



YORK[®]

YBCM Air Handling Unit

Installation, Operation & Maintenance Manual

FORM NO.: 6A7F-A01C-NB-EN



Calalogue

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I. Overview

1-1 Brief Introduction

York YBCM series air handling unit is designed for factories, warehouses, office building and shopping malls. It provides them a comfortable air conditioning environment. The coil of this air handling unit can use heating water to heat air in winter, chilled water to cool air in summer. We can supply eighteen models of YBCM clients can select it necessity.

Features of YBCM Series of Air Handling Unit:

- **Exquisite & Beautiful Appearance**

All operation panels are made of galvanized steel with best quality. They are continuous leveling, clear and beautiful appearance.

- **Good Stability**

All internal parts and components of air conditioning are set in frame structure with high strength and good stability.

- **High Rate of Heat Transfer**

The coils made of best quality copper pipe and sine wave aluminum fin by mechanical expansion tube. It has high heat transfer efficiency. Equipped with mega air flow fan, air handling unit can exert the most heat transmission efficiency.

- **Quiet Operation**

The air handling unit equips with best quality and low noise level motor, the newest low rotational speed and mega air flow fan. It is driven by belt and pulley, runs very quietly.

- **“Dry Drain Pan”**

Condensate drain pan is “dry drain pan” which makes condensate water be drained out in time.

- **Easy Installation & Low Installation Cost**

Computer was used to design the internal structure. Small size makes you convenient to install the unit in limited space; which makes the installation cost reduced to the lowest. The static pressure in unit is high and you can install the unit by connecting air duct or disconnecting air duct. There are two types for installing supply air: vertical and horizontal.

- **Convenient Cleaning for Filter**

The filters can be drawn out from left or right freely, which can cleaned conveniently.

- **Options**

1-Row, 2-Row heating Coil

Evaporative Humidifier

TiO₂ Sterilizer

Static Filter

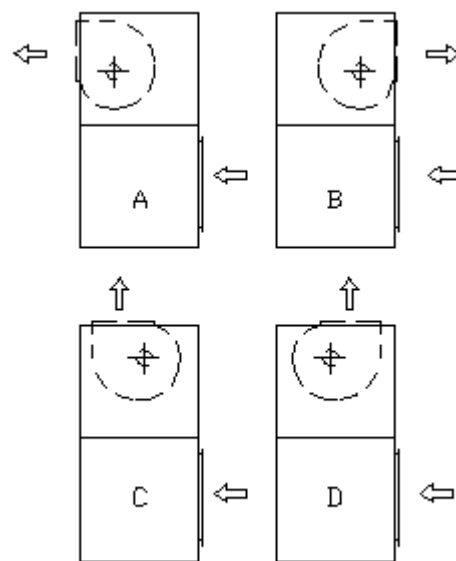
1-2 Model of Air Handling Unit

1-2-1 Nomenclature

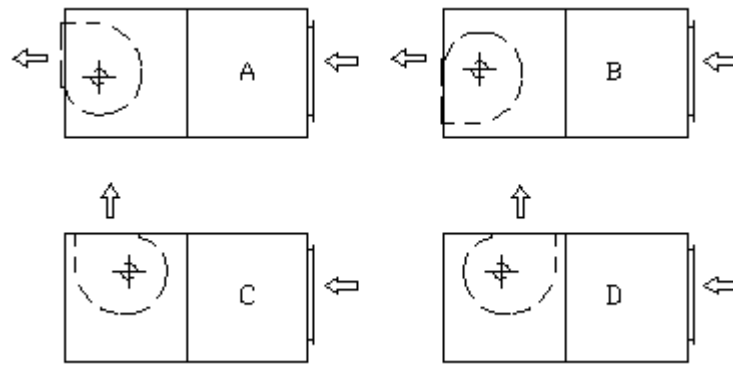


Note: Along the airflow direction, it is the right hand unit if coil connection pipes are on the right side of unit, vice versa.

1-2-2 The types of supply air



Vertical unit

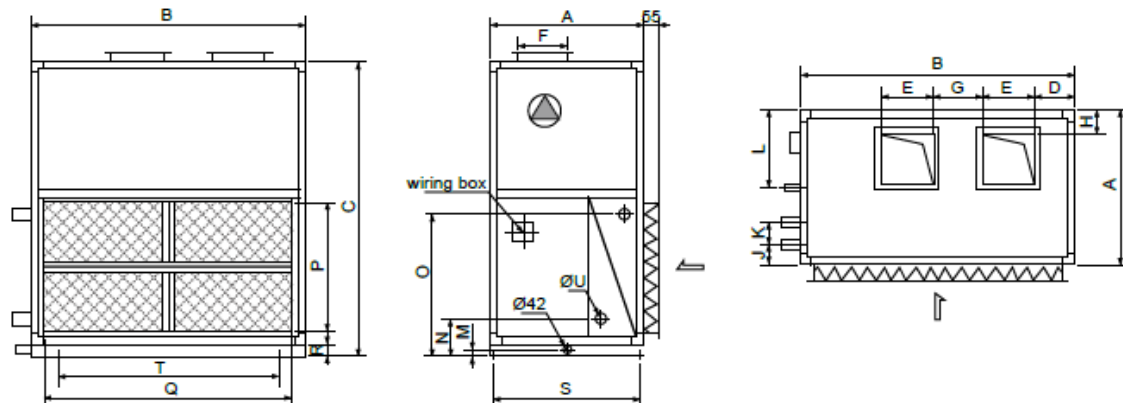


Horizontal unit

1-3 Outlines & Dimensions

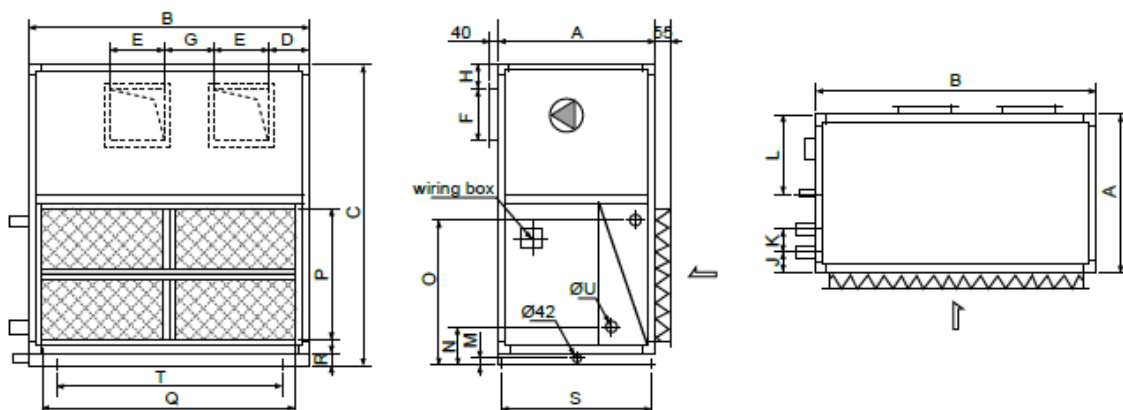
1-3-1 Supply Air Method-Vertical Unit

Vertical Standard Unit (V1)-Top Outlet



Note: The above apply to left hand unit. For right hand unit, the coil connection pipes are on the right of unit and the outlet should be orientated from the left side of unit.

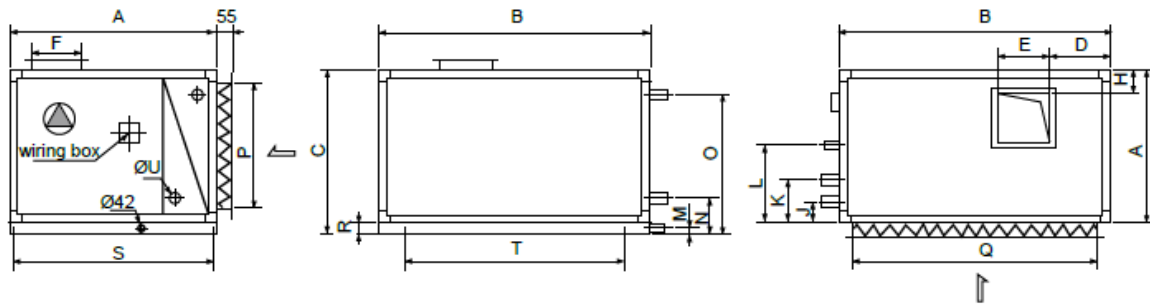
Vertical Standard Unit (V1)-Front Outlet



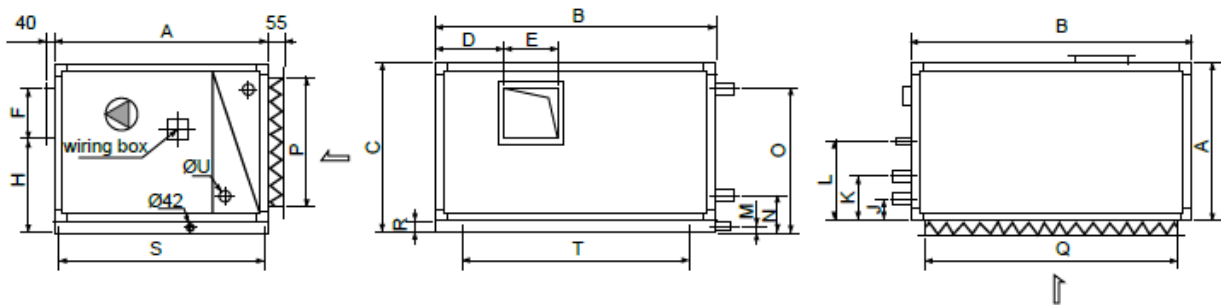
Note: The above apply to left hand unit. For right hand unit, the coil connection pipes are on the right of unit. If the supply air method is B, the air outlet is on the side of air inlet.

1-3-2 Supply Air Method-Horizontal Unit

Horizontal Standard Unit (H1)-Top Outlet

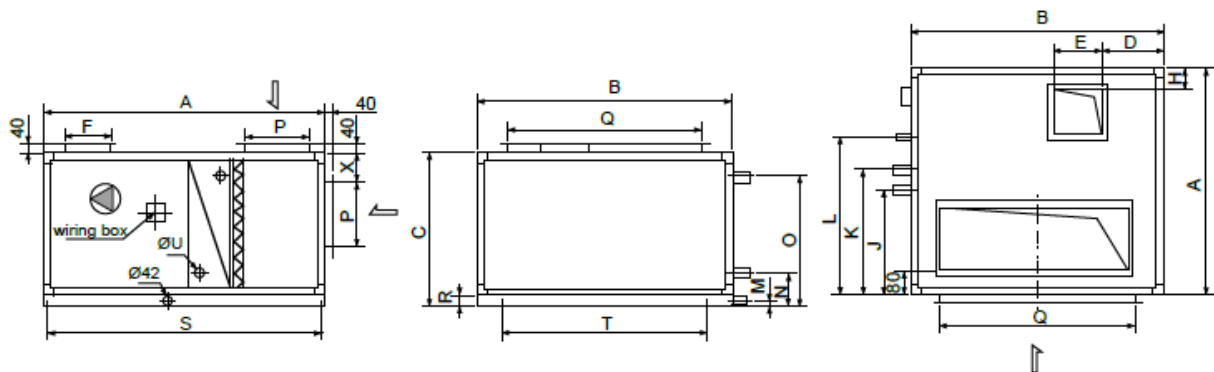


Horizontal Standard Unit (H1)-Front Outlet

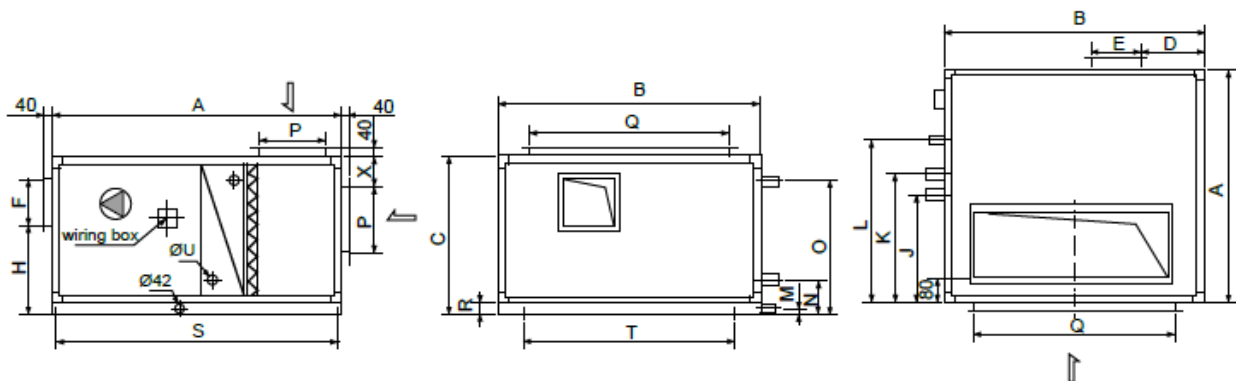


Note: The above applies to left hand unit. For right hand unit, the coil connection pipes are on the right of unit and the outlet should be orientated from the left side of unit.

Horizontal Standard Unit (H2)-Top Outlet

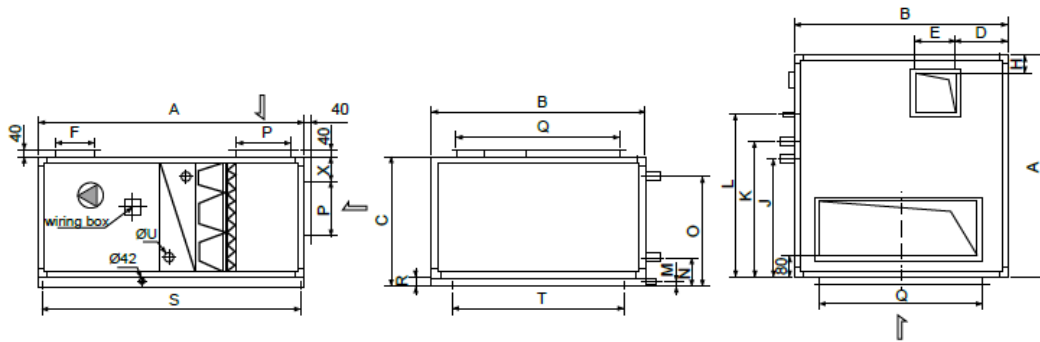


Horizontal Standard Unit (H2)-Front Outlet

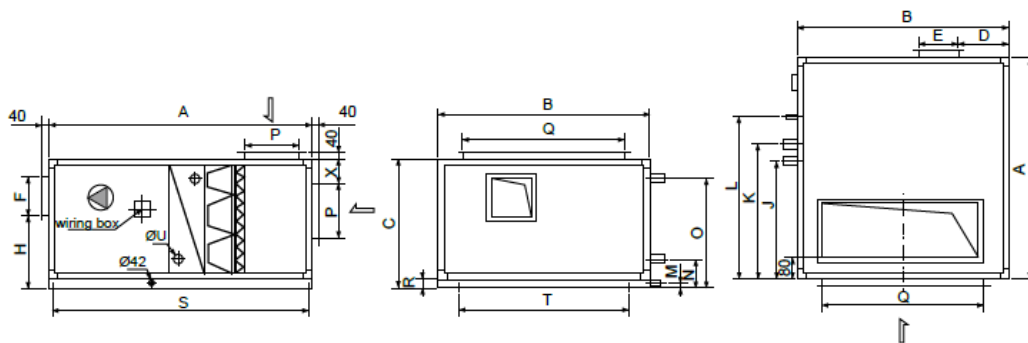


Note: The above applies to left hand unit. For right hand unit, the coil connection pipes are on the right of unit and the outlet should be orientated from the left side of unit.

Horizontal Standard Unit (H3)-Top Outlet

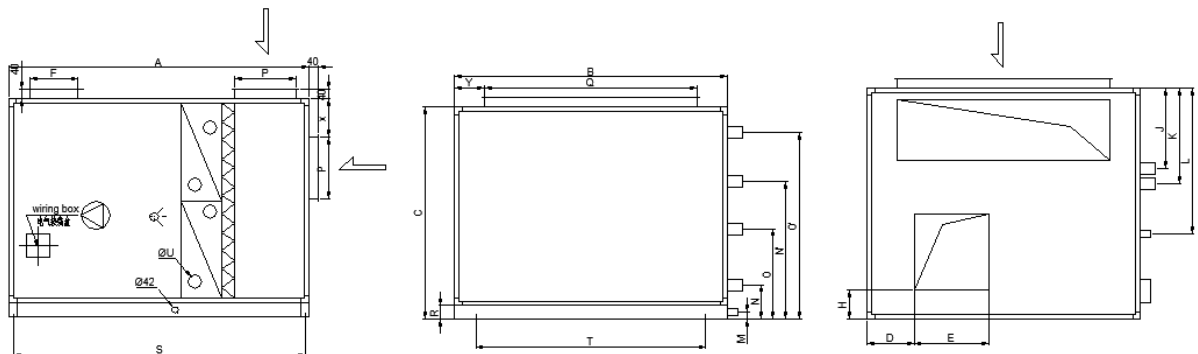


Horizontal Standard Unit (H3)-Front Outlet

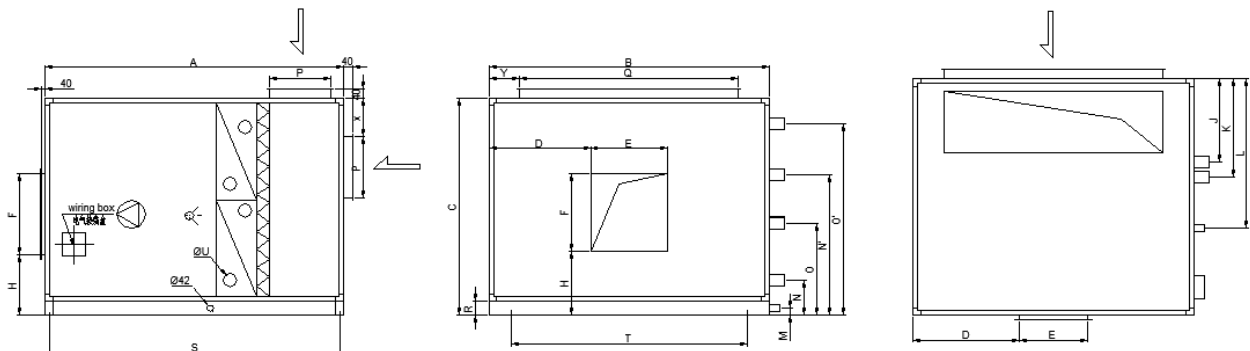


Note: The above applies to left hand unit. For right hand unit, the coil connection pipes are on the right of unit and the outlet should be orientated from the left side of unit.

Horizontal Standard Unit (H4)-Top Outlet



Horizontal Standard Unit (H4)-Front Outlet



Note: The above applies to left hand unit. For right hand unit, the coil connection pipes are on the right of unit and the outlet should be orientated from the left side of unit.

[illegible]

The technical drawings illustrate the dimensions of the 1000 Series Enclosure from three perspectives:

- Front View (Left):** Shows the overall width (A), height (F), and depth (H). It includes details for the door latch (P), handle (Q), and internal components like the wiring box and terminal block (Q42).
- Top View (Middle):** Shows the overall width (A), depth (C), and internal dimensions (B, D, E, F, H, T, U, V, W, X, Y, Z).
- Side View (Right):** Shows the overall height (F), depth (H), and internal dimensions (J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z).

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1-3-3 Outlines & Dimensions

Vertical Unit (V1)

Model	L	W	H	Supply Air Outlet Dimension								4R/6R Pipe Location Dimension										Air Inlet Dimension		Base Height	Installation Location Dimension	
	A	B	C	D	E	F	G	H				J		K		L	M	N		O		P	Q	R	S	T
								A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R					
25-02V	636	816	1128	141	232	262	-	78	78	90	284	110	110	83	138	318	33	163	163	511	511	391	654	65	596	322
25-03V	636	976	1188	208	232	262	-	76	76	88	286	110	110	83	138	318	33	163	163	575	575	455	814	65	596	482
25-04V	636	1236	1328	263	309	341	-	80	80	76	219	110	110	83	138	318	33	163	163	575	575	455	1074	65	596	742
25-05V	636	1326	1392	263	309	341	-	80	80	76	219	125	125	83	138	318	33	163	169	639	633	518	1164	65	596	832
25-06V	636	1326	1519	263	395	341	-	80	80	76	219	125	125	83	138	318	33	163	169	766	760	645	1164	65	596	832
25-07V	716	1336	1668	263	373	404	-	76	76	76	236	125	125	83	138	358	33	168	168	822	822	709	1174	65	676	842
25-08V	716	1386	1732	348	373	404	-	76	76	76	236	125	125	83	138	358	33	168	176	886	878	772	1224	65	676	892
25-10V	846	1656	1858	508	430	478	-	76	76	76	292	125	125	112	138	423	33	168	176	886	878	772	1494	65	806	1162
25-12V	846	1916	1858	608	557	478	-	76	76	76	292	125	125	112	138	423	33	168	176	886	878	772	1754	65	806	1422
25-15V	846	2026	1858	258	373	404	294	76	76	108	334	125	125	112	138	423	33	175	182	1004	997	899	1864	65	806	1532
25-18V	846	2226	1922	198	471	404	384	76	76	108	334	110	125	112	138	423	33	177	182	1065	1061	963	2064	65	806	1732
25-20V	846	2316	2121	278	430	478	343	76	76	76	292	109	124	112	138	423	33	177	182	1129	1124	1026	2154	65	806	1822
25-22V	846	2316	2248	278	430	478	343	76	76	76	292	109	124	112	138	423	33	177	182	1256	1251	1153	2154	65	806	1822

Model	L	W	H	Supply Air Outlet Dimension								4R/6R Pipe Location Dimension										Air Inlet Dimension		Base Height	Installation Location Dimension	
	A	B	C	D	E	F	G	H				J		K		L	M	N		O		P	Q	R	S	T
								A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R					
50-02V	686	866	1178	166	232	262	-	103	103	115	309	140	140	83	138	343	33	187	187	536	536	391	654	65	596	322
50-03V	686	1026	1238	233	232	262	-	101	101	113	311	140	140	83	138	343	33	188	183	600	595	455	814	65	596	482
50-04V	686	1286	1378	288	309	341	-	105	105	101	244	140	140	83	138	343	33	188	183	600	595	455	1074	65	596	742
50-05V	686	1376	1442	288	309	341	-	105	105	101	244	140	140	83	138	343	33	188	194	663	657	518	1164	65	596	832
50-06V	686	1376	1569	288	395	341	-	105	105	101	244	140	140	83	138	343	33	183	188	785	778	645	1164	65	596	832
50-07V	766	1386	1718	288	373	404	-	101	101	101	261	140	140	83	138	383	33	193	187	847	841	709	1174	65	676	842
50-08V	766	1436	1782	373	373	404	-	101	101	101	261	140	140	83	138	383	33	193	201	910	902	772	1224	65	676	892
50-10V	896	1706	1908	533	430	478	-	101	101	101	317	125	140	83	138	448	33	193	195	910	896	772	1494	65	806	1162
50-12V	896	1966	1908	633	557	478	-	101	101	101	317	125	140	83	138	448	33	193	195	910	896	772	1754	65	806	1422
50-15V	896	2076	1908	283	373	404	294	101	101	133	359	130	145	83	138	448	33	200	205	1028	1021	899	1864	65	806	1532
50-18V	896	2276	1972	223	471	404	384	101	101	133	359	130	145	83	138	448	33	202	205	1090	1084	963	2064	65	806	1732
50-20V	896	2366	2171	303	430	478	343	101	101	101	317	130	145	83	138	448	33	202	205	1153	1148	1026	2154	65	806	1822
50-22V	896	2366	2298	303	430	478	343	101	101	101	317	130	140	83	138	448	33	202	205	1280	1275	1153	2154	65	806	1822

Horizontal Unit (H1)

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension		Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	R	S	T
							A	B	C	D	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R					
							Method	Method	Method	Method																			
25-02H	1136	866	701	171	232	262	358	278	87	199	139	128	205	265	316	30	174	170	460	462	-	-	-	-	490	704	65	1096	276
25-03H	1136	966	730	188	232	262	393	303	87	199	139	128	205	265	316	30	168	170	581	589	-	-	-	-	519	804	65	1096	376
25-04H	1196	1066	865	168	309	341	450	268	87	230	128	128	210	265	316	30	176	176	681	681	-	-	-	-	654	904	65	1156	476
25-05H	1196	1116	865	178	309	341	450	268	87	230	128	128	210	265	316	30	176	176	700	700	-	-	-	-	654	954	65	1156	526
25-06H	1196	1116	960	178	395	341	450	268	87	230	128	128	210	265	316	30	176	176	821	821	-	-	-	-	749	954	65	1156	526
25-07H	1276	1256	960	228	373	404	475	268	80	287	128	128	210	265	316	30	176	176	821	821	-	-	-	-	749	1094	65	1236	666
25-08H	1276	1256	1090	228	373	404	475	268	80	287	113	128	225	265	316	30	176	176	948	948	-	-	-	-	879	1094	65	1236	666
25-10H	1406	1366	1220	238	430	478	531	268	75	385	118	128	225	265	316	30	176	176	1075	1075	-	-	-	-	1009	1204	65	1366	776
25-12H	1406	1536	1220	358	557	478	531	268	75	385	118	128	225	265	316	30	176	176	1075	1075	-	-	-	-	1009	1374	65	1366	946
25-15H	1486	1676	1340	308	568	568	516	268	62	315	118	128	225	265	316	30	176	176	1200	1200	-	-	-	-	1129	1514	65	1446	1086
25-18H	1486	1786	1470	408	568	568	516	268	62	315	118	128	225	265	316	30	176	176	1330	1330	-	-	-	-	1259	1624	65	1446	1196
25-20H	1576	1956	1470	460	638	638	538	268	62	337	118	128	225	265	316	30	176	176	1330	1330	-	-	-	-	1259	1794	65	1536	1366
25-22H	1576	1956	1600	460	638	638	538	268	62	337	118	128	225	265	316	30	176	176	1458	1458	-	-	-	-	1389	1794	65	1536	1366
25-25H	1686	2186	1635	510	714	714	608	303	62	372	118	128	225	265	316	63	211	211	1493	1493	-	-	-	-	1389	2024	100	1638	1588
25-28H	1686	2236	1765	525	714	714	608	303	62	372	118	128	225	265	316	63	211	211	1625	1625	-	-	-	-	1519	2074	100	1638	1638
25-30H	1816	2376	1765	545	800	800	649	303	62	412	118	128	225	265	316	63	211	211	1625	1625	-	-	-	-	1519	2214	100	1768	1778
25-33H	1816	2586	1765	696	800	800	647	306	62	412	118	128	225	265	316	63	211	211	1625	1625	-	-	-	-	1519	2424	100	1768	1988
25-36H	1816	2796	1765	749	800	800	647	306	62	412	118	128	225	265	316	63	211	211	1625	1625	-	-	-	-	1519	2634	100	1768	2198
25-40H	1951	2666	2075	724	897	897	617	266	62	477	112	128	225	265	319	65	216	216	984	984	1156	1156	1924	1924	1829	2498	100	1897	2262
25-45H	1951	2806	2200	839	897	897	742	266	62	477	112	128	225	265	319	65	217	218	1049	1049	1221	1221	2052	2053	1954	2638	100	1897	2402

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension		Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	R	S	T
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R					
50-02H	1186	916	751	196	232	262	383	303	112	225	164	153	230	290	342	30	199	195	485	487	-	-	-	-	490	704	65	1096	276
50-03H	1186	1016	780	213	232	262	402	328	112	225	164	153	230	290	342	30	193	195	606	614	-	-	-	-	519	804	65	1096	376
50-04H	1246	1116	915	193	309	341	459	293	112	256	153	153	235	290	342	30	201	201	706	706	-	-	-	-	654	904	65	1156	476
50-05H	1246	1166	915	203	309	341	475	293	112	256	153	153	235	290	342	30	201	201	725	725	-	-	-	-	654	954	65	1156	526
50-06H	1246	1166	1010	203	395	341	475	293	112	256	153	153	235	290	342	30	201	201	846	846	-	-	-	-	749	954	65	1156	526
50-07H	1326	1306	1010	253	373	404	500	293	105	312	153	153	235	290	342	30	201	201	846	846	-	-	-	-	749	1094	65	1236	666
50-08H	1326	1306	1140	253	373	404	500	293	105	312	138	153	250	290	342	30	201	201	973	973	-	-	-	-	879	1094	65	1236	666
50-10H	1456	1416	1270	263	430	478	556	293	100	412	143	153	250	290	342	30	201	201	1100	1100	-	-	-	-	1009	1204	65	1366	776
50-12H	1456	1586	1270	383	557	478	556	293	100	412	143	153	250	290	342	30	201	201	1100	1100	-	-	-	-	1009	1374	65	1366	946
50-15H	1536	1726	1390	334	568	568	541	293	87	341	143	153	250	290	342	30	201	201	1225	1225	-	-	-	-	1129	1514	65	1446	1086
50-18H	1536	1836	1520	434	568	568	541	293	87	341	143	153	250	290	342	30	201	201	1355	1355	-	-	-	-	1259	1624	65	1446	1196
50-20H	1626	2006	1520	486	638	638	563	293	87	363	143	153	250	290	342	30	201	201	1355	1355	-	-	-	-	1259	1794	65	1536	1366
50-22H	1626	2006	1650	486	638	638	563	293	87	363	143	153	250	290	342	30	201	201	1483	1483	-	-	-	-	1389	1794	65	1536	1366
50-25H	1736	2236	1685	536	714	714	598	318	87	398	143	153	250	290	342	63	236	236	1518	1518	-	-	-	-	1389	2024	100	1638	1588
50-28H	1736	2286	1815	551	714	714	598	318	87	398	143	153	250	290	341	63	236	236	1650	1650	-	-	-	-	1519	2074	100	1638	1638
50-30H	1866	2426	1815	571	800	800	637	321	87	437	143	153	250	290	341	63	236	236	1650	1650	-	-	-	-	1519	2214	100	1768	1778
50-33H	1866	2636	1815	722	800	800	637	321	87	437	143	153	250	290	341	63	236	236	1650	1650	-	-	-	-	1519	2424	100	1768	1988
50-36H	1866	2846	1815	775	800	800	637	321	87	437	143	153	250	290	341	63	236	236	1650	1650	-	-	-	-	1519	2634	100	1768	2198
50-40H	2001	2716	2125	749	897	897	642	291	87	502	137	153	250	290	345.5	63	241	241	1009	1009	1181	1181	1949	1949	1829	2498	100	1907	2272
50-45H	2001	2856	2250	864	897	897	767	291	87	502	137	153	250	290	345.5	63	242	243	1074	1074	1246	1246	2077	2078	1954	2638	100	1907	2412

Horizontal Unit (H2)

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R						
25-02H	1506	866	701	171	232	262	358	278	87	199	509	498	575	635	686	30	174	170	460	462	-	-	-	-	200	780	43	65	1466	276
25-03H	1506	966	730	188	232	262	393	303	87	199	509	498	575	635	686	30	168	170	581	589	-	-	-	-	200	880	43	65	1466	376
25-04H	1566	1066	865	168	309	341	450	268	87	230	498	498	580	635	686	30	176	176	681	681	-	-	-	-	200	980	43	65	1526	476
25-05H	1566	1116	865	178	309	341	450	268	87	230	498	498	580	635	686	30	176	176	700	700	-	-	-	-	200	1030	43	65	1526	526
25-06H	1666	1116	960	178	395	341	450	268	87	230	598	598	680	735	786	30	176	176	821	821	-	-	-	-	200	1030	43	65	1626	526
25-07H	1746	1256	960	228	373	404	475	268	80	287	598	598	680	735	786	30	176	176	821	821	-	-	-	-	200	1170	43	65	1706	666
25-08H	1746	1256	1090	228	373	404	475	268	80	287	583	598	695	735	786	30	176	176	948	948	-	-	-	-	300	1170	43	65	1706	666
25-10H	1976	1366	1220	238	430	478	531	268	75	385	688	698	795	835	886	30	176	176	1075	1075	-	-	-	-	300	1280	43	65	1936	776
25-12H	1976	1536	1220	358	557	478	531	268	75	385	688	698	795	835	886	30	176	176	1075	1075	-	-	-	-	300	1450	43	65	1936	946
25-15H	2056	1676	1340	308	568	568	516	268	62	315	688	698	795	835	886	30	176	176	1200	1200	-	-	-	-	400	1590	43	65	2016	1086
25-18H	2056	1786	1470	408	568	568	516	268	62	315	688	698	795	835	886	30	176	176	1330	1330	-	-	-	-	400	1700	43	65	2016	1196
25-20H	2146	1956	1470	460	638	638	538	268	62	337	688	698	795	835	886	30	176	176	1330	1330	-	-	-	-	400	1870	43	65	2106	1366
25-22H	2246	1956	1600	460	638	638	538	268	62	337	788	798	895	935	986	30	176	176	1458	1458	-	-	-	-	500	1870	43	65	2206	1366
25-25H	2396	2186	1635	510	714	714	608	303	62	372	828	838	935	975	1026	63	211	211	1493	1493	-	-	-	-	500	2100	43	100	2356	1588
25-28H	2396	2236	1765	525	714	714	608	303	62	372	828	838	935	975	1026	63	211	211	1625	1625	-	-	-	-	500	2150	43	100	2356	1638
25-30H	2526	2376	1765	545	800	800	649	303	62	412	828	838	935	975	1026	63	211	211	1625	1625	-	-	-	-	500	2290	43	100	2486	1778
25-33H	2526	2586	1765	696	800	800	647	306	62	412	828	838	935	975	1026	63	211	211	1625	1625	-	-	-	-	500	2500	43	100	2486	1988
25-36H	2526	2796	1765	749	800	800	647	306	62	412	828	838	935	975	1026	63	211	211	1625	1625	-	-	-	-	500	2710	43	100	2486	2198
25-40H	2861	2660	2075	724	897	897	617	266	62	477	1022	1038	1135	1175	1235	65	216	216	984	984	1156	1156	1924	1924	600	2574	43	100	2812	2262
25-45H	2861	2800	2200	839	897	897	742	266	62	477	1022	1038	1135	1175	1235	65	217	218	1049	1049	1221	1221	2052	2053	600	2714	43	100	2812	2402

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension																Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T		
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R										
50-02H	1556	916	751	196	232	262	383	303	112	225	534	523	600	660	712	30	199	195	485	487	-	-	-	-	200	780	68	65	1466	276		
50-03H	1556	1016	780	213	232	262	402	328	112	225	534	523	600	660	712	30	193	195	606	614	-	-	-	-	200	880	68	65	1466	376		
50-04H	1616	1116	915	193	309	341	459	293	112	256	523	523	605	660	712	30	201	201	706	706	-	-	-	-	200	980	68	65	1526	476		
50-05H	1616	1166	915	203	309	341	475	293	112	256	523	523	605	660	712	30	201	201	725	725	-	-	-	-	200	1030	68	65	1526	526		
50-06H	1716	1166	1010	203	395	341	475	293	112	256	623	623	705	760	812	30	201	201	846	846	-	-	-	-	200	1030	68	65	1626	526		
50-07H	1796	1306	1010	253	373	404	500	293	105	312	623	623	705	760	812	30	201	201	846	846	-	-	-	-	200	1170	68	65	1706	666		
50-08H	1796	1306	1140	253	373	404	500	293	105	312	608	623	720	760	812	30	201	201	973	973	-	-	-	-	300	1170	68	65	1706	666		
50-10H	2026	1416	1270	263	430	478	556	293	100	412	713	723	820	860	912	30	201	201	1100	1100	-	-	-	-	300	1280	68	65	1936	776		
50-12H	2026	1586	1270	383	557	478	556	293	100	412	713	723	820	860	912	30	201	201	1100	1100	-	-	-	-	300	1450	68	65	1936	946		
50-15H	2106	1726	1390	334	568	568	541	293	87	341	713	723	820	860	912	30	201	201	1225	1225	-	-	-	-	400	1590	68	65	2016	1086		
50-18H	2106	1836	1520	434	568	568	541	293	87	341	713	723	820	860	912	30	201	201	1355	1355	-	-	-	-	400	1700	68	65	2016	1196		
50-20H	2196	2006	1520	486	638	638	563	293	87	363	713	723	820	860	912	30	201	201	1355	1355	-	-	-	-	400	1870	68	65	2106	1366		
50-22H	2296	2006	1650	486	638	638	563	293	87	363	813	823	920	960	1012	30	201	201	1483	1483	-	-	-	-	500	1870	68	65	2206	1366		
50-25H	2502	2236	1685	536	714	714	598	318	87	398	909	919	1016	1056	1108	63	236	236	1518	1518	-	-	-	-	500	2100	68	100	2356	1588		
50-28H	2502	2286	1815	551	714	714	598	318	87	398	909	919	1016	1056	1107	63	236	236	1650	1650	-	-	-	-	500	2150	68	100	2356	1638		
50-30H	2632	2426	1815	571	800	800	637	321	87	437	909	919	1016	1056	1107	63	236	236	1650	1650	-	-	-	-	500	2290	68	100	2486	1778		
50-33H	2632	2636	1815	722	800	800	637	321	87	437	909	919	1016	1056	1107	63	236	236	1650	1650	-	-	-	-	500	2500	68	100	2486	1988		
50-36H	2632	2846	1815	775	800	800	637	321	87	437	909	919	1016	1056	1107	63	236	236	1650	1650	-	-	-	-	500	2710	68	100	2486	2198		
50-40H	2961	2710	2125	749	897	897	642	291	87	502	1097	1113	1210	1250	1312	63	241	241	1009	1009	1181	1181	1949	1949	600	2574	68	100	2872	2272		
50-45H	2961	2850	2250	864	897	897	767	291	87	502	1097	1113	1210	1250	1312	63	242	243	1074	1074	1246	1246	2077	2078	600	2714	68	100	2872	2412		

Horizontal Unit (H3)

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R						
25-02H	1886	866	701	171	232	262	358	278	87	199	889	878	955	1015	1066	30	174	170	460	462	-	-	-	-	200	780	43	65	1846	276
25-03H	1886	966	730	188	232	262	393	303	87	199	889	878	955	1015	1066	30	168	170	581	589	-	-	-	-	200	880	43	65	1846	376
25-04H	1946	1066	865	168	309	341	450	268	87	230	878	878	960	1015	1066	30	176	176	681	681	-	-	-	-	200	980	43	65	1906	476
25-05H	1946	1116	865	178	309	341	450	268	87	230	878	878	960	1015	1066	30	176	176	700	700	-	-	-	-	200	1030	43	65	1906	526
25-06H	2046	1116	960	178	395	341	450	268	87	230	978	978	1060	1115	1166	30	176	176	821	821	-	-	-	-	200	1030	43	65	2006	526
25-07H	2126	1256	960	228	373	404	475	268	80	287	978	978	1060	1115	1166	30	176	176	821	821	-	-	-	-	200	1170	43	65	2086	666
25-08H	2126	1256	1090	228	373	404	475	268	80	287	963	978	1075	1115	1166	30	176	176	948	948	-	-	-	-	300	1170	43	65	2086	666
25-10H	2356	1366	1220	238	430	478	531	268	75	385	1068	1078	1175	1215	1266	30	176	176	1075	1075	-	-	-	-	300	1280	43	65	2316	776
25-12H	2356	1536	1220	358	557	478	531	268	75	385	1068	1078	1175	1215	1266	30	176	176	1075	1075	-	-	-	-	300	1450	43	65	2316	946
25-15H	2436	1676	1340	308	568	568	516	268	62	315	1068	1078	1175	1215	1266	30	176	176	1200	1200	-	-	-	-	400	1590	43	65	2396	1086
25-18H	2436	1786	1470	408	568	568	516	268	62	315	1068	1078	1175	1215	1266	30	176	176	1330	1330	-	-	-	-	400	1700	43	65	2396	1196
25-20H	2526	1956	1470	460	638	638	538	268	62	337	1068	1078	1175	1215	1266	30	176	176	1330	1330	-	-	-	-	400	1870	43	65	2486	1366
25-22H	2626	1956	1600	460	638	638	538	268	62	337	1168	1178	1275	1315	1366	30	176	176	1458	1458	-	-	-	-	500	1870	43	65	2586	1366
25-25H	2736	2186	1635	510	714	714	608	303	62	372	1168	1178	1275	1315	1366	63	211	211	1493	1493	-	-	-	-	500	2100	43	100	2696	1588
25-28H	2736	2236	1765	525	714	714	608	303	62	372	1168	1178	1275	1315	1366	63	211	211	1625	1625	-	-	-	-	500	2150	43	100	2696	1638
25-30H	2866	2376	1765	545	800	800	649	303	62	412	1168	1178	1275	1315	1366	63	211	211	1625	1625	-	-	-	-	500	2290	43	100	2826	1778
25-33H	2866	2586	1765	696	800	800	647	306	62	412	1168	1178	1275	1315	1366	63	211	211	1625	1625	-	-	-	-	500	2500	43	100	2826	1988
25-36H	2866	2796	1765	749	800	800	647	306	62	412	1168	1178	1275	1315	1366	63	211	211	1625	1625	-	-	-	-	500	2710	43	100	2826	2198
25-40H	3201	2660	2075	724	897	897	617	266	62	477	1362	1378	1475	1515	1575	65	216	216	984	984	1156	1156	1924	1924	600	2574	43	100	3153	2262
25-45H	3201	2800	2200	839	897	897	742	266	62	477	1362	1378	1475	1515	1575	65	217	218	1049	1049	1221	1221	2052	2053	600	2714	43	100	3152	2402

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R						
50-02H	1936	916	751	196	232	262	383	303	112	225	914	903	980	1040	1092	30	199	195	485	487	-	-	-	-	200	780	68	65	1846	276
50-03H	1936	1016	780	213	232	262	402	328	112	225	914	903	980	1040	1092	30	193	195	606	614	-	-	-	-	200	880	68	65	1846	376
50-04H	1996	1116	915	193	309	341	459	293	112	256	903	903	985	1040	1092	30	201	201	706	706	-	-	-	-	200	980	68	65	1906	476
50-05H	1996	1166	915	203	309	341	475	293	112	256	903	903	985	1040	1092	30	201	201	725	725	-	-	-	-	200	1030	68	65	1906	526
50-06H	2096	1166	1010	203	395	341	475	293	112	256	1003	1003	1085	1140	1192	30	201	201	846	846	-	-	-	-	200	1030	68	65	2006	526
50-07H	2176	1306	1010	253	373	404	500	293	105	312	1003	1003	1085	1140	1192	30	201	201	846	846	-	-	-	-	200	1170	68	65	2086	666
50-08H	2176	1306	1140	253	373	404	500	293	105	312	988	1003	1100	1140	1192	30	201	201	973	973	-	-	-	-	300	1170	68	65	2086	666
50-10H	2406	1416	1270	263	430	478	556	293	100	412	1093	1103	1200	1240	1292	30	201	201	1100	1100	-	-	-	-	300	1280	68	65	2316	776
50-12H	2406	1586	1270	383	557	478	556	293	100	412	1093	1103	1200	1240	1292	30	201	201	1100	1100	-	-	-	-	300	1450	68	65	2316	946
50-15H	2486	1726	1390	334	568	568	541	293	87	341	1093	1103	1200	1240	1292	30	201	201	1225	1225	-	-	-	-	400	1590	68	65	2396	1086
50-18H	2486	1836	1520	434	568	568	541	293	87	341	1093	1103	1200	1240	1292	30	201	201	1355	1355	-	-	-	-	400	1700	68	65	2396	1196
50-20H	2576	2006	1520	486	638	638	563	293	87	363	1093	1103	1200	1240	1292	30	201	201	1355	1355	-	-	-	-	400	1870	68	65	2486	1366
50-22H	2676	2006	1650	486	638	638	563	293	87	363	1193	1203	1300	1340	1392	30	201	201	1483	1483	-	-	-	-	500	1870	68	65	2586	1366
50-25H	2842	2236	1685	536	714	714	598	318	87	398	1249	1259	1356	1396	1448	63	236	236	1518	1518	-	-	-	-	500	2100	68	100	2696	1588
50-28H	2842	2286	1815	551	714	714	598	318	87	398	1249	1259	1356	1396	1447	63	236	236	1650	1650	-	-	-	-	500	2150	68	100	2696	1638
50-30H	2972	2426	1815	571	800	800	637	321	87	437	1249	1259	1356	1396	1447	63	236	236	1650	1650	-	-	-	-	500	2290	68	100	2826	1778
50-33H	2972	2636	1815	722	800	800	637	321	87	437	1249	1259	1356	1396	1447	63	236	236	1650	1650	-	-	-	-	500	2500	68	100	2826	1988
50-36H	2972	2846	1815	775	800	800	637	321	87	437	1249	1259	1356	1396	1447	63	236	236	1650	1650	-	-	-	-	500	2710	68	100	2826	2198
50-40H	3301	2710	2125	749	897	897	642	291	87	502	1437	1453	1550	1590	1652	63	241	241	1009	1009	1181	1181	1949	1949	600	2574	68	100	3213	2272
50-45H	3301	2850	2250	864	897	897	767	291	87	502	1437	1453	1550	1590	1652	63	242	243	1074	1074	1246	1246	2077	2078	600	2714	68	100	3207	2412

Horizontal Unit (H4)

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension														Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R						
25-02H	1806	866	701	171	232	262	358	278	87	199	509	498	575	635	836	30	174	170	460	462	-	-	-	-	200	780	43	65	1766	276
25-03H	1806	966	730	188	232	262	393	303	87	199	509	498	575	635	836	30	168	170	581	589	-	-	-	-	200	880	43	65	1766	376
25-04H	1866	1066	865	168	309	341	450	268	87	230	498	498	580	635	836	30	176	176	681	681	-	-	-	-	200	980	43	65	1826	476
25-05H	1866	1116	865	178	309	341	450	268	87	230	498	498	580	635	836	30	176	176	700	700	-	-	-	-	200	1030	43	65	1826	526
25-06H	1966	1116	960	178	395	341	450	268	87	230	598	598	680	735	936	30	176	176	821	821	-	-	-	-	200	1030	43	65	1926	526
25-07H	2046	1256	960	228	373	404	475	268	80	287	598	598	680	735	936	30	176	176	821	821	-	-	-	-	200	1170	43	65	2006	666
25-08H	2046	1256	1090	228	373	404	475	268	80	287	583	598	695	735	936	30	176	176	948	948	-	-	-	-	300	1170	43	65	2006	666
25-10H	2276	1366	1220	238	430	478	531	268	75	385	688	698	795	835	1036	30	176	176	1075	1075	-	-	-	-	300	1280	43	65	2236	776
25-12H	2276	1536	1220	358	557	478	531	268	75	385	688	698	795	835	1036	30	176	176	1075	1075	-	-	-	-	300	1450	43	65	2236	946
25-15H	2356	1676	1340	308	568	568	516	268	62	315	688	698	795	835	1036	30	176	176	1200	1200	-	-	-	-	400	1590	43	65	2316	1086
25-18H	2356	1786	1470	408	568	568	516	268	62	315	688	698	795	835	1036	30	176	176	1330	1330	-	-	-	-	400	1700	43	65	2316	1196
25-20H	2446	1956	1470	460	638	638	538	268	62	337	688	698	795	835	1036	30	176	176	1330	1330	-	-	-	-	400	1870	43	65	2406	1366
25-22H	2546	1956	1600	460	638	638	538	268	62	337	788	798	895	935	1136	30	176	176	1458	1458	-	-	-	-	500	1870	43	65	2506	1366
25-25H	2696	2186	1635	510	714	714	608	303	62	372	828	838	935	975	1176	63	211	211	1493	1493	-	-	-	-	500	2100	43	100	2656	1588
25-28H	2696	2236	1765	525	714	714	608	303	62	372	828	838	935	975	1176	63	211	211	1625	1625	-	-	-	-	500	2150	43	100	2656	1638
25-30H	2826	2376	1765	545	800	800	649	303	62	412	828	838	935	975	1176	63	211	211	1625	1625	-	-	-	-	500	2290	43	100	2786	1778
25-33H	2826	2586	1765	696	800	800	647	306	62	412	828	838	935	975	1176	63	211	211	1625	1625	-	-	-	-	500	2500	43	100	2786	1988
25-36H	2826	2796	1765	749	800	800	647	306	62	412	828	838	935	975	1176	63	211	211	1625	1625	-	-	-	-	500	2710	43	100	2786	2198
25-40H	3161	2660	2075	724	897	897	617	266	62	477	1022	1038	1135	1175	1385	65	216	216	984	984	1156	1156	1924	1924	600	2574	43	100	3112	2262
25-45H	3161	2800	2200	839	897	897	742	266	62	477	1022	1038	1135	1175	1385	65	217	218	1049	1049	1221	1221	2052	2053	600	2714	43	100	3112	2402

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension																Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T		
							Method	Method	Method	Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R	4R	6R								
50-02H	1856	916	751	196	232	262	383	303	112	225	534	523	600	660	862	30	199	195	485	487	-	-	-	-	200	780	68	65	1766	276		
50-03H	1856	1016	780	213	232	262	402	328	112	225	534	523	600	660	862	30	193	195	606	614	-	-	-	-	200	880	68	65	1766	376		
50-04H	1916	1116	915	193	309	341	459	293	112	256	523	523	605	660	862	30	201	201	706	706	-	-	-	-	200	980	68	65	1826	476		
50-05H	1916	1166	915	203	309	341	475	293	112	256	523	523	605	660	862	30	201	201	725	725	-	-	-	-	200	1030	68	65	1826	526		
50-06H	2016	1166	1010	203	395	341	475	293	112	256	623	623	705	760	962	30	201	201	846	846	-	-	-	-	200	1030	68	65	1926	526		
50-07H	2096	1306	1010	253	373	404	500	293	105	312	623	623	705	760	962	30	201	201	846	846	-	-	-	-	200	1170	68	65	2006	666		
50-08H	2096	1306	1140	253	373	404	500	293	105	312	608	623	720	760	962	30	201	201	973	973	-	-	-	-	300	1170	68	65	2006	666		
50-10H	2326	1416	1270	263	430	478	556	293	100	412	713	723	820	860	1062	30	201	201	1100	1100	-	-	-	-	300	1280	68	65	2236	776		
50-12H	2326	1586	1270	383	557	478	556	293	100	412	713	723	820	860	1062	30	201	201	1100	1100	-	-	-	-	300	1450	68	65	2236	946		
50-15H	2406	1726	1390	334	568	568	541	293	87	341	713	723	820	860	1062	30	201	201	1225	1225	-	-	-	-	400	1590	68	65	2316	1086		
50-18H	2406	1836	1520	434	568	568	541	293	87	341	713	723	820	860	1062	30	201	201	1355	1355	-	-	-	-	400	1700	68	65	2316	1196		
50-20H	2496	2006	1520	486	638	638	563	293	87	363	713	723	820	860	1062	30	201	201	1355	1355	-	-	-	-	400	1870	68	65	2406	1366		
50-22H	2596	2006	1650	486	638	638	563	293	87	363	813	823	920	960	1162	30	201	201	1483	1483	-	-	-	-	500	1870	68	65	2506	1366		
50-25H	2802	2236	1685	536	714	714	598	318	87	398	909	919	1016	1056	1258	63	236	236	1518	1518	-	-	-	-	500	2100	68	100	2656	1588		
50-28H	2802	2286	1815	551	714	714	598	318	87	398	909	919	1016	1056	1257	63	236	236	1650	1650	-	-	-	-	500	2150	68	100	2656	1638		
50-30H	2932	2426	1815	571	800	800	637	321	87	437	909	919	1016	1056	1257	63	236	236	1650	1650	-	-	-	-	500	2290	68	100	2786	1778		
50-33H	2932	2636	1815	722	800	800	637	321	87	437	909	919	1016	1056	1257	63	236	236	1650	1650	-	-	-	-	500	2500	68	100	2786	1988		
50-36H	2932	2846	1815	775	800	800	637	321	87	437	909	919	1016	1056	1257	63	236	236	1650	1650	-	-	-	-	500	2710	68	100	2786	2198		
50-40H	3261	2710	2125	749	897	897	642	291	87	502	1097	1113	1210	1250	1462	63	241	241	1009	1009	1181	1181	1949	1949	600	2574	68	100	3172	2272		
50-45H	3261	2850	2250	864	897	897	767	291	87	502	1097	1113	1210	1250	1462	63	242	243	1074	1074	1246	1246	2077	2078	600	2714	68	100	3172	2412		

Horizontal Unit (H5)

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension																Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T		
							A Method	B Method	C Method	D Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R										
25-02H	2186	866	701	171	232	262	358	278	87	199	889	878	955	1015	1216	30	174	170	460	462	-	-	-	-	200	780	43	65	2146	276		
25-03H	2186	966	730	188	232	262	393	303	87	199	889	878	955	1015	1216	30	168	170	581	589	-	-	-	-	200	880	43	65	2146	376		
25-04H	2246	1066	865	168	309	341	450	268	87	230	878	878	960	1015	1216	30	176	176	681	681	-	-	-	-	200	980	43	65	2206	476		
25-05H	2246	1116	865	178	309	341	450	268	87	230	878	878	960	1015	1216	30	176	176	700	700	-	-	-	-	200	1030	43	65	2206	526		
25-06H	2346	1116	960	178	395	341	450	268	87	230	978	978	1060	1115	1316	30	176	176	821	821	-	-	-	-	200	1030	43	65	2306	526		
25-07H	2426	1256	960	228	373	404	475	268	80	287	978	978	1060	1115	1316	30	176	176	821	821	-	-	-	-	200	1170	43	65	2386	666		
25-08H	2426	1256	1090	228	373	404	475	268	80	287	963	978	1075	1115	1316	30	176	176	948	948	-	-	-	-	300	1170	43	65	2386	666		
25-10H	2656	1366	1220	238	430	478	531	268	75	385	1068	1078	1175	1215	1416	30	176	176	1075	1075	-	-	-	-	300	1280	43	65	2616	776		
25-12H	2656	1536	1220	358	557	478	531	268	75	385	1068	1078	1175	1215	1416	30	176	176	1075	1075	-	-	-	-	300	1450	43	65	2616	946		
25-15H	2736	1676	1340	308	568	568	516	268	62	315	1068	1078	1175	1215	1416	30	176	176	1200	1200	-	-	-	-	400	1590	43	65	2696	1086		
25-18H	2736	1786	1470	408	568	568	516	268	62	315	1068	1078	1175	1215	1416	30	176	176	1330	1330	-	-	-	-	400	1700	43	65	2696	1196		
25-20H	2826	1956	1470	460	638	638	538	268	62	337	1068	1078	1175	1215	1416	30	176	176	1330	1330	-	-	-	-	400	1870	43	65	2786	1366		
25-22H	2926	1956	1600	460	638	638	538	268	62	337	1168	1178	1275	1315	1516	30	176	176	1458	1458	-	-	-	-	500	1870	43	65	2886	1366		
25-25H	3036	2186	1635	510	714	714	608	303	62	372	1168	1178	1275	1315	1516	63	211	211	1493	1493	-	-	-	-	500	2100	43	100	2996	1588		
25-28H	3036	2236	1765	525	714	714	608	303	62	372	1168	1178	1275	1315	1516	63	211	211	1625	1625	-	-	-	-	500	2150	43	100	2996	1638		
25-30H	3166	2376	1765	545	800	800	649	303	62	412	1168	1178	1275	1315	1516	63	211	211	1625	1625	-	-	-	-	500	2290	43	100	3126	1778		
25-33H	3166	2586	1765	696	800	800	647	306	62	412	1168	1178	1275	1315	1516	63	211	211	1625	1625	-	-	-	-	500	2500	43	100	3126	1988		
25-36H	3166	2796	1765	749	800	800	647	306	62	412	1168	1178	1275	1315	1516	63	211	211	1625	1625	-	-	-	-	500	2710	43	100	3126	2198		
25-40H	3501	2660	2075	724	897	897	617	266	62	477	1362	1378	1475	1515	1725	65	216	216	984	984	1156	1156	1924	1924	600	2574	43	100	3453	2262		
25-45H	3501	2800	2200	839	897	897	742	266	62	477	1362	1378	1475	1515	1725	65	217	218	1049	1049	1221	1221	2052	2053	600	2714	43	100	3452	2402		

Model	L	W	H	Supply Air Outlet Dimension							4R/6R Pipe Location Dimension																Air Inlet Dimension			Base Height	Installation Location Dimension	
	A	B	C	D	E	F	H				J		K		L	M	N		O		N'		O'		P	Q	X	R	S	T		
							Method	Method	Method	Method	4R	6R	4R	6R			4R	6R	4R	6R	4R	6R										
50-02H	2236	916	751	196	232	262	383	303	112	225	914	903	980	1040	1242	30	199	195	485	487	-	-	-	-	200	780	68	65	2146	276		
50-03H	2236	1016	780	213	232	262	402	328	112	225	914	903	980	1040	1242	30	193	195	606	614	-	-	-	-	200	880	68	65	2146	376		
50-04H	2296	1116	915	193	309	341	459	293	112	256	903	903	985	1040	1242	30	201	201	706	706	-	-	-	-	200	980	68	65	2206	476		
50-05H	2296	1166	915	203	309	341	475	293	112	256	903	903	985	1040	1242	30	201	201	725	725	-	-	-	-	200	1030	68	65	2206	526		
50-06H	2396	1166	1010	203	395	341	475	293	112	256	1003	1003	1085	1140	1342	30	201	201	846	846	-	-	-	-	200	1030	68	65	2306	526		
50-07H	2476	1306	1010	253	373	404	500	293	105	312	1003	1003	1085	1140	1342	30	201	201	846	846	-	-	-	-	200	1170	68	65	2386	666		
50-08H	2476	1306	1140	253	373	404	500	293	105	312	988	1003	1100	1140	1342	30	201	201	973	973	-	-	-	-	300	1170	68	65	2386	666		
50-10H	2706	1416	1270	263	430	478	556	293	100	412	1093	1103	1200	1240	1442	30	201	201	1100	1100	-	-	-	-	300	1280	68	65	2616	776		
50-12H	2706	1586	1270	383	557	478	556	293	100	412	1093	1103	1200	1240	1442	30	201	201	1100	1100	-	-	-	-	300	1450	68	65	2616	946		
50-15H	2786	1726	1390	334	568	568	541	293	87	341	1093	1103	1200	1240	1442	30	201	201	1225	1225	-	-	-	-	400	1590	68	65	2696	1086		
50-18H	2786	1836	1520	434	568	568	541	293	87	341	1093	1103	1200	1240	1442	30	201	201	1355	1355	-	-	-	-	400	1700	68	65	2696	1196		
50-20H	2876	2006	1520	486	638	638	563	293	87	363	1093	1103	1200	1240	1442	30	201	201	1355	1355	-	-	-	-	400	1870	68	65	2786	1366		
50-22H	2976	2006	1650	486	638	638	563	293	87	363	1193	1203	1300	1340	1542	30	201	201	1483	1483	-	-	-	-	500	1870	68	65	2886	1366		
50-25H	3142	2236	1685	536	714	714	598	318	87	398	1249	1259	1356	1396	1598	63	236	236	1518	1518	-	-	-	-	500	2100	68	100	2996	1588		
50-28H	3142	2286	1815	551	714	714	598	318	87	398	1249	1259	1356	1396	1597	63	236	236	1650	1650	-	-	-	-	500	2150	68	100	2996	1638		
50-30H	3272	2426	1815	571	800	800	637	321	87	437	1249	1259	1356	1396	1597	63	236	236	1650	1650	-	-	-	-	500	2290	68	100	3126	1778		
50-33H	3272	2636	1815	722	800	800	637	321	87	437	1249	1259	1356	1396	1597	63	236	236	1650	1650	-	-	-	-	500	2500	68	100	3126	1988		
50-36H	3272	2846	1815	775	800	800	637	321	87	437	1249	1259	1356	1396	1597	63	236	236	1650	1650	-	-	-	-	500	2710	68	100	3126	2198		
50-40H	3601	2710	2125	749	897	897	642	291	87	502	1437	1453	1550	1590	1802	63	241	241	1009	1009	1181	1181	1949	1949	600	2574	68	100	3513	2272		
50-45H	3601	2850	2250	864	897	897	767	291	87	502	1437	1453	1550	1590	1802	63	242	243	1074	1074	1246	1246	2077	2078	600	2714	68	100	3507	2412		

1-3-4 Connection pipe

Vertical Unit

Model	Coil Connection Pipe mm(inch)			
	4 Rows	6 Rows	4 Rows	6 Rows
	Return Air	Return Air	Fresh Air	Fresh Air
YBCM02V	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")
YBCM03V	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")	φ60(2")
YBCM04V	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")	φ60(2")
YBCM05V	φ48(1-1/2")	φ60(2")	φ48(1-1/2")	φ60(2")
YBCM06V	φ48(1-1/2")	φ60(2")	φ60(2")	φ76(2-1/2")
YBCM07V	φ60(2")	φ60(2")	φ60(2")	φ76(2-1/2")
YBCM08V	φ60(2")	φ76(2-1/2")	φ60(2")	φ76(2-1/2")
YBCM10V	φ60(2")	φ76(2-1/2")	φ76(2-1/2")	φ76(2-1/2")
YBCM12V	φ60(2")	φ76(2-1/2")	φ76(2-1/2")	φ89(3")
YBCM15V	φ76(2-1/2")	φ89(3")	φ89(3")	φ89(3")
YBCM18V	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM20V	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM22V	φ89(3")	φ89(3")	φ89(3")	φ89(3")

Horizontal Unit

Model	Coil Connection Pipe mm(inch)			
	4 Rows	6 Rows	4 Rows	6 Rows
	Return Air	Return Air	Fresh Air	Fresh Air
YBCM02H	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")
YBCM03H	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")	φ48(1-1/2")
YBCM04H	φ48(1-1/2")	φ60(2")	φ48(1-1/2")	φ60(2")
YBCM05H	φ48(1-1/2")	φ60(2")	φ48(1-1/2")	φ60(2")
YBCM06H	φ60(2")	φ60(2")	φ60(2")	φ60(2")
YBCM07H	φ60(2")	φ60(2")	φ60(2")	φ60(2")
YBCM08H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM10H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM12H	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM15H	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM18H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM20H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM22H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM25H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM28H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM30H	φ76(2-1/2")	φ89(3")	φ76(2-1/2")	φ89(3")
YBCM33H	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM36H	φ89(3")	φ89(3")	φ89(3")	φ89(3")
YBCM40H	φ76(2-1/2")	φ76(2-1/2")	φ76(2-1/2")	φ76(2-1/2")
YBCM45H	φ76(2-1/2")	φ76(2-1/2")	φ76(2-1/2")	φ76(2-1/2")

Note: 1. All pipe's screw is Rc/R2(GB/T7306.2-2000);
 2. YBCM 40H, 45H unit has two coils per unit.

II. Installation & Transportation

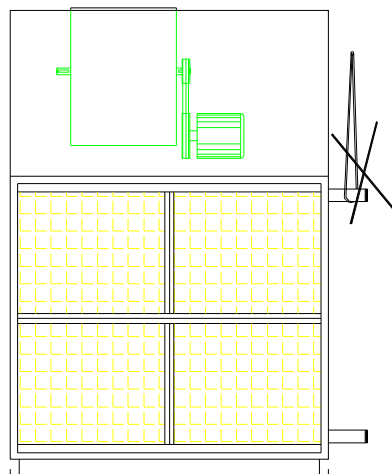
2-1 Matters Needing Attention

1. In order to free drain out and well running, the air handling unit should be installed horizontally.
2. There are not any foreign matters left in the drain pan. All foreign matters should be eliminated in order to get free drain. Then it can be running.
3. During installation, please pay attention not to let plaster, paint or contamination leave on the panels, motor or fan blades. You should also be careful in preventing from damaging galvanized steel panel and insulation.

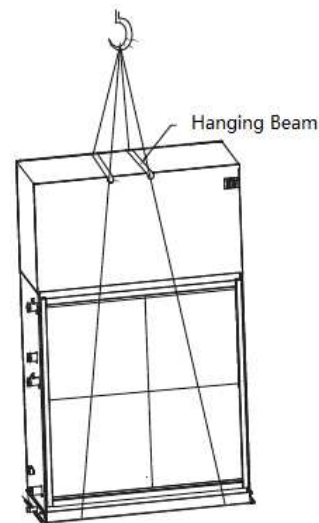
Notice: If contamination and foreign matters on motor or fan blades are not eliminated, YORK CORPORATION cannot supply effective maintenance and service.

2-2 Transportation

YBCM air handling unit is packaged by wooden case. The unit should not be damaged during transportation. The angle of inclination should not be more than 30 degree when carrying it. When the unit is delivered to destination and the wooden case is disassembled please do not uplift inlet or outlet pipe to move the unit. The correct way is to lift or move the unit by forklift. The lifting point should be firm and strong enough to bear the weight of the unit and ensure that the unit is level; when using a forklift, the length of the forklift should not be less than the width of the fork in the direction of the unit.



Wrong way



Right way

Notice:

- 1) There are some $\Phi 30\text{mm}$ eyelets already provided on the base. Make sure to insert blocks or metal rods under the base. When lifting the AHU, the hanging beam width should be wider than the unit lifting width, to avoid unit damaged by lifting rope friction and unit top frame damaged by lifting rope extrusion.
- 2) To avoid frame deformation by compression, lifting rope or metal chain can't contact the unit top frame directly: otherwise necessary protection should be done to make the compression force on the side and top panel of the unit.
- 3) Before lifting the air handling unit, raise it up slightly to test if the machine is balanced and stabilized. Otherwise, adjust the position of the hanging hook accordingly.
- 4) Be careful during the lifting operation. Never overload the crane. Prevent the slings from damaging the air handling unit.
- 5) To transfer the air handling unit with a forklift, the length of the forklift arms shall be equal to or slightly longer than the width

of the air handling unit. Otherwise extension arms can be used. The length of the forklift arms shall not be less than 2/3 of the width of the air handling unit in the direction of inserting the arms.

- 6) The weight of the air handling unit may not be distributed evenly as there are different parts assembled inside the machine. It is relatively heavier where is mounted with the fan and coils. Therefore, please make sure to select a correct position before loading the machine onto the forklift.
- 7) Never use any pipe or manifold as a supporting or hanging point while transferring the air handling unit.
- 8) Do not remove the protective materials provided at the coil connections before mounting the pipes.
- 9) Always maintain the lining and protective materials before the air handling unit is finally positioned or assembled.

The mounting blocks under the fan and motor base rail are specially designed to fix the fan and motor during transportation and installation of the air handling unit. Do not remove these blocks until the air handling unit is permanently mounted and positioned.

2-3 Preparations Before Installation

Before installation, please check the location of installation and confirm there are water supply and power supply or air duct are ventilating. The installation location should be kept clean and tidy.

After unloading the unit, please check the unit and its components to confirm they are not damaged.

-Frame Structure of Unit

-Connection pipe

-Internal Components

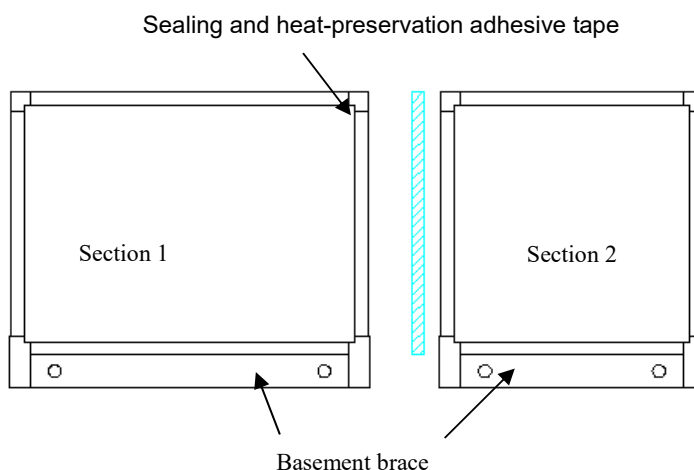
2-4 Space of Installation

In order to install and maintain the unit conveniently, you should leave an appropriate space for the unit to be installed. The distance between each side of the unit and the wall is at least 300mm, and there are at least one side which the distance from it to the wall is not shorter than the unit width.

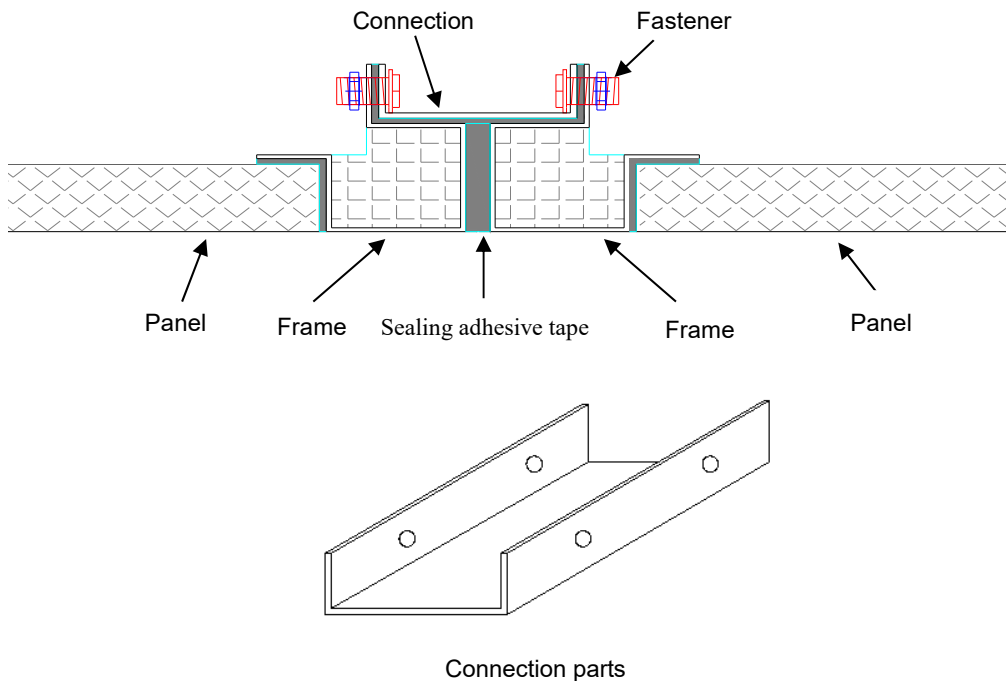
In order to install pipe and maintain/service unit conveniently, you should install the unit on a convex foundation. The size of convex foundation should be a little bigger than the bottom of the unit. The height of the foundation should meet the installation of U-trap.

If the unit is the model which is above YBCM25H, the unit section should be connected according to numbering order of the transporting section of the unit, and assembled in conformity to the airflow direction marked on the unit. Before connection, the basement brace should be taken apart.

Stick the attached sealing and heat-preservation adhesive tape to the joint face of the frame among the unit sections (One face should be stuck for each section, as indicated below)



Two consecutive unit sections are abut-jointed. Use a ruler to check whether they are aligned. Adopt connection parts screw for connection at four sides in the unit (as indicated below).



2-5 Fixture

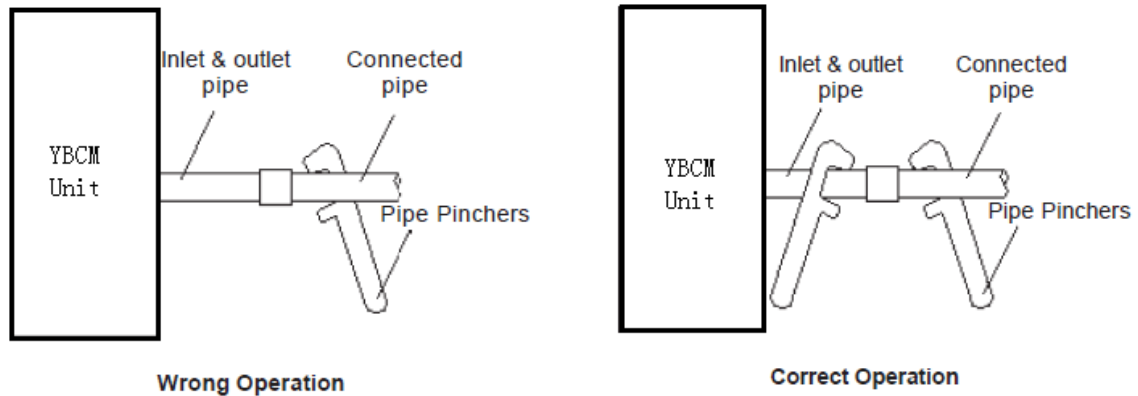
The unit should be placed horizontally and fixed on foundation by bolts.

2-6 Connection of Air Duct

Generally, YBCM air handling unit should be connected by supply air duct and return air duct (You don't need to connect return air duct if return air were connected by corridor). The arrangement and direction of supply air duct should meet the specification and standard. In order to prevent acoustic noise regeneration when vibration is transmitted to air duct, air duct should be connected with the unit by one 100~200mm length flexible duct. Such connection should be good airproof and without any air leakage. The air duct itself should not be supported on the unit. It should be supported by brace or hanger. Air duct should be equipped with good insulation to avoid condensation.

2-7 Connection of Water Pipe

Inlet/outlet pipe are connected with pipeline by screw connection. You should use two pipe pinchers (see Diagram 3). Please take carefully so as not to damage screw and cause leakage. Pay attention to the flow direction of water in pipe when connect them. Do not reverse them.



2-8 Water Quality & Required Environment

Clean and soft water quality is required. The best running temperature of air handling unit $\leq 40^{\circ}\text{C}$ and the relative humidity $\leq 95\%$.

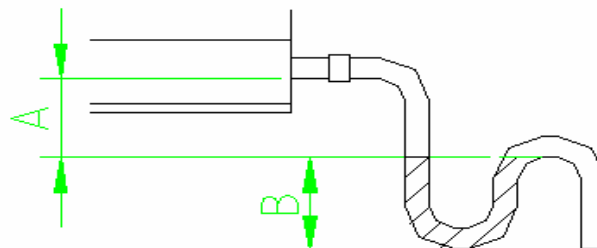
2-9 U-trap

In order to drain condensate water freely and eliminate the effect of the internal negative pressure, a U-trap (not provided by manufacturer) should be installed in drain pipe. The installation method of U-trap is followed by the following picture.

You can design its dimension as follows:

P = Absolute value of internal negative pressure Pa

$A = B \cdot P / 10 + 20 (\text{mm})$



2-10 Warnings

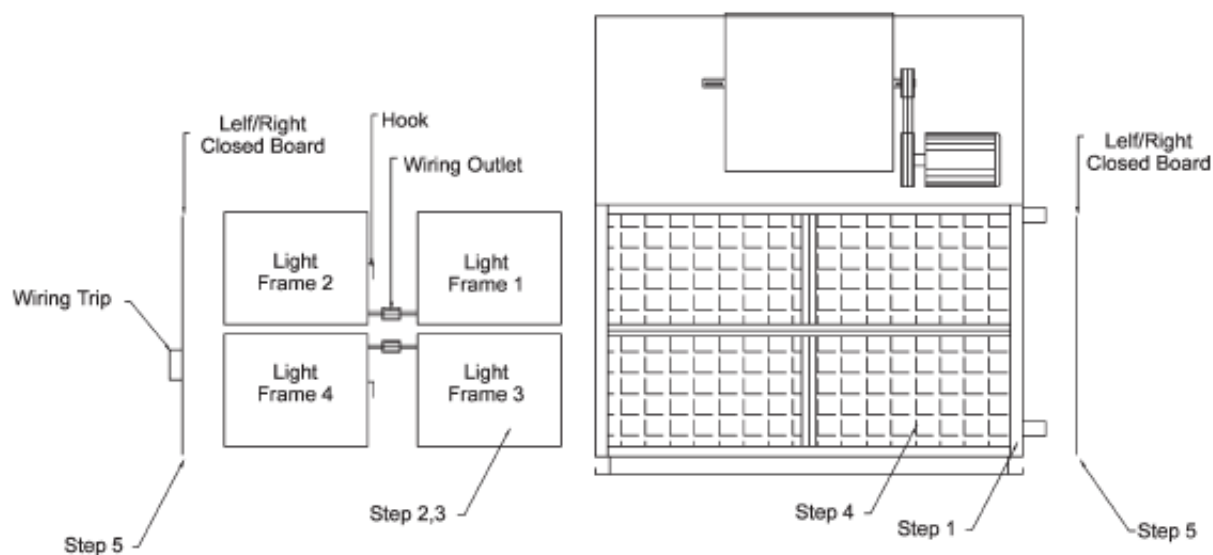
Warning marks are placed on dangerous parts of air handling unit. Please pay attention to them when transporting, installing and running it.

2-11 TiO₂ Installation

YBCM air handling unit TiO₂ sterilizer is installed in flange of return airport (Following picture). Detailed installation steps are as following:

1. Filter frame is installed on air handling unit;
2. Insert Light Frame 1 into frame by side and connect wiring outlet; Hook it and install Light Frame2;
3. Installation Light Frame 3 and Light Frame 4 with the same way as above.
4. Insert nylon plate pre-filters into frame by side;
5. Cover the left and right closed boards; Connect wiring trip;

Ultra-violet lamp bulk components are delivered accompanying with air handling unit instead of installing non unit. So you need to install lamp on unit before switching on power and using it. Detailed steps are shown in maintenance manual.



Attached List: Quantity of main components of Tio2 sterilizer

Sterilizer	QTY of	QTY of	QTY of nylon plate	fuse
YBCM02V1	2	2	1	1
YBCM03V1	4	4	2	1
YBCM04V1	4	4	2	1
YBCM05V1	8	4	2	1
YBCM06V1	12	4	2	1
YBCM07V1	12	4	2	1
YBCM08V1	12	4	2	1
YBCM10V1	12	6	3	1
YBCM12V1	12	6	3	1
YBCM15V1	18	12	6	1
YBCM18V1	18	12	6	1
YBCM20V1	36	12	6	1
YBCM22V1	36	12	6	1
YBCM02H1	2	2	2	1
YBCM03H1	4	4	2	1
YBCM04H1	8	4	2	1
YBCM05H1	8	4	2	1
YBCM06H1	8	4	2	1
YBCM07H1	12	4	2	1
YBCM08H1	12	4	2	1
YBCM10H1	12	4	2	1
YBCM12H1	12	4	2	1
YBCM15H1	24	12	6	1
YBCM18H1	24	12	6	1
YBCM20H1	36	12	6	1
YBCM22H1	36	12	6	1
YBCM25H1	36	12	6	1

YBCM28H1	36	12	6	1
YBCM30H1	36	12	6	1
YBCM33H1	48	16	8	1
YBCM36H1	48	16	8	1
YBCM40H1	72	24	12	1
YBCM45H1	72	24	12	1

Matters Needing Attention in Installation:

Notice: Sterilizer will be damaged if the voltage beyond the running range of sterilizer. When you install it, all switches connected with sterilizer should be in position off.

Manipulation:

The power supply of ultra-violet lamp of sterilizer is single-phase power. The voltage is AC 220V (50Hz/60Hz). Don't stare at ultra-violet lamp of sterilizer for a long time. The sterilizer can be linkage-controlled with relevant unit (the relevant wiring of linkage control is set by user). When internal fan is running, sterilizer will be running. Vice versa.

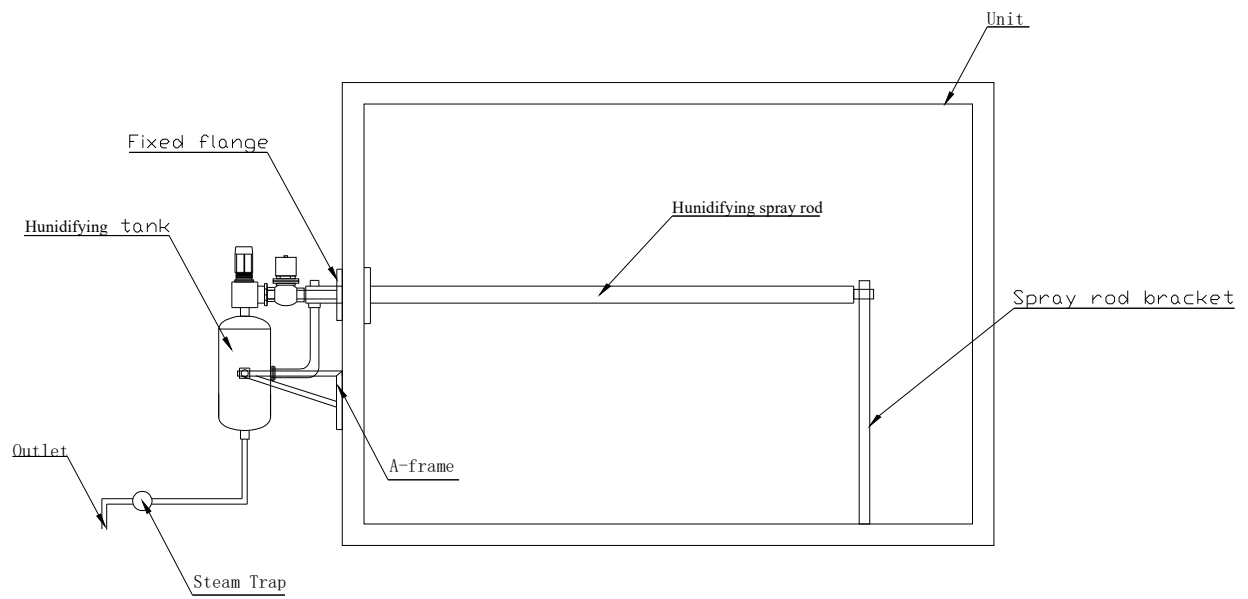
Matters Needing Attention:

The components of sterilizer have been installed in factory except the lamps need to be installed by the user. They are tested and examined strictly before ex-factory. The components are packaged in good order. So under normal condition, sterilizer should be well when it is sent to destination. When you receive sterilizer, you should check all parts. If any obvious damage occurs, you should write it on the document of carriage of carrier. Then make claim against it according to the indication of notice letter. If other parts and components are damaged except the surface, please inform serviceman in local YORK CORPORATION immediately. YORK CORPORATION will not be responsible for the losses and damages caused in the course of transportation or after arrival consignee. Please hold this installation and operation manual properly so that you can read it again at any moment, or give it to operators for reference.

2-12 Dry Steam Humidifier Installation

Only necessary spray rod bracket and spray rod are installed for the humidifier before delivery, while main machine will be installed on site.

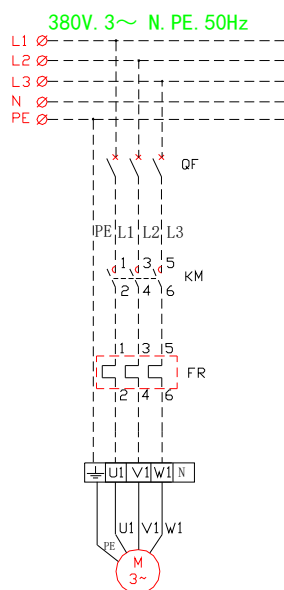
The tank of dry steam humidifier is fixed on the panel through the flange and A-frame and the spray rod on the spray rod bracket inside the unit. The installation of the enclosure and Dry Steam Humidifier connection diagram as shown in the figure below. The connecting way of humidification system other accessories reference installation instructions of ST Humidifier.



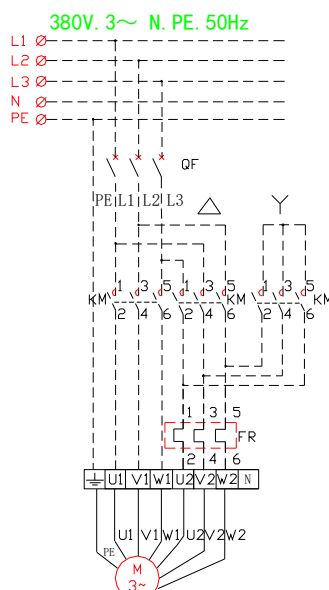
III. Starting & Running

3-1 Electrical Diagram

1. Electrical wiring of dotted line users should prepare by themselves according to diagram 1 or diagram 2. There is no such configuration for standard unit.
2. All electrical wiring should comply with local electrical installation standard.
3. Ground point of unit should be connected to earth terminal of control panel.
4. Check all power supply to confirm they accord with nameplate voltage or not; and power supply should be equipped with applicable fuses.
5. Factory can offer supply power at 380V~415V 3N~50Hz, 460V 3N~60Hz, 380V 3N~60Hz or 230V 3N~60Hz.



Power of motor: Less than or equal to 5.5KW Direct
Startup Principle Diagram



Power of motor: Bigger than or equal to 7.5KW Y-Δ
Startup Principle Diagram

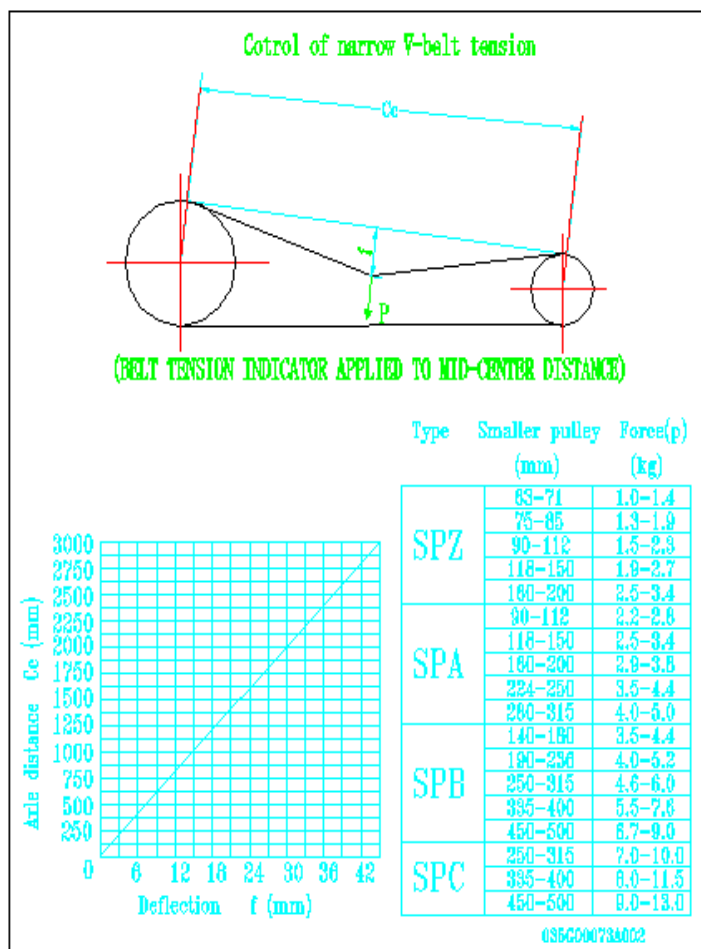
3-2 Check before Startup

After air handling unit is installed, before starting-up and testing, please check the following items firstly:

1. Check air handling unit to find whether components are loosened or not;
2. Check earth-grounding wire to find whether it is connected well or not;
3. Before starting fan, check air duct to find whether it is ventilated or not; Damper should not be in off position;
4. Check flexible duct or duct connecting apparatus;
5. All water pipes are connected well;
6. Check power supply, including short-circuit and circuit-break protection;
7. Drain pipes have been connected correctly;
8. Filter has been installed correctly without any building fragments and dust on it;
9. Check motor and fan bearing to find whether they run freely or not;
10. Hydraulic pressure testing and ventilation testing.
11. The wooden support under the fan base is taken out or not.

Fan

- Shut off switch before checking internal parts of fan;
- Check fan and motor components to find whether anti-vibration and flexible connection apparatus operate freely or not;
- Air handling unit is driven by belt and pulley. Please check tension degree of belt. The tension degree of belt is as follows (Following picture);
- Check electrical connection apparatus of motor to find whether it accords with the provided wiring diagram or not;
- Check nameplate of motor to find whether its voltage, phase and electrical circuit accord with power on the spot or not;
- Check the running current of motor by ammeter; Compare it with the data on nameplate of motor.



3-3 Testing

After air handling unit is installed, please pay attention to condensate water problem when starting-up air conditioning system at the first time. Condensate water is caused because surface temperature of unit is lower than dew point temperature of environment. Considering such special characteristics of this system, you can cool water temperature slowly so as to avoid moist air entering air conditioning room, and then avoid the production of condensate water in colder parts of unit. Use automatic flow switch to avoid the production of condensate water. If the system isn't installed automatic flow switch and thermostat, fan runs unstably, or inlet/outlet pipe valve of coil is not tight when it doesn't work, you should startup air handling unit carefully so as to avoid the production of condensate water.

Fan

Put on the switch, the fan will be driven. It should run continuously. Switch off fan and it would stop running in time. Pay attention to the rotating direction of fan when it runs.

3-4 Running

Fan

Put on the switch of the fan to control its running. The fan would run continuously. When you shut off fan, it will stop running in time.

Exhaust the Air in the cooling coil

There is a discharge valve on the outlet pipe of coil. When coil is watered at the second time, there will be some air collecting in coil. The part air will be collected in the tiptop of coil under the function of water in generally. If there is bubble in coil, there is air in it. So you need to open the discharge valve to exhaust air so as to guarantee the heat exchange efficiency. After air is exhausted, you should close the discharge valve to avoid chilled water leakage. If you do not follow above-mentioned safety regulation to operate, manufacturer will not be responsible for any accident caused by that.

IV. Maintenance & Service

Notice: Air conditioning unit should be maintained by professional workers. The professional workers should do daily monitoring and periodical maintenance for the unit. Strict position guide system and operating instructions should be established. Pay attention to regularly maintenance, service, check and repair.

4-1 Filter

4-1.1 Filter removing method

For PF filter, remove the side lug, take the filter away from each side.

For PF filter, open the access door, take the filter away from each side.

For PF&BF filter, open the access door to take the plate filter away from side, and then take away the bag filter from down-stream.

4-1.2 Air handling unit adopts plate filter that can be cleaned Please inspect the air pressure drop of filter in its running carefully. Generally, when the resistance of the filter is twice of the original one, you should replace or clean the filter. You can pat plate type filter to wipe off dust and wash it in warm water by neutral abstergent if necessary. Re-install it in original position after filter is dry.

4-2 Fan & Electric Motors

There are two categories bearing in YBCM series, including bearing no grease nipple and bearing with grease nipple.

Inspect the lubrication situation for fan bearing at least twice a year. Good maintain method will prolong bearing's service life. Refer to table 4 and blow steps to maintain the bearing.

1. If need, clean the bearing and replace the obsolete lubricating grease. Must inspect the fan status if it has not been operating over one month.
2. For bearing with grease nipple, lubricating grease injected by grease squirt. Clean the grease nipple and grease squirt, avoid the pollution come in the inner of bearing.
3. Should turn fan wheel during the lubricating grease injection, it can ensure the lubricating grease distributing on average.

Stop injection when the lubricating grease spill over from the bearing shield.

4. Maintenance periodically, inject lubricating grease appropriately according to table 4.

5. Clean the surface of bearing after lubricating grease injection.

Table 4 Regular Maintenance Guide For Fan Bearing

Brand Of Bearing	Replenish Period To Lubricating Grease(h)		Filling Amount To Inner Of Bearing	Filling Amount To Bearing Bracket		Type Of Lubricating Grease	Diagram To Grease Nipple
	Speed≤2000r/min	Speed>2000r/min		Speed≤2000r/min	Speed>2000r/min		
NSK	3000~3600	2800~3200	Full	1/2~2/3 Inner Space Of Bearing Bracket	1/3~1/2 Inner Space Of Bearing Bracket	ALVANIA RL2; GOLD GREASE No. 3.	
SKF							
FYH	2800~3200	2800~3200					
PEER							

Notes: The bearing no grease nipple, regular replenish is not necessary.

For bearing no grease nipple, lubricating grease replacement steps: firstly, remove the bearing cap and wash the bearing by gasoline, after it's dry, fill in lubricating grease. Refer to table 4 for the lubricating types.

To fill in the lubricating grease according to table below for motor:

Motor Brand		WoLong		HeBei		HuaLi		ABB		Siemens	
ITEM	Motor Frame Size	With oil filler hole or not	Service life (hours)/Oil filling cycle (hours)	With oil filler hole or not	Service life (hours)/Oil filling cycle (hours)	With oil filler hole or not	Service life (hours)/Oil filling cycle (hours)	With oil filler hole or not	Service life (hours)/Oil filling cycle (hours)	With oil filler hole or not	Service life (hours)/Oil filling cycle (hours)
1	80	No	10 years	No	20000	No	15000	No	20000	No	20000
2	90	No	10 years	No	20000	No	15000	No	20000	No	20000
3	100	No	10 years	No	20000	No	15000	No	20000	No	20000
4	112	No	10 years	No	20000	No	15000	No	20000	No	20000
5	132	No	10 years	No	20000	No	15000	No	20000	No	20000
6	160	Yes	7000	No	20000	Yes	5000	No	20000	No	20000
7	180	Yes	7000	Yes	2000	Yes	5000	No	20000	No	20000
8	200	Yes	6500	Yes	2000	Yes	5000	No	20000	No	20000
9	225	Yes	6500	Yes	2000	Yes	5000	No	20000	No	20000
10	250	Yes	6000	Yes	2000	Yes	5000	Yes	6500	No	20000
11	280	Yes	6000	Yes	2000	Yes	5000	Yes	6500	No	20000
12	315	Yes	5500	Yes	2000	Yes	5000	Yes	6500	Yes	3000

Dongguan Motor								
Motor frame size	Oiling	RPM (r/min)						
		3600	3000	1800	1500	1200	1000	900-500
		Working Time (h)						
80-132	Without	/	/	/	/	/	/	/
160-180	30g	2400	3400	6000	7000	8000	9000	10000
200-225	50g	1100	2400	5200	6200	7200	8200	9500
250-280	70g	1000	2200	3800	4800	5400	6400	8000
315-355	100g	600	1000	2000	3000	4000	5000	6400

4-3 Belt

When you find belt be too loose or too tight, which affects transmission, you should adjust the tension of the belt. The adjustment method is as the picture the front shows.

4-4 Coil

The coil can be cleaned by vacuum cleaner first and then scrub it by hard nylon brush. If there is compressed air source, you can use hose with sprayer to blow and wash it under high pressure. Additionally, if you use applicable air filter and maintain it correctly, you can prolong clean time of coil.

4-5 Drain Pipe

Before air handling unit runs, you should check the drain pipe. If drain pipe is clogged, you should open it or replace it to drain condensate water out.

4-6 TiO₂

Maintenance

Nylon plate pre-filter and aluminum filter with TiO₂ should be cleaned periodically. You should clean the nylon plate pre-filter once a month and clean aluminum filter once three months.

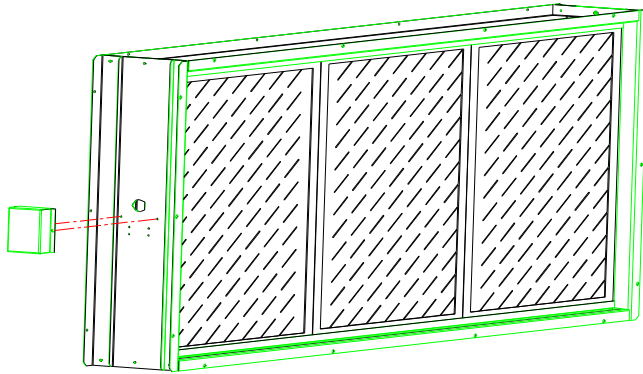
TiO₂ coating on aluminum filter cannot be cleaned by water. If there is any dust on aluminum filter, please blow it by dry air.

When checking and repairing TiO₂ sterilizer components, you can refer to the following detailed steps:

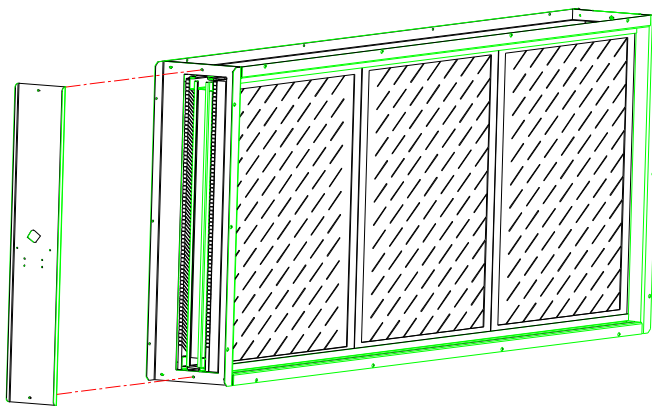
If you want to re-install frames, please do the **following detailed steps** in reverse.

Manipulation Schematic Diagram:

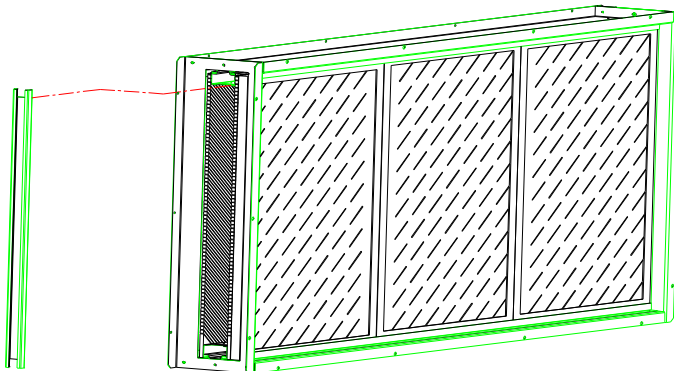
I. Shut off power supply and disassemble electrical box.



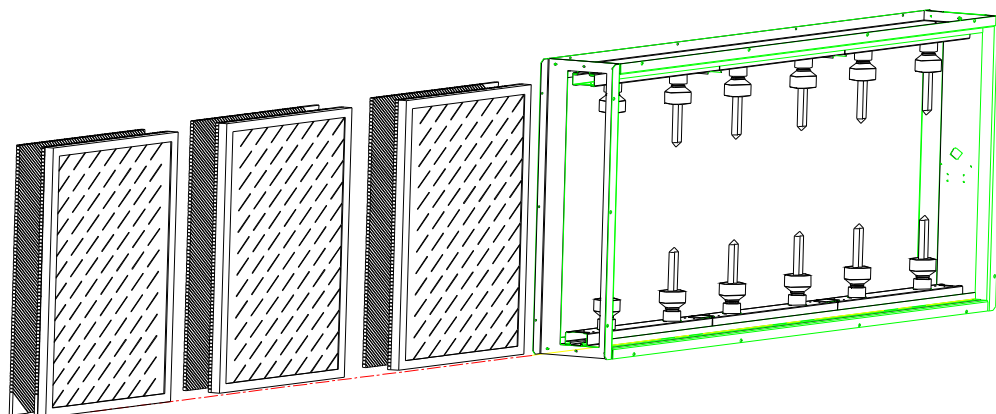
II. Disassemble the left or right access boards.



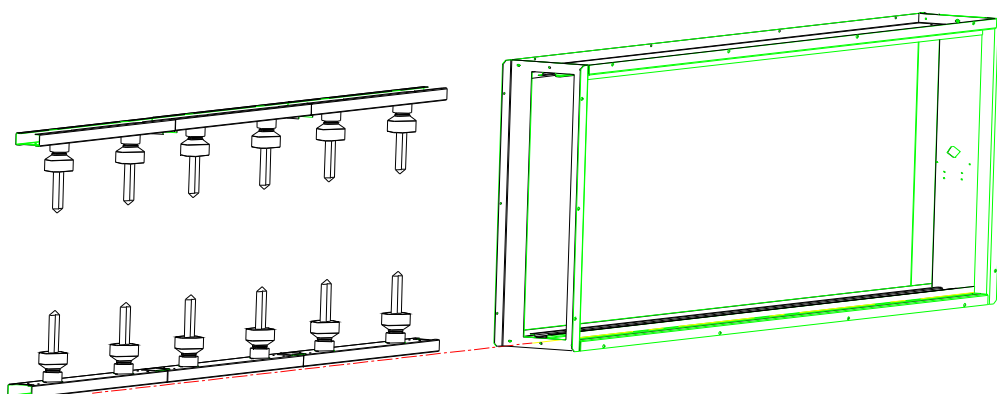
III. Take out the side bracket.



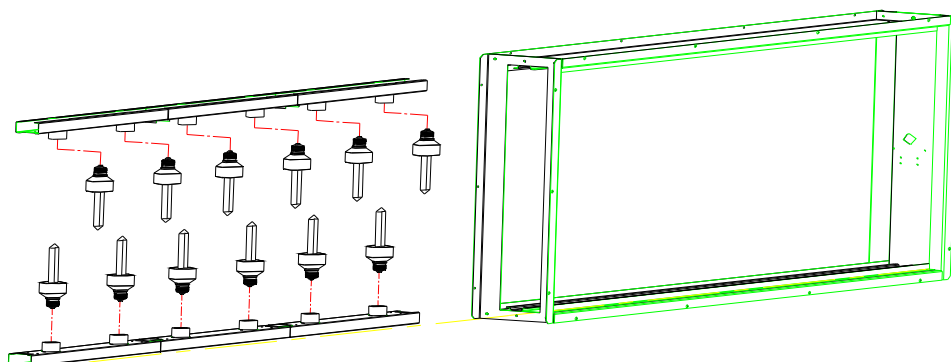
IV. Dismount nylon plate pre-filter and Aluminum filter.



V. Draw out TiO₂ lamp frame.



VI. Dismount and install sterilization lamps.



4-7 Others

If the air handling unit is installed or placed outdoor, you should take necessary measures to prevent the unit from being affected with damp, rusted and dusted. Drain out all collected water in coil in order to prevent coil from being frozen and damaged when unit stops running in winter.

V. Troubleshooting

1. Lower Air flow

When the actual external air pressure drop is bigger than the design pressure, the air flow will come down. Belt is loosened so rotating speed of fan reduces, which makes air flow become lower.

2. Higher Air Flow

When the actual external pressure is lower than the design pressure, which makes air flow become higher. The higher air flow is, the faster air speed is, and then the noisier the unit is.

3. Noise

Check return air and supply air duct to find whether they are connected with unit by flexible connection or not; Whether anti-vibration is installed ; Whether air speed in blowing air opening is too big or not; Whether the parts and components are loosened or not.

4. Broken Belt

Check belt tension to find whether it is too tight or not; whether pulleys are not aligned; whether the belt is worn out.



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