HEAT&ENERGY RECOVERY VENTILATOR

Energy Recovery Ventilation Specialist

Beijing Holtop Artificial Environment Technology Co., Ltd

COMPANY

BRIEF INTRODUCTION TO COMPANY

ENERGY RECOVERY VENTILATION SPECIALIST

Holtop is dedicated to the research and technology development in the filed of indoor air quality. It is the leading company in China who professionally produces heat recovery ventilation system.

Covering a land of 30000 square meters, Holtop was created in May, 2002 furnished with first-class plants and equipments. Through innovation, it developed its own key components like plate and rotary heat exchangers for various heat & energy recovery systems. It provides now full lines of products covering 5 series and 98 specifications which can basically satisfy the needs of various airflows and installations worldwidely.

Holtop is trusted by the users for its advanced technology, superb product quality and all-around services home and abroad. The market share of heat & energy recovery ventilators and heat exchangers ranks No. 1 in China, products are exported to over 41 countries and regions.

Let's join together to contribute to our commitment of energy saving and pollution reduction.

CONTENTS

BENEFITS

OF HEAT&ENERGY RECOVERY VENTILATION SYSTEM

Effective Ventilation

Introduces outdoor fresh air into indoors, meanwhile expels the indoor stale air to outdoor, which makes you feel the comfort of nature.

High efficient energy recovery

The built-in high efficient heat exchanger can recover the energy from outgoing indoor air to coming fresh air while ventilating. It can recover over 70% energy.

Perfect silence design

It is designed with the worldwide fashionable structure and manufactured by the accurate moldings. According to the principle of hydrokinetics, it achieves the perfect silent effect by using the micro-punch anechoic technology.

Air filtration and purification

The inner air filters are professionally designed to remove the pollutants of the incoming air, providing you the fresh and clean air.

By-pass function

By-pass function enables the unit to make natural ventilation in suitable climates, which can prolong the service life of the heat exchanger.

High airproof feature and easy maintenance

The heat exchanger is connected with the equipment by the in-mold rail, and embedded with the special soft and dense sealing materials. It can be drew out by hand and is easy to maintain. At the same time, it can ensure that the fresh air and exhaust air are completely separated, avoiding the cross pollution.

SELECTION GUIDE

1. Choose the proper installation types based on the building structure
2. Determine the fresh airflow required according to the use, size and number of persons
3. Select the right specifications and quantity according to the determined fresh airflow

Airflow required in residential buildings

Rooms type	Non-smoking					Slight smoking		Heavy Smoking
	Ordinary ward	Gym	Theater & mall	Office	Computer room	Dining room	VIP room	Meeting room
Personal fresh air consumption(m3/h) (Q)	17-42	8-20	8.5-21	25-62	40-100	20-50	30-75	50-125
Air changes per hour (P)	1.06-2.65	0.50-1.25	1.06-2.66	1.56-3.90	2.50-6.25	1.25-3.13	1.88-4.69	3.13-7.81

Example

The area of a computer room is 60 sq. meters (S=60), the net height is 3 meters (H=3), and there are 10 persons (N=10) in it.

If it is calculated according to “Personal fresh air consumption”, and assume that: Q=70, the result is

Q1 =N*Q=10*70=700(m3/h)

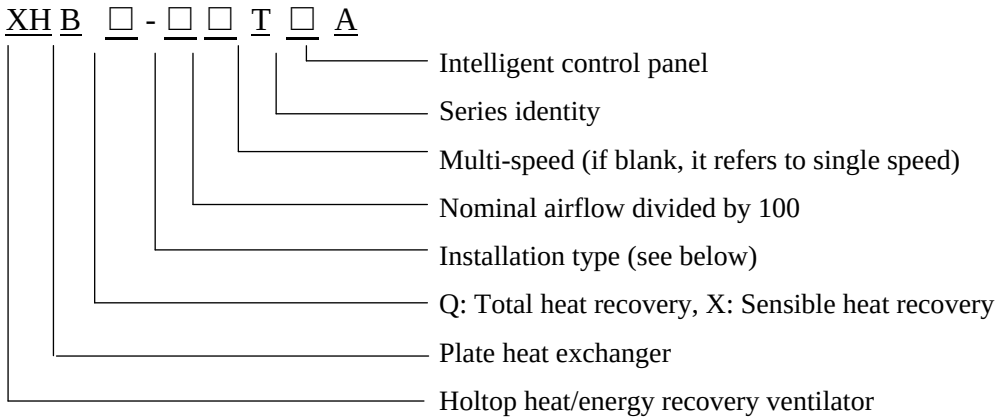
If it is calculated according to “Air changes per hour”, and assume that: P=5, the result is

Q2 =P*S*H=5*60*3=900(m3)

Since Q2 > Q1 , Q2 is better for selecting the unit.

As to special industry such as hospitals (surgery and the special nursing rooms), labs, workshops, airflow required should be determined in conformity with regulations concerned.

Model description



Installation type

D-Suspended type, L-Floor type, W-Wall type (external or balcony), G-Wall type (internal or balcony)

Example

XHBQ-D10TP refers to suspended type ERV with total heat exchanger, TP series, airflow of 1000m^3/h, 3 speeds.

TP SERIES, SUSPENDED TYPE

XHBQ-D1.5P~D10TP

XHBQ-D15P~D20TP

Features

Airflow from 115-2000m3/h

Energy recovery

High efficient counter flow heat exchanger

3 speeds

Quiet operation

Double filters

Easy installation to ceiling

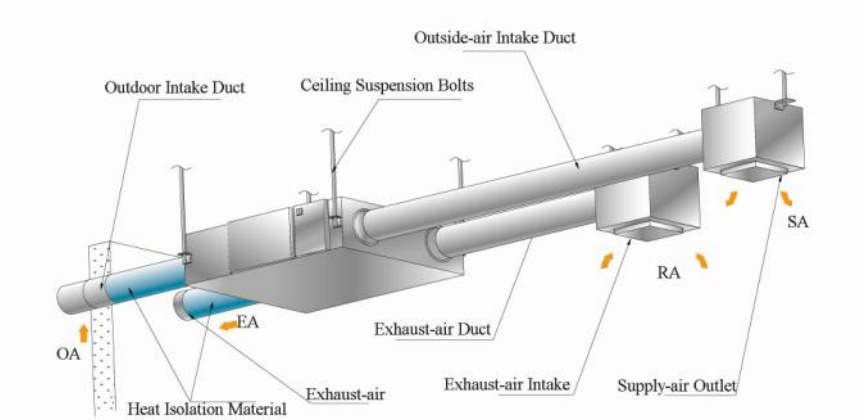
By-pass function

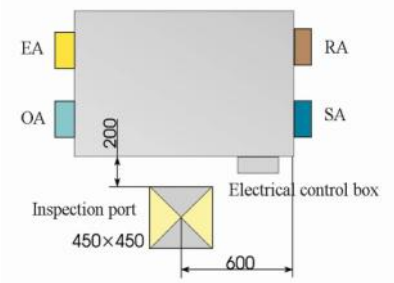
Easy maintenance

Application

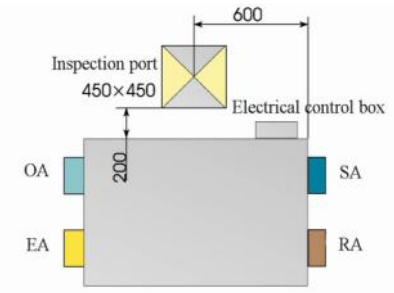
Suitable for household, meeting room, laboratory, office, computer room, dining and gym places etc.

Installation





Normal installation



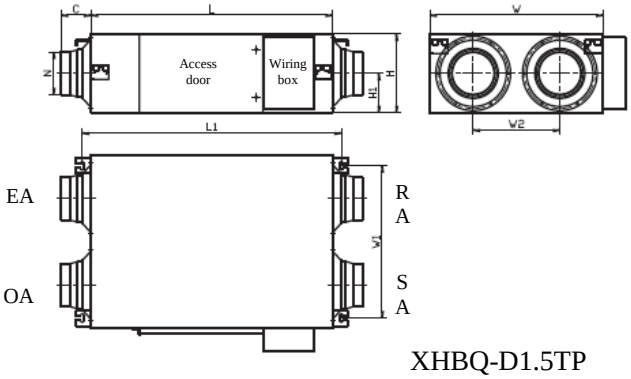
Inverted installation

Specifications

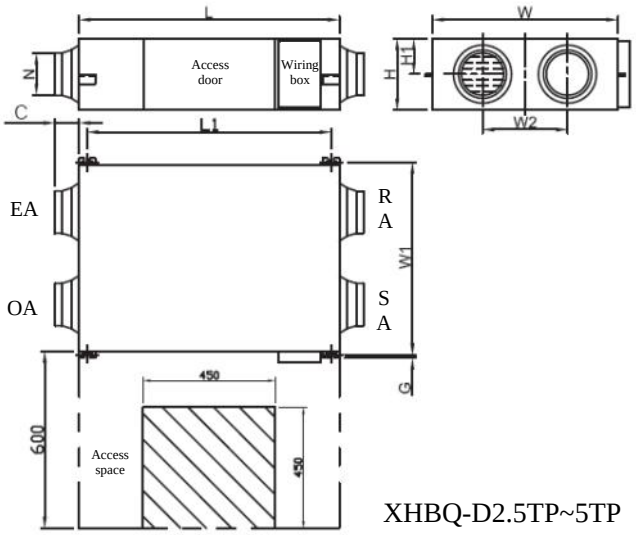
Model	Airflow（m3/h）			External pressure (Pa)			Enthalpy Efficiency（%）						Temp. Eff.（%）			Noise dB(A)			Volt.（V）	Current（A）	Iuput power（W）	N. W.（Kg）
							Summer			Winter												
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H				
XHBQ-D1.5TP	115	150	150	34	58	75	67	63	63	74	70	70	77	75	75	22	24	26	220	0.5	105	25
XHBQ-D2.5TP	165	250	250	30	70	85	67	63	63	73	70	70	77	75	75	22	26	27	220	0.56	117	29
XHBQ-D3.5TP	270	350	350	36	60	90	67	66	66	72	69	69	77	75	75	25	29	31	220	0.72	150	37
XHBQ-D5TP	360	500	500	30	60	100	68	62	62	72	67	67	78	75	75	25	31	33	220	0.96	200	43
XHBQ-D6.5TP	515	650	650	25	40	70	64	65	62	70	68	68	77	75	75	30	34	35	220	1.4	295	64
XHBQ-D8TP	625	800	800	60	98	120	68	65	65	74	71	71	77	75	75	32	36	38	220	1.7	355	71
XHBQ-D10TP	780	1000	1000	25	35	85	68	65	65	74	71	71	77	75	75	31	36	38	220	2.1	440	83
XHBQ-D15TP	1250	1500	1500	20	45	75	68	65	65	74	71	71	77	75	75	31	39	41	220	3.4	710	165
XHBQ-D20TP	1700	2000	2000	20	25	60	68	65	65	74	71	71	77	75	75	34	39	41	220	4.2	880	189

TP SERIES, SUSPENDED TYPE

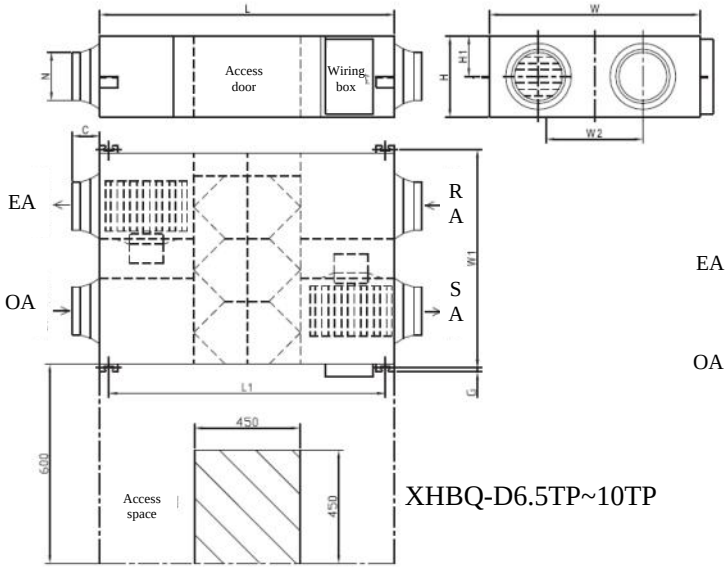
Dimensions



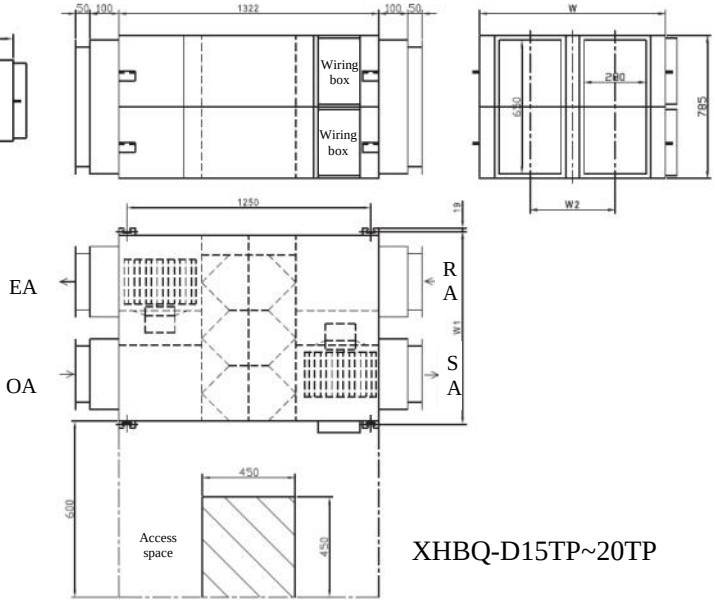
XHBQ-D1.5TP



XHBQ-D2.5TP~5TP



XHBQ-D6.5TP~10TP



XHBQ-D15TP~20TP

Model	L	L1	W	W1	W2	H	H1	C	G	N
XHBQ-D1.5TP	808	867	580	510	290	264	20	100	19	Φ144
XHBQ-D2.5TP	882	810	599	657	315	270	111	100	19	Φ144
XHBQ-D3.5TP	882	810	804	860	480	270	111	100	19	Φ144
XHBQ-D5TP	962	890	904	960	500	270	111	107	19	Φ194
XHBQ-D6.5TP	1222	1150	884	940	480	340	146	107	19	Φ194
XHBQ-D8TP	1322	1250	884	940	428	388	170	85	19	Φ242
XHBQ-D10TP	1322	1250	1134	1190	678	388	170	85	19	Φ242
XHBQ-D15TP	1322	1250	884	940	428	785	-	-	-	-
XHBQ-D20TP	1322	1250	1134	1190	678	785	-	-	-	-

TH SERIES, SUSPENDED TYPE

XHBQ-D2TH~D13TH

Features

Airflow from 150-1300m3/h

Heat or energy recovery

Quiet operation

Double filters

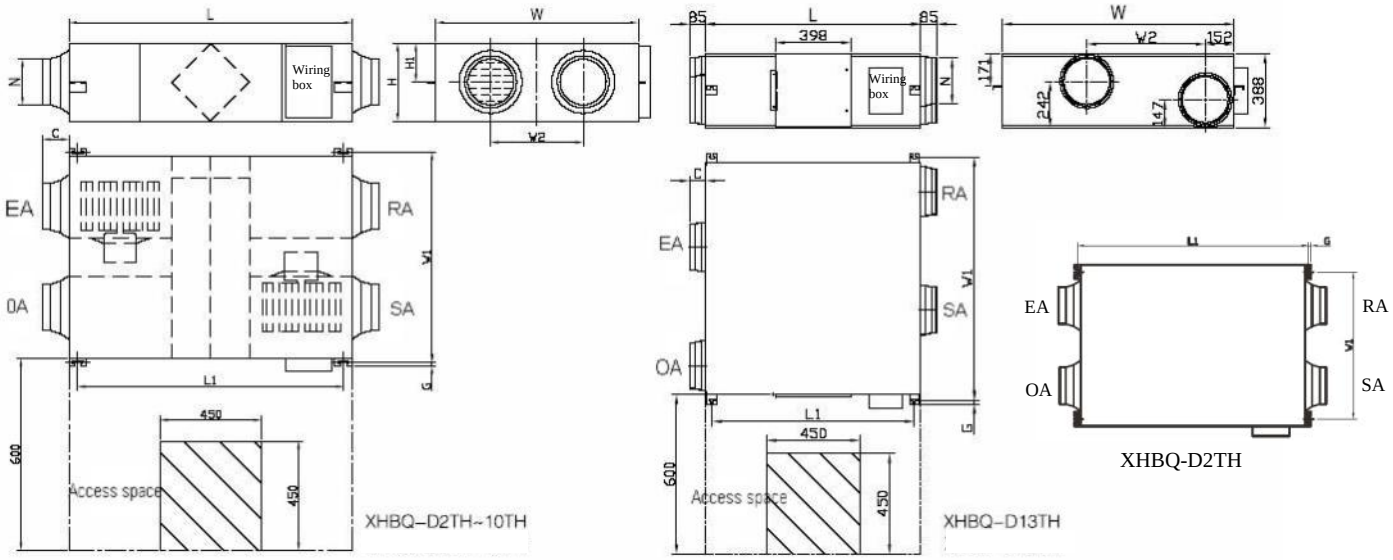
Easy installation to ceiling

By-pass function

Specifications

Model	Airflow（m3/h）			External pressure (Pa)			Enthalpy Efficiency（%）						Temp. Eff.(%)			Noise			Volt.（V）	Current（A）	Input power（W）	N. W.（Kg）
							Summer			Winter												
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H				
XHBQ-D2TH	150	200	200	60	70	75	60	55	55	63	59	59	75	70	70	22	25	27	220	0.5	105	23
XHBQ-D3TH	250	300	300	75	82	85	62	57	57	65	61	61	73	68	68	23	27	30	220	0.56	117	25
XHBQ-D4TH	350	400	400	80	85	88	62	57	57	65	60	60	74	69	69	25	29	32	220	0.72	150	31
XHBQ-D6TH	500	600	600	89	92	97	63	59	59	67	61	61	76	70	70	25	31	35	220	0.96	200	36
XHBQ-D8TH	700	800	800	92	96	100	57	55	55	63	57	57	74	68	68	32	37	39	220	1.7	355	60
XHBQ-D10TH	900	1000	1000	80	85	86	60	58	58	64	62	62	76	70	70	32	36	40	220	2.1	440	70
XHBQ-D13TH	1000	1300	1300	75	85	90	58	56	56	62	59	59	76	70	70	37	40	42	220	3.4	710	79

Dimensions



Model	L	L1	W	W1	W2	H	H1	C	G	N
XHBQ-D2TH	666	725	580	510	290	264	20	100	19	Φ144
XHBQ-D3TH	744	675	599	657	315	270	111	100	19	Φ144
XHBQ-D4TH	744	675	804	860	480	270	111	100	19	Φ144
XHBQ-D6TH	824	754	904	960	500	270	111	107	19	Φ194
XHBQ-D8TH	1116	1045	884	940	428	388	170	85	19	Φ242
XHBQ-D10TH	1116	1045	1134	1190	678	388	170	85	19	Φ242
XHBQ-D13TH	1129	1059	1216	1273	621	388	-	85	19	Φ242

PM TH SERIES, WITH HIGH EFFICIENT FILTER

XHBQ-D2~6PMTH

Features

Airflow from 150-600m3/h

Heat or energy recovery

Integrated with high efficient filters, made of operating theater clean class material

Filtration class up to F9

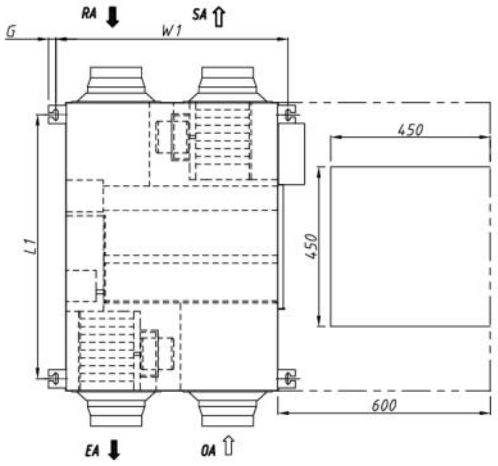
Easy installation and maintenance

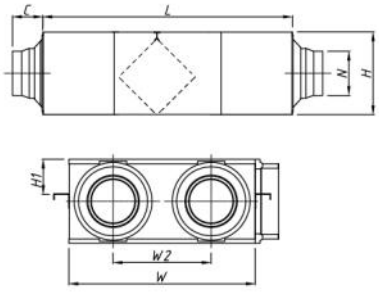
By-pass function

Specifications

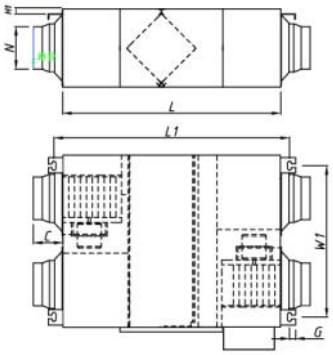
Model	Airflow（m3/h）			External pressure (Pa)			Enthalpy Efficiency (%)						Temp. Eff. (%)			Noise dB(A)			Volt. (V)	Current (A)	Input power (W)	N. W. (Kg)
							Summer			Winter												
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H				
XHBQ-D2PMTH	150	200	200	50	60	65	60	55	55	63	59	59	75	70	70	25	30	31.5	220	0.45	95	24.5
XHBQ-D3PMTH	250	300	300	65	72	75	62	57	57	65	61	61	73	68	68	27	34	34.5	220	0.53	110	26.5
XHBQ-D4PMTH	350	400	400	70	75	78	62	57	57	65	60	60	74	69	69	31	37	37.5	220	0.65	145	33
XHBQ-D6PMTH	500	600	600	79	82	87	63	59	59	67	61	61	76	70	70	29	35	39	220	0.92	195	38

Dimensions





XHBQ-D3~6PMTH



XHBQ-D2PMTH

Model	L	L1	W	W1	W2	H	H1	C	G	N
XHBQ-D2PMTH	736	795	580	510	290	264	20	100	20.5	Φ144
XHBQ-D2PMTH	814	745	599	657	315	270	111	100	20.5	Φ144
XHBQ-D2PMTH	814	745	804	860	480	270	111	100	20.5	Φ144
XHBQ-D2PMTH	894	824	904	960	500	270	111	107	20.5	Φ194

TZ SERIES, SUSPENDED TYPE

XHBQ-D1.5TZ~D10TZ

Features

Airflow from 100-1000m3/h

Heat and energy recovery

High ESP construction

Quiet operation

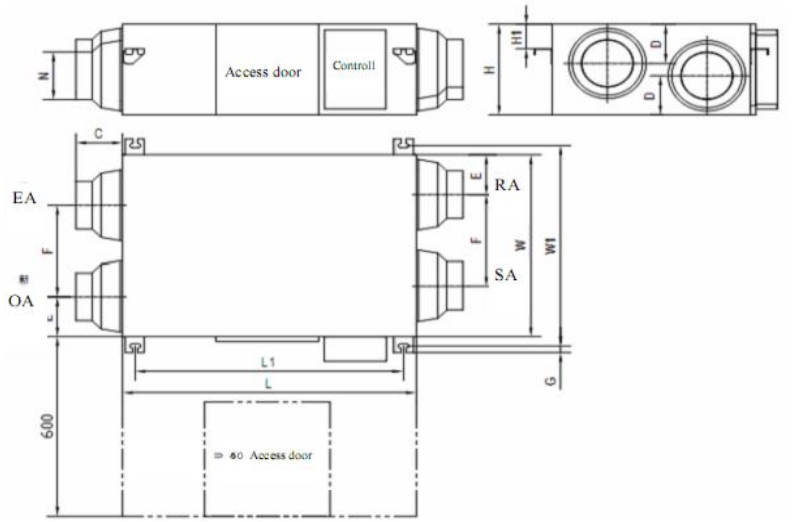
Double filters

Easy installation to ceiling

By-pass function

Specifications

Model	Airflow（m3/h）			External pressure (Pa)			Enthalpy Efficiency（%）						Temp. Eff.（%）			Noise			Volt.（V）	Current（A）	Input power（W）	N. W.（Kg）
							Summer			Winter												
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H				
XHBQ-D1.5TZ	100	150	150	49	69	80	64	60	60	65	62	62	75	72	72	21	25	27	220	0.52	108	28
XHBQ-D2.5TZ	160	250	250	30	48	60	60	56	56	62	60	60	72	69	69	23	26	29	220	0.55	115	28
XHBQ-D3.5TZ	230	350	350	90	100	120	65	61	61	66	63	63	76	73	73	24	29	32	220	0.85	178	40
XHBQ-D5TZ	330	500	500	30	72	95	62	60	60	63	61	61	74	71	71	25	31	34	220	0.95	200	40
XHBQ-D8TZ	680	800	800	120	125	170	58	55	55	64	57	57	75	68	68	31	37	39	220	2.8	585	60
XHBQ-D10TZ	840	1000	1000	105	120	175	60	57	57	63	61	61	75	69	69	33	38	40	220	3.3	690	79



Model	L	L1	W	W1	H	H1	N	C	D	E	F	G
XHBQ-D1.5TZ	816	745	554	611	278	75	Φ96	145	120	122	278	21
XHBQ-D2.5TZ	816	745	554	611	278	75	Φ146	130	120	122	278	21
XHBQ-D3.5TZ	900	830	800	857	307	128	Φ146	130	126	140	415	21
XHBQ-D5TZ	900	830	800	857	307	128	Φ196	85	126	140	415	21
XHBQ-D8TZ	1126	1056	834	891	388	169	Φ242	86	157	152	436	21
XHBQ-D10TZ	1129	1060	1216	1273	388	171	Φ242	86	147	152	621	21

MEDIUM AIRFLOW SERIES

XHBQ-D15TG~D30TG
XHBX-D15TG~D30TG

XHBQ-D40D~D60D
XHBX-D40D~D60D

XHBQ-L15TD1~L30TD1, XHBQ-L40D~L60D
XHBX-L15TD1~L30TD1, XHBX-L40D~L60D

Features

Airflow from 1500-6000m3/h

Heat or energy recovery

Both suspended installation and floor installation available

Application

Suitable for meeting room, laboratory, office, computer room, dining room, indoor swimming pool, shop and gym places etc.

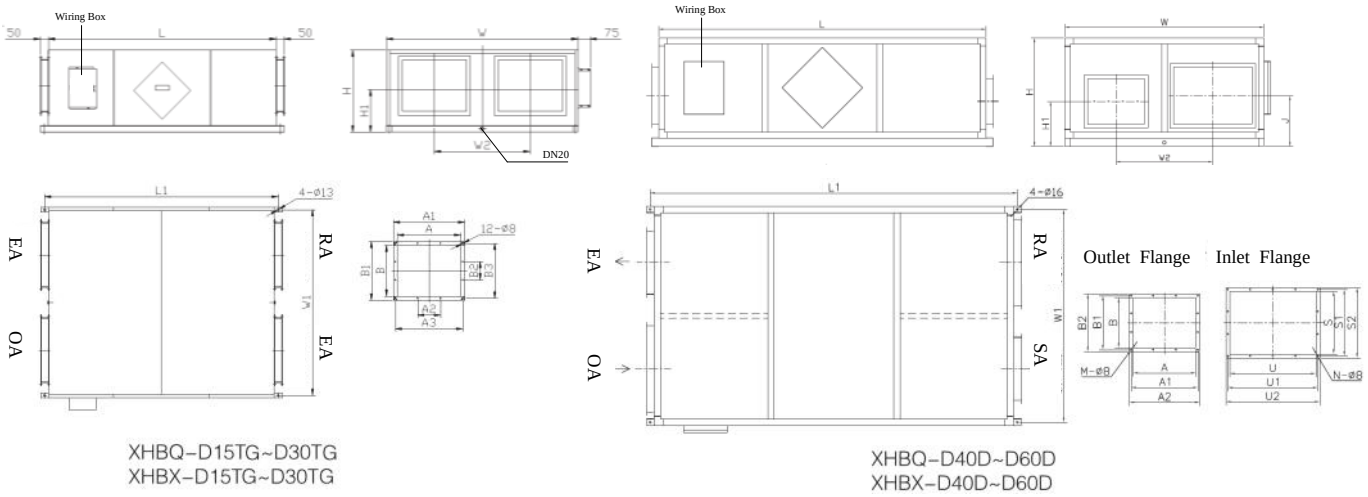
Specifications

Model	Airflow (m3/h)			External pressure (Pa)			Enthalpy Efficiency (%)						Temp. Eff. (%)			Noise dB(A)			Volt. (V)	Current (A)			Input power (W)			N. W. (Kg)
							Summer			Winter																	
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H		L	M	H	L	M	H	
XHBQ-D15TG	1000	1500	1500	84	135	163	69	66	66	74	70	70	74	71	71	40	42	45	220	2.3	3.6	3.8	485	740	785	110
XHBQ-L15TD1																				3.7	4.3	6.6	800	940	1380	130
XHBX-D15TG							-	-	-	-	-	-	76	74	74					2.3	3.6	3.8	485	740	785	114
XHBX-L15TD1																				3.7	4.3	6.6	800	940	1380	135
XHBQ-D20TG	1200	2000	2000	110	132	176	65	62	62	73	71	71	74	71	71	44	46	49		3.0	4.6	4.8	650	980	1020	112
XHBQ-L20TD1																				3.6	4.3	7.4	770	920	1550	138
XHBX-D20TG							-	-	-	-	-	-	76	74	74					3.0	4.6	4.8	650	980	1020	116
XHBX-L20TD1																				3.6	4.3	7.4	770	920	1550	143
XHBQ-D25TG	2000	2500	2500	140	170	200	64	61	61	72	70	70	73	70	70	47	50	53		4.5	6.0	6.3	940	1250	1300	130
XHBQ-L25TD1																				4.9	6.1	8.6	1000	1300	1800	175
XHBX-D25TG							-	-	-	-	-	-	74	72	72					4.5	6.0	6.3	940	1250	1300	142
XHBX-L25TD1																				4.9	6.1	8.6.	1000	1300	1800	185
XHBQ-D30TG	2500	3000	3000	150	180	210	63	60	60	71	69	69	73	70	70	48	51	54		6.5	8.7	9.0	1400	1870	1950	142
XHBQ-L30TD1																				5.9	7.8	10.0	2500	3000	3000	188
XHBX-D30TG							-	-	-	-	-	-	74	72	72					6.5	8.7	9.0	1400	1870	1950	155
XHBX-L30TD1																				5.9	7.8	10.0	2500	3000	3000	198

Model	Airflow (m3/h)	External pressure (Pa)	Enthalpy Efficiency (%)		Temp. Eff. (%)	Noise	Volt. (V)	Current (A)	Fan power (W)	N. W. (Kg)
			Summer	Winter						
XHBQ-D40D	4000	260	62	69	70	59	380	7.6	3000	285
XHBQ-L40D										266
XHBX-D40D			-	-	72					290
XHBX-L40D										281
XHBQ-D50D	5000	260	61	64	70	68	380	11	4400	360
XHBQ-L50D										342
XHBX-D50D			-	-	72					365
XHBX-L50D										362
XHBQ-D60D	6000	300	60	62	68	70	380	14	6000	365
XHBQ-L60D										342
XHBX-D60D			-	-	69					370
XHBX-L60D										362

MEDIUM AIRFLOW SERIES

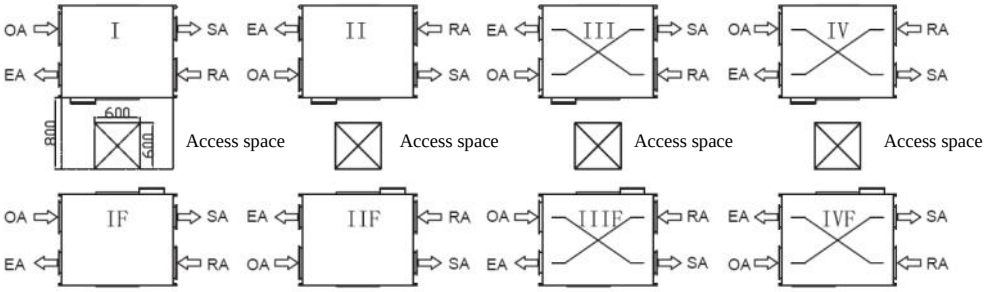
Dimensions

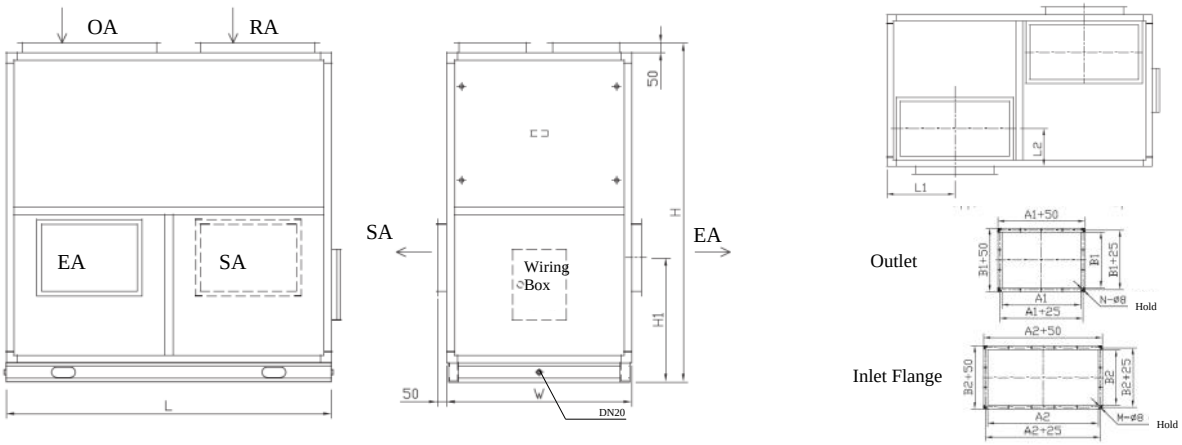


Model	L	L1	W	W1	W2	H	H1	A	A1	A2	A3	B	B1	B2	B3
XHBQ-D15TG, XHBX-D15TG	1426	1476	1200	1170	600	510	290	400	450	145	425	320	370	115	345
XHBQ-D20TG, XHBX-D20TG	1426	1476	1200	1170	600	510	290	400	450	145	425	320	370	115	345
XHBQ-D25TG, XHBX-D25TG	1700	1750	1400	1370	700	590	285	500	550	175	525	350	400	125	375
XHBQ-D30TG, XHBX-D30TG	1800	1850	1500	1470	750	660	415	500	550	175	525	350	400	125	375

Model	L	L1	W	W1	W2	H	H1	J	A	A1	A2	B	B1	B2	S	S1	S2	U	U1	U2	M	N
XHBQ-D40D, XHBX-D40D	2300	2350	1400	1360	680	760	315	355	400	425	450	320	345	370	400	425	450	550	575	600	12	14
XHBQ-D50D, XHBX-D50D	2700	2750	1700	1660	830	900	320	395	500	525	525	350	375	400	500	525	550	600	625	650	14	16
XHBQ-D60D, XHBX-D60D	2700	2750	1700	1660	830	900	320	395	500	525	525	350	375	400	500	525	550	600	625	650	14	16

Optional Installation Way





Model	L	L1	L2	W	H	H1	A1	B1	A2	B2	M	N
XHBQ-L15TD1, XHBX-L15TD1	1450	372	190	614	1220	428	320	250	450	250	10	10
XHBQ-L20TD1, XHBX-L20TD1	1450	372	190	614	1220	428	320	250	450	250	10	10
XHBQ-L25TD1, XHBX-L25TD1	1550	398	190	754	1359	510	400	250	550	250	10	10
XHBQ-L30TD1, XHBX-L30TD1	1550	398	190	754	1359	510	400	250	550	250	10	10
XHBQ-L40D, XHBX-L40D	1400	360	203	825	1540	575	400	320	590	275	12	12
XHBQ-L50D, XHBX-L50D	1700	435	240	967	1770	648	500	350	700	350	16	14
XHBQ-L60D, XHBX-L60D	1700	435	240	967	1770	648	500	350	700	350	16	14

LARGE AIRFLOW SERIES

XHBQ-L75D~L200D
XHBX-L75D~L200D

Features

Airflow from 7500-30000m3/h

Installed on the floor or in machine room

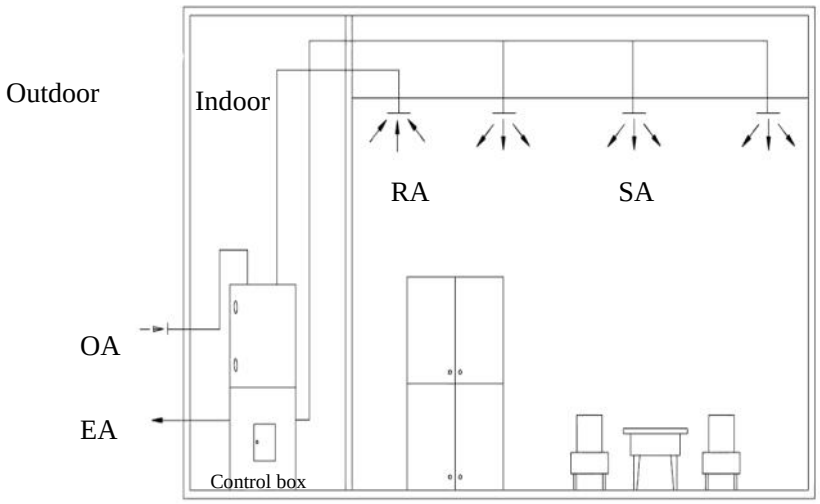
Double filters

Flexible and remote setting of control box

Application

Suitable for lab, classroom, computer room, conference room, open office, commercial building, hotel lobby, dining places etc.

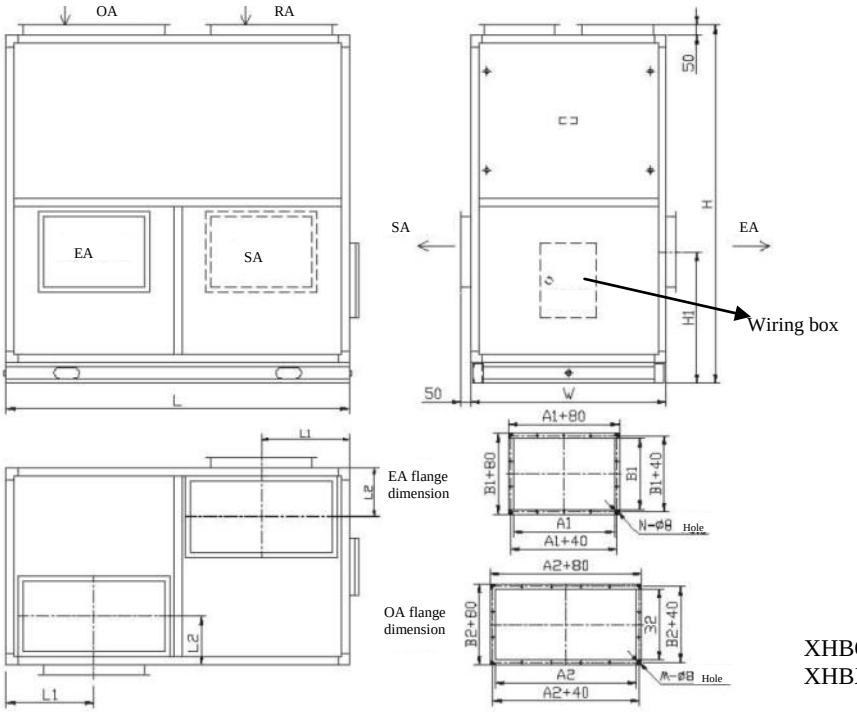
Installation demonstration



Specifications

Model	Airflow（m3/h）	External pressure (Pa)	Enthalpy Efficiency (%)		Temp. Eff. (%)	Noise dB(A)	Volt.（V)	Current（A)	Fan power (W)	N. W. (Kg)
			Summer	Winter						
XHBQ-L75D	7500	290	64	69	72	76	380	14	6000	472
XHBX-L75D			–	–	74					502
XHBQ-L100D	10000	340	63	69	72	80	380	24	11000	757
XHBX-L100D			–	–	73					802
XHBQ-L150D	15000	450	64	67	72	85	380	30.4	15000	1075
XHBX-L150D			–	–	75					1130
XHBQ-L200D	20000	600	62	68	72	88	380	45	22000	1310
XHBX-L200D			–	–	74					1380

Dimensions



XHBQ-L75D~L200D
XHBX-L75D~L200D

Model	L	L1	L2	W	H	H1	A1	B1	A2	B2	M	N
XHBQ-L75D	1710	438	280	1251	2100	657	500	400	700	400	12	10
XHBX-L75D												
XHBQ-L100D	2125	541	305	1251	2220	703	630	500	800	450	14	12
XHBX-L100D												
XHBQ-L150D	2056	524	330	1392	2498	818	630	500	800	500	16	12
XHBX-L150D												
XHBQ-L200D	2456	624	330	1500	2580	935	630	500	930	500	16	12
XHBX-L200D												

WALL TYPE

XHBQ-W3TC~W10TC

XHBQ-G3T

Features

Airflow from 300-1000m3/h

Heat or energy recovery

Easy installation to wall or balcony

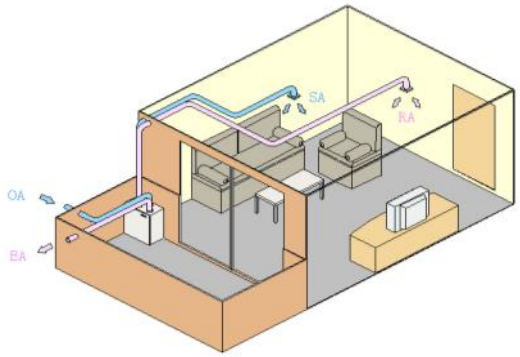
No impact on the indoor decoration

Quiet operation

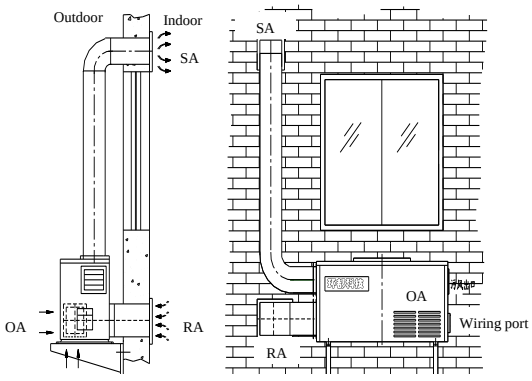
Application

Suitable for classroom, office, meeting room, computer room, dining places or lab etc.

Installation demonstration



XHBQ-G3T



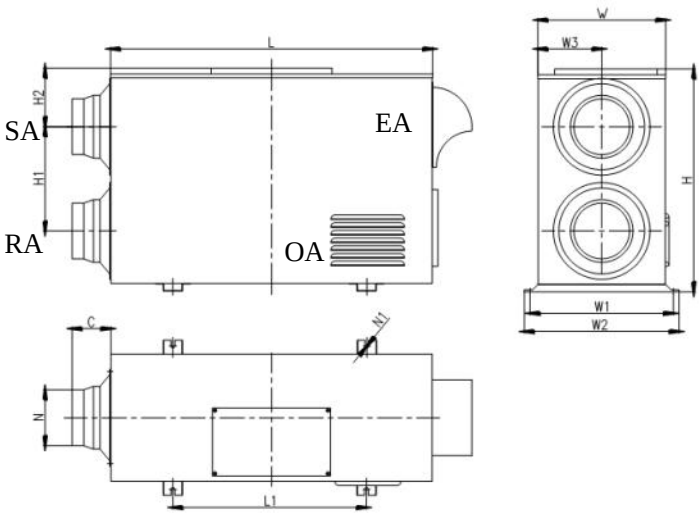
XHBQ-W3TC~W10TC

Specifications

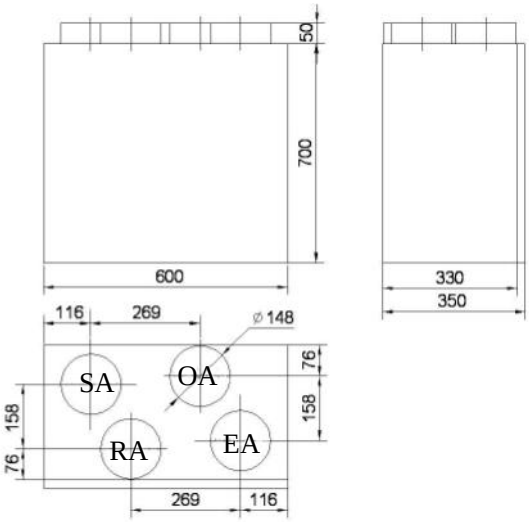
Model	Airflow（m3/h）			External pressure (Pa)			Enthalpy Efficiency（%）						Temp. Eff.(%)			Noise dB(A)			Volt.（V)	Current（A)	Input power（W)	N. W.（Kg)
							Summer			Winter												
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H				
XHBQ-W3TC	250	300	300	75	82	85	62	57	57	65	61	61	73	68	68	23	27	30	220	0.56	117	30
XHBQ-W4TC	350	400	400	80	85	88	62	57	57	65	60	60	74	69	69	25	29	32	220	0.72	150	38
XHBQ-W6TC	500	600	600	89	92	97	63	59	59	67	61	61	76	70	70	25	31	35	220	0.96	200	66
XHBQ-W8TC	700	800	800	92	96	100	57	55	55	63	57	57	74	68	68	32	37	39	220	1.7	355	71
XHBQ-W10TC	900	1000	1000	80	85	86	60	58	58	64	62	62	76	70	70	32	36	40	220	2.1	440	81
XHBQ-G3T	160	300	300	60	80	100	70	64	64	72	66	66	70	65	65	33	38	40	220	0.56	117	33

WALL TYPE

Dimensions



XHBQ-W3TC~W10TC



XHBQ-G3T

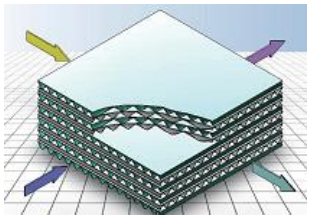
Model	L	L1	W	W1	W2	W3	H	H1	H2	N	N1	C
XHBQ-W3TC	835	500	330	355	395	143	575	255	159	Φ144	10	100
XHBQ-W4TC	835	500	350	385	415	163	711	325	159	Φ144	10	100
XHBQ-W6TC	955	630	450	485	515	202	630	300	157	Φ194	10	106
XHBQ-W8TC	1179	700	520	555	585	230	800	372	208	Φ242	10	86
XHBQ-W10TC	1179	700	520	555	585	230	800	372	208	Φ242	10	86

BRIEF INTRODUCTION TO HEAT EXCHANGER

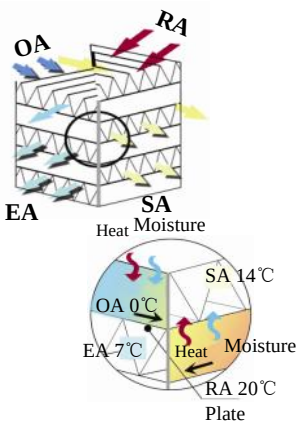
The plate heat exchanger is one of the air-to-air heat exchangers. The outdoor air and exhaust air are separated by the plates to ensure the air tightness while transferring the heat. It has no movement parts, so it's more reliable and has longer service life.

According to the airflow directions of the heat exchanger, it is categorized into crossflow type, counterflow type, and cross-counter flow type. According to heat recovery function of the heat exchanger, it is categorized into sensible heat and total heat type.

Holtop crossflow plate heat exchanger is made of aluminum foils of 0.12mm thickness. The SA and EA are double folded (five thickness of the material).All connections are completely joint sealing using epoxy resin It is high strength and there has no cross-contamination,.It has the large area of heat transfer and high heat transfer efficiency in the same plate under the same amount of wind, the same

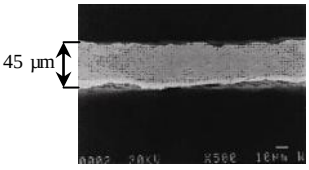


Total heat exchanger is made of ER paper which is featured by high moisture permeability, good air tightness, excellent tear resistance, and aging resistance. The clearance between the fibers is very small, so only the moisture molecules of small diameter can go through, the odor molecules of larger diameter are unable to pass through it. By this means, the temperature and humidity can be recovered smoothly, and prevent the pollutants infiltrating to the fresh air.

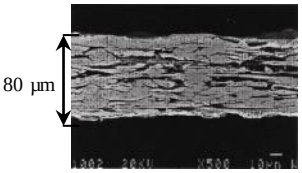


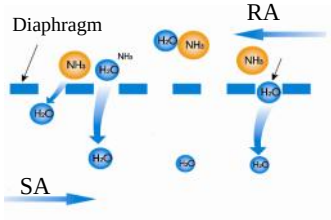
High-efficient counterflow plate total heat exchanger is also an energy recovery for direct air-to-air total heat exchange. Since the two airstreams flow counter and increase the heat exchanging area, it is more efficient than the crossflow heat exchanger and applied to the Holtop ventilators of high efficient series (TP series).

Holtop moisture infiltration paper

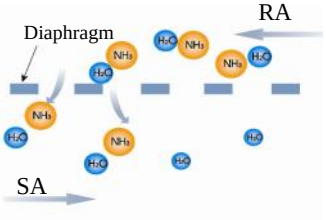


Common moisture infiltration paper





High efficient heat exchange materials



Conventional heat exchange materials

Gas molecules type	Carbon dioxide (CO_2)	Ammonia (NH_3)	Methane (CH_4)	Vapor (H_2O)	The clearance of fiber
Diameters (nm)	0.324	0.308	0.324	0.288	0.3 (for reference)

CONTROL SYSTEM

Standard control panel

- **HDK-08**

  3 Speeds
  Switch of normal ventilation and energy recovery
  Indoor temperature measurement
  Temperature value revision

Suitable models: XHBQ-D1.5TP~D20TP, XHBQ-D2TH~D13TH, XHBQ-D1.5TZ~D10TZ, XHBQ-W3TC~W10TC, XHBQ-G3T

- **HDK-09D**

  Independent ON/OFF of supply and exhaust fan
  Indoor temperature measurement
  Temperature value revision

Suitable models: XHBQ-D40D~D60D, XHBX-D40D~D60D, XHBQ-L40D~L60D, XHBX-L40D~L60D

- **HDK-09S**

  3 Speeds
  Independent ON/OFF of supply and exhaust fan
  Indoor temperature measurement
  Temperature value revision

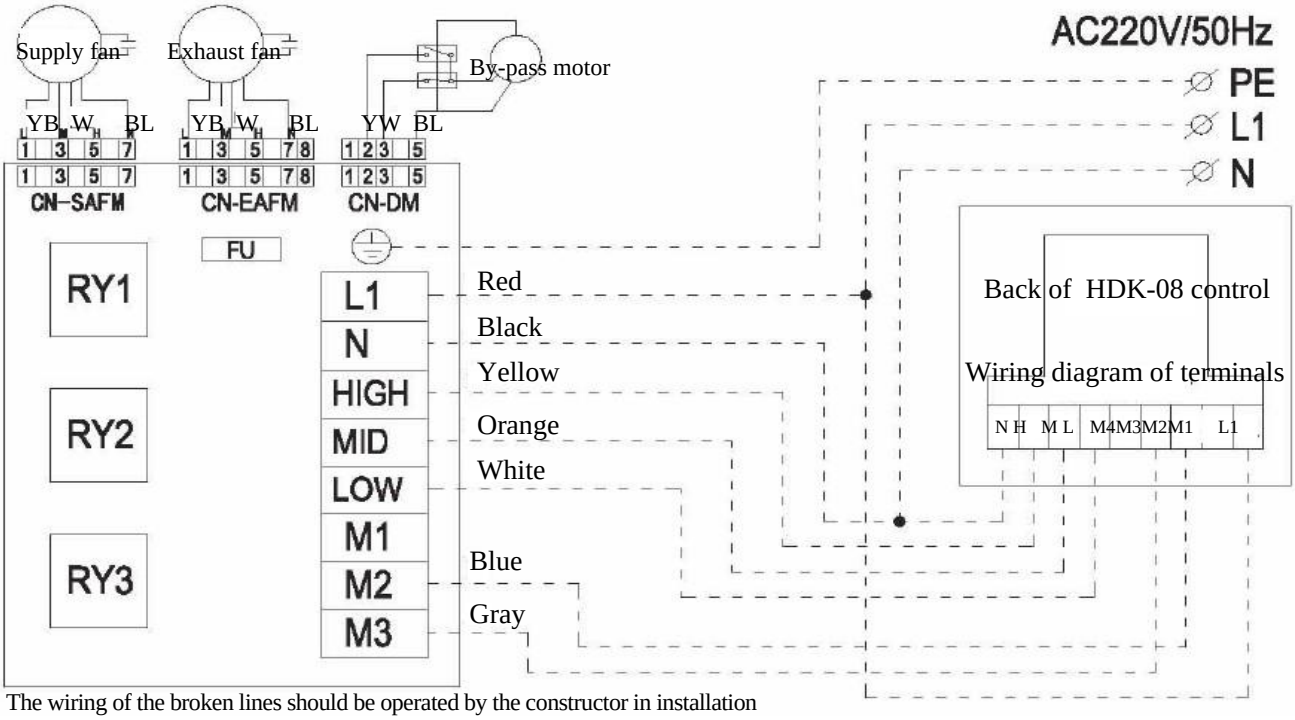
Suitable models: XHBQ-L15TD1~L30TD1, XHBX-L15TD1~L30TD1

- **HDK-20B**

  3 Speeds
  Independent ON/OFF of supply and exhaust fan
  Indoor temperature measurement
  Temperature value revision
  Time display
  Optional weekly ON/OFF

Suitable models: XHBQ-D15TG~D30TG, XHBX-D15TG~D30TG

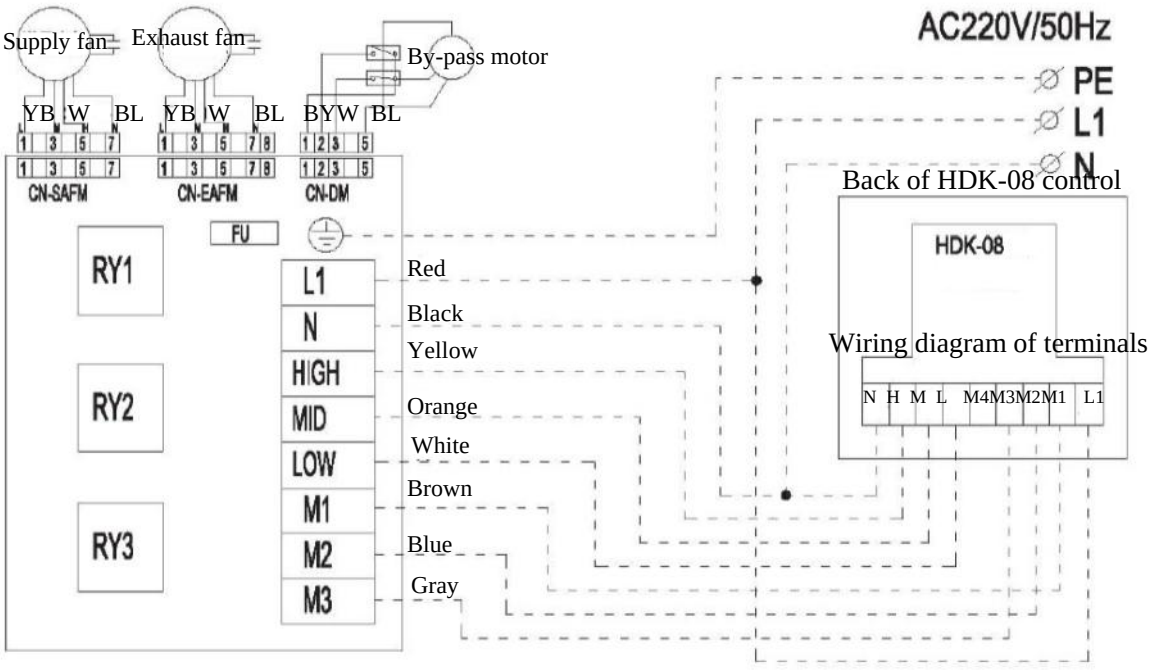
Control Circuit



The wiring of the broken lines should be operated by the constructor in installation

Suitable models:
XHBQ-D1.5TP~D5TP, XHBQ-D2TH~D6TH, XHBQ-D1.5TZ~D5TZ, XHBQ-D2PMTH~D6PMTH

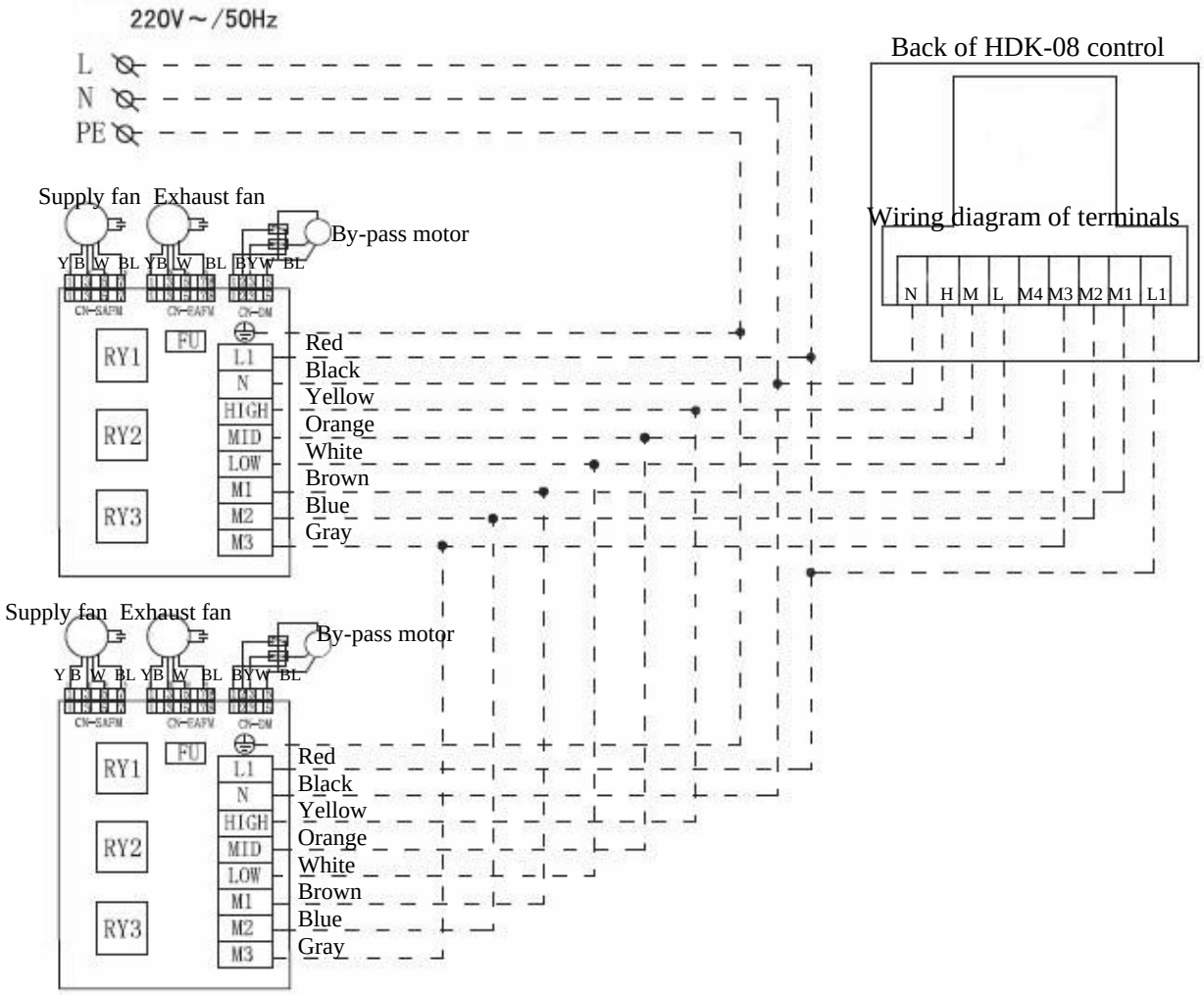
CONTROL SYSTEM



Circuit Board

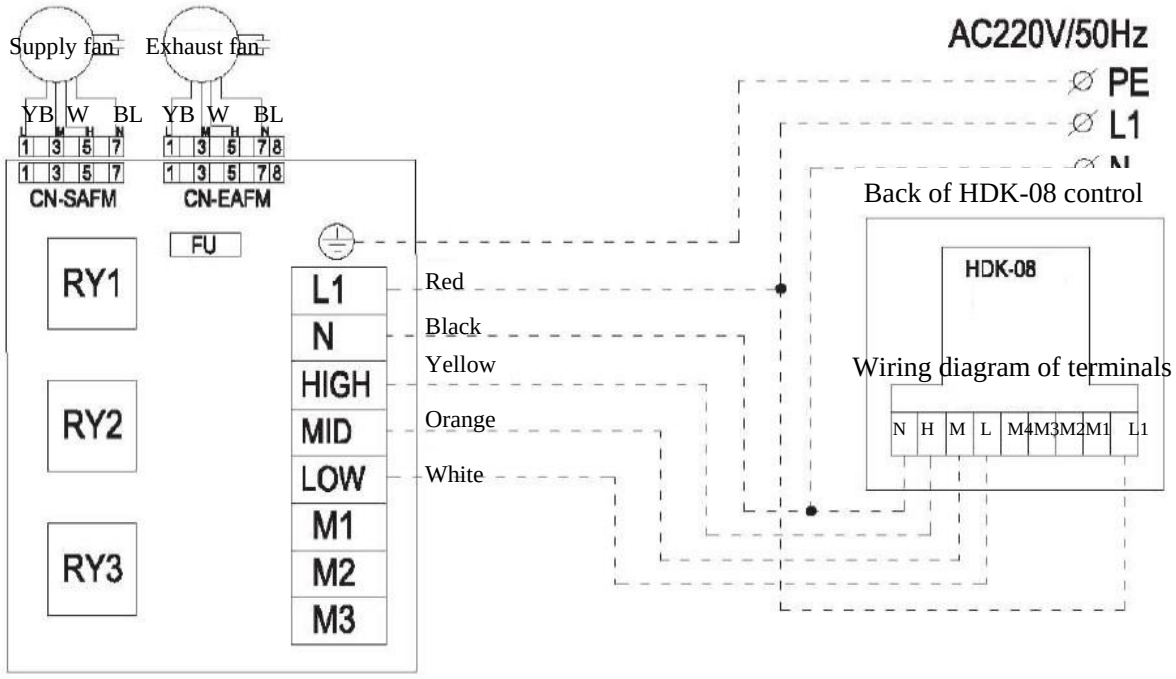
The wiring of the broken lines should be operated by the constructor in installation

Suitable model:
XHBQ-D6.5TP~D10TP, XHBQ-D8TH~D10TH, XHBQ-D8TZ~D10TZ



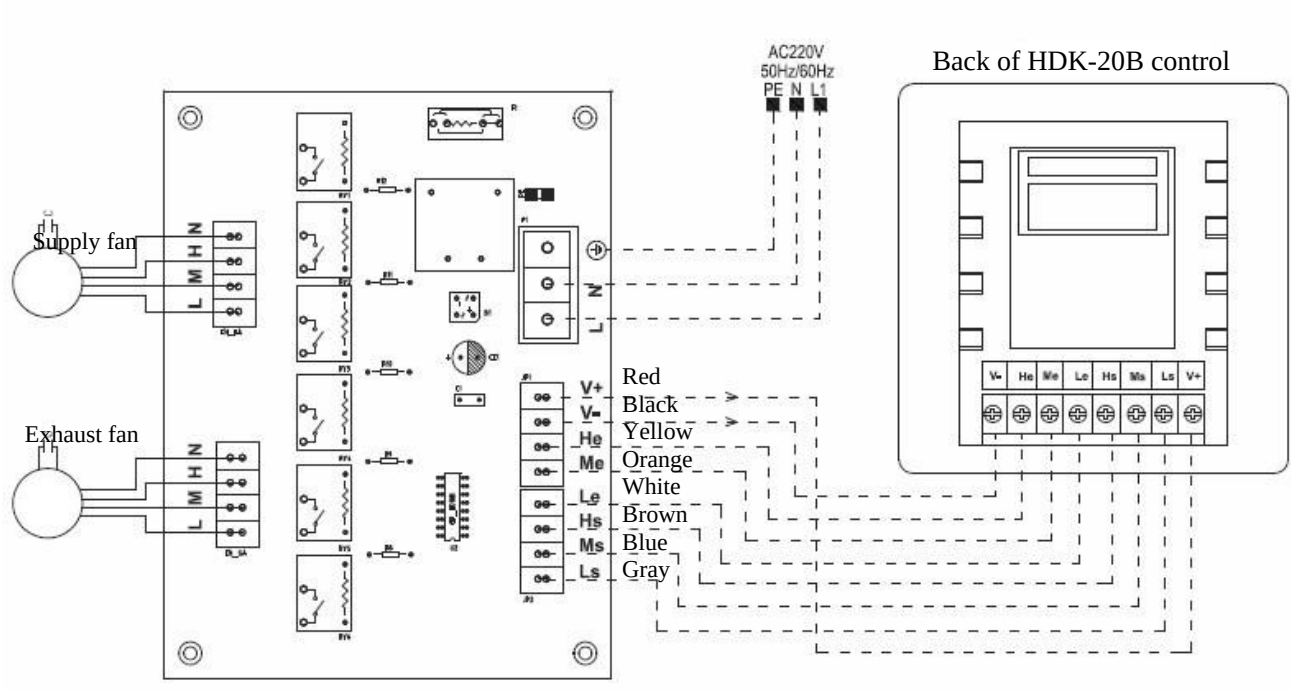
Suitable model:
XHBQ-D15TP~D20TP

CONTROL SYSTEM



The wiring of the broken lines should be operated by the constructor in installation

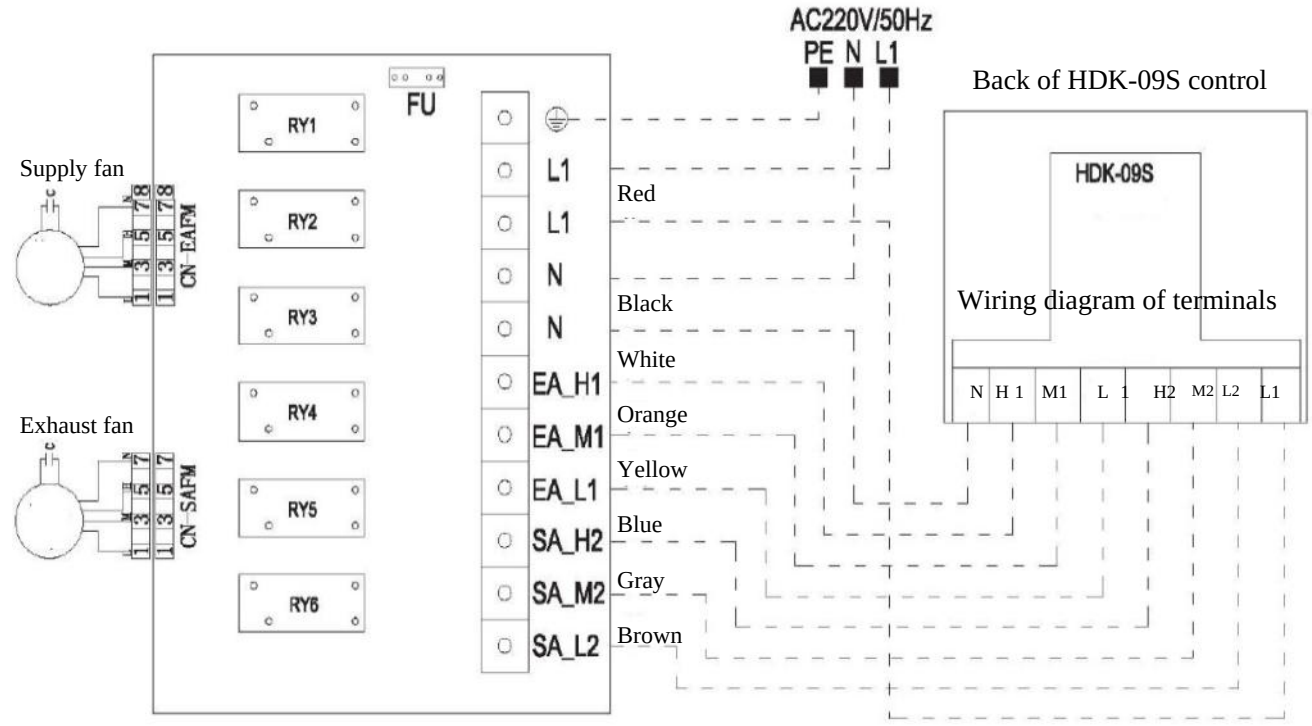
Suitable model:
XHBQ-W3TC-W10TC,XHBQ-G3T



The wiring of the broken lines should be operated by the constructor in installation

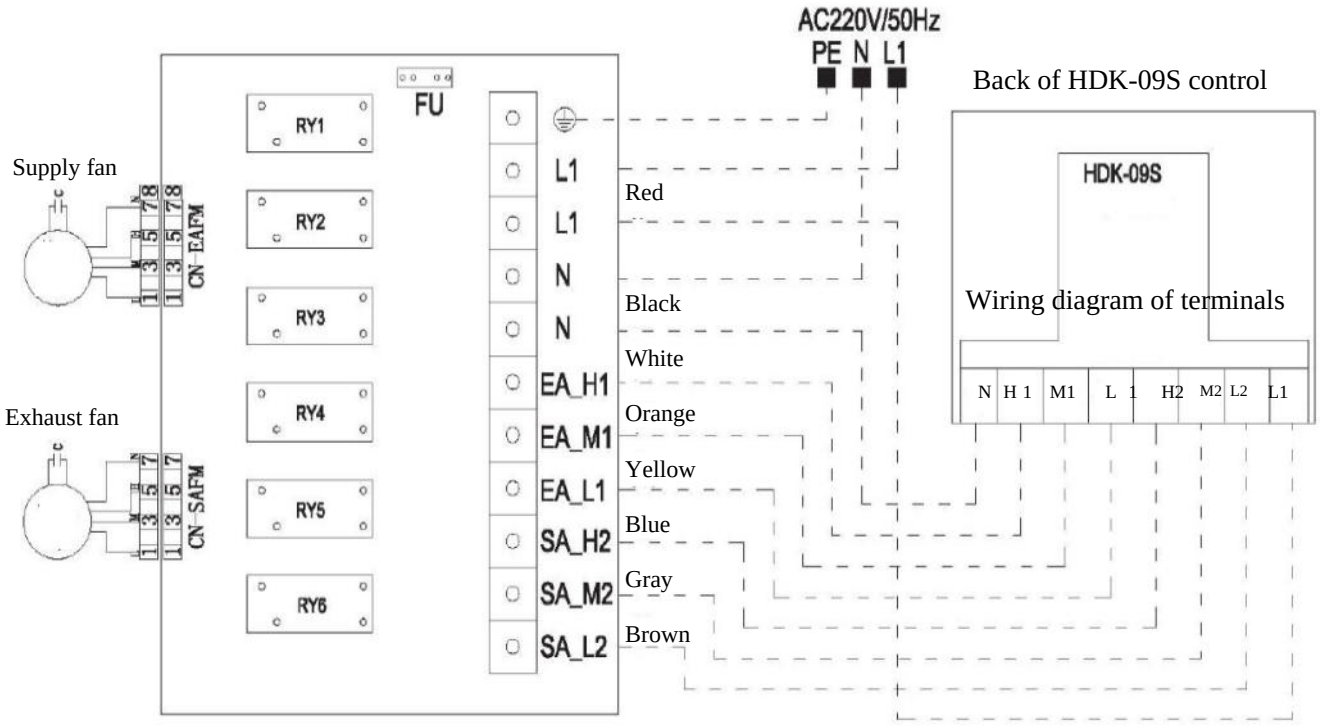
Suitable model:
XHBQ-D15TG~D30TG, XHBX-D15TG~D30TG

CONTROL SYSTEM



The wiring of the broken lines should be operated by the constructor in installation

Suitable model:
XHBQ-L15TD1~L20TD1, XHBX-L15TD1~L20TD1

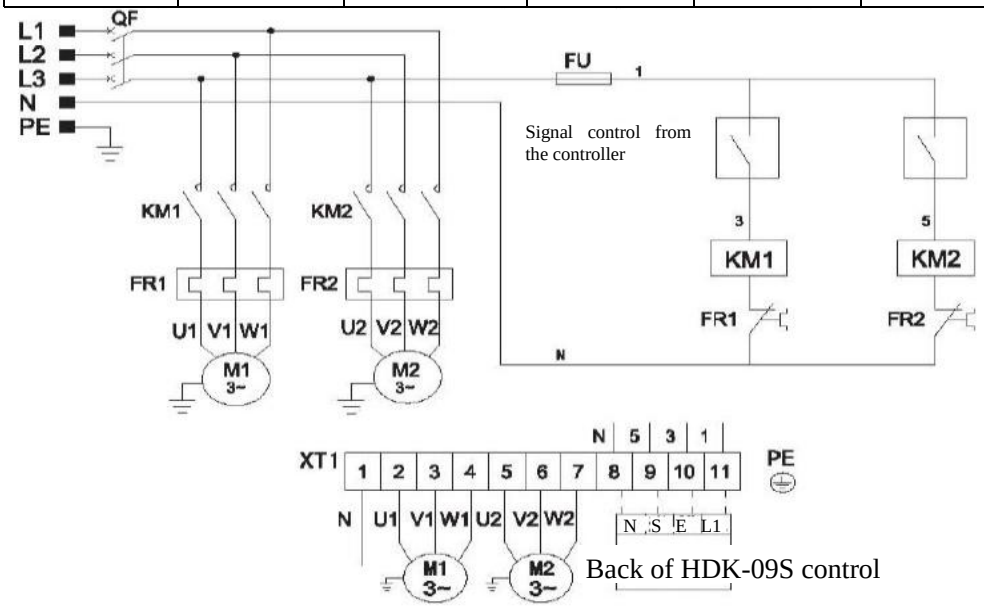


The wiring of the broken lines should be operated by the constructor in installation

Suitable model:
XHBQL25TD1~L30TD1, XHBX-L25TD1~L30TD1

CONTROL SYSTEM

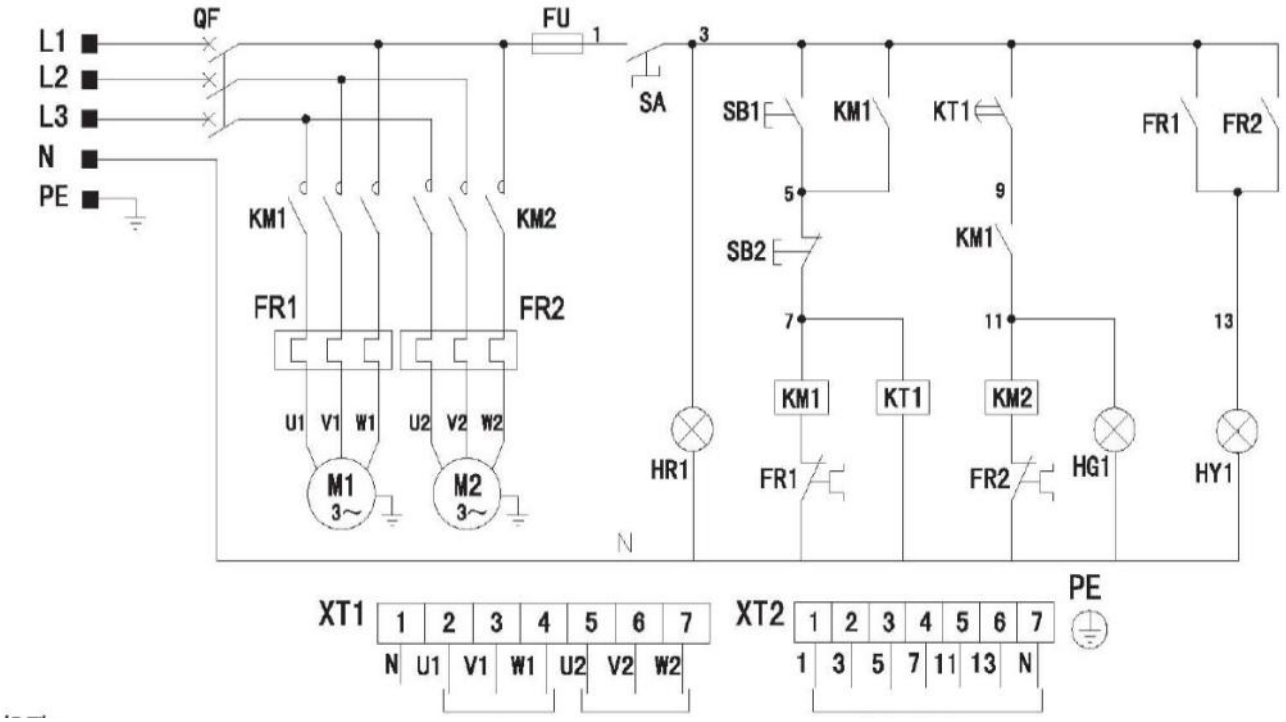
Connect to power AC380V	Exhaust fan primary loop	Supply fan primary loop	Fuse	Exhaust fan Control loop - start/ stop	Supply fan Control loop - start/ stop



Back of HDK-09S control

Suitable model:
XHBQ(X)-D40D~D60D,XHBQ(X)-L40D~L60D

Connect to power 380V	Air Switch	Exhaust fan primary loop	Supply fan primary loop	Fuse	Switch	Power indicator	control circuit				Fault alarm
							Exhaust first	Delay	Supply start	Running indicator	



Exhaust fan Supply fan Connection

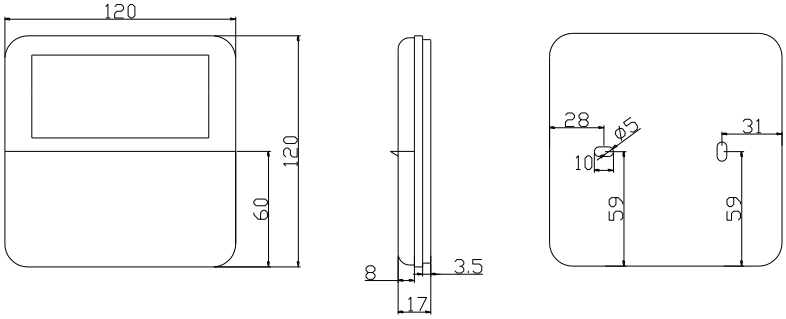
Suitable model:
XHBQ(X)-L75D~L200D

CONTROL SYSTEM

Intelligent control panel

LCD display screen

Dimensions



Functions

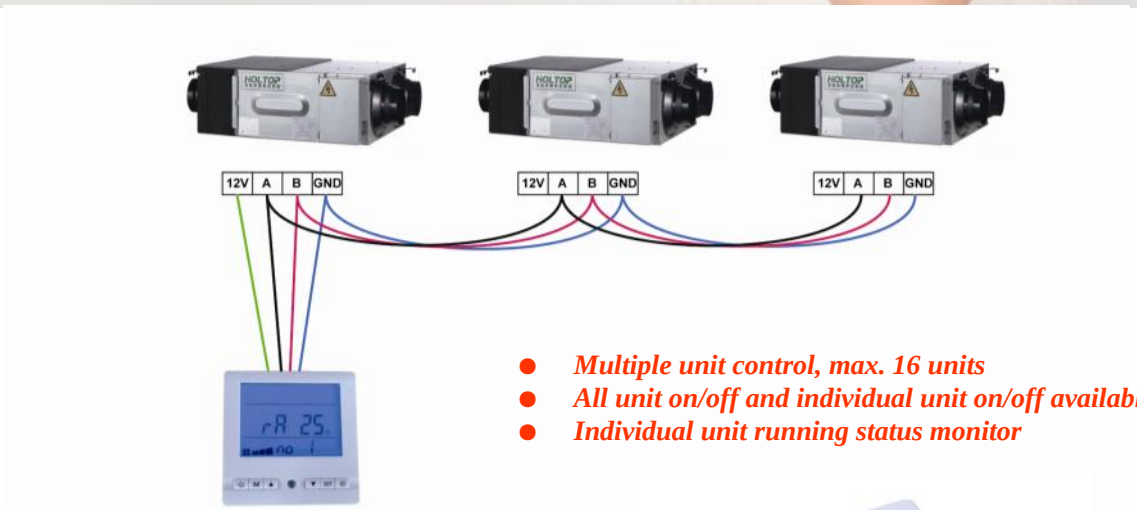
Functions\Model	HDK-10-01	HDK-10-03	HDK-10-04	HDK-10-05	HDK-10-07
Fan speed selection	●	●	●	●	●
Temperature display	●	●	●	●	●
Automatic bypass	●	●	●	●	●
Weekly timer	●	●	●	●	●
Data memory/power to restart	●	●	●	●	●
Automatic Defrosting	●	●	●	●	●
Electric reheater (at SA side)			●		
Electric perheater (at OA side)				●	
External ON/OFF (Voltage free connectors)			● (one connector)	● (one connector)	● (three connectors)
CO2 concentration control		●			●
BMS integration					●
Working condition monitor					●

Suitable models: XHBQ-D1.5TP~D20TP, XHBQ-D2TH~D13TH, XHBQ-D1.5TZ~D10TZ, XHBQ-W3TC~W10TC(No bypass function), XHBQ-G3T(No bypass function)

CONTROL SYSTEM

Accessories of HDK-10-07

Multiple Control Panel HDK-10-07-1

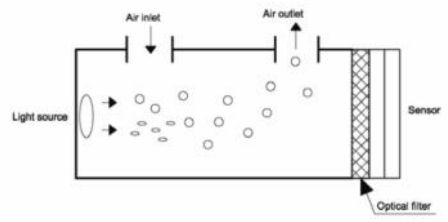


- ***Multiple unit control, max. 16 units***
- ***All unit on/off and individual unit on/off available***
- ***Individual unit running status monitor***

CO2 Sensor

NDIR infrared CO2 detection

- CO2 concentration detection
- Indoor air quality detection
- Ventilation control system,
- Building and hospital CO2 detection,
- Air conditioner, air purifi er
- Mushroom farm CO2 control.
- NDIR infrared measurement



Suitable models: XHBQ-D1.5TP~D20TP, XHBQ-D2TH~D13TH, XHBQ-D1.5TZ~D10TZ, XHBQ-W3TC~W10TC(No bypass function), XHBQ-G3T(No bypass function)

ACCESSARIES

Electrical heater - Duct type

Features

- Widely used in the ventilation system to heat the supply air.
- Made of ceramic PLC heater, casing consists of steel sandwiched with insulation glass wool.
- Equipped with control system, temperature can be set and
adjust automatically, energy saving and comfortable.
- Easy to install and operate, free of maintenance.

*** For more specifications, please contact our service team.**

Blower

Features

- High static pressure and low noise centrifugal fan
- Spring shock absorber is installed between the fan and casing
- Novel design
- PVC inner insulation
- Wide-range in application
- It can be used as supply and exhaust fan and equipped with other ventilation systems to boost the air pressure
- Material: Galvanized steel sheet with a round duct connection

*** For more specifications, please contact our service team.**

Filtration box

Features

- Double or triple filters, progressive filtration class to increase effectiveness.
- Double filters: KJ series, with plate type coarse filter and bag type medium filter, the ultimate efficiency rating at F5.
- Triple filters: KJG series, adding HEPA filter on the basis of KJ series, the ultimate efficiency rating at H10.
- Built-in low-noise blower.
- Can work separately or connected to HRV and air conditioner.
- Easy to install and maintain.

*** For more specifications, please contact our service team.**

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