



CLEAN AIR CAN NOT BE BOUGHT, IT CAN BE MADE







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- > Radin Sanat Faraz Company, in addition to producing air conditioning systems, includes: handling units, air washers, air-cooled chillers, water-cooled chillers, cooling towers and fan coils specializing in providing hygienic units for pharmaceutical, food, instrumentation industries, hospitals and etc.
- > With respect to meet quality and standard requirements we have succeeded in obtaining ISO, CE, GMP certification.
- Radin Sanat Fraz Company in addition of providing engineering services and producing hygienic units Collaboration with specialized teams submit required document for validation such as DQ,IQ,OQ and PQ.
- In addition to supplying the domestic market, Radin Sanat Faraz Company has been able to export its products to neighboring countries such as Iraq, Afghanistan, Turkey, Azerbaijan and Turkmenistan, and we are constantly striving to increase the quality and technology of our products to become a reputable and international brand.







HYGIENIC

AIR HANDLING UNIT FEATURES

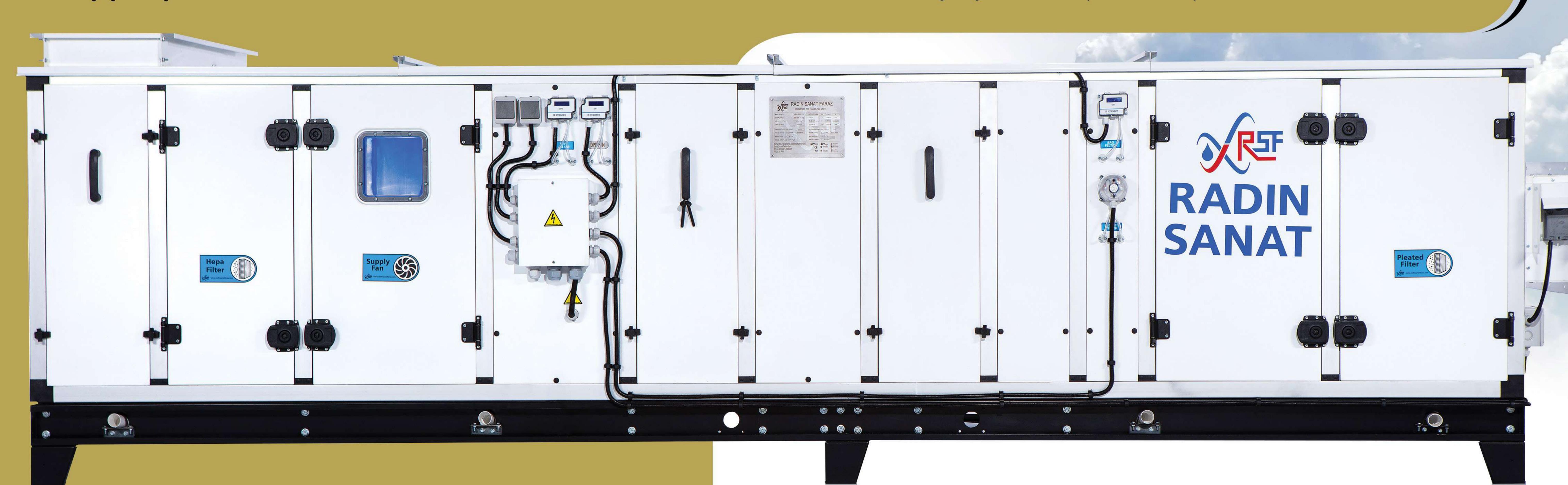
- Air flow rate from 1200 to 47000 cfm in 19 sizes
- Single zone and multi zone types in horizontal and vertical styles
- Modular type with easy assembling
- Unit structure is extruded aluminum profile with curve corners and best airtight
- Panels are double skin with 50 mm Rockwool/polyurethane insulation
- All internal surfaces made by stainless steel sheets
- Equipped with plug fan that installed with electromotor on vibration isolator
- Using water cooled / DX (Direct expansion) /hot water/ steam / electrical coils is possible
- > All coils made by anti-corrosion coated fins
- Installation droplet eliminator with aluminum blades is possible
- Coils situated on stainless steel condensate pan with especially hygienic type drain
- > Equipped with aluminum washable filter, pleated filter, bag filter and hepa filter according to ASHRAE 52-76 and EUROVENT4/5
- Installation all types of dehumidifier and humidifier are available
- All commitment in EN1886, EN13053 and VDI6022 standards observed during design and producing units
- Certified by CE, GMP and VDI6022
- > Equipped with closable special steel drain
- Double skin Sight glass and light installed in essential sections

THE BEATING

HEART OF CLEAN ROOM



- Suitable for indoor and outdoor installation
- Installation all types of heat recovery system is available
- Equipped with opposed and Double side airfoil blade damper for fresh, return and supply air
- Unit can be equipped with control system
- Manufacturing for higher air flow rate and special dimensions are possible



		Coolir	ng Coil	Heat	ing Coil
SERIE	Air Flow Rate (CFM)	4 Rows/ 8FPI	6 Rows/8FPI	l 1 Row/ 8FPI	l 2 Rows/8FPI
	(CIM)	Capacity Lvg. Air (MBH) DB°F/WB°F	Capacity Lvg. Air (MBH) DB°F/WB°F		Capacity Lvg. Air (MBH) DB°F
1500	1200 To 1600	19.6 67.3/60.5	29 61.6/58.5	32.4 81.4	59 101
2000	1700 To 2400	28.6 67.2/60.4	44 60.8/58.2	51.5 83.8	93 105
3000	2400 To 3000	38.6 66.7/60.3	71 58.2/56.5	72.6 86	131 109
4000	3000 To 4000	51.2 66.8/60.3	103 57.3/55.7	97 86	196 116
5000	4000 To 5500	90.7 63.4/59	157 56.3/55.8	133.8 86.1	243 110
7000	5400 To 7200	125.4 62.8/58.7	211 56/54.5	178 86.5	321 111
8500	l 7000 To 9000	179.3 61.5/57.8	282 55.2/53.7	227.5 87.2	410 112
10000	8800 To 10400	222 60.9/57.3	339 54.6/53.3	269 87.9	484 113
12000	l 10200 To 13000	280.3 60.7/57	422 54.6/53.1	326.8 87.5	l 590 l 113
15000	l 12800 To 15400	350.5 60.3/56.8	519 54.2/52.8	401.8 88	722 113
17500	15300 To 18400	451.7 59.6/56.2	640 53.8/52.4	l 492.2 l 88.9	l 881 115
20000	l 18200 To 20700	525.6 59/55.8	732 53.3/52	565.1 89.9	l 1005 l 116
22500	l 20500 To 23500	624.6 58.7/55.5	854 53.1/51.8	l 653.2 l 90.1	1161 117
25000	23000 To 26000	718 58.3/55.1	966 52.8/51.5	731.6 90.5	1300 118
30000	25600 To 30500	823.8 58.4/55.1	l 1114 l 52.8/51.5	l 837 l 90.2	l 1490 l 117
33000	30000 To 35000	751.2 60.7/57.3	1144 54.6/53.2	917.6 88.3	1644 114
35000	34500 To 38000	807.4 60.9/57.4	1244 54.6/53.2	989.3 88.1	1775 113
40000	37500 To 42000	940 60.1/56.8	1392 54.1/52.7	1097 88.9	1960 115
45000	l 41000 To 47000	1048 60.1/56.8	1567 54/52.7	1236 89	l 2206 l 115

PLUG FAN SPECIFICATION-AIRFOIL BLADE

1	SERIE	1500)	2000	3	000	4	.000	5	000	700	00	850	0	10000	O	12000	15	000	175	00	200	00	2250	0 2	25000	0 3	30000) 3	3000	0 3	5000) 4	0000	45	5000
	Fan Size	310	35	50/400	4	400	4	450	;	500	56	0	630)	710	7	'10/800	0 9	00	100	00	100	00	1000)	900		900	9	900	I	900] 1	000	1	000
	No. of Fans	1	Ţ	1	1	1		1]	1	1		1		1	I	1		1	1 1		1	I	1	1	2	ĺ	2	I	2	I	2	I	2		2
	Motor Power (kw)	1.1	:	2.2/3	1	4		5.5	1	7.5	1		15	1	22	1	22/15	18	8.5	30)	30)	30	1	18.5	1	22	1	22		22		30		30

- > Elevation above sea level: 3980 Ft
- > Summer Condition: dry bulb temperature = 80 °F, wet bulb temperature = 64.5°F
- Winter Condition: dry bulb temperature = 59 °F
- Cooling coil water temperature: inlet = 45°F, outlet = 55°F
- > Heating coil water temperature: inlet = 180°F, outlet = 160°F
- > All the fan sizes are calculated for $500{\sim}550$ FPM face and 6 in.wg static pressure
- > Lvg. Air = leaving air temperature $\,/\,$ db = dry bulb temperature $\,/\,$ wb = wet bulb temperature

DEHUMIDIFIER

AIR HANDLING UNIT FEATURES



DEHUMIDIFIER AIR HANDLING UNIT

- This unit has all specification of hygienic units
- Air flow rate from 1200 to 30500 CFM in 15 sizes.
- Ability to achieve humidity less than 5%.
- Modular type with easy assembling
- This model complies with the hygiene standard EN 13779 for comfort ventilation
- Equipped with desiccant wheel in casing with motor and belt
- Equipped with precooling, cooling, heating and reactivation coil
- Using of DX (Direct expansion) and chilled water is possible for cooling
- Using of hot water, steam and electrical coil is possible for heating.
- Equipped with exhaust fan for reactivation area.
- The desiccant wheel is available in: aluminum / epoxy coated aluminum / silica gel coated aluminum.

 Molecular sieve coated aluminum / a mix of non- coated and silica gel coated aluminum.
- The casing of desiccant wheel is made of galvanized steel
- Desiccant wheels are supplied with a special adapted ball bearing
- Air leakage between wheel and casing is minimized through a brush sealant
- The brush sealant mounted on the casing allows for easy adjustment and provides a longer life time. Also the two air streams are separated with brush sealant
- Standard drive is constant speed and also variable speed is available
- Recommended and maximum pressure drop: Recommended 100-200 Pa, maximum allowed 300 Pa
- Air temperature limits: minimum -40°C and maximum +65°C





SERIE	1500		2000		3000		4000	ý	5000		7000		8500		10000	9	12000		15000		17500		20000		22500		25000	影響	30000
Air Flow Rate (CFM)	1200 To 1700		1700 To 2400		2400 To 3000		3000 To 4000	1	4000 To 5500		5400 To 7200		7000 To 9000	J	8800 To 10400	1	10200 To 13000		12800 To 15400		15300 To 18400		18200 To 20700		20500 To 23500		23000 To 26000		25600 To 30500
Fan Size	310		350	i i	400	j	450		500	I	560	I	630		710	ľ	800	13	900		1000		1000	Î	1000	I	900	ľ	900
No. of Fans	1	I	1	j		Î	1	I	1	Ĭ	1	I	1	Ī	1	I	1	ij	1	Í	Ĩ	1	1	j	1	I	2	Ī	2
Motor Power (kw)	1.1	120	2.2		4	I	5.5	I	7.5	I	11	1	15		22	ľ	22	(F)	18.5	110	30		30		30	I	18.5		22

Elevation above sea level: 3980 Ft

All the fan sizes are calculated for $500{\sim}550$ FPM face and 6 in.wg static pressure







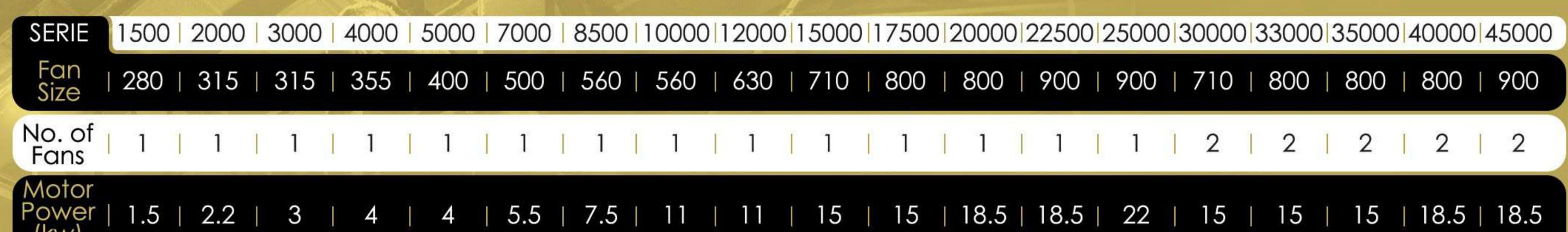
- Air flow rate from 1200 to 47000 CFM in 19 sizes
- Single zone type in horizontal and vertical styles
- Modular type with easy assembling
- Unit structure is extruded aluminum profile with best airtight
- Panels are double skin with 25 or 50 mm Rockwool/polyurethane insulation
- All bodies made by galvanized steel sheets
- Both Forward and backward fan are available
- Using water cooled / DX / hot water / steam / electrical coils is possible
- Aluminum and copper fins are available
- Installation droplet eliminator from polypropylene or galvanized steel is possible
- Coils situated on condensate pan with drain

- Equipped with aluminum washable filter. other special filters such as pleated and bag filters can installed
- Installation all types of dehumidifier and humidifiers are available
- Equipped with Sight glass and light upon request
- Suitable for indoor and outdoor installation
- Installation all types of heat recovery system is possible
- Equipped with opposed blade damper for fresh, return and supply air
- Unit can equipped with control system
- Manufacturing for higher air flow rate and special dimensions is possible

		Cooling Coil	Heating Coil
SERIE	Air Flow Rate (CFM)	4 Rows/8FPI 6 Rows/8FPI	1 Row/ 8FPI 2 Rows/ 8FPI
		Capacity Lvg. Air Capacity Lvg. Air (MBH) DB°F/WB°F (MBH) DB°F/WB°F	Capacity Lvg. Air Capacity Lvg. Air (MBH) DB°F (MBH) DB°F
1500	1200 To 1600	19.6 67.3/60.5 29 61.6/58.5	32.4 81.4 59 101
2000	1700 To 2400	28.6 67.2/60.4 44 60.8/58.2	51.5 83.8 93 105
3000	2400 To 3000	38.6 66.7/60.3 71 58.2/56.5	72.6 86 131 109
4000	3000 To 4000	51.2 66.8/60.3 103 57.3/55.7	97 86 196 116
5000	4000 To 5500	90.7 63.4/59 157 56.3/55.8	133.8 86.1 243 110
7000	5400 To 7200	125.4 62.8/58.7 211 56/54.5	178 86.5 321 111
8500	7000 To 9000	179.3 61.5/57.8 282 55.2/53.7	227.5 87.2 410 112
10000	8800 To 10400	222 60.9/57.3 339 54.6/53.3	269 87.9 484 113
12000	10200 To 13000	280.3 60.7/57 422 54.6/53.1	326.8 87.5 590 113
15000	12800 To 15400	350.5 60.3/56.8 519 54.2/52.8	401.8 88 722 113
17500	15300 To 18400	451.7 59.6/56.2 640 53.8/52.4	492.2 88.9 881 115
20000	18200 To 20700	525.6 59/55.8 732 53.3/52	565.1 89.9 1005 116
22500	20500 To 23500	624.6 58.7/55.5 854 53.1/51.8	653.2 90.1 1161 117
25000	23000 To 26000 I	718 58.3/55.1 966 52.8/51.5	731.6 90.5 1300 118
30000	25600 To 30500	823.8 58.4/55.1 1114 52.8/51.5	837 90.2 1490 117
33000	30000 To 35000	751.2 60.7/57.3 1144 54.6/53.2	917.6 88.3 1644 114
35000	34500 To 38000	807.4 60.9/57.4 1244 54.6/53.2	989.3 88.1 1775 113
40000	37500 To 42000	940 60.1/56.8 1392 54.1/52.7	1097 88.9 1960 115
45000	41000 To 47000	1048 60.1/56.8 1567 54/52.7	1236 89 2206 115

11





- Elevation above sea level: 3980 Ft
- Summer Condition: dry bulb temperature = 80 °F, wet bulb temperature = 64.5°F
- Winter Condition: dry bulb temperature = 59 °F
- Cooling coil water temperature: inlet $= 45 \, ^{\circ}\text{F}$, outlet $= 55 \, ^{\circ}\text{F}$
- $^{>}$ Heating coil water temperature: inlet = $180^{\circ}F$, outlet = $160^{\circ}F$
- All the fan sizes are calculated for 500 FPM face velocity, 4 in.W.g total static pressure for backward fan and 2 in.W.g total static pressure for forward fan
- \rightarrow Lvg. Air = leaving air temperature / db = dry bulb temperature / wb = wet bulb temperature





- Air flow rate from 1200 to 30500 CFM in 15 sizes
- multi zone in horizontal style
- Modular type with easy assembling
- Unit structure is extruded aluminum profile with best airtight
- Panels are double skin with 25 or 50 mm rock wool/polyurethane insulation
- All external surface made by galvanized steel sheets
- Plug fan, Forward curve and backward curve fan are available
- Using water cooled / DX (Direct expansion) / hot water / steam / electrical coils is possible
- Aluminum and copper fins are available
- Installation droplet eliminator with aluminum blades is possible
- Coils situated on condensate pan with drain
- Equipped with aluminum washable filter, and other special filters such as pleated and bag filters can be installed
- Installation all types of humidifiers are available
- Equipped with Sight glass and light
- Suitable for indoor and outdoor installation
- Equipped with opposed blade damper for fresh, return and supply air
- Unit can equipped with control system
- Manufacturing for higher air flow rate and special dimensions is possible
- Number of zones are depended on project design and width of unit



							Cooli	ng	Coil						Heati	ng	Coil		
	SERIE	1	Air Flow Rate (CFM)		4 R	ow	/s/ 8FPI	1	6 Rc	ow.	s/8FPI		1 Roy	w/ 8	BFPI	1	2 Row	s/ 8	3FPI
			(CIM)	(Capaci [*] (MBH)		Lvg. Air DB°F/WB°F		apacity (MBH)		Lvg. Air DB°F/WB°F	С	apacity (MBH)	/ L	.vg. Air DB°F		apacity (MBH)		vg. Air DB°F
	1500	J	1200 To 1700	ļ	19.6		67.3/60.5	ļ	29	S.	61.6/58.5	ļ	32.4	Ţ	81.4	63	38.7	1	107
	2000		1700 To 2400		28.6		67.2/60.4	Î	44		60.8/58.2		51.5	1	83.8		62		111
The state of the s	3000	1	2400 To 3000	1	38.6	ľ	66.7/60.3		71		58.2/56.5	ľ	72.6	1	86	ľ	88		114
	4000		3000 To 4000	I	51.2		66.8/60.3		103		57.3/55.7	Ţ	97	1	86		121		115
	5000	1	4000 To 5500	1	90.7	ľ	63.4/59	1	157	ß e	56.3/55.8	ľ	133.8	1	86.1		170	NA STATE OF THE ST	116
9	7000		5400 To 7200		125.4		62.8/58.7		211		56/54.5	I	178	1	86.5		228		117
	9000]	7000 To 9000	1	179.3	ţ	61.5/57.8	ľ	282	ja S	55.2/53.7	#3 #8	227.5	1	87.2	Ď	289		117
9	10000		8800 To 10400		222		60.9/57.3		339		54.6/53.3		269	1	87.9		339		118
	13000]	10200 To 13000	1	280.3	ľ	60.7/57		422	Ĉ	54.6/53.1	ţ	326.8	1	87.5	ľ	420	8	118
	15000		12800 To 15400	1	350.5		60.3/56.8		519	17.00	54.2/52.8		401.8		88		511		119
	18000	Ì	15300 To 18400	I I	451.7		59.6/56.2	\$0 	640		53.8/52.4	St L	492.2		88.9		623		119
	20000		18200 To 20700		525.6		59/55.8		732		53.3/52		565.1		89.9		705		120
	23000	Ĩ	20500 To 23400	Î	624.6	Î	58.7/55.5	Î	854	ř	53.1/51.8	Î	653.2	Ï	90.1	Ĭ	817 l		120
9	26000		23000 To 26000		718		58.3/55.1		966		52.8/51.5		731.6		90.5		927		121
	30000]	25600 To 30500	I	823.8		58.4/55.1	16	1114	8	52.8/51.5	ľ	837	I	90.2	Ĭ.	1050 l		121

AIR HANDLING UNIT FEATURES

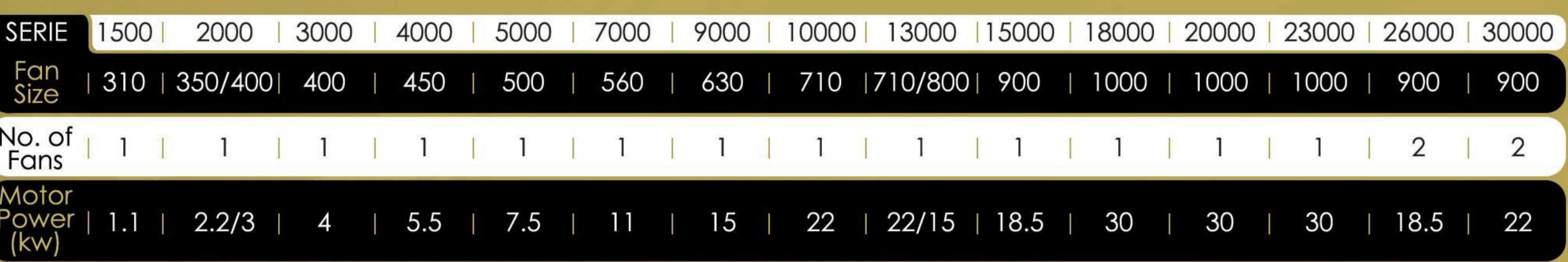


CONDITIONS, FOR DIFFERENT USES

DIFFERENT

- > Summer Condition: dry bulb temperature = 80 °F, wet bulb temperature = 64.5°F
- Winter Condition: dry bulb temperature = 59 °F
- Cooling coil water temperature: inlet $= 45^{\circ}F$, outlet $= 55^{\circ}F$
- Heating coil water temperature: inlet = 180°F, outlet=160°F
- All the fan sizes are calculated for 500~550 FPM face
- \rightarrow Lvg. Air = leaving air temperature / db = dry bulb temperature / wb = wet bulb temperature

PLUG FAN SPECIFACATION-AIR FOIL BLADE







- Production in three classes: 4, 6 and 8.
- Air flow rate from 1600 to 49500 CFM in 15 sizes.
- Modular type with easy assembling.
- Air handling structure (air inlet and fan section) is extruded aluminum profile with best airtight.
- Air washer section coated with epoxy for preventing of corrosion.
- Walkway is installed in air washer section for easy access

- Panels are double skin with 25 or 50 mm rock wool/polyurethane / polystyrene insulation.
- All bodies made by galvanized or Aluzinc steel sheets.
- Both Forward and backward fan are available.
- Using Hot water / Steam / Electrical elements is possible.
- Possibility of installing cooling coil for pre-cooling.
- Droplet eliminator from aluminum blade.
- Equipped with aluminum washable filter, and other special filters such as pleated and bag filters can installed
- Equipped with Sight glass and light
- Suitable for indoor and outdoor installation
- Equipped with opposed blade damper for fresh and return air
- Unit can equipped with control system
- Manufacturing for higher air flow rate and special dimensions is possible
- Suitable for using in residential and industrial area.
- Possibility to install pump inside or outside the air washer

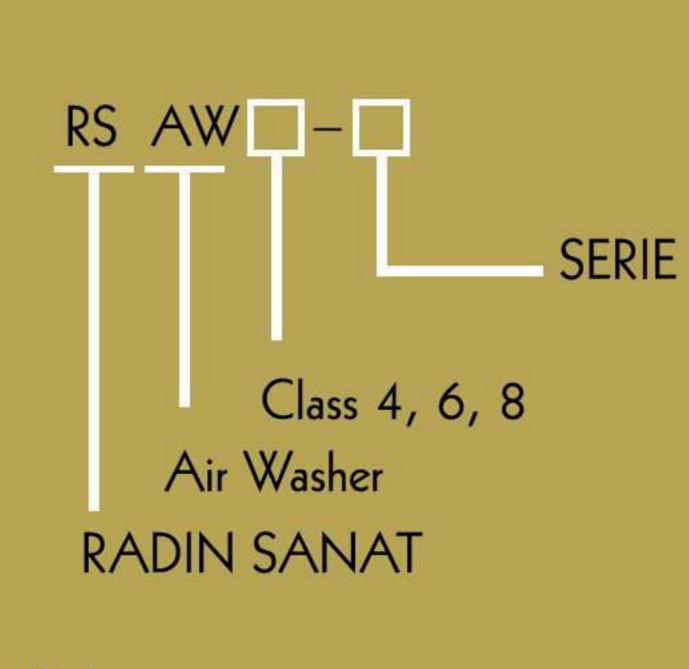
						Heat	inç	g Coil				W	ater F	lov	v		Pu	mp F	leac	
SERIE		Air Flow Rate (CFM)		1 Rov	vs/	8FPI	1	2 Ro	ws/	8FPI			te (G					(ft.		
			(Capacity (MBH)		Lvg. Air DB°F		Capacity (MBH)		Lvg. Air DB°F		4	6		8	4		6	8	3
2000	I	1600 To 2200	1	54.5	I	96	t	88.5	Pi A	112	1	11	15	8 1 8	22	59		59	5	9
3000	1	2200 To 3400	1	76.5	1	94	ı	130	1	112	I	15	22	1	30	60	I	60	1 6	0
5000	Ţ	3400 To 5500	1	147	1	98	1	247		119	I	24	35	1	48	60		60	6	0
7000	I	5500 To 7700	1	206	1	98	1	350	ľ	118	1	35	46	1	70	61		61	6	1
10000	545 2002	7500 To 11000	1	306	1	99	I	512		119	I	44	62	141	97	62		62	6	2
12500	I	10000 To 13500	1	388	Ī	99	1	651	I	120	1	59	79	1	119	62	ľ	62	6	2
15000	ara 2013	12000 To 16500	1	454	1	99	I	761		119	I	63	95	1	127	63		63	6	3
17500	1	14000 To 19300	1	533	1	99	Ī	898	I	120	Ì	70	101	1	143	64	ľ	64	6	4
20000	I	16000 To 22000	1	632	I	100	I	1055		121	1	79	119	1	158	64		64	۱ 6	4
22500	1	18000 To 24500	1	702	I	100	I	1190	1	121	I	97	143	I	191	64	I	64	6	4
25000	0990	20000 To 27500	Ţ	761	į	99		1278	- S	119	ļ	119	158	I	238	62	45	62	ا 6	2
30000	I	24000 To 33000	l	892	Ì	98	Ī	1502	ĺ	118	Ĩ	126	190	Ι	254	63	ĺ	63	6	3
35000	Ī	28000 To 38500	Ĭ	1056	Ĭ	99	Ĭ	1780		119	Ï	140	202	Ī	286	64		64	ا 6	4
40000	Ī	32000 To 44000	Ī	1240	Ī	100	Ĭ	2078	Ī	120	Ì	158	238		316	64		64	1 6	4
45000	5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	36000 To 49500	1	1407	I	100	I	2352	19	121	1	194	286	1	382	64	Î,	64	6	4

Air washer class 4 is single bank and Max. 55% Sat. Eff. At 500 FPM.

Air washer class 6 is single bank and Max. 75% Sat. Eff. At 500 FPM.

Air washer class 8 is single bank and Max. 95% Sat. Eff. At 500 FPM.

1



BACKWARD FAN SPECIFICATION

FORWARD FAN SPECIFICATION

SERIE	1	2000	1	3000	1	5000		7000		0000	1	12500		5000	I	17500		20000	1	22500	1	25000	-	30000	1	35000	2	40000	1	45000
Fan Size	I	355	1	400		450		500		560	Ī	630	I	710	Ī	800	I	800	Ī	900	I	630	I	710	I	800	I	800	1	900
No. of Fans	1	1	1	1		1	() ()	1	67 17.	1	E I	1	ľ	1	1	⁵³ 1	1	1	I	1	1	2	Ţ	2	1	2	1	2	1	2
Motor Power (HP)		2]	3	1	5	I	5		7.5	1	10		15	1	15	I	15	1	20	I	10	I	15	1	15		15	1	20

SERIE	200	0	3000		5000		7000		10000	l	12500	1	15000	1	17500		20000	1	22500	2	25000] -	30000)	35000		40000		45000
Fan Size	280)	280	I	355		400		450	I	560	I	630		710	I	710	I	800	I	560	I	630	Ţ	710	I	710	Ţ	800
No. of Fans	1	94 74	1		1	ľ	1	17.	1	ľ	1	Į,	1	1	1	I	2]	1	1		2	1	2	I	2		2	1	2
Motor Power (HP)	2		3		5		7.5		10		15		15	1	15	I	20	I	20	1	15	1	15	1	15	1	20	1	20





- Air flow rate from 1200 to 30500 CFM in 15 sizes
- Single zone type in horizontal style
- Modular type with easy assembling
- Temperature efficiencies range from 50% up till 80% depending on design
- Unit structure is extruded aluminum profile with best airtight
- Panels are double skin with 25 or 50 mm rock wool/polyurethane insulation
- All bodies made by galvanized steel sheets
- Forward, backward and also plug fan are available
- Using water cooled / DX /hot water/ steam / electrical coils are possible
- Aluminum and anti-corrosion coated aluminum
- Installation aluminum blades droplet eliminator is possible
- There is condensate pan with drain under coils
- Equipped with aluminum washable filter, and other special filters such as pleated and bag filters can also be installed
- Installation all types of heat recovery system are available such as cross flow, cross counter flow, run-around coil and heat recovery wheel
- Equipped with Sight glass and light
- Suitable for indoor and outdoor installation
- Equipped with opposed blade damper for fresh and return air
- Unit can be equipped with control system
- Manufacturing for more air flow rate and special dimensions is possible

RS	AH	R + S : STANDARD
		H : HYGIENIC
		HEAT RECOVERY
	SEF	RIE
	AIR HA	ANDLING UNIT
RAD	IN SAI	NAT

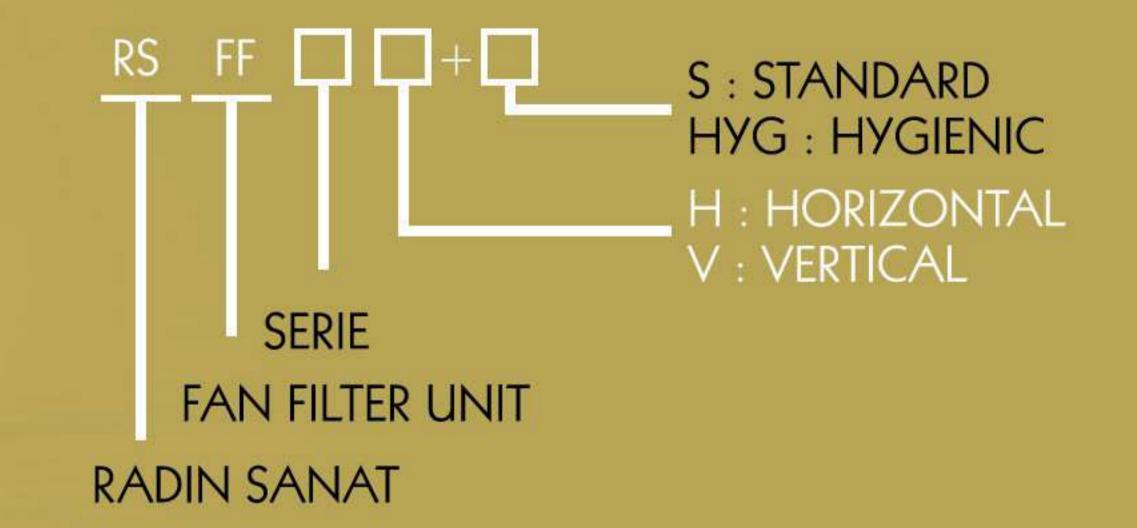
						Cooli	ng (Coil						Heati	ng	Coil		
SERIE		Air Flow Ra (CFM)	te	4 R	ow	s/8FPI		6 F	Row	/s/ 8FPI		1 Rov	v/ 8	BFPI	1	2 Ro	ws/	8FPI
		()		Capacit (MBH)	У	Lvg. Air DB°F/WB°F		apaci (MBH)	ty	Lvg. Air DB°F/WB°F	С	apacity (MBH)	L	vg. Air DB°F		apacit (MBH)	У	Lvg. Air DB°F
1500		1200 To 16	300	19.6		67.3/60.5		29	95 10 10 10 10 10 10 10 10 10 10 10 10 10	61.6/58.5	327 207 207	32.4	Ĭ	81.4	F	59	Î	101
2000		1700 To 24	400	28.6	Î	67.2/60.4	I	44		60.8/58.2	I	51.5	1	83.8	I	93	I	105
3000		2400 To 30	000	38.6	Î	66.7/60.3	\$5.5 27.5	71	24/3 107 107 107 107 107 107 107 107 107 107	58.2/56.5	\$55 255 255	72.6	Ĭ	86		131	Ĭ	109
4000		3000 To 40	000	51.2	Ĩ	66.8/60.3	Į	103		57.3/55.7	Ī	97	1	86	1	196	Ĭ	116
5000		4000 To 55	500	90.7		63.4/59	St I	157	34-0 100 100 100 100 100	56.3/55.8	\$1 1 35	133.8	Ĭ	86.1		243	Ĭ	110
7000		5400 To 72	200	125.4	ĺ	62.8/58.7	I	211	į	56/54.5	Ĭ	178	l	86.5	ĺ	321	Ì	111
8500		7000 To 90	000	179.3	Ĺ	61.5/57.8		282		55.2/53.7		227.5	j	87.2	Ĺ	410	Ĭ	112
10000		8800 To 10	400	222	Î	60.9/57.3	I	339		54.6/53.3	I	269	l	87.9	Ī	484	I	113
12000		10200 To 13	3000	280.3	ĺ	60.7/57	## E	422		54.6/53.1	Ĭ	326.8	Ĭ	87.5		590	Ĭ	113
15000	1	12800 To 15	5400	350.5		60.3/56.8	I	519		54.2/52.8	Î	401.8	Ţ	88	I	722	Ţ	113
17500		15300 To 18	3400	451.7	Ï	59.6/56.2	Ĭ	640	Í	53.8/52.4	Ĩ	492.2	T T	88.9	Ï	881	Ϊ	115
20000		18200 To 20	700	525.6	I	59/55.8	I	732		53.3/52	Î	565.1	1	89.9	1	1005	1	116
22500		20500 To 23	3500	624.6	ja La	58.7/55.5	Ī	854	ľ	53.1/51.8	8	653.2	I	90.1	ľ	1161	I	117
25000		23000 To 26	3000	718		58.3/55.1	I	966		52.8/51.5	1	731.6		90.5	Ţ	1300	I	118
30000		25600 To 30	0500	823.8	ľ	58.4/55.1	ľ	1114		52.8/51.5		837	1	90.2		1490	1	117

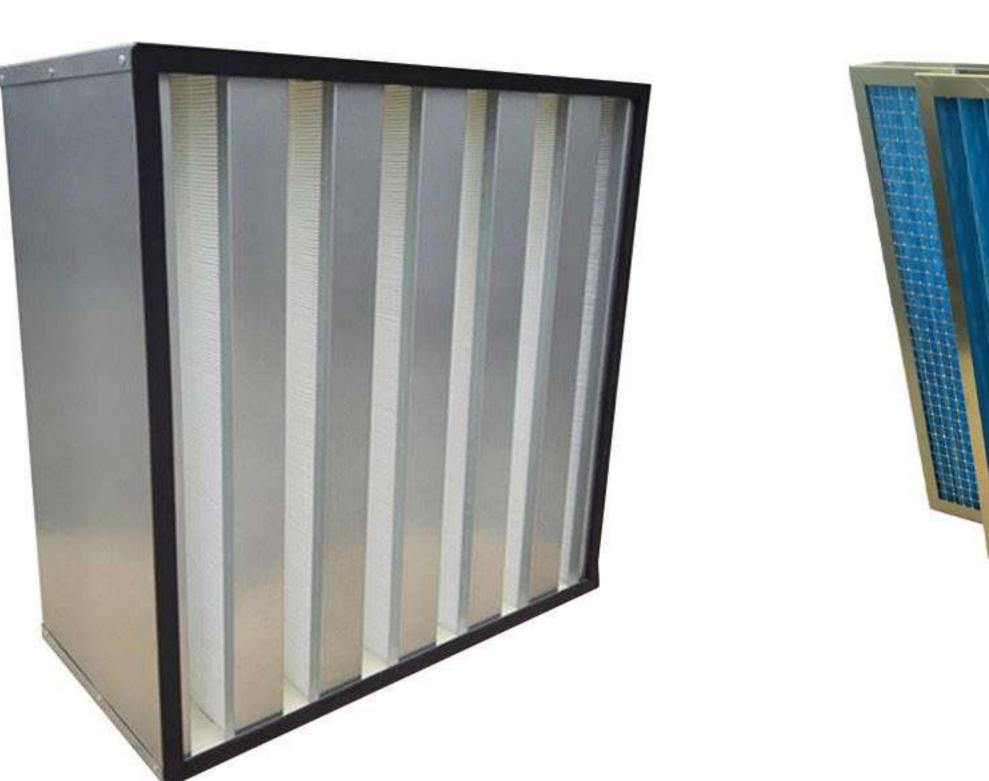




FAN FILTER UNIT FEATURES

- Air flow rate from 1700 to 28000 CFM in 11 sizes
- Possibility to construction in both horizontal and vertical types
- Using thick extrude aluminum profile for unit structure in two types hygienic and normal
- Double skin panels with possibility to made by galvanized or stainless steel sheets
- 1 or 2 inches' rock wool/polyurethane insulation for panels according on request
- Equipped with closable special drain.
- Equipped with sight glass and light
- Equipped with airfoil opposed blade damper for inlet or outlet
- Possibility to using aluminum washable filter and other special filters such as pleated, bag Hepa and chemical filters
- Possibility to using forward, backward, airfoil and plug fan
- Possibility to manufacturing for upper air flow rate from the standard models and special dimensions
- Best airtight for the filter boxes
- Using ASHRAE 52-76 and EUROVENT 415 standards to select filters
- Possibility to install control system
- Possibility to install sand trap on request when needed









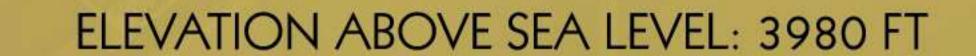
Bag and pleated filter specifications Hepa filter specification Air Flow Rate SERIE Area ft² | 59.2*59.2 | 59.2*28.7 (cm) (cm) Area ft² | 59.2*59.2 | 59.2*28.7 (cm) (cm) Range 2000 1700-2700 3000 2300-3800 5000 3400-5400 7000 4600-7600 10000 6900-11400 34.83 12500 8700-14200 29.01 46.44 15000 10500-16200 34.83 12200-19000 17500 20000 14000-21600 58.12 46.44 16300-24300 54.16 22500 81.22 25000 17500-28000 58.12

FAN FILTER UNIT

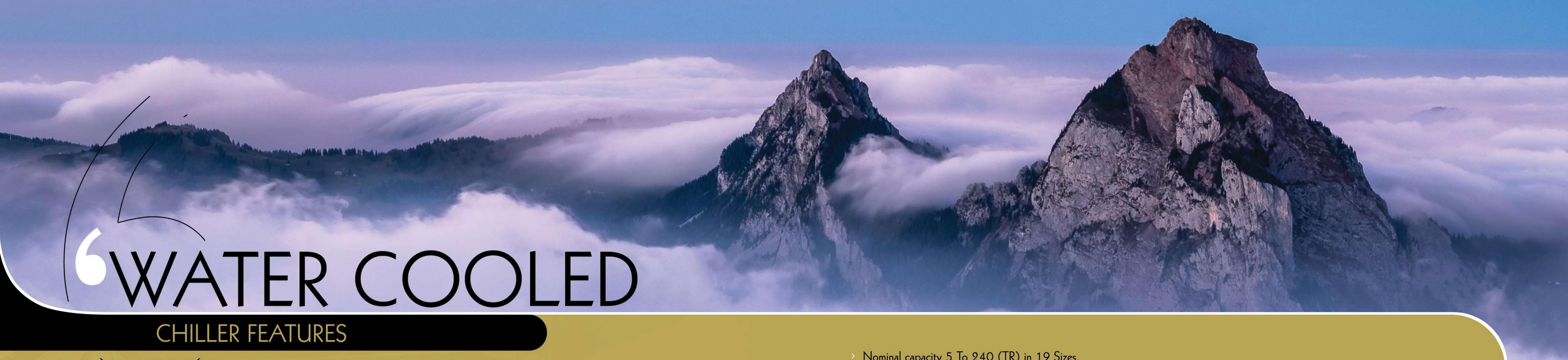
- > The efficiency of pleated filters is Eu3, Eu4 with 50 or 100mm depths.
- > The efficiency of bag filters is Eu5 to Eu9 with 360 or 635 depths.
- > The efficiency of hepa filters is Eu10 to Eu14 with 150 and 299mm depths.

PLUG FAN SPECIFACATION-AIR FOIL BLADE

SERIE	2000	1	3000	1	5000	I	7000	I	10000	1	12500	Ţ	15000	1	17500	I.	20000)	22500	I	25000
Fan Size	350		400		500	I	630	Ι	710	I	800	I	800	Ī	900	I	1000	I	1000	I	800
No. of Fans	1	1	1	1	1	Į,	1	1	1	1	1	1	1	ľ	1	1	1		1	1	2
Motor Power (kw)	2.2		3	1	5.5	1	7.5	I	11		11	1	15	I	18.5	1	22		30	1	15



ALL FAN SIZES ARE CALCULATED FOR 500~550 FPM FACE AND 4 IN.WG STATIC PRESSURE



- Scroll, Screw and reciprocating types based on request and chiller capacity from the best quality and the most COMPRESSOR famous brands such as (Bitzer, Danfoss, Copeland, ...)
- EVAPORATOR Shell and tube type which designed based on TEMA Standard.
- CONDENSER Shell and tube type which designed based on TEMA Standard.
- All Refrigeration cycle control and safety equipment are used by reputable European brands.
- The Electrical panel of the device includes the power and control parts, all Electrical equipments are used by ELECTRICAL PANEL the best brands. For the device control system, we use controller such as Danfoss or PLC such as Siemens.

- Nominal capacity 5 To 240 (TR) in 19 Sizes.
- R134a/R407c/R410a/R22/....
- Chassis and frame made by steel profile which design and produce in our factory.
- according to the various climatic conditions in Iran, each device is calculated and designed before production
- The capacity announced in the table is common and it is possible to produce other capacities.
- The devices are made in two or four circuits or according to the customers' request.
- The electrical panel of the device is equipped with all protection and safety systems according to IEC standard to increase equipment safety factor.
- Special design with separate circuits according to cooling capacity for decrease energy consumption to minimum in non-peak times
- Equipped with automatic detection fault board with ability to save system's faults in long period of time
- Ability to connect to BMS system
- With the ability to turn ON/OFF and observe the condition of cycle remotely.







WATER COOLED CHILLER

MODEL	Compressor type		A.C.C (MBH)		P.In (Kw)		E.W.F (GPM)		EV.P.d (Ft.Wg)	1	C.W.F (GPM)	1	C.P.d (IN.Wg)
RSCH1-5w	Scroll-Reciprocating	(T)	51.8		3.3	Į.	10.36	j	1.7		11.72		2.7
RSCH1-10w	Scroll-Reciprocating	I	110		6.6		22		2.6		24.6		5.7
RSCH1-20w	Scroll-Reciprocating	Ĭ	210	Ĭ	13.4	Ĭ	42		3	Ĭ	47.6	l	5.7
RSCH2-20w	Scroll-Reciprocating	I	220		13.2		44		-		49.2		-
RSCH2-30w	Scroll-Reciprocating	Î	324	j	20.4		64.8		5.6		73.2	Ĭ	4.8
RSCH2-40w	Scroll-Reciprocating	I	371		24.5		74.2		5.1		90.8		5.6
RSCH2-50w	Scroll-Reciprocating		492	j	32.7		98.4		8	Ĭ	120.8	Ĭ	8.8
RSCH2-60w	Scroll-Reciprocating	I	568		37.6		113.6		12	Ì	139.2	Ì	6.9
RSCH2-70w	Reciprocating	653 I glej	738	j	49.4		147.6	25 63	17.4		181.28	Ĭ	5.0
RSCH2-80w	Reciprocating	I	846		56.6		169.2		16.6		208		4.4
RSCH3-90w	Reciprocating	Ĭ	852		56.3		170.4		12.9		209		6.9
RSCH2-100w	Reciprocating-Screw	I	882		61.4		176.4		13.3		218.3		6
RSCH2-120w	Reciprocating-Screw	TOPA	1106	8	76.2	Ĭ	221.2	\$4.	19.1	Î	273	Î	8.5
RSCH2-140w	Screw	I	1294		92.2		258.8		28		321.7		6.6
RSCH3-150w	Screw	I a	1323	ľ.	92.1	ţ	264.6		16.2	1	327.5	1	6
RSCH2-160w	Screw		1502		104.4		300.4		35.4		371.6		8
RSCH2-180w	Screw	I	1800		119.8	ľ	360		13.7	1	441.7	1	9.9
RSCH2-220w	Screw		2158		144		431.6		16		529.9		14.3
RSCH4-240w	Screw	I	2212	e E	152.4	ľ	442.4		16.6	1	546	1	8.3

- > A.C.C: Actual Cooling Capacity
- P.In: Power Input
- E.W.F: Evaporator Water Flow rate
- C.W.F: Condenser Water Flow rate
- EV.P.d: Evaporator pressure drop
- C.P.d: Condenser pressure drop
- Evaporator Inlet/Outlet: 55/45 °f
- Condenser Inlet/Outlet: 85/95 °f



AIR COOLED CHILLER FEATURES

- Nominal capacity 5 To 240 (TR) in 19 Sizes.
- R134a/R407c/R410a/R22/....
- Chassis and frame made by steel profile which design and produce in our factory.
- according to the various climatic conditions in Iran, each device is calculated and designed before production
- If necessary, the condenser coil is made with anti-corrosion coating.
- The capacity announced in the table is common and it is possible to produce in small capacities as mini chiller as well as larger capacities.
- The devices are made in two or four circuits or according to the customers' request.
- The electrical panel of the device is equipped with all protection and safety systems according to IEC standard to increase equipment's safety factor.
- Special design with separate circuits according to cooling capacity for decrease energy consumption to minimum in non-peak times
- Equipped with automatic detection fault board with ability to save system's faults in long period of time
- Ability to connect to BMS system
- With the ability to turn ON/OFF and observe the condition of cycle remotely.



COMPRESSOR

Scroll, Screw and reciprocating types based on request and chiller capacity from the best quality and the most famous brands such as (Bitzer, Danfoss, Copeland, ...)

EVAPORATOR

Shell and tube type which designed based on TEMA Standard.

CONDENSER

Air cooled condenser made by copper tubes and aluminum fins which coated for corrosion resistance if needed.

FAN

Axial fans with the highest efficiency and the lowest sound from EBM, Zilabeg,

REFRIGERATION CYCLE

All Refrigeration cycle control and safety equipments are used by reputable European brands.

The Electrical panel of the device includes the power and control parts, all electrical equipments are used by the best brands. For the device control system, we use controller such as Danfoss or PLC such as Siemens.

MODEL	Compressor type		A.C.C (MBH)		P.In (Kw)		E.W.F (GPM)		EV.P.d (Ft.Wg)		T.H.R (MBH)
RSCH1-5A	Scroll-Reciprocating		45.6		3.9	312 323	9.12		1.3		56.1
RSCH1-10A	Scroll-Reciprocating		98.2	1	7.9		19.64		2.2		119
RSCH1-20A	Scroll-Reciprocating		188	Ĵ	15.8		37.6		2.4	55 25	230
RSCH2-20A	Scroll-Reciprocating	1	196.4	1	15.8		39.28			Ĩ	238
RSCH2-30A	Scroll-Reciprocating		286	Ĩ	24.2		57.2		4.7	50 20	351
RSCH2-40A	Reciprocating		331.6	1	27.68		66.32		4.2		426
RSCH2-50A	Reciprocating	ĺ	440	Ī	36.72		88		6.8		568
RSCH2-60A	Reciprocating		510	1	42.8		102		11.2		656
RSCH2-70A	Reciprocating		610	Ţ	51.8		122		16.2	57 20 20	786
RSCH2-80A	Reciprocating	[760		64		152		15.7	1	978
RSCH3-90A	Reciprocating	ľ	765	Ť	64.2	Ĭ	153		11	in the second	984
RSCH2-100A	Reciprocating-Screw		772		72.2		154.4		10.5		1018.4
RSCH2-120A	Reciprocating-Screw	. [970	İ	89.6	1	194	(f)	15.6		1275.8
RSCH2-140A	Screw		1118		107.4		223.6		21.5		1484.5
RSCH3-150A	Screw	Ĭ	1158	I	108.3) 1	231.6		12.8		1527.6
RSCH2-160A	Screw		1290		120.6		258		27.5		1701.6
RSCH2-180A	Screw	Ĭ	1566	Ĭ	139.2) 	313.2		11.5	ĺ	2041
RSCH2-220A	Screw	I	1856	Ī	167.2		371.2		11.7		2426.6
RSCH4-240A	Screw	Ĭ	1940	Ĭ	179.2		388		12.8		2551.6

A.C.C: Actual Cooling Capacity

ELECTRICAL PANEL

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P.In: Power Input

E.W.F: Evaporator Water Flow rate

EV.P.d: Evaporator pressure drop

Evaporator Inlet/Outlet: 55/45 °f

AIR COOLED CONDENSING UNIT FEATURES



- Nominal capacity 5 To 120 (TR) in 14 Sizes.
- R134a/R407c/R410a/R22/....
- > This unit can be connected to any type of air handling unit.
- > Proper fit of air handling unit is the most important item in the correct operation and longevity of this unit.
- > Chassis and frame made by steel profile which design and produce in our factory.
- according to the various climatic conditions in Iran, each device is calculated and designed before production.
- If necessary, the condenser coil is made with anti-corrosion coating.
- > The capacity announced in the table is common and it is possible to produce in other capacities.
- > The devices are made in two or four circuits or according to the customers' request.
- > The electrical panel of the device is equipped with all protection and safety systems according to IEC standard to increase equipments safety factor.
- > Special design with separate circuits according to cooling capacity for decrease energy consumption to minimum in non-peak times
- > Equipped with automatic detection fault board with ability to save system's faults in long period of time
- > Ability to connect to BMS system
- > Possibility to install ON/OFF system with SMS and receiving equipment's situation message.
- > Piping sizing and it's implementation between the air conditioner and condensing unit should be done specialists.
- The electrical panel is designed in such a way that it both supplies the air handling unit and controls it and if requested aseperate panel can be considered for each of them.

COMPRESSOR

Scroll, Screw and reciprocating types based on request and chiller capacity from the best quality and the most famous brands such as (Bitzer, Danfoss, Copeland, ...)

EVAPORATOR

made by copper tubes and aluminium fins which coated for corrosion resistance if needed Evaporator refrigeration cycle put in air handling unit.

CONDENSER

Air cooled condenser made by copper tubes and aluminum fins which coated for corrosion resistance if needed.

Axial fans with the highest efficiency and the lowest sound from EBM , Zilabeg ,

REFRIGERATION CYCLE

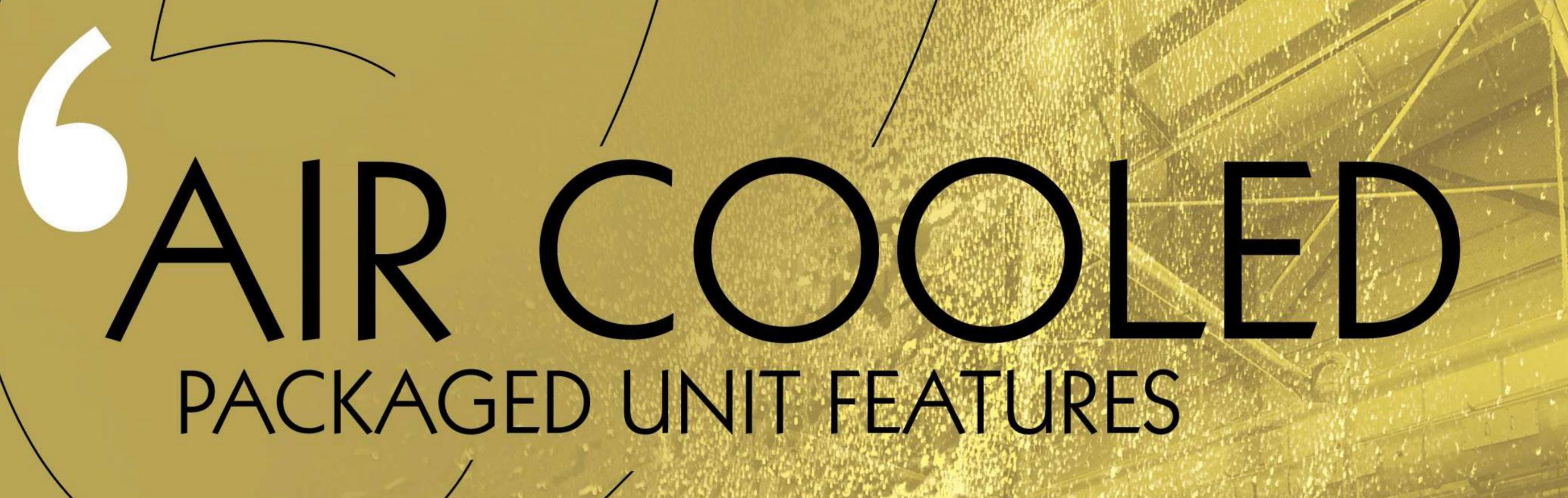
All Refrigeration cycle control and safety equipments are used by reputable European brands.

ELECTRICAL PANEL

The Electrical panel of the device includes the power and control parts, all electrical equipments are used by the best brands. For the device control system, we use controller such as Danfoss or PLC such as siemens.



		Ambient Temperature (f)														
MODEL	S.S.T	R22 R134a														
		95		00)5		0		5		00		05		0
		T.C P.C	W													
	40	4.03 3.6	0.000	V. 2500 0	. sasassas v	. 20142000	· course serious	222 224					. 100		N.A	
RSCU1-5A	45	4.44 3.62	Ve.	#c:		-	\$1 A					7150		1.0	-2	-
	50	4.85 3.62		17-								ara.				
	40	6.02 5.52		Contract of								M. (New York) 1981	A ASSESSED		ALL COMMON PORTS	
RSCU1-7.5A	45	6.65 5.5														
	50	7.34 5.5														**
	40	8.06 7.2		**	1 De 1200-000 D	V 20 100-130-	1. 10 00.00				1	•				
RSCU2-10A	45	8.88 7.24		***************************************											*	
	50	9.7 7.24														
	40	12 11.1														
RSCU2-15A	45	13.3 11									-			*		
	50	14.7 11												•		
	40	16.7 15		3	is a		5				di I	<u></u>	is .	9		
RSCU2-20A	45	18.4 15												*		
	50	20 14.9	19.6	15.8	19	16.8	18.5	17.8	13.7	10.3	13.3	10.9	12.8	11.6	12.4	12.3
	40	21.5 19.4	20.9	20.6	20.3	21.8	19.6	23.2	14.1	13.5	13.7	14.3	13.2	15.1	12.7	16
RSCU2-27A	45	23.7 19.5	23.1	20.7	22.4	21.9	21.7	23.2	15.8	13.5	15.3	14.3	14.8	15.1	14.3	16
	50	26.1 19.5	25.4	20.7	24.6	21.9	23.9	23.2	17.6	13.5	17.1	14.3	16.5	15.2	15.9	16
	40	25.1 23	24.4	24.3	23.6	25.7	22.9	27.2	16.5	15.5	16	16.4	15.5	17.9	14.9	18.4
RSCU2-30A	45	27.7 23.1	26.9	24.3	26.1	25.8	25.3	27.2	18.5	15.6	17.9	16.5	17.3	17.4	16.7	18.4
	50	30 23.1	29.7	24	28.8	25.9	27.9	27.3	20.5	15.7	19.9	16.5	19.3	17.4	18.6	18.5
	40	33.8 30.9	32.8	32.5	31.8	34.3	30.8	36.1	21.9	21.5	21.2	22.7	20.5	23.9	19.8	25.2
RSCU2-40A	45	37.3 31.2	36.2	32.8	35.1	34.6	34	36.4	24.6	21.6	23.8	22.8	23	24	22.2	25.3
	50	40 31.5	39.9	33.2	38.7	34.9	37.5	36.7	27.5	21.8	26.6	22.9	25.7	24.2	24.8	25.5
	40	43.3 38.8	42	40.7	40.6	42.8	39.2	45.1	27.4	26.7	26.5	28.2	25.6	29.8	24.7	31.4
RSCU2-50A	45	47.9 39.4	46.4	41.4	45	43.5	43.5	45.7	30.6	27	29.6	28.4	28.6	30	27.6	31.7
	50	52 40.1	50	42	49.6	44.1	48.1	46.3	34.1	27.2	33	28.6	32	30.2	30.9	31.9
	40	52.1 46.6	50.6	49	49.1	51.5	47.6	54.2	34.3	32	33.3	33.7	32.2	35.6	31	37.5
RSCU2-60A	45	57.4 47.1	55.8	49.5	54.2	52	52.5	54.7	38.3	32.3	37.1	34	35.9	35.8	34.7	37.7
	50	62 48	60	50	59.6	52.5	57.8	55.2	42.6	32.5	41.3	34.2	40	36	38.6	38
	40	58.2 54.2	56.3	56.6	54.3	58.8	52.5	61	36.8	34.2	35.3	35.4	33.8	36.5	32.3	37.6
RSCU2-70A	45	64.7 55.6	62.5	58	60.5	60.4	58.5	62.8	41.3	35.4	39.7	36.8	38.2	38.1	36.5	39.3
	50	71 56.4	69.3	59.2	67.2	62	64.8	64.6	46.3	36.5	44.7	38	42.8	39.5	41	41
	40	66.8 62	64.7	64.4	62.5	66.8	60.2	69.2	42.5	40.8	41	42.2	39.3	43.6	37.7	44.8
RSCU2-80A	45	74.2 63.2	71.8	66	69.5	68.8	67	71.4	47.7	42.2	46	43.8	44.2	45.4	42.5	46.8
	50	80 64.4	79.6	67.4	77	70.2	74.5	73.2	53.3	43.4	51.5	45.2	49.5	47	47.5	48.6
DCCII	40	68.8	65.7	72.6	63.5	76.8	61.2	81	46.7	43	44.8	45.4	43	48	41.2	50.6
RSCU 2-100A	45	75 70.4	72.6	74.6	70.2	78.8	67.8	83.4	52.1	43.8	50.2	46.2	48.2	48.8	46.2	51.6
2 100/	50	82.5 71.8	80	76.4	77.5	81	75	85.6	58	44.6	56	47	53.8	49.6	51.5	52.4
	40	85.3 85.2	82.5	90	79.7	95.2	76.8	100	58.5	53.2	56.3	56.2	54	59.4	51.6	62.8
RSCU 2-120A	45	94.2 87.2	91.2	92.4	88.2	97.8	85.2	103	65.3	54.2	63	57.4	60.5	60.6	57.8	64





- Nominal capacity 3.5 To 120 (TR) in 15 Sizes.
- R134a/R407c/R410a/R22/....
- according to the various climatic conditions of Iran, each device is calculated and designed before production
- If necessary, the condenser and evaporator coils are made with anti-corrosion coating.
- The capacity announced in the table is common and it is possible to produce in small other capacities.
- The devices are made in two or four circuits or according to the customers' request.
- The electrical panel of the device is equipped with all protection and safety systems according to IEC standard to increase equipment'ssafety factor.
- > Special design with separate circuits according to cooling capacity for decrease energy consumption to minimum in non-peak times
- Equipped with automatic detection fault board with ability to save system's faults in long period of time
- Ability to connect to BMS system
- Possibility to install ON/OFF system with SMS and receiving equipment's situation message.
- It is possible to use a variety of filters to achieve clean air.



COMPRESSOR

Scroll, Screw and reciprocating types based on request and chiller capacity from the best quality and the most famous brands such as (Bitzer, Danfoss, Copeland, ...)

EVAPORATOR

Made by copper tubes and aluminum fins which coated for corrosion resistance if needed.

CONDENSER

Air cooled condenser made by copper tubes and aluminum fins which coated for corrosion resistance if needed.

CONDENSER FAN

Axial fans with the highest efficiency and the lowest sound from EBM , Zilabeg ,

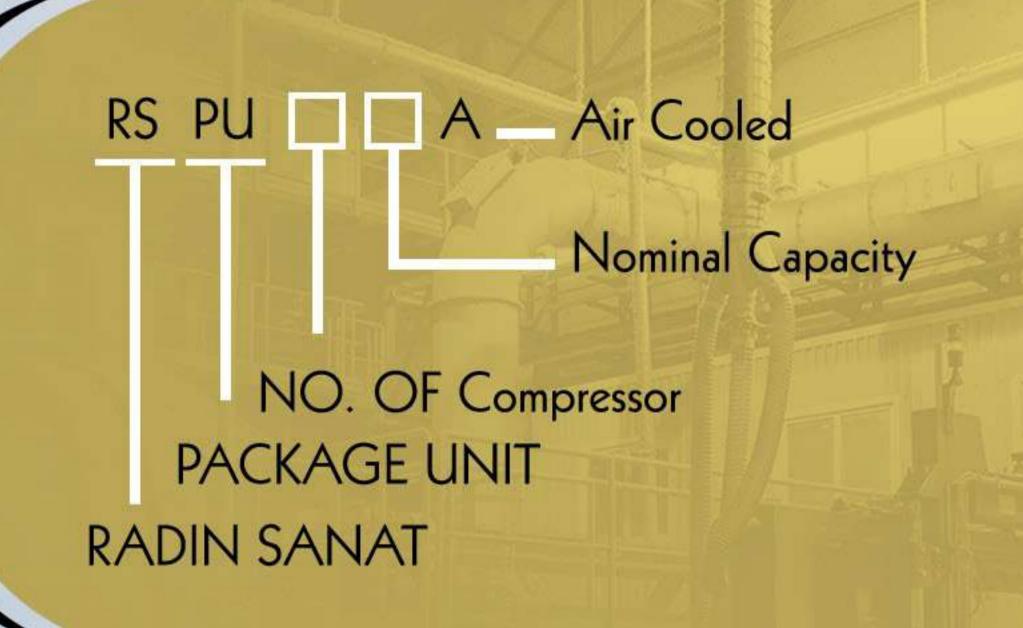
SUPPLY FAN

centrifugal fan indifferent type : plug, forward and backward curve which select by the software whit the best efficiency and lowest sound. The electric motor is select from the best brands and its speed is determined based on the operating point of the fan.

All Refrigeration cycle control and safety equipment's are used by reputable European brands.

ELECTRICAL PANEL

The Electrical panel of the device includes the power and control parts, all electrical equipment's are used by the best brands. For the device control system, we use controller such as Danfoss or PLC such as siemens.





PACKAGED UNIT

			Cooling	(TR)					
MODEL		R2	22	R1:	34a			Nominal	
MODEL	A.DB (f) A.WB (f)	100	105	100	105	A.DB (f) Coil Row	25	41	Air Flow (CFM)
RSPU1-3.5A	70	2.95	2.85	N.A	N.A	1	43.5	41.1	1500
K31 0 1-3.5A	75	3.06	2.96	N.A	N.A	2	72	68.1	1300
RSPU1-5A	70	4.23	4.1	N.A	N.A	1	58	54.9	2000
	75	4.31	4.18	N.A	N.A	2	96	90.9	
RSPU1-7.5A	70	6.33	6.14	4.19	4.04		90.5	85.6	3000
	75	6.46	6.26	4.28	4.13	2	149.7	141.8	
RSPU2-10A	70	8.46	8.2	N.A	N.A		128.7	122.3	4000
	75	8.62	8.36	N.A	N.A	2	211.6	201	
RSPU2-15A	70	12.7	12.3	8.38	8.08	1	189.8	180	6000
	75	12.9	12.5	8.56	8.26	2	313	297.4	
RSPU2-20A	70	17.5	17	11.7	11.3		226	214.5	7000
	75	17.8	17.3	11.9	11.5	2	373	353	
RSPU2-27A	70	22.6	22	15	14.5		257	244	8000
	75	23	22.4	15.3	14.8	2	414.8	402	
RSPU2-30A	70	26.4	25.6	17.5	16.9	1	333	316	10000
	75	26.9	26	17.9	17.3	2	546	519.5	
RSPU2-40A	70	35.5	34.4	23.2	22.4	1	429	407.6	13000
	75	36.2	35.1	23.8	23	2	706	671	
RSPU2-50A	70	45.5	44.1	29	28	1	514	488	16000
	75	46.5	45	29.6	28.6	2	829.6	704	
RSPU2-60A	70	54.8	53.2	36.3	35.1	1	633	600	19000
	75	55.8	54.2	37.1	35.9	2	1037	987	
RSPU2-70A	70	61.3	59.2	38.8	37.2	1	773	741	23000
	75	62.5	60.5	39.7	38.2	2	1280	1218	
RSPU2-80A	70	70.3	68	45	43.2	1.	974	926	28000
	75	71.8	69.5	46	41.2	2	1600	1527	
RSPU2-100A	70	71.2	68.8	49	47.2	1	1055	1005	31000
	75	72.7	70.2	50.2	48.2	2	1734	1654	
RSPU2-120A	70	89.3	86.3	61.5	59.2	1	1214	1151	37000
1101 02 120/	75	91.2	88.2	63	60.5	2	1996	1900	

- Bag in / Bag out (BIBO) access filter system is a safe, simple and reliable way to remove contaminated filters or gas absorbers and is used to purify the air in hazardous environments.
- With this system, maintenance personnel are protected from direct contact with the interior of the enclosure and hazardous contaminants when replacing the filter.
- in various figures to fit any flow request in any grade of filtration.



- Test groove for leak testing of the gasket seal between main filter and housing.
- Each BIBO has its own filter replacement table so that the filters can be easily and safely replaced by a person.
- Radin Sanat Faraz R&D department works on safe, reliable and user-friendly configurations. Our approach provides benefits to customers to reduce overall costs and improve system performance and human health.

BAG IN BAG OUT FEATURES

Optional aerosol injection and particle measurement connection Strong structure

Self-adjusting filter sealing mechanism

Standard construction of iron sheet with electrostatic powder coating. S st 304L/316/316L is available on request.

Differential manometer connection port for each filter stage

Single or multiple filter steps with a range of different filters

Optional aerosol injection and particle counter connection

APPLICATION

Pharmaceutical Plants
Radioactive Isotope Laboratories
——————————————————————————————————————
Nuclear Power Plants
Epidemic and Isolation Products
Biotechnical Facilities
Animal Facilities
Chemical Industries
Safety Laboratories

LEAK PROOF STRUCTURE

Metal body of safe change filter housing has bisulcate flange connection. This structure provides a safe tightness. Filter change is carried out untouched by human hands. Service staff do not have to touch neither filter nor inner side of cabin. Radin Sanat Faraz Safe Change Filter Housing has a pre-filter option according to request one or multiple stages. Body surface of cabin is powder coated with a color you preferred and can be disinfected. Service covers are closed very tightly with spline sealed bolt and cross-slotted bolt. Filter monitoring can be done by magnehelic manometers with the pressure nozzles

EXHAUST FAN FEATURES Possibility to produce with forward and backward curved fans for different static pressure losses, increase efficiency and low noise operation. Air flow rate range from 200 to 12000 CFM in forward blade utility exhaust. Air flow rate range from 500 to 18000 CFM in backward blade utility exhaust. In forward blade fans, wheel and housing shall be constructed form galvanized steel sheet. In backward blade fans, the wheel is made of mild steel, which is coated proper layer of epoxy painting and housing is made of galvanized sheet of proper thickness. All fans are statically and dynamically balanced and tested according to AMCA standard 210-99 All forward blade fans are equipped with adjustable stay rods for maximum rigidity and preventing form accidental deformation (stay rods are factory adjusted during balancing procedure). All fans are equipped with circular flange and mesh screen at air outlet to prevent external object form entering when the fan is off. All fans can be manufactured to become anti-spark, anti-corrosion and suitable for operation at high temperatures upon request. Shafts are turned, ground and polished form CK-45 carbon steel coated with synthetic material to be protected against humid air. For better service, all pulleys are taper bush. Frame shall be made of steel angular bars and to protect against corrosion, all external parts shall be covered with epoxy zinc-rich coating and all unit are provided with rubber vibration isolator. Bearing are of self-aligning type with cast iron housing and grease fitting secure full performance and longer service life and also bearings shall be double – sealed with combination of heat resistant oil – proof synthetic rubber and steel slinger. Possibility to produce as fan box for upper sizes. Both types of direct drive or belt & pulley is available Easy installation due to the use of double chassis. RS EF U Utility type F: Forward curve B: Backward curve FAN SIZE EXHAUST FAN RADIN SANAT

EXHAUST FAN _____

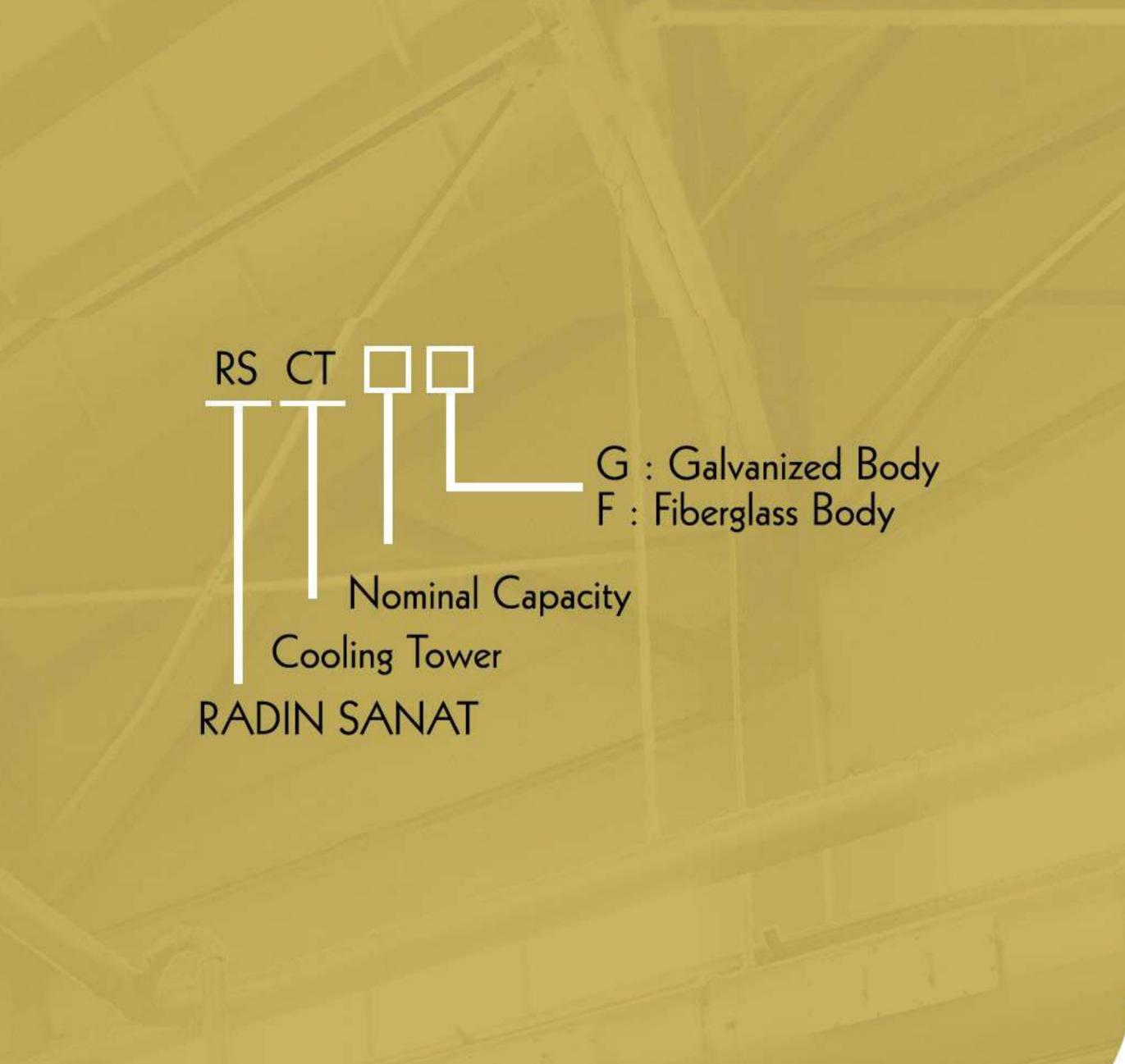
			Forward Curve				
Fan Size	Air Flow Rate Range (CFM)	1	Motor Power (HP) Min. /Max.		Noise (db) Min. /Max.		Weight of Forward Fan (Kg)
RSEF- 9-3 FU	200 to 1000	Î	0.75 / 0.75	Î	51.6 / 80.5		83
RSEF- 10-4 FU	200 to 1300	1	0.75 / 1.5		50.9 / 83.6		90
RSEF- 10-5 FU	200 to 1300	Ĩ	0.75 / 1.5	Î	51.5 / 81.6	*	92
RSEF- 12-4 FU	300 to 1800	1	0.75 / 1.5		52.5 / 84.5		112
RSEF- 12-6 FU	600 to 2400		0.75 / 3	Ĩ	54.2 / 85.5	*	116
RSEF- 15-5 FU	600 to 2600	1	0.75 / 3		54.5 / 85.3		130
RSEF- 15-7 FU	800 to 3200		0.75 / 4	ſ	55.2 / 85.7	8	136
RSEF- 18-6 FU	1000 to 3700	1	0.75 / 3		58.5 / 86.7		170
RSEF- 18-9 FU	1000 to 4600	is .	0.75 / 4	ſ	56.2 / 86.9		183
RSEF- 20-7 FU	1400 to 4800		0.75 / 4		58.3 / 85.6		276
RSEF- 20-10 FU	1600 to 5000	a l	0.75 / 5.5	Î	59.7 / 86.3		294
RSEF- 20-11 FU	1800 to 6000		0.75 / 5.5		60.1 / 88.3		330
RSEF- 25-10 FU	2600 to 8000	N .	0.75 / 7.5	Î	61.8 / 87.7		410
RSEF- 25-12 FU	2800 to 8500		0.75 / 7.5		61.3 / 87.8		424
RSEF- 30-10 FU	3000 to 11000	is a	0.75 / 10	Î	60.1 / 88.2	*	510
RSEF- 30-14 FU	3400 to 12000		0.75 / 10		60.5 / 88.9		546

			Backward Curve			
Fan Size	Air Flow Rate Range (CFM)		Motor Power (HP) Min. /Max.		Noise (db) Min. /Max.	Weight of Forward Fan (Kg)
RSEF- 315 BU	500 to 2400		0.75 / 3		58.1 / 84	62
RSEF- 400 BU	800 to 3400	J	0.75 / 4		59.1 / 84.6	97
RSEF- 450 BU	1000 to 4200		0.75 / 5.5	Ĭ	60.2 / 85.5	115
RSEF- 500 BU	1400 to 5500	J	0.75 / 7.5		61.9 / 86.8	134
RSEF- 560 BU	1600 to 7000		0.75 / 10		63.2 / 87.8	203
RSEF- 630 BU	2000 to 8000	J	0.75 / 10		63.2 / 87.4	243
RSEF- 710 BU	2000 to 10000		0.75 / 15	Ĭ	63.2 / 89.5	293
RSEF- 800 BU	3500 to 13000		0.75 / 15		65.9 / 90.6	350
RSEF- 900 BU	4000 to 18000		0.75 / 20	Ĭ	66.1 / 91.1	416

Forward curve designed for 0.2 To 3.0 In.W.G Static pressure backward curve designed for 0.5 To 6.0 In.W.G Static pressure



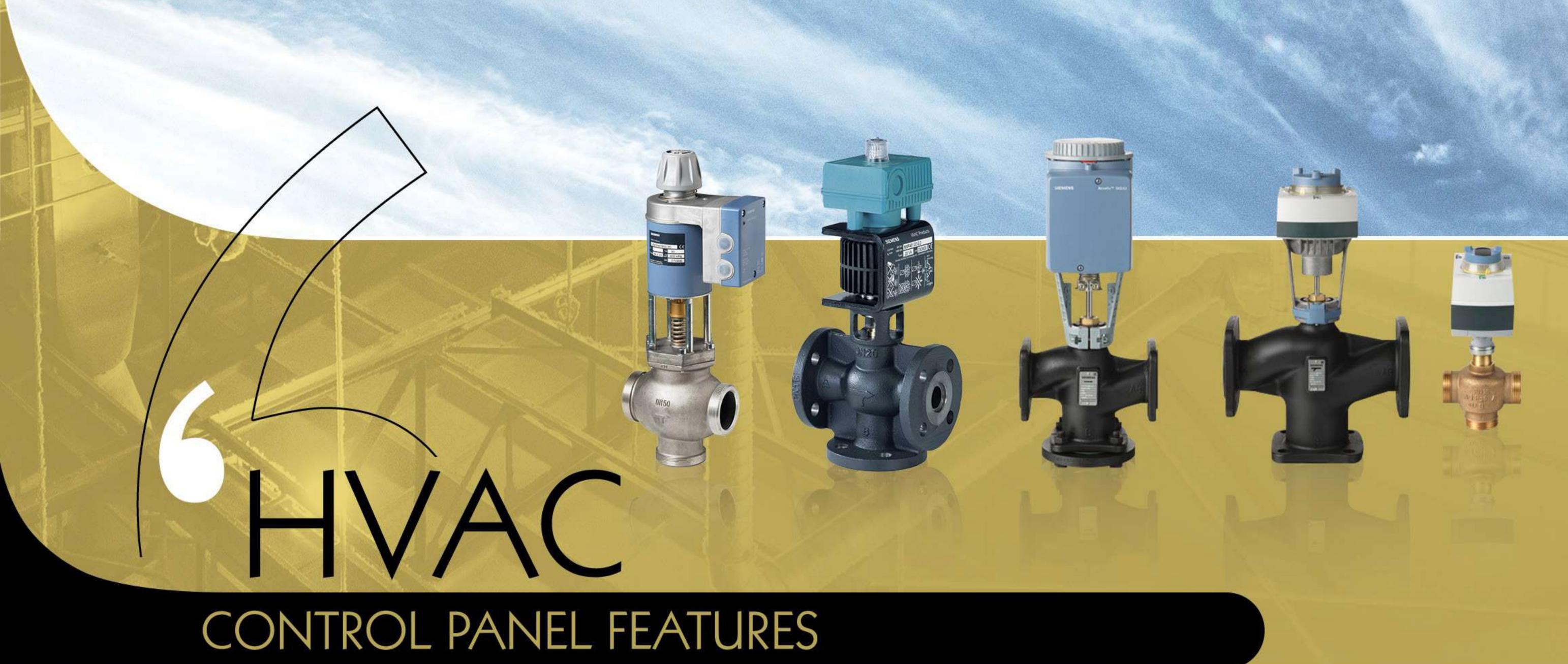
- > Square counter flow structure
- Complete range from 50 to 900 ton.r
- Flexible operation and adjustment
- Low running costs.
- Low noise and vibration
- > Smaller dimensions compared to round type
- Low service area.
- > Structure made by FRP
- Water distribution with antifouling nozzle
- Equipped with PVC drift eliminator
- Axial fan with adjustable air foil blade with high efficiency
- Possibility for using intelligent control system
- Equipped with ladder with strength and proper protection
- Resistant to UV radiation
- Monolith basin with the lowest water leakage







MODEL	Nominal capacity	Water flow rate	Elec		Ove	rall Dimens (mm)	sion	Water connections		
	Tons	GPM	NO	HP	W	L	Н	IN	OUT	
RSCT-20	20	60	1	0.75	100	130	175	2"	2"	
RSCT-25	25	75	1	1	100	130	185	2"	2"	
RSCT-35	35	105	1	1	140	210	185	2 1/2"	3"	
RSCT-40	40	120	1	1.5	140	210	195	3"	4"	
RSCT-55	55	165	1]	2	140	210	205	3"	4"	
RSCT-70	70	204	1	2	140	210	220	4"	4"	
RSCT-85	85	255	1	2	180	240	210	4"	4"	
RSCT-110	110	330	1	3	180	240	220	4"	4"	
RSCT-125	125	375	1	3	180	240	225	4"	4"	
RSCT-135	135	405	1	5.5	180	240	230	4"	5"	
RSCT-170	170	510	2	2	360	240	210	4"	5"	
RSCT-220	220	660	2	2	360	240	220	4"	5"	
RSCT-250	250	750	2	3	360	240	225	5"	5"	
RSCT-270	270	810	2	5.5	360	240	230	5"	5"	
RSCT-330	330	990	1	7.5	560	250	310	2*6"	8"	
RSCT-370	370	1110	1	7.5	560	250	320	2*6"	8"	
RSCT-415	415	1260	1	10	650	250	330	2*6"	10"	
RSCT-460	460	1380	1	15	700	250	340	2*6"	10"	
RSCT-500	500	1500	1	20	700	250	360	2*6"	10"	
RSCT-660	660	1980	2	7.5	560	620	310	4*6"	2*8"	



- > HVAC control panels can be installed and wired on the unit at our factory or delivery on site
- Panel solutions designed and assembled per customer's exact specifications.
- Our ready access to a wide variety of components makes material selection easy and cost-effective for customers..
- Panel s are assembled in a manufacturing facility
- Price estimates available by simply providing either bill of material or drawing.
- Construction of a central electrical panel to control several units simultaneously.
- All panels are equipped with safety and protection system.





Our control panels feature the latest technology controllers, with user friendly interface allowing monitoring and control of each component of your AHU including fans, heating, cooling, dampers, humidification and heat recovery.

Total design flexibility is offered with each application with variable sizing options and a wide range of component choices available.











Our aim with every controls package is to make the facility more versatile, productive and efficient, delivering both output and quality; we have a wealth of experience and use the latest technology to help you get the most from your system, by managing workloads and using performance data to greatest effect.

ADVANCED CONTROL SYSTEM, ENSURES EXCELLENT PERFORMANCE



SERVICES

- The After Sales personnel will develop a close and continuing relationship with you through communication, assistance, guidance and advice. From the very beginning of the relationship, we will provide you with the highest degree of care and attention. By listening to you and keeping you informed you will have complete confidence in our dedication to your project.
- In the unlikely event that problems arise with the equipment the priority is to solve them in the quickest possible manner.

 Our highly skilled engineers are fully conversant with all aspects of the Products and Services we offer, enhancing our 'One Stop Shop' philosophy.
- All equipment carries a full twelve month warranty, within which time replacement parts and labor to fit the parts is provided free of charge. A full range of consumables and replacement parts are also offered for all equipment that is outside of the warranty period and till 10 years after sale

