

ASC Series Catalogue



Air conditioning

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Air Cooled Self Contain Package Unit



Made In
PAKISTAN
Since 1969



ASC MODELS SERIES

Air Cooled Self Contained Models Series

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Also Available with Environmental Friendly Refrigerant-(R-407C/410A)

Air Cooled Self-contained Package Unit

Sabro has over 50 years of experience on ASC systems.

Modernization & Sophistication of workplaces & industries with massive urbanization has led to a hyper demand for a more holistic approach towards air conditioning.

Units that are engineered with bi-dimensional capabilities, possessing the potential of simultaneously cooling & heating, adaptability to different seasons and varied temperature comfort levels of different spaces within single premises.

Sabro Self contained units have always remained popular choice amongst users primarily because they are easy to install and allow cost effective maintenance.

Air-cooled Self contained systems at Sabro have been distinctively designed having a great regard of our customers' requirement. We at sabro understand that customers want to save time, money & space all of which have been our guiding design & production imperatives, carefully crafting our Air-cooled Self contained Units to make sure that our ready-made product becomes your tailored solution.

We are also applying our ingenuity to make our products as environmental friendly as possible, with simple effective control over air conditioning units to avoid unnecessary/unhygienic energy wastage.



Standard Range: 3.3 RT to 42.25 RT

Custom Make: Up to 150 RT

Equipment Features



Economy, Efficiency And Comfort

- Scroll Compressors, a relatively new technology, has proven to more efficient and economical than conventional compressors in refrigeration/electrical usage.
- Factory tested equipment and refrigerant is factory-charged.
- Intelligent space utilization, in both high rise and conventional buildings.

Improved Indoor Air Quality

- Pre-filter option, Recycling of dust free air leading to more healthy & hygienic environment.

Noise Reduction

- Specialized design and structural quality.
- Heavy -gauge metal and welded construction to minimize vibrations.
- Statically and dynamically balanced fans

Designed And Manufactured For Longevity

- Convenient access to all parts and maintenance/services as of need.
- Adjustable(belt drive) centrifugal evaporator fan, enabling fan RPM to be increased or decreased.
- Multiple circuits to maintain required temperatures i.e. allowing great deal of precision in cooling (Selected models only).
- Available in wide range of models from 3.75 Hp to 50 Hp to suite individual area requirement.



Casing Material

Units are made from Galvanized fine steel sheets, degreased, de-rusted, phosphate coated and finished electro statically with powder paint which is then baked. This results in excellent corrosion resistance which ensures long lasting life of units.

Compressor

Sabro has always placed sole reliance on Copeland[®] compressors, one of the most well reputed and reliable manufacturers in the world. All ASC units consist of scroll compressors. Each compressor is provided with completely independent refrigerant circuits.

Evaporator-Fan And Motor

Statically and dynamically balanced for noiseless and laminar flow, All ASC units consist of forward curved centrifugal fans. These fans are belt driven using 1 or 2 "V" belts with fan pulleys combination(mounted on shafts), that are provided with permanently lubricated ball-bearings.

Condenser-Fan And Motor

The Condenser fans are made up of propeller type blades which are made up of heavy gauge aluminum material. The fans are statically&dynamically balanced for laminar flow enabling low noise operations. The fan motors have class F insulation and IP-55 protection.

Evaporator Coil

The evaporator-coil is made up of seamless copper-tubes that are mechanically expanded to ensure rigid contact with fins to ensure greater heat-transfer efficiency. It is tested under water with nitrogen gas at a gauge pressure of 250 Psi against leakage.

Condenser Coil

The condenser coil is made up of seamless copper-tubes and aluminum plate fins. It is tested under water with nitrogen gas at a gauge pressure of 450 Psi against leakage.

Components Details



Air-Filter

2-inch thick washable aluminum media air filters are used in these units.

Electrical Control Panel

Mounted inside the condenser section, the electrical control panel consists of power monitor, magnetic contactors, thermal overload relays and fuses etc. Control panel is provided with hinged door with lock and can be made available for remote installation in the field on request.

Operational Switches And Thermostat

ASC units are provided with electronic thermostats with LCD display, detailing unit's operating status.





Safety Devices

Compressor Internal Protector

Protects the compressor motor winding from overheating.

Power Monitor

P.M Monitors voltage fluctuations. It stops the unit from operating at high/low voltage or wrong phase sequence/phase reversal.

Compressor Over-Load Relay

It Protects the compressor by switching it OFF at higher than required current.

Low And High Pressure Switches

These switches are used to protect the compressor from any damage due to abnormal suction/discharge pressure.

Evaporator And Condenser Fan Motor Over-Load Relays

To protect the evaporator as well condenser fan motor from over current operation.

Optional Accessories



Pressure Gauge

Visual representation depicting the compressor's operating conditions, using high and low refrigerant pressure.

Acrylic Protective Coating

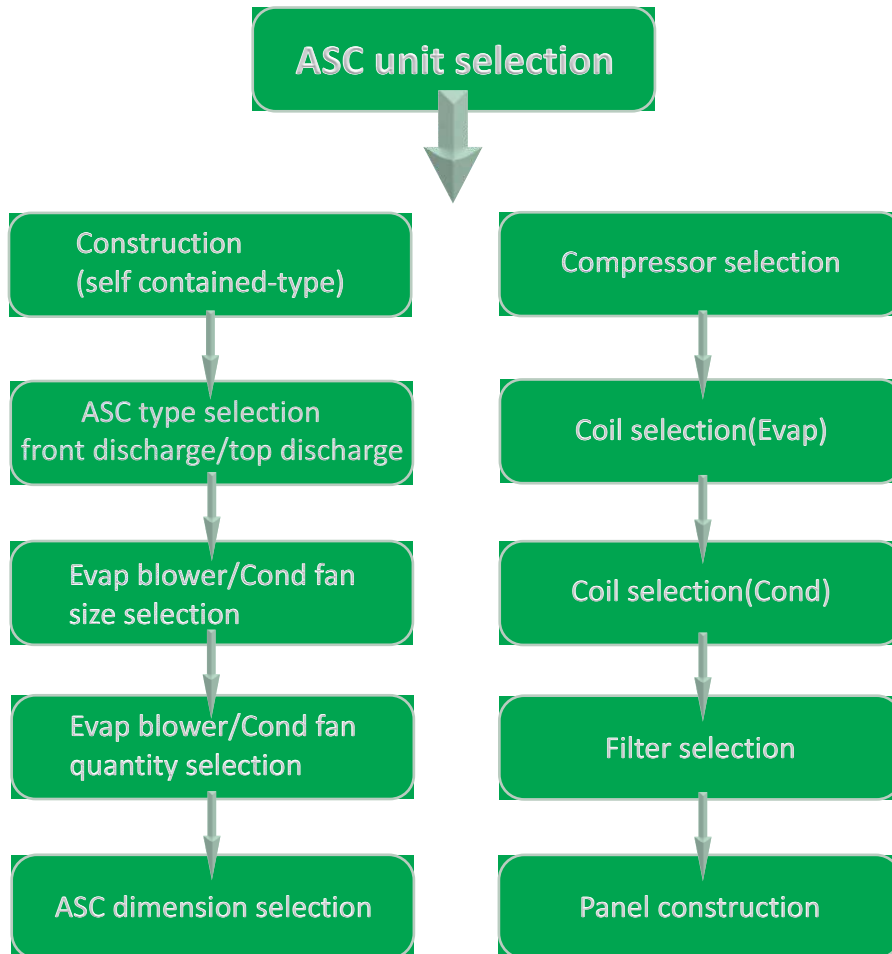
On condenser coil a protective coating of acrylic resin is used to prolong its life in sea-line areas.

Low-Ambient Control

A safety device that shifts the condenser fan motor ON & OFF, the aim is to keep the head pressure elevated during low ambient temperatures.



Commercial



Physical Data



ASC MODELS SERIES

APPLICATION	ITEM	ASC 040S-S	ASC 050S-S	ASC 060S-S	ASC 080D-S	ASC 080S-S	ASC 100D-S	ASC 120D-S	ASC 160S-S	
Cooling Capacity	BTU/Hr	39400	51000	60500	78800	79500	102000	121000	155000	
	KCAL/Hr	9935	12860	15246	19858	20034	25704	30492	39060	
	KW	11.55	14.94	17.74	23.10	23.31	30.00	35.48	45.45	
Heating Capacity	BTU/Hr	40000	51500	61000	80000	80250	103000	121500	156200	
	KCAL/Hr	10080	12986	15372	20160	20223	25956	30618	39363	
	KW	11.73	15.09	17.89	23.45	23.52	30.20	35.63	45.78	
Refrigerant		R-22(Factory Charged)								
Refrigerant Circuits	Qty	1	1	1	2	1	2	2	1	
Control	Type	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	TXV	Capillary Tube	Capillary Tube	TXV	
Power Supply		380/415-3-50HZ+N								
Compressor	Type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	
	Qty	1	1	1	2	1	2	2	1	
	Nominal Hp	3.75	5	6	3.75	8	5x2	6x2	16	
	Amp.(RLA)	6.0	7.5	8.5	6.0x2	11.5	7.5x2	8.5x2	23	
Condenser Fan	Type	Propeller Type, Directly Mounted On Motor Shaft								
	Qty	01	01	01	01	01	01	01	01	
Condenser Fan Motor	Nominal Hp	0.50	0.75	0.75	0.75	0.75	0.75	0.75	0.75	
	Amp.(RLA)	0.70	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
		Forward Curved, Centrifugal, Belt Drive								
Evaporator Fan	CFM	1200	1500	1800	2200	2400	3000	3600	4800	
	ESP.(in.Wg)	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	
	Nominal Hp	0.75	0.75	1.00	1.00	1.00	2.00	2.00	3.00	
Evaporator Fan Motor	Amp.(RLA)	0.80	1.00	1.40	2.30	2.40	2.70	3.10	3.70	
		2 Inch Thick Washable Aluminum Air Filters								
Air Filters	Type	Female Pipe threaded								
Condensate drain connection	Type	Female Pipe threaded								
	Size (inch)	3/4"								
Dimensions mm. (inch)	Height	955(37.6")			1117(44.0")			1117(44.0")		1219(48.0")
	Width	1016(40.0")			1016(40.0")			1168(46.0")		1575(62")
	Depth	1956(77.0")			1956(77.0")			2058(81.0")		2311(91.0")
Weight (Approx.)	Kg.	150	180	205	275	310	350	410	550	

APPLICATION	ITEM	ASC 160D-S	ASC 200D-S	ASC 240D-S	ASC 320D-S	ASC 370D-S	ASC 420D-S	ASC 480T-S	ASC 500D-S		
Cooling Capacity	BTU/Hr	159000	212000	240000	310000	359000	408000	465000	506000		
	KCAL/Hr	40068	53424	60480	78120	90468	102816	117180	127512		
	KW	46.62	62.17	70.38	90.91	105.28	119.65	136.36	148.39		
Heating Capacity	BTU/Hr	159705	212700	241000	312400	365000	415000	NA	508000		
	KCAL/Hr	40246	53600	60732	78725	91980	104580	NA	128016		
	KW	46.80	62.38	70.68	91.61	107.04	121.70	NA	148.97		
Refrigerant		R-22(Factory Charged)									
Refrigerant Circuits	Qty	2	2	2	2	2	2	3	2		
Control	Type	TXV	TXV	TXV	TXV	TXV	TXV	TXV	TXV		
Power Supply		380/415-3-50HZ+N									
Compressor	Type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll		
	Qty	2	2	2	2	2	2	3	1		
	Nominal Hp	8x2	10x2	12x2	16x2	16+21	21x2	16x3	25x2		
	Amp.(RLA)	11.5x2	14x2	16x2	23x2	23+28	28x2	23x3	32.5x2		
Condenser Fan	Type	Propeller Type, Directly Mounted On Motor Shaft									
	Qty	01	02	02	02	04	04	06	04		
Condenser Fan Motor	Nominal Hp	0.75	0.75x2	0.75x2	0.75x2	0.75x4	0.75x4	0.5x6	0.75x4		
	Amp.(RLA)	1.0	1.0x2	1.0x2	1.0x2	1.0x4	1.0x4	0.7x6	1.0x4		
		Forward Curved, Centrifugal, Belt Drive									
Evaporator Fan	CFM	4800	6000	7000	9000	10500	11500	13000	14500		
	ESP.(in.Wg)	0.75	0.75	0.75	1.0	1.0	1.0	1.25	1.25		
	Nominal Hp	3.0	5.0	5.0	7.5	7.5	10	10	10		
Evaporator Fan Motor	Amp.(RLA)	3.7	5.8	6.5	8.0	10.0	11.7	12.7	13.5		
		2 Inch Thick Washable Aluminum Air Filters									
Air Filters	Type	Female Pipe threaded									
Condensate drain connection	Type	Female Pipe threaded									
	Size (inch)	3/4"			2"						
Dimensions mm. (inch)	Height	1219(48.0")		1295(51.0")			1462(57.6")		1498(59.0")		1651(65.0")
	Width	1575(62.0")		1880(74.0")			1961(77.2")		2362(93.0")		2362(93.0")
	Depth	2311(91.0")		2831(111.5")			3426(135.0")		3583(141.0")		4040(159.0")
Weight (Approx.)	Kg.	550	700	850	1450	1500	1800	1850	2150		

Note: The above Specification are based on ARI conditions; **C.F.M** = Air Flow Rate, **E.S.P** = External static Pressure, **R.L.A**= Rated load amps
 Evaporator Entering Air Temperature =80.0 °F (26.6 °C)DB, & 67 °F(19.5 °C)WB. Condenser Entering Air Temperature= 95.0 °F (35 °C) DB



Cooling Performance Data

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Model	Evaporator Air Flow Rate CFM(BF)	Cooling Capacities, MBH															
		Condenser Air Entering Temperature(°F)															
		EWB °F	85°F			95°F			105°F			115°F			125°F		
	TH	SH	KW	TH	SH	KW	TH	SH	KW	TH	SH	KW	TH	SH	KW		
ASC 370D	9500(0.12)	62	323.2	287.2	26.1	307.8	278.8	29.7	292.4	270.4	33.3	277.0	261.6	36.8	261.6	253.7	40.3
		67	347.9	239.0	26.1	331.6	232.0	29.7	315.2	225.1	33.3	298.8	218.1	36.8	282.4	211.1	40.3
		72	372.8	190.8	26.1	355.3	185.3	29.7	337.9	179.7	33.3	320.4	174.2	36.9	302.9	168.7	40.3
	10500(0.15)	62	333.2	302.2	26.3	267.3	293.5	29.8	301.5	284.7	33.5	285.6	275.9	37.0	269.8	267.1	40.3
		67	356.9	255.7	26.3	359.0	253.5	29.8	323.1	240.8	33.5	306.2	233.4	37.0	289.3	225.9	40.3
		72	381.0	209.1	26.3	368.0	207.0	29.8	344.7	196.9	33.5	326.5	190.8	37.0	308.4	184.7	40.3
	11500(0.15)	62	343.0	316.7	26.4	326.7	308.2	30.0	310.4	299.0	33.5	294.1	289.8	37.0	277.8	279.9	40.4
		67	365.7	272.4	26.4	364.0	272.5	30.0	330.9	256.4	33.6	313.5	248.4	37.0	296.0	240.5	40.4
		72	388.9	227.5	26.4	383.0	224.7	30.0	351.5	213.9	33.6	333.0	207.1	37.0	314.5	200.3	40.4
ASC 420D	10500(0.12)	62	361.1	318.8	29.7	343.9	309.5	33.7	326.7	300.2	37.7	309.5	290.0	41.7	292.3	281.6	45.7
		67	389.1	266.3	29.7	370.6	258.5	33.7	352.1	250.7	37.7	333.6	242.9	41.7	315.1	235.1	45.7
		72	417.2	213.7	29.7	397.3	207.5	33.7	377.4	201.3	37.7	357.5	195.1	41.8	337.6	188.9	45.7
	11500(0.15)	62	372.2	335.9	29.8	254.5	326.1	33.7	336.8	316.3	37.8	319.1	306.5	41.8	301.4	296.7	45.6
		67	399.0	284.9	29.8	408.0	288.7	33.7	361.0	268.3	37.8	342.0	260.0	41.8	323.0	251.7	45.6
		72	425.8	233.9	29.8	418.3	239.0	33.7	385.2	220.3	37.8	364.9	213.5	41.8	344.6	206.7	45.6
	12500(0.17)	62	383.3	351.6	29.9	365.1	342.7	33.8	346.9	332.4	37.9	328.7	322.1	41.9	310.5	310.5	45.7
		67	408.9	303.5	29.9	418.0	299.3	33.8	369.9	285.9	37.9	350.4	277.1	41.9	330.9	268.3	45.7
		72	434.0	254.1	29.9	422.0	253.5	33.8	393.0	239.3	37.9	373.0	231.9	41.9	353.0	224.5	45.7
ASC 480T	12000(0.13)	62	428.1	383.4	33.9	407.7	372.3	38.7	387.3	360.9	43.5	366.9	349.8	48.0	346.5	338.7	52.5
		67	460.2	317.7	33.9	438.9	308.4	38.7	417.6	299.2	43.5	396.0	290.1	48.0	374.7	280.8	52.5
		72	492.6	252.1	33.9	470.1	244.7	38.7	447.6	237.4	43.5	425.1	230.1	48.0	402.3	222.7	52.5
	13000(0.15)	62	441.3	402.9	34.2	428.0	397.5	39.0	399.3	379.8	43.8	378.3	368.1	48.3	357.3	356.4	52.5
		67	472.2	339.9	34.2	465.0	339.0	39.0	427.8	320.1	43.8	405.6	310.2	48.3	383.4	300.3	52.5
		72	504.3	276.6	34.2	489.3	274.0	39.0	456.3	260.3	43.8	432.3	252.2	48.3	408.3	244.1	52.5
	14000(0.17)	62	454.2	422.7	34.5	440.0	416.0	39.3	411.0	398.4	43.8	389.4	386.4	48.3	367.8	374.1	52.8
		67	483.9	362.1	34.5	474.2	358.7	39.3	438.0	340.5	44.1	414.9	329.7	48.3	391.8	319.2	52.8
		72	515.7	301.5	34.5	509.2	295.2	39.3	465.0	282.9	44.1	439.5	273.6	48.3	414.0	264.2	52.8
ASC 500D	12500(0.14)	62	460.8	415.8	34.0	436.9	401.7	38.0	413.0	387.6	42.3	389.1	373.5	46.6	365.2	359.4	50.9
		67	495.3	354.6	34.0	469.4	342.6	38.0	443.5	330.6	42.3	417.6	318.6	46.6	391.7	206.6	50.9
		72	529.8	293.4	34.0	501.9	283.5	38.0	474.0	273.6	42.3	446.1	263.7	46.6	418.2	253.8	50.9
	14500(0.15)	62	490.4	437.7	34.1	465.8	423.7	38.1	39.3	408.1	42.4	413.6	393.3	46.7	388.0	378.5	51.0
		67	526.9	377.3	34.1	506.0	369.1	38.1	471.9	351.7	42.4	444.4	338.9	46.7	416.9	326.1	51.0
		72	563.0	316.8	34.1	527.0	303.2	38.1	504.6	295.4	42.4	475.2	284.7	46.7	445.8	274.0	51.0
	16500(0.18)	62	520.0	459.6	34.1	495.5	448.0	38.2	465.6	428.6	42.5	438.5	413.1	46.8	410.8	397.6	51.1
		67	558.1	400.0	34.1	525.0	386.7	38.2	500.3	372.8	42.5	471.2	359.2	46.8	442.1	345.6	51.0
		72	596.2	340.0	34.1	562.1	329.2	38.2	535.0	317.2	42.5	503.9	306.4	46.8	472.8	295.6	51.0

Note:

HIGHLIGHTED are the values at Nominal ARI Conditions

TH=Total cooling capacity

SH=Sensible cooling capacity

BF=Bypass factor

KW=Compressor motor input

MBH=1000Btu/hr

CFM=Cubic feet per minute

Sensible cooling capacity is based on 80°F DB temperature of air entering evaporator

Below 80°F EDB subtract SHC(sensible cooling correction) from SH

Above 80°F EDB add SHC(sensible cooling correction) to SH

Sensible cooling correction below 80°F=Correction Factor(C.F) x CFM

Cooling correction factor below 80°F=1.1(1-BF)(80-EDB)

Sensible cooling correction below 80°F=1.1(1-BF)(80-EDB) x CFM

Sensible cooling correction above 80°F=Correction Factor(C.F) x CFM

Cooling correction factor above 80°F=1.1(1-BF)(EDB-80)

Sensible cooling correction above 80°F=1.1(1-BF)(EDB-80) x CFM

Leaving dry bulb LDB=EDB-SH(Btu/Hr)/1.08 x CFM

Heating Capacity



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ARI Capacity Ratng (Heat Pump Models)

Model ASC		040 S	050S	060S	080D	080S	100D	120D	160S
High Heating Capacity	Btu/h	40000	51500	61000	80000	80250	103000	121500	156200
	KCal/h	10080	12978	15372	20160	20223	25956	30618	39363
	Watt	11220	15090	17730	22300	23510	30180	35450	45770
Low Heating Capacity	Btu/h	21056	28700	33900	41800	44050	56500	67700	85500
	KCal/h	5310	7237	8548	10540	11108	14247	17072	21560
	Watt	6169	8409	9933	12247	12907	16555	19836	25052

ARI Capacity Ratng (Heat Pump Models)

Model ASC		160D	200D	240D	320D	370D	420D	480T	500D
High Heating Capacity	Btu/h	159705	212700	241000	312400	365000	415000	NA	508000
	KCal/h	40246	53600	60732	78725	91980	104580	NA	128016
	Watt	467900	621200	703200	915300	107000	121600	NA	148900
Low Heating Capacity	Btu/h	86500	116480	132720	176400	196200	218400	NA	280100
	KCal/h	21812	29372	33467	44482	49475	55073	NA	70631
	Watt	25345	24129	38887	51685	57487	63991	NA	82069

Note:

High heating capacity is based on indoor entering air temperature 70°F DB(21°C DB), Outdoor entering air temperature 47°F DB(8.3°F DB) & 43°F WB(6.1°C WB)

Low heating capacity is based on indoor entering air temperature 70°F DB(21°C DB), Outdoor entering air temperature 17°F DB(-8.3°C DB) & 15°F WB(-9.4°C WB)



Fan Performance Data

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MODEL	External Static Pressure (Inch Wg)								
	CFM	Evap Fan/Motor	0.00	0.25	0.50	0.75	1.00	1.25	1.50
ASC 040S	1000	RPM	924	1076	1238	1390	1550	-	-
		BHP	0.21	0.30	0.40	0.51	0.61	-	-
	1200	RPM	942	1120	1260	1420	1578	-	-
		BHP	0.26	0.35	0.45	0.57	0.70	-	-
	1400	RPM	978	1140	1283	1435	-	-	-
		BHP	0.35	0.43	0.53	0.70	-	-	-
ASC 050S	1200	RPM	600	690	805	895	970	1005	1090
		BHP	0.20	0.30	0.40	0.50	0.65	0.80	0.90
	1500	RPM	595	700	810	900	990	1040	1100
		BHP	0.20	0.25	0.42	0.55	0.62	0.75	0.84
	1800	RPM	613	728	825	920	1008	1075	-
		BHP	0.30	0.43	0.54	0.73	0.87	0.90	-
ASC 060S	1400	RPM	595	700	810	900	990	1040	1100
		BHP	0.20	0.25	0.42	0.55	0.62	0.75	0.84
	1800	RPM	613	728	825	920	1008	1075	-
		BHP	0.30	0.43	0.54	0.73	0.87	0.90	-
	2200	RPM	640	735	840	933	1026	1098	-
		BHP	0.35	0.54	0.70	0.85	0.98	1.10	-
ASC 080D & ASC 080S	1800	RPM	615	740	850	935	1025	1100	-
		BHP	0.30	0.40	0.51	0.78	0.90	0.96	-
	2200 (FOR 080D)	RPM	635	753	857	947	1039	1119	-
		BHP	0.35	0.55	0.70	0.83	1.05	1.15	-
	2400 (FOR 080S)	RPM	681	771	865	958	1044	1123	-
		BHP	0.50	0.66	0.85	0.96	1.17	1.32	-
ASC 100D	2400	RPM	680	761	860	952	1045	1126	-
		BHP	0.40	0.58	0.74	0.90	1.10	1.27	-
	3000	RPM	684	765	866	960	1054	1131	-
		BHP	0.60	0.70	0.85	1.15	1.31	1.45	-
	3600	RPM	700	775	875	968	1061	1160	-
		BHP	1.05	1.10	1.25	1.55	1.71	1.95	-
ASC 120D	3200	RPM	686	770	873	966	1059	1134	-
		BHP	0.71	0.86	1.0	1.23	1.43	1.65	-
	3600	RPM	700	779	878	972	1063	1151	-
		BHP	0.95	1.05	1.25	1.50	1.70	1.90	-
	4000	RPM	714	788	888	978	1068	-	-
		BHP	1.14	1.32	1.50	1.70	1.83	-	-
ASC 160D & ASC 160S	4200	RPM	490	577	658	732	800	864	947
		BHP	0.8	1.03	1.30	1.60	1.9	2.2	2.55
	4800	RPM	501	582	672	736	815	870	-
		BHP	1.0	1.24	1.52	1.82	2.15	2.48	-
	5400	RPM	520	595	685	753	845	910	-
		BHP	1.25	1.50	1.80	1.82	2.44	2.80	-
ASC 200D	5400	RPM	490	550	610	675	731	789	846
		BHP	1.13	1.41	1.71	2.05	2.41	2.80	3.2
	6000	RPM	500	557	617	681	738	791	855
		BHP	1.42	1.62	2.00	2.25	265	3.05	3.40
	6600	RPM	514	575	635	690	754	810	870
		BHP	1.60	2.10	2.55	2.65	3.10	3.60	3.85

See Note at page 14

Fan Performance Data



ASC MODELS SERIES

MODEL	CFM	Evap Fan/Motor	External Static Pressure (Inch Wg)						
			0.50	0.75	1.00	1.25	1.50	1.75	2.00
ASC 240D	6000	RPM	500	553	615	675	735	790	855
		BHP	1.75	1.85	2.00	2.25	2.55	3.00	3.41
	7000	RPM	520	580	635	692	747	807	870
		BHP	4.91	2.05	2.40	2.70	3.00	3.50	3.95
	8000	RPM	535	610	655	712	764	-	-
		BHP	2.35	2.75	2.85	3.35	3.81	-	-
ASC 320D	8000	RPM	490	540	593	640	670	718	755
		BHP	2.46	2.99	3.57	4.18	4.83	5.50	6.19
	9000	RPM	501	551	600	651	680	730	775
		BHP	2.42	3.35	3.93	4.55	5.21	6.00	6.62
	10000	RPM	522	555	605	680	693	744	-
		BHP	3.27	3.80	4.38	5.00	5.66	6.30	-
ASC 370D	9500	RPM	630	665	736	796	858	925	975
		BHP	3.10	3.90	4.70	5.00	6.10	7.00	8.05
	10500	RPM	635	685	751	810	870	930	985
		BHP	3.48	4.21	4.90	5.61	6.50	7.50	8.45
	11500	RPM	640	705	765	824	882	935	995
		BHP	3.90	4.61	5.29	6.22	7.10	8.00	8.90
ASC 420D	10500	RPM	635	685	751	810	870	930	985
		BHP	3.48	4.21	4.90	5.61	6.50	7.50	8.45
	11500	RPM	638	696	759	815	877	933	990
		BHP	3.70	4.40	5.10	5.95	6.90	7.95	8.75
	12500	RPM	644	708	767	830	889	940	998
		BHP	4.10	4.85	5.45	6.40	7.40	8.10	9.35
ASC 480T	11500	RPM	640	705	765	824	882	935	995
		BHP	3.90	4.61	5.29	6.22	7.10	8.00	8.90
	13000	RPM	650	719	775	841	898	948	1006
		BHP	4.36	5.14	5.85	6.74	7.62	8.52	9.62
	14500	RPM	662	725	787	852	903	955	-
		BHP	4.51	5.27	5.98	6.90	7.87	8.72	-
ASC 500D	12500	RPM	648	715	770	835	892	942	1001
		BHP	4.35	5.10	5.80	6.70	7.60	8.50	9.60
	14500	RPM	662	725	787	852	903	955	-
		BHP	4.51	5.27	5.98	6.90	7.87	8.72	-
	16500	RPM	684	734	792	860	910	972	-
		BHP	6.90	7.73	8.56	9.41	10.40	11.40	-

Note:

Don't operate Evap fan motor in dotted shade area Range of E.S.P

Fan performance is based on wet coil and clean filter

RPM=Revolutions per minute

BHP=Brake Horse Power

Brake horsepower (BHP) is the amount of work generated by a motor under ideal conditions. This work is calculated without the consideration of the effects of any auxiliary component, that may slow down the actual speed of the motor.

MODEL	Compressor (Each)						Evaporator Motor(Each)				Condenser motor(Each)				Total Unit		
	S.M	HP	QTY	RLA	FLA	LRA	HP	QTY	RLA	FLA	HP	QTY	RLA	FLA	RLA	FLA	MFA
ASC 040S	AL	3.75	1	6.0	8.5	50	0.75	1	0.8	2.2	0.5	1	0.7	1.0	7.5	11.7	20
ASC 050S	AL	5.0	1	7.5	10.3	65	0.75	1	1.0	2.2	0.75	1	1.0	1.3	9.5	13.8	25
ASC 060S	AL	6.0	1	8.5	11.0	75	1	1	1.4	2.2	0.75	1	1.0	1.3	10.9	14.5	25
ASC 080D	AL	3.75	2	6.0	8.5	50	1	1	2.3	3.2	0.75	1	1.0	1.3	15.3	21.5	30
ASC 080S	AL	8.0	1	11.5	16.0	95	1	1	2.4	3.4	0.75	1	1.0	1.3	14.9	20.7	40
ASC 100D	AL	5.0	2	7.5	10.3	65	2	1	2.7	3.8	0.75	1	1.0	1.3	18.7	25.7	40
ASC 120D	AL	6.0	2	8.5	11.0	75	2	1	3.1	4.3	0.75	1	1.0	1.3	21.1	27.6	40
ASC 160S	AL	16	1	23.0	30.0	179	3	1	3.7	4.9	0.75	1	1.0	1.3	27.7	36.2	50
ASC 160D	AL	8.0	2	11.5	16.0	95	3	1	3.7	4.9	0.75	1	1.0	1.3	27.7	38.2	60
ASC 200D	AL	10	2	14.0	19.5	125	5	1	5.8	7.3	0.75	2	1.0	1.3	35.8	48.9	75
ASC 240D	AL	12	2	16.0	21.8	25	5	1	6.5	8.3	0.75	2	1.0	1.3	40.5	54.5	100
ASC 320D	AL	16	2	23.0	30.0	179	7.5	1	8.0	10.6	0.75	2	1.0	1.3	56.0	73.2	100
ASC 370D	AL	21+16	2	28+23	37+30	225+179	7.5	1	10.0	13.5	0.75	4	1.0	1.3	65.0	85.7	100
ASC 420D	AL	21	2	28.0	37.0	279	10	1	11.7	14.5	0.75	4	1.0	1.3	71.7	93.7	120
ASC 480T	AL	16	3	23.0	30.0	279	10	1	12.7	15.0	0.5	6	0.7	1.0	85.9	111.0	150
ASC 500D	AL	25	2	32.5	40.5	250	10	1	13.5	16.0	0.75	4	1.0	1.3	82.5	102.2	150

Note:

SM=Starting method

AL=Across the line starting

RLA=Rated load amps at condenser air in 95°F(35°C), Evaporator air in 80°F(26.6°C)DB / 67°F(19.5°C)WB

FLA=Full load amps at condenser air in 125°F(51.6°C)DB

LRA=Compressor locked rotor amps

MFA=Maximum fuse amps

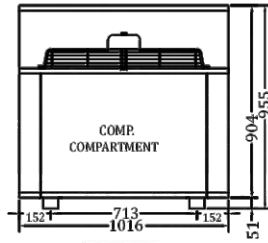
* in multi compressor units the compressor motors start sequence wise

Dimensional Data

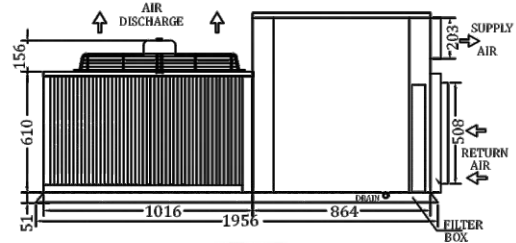
ASC Standard Model



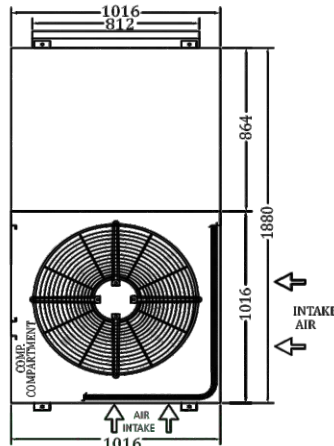
MODEL-ASC 040S-S, 050S-S, 060S-S (RC)



FRONT



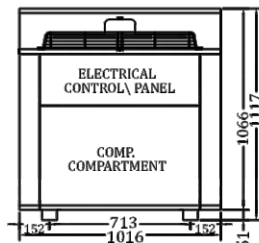
SIDE



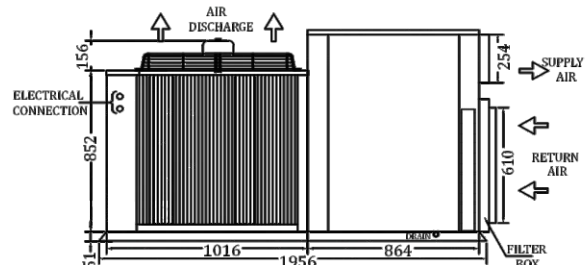
PLAN

NOTE:-
DIMENSIONS ARE IN M.M.
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE
AIR DISCHARGE AT TOP AVAILABLE ON DEMAND

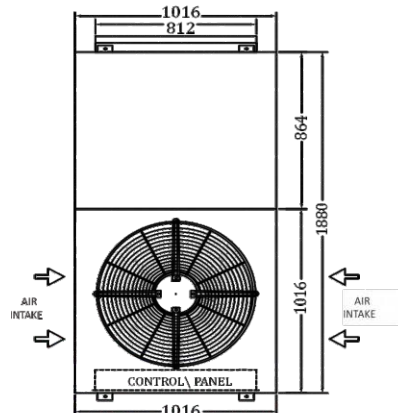
MODEL-ASC 080S-S, 080D-S (RC)



FRONT



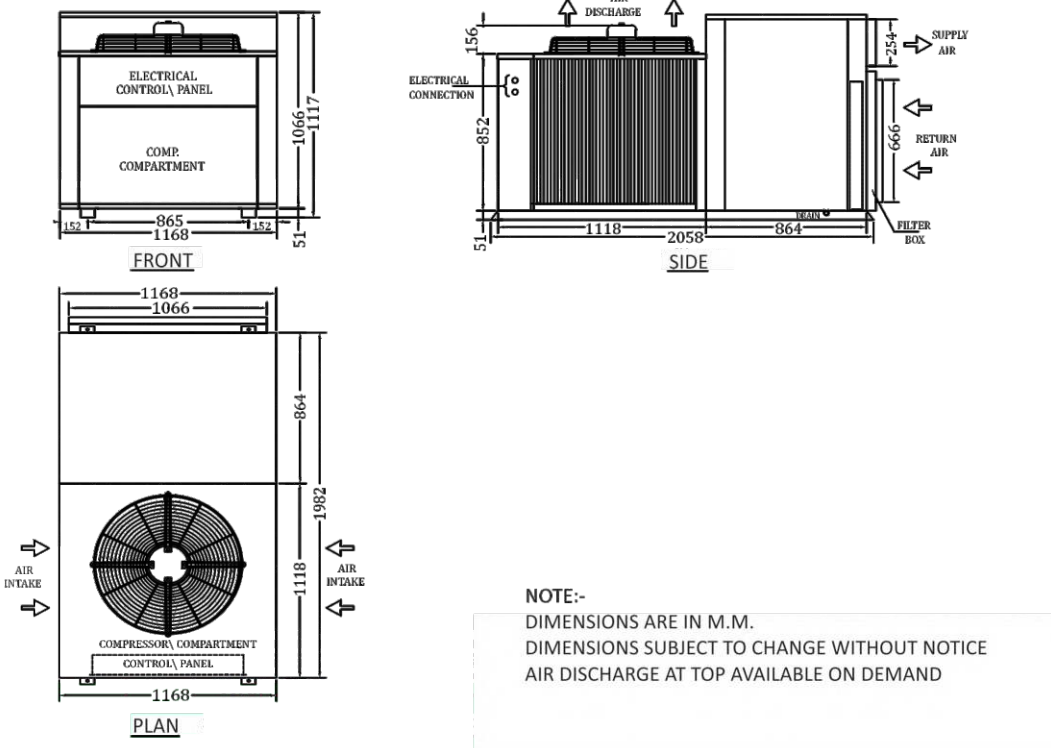
SIDE



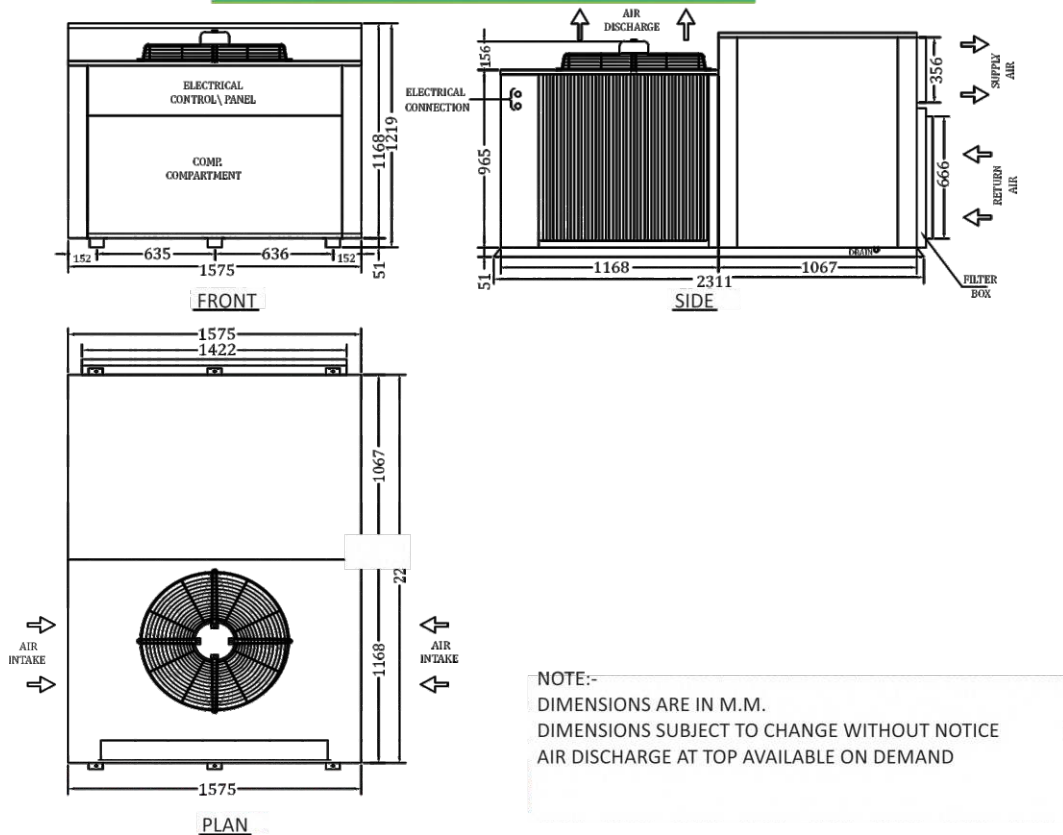
PLAN

NOTE:-
DIMENSIONS ARE IN M.M.
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE
AIR DISCHARGE AT TOP AVAILABLE ON DEMAND

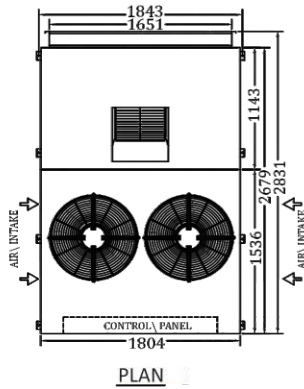
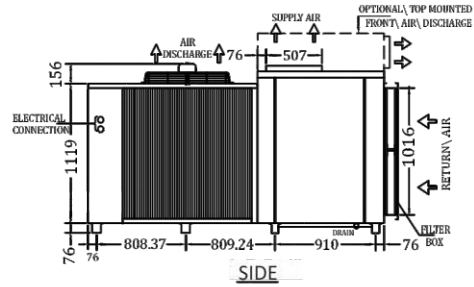
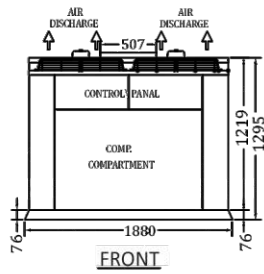
MODEL-ASC 100D-S, 120D-S (RC)



MODEL-ASC 160S-S, 160D-S (RC)

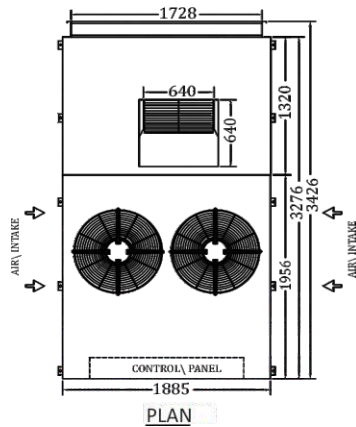
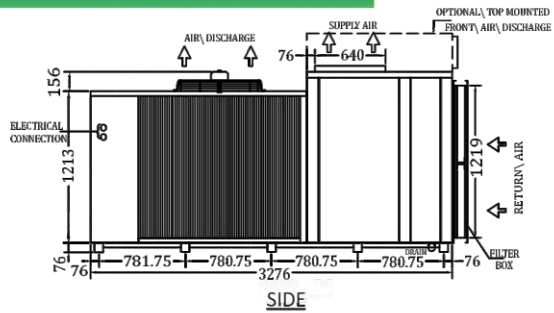
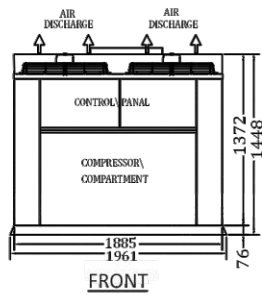


MODEL-ASC 200D-S, 240D-S (RC)



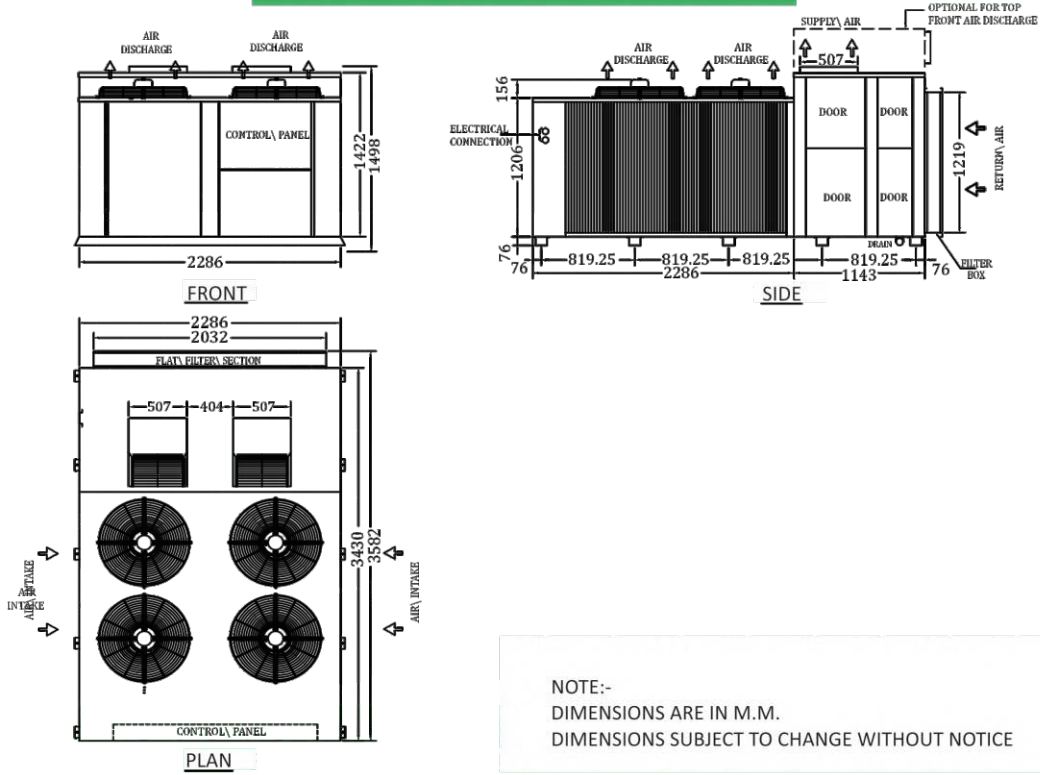
NOTE:-
DIMENSIONS ARE IN M.M.
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE

MODEL-ASC 320D-S (RC)

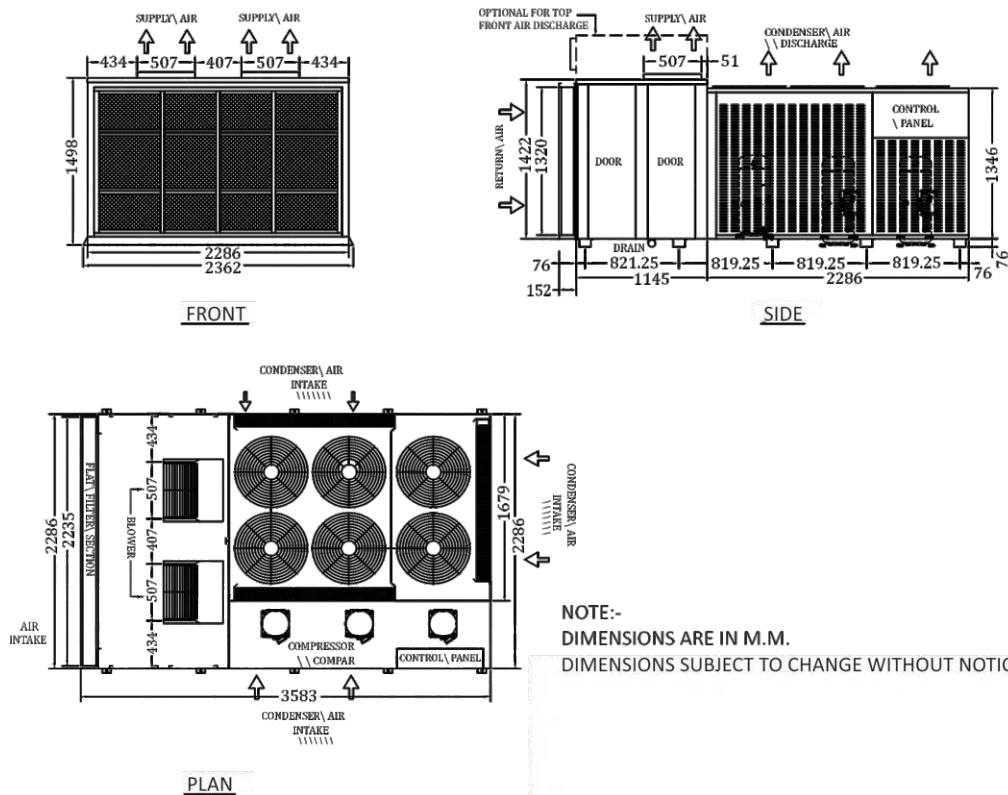


NOTE:-
DIMENSIONS ARE IN M.M.
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE

MODEL-ASC 370D-S, 420D-S (RC)



MODEL-ASC 480T-S (RC)



Dimensional Data

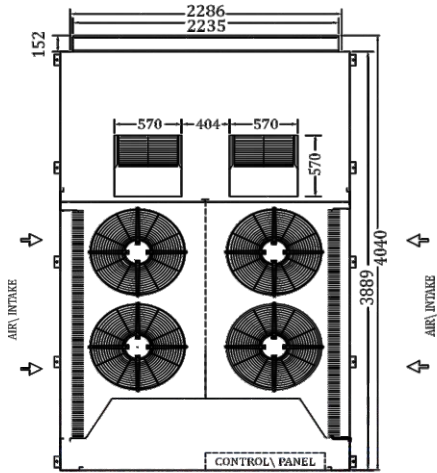
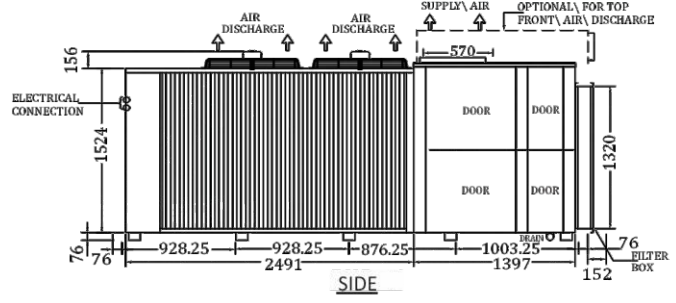
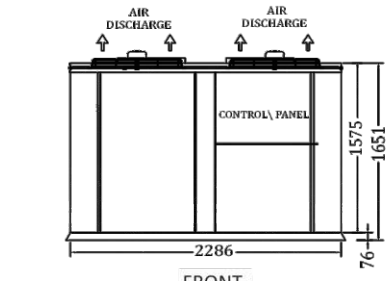
ASC Standard Model



ASC MODELS SERIES

STANDARD UNIT

MODEL-ASC 500D-S (RC)



NOTE:-
 DIMENSIONS ARE IN M.M.
 DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE

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 (=10 000 sq. cm)	1.1960 sq. yards
1 are (=100 sq. metres)	119.60 sq. yards
1 hectare (=100 ares)	2.4711 acres
1 square kilometre (=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.

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