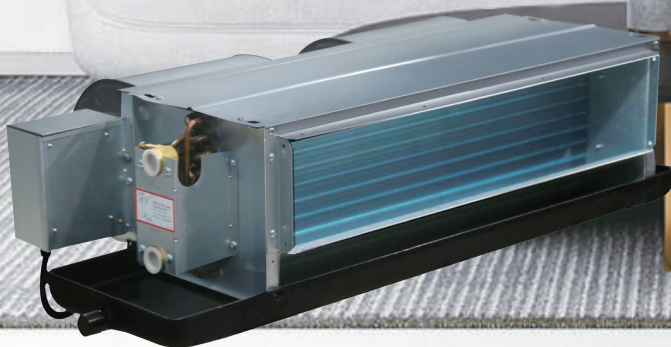


DC Brushless Fan Coil Unit



Quiet Efficiency

Noise low as 20 dB (A)



Pure Comfort

Room temperature $\pm 0.5^{\circ}\text{C}$
stepless regulation

LAUNCH

With the brushless DC motor bringing energy efficiency and low noise, this air conditioner can be widely used in high-end hotels, office buildings, apartments, hospitals and other scenarios with special needs for low noise.

Compact, Light, Flexible and Elegant

The product is compact in structure, with depth as low as 470 mm and thickness as low as 230 mm. It is especially suitable for restricted ceiling space and can save building floor height.

Highly Efficient and Eco-Friendly

Highly efficient brushless DC motor is used with low wind resistance energy-saving heat exchanger to achieve higher efficiency. During operation, the energy consumption can be greatly saved during low load period through stepless regulation of speed.

Low Noise, Exceptional Comfort

The motor features UHF drive emitting only very low noise, and the fan adopts large impeller achieving low speed. Selected noise insulation materials are used with unique intelligent mute control logic, so that the operating noise can be as low as 20 dB (A).

Safe and Reliable Drainage Pan

The pan is formed using one-off processing technology without any welds and processed with anti-corrosion treatment; The thermal insulation material at the bottom has no joint and no condensation problem. The fire protection rating is non-flammable, so it is safe to use.

Changeable External Static Pressures

The user can quickly convert among external static pressures 12Pa, 30Pa and 50Pa through a DIP switch at the installation site to meet different applications.

Network Intelligent Temperature Control

Equipped with RS485 interface, and supporting Modbus communication protocol, this air conditioner can be connected to automatic control system of the building for centralized management to realize functions such as remote power on/off, mode setting, and operation monitoring for convenient operation management and energy saving.

- Black or white optional
- Electric valve and fan controllable
- Temperature sensor built-in to display the indoor temperature
- Both 2-pipe and 4-pipe models applicable
- Embedded functions such as child lock, power-off memory, anti-freeze protection, and sleep mode



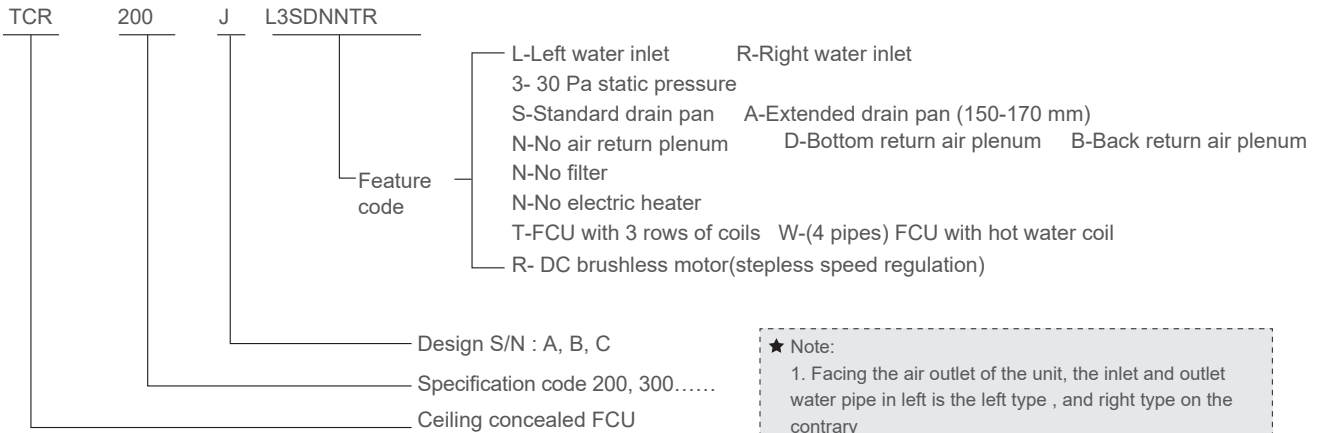
Simple Electronic Control Configuration

Easy to operate, four-speed flexible wind control (high, medium, low, mute), and intelligent stepless regulation in auto-speed mode.

Convenient Installation

The product can be selected as left type or right type, and the type can be adjusted at the installation site; The air return type can be selected as back return or bottom return, and the air return direction can be switched at the installation site.

Nomenclature



★ Note:

1. Facing the air outlet of the unit, the inlet and outlet water pipe in left is the left type , and right type on the contrary
2. 30Pa is standard, and 12Pa、50Pa can be adjusted on site.

Parameters

2-pipes(3 Rows)

Model: TCR		200J	300J	400J	500J	600J	800J	1000J	1200J	1400J	
Rated Air Flow (m³/h)	High	340	510	680	850	1020	1360	1700	2040	2380	
	Medium	270	380	510	640	780	1030	1290	1540	1850	
	Low	190	280	340	450	560	740	890	1040	1255	
	Silence	135	205	270	340	410	545	680	815	950	
Cooling Capacity (W)	High	2210	3200	4150	5000	5950	8100	9100	11250	13000	
	Medium	1990	2782	3570	4197	5200	6882	8200	9613	11700	
	Low	1635	2304	2950	3298	4200	5749	6700	7403	7560	
	Silence	1005	1460	2000	2340	2900	3940	4600	5630	6785	
Sensible Cooling Capacity (W)	High	1590	2285	2880	3570	4200	5880	6700	8260	9750	
	Medium	1400	1920	2420	2930	3570	4880	5700	6935	8280	
	Low	1050	1555	1930	2210	2900	3935	4500	5120	5945	
	Silence	680	1005	1350	1620	1980	2680	3200	3875	4615	
Heating Capacity (Water Inlet: 60°C) (W)	High	3500	5200	6500	7870	9800	13000	14900	18800	22100	
Heating Capacity (Water Inlet: 45°C) (W)	High	2210	3200	4150	5000	5950	8100	9100	11250	13000	
Power Input (W)	Low static pressure 12 Pa	High/Medium/Low/Silence	14/9/7/6	18/11/7/6	24/14/9/7	36/21/12/7	52/31/17/8	61/35/19/10	82/41/29/15	102/48/34/16	120/75/34/17
	static pressure 30 Pa	High/Medium/Low/Silence	20/13/8/6	25/15/9/7	33/17/11/7	48/28/15/8	65/38/19/9	80/45/22/11	99/49/33/16	124/56/38/17	146/90/39/19
	static pressure 50 Pa	High/Medium/Low/Silence	26/16/10/7	33/19/10/8	45/22/14/8	61/36/18/9	80/46/22/10	99/46/26/13	118/59/37/18	152/69/45/19	175/106/45/21
FCEER	Low static pressure 12 Pa	High	123	135	120	109	88	99	85	86	80
	static pressure 30 Pa	High	92	104	95	86	73	80	73	73	69
	static pressure 50 Pa	High	74	82	73	70	62	64	63	62	60
FCCOP(Water Inlet: 60°C)	Low static pressure 12 Pa	High	195	225	203	172	145	159	140	144	137
	static pressure 30 Pa	High	146	173	158	136	122	129	120	124	118
	static pressure 50 Pa	High	117	137	122	111	103	108	104	104	102
FCCOP(Water Inlet: 45°C)	Low static pressure 12 Pa	High	123	135	120	109	88	99	85	86	80
	static pressure 30 Pa	High	92	104	95	86	73	80	73	73	69
	static pressure 50 Pa	High	74	82	73	70	62	64	63	62	60
Sound Level (dB(A))	Low Static Pressure (12 Pa)	High/Medium/Low/Silence	33/26/23/19	35/28/25/20	39/29/25/20	40.5/34/29/21	43/35/31/21	44/39/31/27	46/41/34/23	47/41/33.5/24	48/43/37/26
	static pressure 30 Pa	High/Medium/Low/Silence	34/30/24/20	37/31/27/20	39/32/27/20	40.5/37/30/21	42/37/32/22	44/38/33/25	46/42.5/36/28	47/41/35/28	48/43/36/25
	static pressure 50 Pa	High/Medium/Low/Silence	38/33/27/22	40/35/30/23	42/35/32/23	43.5/37/33/23	44.5/37/33/23	46/40/35/25	48/44/37/28	49/44/37/28	49/44/37/26
Fan	Type	Forward-curved multi-blade double inlet centrifugal fan									
Motor	Type	DC brushless motor(built in conversion)									
Heat Exchanger	Structure Type	Efficient double-flanged aluminum fins and copper tubes, expanded into one									
	Maximum Operating Pressure (MPa)	1.6									
	Water Inlet/Outlet Pipe Diameter (inch)	Rc3/4 (Taper Pipe Female Threaded)									
Water Resistance	Water Flow (m³/h)	0.42	0.55	0.72	0.87	1.05	1.39	1.67	1.9	2.23	
Water Resistance	kPa	25	25	30	30	40	40	40	40	50	
Drain Pan	Condensate Water Pipe Diameter (inch)	R3/4 (Taper Pipe Male Threaded)									
Dimensions (Without Return Air Plenum)	Length (mm)	695	845	930	995	1085	1490	1530	1795	1795	
	Width (mm)	470	470	470	470	470	470	470	490	490	
	Height (mm)	230	230	230	230	230	230	230	250	292	

★ Note:

1. Cooling: supply water and return water temperatures 7/12°C; the dry/wet bulb temperature of air inlet is 27/19.5°C;
2. Heating: supply water is 60°C or 45°C, water quantity being the same as during cooling; air return conditions: the dry bulb temperature of air inlet is 21°C;
3. In the table, low static pressure indicates the air outlet static pressure at 0Pa (with air outlet and filter) and at 12Pa (without air outlet and filter);
4. The air flow in the table is obtained when the unit is running in dry state and the dry bulb temperature of air inlet is 20°C;

5. The noise in the table is measured in a semi-anechoic chamber with background noise of 11.5dB(A).
6. Left & right swing manner can be adjusted on site. After adjustment, the cooling capacity and heating capacity should be multiplied by the correction factor 0.9;
7. Specifications are subject to change without notice due to product improvement, please refer to the nameplate of the unit.

4-pipes(3 +1Rows)

Model: TCR		200J	300J	400J	500J	600J	800J	1000J	1200J	1400J	
Rated Air Flow (m³/h)	High	340	510	640	830	1000	1340	1650	2040	2350	
	Medium	270	380	510	620	750	1030	1290	1540	1850	
	Low	190	280	410	450	560	720	890	1040	1255	
	Silence	135	205	280	340	410	545	680	815	950	
Cooling Capacity (W)	High	2210	3200	4150	4800	5950	7900	9200	10275	12600	
	Medium	1890	2782	3570	4150	5200	6900	8000	8500	11000	
	Low	1500	2304	2950	3400	4200	5800	6700	7450	9500	
	Silence	1005	1460	2000	2340	2900	3940	4600	5630	6785	
Sensible Cooling Capacity (W)	High	1590	2285	2880	3400	4200	5750	6600	7400	9400	
	Medium	1350	1920	2420	2880	3570	4800	5500	6200	7900	
	Low	1050	1555	1930	2210	2900	3700	4200	4930	6200	
	Silence	680	1005	1350	1620	1980	2680	3200	3875	4615	
Heating Capacity (W)		High	2050	3000	3850	4500	5200	7550	8400	9800	10800
Power Input (W)	Low static pressure 12 Pa	High/Medium/Low/Silence	14/10/8/6	18/12/8/6	24/14/9/7	36/22/12/7	54/31/17/8	63/39/21/10	84/41/29/15	104/48/34/16	125/75/35/17
	static pressure 30 Pa	High/Medium/Low/Silence	20/13/9/6	25/15/9/7	34/18/11/7	48/28/15/8	65/40/20/9	83/45/25/12	101/49/33/16	127/56/38/17	151/90/39/19
	static pressure 50 Pa	High/Medium/Low/Silence	27/16/10/7	34/19/10/8	46/22/14/8	62/36/18/9	80/48/23/10	101/47/28/13	123/59/38/18	155/69/45/19	178/106/45/21
FCEER	Low static pressure 12 Pa	High	125	134	121	105	85	94	84	77	75
	static pressure 30 Pa	High	93	103	92	83	73	76	73	66	65
	static pressure 50 Pa	High	72	80	72	67	62	64	62	56	57
FCCOP	Low static pressure 12 Pa	High	132	149	136	107	87	102	85	86	74
	static pressure 30 Pa	High	93	109	99	82	73	79	72	71	62
	static pressure 50 Pa	High	70	81	73	65	59	66	60	58	54
Sound Level (dB(A))	Low static pressure 12 Pa	High/Medium/Low/Silence	33/28/24/21	36/31/26/23	39/31/26/23	40.5/34/29/24	43/35/31/25	44/39/32/27	46/41/34/25	47/41/35/25	49/44/38/26
	static pressure 30 Pa	High/Medium/Low/Silence	35/30/25/20	38/34/27/23	39/33/28/23	40.5/37/30/24	42/38/32/25	45/38/34/26	46/43/36/28	47/42/36/28	48/43/36/26
	static pressure 50 Pa	High/Medium/Low/Silence	39/33/28/23	41/36/30/24	43/36/32/24	43.5/37/33/25	44.5/40/34/25	46/40/35/27	48/44/37/28	49/44/37/28	49/44/38/27
Fan	Type	Forward-curved multi-blade double inlet centrifugal fan									
Motor	Type	DC brushless motor(built in conversion)									
Heat Exchanger	Structure Type	Efficient double-flanged aluminum fins and copper tubes, expanded into one									
	Maximum Operating Pressure (MPa)	1.6									
	Water Inlet/Outlet Pipe Diameter (inch)	Rc3/4 (Taper Pipe Female Threaded)									
Water Flow	Cooling Mode (m³/h)	0.39	0.63	0.73	0.86	1.04	1.39	1.65	1.9	2.23	
	Heating Mode (m³/h)	0.21	0.29	0.33	0.42	0.47	0.66	0.72	0.88	0.95	
Water Resistance	Cooling Mode (kPa)	25	25	30	30	40	40	40	40	50	
	Heating Mode (kPa)	10	10	20	25	15	30	20	30	35	
Drain Pan	Condensate Water Pipe Diameter (inch)	R3/4 (Taper Pipe Male Threaded)									
Dimensions (Without Return Air Plenum)	Length (mm)	695	845	930	995	1085	1490	1530	1795	1795	
	Width (mm)	470	470	470	470	470	470	470	490	490	
	Height (mm)	230	230	230	230	230	230	230	250	292	

★ Note:

- Cooling: supply water and return water temperatures 7/12°C; the dry/wet bulb temperature of air inlet is 27/19.5°C;
- Heating: supply water is 60°C or 50°C; air return conditions: the dry bulb temperature of air inlet is 21°C;
- In the table, low static pressure indicates the air outlet static pressure at 0Pa (with air outlet and filter) and at 12Pa (without air outlet and filter);
- The air flow in the table is obtained when the unit is running in dry state and the dry bulb temperature of air inlet is 20°C;

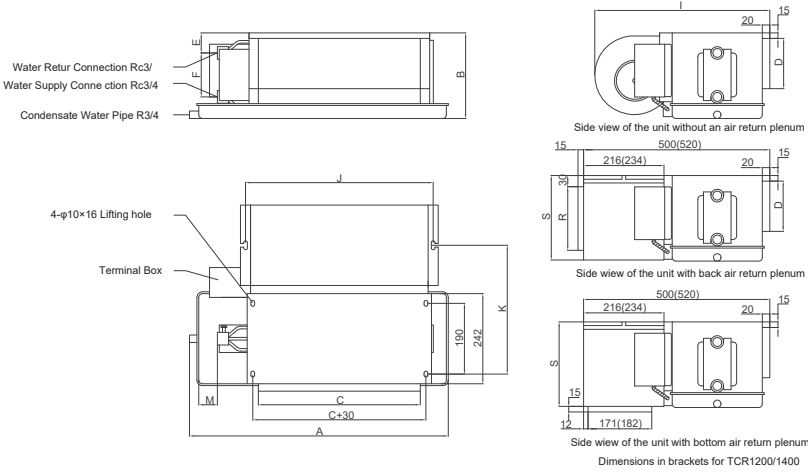
5.The noise in the table is measured in a semi-anechoic chamber with background noise of 11.5dB(A).

6. 4-pipes units,3 rows are cooling coil, and 1 row is heating coil.

7.Specifications are subject to change without notice due to product improvement, please refer to the nameplate of the unit.

Dimensions

Dimensions- 2-pipes(3 rows)

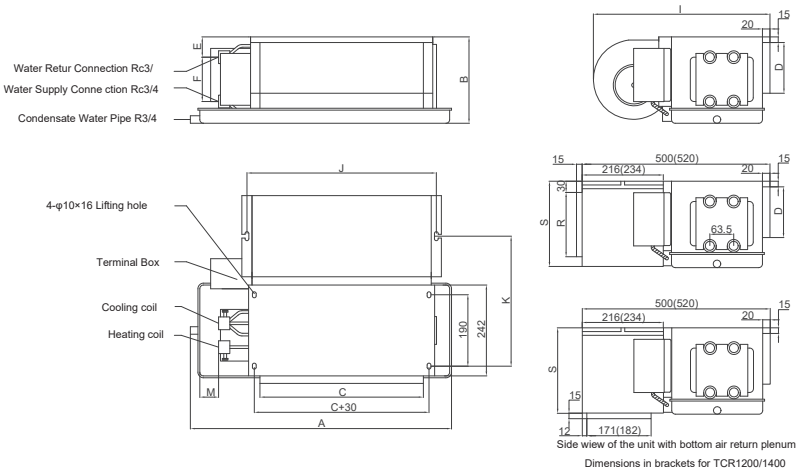


TCR	A	B	C	D	E	F	I	J	K	M	R	S	Length of air return plenum	Length of air return inlet
200	695	230	435	135	54	118	470	504	346	50	171	227	483.6	422
300	845	230	570	135	54	118	470	637	346	65	171	227	615.6	557
400	930	230	670	135	54	118	470	739	346	50	171	227	725.6	657
500	995	230	730	135	54	118	470	799	346	55	171	227	775.6	717
600	1085	230	825	135	54	118	470	894	346	50	171	227	870.6	812
800	1490	230	1215	135	54	118	470	1284	346	65	171	227	1260.6	1202
1000	1530	230	1255	135	54	118	470	1324	346	65	171	227	1300.6	1242
1200	1795	250	1510	135	54	118	490	1579	357	45	192	246	1555.6	1497
1400	1795	292	1510	177	41	171	490	1579	357	45	234	288	1555.6	1497

★Note:

1. Diagram of unit with air return plenum, and the air return plenum has no filter
2. The air return plenum with filter has no air return flange
3. If shock absorption hook is used, special instructions should be given to the factory

Dimensions- 4-pipes(3+1 rows)



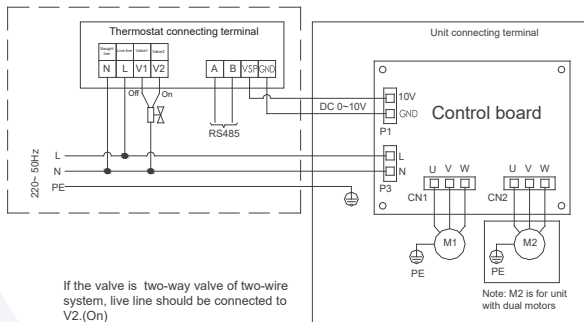
TCR	A	B	C	D	E	F	I	J	K	M	R	S	Length of air return plenum	Length of air return inlet
200	695	230	435	135	54	118	470	504	346	50	171	227	483.6	422
300	845	230	570	135	54	118	470	637	346	65	171	227	615.6	557
400	930	230	670	135	54	118	470	739	346	50	171	227	725.6	657
500	995	230	730	135	54	118	470	799	346	55	171	227	775.6	717
600	1085	230	825	135	54	118	470	894	346	50	171	227	870.6	812
800	1490	230	1215	135	54	118	470	1284	346	65	171	227	1260.6	1202
1000	1530	230	1255	135	54	118	470	1324	346	65	171	227	1300.6	1242
1200	1795	250	1510	135	54	118	490	1579	357	45	192	246	1555.6	1497
1400	1795	292	1510	177	41	171	490	1579	357	45	234	288	1555.6	1497

★Note:

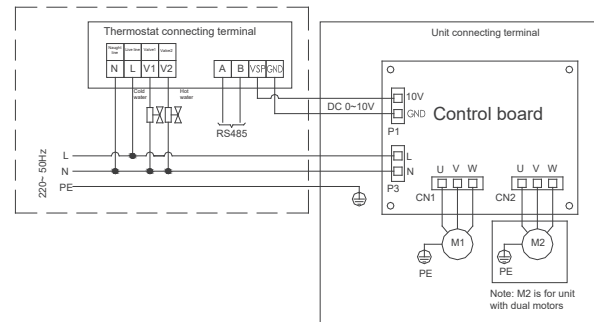
1. Diagram of unit with air return plenum, and the air return plenum has no filter
2. The air return plenum with filter has no air return flange
3. If shock absorption hook is used, special instructions should be given to the factory

Wiring diagrams

Thermostat(2-pipes)



Thermostat(4-pipes)



★Note:

1. The wire connection of unit must be correct, otherwise, the motor may be burnt out.
2. Wiring to be implemented by the customer is indicated in the dashed frame. Shielded twisted pair cables are used for communication cables and signal cables.
3. Voltage, frequency and phase of the power supply must be consistent with the unit requirements, and the power supply is 220V, single phase. The supply voltage deviation should not exceed 10% of the rated voltage.
4. Unit of 4 pipes, the cold water valve should be connected to V1, and hot water valve should be connected to V2.



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