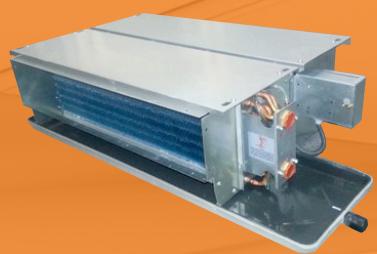


Sabro

Fan Coil Unit



FCU Series
Catalogue

CONTENTS

	PAGE#
• Introduction	01
• Features	02
• Classification	03-04
• Components	05-06
• Physical data	07
• Air flow 300H	08
• Performance 300H	09
• Air flow 400H	10
• Performance 400H	11
• Air flow 600H	12
• Performance 600H	13
• Air flow 800H	14
• Performance 800H	15
• Air flow 1000H	16
• Performance 1000H	17
• Air flow 1200H	18
• Performance 1200H	19
• Air flow 1600H	20
• Performance 1600H	21
• Notes	22

Also Available with Environmental Friendly
Refrigerant-(R-407C/410A) based chilled water systems

Sabro made fan coil units provide cooling/heating air for all commercial/industrial air-conditioning applications.

Sabro FCU Series models are suitable to maintain stable cooling. These units are designed to provide optimum cooling/heating efficiency at tropical conditions.

Fan coil are used for installation in any commercial building, industrial application, hotel, motel, office, hospital and restaurant as well for large residences to provide required temperature and air flow for each individual room.

Fan-coil units provide heating, cooling, or both to individual spaces. They may be mounted in free standing cabinets, inside walls, in ceiling plenums, or in other locations. Fan-coil units usually discharge air directly from their enclosures, although some may be installed with short ducts. It ranges from capacities i.e. 300CFM to 2400CFM (Models with 2000 CFM, 2400CFM and above are available at clientele demand). These units are available in multiple categories. These units are constructed rugged and strong, yet are light and compact for installation on ceiling or on floor. It is desirable to operate on a centralized production of chilled water. The units are connected with chiller and hot water generator combined with each air conditioned space (air or water regulation of each fan coil unit).

These units provide advantage of setting different temperatures for each room. It also results in energy saving by switching off the units of an empty room.

- **Quiet & Smooth Operation**

Sabro fan coil units have an edge on other brands with their lower noise level. The design of whole blower assembly and smooth running of moving parts, resulting in quiet operation. It is therefore highly recommended and rightly suggested for comfortable environment.

- **Accurate Performance**

The centrifugal fan quietly blows air in the unit where it passes through the perfectly designed coil. The coil cools and dehumidifies or heats the air, before entering the room, thus provides an accurate dependable temperature for the space.

- **Compact & Space Saver**

Sabro fan coil units are designed simple and compact, in order to suit the limited spaces available at site. The concealed units can be installed without ducts or very short ducts and the exposed units require no ducting. The only need is to connect the small water piping and electric supply. They are real space saver.

- **Durability**

Rugged manufacturing of sabro fan coil units and application of corrosion resistant bake paint give beautiful outlook and long life of the units.

- **Controlled Air Conditioning**

Sabro fan coil units provide advantage of setting the different temperatures for each room, as per individual requirements. It also results in energy saving by switching off the unit of an empty room as per given requirements.

- **Flexibility**

Sabro fan coil units are manufactured in six different types and may be installed with the ceiling, along with the wall, under the window or in a cabinet.

- **Ideal For All Application**

Sabro fan coil units are perfectly suited for installation in any commercial building for industrial application, hotel, motel, office, hospital and restaurant as well as for large residences to provide required temperature and air flow for each individual room. It provides the perfect solution to match your needs.

- **Fan Coil Units (300 to 2000 Cfm)**

Sabro's **FCUs** are used for installation in any commercial building, industrial application, hotels, motels, offices, marquees, hospitals and restaurants as well in large residences to provide required temperature and air flow for each individual room.

- **Horizontal Ceiling Concealed Fan Coil Unit
H MODEL (300 TO 1600 CFM)**

This model is designed specifically to meet the various demands of horizontal, ceiling concealed units that are commonly installed at a place where unit is not desired to be seen and floor space is valuable.



- **Horizontal Ceiling Exposed
HC MODEL (300 TO 1800CFM)**

This model contains all the features of H type model unit along with a modern decorative cabinet. This model is suitable for old buildings, reducing the requirement of duct work and avoiding the need for modification of walls and ceilings. This model has built in stamped return and air supply grill with adjustable louvers.



- **Vertical Floor Mounted Concealed
V MODEL (300 TO 1600CFM)**

This model is designed for all concealed applications. These units are generally placed along side the wall with a decoratively arranged front panel at site to conceal the unit.



- **Vertical Floor Mounted Exposed
VC MODEL (300 TO 800CFM)**

This model is designed for exposed application. This model has a decorative cabinet and ideal for smooth installation on the floor along the wall or under the window. this model have built in supply air grill with adjustable louvers, free return and removable front panels providing complete access to piping and electrical connections.



Classification

- **Wall Mounted**

PW MODEL (400 TO 800 CFM)

This model is designed for exposed applications. It primarily constitutes plastic casing. These special wall mounted series models are energy efficient and reliable.



- **High Rise Floor Mounted Concealed**

HR MODEL (300 TO 1600 CFM)

This model is designed for concealed application for building with low ceiling and lesser floor space. These units are generally placed within the cupboard. Only water installation discharge and return grill are visible.



- **High Rise Floor Mounted Exposed**

HRC MODEL (300 TO 800 CFM)

This model is designed for exposed application for all buildings with low ceiling and lesser floor space. The unit has a decorative cabinet with double deflection discharge and stamped return grill.



MODEL	AIR FLOW RATE CFM	WATER FLOW RATE GPM	CAPACITY (COOLING (BTU/Hr/(Kcal/Hr)
FCU300	300	1.8	9000
FCU400	400	2.4	12000
FCU600	600	3.6	18000
FCU800	800	4.8	24000
FCU1000	1000	6.0	30000
FCU1200	1200	7.2	36000
FCU1600	1600	9.6	48000
FCU2000	2000	12	60000

FCU 2000, FCU 2400 & Above Models are available on special request

Due to continuous improvement, our product specs may change

Thermostat	Easy to operate, wall mounted & unit mounted as per requirement
Motorized valve	Factory fitted, 3-way motorized valve
Blowers	Perfectly balanced aluminum blower
Motors	3-speed i.e. low, medium and high
Coils	Fully automated, designed as per climate conditions
Drain pan	Double walled sandwiched drain pans
Filters	Easily accessible, washable air filters
Supply/Return Air Grill	Double deflection supply air grills and return stamped air grills

- **Thermostats**

Sabro's in-house electronic production facility uses integrated solid-state circuitry for accurate temperature control in its thermostats.

Thermostats are easy to operate with bright indication lights. These thermostats are wall mounted or unit mounted type, as per design requirement.



- **Motorized Valve**

Sabro fan coil units are supplied with factory fitted 3-way motorized valve, to control the room temperature in connection with setting of room temperature.



- **Blowers**

Sabro fan coil units are equipped with high quality aluminum blowers for quiet operation. Each blower is individually tested under supervision of quality control inspectors for perfect balancing.



- **Motors**

To maintain the international standards of quality in the motors, sabro relies on no one but itself for our specific designing and manufacturing. These three speed motors are life lubricated and totally selected for durability.



Components

Sabro

- **Coils**

Sabro is one of the few facilities in south Asia who possess the technology of fully automated coil manufacturing equipment. These coils are designed according to our climate conditions for longer life and energy conservation.



- **Drain Pan**

Sabro fan coil units are equipped with closed cell polyurethane insulated drain pans with the rexene covering. The 'H' models are provided with double walled sandwiched drain pans.



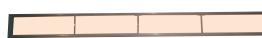
- **Filters**

All exposed models are supplied with washable /cleanable air filters. These filters are easily accessible and even easier to service.



- **Supply / Return Air Grills**

All exposed models are supplied with the double deflection supply air grills & stamped return air grills.



- **Electric Heaters (Optional)**

Electric heaters may be provided as optional (except VC models) for heating in winter .these heaters are provided with auto reset type thermal cut outs.



Models items	300H	400H	600H	800H	1000H	1200H	1600H	2000H	
Total cooling capacity(Btu/hr)	9000	12000	18000	24000	30000	36000	48000	60000	
Sensible cooling capacity(Btu/hr)	7000	9000	13600	18300	22300	25800	36200	49300	
Air flow rate(CFM)	300	400	600	800	1000	1200	1600	2000	
Water flow rate(GPM)	1.8	2.4	3.6	4.8	6.0	7.2	9.6	12	
Water pressure(ft)	2.8	6.5	13.5	4.6	5.0	5.3	6.0	7.3	
Max. External static pressure	0.15 inch wg								
Power supply	200/220-1-50 hz								
coil	Type	Copper tubes mechanically expanded to aluminum foil fins							
	Inlet/outlet connection(size)	5/8" OD, copper tube						7/8" OD, copper tube	
	Drain pan	Double wall construction(sandwiched polyurethane insulation)							
	Drain connection(size)	¾" OD							
fans	Type	Forward curved centrifugal							
	Material	Aluminum							
	Qty	1	1	2	2	4	4	4	4
	Wheel Dia	6-1/2" OD(double inlet)							
	Fan rpm	920	1030	860	875	800	875	800	875
motor	Type	Totally enclosed, split capacitor type, 3-speed							
	Qty	1(single shaft)			1(double shaft)		2(double shaft)		
	Rating(watts)	100	105	125	135	2x130	2x135	2x200	2x250
Temp. control	Electronic room thermostat with selector switches								
Control valve	3-way motorized bypass valve								
Electric heater(optional)	Electric heater(Optional)								
Return air plenum with filter	Provided as optional								
Outer finish.	Polyester powder paint								
Weight(kg)	23	26	35	40	70	80	90	102	

Note

The cooling capacity(At High Fan Speed) is based on ARI standard 210/240

*FCU 2000H is available on special request

AIR FLOW 300H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE.(inches WG)						
	0.00	0.05	0.1	0.15	0.20	0.25	0.30
HIGH	410	390	370	345	290	290	290
MEDIUM	320	305	295	275	230	230	200
LOW	250	235	225	210	195	175	150

unit with return air plenum and 1" cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	380	360	340	320	295	280	230
MEDIUM	295	280	270	255	225	215	195
LOW	230	220	205	195	185	170	145

Note:

1. Air flow under dry coil conditions

2.wet coil cfm is 92 percent of dry coil cfm

3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr

At nominal cfm×capacity correction factor

	APPLICATION CFM							
	150	175	200	225	250	330	350	400
TH	.62	.69	.76	.82	.89	1.0	1.11	1.09
SH	.57	.65	.73	.80	.87	1.0	1.12	1.20

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY (HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	54	53	51	48	43	38	32	20
MEDIUM	49	47	45	41	38	32	25	-
LOW	43	42	40	35	30	26	20	-

Motor data (220 V-1-50Hz)

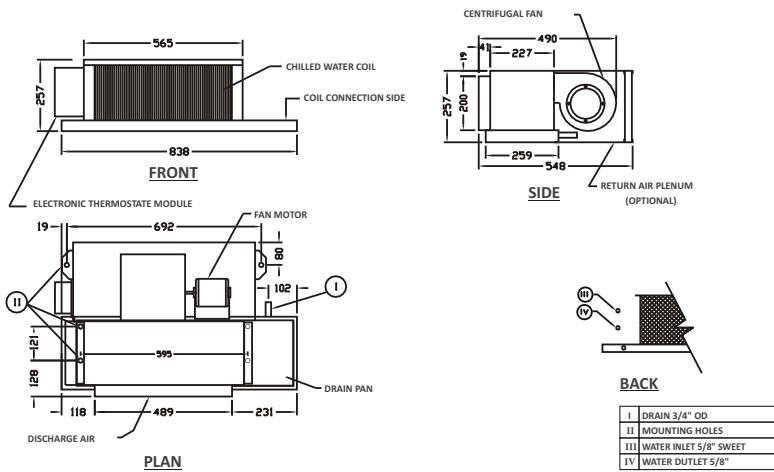
SPEED	AMP	WATTS	RPM
HIGH	.54	100	920
MEDIUM	.86	75	700
LOW	.33	70	590

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)

300H



PERFORMANCE 300H

ENTERING AIR TEMP °FDB(WB)	ENTERING WATER TEMPERATURE(°F)												
	40				45				50				
	W.T.R	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8.0	8.3	6.5	2.1	3.6	6.6	5.7	1.7	2.3	4.9	4.9	1.2	1.4
	10.0	7.5	6.2	1.5	2.0	5.8	5.4	1.2	1.6	4.6	4.6	0.9	1.0
	12.0	6.7	5.9	1.1	1.2	5.1	5.1	0.8	0.8	4.3	4.3	0.7	0.8
	14.0	5.9	5.8	0.8	0.9	4.8	4.8	0.7	0.8	4.0	4.0	0.6	0.7
74(61)	8.0	8.3	6.9	2.1	3.6	6.6	6.1	1.7	2.3	5.3	5.3	1.3	1.8
	10.0	7.5	6.6	1.5	2.0	5.8	5.8	1.2	1.6	5.0	5.0	1.0	1.0
	12.0	6.7	6.3	1.1	1.5	5.5	5.5	0.9	1.0	4.7	4.7	0.8	0.8
	14.0	5.9	5.9	0.8	0.9	5.2	5.2	0.7	0.8	4.4	4.4	0.6	0.7
74(63)	8.0	9.7	6.9	2.4	3.9	7.8	6.1	2.0	3.2	5.7	5.7	1.4	1.9
	10.0	8.9	6.6	1.8	3.1	6.8	5.8	1.4	1.9	5.0	5.0	1.0	1.0
	12.0	8.1	8.3	1.4	1.9	5.9	5.5	1.0	1.0	4.7	4.7	0.8	0.8
	14.0	7.3	6.0	1.0	1.1	5.6	5.2	0.8	0.9	4.0	4.0	0.6	0.7
76(63)	8.0	9.7	7.3	2.4	3.9	7.8	6.5	2.0	3.2	5.7	5.7	1.4	1.9
	10.0	8.9	7.0	1.8	3.1	6.8	6.2	1.4	1.9	5.4	5.4	1.1	1.1
	12.0	8.1	6.7	1.4	1.9	5.9	5.9	1.0	1.0	5.1	5.1	0.9	0.9
	14.0	7.3	6.4	1.0	1.1	5.6	5.6	0.8	0.9	4.8	4.8	0.7	0.7
76(65)	8.0	9.7	7.3	2.8	5.6	9.0	6.5	2.3	3.7	6.9	5.7	1.7	2.8
	10.0	8.9	7.0	2.1	3.3	8.1	6.2	1.6	2.2	5.9	5.4	1.2	1.7
	12.0	8.1	6.7	1.6	1.6	7.2	5.9	1.2	1.2	5.1	5.1	0.9	0.9
	14.0	7.3	6.4	1.2	1.2	6.3	5.6	0.9	0.9	4.8	4.8	0.7	0.7
78(65)	8.0	9.7	7.7	2.8	5.6	9.0	6.9	2.3	3.7	6.9	6.1	1.7	2.8
	10.0	8.9	7.4	2.1	3.3	8.1	6.6	1.6	2.2	5.9	5.8	1.2	1.7
	12.0	8.1	7.1	1.6	1.6	7.2	6.3	1.2	1.2	5.5	5.5	0.9	0.9
	14.0	7.3	6.8	1.2	1.2	6.3	6.0	0.9	0.9	5.2	5.2	0.7	0.8
80(67)	8.0	11.1	8.1	3.1	7.7	10.2	7.3	2.6	4.0	7.9	6.5	2.0	3.4
	10.0	10.3	7.8	2.3	3.8	9.4	7.4	1.9	3.2	7.1	6.6	1.4	1.9
	12.0	9.6	7.9	1.8	2.7	8.6	7.1	1.6	2.0	6.3	6.3	1.1	1.1
	14.0	8.7	7.6	1.4	1.9	7.8	6.8	1.1	1.2	6.0	6.0	0.9	0.9
82(67)	8.0	12.5	8.5	3.5	8.5	11.4	7.7	2.9	6.9	8.9	6.9	2.2	3.7
	10.0	11.7	8.2	2.6	4.2	10.7	7.4	2.1	3.7	8.3	6.6	1.7	2.6
	12.0	10.9	7.9	2.1	3.6	10.0	7.1	1.7	2.6	7.7	8.3	1.3	1.6
	14.0	10.1	7.6	1.6	2.6	9.3	6.8	1.3	1.8	7.1	6.0	1.0	1.1
82(69)	8.0	12.5	8.9	3.5	8.5	11.4	8.1	2.9	6.9	8.9	7.3	2.2	3.7
	10.0	11.7	8.6	2.6	4.2	10.7	7.8	2.1	3.7	8.3	7.0	1.6	2.8
	12.0	10.9	8.3	2.1	3.6	10.0	7.5	1.7	2.6	7.7	6.7	1.3	1.6
	14.0	10.1	8.0	1.6	2.6	9.3	7.2	1.3	1.8	7.1	6.4	1.0	1.1

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)											
	0.5	1	1.5	2	3	4						
17.5	20	22	23.5	25	26							

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)											
	100	110	120	130	140	150	160	170	180	190	200	
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41	
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.38	
65	0.35	0.46	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31	
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26	
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22	
80	0.23	0.34	0.45	0.58	0.63	0.71	0.79	0.88	0.98	1.08	1.18	

Hot Water Pressure Drop

FT. OF WATER	WATER FLOW RATE(U.S GPM)											
	0.5	1	1.5	2	3	4						
0.7	1	2	3.5	7	9							

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

Air Flow Data



AIR FLOW 400H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE.(inches WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	460	440	415	395	365	335	295
MEDIUM	375	355	330	313	290	285	235
LOW	295	280	265	250	235	215	190

unit with return air plenum and 1" cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE (INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	425	405	385	380	340	310	270
MEDIUM	345	325	300	285	275	240	215
LOW	280	285	255	230	210	195	180

Note:

1. Air flow under dry coil conditions 2.wet coil cfm is 92 percent of dry coil cfm
 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr = base Btu/hr

At nominal cfm x capacity correction factor

	APPLICATION CFM								
	150	175	200	250	300	350	400	450	500
TH	.51	.37	.82	.72	.82	.92	1.0	1.08	1.16
SH	.45	.50	.57	.69	.80	.90	1.0	1.08	1.18

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY (HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	54	55	54	50	45	40	35	26
MEDIUM	50	49	47	44	40	35	30	-
LOW	48	46	45	41	38	32	25	-

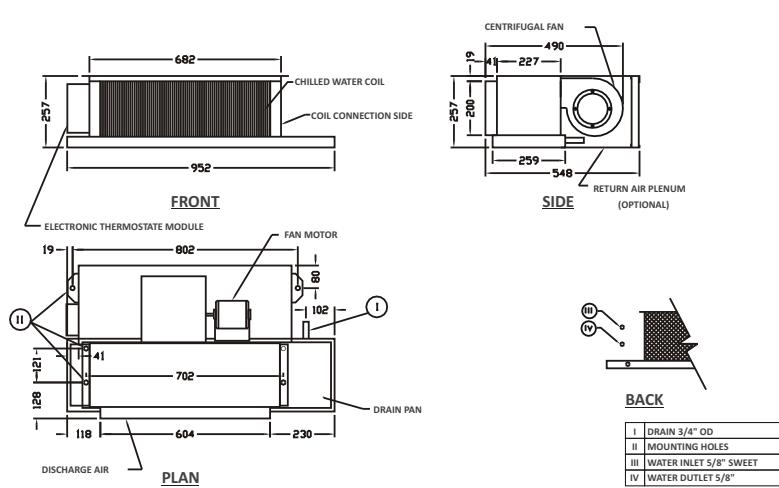
Motor data (220 V-1-50Hz)

SPEED	AMP	WATTS	RPM
HIGH	.56	105	1030
MEDIUM	.38	80	840
LOW	.33	70	720

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)



PERFORMANCE 400H

ENTERING AIR TEMP °FDB(WB)	W.T.R	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	11.0	8.1	2.8	7.5	8.0	7.0	2.0	4.3	5.9	5.9	1.5	2.4
	10	10.1	7.8	2.0	4.3	7.2	6.6	1.4	2.4	5.4	5.4	1.1	1.4
	12	9.2	7.5	1.5	2.4	6.2	6.2	1.1	1.1	4.9	4.9	1.8	1.3
	14	8.3	7.2	1.2	1.8	5.8	5.6	0.8	0.9	4.4	4.4	0.6	0.8
74(61)	8	11.0	9.0	2.8	7.5	8.0	7.8	2.0	4.3	6.2	6.2	1.6	2.5
	10	10.1	8.6	2.0	4.3	7.2	7.2	1.4	2.4	5.8	5.8	1.2	1.7
	12	9.2	8.2	1.5	2.4	6.7	6.8	1.1	1.1	5.4	5.4	0.9	1.0
	14	8.3	7.8	1.2	1.8	6.3	8.3	0.8	0.9	4.8	4.8	0.6	0.7
74(63)	8	12.9	9.9	3.3	9.6	9.8	8.2	2.5	5.4	8.7	6.5	1.7	2.6
	10	12.0	8.6	2.4	5.2	8.9	7.2	1.8	3.5	5.8	5.8	1.2	1.7
	12	11.0	8.2	1.9	3.5	8.0	6.8	1.3	2.1	5.4	5.4	0.9	1.0
	14	10.2	7.8	1.5	2.3	7.1	6.3	1.0	1.4	4.8	4.8	0.7	0.7
76(63)	8	12.9	9.9	3.3	9.6	9.8	8.2	2.5	5.4	6.7	6.5	1.7	2.6
	10	12.0	9.4	2.4	5.2	8.9	7.8	1.8	3.3	8.2	8.2	1.2	1.9
	12	11.0	8.9	1.9	3.5	8.0	7.4	1.3	2.1	5.9	5.9	1.0	1.3
	14	10.2	8.4	1.5	2.3	7.1	7.0	1.0	1.4	5.6	5.6	0.8	0.8
76(65)	8	14.8	9.9	3.7	11.1	11.8	8.2	2.9	7.8	8.4	8.5	2.1	4.8
	10	13.9	9.4	2.8	7.6	10.8	7.6	2.2	4.5	7.7	8.2	1.5	2.5
	12	13.0	8.9	2.2	4.5	9.8	7.4	1.6	2.6	7.0	5.9	1.2	1.6
	14	12.1	8.4	1.7	2.6	8.8	7.0	1.3	2.0	8.3	5.6	0.9	1.2
78(65)	8	14.8	10.8	3.7	11.1	11.8	8.8	2.9	7.8	8.4	8.8	2.1	4.8
	10	13.9	10.2	2.8	7.8	10.8	8.4	2.2	4.5	7.7	8.8	1.3	2.5
	12	13.0	9.6	2.2	4.5	9.8	8.0	1.8	2.8	7.0	8.4	1.2	1.8
	14	12.1	9.0	1.7	2.8	8.8	7.6	1.3	2.0	8.3	8.2	0.9	1.2
80(67)	8	16.7	11.7	4.2	14.6	13.4	9.4	3.4	9.6	10.1	7.1	2.5	5.8
	10	15.8	11.0	3.2	9.5	12.0	9.0	2.5	5.5	9.2	7.0	1.8	3.7
	12	14.9	10.3	2.5	5.4	11.8	8.6	193.0	4.1	8.2	8.9	1.4	2.3
	14	13.1	9.6	1.9	3.8	10.6	8.2	1.5	2.3	8.0	8.8	1.1	1.5
82(67)	8	16.7	12.8	4.0	14.6	13.4	10.0	3.4	9.6	10.1	7.4	2.5	5.6
	10	15.8	11.8	3.0	9.5	12.5	9.6	2.5	5.5	9.2	7.4	1.8	3.7
	12	14.9	11.0	28.0	5.4	11.8	9.2	1.9	4.1	8.3	7.4	1.4	2.3
	14	13.1	10.2	1.9	3.8	10.6	8.8	1.5	2.3	8.0	7.4	1.1	1.5
82(69)	8	18.6	12.6	4.7	24.0	15.2	10.0	3.8	13.0	11.8	7.4	3.0	7.9
	10	17.7	11.8	3.5	10.5	14.2	9.6	2.8	8.4	10.7	7.4	2.1	4.7
	12	16.8	11.0	2.8	7.1	13.3	9.2	2.2	4.1	9.8	7.4	1.6	3.3
	14	15.9	10.2	2.3	5.0	12.4	8.8	1.8	3.5	8.9	7.4	1.3	2.0
84(69)	8	18.6	13.5	4.7	24.0	15.2	10.6	3.8	13.0	11.8	7.7	3.0	7.9
	10	17.7	12.6	3.5	10.5	14.2	10.2	2.8	8.4	10.7	7.8	2.1	4.7
	12	16.8	11.7	2.8	7.1	13.3	9.8	2.2	4.9	9.8	7.9	1.6	3.3
	14	15.9	10.8	2.3	5.0	12.4	9.4	1.8	3.5	8.9	8.0	1.3	2.0

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)											
	0.5	1.0	1.5	2.0	3.0	4.0						
20.0	26.0	28.2	29.5	31.5	32.5							

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.38
65	0.35	0.48	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.56	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

FT.OF WATER	WATER FLOW RATE(U.S GPM)										
	0.5	1	1.5	2	3	4					
0.8	1.4	2.4	4.2	8.7	3						

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

Air Flow Data

AIR FLOW 600H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE.(inches WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	700	670	635	610	580	545	500
MEDIUM	580	545	510	490	470	440	400
LOW	430	415	400	375	355	335	300

Unit with return air plenum and 1"cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	650	610	595	570	530	500	560
MEDIUM	515	500	475	450	430	495	380
LOW	410	395	380	380	340	315	185

Note:

- 1. Air flow under dry coil conditions
- 2.wet coil cfm is 92 percent of dry coil cfm
- 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr
At nominal cfm x capacity correction factor

	APPLICATION CFM									
	250	300	350	400	450	500	550	600	700	
TH	.55	.62	.69	.76	.82	.89	.95	1.0	1.11	
SH	.49	.57	.65	.73	.80	.87	.94	1.0	1.12	

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY(HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	55	52	50	48	45	41	33	20
MEDIUM	52	49	46	44	40	34	24	-
LOW	44	42	40	38	35	30	-	-

Motor data (220 V-1-50Hz)

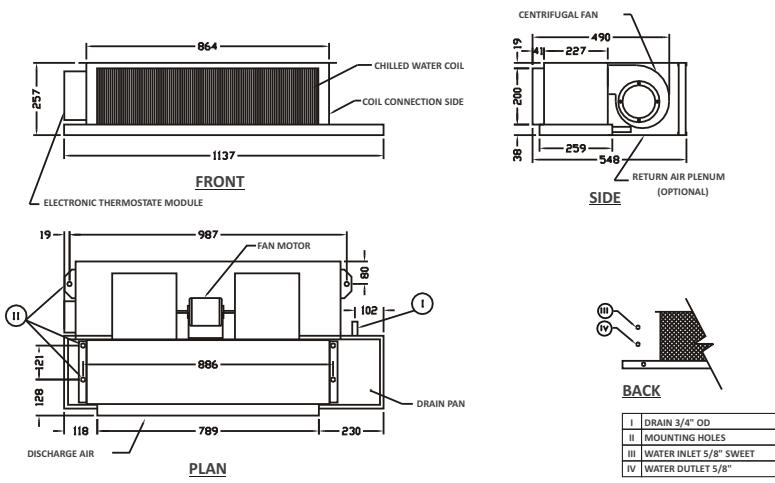
SPEED	AMP	WATTS	RPM
HIGH	0.62	125	860
MEDIUM	0.42	85	700
LOW	0.37	73	600

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)

600H



PERFORMANCE 600H

ENTERING AIR TEMP °FDB(WB)	W.T.R	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	15.3	12.5	3.82	16	10.8	10	2.7	9.3	9.1	9.1	2.27	6.5
	10	14.1	11.8	2.82	9.3	10	10.2	2	6.2	8.2	8.2	1.84	3.8
	12	12.9	11.1	2.15	8.3	3.2	9.2	1.53	4.1	7.3	7.3	1.21	2.8
	14	11.7	10.4	1.67	3.9	8.4	8.4	1.2	2.8	8.4	8.4	0.91	2.1
74(61)	8	15.3	13.5	3.82	18	11.7	11.7	2.92	9.5	9.9	9.9	2.47	9
	10	14.1	12.8	3.38	12.6	12.4	10.9	2.18	9	9	9	1.8	4.8
	12	15.8	12.1	2.6	8.1	10.7	10.1	1.68	4.7	8.1	8.1	1.35	3.2
	14	14.3	11.4	2.04	8	9.3	9.3	1.32	3.1	7.2	7.2	1.02	2
74(63)	8	18.2	14.5	4.65	19.5	14.1	12.8	3.52	13.7	10.73	10.7	2.67	9.2
	10	16.9	13.8	3.38	12.6	12.4	11.8	2.48	9	9.8	9.8	1.96	5.2
	12	15.8	13.1	2.6	8.1	11	11	1.76	4.7	8.9	8.9	1.48	4
	14	14.3	11.4	2.04	6	9.3	9.3	1.33	3.1	7.2	7.2	1.02	2
76(63)	8	18.2	14.5	4.55	19.5	14.1	12.8	3.52	13.7	10.7	10.7	2.87	9.2
	10	16.9	13.8	3.38	12.5	12.4	11.8	2.48	9	9.8	9.8	1.96	5.2
	12	15.8	13.1	2.6	8.1	11	11	1.83	4.7	8.9	8.9	1.48	4
	14	14.3	12.4	2.04	8	10.2	10.2	1.45	3.1	8	8	1.14	2.1
76(65)	8	21.1	14.5	5.27	23.8	16.9	12.6	4.22	15.8	12.7	10.7	3.17	11.1
	10	19.7	13.8	3.94	17	15.2	11.8	3.04	10.5	10.7	9.8	2.14	6.3
	12	18.3	13.1	3.05	10.5	13.5	11	2.25	6.4	8.9	8.9	1.48	4
	14	16.9	12.4	2.41	8.9	11.8	10.2	1.68	4	8	8	1.14	2
78(65)	8	21.1	15.5	5.27	23.8	16.9	13.5	4.22	18.8	12.7	11.6	3.17	11.1
	10	19.7	14.8	3.94	17	15.2	12.7	3.04	10.5	10.7	10.6	2.14	8.3
	12	18.3	14.1	3.05	10.5	13.5	11.9	2.25	6.4	8.7	9.6	1.6	4.2
	14	16.9	13.4	2.41	8.9	11.8	11.1	1.68	4	6.7	8.6	1.23	2.8
80(67)	8	24	16.5	6	32	19.7	14.4	4.92	21	15.4	12.3	3.85	16
	10	22.5	15.8	4.5	19.5	18	13.6	3.6	12.7	13.5	11.4	2.7	8.3
	12	21	15.1	3.5	12.6	18.3	12.8	2.71	8.3	11.6	10.5	1.93	6
	14	19.5	14.4	2.78	9	14.6	12	2.08	6.1	9.7	9.6	1.51	3.5
82(67)	8	24	17.5	6	32	19.7	15.2	4.92	21	15.4	13	3.85	16
	10	22.5	16.6	4.5	19.5	18	14.4	3.6	12.7	13.5	12.2	2.7	8.3
	12	21	15.9	3.5	12.6	18.3	13.6	2.71	8.3	11.6	11.4	1.93	6
	14	19.5	15.1	2.78	9	14.6	12.8	2.08	6.1	10.6	10.6	1.51	3.5
82(69)	8	26.9	17.5	8.72	37.5	22.5	15.2	5.62	28.5	18.1	13	4.52	19.3
	10	25.3	16.7	5.06	22.5	20.8	14.4	4.16	17.3	16.3	12.2	3.26	12
	12	23.7	15.9	3.95	16.3	19.1	13.6	3.18	11.5	14.5	11.4	2.41	7.2
	14	22.1	15.1	3.15	11	17.4	12.8	2.48	7.4	12.7	10.8	1.81	5
84(69)	8	26.9	18.5	6.72	37.5	22.5	16.1	5.62	28.5	18.1	13.7	4.52	19.3
	10	25.3	17.6	5.06	22.5	20.8	15.3	4.16	17.3	16.3	13	3.26	12
	12	23.7	16.7	3.95	16.3	19.1	14.5	3.18	11.5	14.5	12.7	2.41	7.2
	14	22.1	15.8	3.15	11	17.4	13.7	2.48	7.4	12.7	11.6	1.81	5

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)							
	1	1.3	2	3	4	5	6	7
31	38	38	40.8	42.5	43.5	44.5	45	45.6

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.36
65	0.35	0.48	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26
75	0.27	0.38	0.49	0.6	0.68	0.78	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.56	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

FT.OF WATER	WATER FLOW RATE(U.S GPM)							
	1	1.5	2	3	4	5	6	7
2	4.1	6.2	10.5	16.5	22.1	32	39	
8								

TH=Total heat(MBH) SH=sensible heat(MBH)

GPM(u.s)=Water flow rate PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise (1MBH=1000BTU/Hr)

* The data based on high speed

AIR FLOW 800H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE (INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	910	880	850	820	780	730	650
MEDIUM	730	705	680	655	625	585	520
LOW	555	535	520	500	475	445	385

unit with return air plenum and 1" cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE (INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	840	815	758	755	715	670	600
MEDIUM	680	655	625	605	570	550	480
LOW	525	510	500	475	450	430	370

Note:

- 1. Air flow under dry coil conditions
- 2. wet coil cfm is 92 percent of dry coil cfm
- 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr

At nominal cfm x capacity correction factor

	APPLICATION CFM								
	350	400	450	500	550	600	700	800	900
TH	.57	.62	.67	.72	.77	.82	.92	1.0	1.08
SH	.50	.57	.63	.69	.74	.80	.91	1.0	1.08

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY (HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	55	54	51	48	42	40	33	20
MEDIUM	52	50	48	45	40	35	30	-
LOW	47	46	41	38	32	24	-	-

Motor data (220 V-1-50Hz)

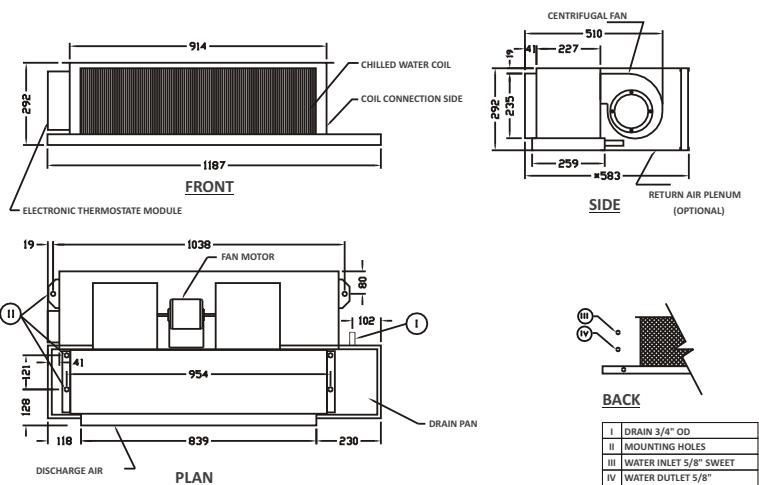
SPEED	AMP	WATTS	RPM
HIGH	.66	135	875
MEDIUM	.46	95	710
LOW	.40	80	650

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)

800H



PERFORMANCE 800H

ENTERING AIR TEMP °FDB(WB)	W.T.R	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	20.7	18.5	5.17	5	14.5	13.5	3.62	3	10.9	10.9	2.72	2
	10	18.2	15.3	3.64	3	13.1	13.1	2.62	1.9	10.3	10.3	2.06	1.1
	12	15.7	14.1	2.61	1.9	12.7	12.7	2.12	1.1	9.7	9.7	1.61	0.9
	14	13.2	12.9	1.88	1	12.3	12.3	1.75	1	9.1	9.1	1.3	0.7
74(61)	8	20.7	17.9	5.17	5	15.4	15	3.85	3.1	11.8	11.8	2.9	2
	10	18.2	16.7	3.64	3	14.4	14.4	2.88	2	11	11	2.2	1.2
	12	15.7	15.5	2.61	1.9	13.8	13.8	2.3	2.3	10.5	10.5	1.75	0.9
	14	13.2	14.3	1.88	1	13.2	13.2	1.88	1	10	10	1.42	0.8
74(63)	8	24.5	17.9	6.12	7.2	18.4	15	4.6	3.7	12.3	12.3	3	2
	10	22.1	16.7	4.42	3.5	16	14.4	3.2	2.2	11.8	11.8	2.36	1.3
	12	19.7	15.5	3.28	2.3	13.8	13.8	2.3	1.2	11.3	11.3	1.88	1
	14	17.3	14.3	2.47	1.2	13.2	13.2	1.88	1	10.8	10.8	1.54	0.8
76(63)	8	24.5	19.3	6.12	7.2	18.4	16.5	4.6	3.7	13.7	13.7	3.42	2.3
	10	22.1	18.1	4.42	3.5	16	15.7	3.2	2.2	13.3	13.3	2.66	1.4
	12	19.7	16.9	3.28	2.3	14.9	14.9	2.48	1.8	12.9	12.9	2.15	1.2
	14	17.3	15.7	2.47	1.3	14.1	14.1	2.01	1.1	12.5	12.5	1.78	0.9
76(65)	8	28.3	19.3	7.07	8.5	22.3	16.5	5.82	5.6	16.3	13.7	4.07	3.4
	10	26	18.1	5.2	5	20	15.7	4	3.4	13.3	13.3	2.68	1.4
	12	23.7	16.9	3.95	3.4	17.7	14.9	2.95	2	12.9	12.9	2.15	1
	14	21.4	15.7	3.05	2	15.4	14.1	2.2	1.2	12.5	12.5	1.78	0.9
78(65)	8	28.3	20.7	7.07	8.5	22.3	18	5.82	5.6	18.3	15.3	4.07	3.4
	10	26	19.5	5.2	5	20	17	4	3.4	14.5	14.5	2.9	2
	12	23.7	18.3	3.95	3.4	17.7	16	2.95	2	13.7	13.7	2.28	1.2
	14	21.4	17.1	3.05	2	15.4	15	2.2	1.2	12.9	12.9	1.84	1
80(67)	8	32.1	22.1	8.02	10	26.2	19.5	6.55	7.5	20.3	16.9	5.07	4.9
	10	29.9	40.9	5.98	7.9	24	18.3	4.8	5	18.1	15.7	3.62	3
	12	27.7	19.7	4.61	3.7	21.8	17	3.63	3	15.9	14.3	2.65	4.9
	14	25.5	18.5	3.64	3	19.6	15.7	2.8	2	13.7	12.9	1.95	1
82(67)	8	32.1	23.5	8.02	10	26.2	21	6.55	7.5	20.3	18.5	5.07	4.9
	10	29.9	22.3	5.98	7	24	19.8	4.8	5	18.1	18.9	3.62	3
	12	27.7	21.1	4.61	3.7	21.8	18.2	3.63	3	15.9	15.3	2.65	1.9
	14	25.5	19.9	3.64	3	19.6	16.8	2.8	2	13.7	13.7	1.95	1
82(69)	8	35.9	23.5	8.97	12.5	30.1	21	7.52	9	24.3	18.5	6.07	7.1
	10	33.8	22.3	6.76	6	28	19.6	5.6	5.5	22.2	16.9	4.44	3.6
	12	31.7	21.1	5.28	5.1	25.9	18.2	4.31	3.5	20.1	15.3	3.35	2.3
	14	29.6	19.9	4.28	3.5	23.8	16.8	3.4	2.5	18	13.7	2.57	1.9
84(69)	8	35.9	24.9	8.97	12.5	30.1	22.5	7.52	9	24.3	20.1	8.07	7.1
	10	33.8	23.7	6.76	8	28	20.9	5.6	5.5	22.2	18.1	4.44	3.6
	12	31.7	22.5	5.28	5.1	25.9	19.3	4.31	3.5	20.1	16.3	3.75	2.3
	14	29.6	21.3	4.23	3.5	23.8	17.7	3.4	2.5	18	14.5	2.57	1.9

Heating capacities(High speed)

WATER FLOW RATE(U.S GPM)

1.5	2	3	4	5	6	7	8						
42	44.8	49.8	52.1	54	55.4	56.4	57.2						

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.36
65	0.35	0.46	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.58	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

WATER FLOW RATE(U.S GPM)

1	1.5	2	3	4	5	6	7	8			
2	4.1	6.2	10.5	16.5	22.1	32	39				

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

AIR FLOW 1000H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	910	880	850	820	780	730	650
MEDIUM	730	705	680	655	625	585	520
LOW	555	535	520	500	475	445	385

unit with return air plenum and 1" cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	840	815	758	755	715	670	600
MEDIUM	680	655	625	605	570	550	480
LOW	525	510	500	475	450	430	370

Note:

- 1. Air flow under dry coil conditions
- 2. wet coil cfm is 92 percent of dry coil cfm
- 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr

At nominal cfm x capacity correction factor

	APPLICATION CFM								
	350	400	450	500	550	600	700	800	900
TH	.57	.62	.67	.72	.77	.82	.92	1.0	1.08
SH	.50	.57	.63	.69	.74	.80	.91	1.0	1.08

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY (HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	55	54	51	48	42	40	33	20
MEDIUM	52	50	48	45	40	35	30	-
LOW	47	46	41	38	32	24	-	-

Motor data (220 V-1-50Hz)

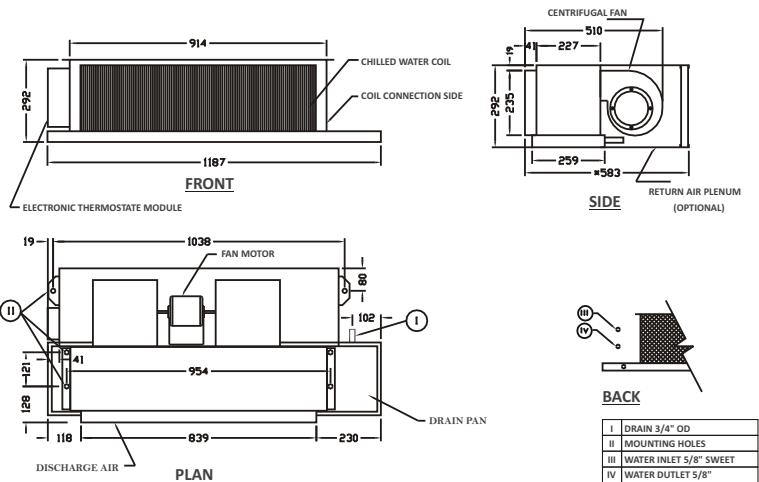
SPEED	AMP	WATTS	RPM
HIGH	.66	135	875
MEDIUM	.46	95	710
LOW	.40	80	650

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)

800H



PERFORMANCE 1000H

ENTERING AIR TEMP °FDB(WB)	WTR	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	20.7	18.5	5.17	5	14.5	13.5	3.62	3	10.9	10.9	2.72	2
	10	18.2	15.3	3.64	3	13.1	13.1	2.62	1.9	10.3	10.3	2.06	1.1
	12	15.7	14.1	2.61	1.9	12.7	12.7	2.12	1.1	9.7	9.7	1.61	0.9
	14	13.2	12.9	1.88	1	12.3	12.3	1.75	1	9.1	9.1	1.3	0.7
74(61)	8	20.7	17.9	5.17	5	15.4	15	3.85	3.1	11.8	11.8	2.9	2
	10	18.2	16.7	3.64	3	14.4	14.4	2.88	2	11	11	2.2	1.2
	12	15.7	15.5	2.61	1.9	13.8	13.8	2.3	2.3	10.5	10.5	1.75	0.9
	14	13.2	14.3	1.88	1	13.2	13.2	1.88	1	10	10	1.42	0.8
74(63)	8	24.5	17.9	6.12	7.2	18.4	15	4.6	3.7	12.3	12.3	3	2
	10	22.1	16.7	4.42	3.5	16	14.4	3.2	2.2	11.8	11.8	2.36	1.3
	12	19.7	15.5	3.28	2.3	13.8	13.8	2.3	1.2	11.3	11.3	1.88	1
	14	17.3	14.3	2.47	1.2	13.2	13.2	1.88	1	10.8	10.8	1.54	0.8
76(63)	8	24.5	19.3	6.12	7.2	18.4	16.5	4.6	3.7	13.7	13.7	3.42	2.3
	10	22.1	18.1	4.42	3.5	16	15.7	3.2	2.2	13.3	13.3	2.66	1.4
	12	19.7	16.9	3.28	2.3	14.9	14.9	2.48	1.8	12.9	12.9	2.15	1.2
	14	17.3	15.7	2.47	1.3	14.1	14.1	2.01	1.1	12.5	12.5	1.78	0.9
76(65)	8	28.3	19.3	7.07	8.5	22.3	16.5	5.82	5.6	16.3	13.7	4.07	3.4
	10	26	18.1	5.2	5	20	15.7	4	3.4	13.3	13.3	2.68	1.4
	12	23.7	16.9	3.95	3.4	17.7	14.9	2.95	2	12.9	12.9	2.15	1
	14	21.4	15.7	3.05	2	15.4	14.1	2.2	1.2	12.5	12.5	1.78	0.9
78(65)	8	28.3	20.7	7.07	8.5	22.3	18	5.82	5.6	18.3	15.3	4.07	3.4
	10	26	19.5	5.2	5	20	17	4	3.4	14.5	14.5	2.9	2
	12	23.7	18.3	3.95	3.4	17.7	16	2.95	2	13.7	13.7	2.28	1.2
	14	21.4	17.1	3.05	2	15.4	15	2.2	1.2	12.9	12.9	1.84	1
80(67)	8	32.1	22.1	8.02	10	26.2	19.5	6.55	7.5	20.3	16.9	5.07	4.9
	10	29.9	40.9	5.98	7.9	24	18.3	4.8	5	18.1	15.7	3.62	3
	12	27.7	19.7	4.61	3.7	21.8	18.2	3.63	3	15.9	15.3	2.65	1.9
	14	25.5	19.9	3.64	3	19.6	16.8	2.8	2	13.7	13.7	1.95	1
82(67)	8	32.1	23.5	8.02	10	26.2	21	6.55	7.5	20.3	18.5	5.07	4.9
	10	29.9	22.3	5.98	7	24	19.8	4.8	5	18.1	18.9	3.62	3
	12	27.7	21.1	4.61	3.7	21.8	18.2	3.63	3	15.9	15.3	2.65	1.9
	14	25.5	19.9	3.64	3	19.6	16.8	2.8	2	13.7	13.7	1.95	1
82(69)	8	35.9	23.5	8.97	12.5	30.1	21	7.52	9	24.3	18.5	6.07	7.1
	10	33.8	22.3	6.76	6	28	19.6	5.6	5.5	22.2	16.9	4.44	3.6
	12	31.7	21.1	5.28	5.1	25.9	18.2	4.31	3.5	20.1	15.3	3.35	2.3
	14	29.6	19.9	4.28	3.5	23.8	16.8	3.4	2.5	18	13.7	2.57	1.9
84(69)	8	35.9	24.9	8.97	12.5	30.1	22.5	7.52	9	24.3	20.1	8.07	7.1
	10	33.8	23.7	6.76	8	28	20.9	5.6	5.5	22.2	18.1	4.44	3.6
	12	31.7	22.5	5.28	5.1	25.9	19.3	4.31	3.5	20.1	16.3	3.75	2.3
	14	22.1	21.3	4.23	3.5	23.8	17.7	3.4	2.5	18	14.5	2.57	1.9

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)							
	1.5	2	3	4	5	6	7	8
42	44.8	49.8	52.1	54	55.4	56.4	57.2	

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.36
65	0.35	0.46	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.58	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

FT.OF WATER	WATER FLOW RATE(U.S GPM)							
	1	1.5	2	3	4	5	6	7
2	4.1	6.2	10.5	16.5	22.1	32	39	

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

AIR FLOW 1200H

Unit without air plenum and filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	1400	1350	1285	1205	1110	1005	900
MEDIUM	1120	1080	1030	985	890	805	720
LOW	855	825	785	735	680	615	550

Unit with return air plenum and 1"cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	1800	1245	1200	1110	1030	935	835
MEDIUM	1055	1000	960	890	825	750	670
LOW	825	785	735	725	650	585	525

Note:

- 1. Air flow under dry coil conditions
- 2.wet coil cfm is 92 percent of dry coil cfm
- 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr
At nominal cfm x capacity correction factor

	APPLICATION CFM									
	500	600	700	800	900	1000	1200	1400	-	-
TH	0.55	0.82	0.89	0.76	0.82	0.89	1.0	1.11	-	-
SH	0.47	0.57	0.67	0.73	0.80	0.87	1.0	1.12	-	-

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY(HZ)							
	125	250	500	1000	2000	4000	5000	6000
HIGH	55	52	51	49	46	40	33	20
MEDIUM	52	49	46	44	40	33	23	-
LOW	46	44	42	41	37	30	-	-

Motor data (220 V-1-50Hz)

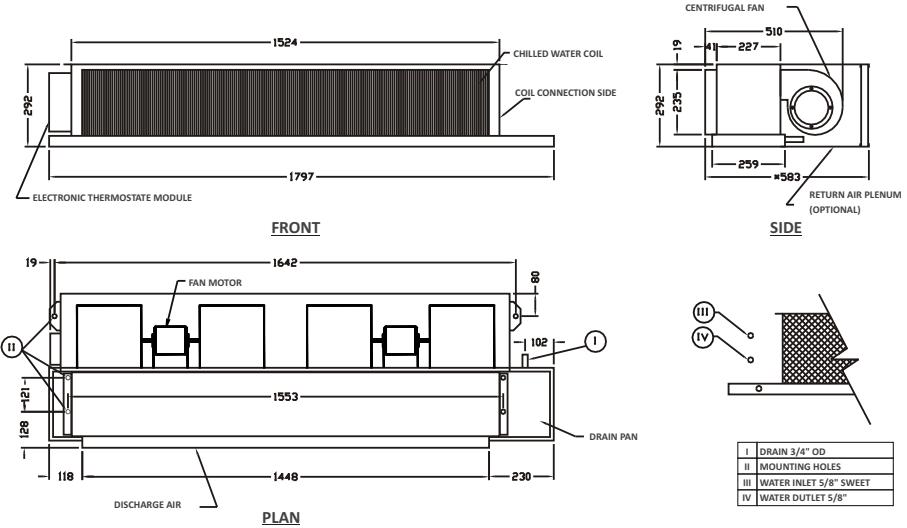
SPEED	AMP	WATT	RPM
HIGH	.66	135	875
MEDIUM	.46	95	710
LOW	.40	80	650

CONNECTION SIZE

I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)

1200H



PERFORMANCE 1200H

ENTERING AIR TEMP °FDB(WB)	W.T.R	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	30.7	26.1	7.67	5.9	23	21.7	5.75	3.6	17.3	17.3	5.32	2.5
	10	27.4	25.4	5.48	3.5	21.9	20.6	4.38	2.7	15.8	15.8	3.16	1.8
	12	24.7	24.7	4.01	2.4	19.5	19.5	3.25	1.9	14.3	14.3	2.38	1.3
	14	24	24	3.42	2.4	18.4	18.4	2.62	1.5	12.6	12.8	1.83	1
74(61)	8	30.7	27.1	7.68	5.9	23	23	5.75	3.8	18.9	18.9	4.72	2.7
	10	27.4	26.3	5.48	3.5	21.9	21.9	4.38	2.7	17.5	17.5	3.5	2
	12	25.5	25.5	4.25	2.6	20.8	20.8	2.46	2	16.1	16.1	2.68	1.5
	14	24.7	24.7	3.52	2.1	19.7	19.7	2.8	1.6	14.7	14.7	2.1	1.2
74(63)	8	36	27.1	9	7.3	27.5	23	6.87	4.9	19	19	4.75	2.8
	10	32.6	26.3	6.52	4.5	24	21.9	4.8	2.9	17.9	17.9	3.5	2
	12	29.2	25.5	4.86	3	20.8	20.6	3.41	2	60.1	60.1	2.68	1.5
	14	25.8	24.7	3.68	2.2	19.7	19.7	2.8	1.6	14.7	14.7	2.1	1.2
76(63)	8	36	28.1	9	7.3	27.5	24.3	6.87	4.9	20.5	20.5	5.42	3.2
	10	30.6	27.2	6.52	4.5	24	23.2	4.8	2.9	19.2	19.2	3.84	2.3
	12	30.6	26.3	4.86	3	22.1	22.1	3.68	2.2	17.9	17.9	2.98	1.7
	14	29.2	25.4	3.68	2.2	21	21	3	1.7	16.6	16.6	2.39	1.3
76(65)	8	25.8	28.1	10.32	8.2	33	24.3	8.25	6.4	24.7	20.5	6.17	4.3
	10	41.3	27.2	7.56	5.7	29.5	23.2	5.9	4.1	21.2	19.2	4.24	2.6
	12	37.8	26.3	5.71	3.8	26	22.1	4.33	2.6	17.9	17.9	2.98	1.7
	14	34.3	25.4	4.4	2.7	22.5	21	3.21	1.9	16.6	16.6	2.37	1.3
78(65)	8	30.8	29.1	10.32	6.2	33	25.6	8.25	6.4	24.7	22.2	6.17	4.3
	10	41.3	28.1	7.56	5.7	29.6	24.5	5.9	4.1	21.2	21	4.24	2.8
	12	37.8	27.1	5.71	3.8	26	23.4	4.3	2.6	19.8	19.8	2.98	2
	14	34.3	26.1	4.4	2.7	22.5	22.3	3.21	1.9	18.6	18.6	2.37	1.5
80(67)	8	30.8	30.1	11.65	10.2	38.5	26.9	9.62	8	29.4	23.7	6.17	5.4
	10	46.6	29	8.6	8.6	35	25.8	7	5	26	22.6	4.24	3.4
	12	43	27.9	6.58	4.6	31.5	24.7	5.25	3.4	22.6	21.5	3.3	2.3
	14	39.4	26.8	5.11	3.3	28	23.6	4	2.4	20.4	20.4	2.65	1.6
82(67)	8	35.8	31.1	11.65	10.2	38.5	28.3	9.62	8	29.4	25.3	7.35	5.4
	10	46.6	29.9	8.6	6.6	35	27.1	7	5	26	24.3	5.2	3.4
	12	43	28.7	6.56	4.6	31.5	26	5.25	3.4	22.6	23.3	3.76	2.3
	14	39.4	27.5	5.11	3.3	28	24.9	4	2.4	22.3	22.3	3.18	1.6
82(69)	8	35.8	31.1	12.96	13	44	28.2	11	9	35	25	8.75	7.13
	10	51.9	29.9	9.64	8	40.5	27.1	8.1	6.2	31.3	24.3	6.26	4.5
	12	48.2	28.7	7.41	5.4	37	25	6.16	4.3	28.2	23.3	4.7	3
	14	44.5	27.5	5.83	4	33.5	24.9	4.76	2.7	24.8	22.3	3.54	2.1
84(69)	8	40.8	32.1	12.97	13	44	29.5	11	9	35	26.9	8.75	7.1
	10	51.9	30.8	9.64	8	40.5	28.4	8.1	6.2	31.3	26	6.28	4.5
	12	48.2	29.5	7.41	5.4	37	27.3	6.16	4.3	28.2	25.1	4.7	3
	14	44.5	28.2	5.83	4	33.5	26.2	4.78	2.7	24.6	24.2	3.54	2.1

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)											
	1.5	2	3	4	5	6	7	8	9	10	11	12
	54	63	71	75	78	80	81.8	83.2	84.2	85.1	85.8	86.6

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.36
65	0.35	0.46	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.08	1.17	1.26
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.58	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

FT.OF WATER	WATER FLOW RATE(U.S GPM)											
	1.5	2	3	4	5	6	7	8	9	10	11	12
	0.8	1.1	1.8	2.4	3	4.2	5	6.1	7.3	8.2	9	12.5

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

Air Flow Data

AIR FLOW 1600H**Unit without air plenum and filter**

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	1790	1740	1680	1610	1530	1430	1310
MEDIUM	1435	1400	1345	1290	1225	1145	1050
LOW	1074	1025	1010	965	920	880	790

unit with return air plenum and 1" cleanable filter

FAN SPEED	EXTERNAL STATIC PRESSURE(INCHES WG)						
	0.00	0.05	0.10	0.15	0.20	0.25	0.30
HIGH	1660	1610	1580	1490	1410	1320	1200
MEDIUM	1340	1300	1240	1200	1120	1080	970
LOW	1015	980	970	915	870	830	760

Note:

1. Air flow under dry coil conditions
 2. wet coil cfm is 92 percent of dry coil cfm
 3. Medium and low speed air flow based on unit performance in a system with the tabulated external static pr. Produced at high speed cfm.

Capacity reduction factor (water temp. kept as a constant)

Application Btu/hr=base Btu/hr

At nominal cfm x capacity correction factor

	APPLICATION CFM								
	700	800	900	1000	1200	1400	1600	1800	2000
TH	.57	.62	.67	.72	.82	.82	1.0	1.08	1.18
SH	.50	.57	.63	.69	.80	.91	1.0	1.08	1.18

Altitude cooling correction factor

	ELEVATION					
	1000	2000	3000	4000	5000	6000
TH	.99	.98	.97	.96	.94	.93
SH	.96	.93	.90	.86	.83	.80

Sound power rating dbA

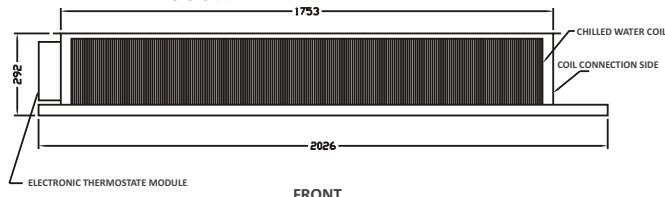
FAN SPEED	OCTAVE BAND CENTRE-FREQUENCY (HZ)							
	125	250	500	1000	2000	4000	8000	16000
HIGH	55	54	51	48	42	40	33	20
MEDIUM	52	50	48	45	40	35	30	-
LOW	47	46	41	38	32	24	-	-

Motor data (220 V-1-50Hz)

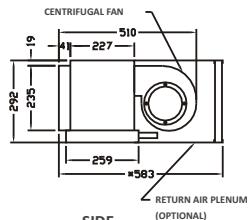
SPEED	AMP	WATTS	RPM
HIGH	.66	135	875
MEDIUM	.46	95	710
LOW	.40	80	650

CONNECTION SIZE

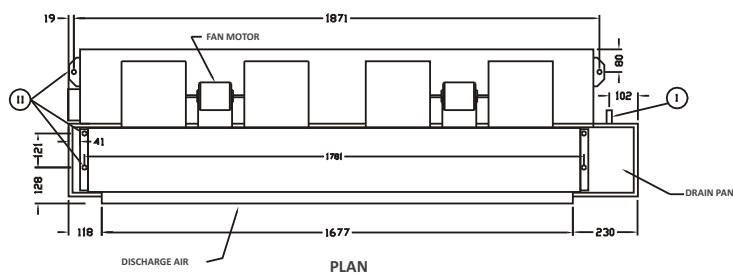
I	WATER INLET OD 166 MM	III	DRAIN OD 19 MM
II	WATER OUTLET OD 16 MM	IV	MOUNTING HOLES

DIMENSIONAL DATA (MM)**1600H**

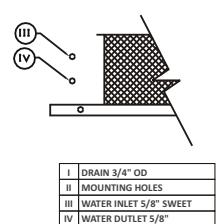
FRONT



SIDE



PLAN



- I DRAIN 3/4" OD
- II MOUNTING HOLES
- III WATER INLET 5/8" SWEET
- IV WATER DULET 5/8"

PERFORMANCE 1600H

ENTERING AIR TEMP °FDB(WB)	W.T.R	ENTERING WATER TEMPERATURE(°F)											
		40				45				50			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
72(61)	8	41	32	10.25	8.8	28.7	26	7.7	5.65	31.3	21.3	5.32	3.6
	10	36	29.6	7.2	5.6	25.6	25.6	5.12	3.5	20.1	20.1	4.02	2.7
	12	31	27.2	5.18	3.5	24.8	24.8	4.13	2.6	18.9	18.9	3.15	1.9
	14	26	24.8	3.71	2.3	24	24	3.42	2.1	17.7	17.7	2.52	1.4
74(61)	8	41	34.8	10.25	8.8	29.8	29.4	7.35	5.8	22.7	22.7	5.68	4
	10	36	32.4	7.2	5.6	28.2	28.2	5.64	3.7	21.5	21.5	4.3	2.8
	12	31	29.8	5.16	3.5	27	27	4.5	2.9	20.3	20.3	3.38	2.1
	14	26	27.8	3.71	2.3	25.8	25.8	3.68	2.3	19.1	19.1	2.73	1.6
74(63)	8	48.5	34.8	12.12	12.5	36.4	29.4	9.1	8	24.3	22.7	6.07	4.3
	10	42.7	32.4	8.74	7.5	31.6	26.2	8.32	4.6	19.5	21.5	3.9	2.4
	12	38.9	29.8	6.48	4.8	27	27	4.5	2.9	20.3	20.3	3.38	2.1
	14	34.1	27.2	4.87	3.3	25.8	25.8	3.69	2.3	19.1	19.1	2.73	1.6
76(63)	8	48.5	37.8	12.12	12.5	38.4	32.3	9.1	8	26.4	28.4	6.6	4.9
	10	43.7	35.4	8.74	7.5	31.8	30.7	8.32	4.6	25.6	25.6	5.12	3.2
	12	38.9	33	6.48	4.8	29.1	29.1	4.85	3.2	24.8	24.8	4.13	2.6
	14	34.1	30.6	4.87	3.3	27.5	27.5	3.93	2.5	24	24	3.43	2.2
76(65)	8	56	37.8	14	16	44.1	32.3	11	9.5	32.2	25.4	8.05	6.7
	10	51.4	35.4	10.28	8.9	39.6	30.7	7.92	5.6	27.8	25.8	5.56	3.9
	12	46.8	33	7.8	8.4	35.1	29.1	5.85	4.1	24.8	24.8	4.13	2.6
	14	42.2	30.6	6.03	4.3	30.8	27.5	4.37	2.8	24	24	3.43	2.2
78(65)	8	56	40.5	14	16	44.1	35.2	11	9.5	32.2	29.9	8.05	6.6
	10	51.4	38.2	10.28	8.9	39.8	33.3	7.92	5.6	28.4	28.4	5.68	4
	12	46.8	35.9	7.8	8.4	35.1	31.4	5.85	4.1	26.9	26.9	4.48	2.9
	14	42.2	33.6	6.03	4.3	30.6	29.5	4.37	2.8	25.4	25.4	3.62	2.8
80(67)	8	63.5	43.7	15.87	19.3	51.8	38.2	12.95	14	40.2	33.1	10.05	8.7
	10	59.2	40.9	11.84	11.8	48	35.8	9.6	8.8	35.8	30.7	7.18	5.8
	12	54.8	38.1	9.13	8.5	43.1	33.3	7.18	5.6	31.4	28	5.27	3.6
	14	50.4	35.3	7.2	5.6	38.8	30.7	5.47	3.8	27	25.3	3.88	2.4
82(67)	8	63.5	46	15.85	19.3	51.8	41.1	12.95	14	40.2	36.2	10.05	8.7
	10	59.2	43.7	11.84	11.8	48	38.4	9.6	8.8	35.8	33.1	7.18	5.6
	12	54.8	41.4	9.13	8.5	43.1	35	7.18	5.8	31.4	30	5.27	3.6
	14	50.4	39.1	7.2	5.6	38.8	32.8	5.47	3.8	24	26.9	3.88	2.4
82(69)	8	71	46	17.75	23.3	59.5	41.1	14.88	17.6	48.1	36.2	12.02	12.3
	10	66.9	43.7	13.3	14.8	55.4	38.4	11.08	9.6	43.9	33.1	8.78	7.6
	12	62.2	41.4	10.46	9	51.3	35.6	8.55	7.3	39.7	30	6.62	5
	14	58.7	39.1	8.39	7	47.2	32.8	6.74	5.1	35.5	28.9	3.07	3.4
84(69)	8	71	48.8	17.75	23.3	59.5	44.1	14.88	17.6	48.1	39.4	12.02	12.2
	10	56.9	46.5	13.38	14.8	55.4	40.9	11.08	9.6	42.9	35.4	8.78	7.5
	12	62.8	44.1	10.48	9	51.3	37.7	8.55	7.3	39.7	31.4	6.62	5
	14	58.7	41.7	8.39	7	47.2	34.5	8.74	5.1	35.5	27.4	5.07	3.4

Heating capacities(High speed)

MBH	WATER FLOW RATE(U.S GPM)											
	1.5	2	3	4	5	6	7	8	9	10	11	12
	66.4	77.5	87.3	92.2	96	98.4	100.6	102.3	103.5	104.6	105.5	106.4

Heating capacities(Correction factor)

ENTERING AIR TEMP °FDB	ENTERING WATER TEMPERATURE(°F)										
	100	110	120	130	140	150	160	170	180	190	200
55	0.44	0.54	0.64	0.75	0.85	0.95	1.05	1.14	1.23	1.32	1.41
60	0.39	0.5	0.61	0.71	0.81	0.91	1	1.09	1.18	1.27	1.36
65	0.35	0.46	0.57	0.67	0.77	0.86	0.95	1.04	1.13	1.22	1.31
70	0.31	0.42	0.53	0.64	0.73	0.81	0.89	0.99	1.04	1.13	1.26
75	0.27	0.38	0.49	0.6	0.68	0.76	0.84	0.94	1.04	1.13	1.22
80	0.23	0.34	0.45	0.56	0.63	0.71	0.79	0.88	0.98	1.08	1.18

Hot Water Pressure Drop

FT. OF WATER	WATER FLOW RATE(U.S GPM)											
	1.5	2	3	4	5	6	7	8	9	10	11	12
	1	1.3	1.8	2.7	3.4	4.3	5.5	7.5	8.4	8.7	9.6	12.2

TH=Total heat(MBH)

SH=sensible heat(MBH)

GPM(u.s)=Water flow rate

PD(FT.OF H2O)=Water pr. Drop

WTR=Water temp rise

(1MBH=1000BTU/Hr)

* The data based on high speed

Metric/Imperial Unit Conversion Table

Imperial Metric

Metric Imperial

Linear Measure (Length/Distance)

Imperial	Metric
1 inch	25.4 millimetres
1 foot (=12 inches)	0.3048 metre
1 yard (=3 feet)	0.9144 metre
1 (statute) mile (=1760 yards)	1.6093 kilometres
1 (nautical) mile (=1.150779 miles)	1.852 kilometres

Linear Measure (Length/Distance)

Metric	Imperial
1 millimetre	0.0394 inch
1 centimetre (=10 mm)	0.3937 inch
1 decimetre (=10 cm)	3.937 inches
1 metre (=100 cm)	1.0936 yards
1 decametre (=10 m)	10.936 yards
1 hectometre (=100 m)	109.36 yards
1 kilometre (=1000 m)	0.6214 miles

Square Measure (Area)

Imperial	Metric
1 square inch	6.4516 sq. centimeters
1 square foot (=144 square inches)	9.29 square decimeters
1 square yard (=9 square feet)	0.8361 square metres
1 acre (=4840 square yards)	0.40469 hectare
1 square mile (=640 acres)	259 hectares

Square Measure (Area)

Metric	Imperial
1 square centimetre	0.1550 sq. inch
1 square metre (=10000 sq. cm)	1.1960 sq. yards
1 are (=100 sq. metres)	119.60 sq. yards
1 hectare (=100 ares)	2.4711 acres
1 square kilometer (=100 hectares)	0.3861 sq. mile

Cubic Measure (Volume)

Imperial	Metric
1 cubic inch	16.4 cubic centimeters
1 cubic foot (=1728 cubic inches)	0.0283 cubic metres
1 cubic yard (=27 cubic feet)	0.765 cubic metres

Cubic Measure (Volume)

Metric	Imperial
1 cubic centimeter	0.0610 cubic inch
1 cubic metre (one million cu. cm)	1.308 cubic yards

Capacity Measure (Volume)

Imperial	Metric
1 (imperial) fl. oz. (=1/20 imperial pint)	28.41 ml
1 (US liquid) fl. oz. (=1/16 US pint)	29.57 ml
1 (imperial) gill (=1/4 imperial pint)	142.07 ml
1 (US liquid) gill (=1/4 US pint)	118.29 ml
1 (imperial) pint (=20 fl. imperial oz.)	568.26 ml
1 (US liquid) pint (=16 fl. US oz.)	473.18 ml
1 (US dry) pint (=1/2 quart)	550.61 ml
1 (imperial) gallon (=4 quarts)	4.546 litres
1 (US liquid) gallon (=4 quarts)	3.785 litres
1 (imperial) peck (=2 gallons)	9.092 litres
1 (US dry) peck (=8 quarts)	8.810 litres
1 (imperial) bushel (=4 pecks)	36.369 litres
1 (US dry) bushel (=4 pecks)	35.239 litres

Capacity Measure (Volume)

Metric	Imperial
1 millilitre	0.002 (imperial) pint
1 centilitre (=10 ml)	0.018 pint
1 decilitre (=100 ml)	0.176 pint
1 litre (=1000 ml)	1.76 pints
1 decalitre (=10 l)	2.20 (imperial) gallons
1 hectolitre (=100 l)	2.75 (imperial) bushels

Mass (Weight)

Imperial	Metric
1 grain	0.065 gram
1 dram	1.772 grams
1 ounce (=16 drams)	28.35 grams
1 pound (=16 ounces =7000 grains)	0.45359237 kilogram
1 stone (=14 pounds)	6.35 kilograms
1 quarter (=2 stones)	12.70 kilograms
1 hundred weight (=4 quarters =112 lb.)	50.80 kilograms
1 (long) ton (=2240 lbs)	1.016 tonnes
1 (short) ton (=2,000 lbs)	0.907 tonne

Mass (Weight)

Metric	Imperial
1 milligram	0.015 grain
1 centigram (=10 mg)	0.154 grain
1 decigram (=100 mg)	1.543 grain
1 gram (=1000 mg)	15.43 grain
1 decagram (=10 g)	5.64 drams
1 hectogram (=100 g)	3.527 ounces
1 kilogram (=1000 g)	2.205 pounds
1 tonne (=1000 kg)	0.984 (long) ton

Sabro Airconditioning

Inspired by the 'stimulus to grow' through knowledge, interlaced with the zeal and sheer commitment of an enthusiastic team and gripped by the obsession of three brothers of turning the dream-into reality, **Sabro** has evolved, grown and expanded **since its inception in 1969.**

For over five decades, Sabro has been a trusted brand name that has exceeded expectations nationwide & internationally, catering to the needs of both domestic as well international customers.

Made In
PAKISTAN
Since 1969



Contact information:
contact@sabro.com.pk

Sabro Head Office:
#77/78, St: 10, I-9/2, Islamabad
+92 51 4433006
www.sabrotechnology.com