

Quick Selection Procedure

- Step 1 : Determine what is the design airflow (m³ / s) or total cooling capacity.
 Step 2 : Use the table below to determine the unit size by picking the closest airflow or total cooling capacity.
 Step 3 : The unit width and height are the same for all sections. Unit length in Table A is based on basic fan+coil+flat filter sections only.
 For other combinations, use Table B: Standard Section Length to determine the overall unit length.
 Step 4 : Determine the nominal unit details (unit weight, coil water pressure drop, water flow rate and motor installed power) using Table A.

Table A Quick Select

Model Size	Coil Face Area	Airflow At 2.55m/s Face Velocity	Total Cooling Capacity	External Static Pressure	Unit Dimension (Fan + Coil + Flat Filter)			Unit Weight	Cooling Coil Water Pressure	Water Flow Rate Drop	Motor Installed Power
					Width	Height	Length				
	m ²	m ³ / s	kW	Pa	mm	mm	mm	kg	kPa	L / s	kW
003	0.2	0.6	10.7	300	748	868	1273	196	2.0	0.5	1.1
004	0.4	1.0	21.0	300	1058	868	1273	244	5.8	0.9	2.2
006	0.6	1.5	24.8	300	1368	868	1273	329	4.3	1.1	3.0
008	0.7	1.9	36.9	300	1678	868	1273	370	10.2	1.6	3.0
010	0.9	2.3	39.7	300	1368	1178	1428	410	4.2	1.7	3.7
012	1.6	3.0	59.1	300	1678	1178	1428	485	9.9	2.6	3.7
014	1.4	3.6	76.3	300	1988	1178	1428	606	17.5	3.3	5.5
016	1.6	4.1	81.3	300	1678	1488	1428	667	9.5	3.5	5.5
020	1.9	5.0	106.2	300	1988	1488	1428	802	17.2	4.6	7.5
025	2.4	6.2	132.0	300	1988	1798	1583	938	20.9	5.7	7.5
030	2.9	7.4	156.3	300	1988	2108	1893	1067	19.2	6.8	11.0
035	3.4	8.7	191.7	300	2298	2108	1893	1199	30.6	8.3	11.0
040	4.0	10.1	228.5	300	2608	2108	2048	1448	45.8	9.9	15.0
045	4.5	11.5	265.6	300	2918	2108	2048	1545	65.1	11.5	15.0
050	5.0	12.9	302.8	300	3228	2108	2203	1776	88.6	13.1	18.5
060	5.9	15.2	358.3	300	3228	2418	2203	1931	78.1	15.5	22.0
065	6.6	16.8	353.9	300	3538	2418	2203	2200	23.0	15.3	30.0
070	7.2	18.4	396.0	300	3848	2418	2951	2318	29.5	17.2	30.0
080	7.8	20.0	438.7	300	4158	2418	2951	2468	37.0	19.0	30.0
085	8.4	21.6	481.6	300	4468	2418	2951	2654	45.4	20.9	30.0
090	9.1	23.2	524.5	300	4778	2418	2951	2767	55.0	22.7	30.0
095	9.7	23.2	543.7	300	5088	2418	2951	2868	60.5	23.6	30.0

Note:

- Cooling capacities are based on EDB 26.70C / EWB 19.40C and EWT 6.70C / LWT 12.20C.
- Unit dimension and weight includes forward curved fan section, 4row 120pfi coil (1/2inch cu tube) section and flat filter section (with filter media).
- All dimensions and weights above are based on 50mm casing design.

Mechanical Specifications
Casing

- Casing shall be pentapost perimeter frame with a modular system based on standardized **double wall panels**.
- Casing strength shall be designed and certified to **European Standard EN 1886: 1998, Casing Strength Class 2A**.
- Casing air leakage rate shall be certified to **Eurovent Casing Air Leakage Class B**.
- Panel shall be attached to the frame through a **self-locking mechanism represented by a wedge and frame, exerting pressure evenly onto the panel and the seal attached to the frame**, and hence a better air tight cabinet construction.
- Removal of any of the panels** for any maintenance or repair works, must **not affect the structural integrity** of the unit.
- The casing construction shall incorporate **thermal break feature** in the panel design with **T2 Thermal transmittance and TB2 Thermal bridging factor certified to EN1886: 1998**
- The whole unit shall be mounted on a **galvanized steel base rail** for ease of shipping and handling.

Panel

- Panels shall be **25/50mm thick with injected polyurethane foam insulation** for a rigid construction.
- The panel insulation material shall have a heat transfer "**K**" value of **0.02w/mK**.
- The outer wall shall be galvanized steel **painted with baked polyester powder paint** that is resistant to nicks and scratch and allow for easy cleaning. The inner wall shall be galvanized steel.
- The door construction shall consist of a **door panel that compresses with gasket onto a rigid fram**
- Opening or closing** of the door shall **not affect the structural integrity** of the unit.

Fan Section

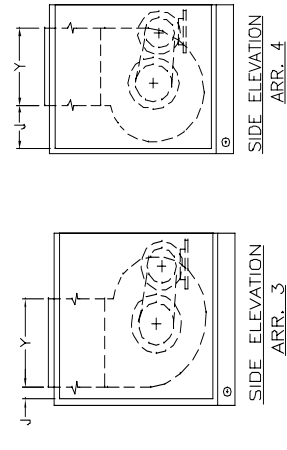
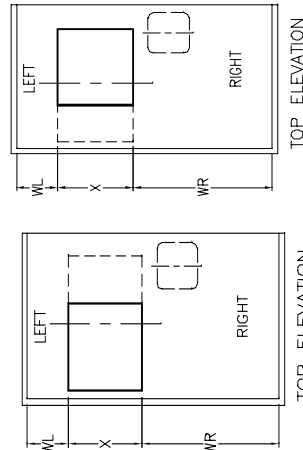
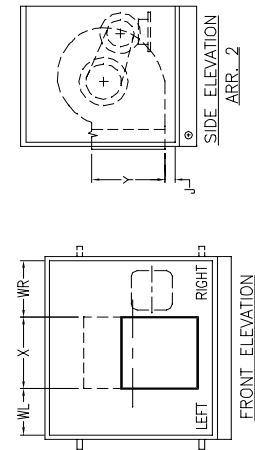
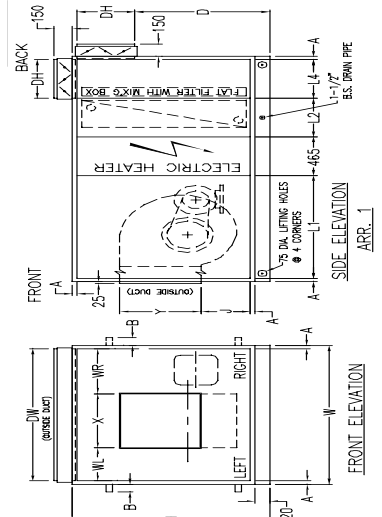
- Supply fan shall be **certified as per AMCA 210 and AMCA 300 Standards**.
- All fans impellers are **statically and dynamically balanced to ISO 1940**.
- The **entire fan/motor/drives assembly** shall be mounted on a **common framework and isolated from the unit by rubber-in-shear or spring isolators**. The fan discharge shall be **isolated from the casing by a vibration absorbing or flexible duct**.
- Fan shall be equipped with bearings with an **L-50 life of 200,000 hours**.
- Motors shall be **totally enclosed fan-cooled (TEFC) with IP55 protection with class F insulation** 40 degree C.

Coil Section

- Coils performance/selection shall be **rated in accordance with ARI Standard 410**, and certified to EN 1886: 1998
- Cooling coils shall be **cartridge type mounted on steel channel** for easy removal when required.
- Coil casing shall be **galvanized steel** with drain holes in the bottom channels to ensure condensate drainage.
- Coil tubes shall be copper and **mechanically expanded** into aluminum plate fins. No soldering or tinning shall be used in the bonding process.
- The fins shall be **sine-wave design with slits** for better heat transfer efficiency and moisture carry-over limit performance.
- All coils are proof and leak tested at 375 psig.
- Dual pitched sloping drain pan** shall be installed under the coil to ensure total removal of condensate.
- In case of stacked coils, an **intermediate drain pan** shall be installed between the coils to drain condensate to the main drain pan without flooding the lower coil and passing condensate through the air of the lower coil.

Drawing No: 6110-0007R11

Table B

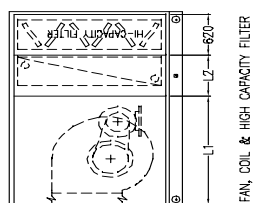
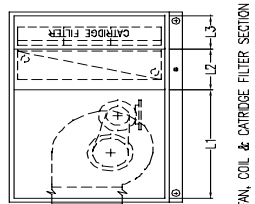
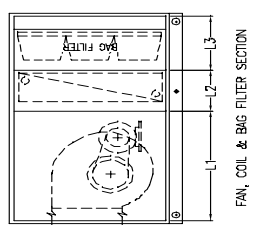
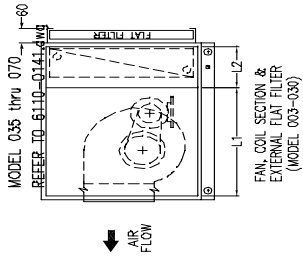


FOR BACK LOADING / SIDE SLIDING

FILTER SECTION	LENGTH L3
BAG FILTER 15" DEPTH	620mm
BAG FILTER 21" DEPTH	775mm
CARTRIDGE 4" DEPTH	310mm
CARTRIDGE 12" DEPTH	620mm

CASING	LENGTH A	LENGTH	
		003-025	030-095
25mm PANEL	39mm	L2	L2
50mm PANEL	64mm	310mm	310mm
25mm PANEL	100mm	465mm	465mm
50mm PANEL	75mm	620mm	620mm

COIL SECTION	LENGTH
1 & 2 ROW	310mm
4 ROW	465mm
6 ROW	465mm
8, 10 & 12 ROW	620mm



MODEL	FAN	MOTOR KW	FAN ARR						FAN SECTION						MOTOR ACCESS						FLAT FILTER W/MIX SECT.			25mm CASING			50mm CASING			DAMPER		
			ARR1	ARR2	ARR3	ARR4	ARR1.2	ARR3.4	L1	WL	WR	WL	WR	WL	WR	LH	X	Y	L4	H	W	D	H	W	D	DW	DH					
003(0404)	F/BDB 200	0.18 - 3	221	115	100	185	775	775	775	775	775	775	170	170	170	170	274	274	310	818	698	469	888	748	494	620	310					
004(0604)	F/BDB 225	0.37 - 3	236	115	99	217	775	775	775	775	775	155	468	155	307	307	310	310	818	1008	469	888	1058	494	930	310						
006(0804)	F/BDB 250	0.55 - 7.5	246	116	97	227	775	930	930	930	930	199	702	199	340	340	340	310	818	1318	469	888	1368	494	1240	310						
008(1004)	F/BDB 280	0.75 - 7.5	194	46	98	247	775	930	930	930	336	837	336	378	378	378	310	818	1628	469	888	1678	494	1550	310							
010(0806)	F/BDB 315	1.1 - 7.5	283	115	96	264	1085	1085	1085	1085	1085	161	657	161	422	422	422	310	1128	1318	779	1178	1368	804	1240	310						
012(1006)	F/BDB 400	1.1 - 7.5	337	116	97	318	1085	1085	1085	1085	1085	209	817	209	524	524	524	310	1128	1628	779	1178	1678	804	1550	310						
014(1206)	F/BDB 400	1.5 - 7.5	337	116	97	318	1085	1085	1085	1085	1085	349	987	349	524	524	524	310	1128	1938	779	1178	1988	804	1860	310						
016(1008)	F/BDB 450	1.5 - 7.5	365	117	99	345	1395	1395	1395	1395	1395	227	738	227	586	586	586	310	1438	1628	1089	1488	1678	1114	1550	310						
020(1208)	F/BDB 500	2.2 - 7.5	387	117	100	368	1085	1085	1085	1085	1085	266	938	266	656	656	656	310	1438	1938	1089	1488	1988	1114	1860	310						
025(1210)	F/BDB 560	2.2 - 7.5	446	145	100	401	1085	1085	1085	1085	1085	276	851	276	732	732	732	465	1748	1938	1244	1798	1988	1269	1860	310						
030(1212)	F/BDB 560	2.2 - 7.5	446	145	100	401	1395	1395	1395	1395	1395	276	851	276	732	732	732	465	2058	1938	1554	2108	1988	1579	1860	465						
035(1412)	F/BDB 630	4 - 22	540	196	100	443	1240	1240	1240	1240	1240	294	1058	294	818	818	818	465	2058	2248	1554	2108	2298	1579	2170	465						
040(1612)	F/BDB 710	4 - 22	589	198	100	489	1550	1550	1550	1550	1550	406	1158	406	916	916	916	620	2058	2558	1399	2108	2608	1424	2480	620						
045(1812)	F/BDB 710	4 - 22	589	198	100	489	1550	1550	1550	1550	1550	561	1313	561	916	916	916	620	2058	2868	1399	2108	2918	1424	2790	620						
050(2012)	F/BDB 800	5.5 - 22	648	201	100	547	1705	1705	1705	1705	1705	602	1474	602	1024	1024	1024	620	2058	3178	1399	2108	3228	1424	2790	620						
060(2014)	F/BDB 800	7.5 - 22	648	201	100	547	1705	1705	1705	1705	1705	602	1474	602	1024	1024	1024	775	-	-	-	2418	3228	1579	2790	775						
065(2214)	F/BDB 900	7.5 - 22	702	198	100	604	1860	1860	1860	1860	1860	671	1591	671	1148	1148	1148	775	-	-	-	2418	3538	1579	2790	775						
070(2414)	F/BDB 900	7.5 - 22	702	198	100	604	1860	1860	1860	1860	1860	826	1746	826	1148	1148	1148	930	-	-	-	2418	3848	1424	2790	930						
080(2614)	F/BDB 1000	7.5 - 7.5	732	207	102	627	1860	1860	1860	1860	1860	831	1914	831	1284	1284	1284	930	-	-	-	2418	4158	1424	2790	930						
085(2814)	F/BDB 1000	7.5 - 7.5	732	207	102	627	1860	1860	1860	1860	1860	986	2069	986	1284	1284	1284	1085	-	-	-	2418	4468	1269	2790	1085						
090(3014)	F/BDB 1000	11 - 7.5	732	207	102	627	1860	1860	1860	1860	1860	1141	2224	1141	1284	1284	1284	1085	-	-	-	2418	4778	1269	2790	1085						
095(3214)	F/BDB 1000	11 - 7.5	732	207	102	627	1860	1860	1860	1860	1860	1296	2379	1296	1284	1284	1284	1085	-	-	-	2418	5088	1269	2790	1085						