

Technical Service Manual

VRF Indoor Unit

DC Series



Series:

Wall Mounted

KTGZ24HFAN1

KTGZ30HFAN1

KTGZ40HFAN1

KTGZ50HFAN1

KTGZ60HFAN1

KTGZ72HFAN1

KTGZ80HFAN1

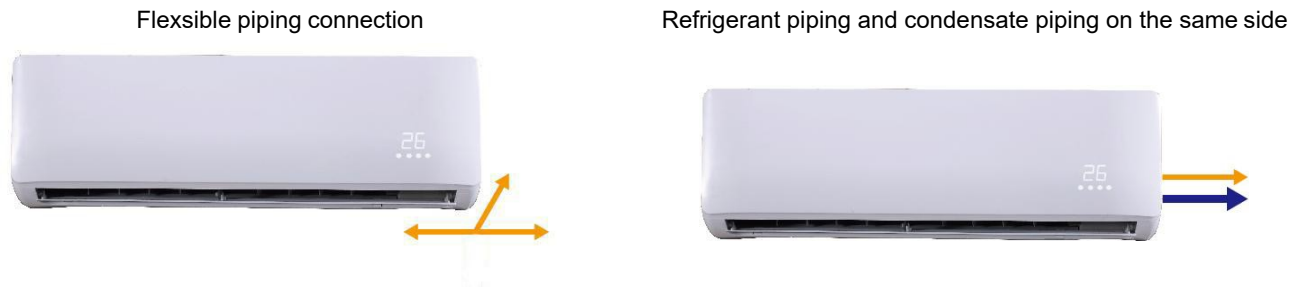
Wall Mounted KTGZ

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1. Features

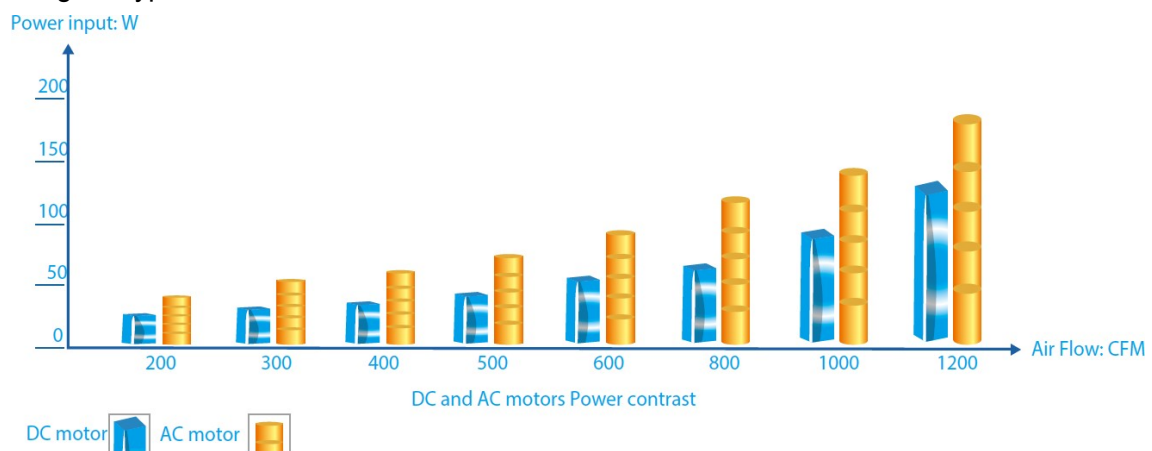
➤ Flexible installation

Multi-refrigerant outlet pipe method: left/right/rear, more flexible for installation.



➤ High efficiency DC fan motor

The power consumption of DC driven VRF indoor units can be reduced up to 30% in comparison to corresponding AC type.



➤ Quiet operation

Adoption of the 2000 stages element positioning mechanical expansion valve, ensures precise flow control, as well as lower modulation noise when EXV operating.

More smooth airflow with less turbulence. Owing to the multiple-blade fan and the air guide design, the airflow is getting smoother and more comfortable.

2. Specifications

Model			KTGZ24HFAN1	KTGZ30HFAN1	KTGZ40HFAN1	KTGZ50HFAN1
Power supply			1 phase, 220-240V, 50/60Hz			
Cooling	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	8	9	19	19
	Rated current	A	0.27	0.31	0.43	0.44
Heating	Capacity	kW	2.4	3.2	4	5
	Input	W	8	9	19	19
	Rated current	A	0.27	0.31	0.43	0.44
Indoor fan motor	Model		WZDK20-38G	WZDK20-38G	ZKSP-58-8-1	ZKSP-58-8-1
	Type		DC motor			
	Input	W	7	8	18	18
Indoor coil	Number of rows		1	2	1	2
	Tube pitch× row pitch	mm	21×13.37			
	Fin spacing	mm	1.3			
	Fin type		Hydrophilic aluminum			
	Piping diameter	mm	Φ7			
	Length× height	mm	585×315	585×315	701×315	701×315
	Number of circuits		2	3	3	5
Indoor air flow (H/M/L)		m ³ /h	422/393/356	417/370/316	656/573/488	594/507/424
Indoor noise level (H/M/L)		dB(A)	31/30/29	31/30/29	33/32/30	35/33/31
Indoor unit	Dimension (W×H×D)	mm	835×280×203	835×280×203	990×315×223	990×315×223
	Packing (W×H×D)	mm	935×385×320	935×385×320	1085×420×335	1085×420×335
	Net/Gross weight	kg	8.4/12.1	9.5/13.1	11.4/15.5	12.8/16.9
Refrigerant type			R410A			
Throttle		Type	EXV			
Design pressure (H/L)		MPa	4.4/2.6			
Liquid pipe/ Gas pipe		mm	Φ6.35/ Φ12.7			
Connecting wiring	Power wiring	mm ²	3×2.5			
	Signal wiring	mm ²	3×0.75			
Drainage water pipe diameter		mm	Φ16.5			
Controller			KWC-51			

Notes:

Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m (horizontal)

Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB; equivalent ref. piping: 7.5m (horizontal)

Specifications

Model			KTGZ60HFAN1	KTGZ72HFAN1	KTGZ80HFAN1
Power supply			1 phase, 220-240V, 50/60Hz		
Cooling	Capacity	kW	5.6	7.1	8
	Input	W	27	49	53
	Rated current	A	0.58	0.6	0.6
Heating	Capacity	kW	6.3	8	9
	Input	W	27	49	53
	Rated current	A	0.58	0.6	0.6
Indoor fan motor	Model		ZKSP-58-8-1	ZKSP-60-8-3	ZKSP-60-8-3
	Type		DC motor		
	Input	W	25	40	
Indoor coil	Number of rows		2	2	
	Tube pitch× row pitch	mm	21×13.37		
	Fin spacing	mm	1.3		
	Fin type		Hydrophilic aluminum		
	Piping diameter	mm	Φ7		
	Length× height	mm	701×315	825×399	825×399
	Number of circuits		5		
Indoor air flow (H/M/L)		m ³ /h	747/648/547	1195/1005/809	1195/1005/809
Indoor noise level (H/M/L)		dB(A)	38/36/34	44/39/36	44/39/36
Indoor unit	Dimension (W×H×D)	mm	990×315×223	1194×343×262	1194×343×262
	Packing (W×H×D)	mm	1085×420×335	1290×375×460	1290×375×460
	Net/Gross weight	kg	12.8/16.9	17/22.4	17/22.4
Refrigerant type			R410A		
Throttle		Type	EXV		
Design pressure (H/L)		MPa	4.4/2.6		
Liquid pipe/ Gas pipe		mm	Φ9.53/ Φ15.9		
Connecting wiring	Power wiring	mm ²	3×2.5		
	Signal wiring	mm ²	3×0.75		
Drainage water pipe diameter		mm	Φ16.5		
Controller			KWC-51		

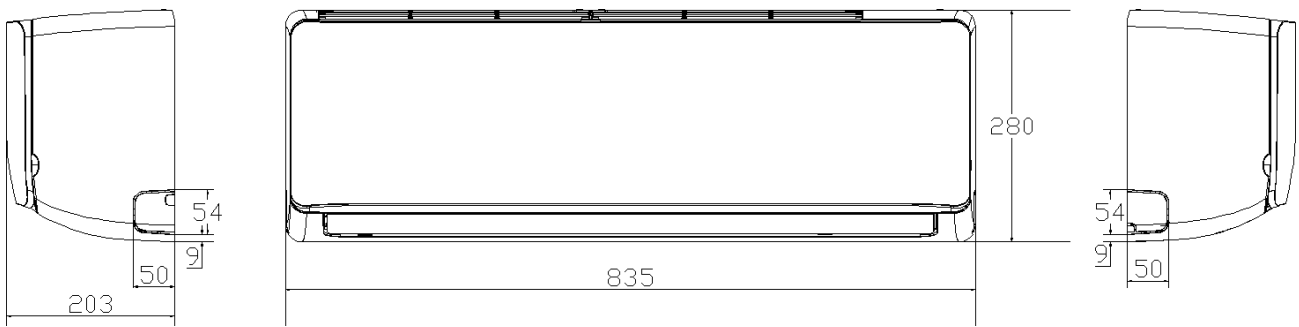
Notes:

Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m (horizontal)

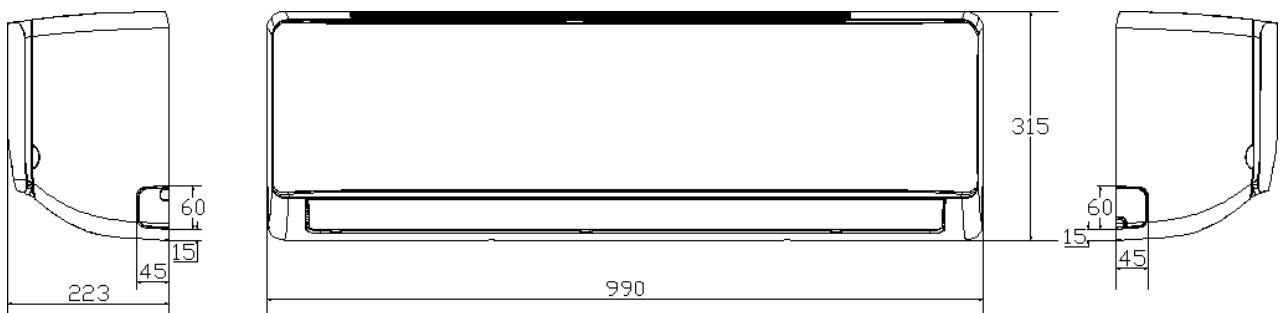
Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB; equivalent ref. piping: 7.5m (horizontal)

3. Dimensions

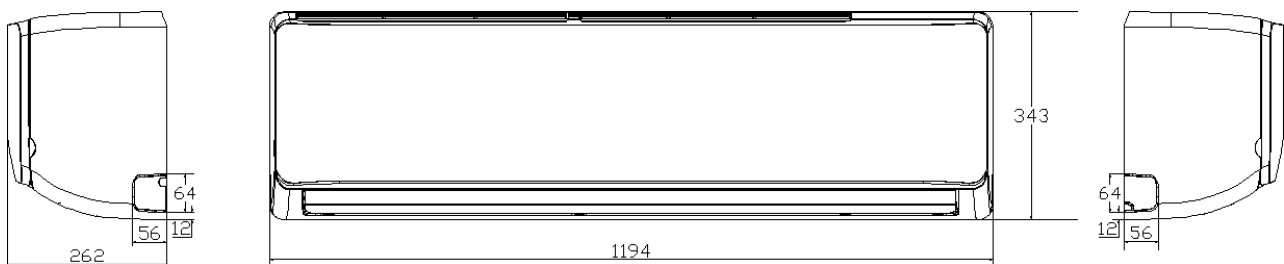
KTGZ24HFAN1 KTGZ30HFAN1



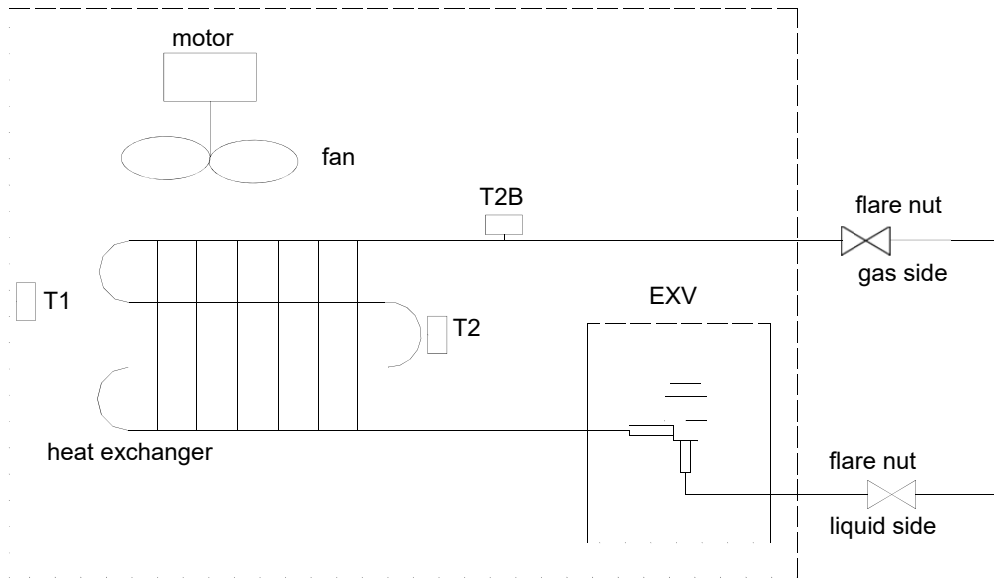
KTGZ40HFAN1 KTGZ50HFAN1 KTGZ60HFAN1



KTGZ72HFAN1 KTGZ80HFAN1



4. Piping Diagrams



T1: Indoor ambient temperature sensor;

T2: Temperature sensor in the middle of evaporator;

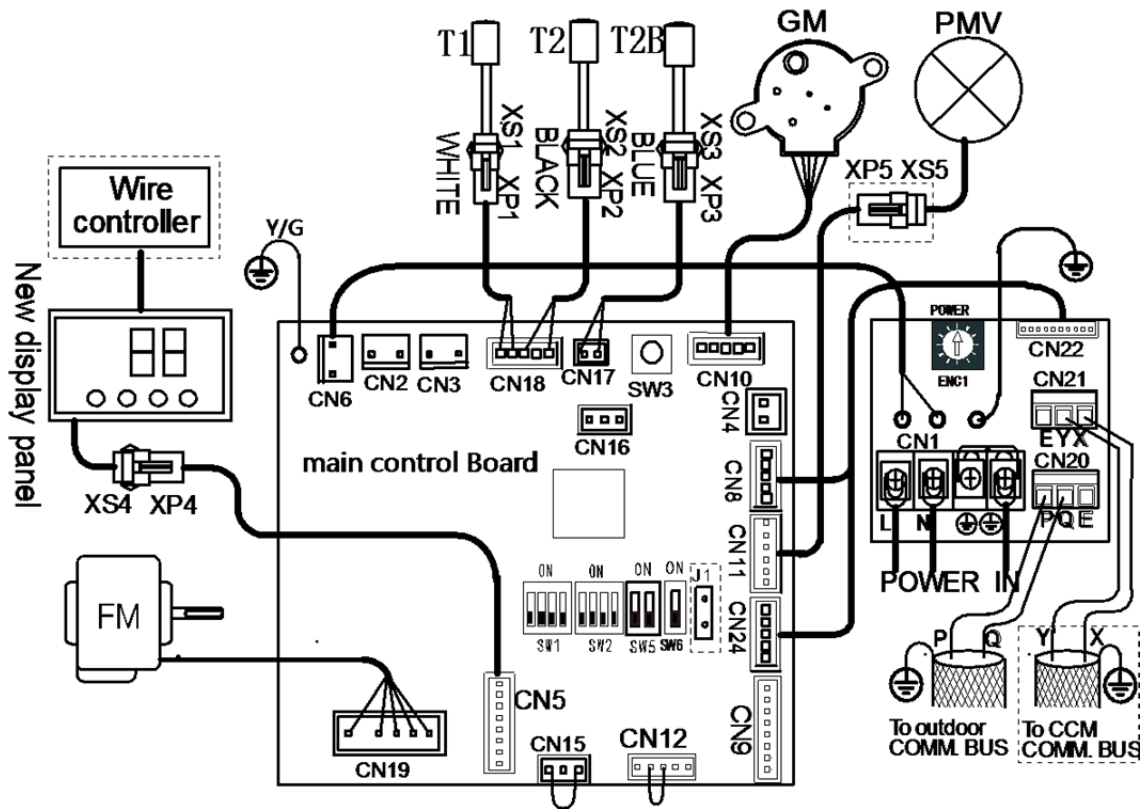
T2B: Evaporator outlet temperature sensor.

Refrigerant pipe connection port diameters

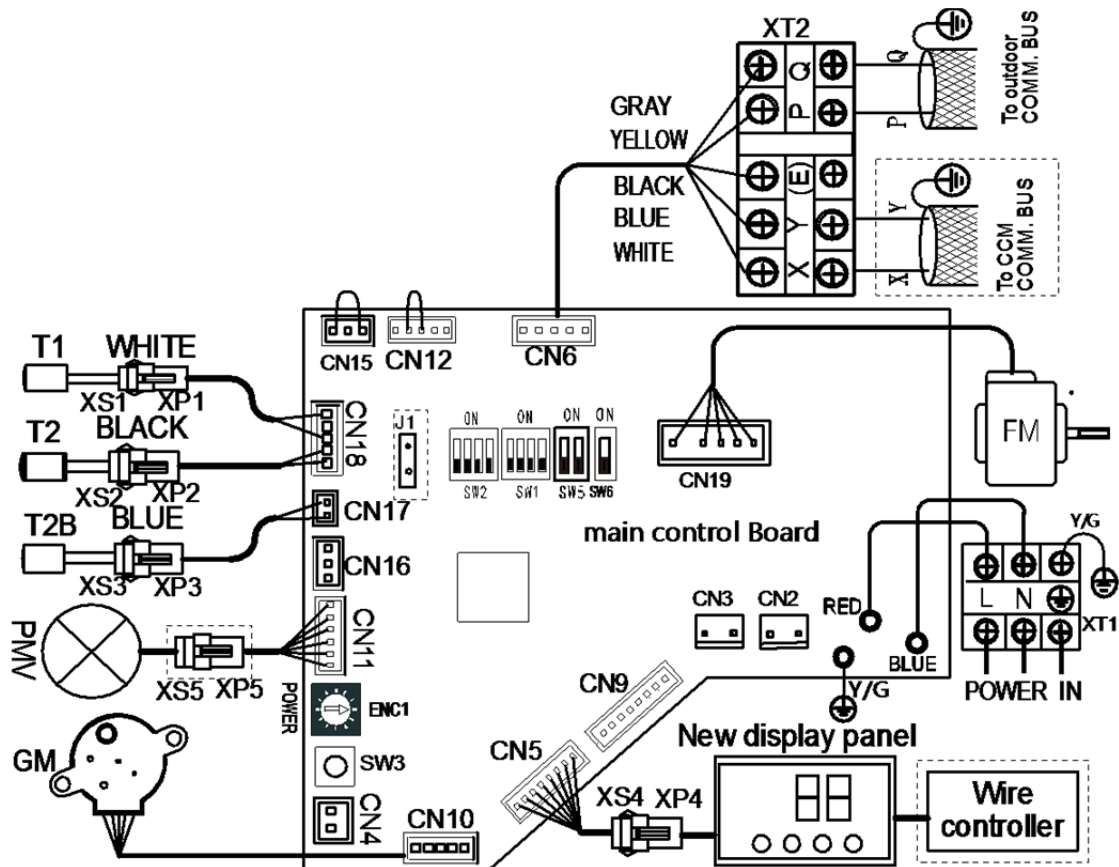
Model	Gas pipe	Liquid pipe
2.2-4.5kW	Φ12.7	Φ6.35
5.6-8.0kW	Φ15.9	Φ9.53

5. Wiring Diagrams

KTGZ24HFAN1 KTGZ30HFAN1

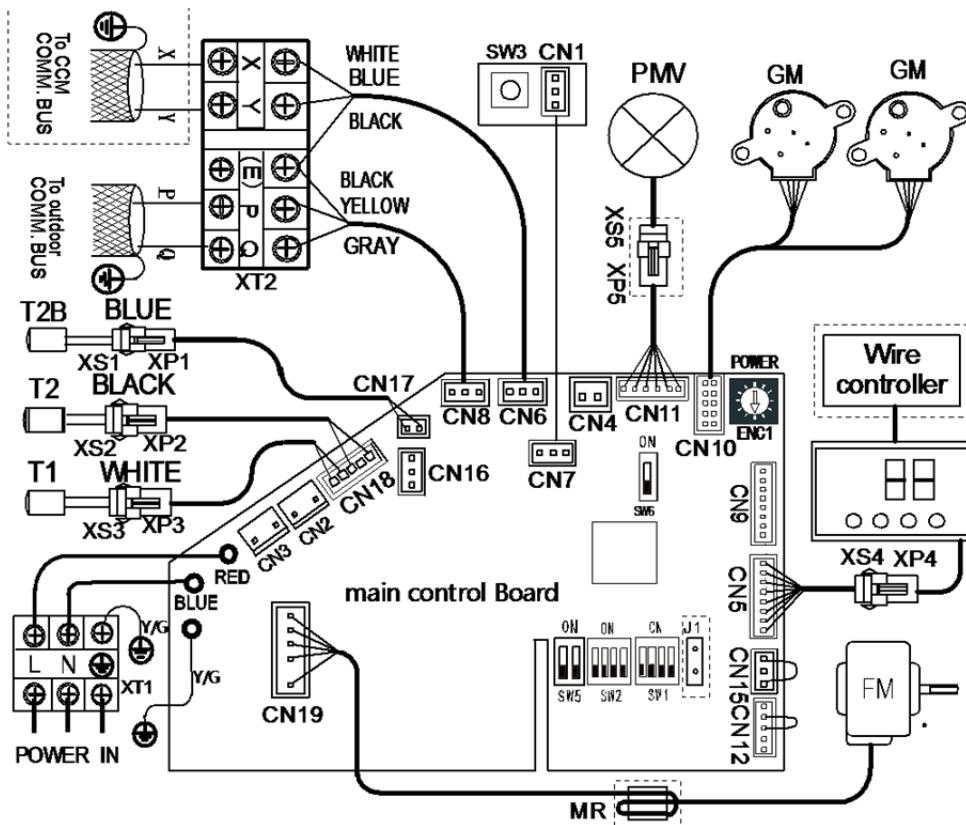


KTGZ40HFAN1 KTGZ50HFAN1 KTGZ60HFAN1



Wiring diagrams

KTGZ72HFAN1 KTGZ80HFAN1



Code definition

Code	Name	Code	Name
FM	Fan motor	T2B	Evaporator outlet temperature sensor
GM	Swing motor	CS	Water level switch
PMV	EXV	XP1-5/XS1-5	Connectors
T1	Indoor ambient temperature sensor	XT1/XT2	Terminals
T2	Temperature sensor in the middle of evaporator	MR	Magnetic ring

Dial switch setting

ON	Means 0
ON	Means 1

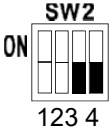
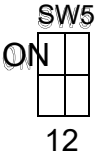
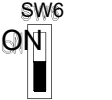


SW1 setting

ON	0 means auto addressing mode (Default)
ON	1 means factory test mod

SW2 setting

ON	00 means when temperature is 15°C or below, fan will stop to prevent cold air(Default)
ON	01 means when temperature is 20°C or below, fan will stop to prevent cold air
ON	10 means when temperature is 24°C or below, fan will stop to prevent cold air
ON	11 means when temperature is 26°C or below, fan will stop to prevent cold air

Dial switch setting

SW2 setting	
	00 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 4 minutes and run for 1 minute (Default)
	01 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 8 minutes and run for 1 minute
	10 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 12 minutes and run for 1 minute
	11 means in heating mode, the fan which stop for reaching the set temp., will periodically stop for 16 minutes and run for 1 minute
SW5 setting	
	00 means temperature compensation value is 6°C in heating mode (default)
	01 means temperature compensation value is 2°C in heating mode
	10 means temperature compensation value is 4°C in heating mode
	11 means temperature compensation value is 8°C in heating mode
SW6 setting	
	0 means temperature compensation value is 0°C in cooling mode (default)
	1 means temperature compensation value is 2°C in cooling mode
J1 definition	
	With auto restart function
	Non-auto restart function

6. Capacity Tables

6.1 Cooling capacity tables

TC: Total Capacity; SC: Sensible Capacity

Indoor Unit size (kW)	Outdoor temperature (°CDB)	Indoor temperature (°CWB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW	TC kW	SC kW
2.2	10.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.9	1.5
	12.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	14.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	16.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	18.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.4
	20.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.7	1.4
	21.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.7	1.4
	23.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.7	1.4
	25.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.6	1.4
	27.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.6	1.4
	29.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.5	1.4
	31.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.5	1.4
	33.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.4	1.4
	35.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.3	1.3	2.4	1.4
	37.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.3	1.3	2.3	1.4
	39.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4
42.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
44.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
46.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
2.8	10.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.7	2.0
	12.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.6	2.0
	14.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.6	2.0
	16.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.5	1.9
	18.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.5	1.9
	20.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	21.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	23.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	25.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.2	1.9	3.3	1.9
	27.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.2	1.9	3.3	1.9
	29.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.2	1.8
	31.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.2	1.7
	33.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.1	1.7
	35.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.1	1.7
	37.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7
	39.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7
42.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7	
44.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7	
46.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7	
3.6	10.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	12.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	14.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.6	2.4
	16.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	18.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	20.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	21.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	23.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.3	2.2
	25.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.2	2.2
	27.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.2	2.2
	29.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.1	2.2
	31.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	4.1	2.2
	33.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	35.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	37.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.9	2.1
	39.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1
42.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	
44.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	
46.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	

6.2 Heating capacity tables

TC: Total Capacity; WB: Wet-bulb temperature; DB: Dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (°C)		Indoor temperature (°C DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
	WB	DB	TC kW	TC kW	TC kW	TC kW	TC kW	TC kW
2.2	-20	-19.8	1.34	1.34	1.34	1.34	1.34	1.34
	-19	-18.8	1.44	1.44	1.44	1.44	1.44	1.44
	-17	-16.7	1.51	1.51	1.51	1.51	1.51	1.51
	-15	-14.7	1.56	1.56	1.56	1.56	1.56	1.56
	-13.00	-12.60	1.66	1.66	1.66	1.66	1.66	1.66
	-11.00	-10.50	1.68	1.70	1.70	1.70	1.70	1.70
	-10.00	-9.50	1.75	1.75	1.75	1.75	1.75	1.75
	-9.10	-8.50	1.80	1.80	1.80	1.80	1.80	1.80
	-7.60	-7.00	1.82	1.82	1.82	1.82	1.82	1.82
	-5.60	-5.00	1.90	1.90	1.90	1.90	1.90	1.90
	-3.70	-3.00	1.99	1.99	1.99	1.99	1.99	1.99
	-0.70	0.00	2.14	2.14	2.14	2.14	2.14	2.02
	2.20	3.00	2.26	2.26	2.26	2.26	2.21	2.02
	4.10	5.00	2.33	2.33	2.33	2.33	2.21	2.02
	6.00	7.00	2.40	2.40	2.40	2.33	2.21	2.02
7.90	9.00	2.47	2.47	2.40	2.33	2.21	2.02	
9.80	11.00	2.54	2.54	2.40	2.33	2.21	2.02	
11.80	13.00	2.64	2.59	2.40	2.33	2.21	2.02	
13.70	15.00	2.71	2.59	2.40	2.33	2.21	2.02	
2.8	-20	-19.8	1.79	1.79	1.79	1.79	1.79	1.79
	-19	-18.8	1.92	1.92	1.92	1.92	1.92	1.92
	-17	-16.7	2.02	2.02	2.02	2.02	2.02	2.02
	-15	-14.7	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69	
9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69	
11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69	
13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69	
3.6	-20	-19.8	2.24	2.24	2.24	2.24	2.24	2.24
	-19	-18.8	2.40	2.40	2.40	2.40	2.40	2.40
	-17	-16.7	2.52	2.52	2.52	2.52	2.52	2.52
	-15	-14.7	2.60	2.60	2.60	2.60	2.60	2.60
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36	
9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36	
11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36	
13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36	

Heating capacity tables

TC: Total Capacity; WB: Wet-bulb temperature; DB: Dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (°C)		Indoor temperature (°C DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
	WB	DB	TC kW	TC kW	TC kW	TC kW	TC kW	TC kW
4.5	-20	-19.8	2.80	2.80	2.80	2.80	2.80	2.80
	-19	-18.8	3.00	3.00	3.00	3.00	3.00	3.00
	-20	-19.8	2.80	2.80	2.80	2.80	2.80	2.80
	-19	-18.8	3.00	3.00	3.00	3.00	3.00	3.00
	-17	-16.7	3.15	3.15	3.15	3.15	3.15	3.15
	-15	-14.7	3.25	3.25	3.25	3.25	3.25	3.25
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20	
7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20	
9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20	
11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20	
13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20	
5.6	-20	-19.8	3.53	3.53	3.53	3.53	3.53	3.53
	-19	-18.8	3.78	3.78	3.78	3.78	3.78	3.78
	-17	-16.7	3.97	3.97	3.97	3.97	3.97	3.97
	-15	-14.7	4.10	4.10	4.10	4.10	4.10	4.10
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29	
11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29	
13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29	
7.1	-20	-19.8	4.48	4.48	4.48	4.48	4.48	4.48
	-19	-18.8	4.8	4.8	4.8	4.8	4.8	4.8
	-17	-16.7	5.04	5.04	5.04	5.04	5.04	5.04
	-15	-14.7	5.2	5.2	5.2	5.2	5.2	5.2
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.6	5.6	5.6	5.6	5.6	5.6
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6	6	6	6	6	6
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8	8	8	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8	7.76	7.36	6.72
9.80	11.00	8.48	8.48	8	7.76	7.36	6.72	
11.80	13.00	8.8	8.64	8	7.76	7.36	6.72	
13.70	15.00	9.04	8.64	8	7.76	7.36	6.72	
8.0	-20	-19.8	5.04	5.04	5.04	5.04	5.04	5.04
	-19	-18.8	5.4	5.4	5.4	5.4	5.4	5.4
	-17	-16.7	5.67	5.67	5.67	5.67	5.67	5.67
	-15	-14.7	5.85	5.85	5.85	5.85	5.85	5.85
	-13.00	-12.60	6.03	6.03	6.03	6.03	6.03	6.03
	-11.00	-10.50	6.3	6.3	6.3	6.3	6.3	6.3
	-10.00	-9.50	6.57	6.57	6.57	6.57	6.57	6.57
	-9.10	-8.50	6.75	6.75	6.75	6.75	6.75	6.75
	-7.60	-7.00	6.84	6.84	6.84	6.84	6.84	6.84
	-5.60	-5.00	7.11	7.11	7.11	7.11	7.11	7.11
	-3.70	-3.00	7.47	7.47	7.47	7.47	7.47	7.47
	-0.70	0.00	8.01	8.01	8.01	8.01	8.01	7.56
	2.20	3.00	8.46	8.46	8.46	8.46	8.28	7.56
	4.10	5.00	8.73	8.73	8.73	8.73	8.28	7.56
	6.00	7.00	9	9	9	8.73	8.28	7.56
	7.90	9.00	9.27	9.27	9	8.73	8.28	7.56
9.80	11.00	9.54	9.54	9	8.73	8.28	7.56	
11.80	13.00	9.9	9.72	9	8.73	8.28	7.56	
13.70	15.00	10.17	9.72	9	8.73	8.28	7.56	

7. Electrical Characteristics

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
KTGZ24HFAN1	50/60	220-240	198	264	0.27	15	0.01	0.22
KTGZ30HFAN1	50/60	220-240	198	264	0.31	15	0.012	0.25
KTGZ40HFAN1	50/60	220-240	198	264	0.43	15	0.016	0.34
KTGZ50HFAN1	50/60	220-240	198	264	0.44	15	0.017	0.35
KTGZ60HFAN1	50/60	220-240	198	264	0.58	15	0.026	0.46
KTGZ72HFAN1	50/60	220-240	198	264	0.60	15	0.034	0.48
KTGZ80HFAN1	50/60	220-240	198	264	0.60	15	0.034	0.48

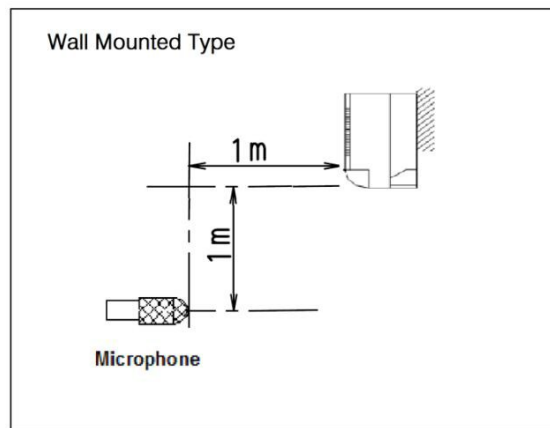
Remark:

MCA: Min. Current Amps. (A); **MFA:** Max. Fuse Amps. (A); **KW:** Fan Motor Rated Output (kW)

FLA: Full Load Amps. (A); **IFM:** Indoor Fan Motor

8. Sound Levels

Test condition



Note:

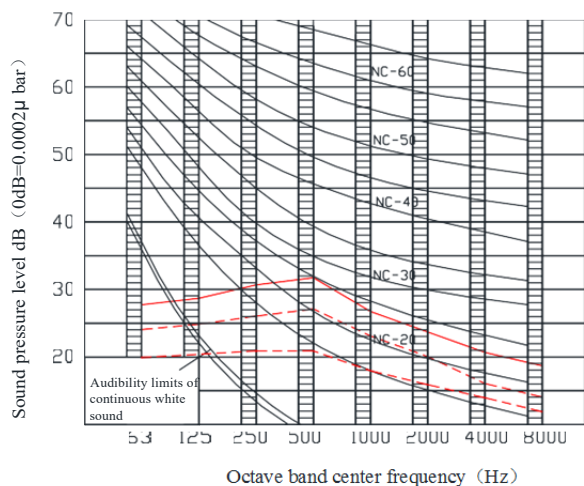
1. Sound values are measured in a semi-anechoic room, at a position 1m below the air outlet both horizontally and vertically.
2. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Sound pressure levels

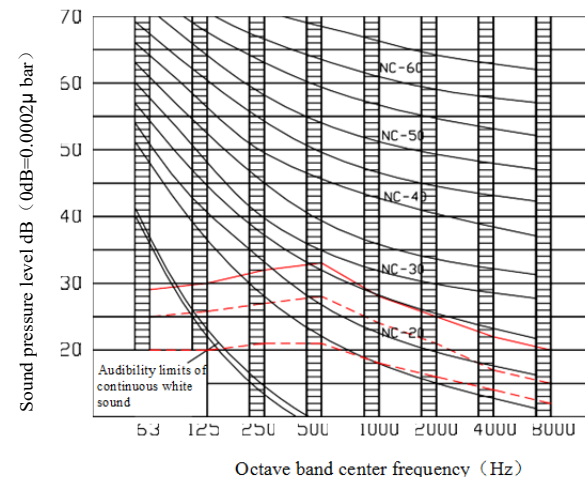
Model	Sound test value dB(A)		
	H	M	L
KTGZ24HFAN1	31	30	29
KTGZ30HFAN1	31	30	29
KTGZ40HFAN1	33	32	30
KTGZ50HFAN1	35	33	31
KTGZ60HFAN1	38	36	34
KTGZ72HFAN1	44	39	36
KTGZ80HFAN1	44	39	36

Octave band level

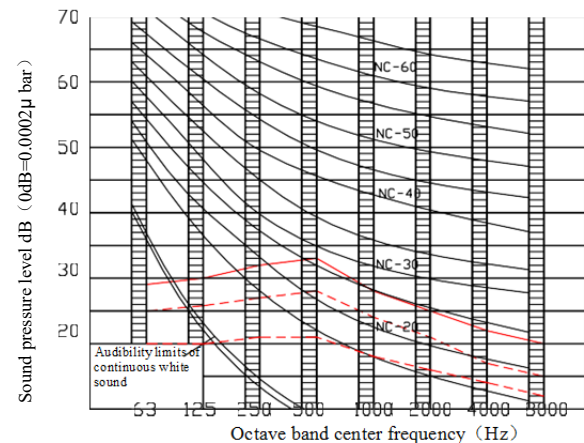
KTGZ24HFAN1 KTGZ30HFAN1



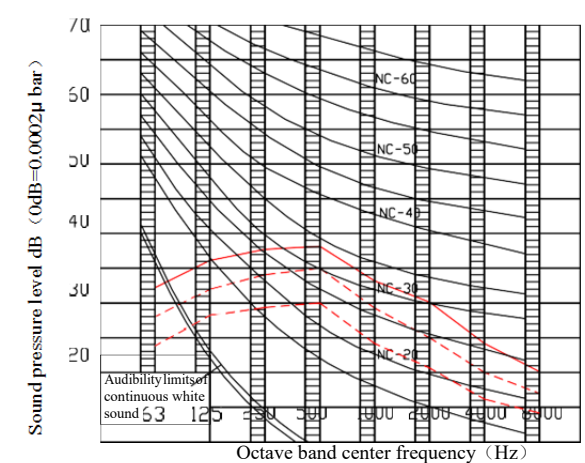
KTGZ40HFAN1



KTGZ50HFAN1



KTGZ60HFAN1



KTGZ72HFAN1 KTGZ80HFAN1

