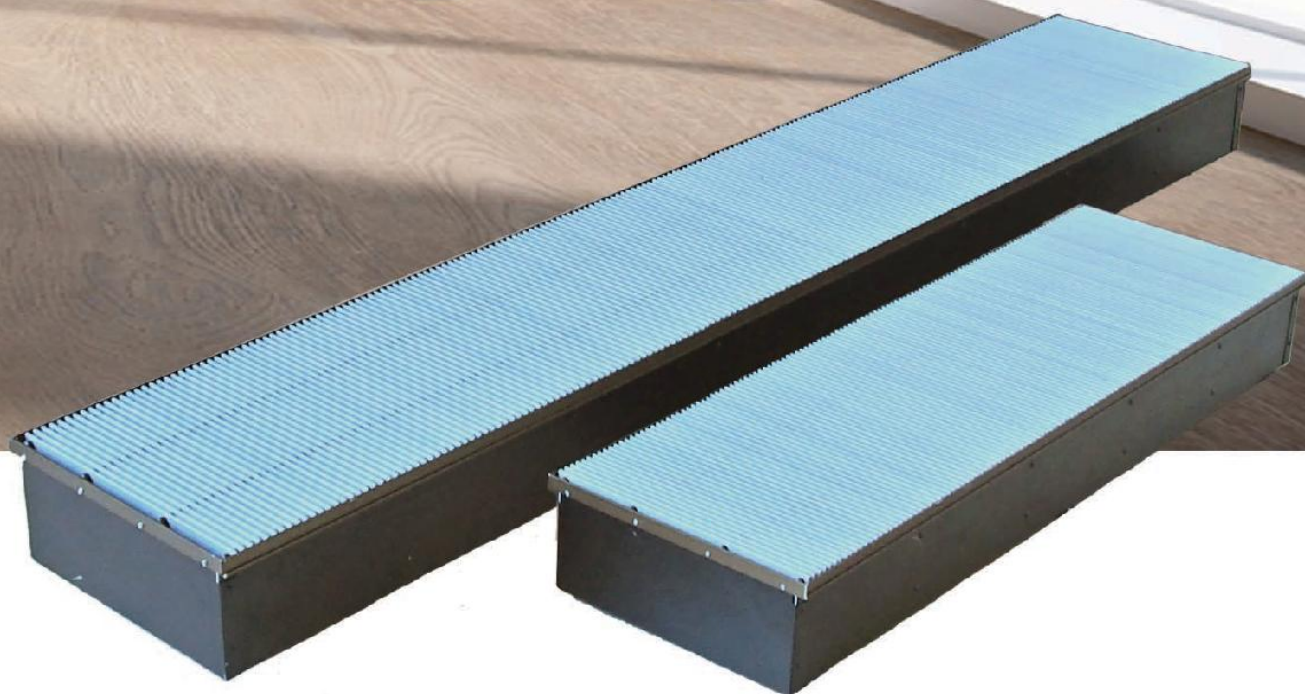




FLOOR CONVECTORS
TANGRA FFCU

DESCRIPTION

Floor convectors are modern equipment for heating and cooling, designed to be mounted underfloor in office buildings, stores and exhibition halls, apartments, houses and other premises. Very suitable for premises with large windows, where they are of functional and also esthetical importance.

Floor convectors are used as main components or could be installed in combination with other types of heating/cooling units.

Operation temperature of the working fluid from -5°C to +55°C.

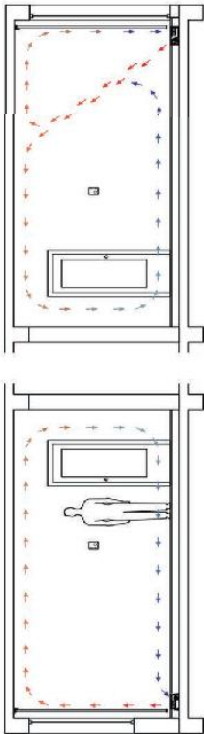
MODELS

FFCU-* Silent** - low noise version, suitable for residential buildings

FFCU-* Power** - high efficient version - office buildings

FFCU-H-*** - floor convectors only for heating, without condensation tray

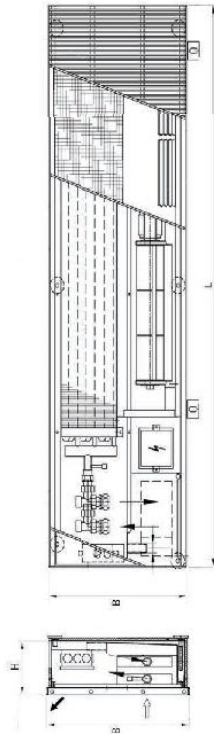
Air distribution



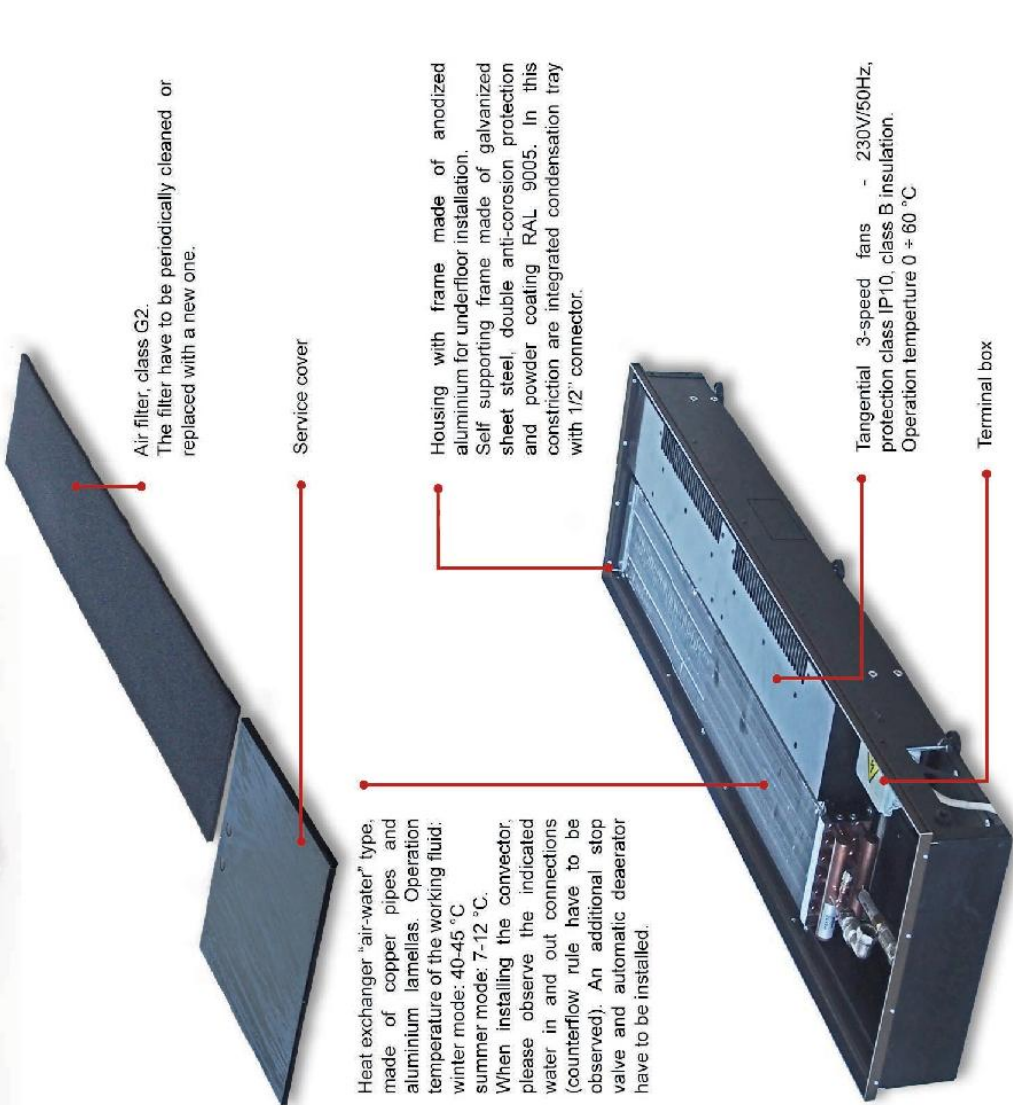
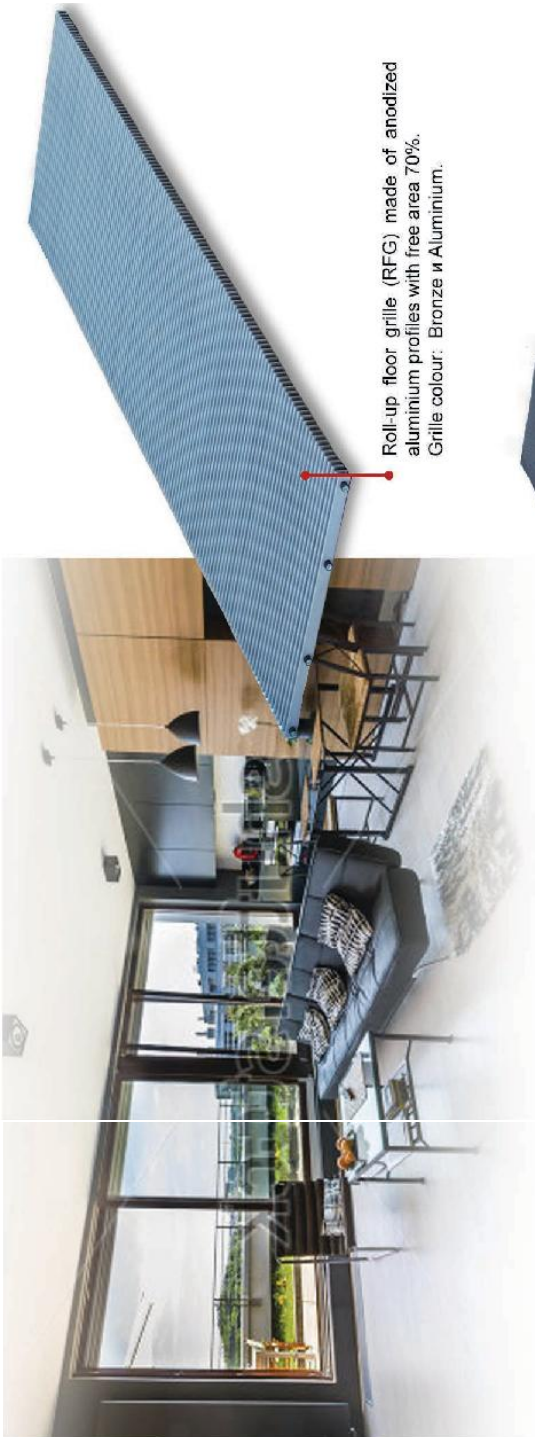
FFCU-H*** - only heating

FFCU-Silent/Power - heating and cooling

OVERALL AND JOINED DIMENSIONS



Model	Dimensions			Fans	Minimum dimensions for installation			Weight	
	B	H	L	Ø	Bk	Hk	Lk		
FFCU-125 Silent	368	150	1250	3/4"	1	410	1500+200	1300	32
FFCU-125 Power	368	150	1250	3/4"	1	410	1500+200	1300	33
FFCU-200 Silent	368	150	2000	3/4"	2	410	1500+200	2050	52
FFCU-200 Power	368	150	2000	3/4"	2	410	1500+200	2050	53
FFCU-H-125	288	135	1250	3/4"	1	350	1500+200	1300	26
FFCU-H-200	288	135	2000	3/4"	2	350	1500+200	2050	42



Roll-up floor grille



Air filter G2



Heat exchanger "air-water"



CONTROL



The convector could be controlled by room thermostat. One thermostat can manage up to 6 fans (3 convectors). It is recommended to install it on an inner wall, far removed from windows and doors.



Digital room thermostat Siemens with LCD display - allows quick and easy setting of customer's parameters. Additional equipment, such as valves, heaters, fans, could be connected and controlled by the digital thermostat. Possible to connect the unit to BMS.

Accessories

- External acoustic insulation of the housing - synthetic rubber 6mm.
- Pipe fittings (hollander, valves, adapters, etc).
- Control unit - room thermostat with heating /cooling mode, 3-speed fan control.
- Condensing pump - 2.0/h, H=8m, 18W, 230V/50Hz
- Secure cover to protect the unit during reconstructions.
- Decorative aluminium profile for installation on parquet or laminate flooring.

Mounting kit

- Leveling steps
- Profiles for fixing the convector to supporting surface.

ACOUSTIC DATA Lw (dB(A))

Sound pressure level in free field
at 1,5m from the convector.

Speed	FFCU-125 Silent			FFCU-125 Power			FFCU-200 Silent			FFCU-200 Power		
	3	2	1	34	29	23	39	34	29	37	32	26
	37	32	26	34	29	23	31	23	26	34	37	26

TECHNICAL DATA

Model	Units	COOLING										HEATING									
		Fan speed	Air flow [m³/h]	Room temperature [°C]	Relative humidity [%]	Air outlet temperature [°C]	Sensible cooling capacity [kW]	Total cooling capacity [kW]	Water inlet temperature [°C]	Water outlet temperature [°C]	Water flow [l/h]	Pressure drop [kPa]	Condensation [l/h]	Air flow [m³/h]	Room temperature [°C]	Air outlet temperature [°C]	Total heating capacity [kW]	Water inlet temperature [°C]	Water outlet temperature [°C]	Water flow [l/h]	Pressure drop [kPa]
FFCU-125 Silent	3/2/1	210/140/70	24	40	10,9/4,7/6	990/720/440	990/684/333	1007/739/427	7	12,11,3/9,7	144	1,09	-/-0,04/0,07	210/140/70	20	40,6/42,7/44,6	1460/1070/580	45	36,3/38,6/41,5	144	0,72
	3/2/1	210/140/70	26	40	11,7/9,9/7,8	1060/880/540	1007/739/427	1060/880/540	7	13,4/12,3/10,2	144	1,09	0,04/0,14/0,14	210/140/70	22	40,9/42,9/44,6	1340/990/530	45	37/38,1/41,8	144	0,72
	3/2/1	210/140/70	24	40	11,9/10,6/9,5	850/630/340	850/630/333	850/630/340	9	14,1/12,8/11,1	144	1,09	-/-0,01	210/140/70	20	36,4/38,2/39,6	1160/860/460	40	33/34,9/39,6	144	0,72
	3/2/1	210/140/70	26	40	12,3/11,4/9,6	970/710/440	970/682/333	970/710/440	9	14,8/13,3/11,7	144	1,09	-/-0,01/0,07	210/140/70	22	38,8/38,3/39,5	1050/770/410	40	33,7/35,4/37,5	144	0,72
FFCU-200 Silent	3/2/1	420/280/140	24	40	10,3/9,4/7,8	1950/1400/890	1950/1316/774	2037/1513/853	7	12/10,9/9,4	324	0,71	-/-0,11/0,14	420/280/140	20	40,6/42,7/44,5	2920/2150/1160	45	37,2/39,3/41,9	324	0,52
	3/2/1	420/280/140	26	40	11,6/9,6/7,8	2190/1780/1080	2190/1513/853	2190/1780/1080	7	12,8/11,7/9,9	324	0,71	0,18/0,32/0,29	420/280/140	22	40,9/42,9/44,5	2690/1970/1070	45	37,8/39,7/42,2	324	0,52
	3/2/1	420/280/140	24	40	12/10,6/10,1	1710/1270/676	1710/1270/676	1710/1270/676	9	13,6/12,4/10,9	324	0,71	-/-0,01	420/280/140	20	36,4/38,1/39,6	2330/1710/990	40	33,8/35,4/37,5	324	0,52
	3/2/1	420/280/140	26	40	12,3/11,4/9,7	1940/1378/774	1940/1378/774	1940/1378/774	9	14,2/12,9/11,4	324	0,71	0/0,07/0,14	420/280/140	22	38,8/38,3/39,5	2100/1540/830	40	34,4/38,9/37,8	324	0,52
FFCU-125 Power	3/2/1	270/210/175	24	40	10,6/10,1/9,4	1220/979/656	1220/979/656	1500/1240/1120	7	11,9/11,1/10,7	216	1,68	-/-0,04/0,07	270/210/175	20	40,2/41,6/42,5	1830/1530/1330	45	37,6/38,9/38,7	216	1,42
	3/2/1	270/210/175	26	40	11,8/10,6/9,9	1380/1079/952	1380/1079/952	1500/1240/1120	7	12,6/12/11,5	216	1,68	0,14/0,18/0,29	270/210/175	22	40,6/41,9/42,7	1700/1410/1060	45	38,2/39,4/40,1	216	1,42
	3/2/1	270/210/175	24	40	12,1/11,2/10,7	1080/900/780	1080/900/780	1080/900/780	9	13,3/12,6/12,1	216	1,68	-/-	270/210/175	20	36,1/37,3/38	1470/1220/1060	40	34,1/35,1/35,8	216	1,42
	3/2/1	270/210/175	26	40	12,6/12/11,4	1230/980/855	1230/980/855	1230/1010/910	9	13,9/13/12,6	216	1,68	-/-0,01/0,04	270/210/175	22	35,5/37,5/38,2	1320/1100/960	40	34,7/35,6/36,2	216	1,42
FFCU-200 Power	3/2/1	540/420/350	24	40	10,7/10,1/9,5	2430/1958/1711	2430/1958/1711	2430/2040/1840	7	11,5/10,8/10,4	468	1,39	-/-0,07/0,14	540/420/350	20	40,4/41,5/42,3	3670/3050/2640	45	36,3/39,4/40,1	468	1,15
	3/2/1	540/420/350	26	40	11,6/10,7/9,9	2592/2166/1904	2592/2166/1904	2880/2490/2240	7	12/11,6/11,1	468	1,39	0,36/0,43/0,47	540/420/350	22	40,4/41,7/42,5	3370/2810/2480	45	38,8/39,8/40,5	468	1,15
	3/2/1	540/420/350	24	40	12,2/11,4/10,8	2150/1800/1560	2150/1800/1560	2150/1800/1560	9	13/12,3/11,9	468	1,39	-/-	540/420/350	20	36/37,1/37,8	2920/2430/2110	40	34,6/35,5/36,1	468	1,15
	3/2/1	540/420/350	26	40	12,7/12,1/11,5	2430/1969/1720	2430/1969/1720	2430/2030/1830	9	13,5/12,7/12,4	468	1,39	-/-0,04/0,14	540/420/350	22	36,4/37,4/38	2630/2190/1900	40	35,2/36/36,5	468	1,15
FFCU-H-125	3/2/1													210/140/70	20	40,6/42,7/44,6	1460/1070/580	45	36,3/38,6/41,5	144	0,72
	3/2/1													210/140/70	22	40,9/42,9/44,6	1340/990/530	45	37/38,1/41,8	144	0,72
	3/2/1													210/140/70	20	36,4/38,2/39,6	1160/860/460	40	33/34,9/39,6	144	0,72
	3/2/1													210/140/70	22	38,8/38,3/39,5	1050/770/410	40	33,7/35,4/37,5	144	0,72
FFCU-H-200	3/2/1													420/280/140	20	40,6/42,7/44,5	2820/2150/1160	45	37,2/39,3/41,9	324	0,52
	3/2/1													420/280/140	22	40,9/42,9/44,5	2690/1970/1070	45	37,8/39,7/42,2	324	0,52
	3/2/1													420/280/140	20	36,4/38,1/39,6	2330/1710/990	40	33,9/35,4/37,5	324	0,52
	3/2/1													420/280/140	22	36,6/38,3/39,5	2100/1540/830	40	34,4/38,3/37,8	324	0,52