

SPU Series Packaged Air Conditioners

Range: 420 to 1200 MBH (35 to 100 TR)

50 Hz



Features / Benefits

- Statically and dynamically balanced belt driven Centrifugal, DIDW Backward Curved fan, designed for low sound operation.
- Double skin units with 1" fiberglass insulation for a better indoor air quality.
- Painted electro-static powder coat, zinc coated steel panels provide additional protection against rust and discoloration in areas with high UV factor.
- Cooling coils are made of inner grooved copper tubes with mechanically bonded hydrophilic aluminum fins that provide optimum heat transfer.
- Standard factory installed thermostatic expansion vales (TXV).
- Motors are Totally Enclosed Fan Cooled (TEFC) type, IP55 Protected, 4 Pole Class F insulation conform to relevant IEC standards.
- Standard sloped drain pan with 8 mm polyethylene insulation.
- Low resistance aluminum washable filters having frontal access for removal.
- Easy panel removal of side panel allows access to serviceable components.
- Minimum of two refrigerant independent circuits which provide efficient part load operation.

**High Capacity Packaged Units
With Tropical Hermetic
Compressor**



The new series of Coolex Package Units air conditioner are designed and manufactured to provide comfort cooling for commercial and industrial applications with the optimum performance, high efficiency, reliability, ease of service & maintenance and capable to operate at extremely ambient conditions up to 125°F.

For more technical information please visit www.coolex.com.kw



Table of Contents

NOMENCLATURE	2
UNIT RATING SUMMARY	3
STANDARD SPECIFICATIONS	5
MICROPROCESSOR BASED CONTROLLER	6
OPTIONAL SPECIFICATIONS	6
SELECTION PROCEDURE	7
GENERAL DATA	8
PERFORMANCE DATA TABLES	10
UNIT ELECTRICAL DATA	18
FAN PERFORMANCE	19
UNIT DIMENSIONS	21
TYPICAL WIRING DIAGRAMS	24
LOAD DISTRIBUTION	25
ABOUT RIC	29
COOLEX DISTRIBUTORS	30

OTHER COOLEX PRODUCTS

- 1. Air Cooled Screw Water Chillers**
- 2. Air Cooled Scroll Water Chillers**
- 3. Air Handling Units**
- 4. Ducted Split Units**
- 5. Concealed Split Units**
- 6. Fan Coil Units**

NOMENCLATURE

SPU - 600 F 2 4 S

Unit Series Description
 SPU Special Package Unit

Nominal Capacity MBH

420	-	780
480	-	840
540	-	960
600	-	1080
660	-	1200
720	-	

Refrigerant
 F R410A

Unit Options
 S Standard Unit
 T With Additional Options

No. of Rows (Evaporator)
 4 4 Rows
 6 6 Rows

Electrical Specifications
 2 415/3Ph/50Hz

UNIT RATING SUMMARY (4 ROWS)

Model	Air Flow (CFM)	Ambient temp 95°F				Ambient temp 115°F				Ambient temp 118.4°F				Ambient temp 125°F			
		Cooling Capacity	Total Power	kW/Ton	EER	Cooling Capacity	Total Power	kW/Ton	EER	Cooling Capacity	Total Power	kW/Ton	EER	Cooling Capacity	Total Power	kW/Ton	EER
		(Btu/h)	(kW)			(Btu/h)	(kW)			(Btu/h)	(kW)			(Btu/h)	(kW)		
SPU-420	13200	421,239	38.26	1.09	11.01	381,502	44.73	1.41	8.53	373,694	45.95	1.48	8.13	358,778	48.44	1.62	7.41
SPU-480	15000	480,198	45.97	1.15	10.45	431,513	46.97	1.31	9.19	422,762	54.92	1.56	7.70	405,811	57.89	1.71	7.01
SPU-540	16800	540,534	51.66	1.15	10.46	484,045	60.23	1.49	8.04	474,584	61.89	1.56	7.67	455,570	65.39	1.72	6.97
SPU-600	18300	599,468	56.39	1.13	10.63	539,317	66.19	1.47	8.15	529,307	68.08	1.54	7.78	507,433	72.18	1.71	7.03
SPU-660	20300	660,386	58.31	1.06	11.33	591,381	68.35	1.39	8.65	578,638	70.24	1.46	8.24	554,223	74.06	1.60	7.48
SPU-720	22200	720,074	66.46	1.11	10.84	644,211	68.88	1.28	9.35	630,664	79.19	1.51	7.96	603,804	83.35	1.66	7.24
SPU-780	24000	780,429	74.12	1.14	10.53	699,880	86.19	1.48	8.12	685,824	88.56	1.55	7.74	657,831	93.19	1.70	7.06
SPU-840	25500	840,810	76.37	1.09	11.01	757,384	89.24	1.41	8.49	742,510	91.70	1.48	8.10	712,992	96.65	1.63	7.38
SPU-960	28800	959,489	84.74	1.06	11.32	863,447	99.81	1.39	8.65	847,225	102.68	1.45	8.25	813,369	108.60	1.60	7.49
SPU-1080	32400	1,079,098	96.04	1.07	11.24	972,310	110.25	1.36	8.82	954,024	116.63	1.47	8.18	914,445	123.61	1.62	7.40
SPU-1200	36000	1,199,042	109.23	1.09	10.98	1,079,509	128.82	1.43	8.38	1,058,651	132.60	1.50	7.98	1,014,966	140.81	1.66	7.21

Rating Conditions: Indoor Temperature DB = 80 °F (26.7 °C) .
WB = 67 °F (19.4 °C).

OUT STANDING FEATURES

Superior Efficiency

- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

Quiet operation

- Low noise level compressors, condenser fans and evaporator blower
- Compact physical footprint
- Special designed refrigerant piping in addition to the insulation for the evaporator section.

Controls

- Microprocessor Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance

All units in the SPU series are :

- Factory run tested.
- Produced in an ISO 9001-2015 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.
- AHRI rated cooling coils

UNIT RATING SUMMARY (6 ROWS)

Model	Air Flow (CFM)	Ambient temp 95°F				Ambient temp 115°F				Ambient temp 118.4°F				Ambient temp 125°F			
		Cooling Capacity (Btu/h)	Total Power (kW)	kW/Ton	EER	Cooling Capacity (Btu/h)	Total Power (kW)	kW/Ton	EER	Cooling Capacity (Btu/h)	Total Power (kW)	kW/Ton	EER	Cooling Capacity (Btu/h)	Total Power (kW)	kW/Ton	EER
SPU-420	13200	438,218	38.54	1.06	11.37	393,199	44.97	1.37	8.74	385,120	46.19	1.44	8.34	369,147	48.68	1.58	7.58
SPU-480	15000	492,850	46.20	1.12	10.67	441,841	47.22	1.28	9.36	432,719	55.15	1.53	7.85	414,789	58.12	1.68	7.14
SPU-540	16800	554,693	51.98	1.12	10.67	498,139	60.59	1.46	8.22	488,779	62.24	1.53	7.85	468,383	65.75	1.68	7.12
SPU-600	18300	618,342	56.89	1.10	10.87	555,446	66.67	1.44	8.33	544,692	68.54	1.51	7.95	521,218	72.65	1.67	7.17
SPU-660	20300	686,453	58.73	1.03	11.69	612,242	68.75	1.35	8.91	598,951	70.63	1.42	8.48	572,858	74.46	1.56	7.69
SPU-720	22200	740,838	66.82	1.08	11.09	660,966	69.22	1.26	9.55	647,359	79.53	1.47	8.14	618,870	83.70	1.62	7.39
SPU-780	24000	811,104	74.66	1.10	10.86	725,247	86.74	1.44	8.36	701,365	89.07	1.52	7.87	679,749	93.73	1.65	7.25
SPU-840	25500	875,079	76.92	1.05	11.38	785,327	89.78	1.37	8.75	769,073	92.21	1.44	8.34	737,687	97.19	1.58	7.59
SPU-960	28800	996,146	85.40	1.03	11.66	893,728	100.46	1.35	8.90	875,491	103.31	1.42	8.47	839,472	109.27	1.56	7.68
SPU-1080	32400	1,117,294	96.87	1.04	11.53	1,003,163	111.04	1.33	9.03	983,598	117.40	1.43	8.38	942,695	124.43	1.58	7.58
SPU-1200	36000	1,234,486	110.16	1.07	11.21	1,110,048	129.76	1.40	8.55	1,089,349	133.53	1.47	8.16	1,043,654	141.76	1.63	7.36

Rating Conditions: Indoor Temperature DB = 80 °F (26.7 °C) .
WB = 67 °F (19.4 °C).

OUT STANDING FEATURES

Superior Efficiency

- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

Quiet operation

- Low noise level compressors, condenser fans and evaporator blower
- Compact physical footprint
- Special designed refrigerant piping in addition to the insulation for the evaporator section.

Controls

- Microprocessor Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

Quality Assurance

All units in the SPU series are :

- Factory run tested.
- Produced in an ISO 9001-2015 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.
- AHRI rated cooling coils

STANDARD SPECIFICATIONS

General

- The Package Units (SPU) are factory assembled cooling or combination of cooling and heating with electric heater, suitable for outdoor installation mounting on the roof or ground.
- The packaged unit consists of scroll compressors, cooling coil, condenser coil, fans, electric heater (optional), control wiring and interconnecting piping-all factory assembled.
- The units are rated and tested in accordance with ARI 340/360 standard.

Unit Casing

Panels are fabricated from hot dipped G90, Zinc coating and zero spangle galvanized steel, oven-baked powder coated. The unit is provided with an integral weather resistant control panel for outdoor application. Panels and access doors are provided for inspection and access for all internal parts.

"The evaporator section is double skin insulated from all sides with 1" thick fiber glass insulation for a better indoor air quality."

Compressor

The compressors are hermetic scroll type provided with crankcase heater, internal pressure relief valve which provides high pressure protection to the refrigerant system and rubber vibration isolators for quiet and efficient operation. The compressors are equipped with internal motor protector for safe operation. The compressors are built to NF, VPE, CSA, & UL certification.

Evaporator Coils

The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed pre coated aluminum louvered fins. The assembled coils are factory leak tested under water at a pressure of 350 psig for quality and leak free units.

Condenser Coils

The coils are built up of ripple finned seamless copper tubes and mechanically bonded to scientifically designed pre coated aluminum louvered fins. The assembled coils are factory leak tested under water at a pressure of 700 psig for quality and leak free units.

Evaporator Fan

The units are provided with centrifugal backward curve fans which are statically and dynamically balanced belt driven, designed for low sound level operation.

Evaporator Blower Motor

Motors are totally enclosed fan cooled (TEFC) type with class F insulation for weather protection with permanently lubricated bearings and automatic thermal protection.

Condenser Fans

Condenser air fan is of the propeller type, aluminum blade with a direct drive motor upward discharge and provided with fan grille mounted in casing.

Condenser Fan Motor

Motors are totally enclosed air-over type with class F insulation for weather protection with permanently lubricated bearings and automatic thermal protection.

Drain Pan

The drain pan is fabricated of painted galvanized steel with insulation.

Air Filter

High dust holding capacity, low resistance filter. It can be cleaned with regular water and prolonged use. It consists of 2" metal aluminum mesh with unique pattern.

Refrigerant Circuit

SPU series comes complete, as standard, with properly sized refrigerant lines including thermostatic expansion valve, sight glass, filter drier, automatic high and low pressure switch and full operating charge of R410A in each circuit.

Control Panel

The control panel enclosure is fabricated out of heavy gauge sheet steel powder coated bake finished. Internal power and control wiring is neatly routed, properly anchored and all wires are identified with cable markers as per NEC standard applicable to HVAC units. Major components used in the control panel are UL approved.

MICROPROCESSOR BASED CONTROLLER

The Units (SPU) are provided with technologically advanced Microprocessor based controller, incorporating the following benefits and features:

- Anti-recycling timing device
- Compressor lock out function
- Balance loading of compressors
- Compressors lead-lag operation
- Pump down option
- Fault diagnostics
- Indicator lights for high & low pressure safety

OPTIONAL SPECIFICATIONS

Construction

- Anti-corrosion coating for coils
- Copper fins for evaporator and/or condenser
- Stainless steel drain pan
- Special Air filter material
- Filter box with High Efficiency Bag filters
- Sand trap louver

Electrical

- Electric heater
- Compressor circuit breaker
- Blower motor circuit breaker
- Condenser fan motor circuit breaker
- External overload for condenser fan motor
- Mild ambient kit
- Anti - ice thermostat
- Air flow switch
- Ultra violet light
- Wi-Fi Thermostat
- Multi Stage Thermostat
- Modbus connectivity

Refrigeration

- Pump down kit
- Hot gas bypass kit
- High & Low Pressure gauges
- Rotalock valve for compressor
- Replaceable filter drier with mechanical shut-off valve
- Adjustable high/low pressure switch

Coolex App



Wi Fi Module



Typical Thermostat



SELECTION PROCEDURE

The below example illustrates the selection procedure to assist using this catalog to select the appropriate SPU unit that meets the design requirements.

Example :

Design requirements

- Total cooling capacity 585 [MBH]
- Sensible cooling capacity 425 [MBH]
- Design ambient temperature 95 [°F]
- Evaporator air flow 17500 [CFM]
- Evaporator entering temperature DB/WB 80/67 [°F/°F]
- Altitude 2000 [ft]
- Power supply 415V /3Ph /50Hz

Altitude [ft]	Correction factor
Sea level	1
1000	0.996
2000	0.990
3000	0.984
4000	0.980
5000	0.974
6000	0.965
7000	0.960

*Using the correction factor table at the specified altitude, thereby the required capacity will be:

Corrected capacity = Required capacity /corr. factor

Corrected total capacity = 585 [MBH]/0.99
= 591 MBH

Corrected sensible capacity = 425 [MBH]/0.99
= 429 MBH

From the cooling capacity at performance data tables (page 12), the closest selection model to the required capacity is SPU-600. From the performance table:

Total capacity = 599.5 [MBH]

Sensible capacity = 454.5 [MBH]

GENERAL DATA (4 ROWS)

Outdoor Units		SPU-420	SPU-480	SPU-540	SPU-600	SPU-660	SPU-720	SPU-780	SPU-840	SPU-960	SPU-1080	SPU-1200	
Cooling Capacity (Nominal)	MBH	421.2	480.2	540.5	599.5	660.4	720.0	780.4	840.8	959.5	1079.1	1199	
	KW	123.5	140.7	158.4	175.7	193.6	211.0	228.7	246.4	281.2	316.3	351.4	
Compressor	Type	Hermetic Scroll											
	Quantity	4											
	Refrigerant	R410A											
	Refrigerant circuits	4											
	Expansion device type	Thermostatic Expansion Valve											
Condenser Fan	Type	Propeller											
	Diameter, mm	762	800		762	800	762	800	762		800		
	No. of fans	4				6			8				
	Motor Enclosure/Ins Class	Totally Enclosed Air Over, Class F											
	Nominal HP x Qty	1.5 x 4		2.0 x 4		1.5 x 6		2.0 x 6		1.5 x 8		2.0 x 8	
	RPM	900											
Condenser Coil	Type	Enhanced Aluminum Fins & Inner Grooved Copper Tubes											
	Rows - FPI	3-14											
	Total Face area	ft ²		79.2			118.8			158.4			
Evaporator Blower	Type	Centrifugal Backward Curve											
	Motor Enclosure/Ins Class	Totally Enclosed Fan Cooled, Class F											
	Nominal HP @ 0.7" External Static Pressure	10	15					20			25		
Evaporator Coil	Type	Hydrophilic Aluminum Fins & Inner Grooved Copper Tubes											
	Rows - FPI	4-12	4-14	4-12	4-16	4-16		4-12		4-14		4-16	
	Total Face area	ft ²		26.0	29.2	33.9	37.0	43.8		52.1		58.3	64.4
Air Filter	Type	Washable aluminum mesh											
	Thickness (in)	2											
Drain Pipe	mm X TPI	42 X 11.5											
Weight	kg	1460	1631	1662	1727	2197	2242	2345	3092	3445	3513	3621	

Note:

1. Cooling capacities are based on 80°/67°F Evaporating air temperature and 95° Condensing air temperature as per AHRI 340/360.
2. The above data maybe changed without prior notice due to continuous improvement in quality and performance.

GENERAL DATA (6 ROWS)

Outdoor Units		SPU-420	SPU-480	SPU-540	SPU-600	SPU-660	SPU-720	SPU-780	SPU-840	SPU-960	SPU-1080	SPU-1200	
Cooling Capacity (Nominal)	MBH	438.2	492.9	554.7	599.5	686.5	740.8	811.1	875.1	996.1	1117.3	1234.5	
	KW	128.4	144.5	162.6	175.7	201.2	217.1	237.7	256.5	291.9	327.5	361.8	
Compressor	Type	Hermetic Scroll											
	Quantity	4											
	Refrigerant	R410A											
	Refrigerant circuits	4											
	Expansion device type	Thermostatic Expansion Valve											
Condenser Fan	Type	Propeller											
	Diameter, mm	762	800			762	800	762	800				
	No. of fans	4				6			8				
	Motor Enclosure/Ins Class	Totally Enclosed Air Over, Class F											
	Nominal HP x Qty	1.5 x 4		2.0 x 4			1.5 x 6		2.0 x 6		1.5 x 8		2.0 x 8
	RPM	900											
Condenser Coil	Type	Enhanced Aluminum Fins & Inner Grooved Copper Tubes											
	Rows - FPI	3-14											
	Total Face area	ft ²	79.2				118.8			158.4			
Evaporator Blower	Type	Centrifugal Backward Curve											
	Motor Enclosure/Ins Class	Totally Enclosed Fan Cooled, Class F											
	Nominal HP @ 0.7" External Static Pressure	10	15					20			25		
Evaporator Coil	Type	Hydrophilic Aluminum Fins & Inner Grooved Copper Tubes											
	Rows - FPI	6-12	6-14	6-12	6-16	6-14		6-12		6-14		6-16	
	Total Face area	ft ²	26.0	29.2	33.9	37.0	43.8		52.1		58.3	64.4	72.2
Air Filter	Type	Washable aluminum mesh											
	Thickness (in)	2											
Drain Pipe	mm X TPI	42 X 11.5											
Weight	kg	1510	1681	1722	1787	2267	2312	2425	3172	3535	3613	3731	

- Note:**
1. Cooling capacities are based on 80°/67°F Evaporating air temperature and 95° Condensing air temperature as per AHRI 340/360.
 2. The above data maybe changed without prior notice due to continuous improvement in quality and performance.

PERFORMANCE DATA TABLES (4 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM		95			115			118.4			125			
	DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	
			Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.		
SPU-420	10500	86	72	440,342	288,325	38.63	395,544	268,651	45.24	387,984	265,698	46.49	373,291	260,018	49.04
		80	67	405,472	281,842	38.01	364,221	262,611	44.46	357,260	259,724	45.69	343,730	254,172	48.17
		74	62	373,034	274,796	37.49	335,083	256,046	43.81	328,679	253,231	45.01	316,232	247,818	47.45
	11400	86	72	447,171	299,680	38.73	400,748	279,553	45.33	392,977	276,570	46.58	377,688	270,751	49.12
		80	67	411,760	292,942	38.11	369,013	273,268	44.54	361,857	270,352	45.77	347,779	264,664	48.25
		74	62	378,819	285,619	37.58	339,492	266,436	43.89	332,908	263,593	45.10	319,957	258,047	47.53
	12300	86	72	452,857	310,649	38.81	405,136	290,178	45.40	397,026	287,109	46.66	381,867	281,415	49.21
		80	67	416,995	303,664	38.18	373,053	283,654	44.62	365,586	280,654	45.84	351,627	275,088	48.33
		74	62	383,636	296,073	37.66	343,209	276,563	43.97	336,339	273,637	45.17	323,497	268,211	47.61
	13200	86	72	457,466	321,245	38.89	414,311	306,779	45.52	405,832	303,626	46.77	389,633	297,642	49.32
		80	67	421,239	314,022	38.26	381,502	299,881	44.73	373,694	296,800	45.95	358,778	290,950	48.44
		74	62	387,540	306,172	37.73	350,982	292,384	44.08	343,799	289,380	45.27	330,076	283,677	47.71
SPU-480	12000	86	72	503,978	333,454	46.40	455,096	314,294	47.61	445,937	310,765	55.59	428,542	304,114	58.61
		80	67	464,068	325,957	45.68	419,057	307,228	46.70	410,624	303,778	54.65	394,606	297,277	57.60
		74	62	426,942	317,808	45.07	385,532	299,547	45.95	377,774	296,184	53.87	363,038	289,845	56.76
	13000	86	72	510,502	346,214	46.52	460,304	326,864	47.72	451,008	323,336	55.70	433,013	316,560	58.72
		80	67	470,076	338,430	45.79	423,852	319,515	46.81	415,293	316,066	54.76	398,723	309,443	57.71
		74	62	432,470	329,969	45.18	389,944	311,527	46.05	382,070	308,164	53.97	366,825	301,707	56.86
	14000	86	72	516,401	358,809	46.61	464,700	339,164	47.81	455,612	335,765	55.79	437,050	328,867	58.81
		80	67	475,507	350,742	45.88	427,900	331,539	46.90	419,532	328,216	54.85	402,440	321,473	57.80
		74	62	437,467	341,973	45.28	393,668	323,250	46.14	385,970	320,011	54.06	370,245	313,436	56.95
	15000	86	72	521,495	371,146	46.70	468,623	351,311	47.89	459,119	347,800	55.87	440,710	341,037	58.91
		80	67	480,198	362,802	45.97	431,513	343,412	46.97	422,762	339,980	54.92	405,811	333,369	57.89
		74	62	441,783	353,732	45.36	396,992	334,827	46.21	388,941	331,480	54.13	373,346	325,035	57.04
SPU-540	13500	86	72	564,464	373,698	52.06	510,372	352,490	60.91	500,636	348,736	62.61	481,158	341,285	66.19
		80	67	519,764	365,296	51.24	469,956	344,565	59.88	460,990	340,895	61.54	443,055	333,612	65.04
		74	62	478,183	356,164	50.55	432,360	335,951	59.02	424,111	332,373	60.65	407,611	325,272	64.07
	14600	86	72	571,597	387,625	52.20	516,082	366,209	61.05	506,319	362,501	62.75	486,400	354,995	66.33
		80	67	526,332	378,910	51.38	475,214	357,975	60.01	466,224	354,351	61.67	447,882	347,013	65.17
		74	62	484,226	369,438	50.69	437,197	349,026	59.15	428,926	345,492	60.78	412,051	338,338	64.21
	15700	86	72	577,946	401,308	52.33	521,404	379,797	61.17	511,438	376,062	62.86	490,839	368,397	66.44
		80	67	532,178	392,286	51.50	480,114	371,258	60.13	470,937	367,607	61.79	451,969	360,115	65.28
		74	62	489,604	382,479	50.81	441,705	361,976	59.27	433,262	358,417	60.89	415,812	351,112	64.32
	16800	86	72	587,020	418,403	52.50	525,673	393,016	61.27	515,398	389,210	62.96	494,749	381,615	66.55
		80	67	540,534	408,996	51.66	484,045	384,180	60.23	474,584	380,459	61.89	455,570	373,035	65.39
		74	62	497,291	398,771	50.97	445,321	374,575	59.37	436,617	370,948	60.99	419,124	363,709	64.42

See note on page 17

PERFORMANCE DATA TABLES (6 ROWS)

Model	Air Flow CFM	Condenser Ambient Temperature [°F]													
		Air Flow		95			115			118.4			125		
		DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-420	10500	92	77	497,115	308,010	39.56	447,630	289,742	46.32	438,560	286,456	47.61	420,775	280,079	50.21
		86	72	459,070	302,684	38.91	413,373	284,732	45.50	404,997	281,503	46.76	388,573	275,236	49.30
		80	67	422,717	295,879	38.28	380,638	278,330	44.71	372,925	275,174	45.94	357,802	269,048	48.43
		74	62	388,899	288,482	37.75	350,187	271,372	44.06	343,091	268,295	45.26	329,178	262,322	47.70
	11400	92	77	503,887	320,314	39.66	453,193	301,941	46.41	443,928	298,643	47.70	426,080	292,344	50.31
		86	72	465,325	314,775	39.00	418,510	296,720	45.59	409,954	293,479	46.84	393,471	287,289	49.39
		80	67	428,476	307,698	38.37	385,368	290,049	44.80	377,490	286,881	46.03	362,313	280,830	48.52
		74	62	394,198	300,006	37.84	354,539	282,797	44.15	347,291	279,709	45.35	333,328	273,809	47.79
	12300	92	77	509,965	332,475	39.74	458,254	314,030	46.50	448,556	310,623	47.78	429,968	304,149	50.39
		86	72	470,937	326,726	39.08	423,183	308,600	45.67	414,227	305,252	46.93	397,062	298,890	49.47
		80	67	433,643	319,380	38.45	389,672	301,662	44.88	381,425	298,389	46.11	365,619	292,170	48.59
		74	62	398,952	311,395	37.92	358,498	294,120	44.23	350,911	290,929	45.42	336,370	284,865	47.86
	13200	92	77	515,344	344,451	39.84	462,403	325,832	46.58	452,901	322,540	47.86	434,117	316,075	50.48
		86	72	475,904	338,495	39.17	427,015	320,198	45.76	418,240	316,963	47.01	400,893	310,610	49.56
		80	67	438,218	330,884	38.54	393,199	312,999	44.97	385,120	309,836	46.19	369,147	303,626	48.68
		74	62	403,160	322,612	38.01	361,743	305,175	44.31	354,310	302,090	45.50	339,615	296,036	47.95

SPU-480	12000	92	77	560,229	349,551	47.39	504,072	328,969	48.78	494,021	325,351	56.80	474,182	318,267	59.90
		86	72	517,354	343,507	46.63	465,495	323,280	47.83	456,213	319,726	55.81	437,893	312,764	58.84
		80	67	476,385	335,784	45.90	428,633	316,012	46.92	420,086	312,537	54.87	403,216	305,732	57.83
		74	62	438,274	327,390	45.29	394,342	308,112	46.16	386,479	304,724	54.08	370,959	298,089	56.98
	13000	92	77	567,451	363,271	47.51	509,936	342,549	48.89	499,581	338,881	56.91	479,441	331,795	60.02
		86	72	524,024	356,989	46.75	470,910	336,626	47.94	461,348	333,021	55.92	442,749	326,058	58.96
		80	67	482,526	348,963	46.02	433,619	329,057	47.03	424,814	325,534	54.97	407,688	318,727	57.94
		74	62	443,924	340,239	45.41	398,929	320,831	46.27	390,829	317,396	54.18	375,073	310,759	57.09
	14000	92	77	574,008	376,856	47.62	515,164	355,963	49.00	504,632	352,282	57.01	483,964	345,112	60.12
		86	72	530,079	370,340	46.85	475,738	349,808	48.05	466,013	346,191	56.02	446,926	339,145	59.06
		80	67	488,102	362,014	46.12	438,064	341,943	47.13	429,109	338,407	55.07	411,534	331,520	58.04
		74	62	449,054	352,963	45.50	403,019	333,395	46.37	394,780	329,947	54.28	378,612	323,232	57.19
	15000	92	77	579,592	390,159	47.71	519,604	369,141	49.09	508,877	365,438	57.10	487,791	358,207	60.21
		86	72	535,235	383,413	46.94	479,839	362,758	48.13	469,932	359,120	56.11	450,460	352,013	59.15
		80	67	492,850	374,793	46.20	441,841	354,602	47.22	432,719	351,045	55.15	414,789	344,099	58.12
		74	62	453,422	365,423	45.59	406,493	345,737	46.45	398,101	342,269	54.36	381,605	335,497	57.27

SPU-540	13500	92	77	631,343	394,878	53.28	568,983	372,061	62.34	558,033	368,125	64.07	535,755	360,179	67.75
		86	72	583,026	388,050	52.42	525,438	365,627	61.25	515,327	361,759	62.95	494,753	353,951	66.54
		80	67	536,856	379,326	51.59	483,829	357,407	60.22	474,518	353,626	61.87	455,574	345,993	65.38
		74	62	493,908	369,842	50.89	445,123	348,472	59.35	436,557	344,785	60.97	419,128	337,344	64.41
	14600	92	77	639,215	410,080	53.44	575,460	387,139	62.48	564,858	383,389	64.23	541,547	375,193	67.90
		86	72	590,295	402,989	52.57	531,420	380,445	61.40	521,629	376,760	63.10	500,102	368,706	66.69
		80	67	543,550	393,929	51.73	489,337	371,891	60.35	480,321	368,290	62.02	460,499	360,416	65.52
		74	62	500,066	384,080	51.04	450,190	362,594	59.49	441,896	359,082	61.12	423,659	351,406	64.55
	15700	92	77	645,972	424,964	53.57	581,187	401,994	62.61	569,895	398,048	64.35	546,306	389,871	68.03
		86	72	596,535	417,616	52.70	536,709	395,043	61.52	526,281	391,166	63.22	504,497	383,130	66.81
		80	67	549,296	408,227	51.86	494,207	386,161	60.48	484,605	382,371	62.13	464,546	374,516	65.64
		74	62	505,352	398,021	51.16	454,670	376,507	59.61	445,837	372,812	61.23	427,382	365,153	64.67
	16800	92	77	652,320	439,796	53.70	585,811	416,514	62.72	574,804	412,719	64.46	550,819	404,497	68.14
		86	72	602,397	432,191	52.82	540,979	409,312	61.63	530,814	405,583	63.33	508,664	397,502	66.92
		80	67	554,693	422,474	51.98	498,139	400,109	60.59	488,779	396,464	62.24	468,383	388,565	65.75
		74	62	510,318	411,913	51.28	458,288	390,107	59.71	449,677	386,553	61.33	430,912	378,851	64.77

See note on page 17

PERFORMANCE DATA TABLES (4 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM	Air Flow		95			115			118.4			125		
		DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-600	15000	86	72	631,600	421,923	56.87	570,969	398,330	66.96	560,013	394,133	68.90	537,424	385,552	73.08
		80	67	581,583	412,437	55.93	525,754	389,374	65.79	515,665	385,272	67.68	494,866	376,883	71.77
		74	62	535,057	402,126	55.15	483,694	379,640	64.82	474,412	375,640	66.67	455,276	367,461	70.67
	16100	86	72	638,538	436,361	57.04	576,579	412,598	67.11	565,477	408,405	69.05	542,583	399,824	73.24
		80	67	587,972	426,550	56.10	530,920	403,321	65.94	520,697	399,223	67.83	499,616	390,835	71.92
		74	62	540,934	415,886	55.31	488,446	393,238	64.96	479,041	389,243	66.81	459,647	381,064	70.82
	17200	86	72	644,778	450,609	57.18	581,176	426,529	67.24	569,940	422,339	69.17	547,388	413,991	73.40
		80	67	593,718	440,478	56.24	535,153	416,939	66.06	524,807	412,844	67.95	504,040	404,683	72.08
		74	62	546,221	429,466	55.46	492,341	406,516	65.08	482,822	402,523	66.93	463,717	394,566	70.98
18300	86	72	651,022	464,917	57.33	585,698	440,462	67.37	574,827	436,453	69.30	551,072	427,744	73.51	
	80	67	599,468	454,464	56.39	539,317	430,559	66.19	529,307	426,640	68.08	507,433	418,127	72.18	
	74	62	551,511	443,102	55.60	496,172	419,795	65.20	486,962	415,974	67.05	466,838	407,674	71.08	
SPU-660	16500	86	72	694,293	456,405	58.93	623,936	428,667	69.24	610,542	423,905	71.17	585,739	413,953	75.08
		80	67	639,312	446,143	57.97	574,526	419,030	68.03	562,194	414,374	69.92	539,354	404,646	73.74
		74	62	588,167	434,990	57.16	528,564	408,554	67.02	517,218	404,015	68.88	496,206	394,530	72.62
	17700	86	72	702,273	471,085	59.06	630,038	443,309	69.35	616,973	438,323	71.29	591,571	428,696	75.20
		80	67	646,660	460,494	58.09	580,145	433,342	68.14	568,115	428,468	70.03	544,725	419,058	73.85
		74	62	594,927	448,981	57.28	533,734	422,508	67.13	522,666	417,756	68.99	501,147	408,581	72.73
	19000	86	72	710,046	487,347	59.17	636,734	459,255	69.47	623,193	454,151	71.41	597,335	444,476	75.32
		80	67	653,818	476,390	58.20	586,311	448,930	68.25	573,843	443,941	70.15	550,032	434,483	73.97
		74	62	601,512	464,480	57.39	539,406	437,707	67.24	527,935	432,842	69.10	506,029	423,621	72.84
20300	86	72	717,180	503,131	59.28	642,240	474,766	69.57	628,401	469,608	71.50	601,887	459,796	75.41	
	80	67	660,386	491,819	58.31	591,381	464,092	68.35	578,638	459,050	70.24	554,223	449,459	74.06	
	74	62	607,555	479,523	57.50	544,071	452,490	67.34	532,347	447,574	69.19	509,886	438,222	72.93	
SPU-720	18000	86	72	757,050	502,132	67.13	679,832	471,896	69.83	666,112	466,618	80.21	638,215	455,972	84.46
		80	67	697,100	490,843	66.07	625,996	461,286	68.51	613,363	456,127	78.84	587,675	445,720	82.99
		74	62	641,332	478,572	65.18	575,916	449,754	67.41	564,294	444,724	77.70	540,661	434,577	81.76
	19400	86	72	765,933	519,573	67.27	686,891	489,527	69.97	673,357	484,399	80.35	644,736	473,623	84.60
		80	67	705,279	507,891	66.20	632,496	478,521	68.64	620,034	473,508	78.97	593,680	462,974	83.13
		74	62	648,857	495,194	65.31	581,896	466,558	67.54	570,431	461,671	77.83	546,186	451,400	81.90
	20800	86	72	774,549	537,872	67.41	693,730	507,124	70.09	679,241	501,700	80.46	650,475	491,007	84.72
		80	67	713,213	525,779	66.34	638,793	495,723	68.76	625,452	490,420	79.08	598,964	479,968	83.24
		74	62	656,156	512,635	65.45	587,690	483,329	67.66	575,416	478,160	77.93	551,047	467,968	82.01
22200	86	72	782,000	555,357	67.53	699,613	524,384	70.21	684,901	518,937	80.57	655,731	508,211	84.83	
	80	67	720,074	542,871	66.46	644,211	512,595	68.88	630,664	507,270	79.19	603,804	496,785	83.35	
	74	62	662,468	529,299	65.56	592,674	499,780	67.77	580,211	494,588	78.04	555,499	484,366	82.11	

See note on page 17

PERFORMANCE DATA TABLES (6 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM	Air Flow		95			115			118.4			125		
		DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-600	15000	92	77	705,800	429,347	58.34	636,010	419,784	68.64	624,212	415,575	70.63	598,413	406,436	74.93
		86	72	651,784	421,923	57.36	587,336	412,526	67.41	576,440	408,389	69.35	552,616	399,408	73.55
		80	67	600,170	412,437	56.41	540,825	403,251	66.23	530,792	399,207	68.13	508,855	390,428	72.22
		74	62	552,156	402,126	55.62	497,559	393,170	65.24	488,329	389,227	67.10	468,146	380,668	71.12
	16100	92	77	713,246	460,814	58.52	642,682	435,585	68.81	630,257	431,215	70.79	603,684	421,933	75.09
		86	72	658,661	452,846	57.52	593,497	428,053	67.58	582,023	423,759	69.51	557,484	414,637	73.70
		80	67	606,502	442,664	56.57	546,498	418,429	66.39	535,933	414,232	68.28	513,337	405,315	72.37
		74	62	557,982	431,598	55.78	502,779	407,969	65.40	493,058	403,876	67.25	472,270	395,182	71.27
	17200	92	77	720,773	476,663	58.69	648,350	451,115	68.98	635,674	446,708	70.93	609,380	437,637	75.26
		86	72	665,612	468,421	57.69	598,731	443,315	67.74	587,025	438,984	69.64	562,744	430,070	73.87
		80	67	612,902	457,890	56.74	551,318	433,348	66.55	540,539	429,114	68.41	518,180	420,401	72.54
		74	62	563,870	446,443	55.94	507,212	422,514	65.56	497,296	418,386	67.38	476,726	409,891	71.43
	18300	92	77	727,171	492,197	58.85	653,205	448,212	69.10	640,558	462,067	71.07	612,952	452,645	75.38
		86	72	671,520	483,686	57.85	603,214	440,462	67.86	591,536	454,077	69.78	566,042	444,818	73.99
		80	67	618,342	472,812	56.89	555,446	430,559	66.67	544,692	443,868	68.54	521,218	434,817	72.65
		74	62	568,875	460,991	56.10	511,010	419,795	65.67	501,117	432,772	67.51	479,520	423,947	71.54
SPU-660	16500	92	77	781,424	486,332	60.37	699,454	456,231	70.90	685,158	451,081	72.89	655,556	440,491	76.89
		86	72	721,621	477,923	59.35	645,924	448,343	69.63	632,722	443,281	71.58	605,386	432,874	75.48
		80	67	664,476	467,178	58.37	594,773	438,263	68.42	582,617	433,315	70.32	557,445	423,142	74.13
		74	62	611,318	455,499	57.56	547,192	427,306	67.40	536,008	422,482	69.26	512,850	412,564	73.00
	17700	92	77	790,724	503,140	60.50	706,450	472,648	71.02	691,777	467,431	73.01	662,382	457,066	77.02
		86	72	730,210	494,441	59.48	652,385	464,475	69.74	638,835	459,349	71.69	611,690	449,163	75.61
		80	67	672,385	483,324	58.50	600,723	454,033	68.52	588,245	449,022	70.42	563,250	439,065	74.25
		74	62	618,594	471,241	57.69	552,665	442,682	67.51	541,186	437,796	69.37	518,190	428,088	73.12
	19000	92	77	799,017	520,821	60.63	713,660	490,386	71.14	698,259	484,983	73.12	668,255	474,539	77.13
		86	72	737,868	511,816	59.60	659,043	481,907	69.87	644,820	476,597	71.80	617,113	466,333	75.72
		80	67	679,436	500,309	58.62	606,854	471,072	68.64	593,757	465,881	70.53	568,244	455,849	74.36
		74	62	625,081	487,801	57.80	558,306	459,295	67.62	546,257	454,234	69.47	522,784	444,453	73.22
	20300	92	77	807,268	538,602	60.74	719,997	507,873	71.25	704,367	502,455	73.22	673,681	491,889	77.24
		86	72	745,488	529,289	59.72	664,895	499,092	69.97	650,461	493,767	71.90	622,124	483,383	75.82
		80	67	686,453	517,389	58.73	612,242	487,871	68.75	598,951	482,665	70.63	572,858	472,515	74.46
		74	62	631,537	504,454	57.91	563,263	475,674	67.73	551,035	470,599	69.57	527,029	460,702	73.32
SPU-720	18000	92	77	843,202	527,557	68.60	755,870	495,601	71.57	740,069	489,923	81.98	708,405	478,636	86.34
		86	72	778,672	518,435	67.49	698,023	487,032	70.18	683,431	481,451	80.54	654,190	470,360	84.80
		80	67	717,009	506,780	66.41	642,747	476,082	68.85	629,311	470,627	79.16	602,385	459,785	83.32
		74	62	659,648	494,110	65.52	591,327	464,180	67.74	578,966	458,861	78.01	554,194	448,290	82.09
	19400	92	77	854,243	547,334	68.77	763,658	514,704	71.71	747,584	509,013	82.12	715,672	497,801	86.49
		86	72	788,868	537,870	67.65	705,215	505,804	70.32	690,371	500,212	80.68	660,901	489,193	84.95
		80	67	726,397	525,777	66.57	649,369	494,432	68.98	635,701	488,966	79.30	608,564	478,195	83.46
		74	62	668,286	512,633	65.67	597,420	482,071	67.87	584,845	476,742	78.14	559,879	466,240	82.23
	20800	92	77	862,887	566,374	68.91	751,221	516,047	71.84	754,628	528,014	82.25	722,046	516,714	86.62
		86	72	796,849	556,581	67.78	693,730	507,124	70.44	696,876	518,884	80.81	666,787	507,780	85.08
		80	67	733,747	544,067	66.70	638,793	495,723	69.11	641,690	507,218	79.42	613,985	496,364	83.59
		74	62	675,047	530,465	65.80	587,690	483,329	67.99	590,355	494,538	78.27	564,866	483,954	82.35
	22200	92	77	871,226	585,410	69.03	777,296	552,457	71.96	761,295	546,931	82.37	727,791	535,435	86.73
		86	72	804,550	575,288	67.90	717,809	542,905	70.56	703,032	537,474	80.92	672,092	526,176	85.18
		80	67	740,838	562,354	66.82	660,966	530,699	69.22	647,359	525,390	79.53	618,870	514,346	83.70
		74	62	681,571	548,295	65.92	608,089	517,431	68.11	595,571	512,255	78.38	569,360	501,488	82.46

See note on page 17

PERFORMANCE DATA TABLES (4 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM	Air Flow		95			115			118.4			125		
		DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-780	19500	86	72	819,878	537,919	74.86	738,720	505,828	87.26	723,079	499,756	89.67	694,974	488,926	94.41
		80	67	754,952	525,825	73.67	680,221	494,455	85.78	665,819	488,520	88.13	639,940	477,933	92.76
		74	62	694,556	512,680	72.67	625,803	482,094	84.54	612,553	476,307	86.85	588,744	465,985	91.39
	21000	86	72	829,989	556,557	75.03	746,902	524,208	87.42	730,915	518,088	89.83	702,005	507,110	94.58
		80	67	764,263	544,044	73.83	687,755	512,422	85.93	673,034	506,440	88.28	646,413	495,709	92.92
		74	62	703,122	530,443	72.83	632,735	499,612	84.69	619,191	493,779	87.00	594,700	483,316	91.54
	22500	86	72	776,910	546,821	75.18	754,330	542,347	87.57	738,290	536,290	89.98	708,407	525,080	94.72
		80	67	715,387	534,527	73.98	694,595	530,154	86.08	679,825	524,233	88.43	652,309	513,275	93.06
		74	62	658,156	521,164	72.98	639,027	516,900	84.84	625,439	511,127	87.14	600,124	500,443	91.68
24000	86	72	847,546	593,074	75.32	760,070	559,880	87.69	744,805	554,180	90.11	714,404	542,896	94.85	
	80	67	780,429	579,740	74.12	699,880	547,292	86.19	685,824	541,720	88.56	657,831	530,690	93.19	
	74	62	717,995	565,246	73.11	643,890	533,610	84.95	630,958	528,177	87.27	605,204	517,422	91.81	
SPU-840	21000	86	72	884,700	579,498	77.21	799,923	545,903	90.41	784,044	539,721	92.91	754,186	528,179	97.98
		80	67	814,641	566,469	75.96	736,577	533,629	88.85	721,956	527,586	91.30	694,462	516,304	96.25
		74	62	749,470	552,307	74.92	677,651	520,289	87.55	664,199	514,396	89.95	638,905	503,396	94.80
	22500	86	72	895,178	598,170	77.36	808,208	564,209	90.55	792,339	558,109	93.06	761,860	546,488	98.14
		80	67	824,290	584,721	76.11	744,206	551,524	88.99	729,594	545,561	91.44	701,528	534,202	96.40
		74	62	758,346	570,103	75.07	684,670	537,735	87.69	671,227	531,922	90.10	645,406	520,847	94.95
	24000	86	72	904,582	616,518	77.50	815,639	582,233	90.69	799,606	576,149	93.20	768,134	564,290	98.27
		80	67	832,948	602,657	76.25	751,049	569,142	89.13	736,286	563,195	91.58	707,306	551,603	96.53
		74	62	766,312	587,590	75.20	690,965	554,914	87.82	677,383	549,115	90.22	650,721	537,813	95.08
	25500	86	72	913,120	634,604	77.63	822,519	600,076	90.80	806,366	594,016	93.32	774,309	582,060	98.40
		80	67	840,810	620,337	76.37	757,384	586,584	89.24	742,510	580,661	91.70	712,992	568,974	96.65
		74	62	773,545	604,828	75.32	696,793	571,920	87.93	683,109	566,144	90.34	655,952	554,749	95.20
SPU-960	24000	86	72	1,013,601	667,893	85.72	914,723	629,008	101.16	897,070	622,189	104.09	862,850	609,069	110.14
		80	67	933,335	652,877	84.27	842,286	614,866	99.35	826,032	608,200	102.21	794,521	595,376	108.12
		74	62	858,668	636,555	83.07	774,903	599,495	97.84	759,949	592,995	100.65	730,959	580,491	106.44
	25600	86	72	1,023,935	687,964	85.90	923,538	649,016	101.34	905,644	642,191	104.27	869,507	628,499	110.31
		80	67	942,850	672,496	84.45	850,404	634,424	99.53	833,926	627,753	102.39	800,651	614,368	108.28
		74	62	867,422	655,684	83.24	782,371	618,564	98.02	767,212	612,059	100.82	736,599	599,009	106.60
	27200	86	72	1,033,728	707,930	86.06	931,500	668,749	101.51	913,232	661,850	104.43	876,792	648,201	110.48
		80	67	951,867	692,014	84.60	857,735	653,713	99.69	840,914	646,970	102.54	807,359	633,628	108.45
		74	62	875,718	674,713	83.39	789,116	637,370	98.18	773,641	630,795	100.97	742,771	617,787	106.76
	28800	86	72	1,042,005	727,373	86.20	937,704	687,833	101.63	920,086	681,255	104.57	883,319	667,623	110.63
		80	67	959,489	711,020	84.74	863,447	672,369	99.81	847,225	665,938	102.68	813,369	652,613	108.60
		74	62	882,730	693,244	83.52	794,372	655,560	98.29	779,447	649,290	101.10	748,300	636,298	106.90

See note on page 17

PERFORMANCE DATA TABLES (6 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM	DB	WB	95			115			118.4			125		
				Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-780	19500	92	77	922,439	572,916	76.65	828,413	538,287	89.34	810,741	531,900	91.81	777,623	520,019	96.67
		86	72	851,844	563,010	75.40	765,014	528,980	87.78	748,695	522,703	90.20	718,111	511,027	94.94
		80	67	784,387	550,352	74.19	704,433	517,087	86.29	689,406	510,951	88.64	661,244	499,538	93.28
		74	62	721,636	536,593	73.18	648,078	504,160	85.04	634,254	498,177	87.35	608,345	487,050	91.89
	21000	92	77	934,128	593,794	76.84	837,143	558,641	89.51	810,520	545,382	91.98	785,743	540,432	96.86
		86	72	862,639	583,526	75.57	773,076	548,981	87.95	748,490	535,951	90.35	725,610	531,087	95.12
		80	67	794,327	570,407	74.36	711,856	536,639	86.45	689,217	523,902	88.80	668,149	519,147	93.45
		74	62	730,781	556,147	73.36	654,908	523,223	85.20	634,080	510,804	87.50	614,697	506,168	92.06
	22500	92	77	944,169	614,229	77.00	845,454	578,981	89.68	818,633	565,267	92.14	792,568	560,449	97.00
		86	72	871,911	603,608	75.73	780,751	568,970	88.11	755,983	555,493	90.51	731,912	550,758	95.26
		80	67	802,864	590,037	74.52	718,924	556,178	86.61	696,117	543,004	88.95	673,952	538,376	93.59
		74	62	738,635	575,286	73.51	661,410	542,274	85.35	640,427	529,429	87.65	620,036	524,916	92.20
	24000	92	77	953,859	634,649	77.14	852,890	599,017	89.82	824,805	584,512	92.26	799,384	560,140	97.15
		86	72	880,859	623,675	75.88	787,618	588,660	88.25	761,682	574,405	90.63	738,207	550,455	95.41
		80	67	811,104	609,653	74.66	725,247	575,425	86.74	701,365	561,491	89.07	679,749	538,079	93.73
		74	62	746,216	594,412	73.65	667,227	561,039	85.48	645,255	547,454	87.77	625,369	524,627	92.34

SPU-840	21000	92	77	997,181	618,449	79.05	897,651	581,710	92.56	879,873	575,269	95.13	845,230	562,811	100.34
		86	72	920,867	607,755	77.74	828,953	571,652	90.93	812,536	565,322	93.43	780,544	553,079	98.52
		80	67	847,943	594,091	76.48	763,308	558,800	89.36	748,191	552,612	91.80	718,733	540,645	96.77
		74	62	780,108	579,239	75.43	702,244	544,830	88.05	688,336	538,797	90.44	661,234	527,129	95.32
	22500	92	77	1,008,752	639,189	79.22	906,754	602,105	92.72	889,469	595,929	95.29	853,266	583,663	100.50
		86	72	931,551	628,137	77.90	837,359	591,694	91.08	821,397	585,625	93.59	787,965	573,571	98.67
		80	67	857,782	614,015	76.64	771,049	578,391	89.50	756,351	572,459	91.96	725,566	560,675	96.92
		74	62	789,160	598,664	75.59	709,365	563,931	88.19	695,843	558,147	90.60	667,521	546,658	95.46
	24000	92	77	1,019,595	659,819	79.37	915,351	622,413	92.86	897,597	616,152	95.44	860,948	603,300	100.65
		86	72	941,565	648,410	78.05	845,298	611,650	91.22	828,903	605,498	93.73	795,059	592,868	98.82
		80	67	867,003	633,832	76.78	778,359	597,899	89.64	763,263	591,884	92.10	732,099	579,539	97.07
		74	62	797,643	617,986	75.73	716,091	582,951	88.33	702,202	577,087	90.74	673,531	565,050	95.61
	25500	92	77	1,029,093	680,073	79.51	923,544	642,643	93.00	904,430	635,968	95.56	867,520	623,169	100.78
		86	72	950,336	668,313	78.19	852,865	631,531	91.36	835,214	624,971	93.85	801,128	612,394	98.95
		80	67	875,079	653,288	76.92	785,327	617,332	89.78	769,073	610,920	92.21	737,687	598,625	97.19
		74	62	805,073	636,956	75.86	722,501	601,899	88.46	707,547	595,647	90.85	678,672	583,660	95.73

SPU-960	24000	92	77	1,137,939	710,707	87.87	1,024,818	669,294	103.70	1,003,879	661,758	106.68	963,851	647,475	112.90
		86	72	1,050,852	698,418	86.34	946,388	657,721	101.80	927,052	650,315	104.71	890,087	636,280	110.78
		80	67	967,635	682,715	84.88	871,444	642,933	99.98	853,639	635,694	102.81	819,601	621,975	108.75
		74	62	890,224	665,647	83.66	801,729	626,860	98.46	785,348	619,802	101.24	754,033	606,425	107.05
	25600	92	77	1,151,413	733,781	88.09	1,033,677	691,258	103.88	1,013,365	684,046	106.87	972,675	669,709	113.11
		86	72	1,063,295	721,094	86.56	954,569	679,305	101.98	935,812	672,218	104.90	898,236	658,129	110.99
		80	67	979,093	704,881	85.09	878,977	664,033	100.15	861,705	657,105	103.00	827,105	643,332	108.95
		74	62	900,765	687,259	83.87	808,659	647,432	98.62	792,769	640,677	101.42	760,936	627,249	107.25
	27200	92	77	1,162,272	756,027	88.26	1,042,873	713,435	104.06	1,021,872	706,063	107.04	979,948	691,459	113.27
		86	72	1,073,322	742,954	86.72	963,061	701,099	102.15	943,668	693,855	105.06	904,952	679,503	111.14
		80	67	988,326	726,251	85.25	886,796	685,336	100.31	868,939	678,255	103.16	833,290	664,226	109.10
		74	62	909,260	708,094	84.03	815,853	668,202	98.79	799,424	661,299	101.57	766,626	647,621	107.40
	28800	92	77	1,171,468	777,795	88.41	1,051,024	735,304	104.21	1,029,577	727,862	107.20	987,219	713,249	113.45
		86	72	1,081,815	764,346	86.87	970,588	722,590	102.30	950,783	715,276	105.22	911,667	700,916	111.32
		80	67	996,146	747,161	85.40	893,728	706,344	100.46	875,491	699,195	103.31	839,472	685,158	109.27
		74	62	916,454	728,482	84.17	822,229	688,685	98.93	805,452	681,715	101.73	772,314	668,029	107.56

See note on page 17

PERFORMANCE DATA TABLES (4 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM		95			115			118.4			125			
	DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	
			Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.		
SPU-1080	27000	86	72	1,139,271	756,313	97.04	1,029,265	713,210	111.71	1,009,542	705,616	118.17	969,932	690,476	125.32
		80	67	1,049,052	739,309	95.39	947,758	697,175	109.65	929,597	689,752	116.03	893,124	674,952	123.01
		74	62	965,128	720,826	94.02	871,937	679,745	107.93	855,229	672,508	114.25	821,674	658,078	121.09
	28800	86	72	1,151,208	779,575	97.28	1,038,772	736,106	111.92	1,018,888	728,547	118.39	978,912	713,429	125.56
		80	67	1,060,044	762,048	95.63	956,512	719,556	109.86	938,203	712,167	116.24	901,392	697,389	123.25
		74	62	975,240	742,997	94.25	879,991	701,567	108.14	863,146	694,363	114.46	829,281	679,954	121.32
	30600	86	72	1,162,338	802,640	97.50	1,047,480	758,767	112.13	1,028,193	751,513	118.60	986,423	735,903	125.75
		80	67	1,070,293	784,594	95.84	964,530	741,708	110.07	946,771	734,617	116.46	908,308	719,358	123.44
		74	62	984,669	764,979	94.46	887,368	723,165	108.34	871,029	716,251	114.67	835,643	701,374	121.51
	32400	86	72	1,171,900	825,186	97.69	1,055,928	781,356	112.32	1,036,070	773,960	118.79	993,087	758,060	125.93
		80	67	1,079,098	806,634	96.04	972,310	763,788	110.25	954,024	756,559	116.63	914,445	741,017	123.61
		74	62	992,770	786,468	94.65	894,525	744,694	108.52	877,702	737,645	114.84	841,289	722,491	121.68
SPU-1200	30000	86	72	1,266,727	846,092	110.26	1,144,237	798,409	130.43	1,122,209	789,976	134.30	1,077,872	773,133	142.71
		80	67	1,166,416	827,069	108.39	1,053,625	780,458	128.08	1,033,342	772,215	131.87	992,516	755,751	140.08
		74	62	1,073,102	806,393	106.83	969,335	760,947	126.13	950,674	752,910	129.84	913,114	736,857	137.89
	32000	86	72	1,279,553	872,464	110.57	1,154,376	824,377	130.70	1,133,070	816,323	134.60	1,087,270	799,131	142.98
		80	67	1,178,225	852,849	108.69	1,062,961	805,843	128.35	1,043,343	797,970	132.16	1,001,170	781,164	140.34
		74	62	1,083,967	831,527	107.13	977,924	785,697	126.39	959,875	778,021	130.12	921,076	761,635	138.14
	34000	86	72	1,291,981	898,818	110.87	1,164,464	850,402	130.98	1,142,022	842,010	134.85	1,095,778	824,845	143.25
		80	67	1,189,670	878,610	108.98	1,072,250	831,282	128.62	1,051,586	823,079	132.40	1,009,004	806,300	140.60
		74	62	1,094,496	856,645	107.41	986,470	810,500	126.66	967,459	802,502	130.36	928,283	786,143	138.40
	36000	86	72	1,302,159	924,397	111.12	1,172,347	875,637	131.19	1,149,695	867,258	135.05	1,102,253	849,812	143.46
		80	67	1,199,042	903,614	109.23	1,079,509	855,950	128.82	1,058,651	847,760	132.60	1,014,966	830,706	140.81
		74	62	1,103,118	881,023	107.65	993,148	834,552	126.86	973,959	826,566	130.56	933,769	809,939	138.61

PERFORMANCE DATA TABLES (6 ROWS)

Model	Air Flow		Condenser Ambient Temperature [°F]												
	CFM	Air Flow		95			115			118.4			125		
		DB	WB	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input	Capacity Btu/Hr		kW Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
SPU-1080	27000	92	77	1,276,376	801,801	99.56	1,150,114	755,695	114.63	1,127,901	747,725	121.17	1,082,514	731,561	128.52
		86	72	1,178,695	787,937	97.83	1,062,095	742,629	112.47	1,041,582	734,796	118.92	999,668	718,911	126.10
		80	67	1,085,354	770,222	96.17	977,988	725,932	110.39	959,100	718,275	116.76	920,505	702,748	123.78
		74	62	998,526	750,966	94.78	899,749	707,784	108.66	882,372	700,319	114.97	846,864	685,179	121.84
	28800	92	77	1,291,100	828,016	99.84	1,161,181	781,216	114.88	1,138,866	773,315	121.42	1,092,384	756,962	128.78
		86	72	1,192,291	813,699	98.11	1,072,315	767,708	112.71	1,051,708	759,943	119.17	1,008,783	743,873	126.35
		80	67	1,097,874	795,404	96.44	987,399	750,447	110.63	968,423	742,858	117.01	928,898	727,149	124.02
		74	62	1,010,044	775,519	95.05	908,407	731,686	108.89	890,949	724,286	115.21	854,586	708,970	122.08
	30600	92	77	1,302,748	853,277	100.08	1,170,729	806,306	115.10	1,148,497	798,520	121.63	1,100,319	781,763	128.99
		86	72	1,203,048	838,523	98.34	1,081,132	792,364	112.93	1,060,601	784,712	119.38	1,016,111	768,245	126.56
		80	67	1,107,779	819,671	96.67	995,518	774,549	110.84	976,613	767,070	117.21	935,645	750,973	124.22
		74	62	1,019,156	799,179	95.27	915,876	755,185	109.10	898,484	747,893	115.41	860,793	732,198	122.27
	32400	92	77	1,313,938	878,504	100.30	1,179,720	831,281	115.31	1,156,711	823,304	121.83	1,108,610	806,743	129.21
		86	72	1,213,381	863,314	98.55	1,089,435	816,907	113.13	1,068,187	809,068	119.57	1,023,767	792,794	126.77
		80	67	1,117,294	843,904	96.87	1,003,163	798,541	111.04	983,598	790,878	117.40	942,695	774,970	124.43
		74	62	1,027,911	822,806	95.48	922,910	778,577	109.30	904,910	771,106	115.59	867,280	755,595	122.48

SPU-1200	30000	92	77	1,412,667	891,684	113.14	1,273,275	841,088	133.75	1,248,654	832,303	137.71	1,198,093	814,400	146.34
		86	72	1,304,555	876,266	111.17	1,175,831	826,545	131.29	1,153,094	817,912	135.16	1,106,402	800,318	143.57
		80	67	1,201,248	856,565	109.27	1,082,717	807,962	128.93	1,061,781	799,523	132.70	1,018,787	782,324	140.92
		74	62	1,105,148	835,151	107.70	996,100	787,763	126.96	976,839	779,535	130.66	937,284	762,766	138.71
	32000	92	77	1,427,996	920,948	113.50	1,285,470	869,916	134.07	1,260,676	861,186	138.03	1,208,490	842,937	146.65
		86	72	1,318,711	905,024	111.52	1,187,092	854,874	131.60	1,164,196	846,295	135.47	1,116,004	828,362	143.88
		80	67	1,214,283	884,676	109.62	1,093,086	835,654	129.23	1,072,004	827,268	133.01	1,027,628	809,738	141.22
		74	62	1,117,140	862,559	108.04	1,005,639	814,763	127.26	986,243	806,586	130.96	945,417	789,494	139.00
	34000	92	77	1,441,680	949,815	113.82	1,296,570	898,492	134.37	1,272,408	890,082	138.33	1,217,777	871,179	146.94
		86	72	1,331,347	933,392	111.84	1,197,342	882,956	131.90	1,175,030	874,692	135.76	1,124,580	856,115	144.16
		80	67	1,225,918	912,407	109.93	1,102,525	863,105	129.52	1,081,980	855,026	133.29	1,035,525	836,867	141.49
		74	62	1,127,845	889,596	108.34	1,014,323	841,527	127.54	995,421	833,651	131.24	952,683	815,945	139.27
	36000	92	77	1,451,756	977,538	114.07	1,305,416	926,369	134.62	1,281,074	917,982	138.58	1,227,337	899,584	147.21
		86	72	1,340,652	960,635	112.07	1,205,512	910,351	132.14	1,183,033	902,109	136.00	1,133,409	884,029	144.43
		80	67	1,234,486	939,038	110.16	1,110,048	889,883	129.76	1,089,349	881,827	133.53	1,043,654	864,154	141.76
		74	62	1,135,727	915,562	108.57	1,021,244	867,636	127.77	1,002,201	859,781	131.47	960,162	842,550	139.53

LEGEND:

CFM : Air flow rate (Ft³/minute)
 DB : Dry bulb temperature (°F)
 WB : Wet bulb temperature (°F)
 KW : Total Power Input (Kilowatts)

Note:

1. Cooling capacities are based on 80°/67°F Evaporating air temperature and 95° Condensing air temperature.
2. Direct interpolation is permissible – Do not extrapolate.
3. Capacity in KW = (Btu/Hr/12000)*3.517.

UNIT ELECTRICAL DATA

MODEL	POWER SUPPLY	VOLTAGE RANGE		Condenser Fan Motor		Compressor 1		Compressor 1		Evaporator Blower Motor		MCA	MOCP
	(V-PH-HZ)	MIN.	MAX.	HP	FLA	RLA	LRA	RLA	LRA	HP (KW)	FLA		
SPU-420	415-3-50	374	457	1.5 (4)	3.0	17.9(2)	139.0	14.5(2)	101.0	10.0 (7.5)	14.0	95.2	110
SPU-480	415-3-50	374	457	1.5 (4)	3.0	17.9(2)	139.0	17.9(2)	139.0	15.0 (11.0)	20.2	108.3	125
SPU-540	415-3-50	374	457	2.0 (4)	3.8	20.8 (2)	183.9	17.9 (2)	139.0	15.0 (11.0)	20.2	118.0	125
SPU-600	415-3-50	374	457	2.0 (4)	3.8	20.8 (2)	144.0	20.8 (2)	144.0	15.0 (11.0)	20.2	123.8	125
SPU-660	415-3-50	374	457	1.5 (6)	3.0	27.9	173.0	24.3 (3)	140.0	15.0 (11.0)	20.7	146.5	150
SPU-720	415-3-50	374	457	1.5 (6)	3.0	27.9 (3)	173.0	24.3	140.0	15.0 (11.0)	20.7	153.7	175
SPU-780	415-3-50	374	457	2.0 (6)	3.8	34.3	229.0	27.9(3)	173.0	15.0 (11.0)	20.7	170.0	200
SPU-840	415-3-50	374	457	1.5 (8)	3.0	34.3(2)	229.0	27.9(2)	173.0	20.0 (15.0)	26.9	183.9	200
SPU-960	415-3-50	374	457	1.5 (8)	3.0	34.3(2)	229	34.3(2)	229.0	20.0 (15.0)	26.9	196.7	225
SPU-1080	415-3-50	374	457	2.0 (8)	3.8	42.1(2)	320	34.3(2)	229.0	20.0 (15.0)	26.9	220.6	250
SPU-1200	415-3-50	374	457	2.0 (8)	3.8	42.1(2)	320	42.1(2)	320.0	25.0 (18.5)	34.8	244.1	250

LEGEND:

FLA - Full Load Amps
 HP - Horse Power
 LRA - Locked Rotor Amps

RLA - Rated Load Amps
 MCA - Minimum Circuit Amps
 MOCP - Maximum Over Current Protection

FAN PERFORMANCE (4 ROWS)

Model	CFM	External Static Pressure [in.wg]											
		0.70		1.00		1.50		2.00		2.50		3.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
SPU-420	10500	1638	4.76	1711	5.38	1824	6.43	1930	7.51	2032	8.64	2131	9.77
	11400	1711	5.47	1782	6.13	1892	7.25	1994	8.39	2092	9.57	2186	10.78
	12300	1784	6.27	1854	6.96	1962	8.15	2062	9.36	2156	10.60	2247	11.88
	13200	1860	7.16	1928	7.88	2033	9.14	2132	10.42	2224	11.73	2311	13.07
SPU-480	12000	1760	6.00	1830	6.68	1938	7.84	2039	9.03	2134	10.25	2226	11.50
	13000	1843	6.96	1911	7.67	2017	8.91	2116	10.17	2208	11.47	2297	12.79
	14000	1929	8.04	1994	8.79	2098	10.11	2195	11.45	2285	12.82	2371	14.21
	15000	2017	9.26	2079	10.07	2180	11.42	2275	12.84	2364	14.28	2448	15.75
SPU-540	13500	1480	6.22	1544	7.01	1644	8.35	1738	9.73	1828	11.15	1915	12.60
	14600	1543	7.10	1606	7.95	1704	9.37	1795	10.83	1881	12.33	1964	13.86
	15700	1607	8.10	1669	9.00	1765	10.49	1854	12.04	1938	13.62	2018	15.23
	16800	1673	9.22	1733	10.15	1827	11.73	1915	13.36	1997	15.03	2075	16.72
SPU-600	15000	1566	7.47	1629	8.31	1726	9.77	1816	11.26	1901	12.79	1983	14.34
	16100	1631	8.50	1692	9.40	1788	10.94	1876	12.51	1959	14.12	2038	15.75
	17200	1698	9.66	1757	10.60	1850	12.20	1937	13.86	2018	15.56	2096	17.27
	18300	1766	10.95	1823	11.93	1914	13.60	1999	15.34	2079	17.12	2155	18.93
SPU-660	16500	882	6.90	918	7.75	975	9.18	1029	10.64	1082	12.14	1133	13.67
	17700	918	7.82	953	8.70	1008	10.21	1060	11.77	1110	13.34	1159	14.95
	19000	958	8.90	992	9.84	1045	11.43	1096	13.08	1144	14.75	1190	16.43
	20300	999	10.13	1032	11.10	1083	12.77	1132	15.91	1179	16.27	1224	18.06
SPU-720	18000	928	8.06	962	8.95	1017	10.48	1068	12.05	1118	13.66	1166	15.28
	19400	971	9.26	1004	10.21	1057	11.84	1107	13.50	1154	15.20	1200	16.92
	20800	1015	10.64	1047	11.62	1098	13.32	1146	15.09	1193	16.89	1237	18.70
	22200	1061	12.18	1092	13.20	1141	14.99	1187	16.82	1232	18.71	1275	20.63

LEGEND:

RPM : Fan Speed in revolution per minute
 BHP : Fan absorbed power

Note:

1. Internal Static pressure is based on pressure drops through evaporator coil, fan casing and 2" washable filters.
2. Blue shaded area indicates the operating range of a standard motor and drive combination.
3. Green shaded area indicates the operating range of a standard motor with non standard drive combination.
4. Gray shaded area indicates operating range using non standard motor and drive combination.
5. To determine the power of motor to be installed, just multiply the value of the absorbed power indicated above by 1.2.

FAN PERFORMANCE (4 ROWS)

Model	CFM	External Static Pressure [in.wg]											
		0.70		1.00		1.50		2.00		2.50		3.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
SPU-780	19500	758	7.82	791	8.82	843	10.54	893	12.29	942	14.10	990	15.95
	21000	789	8.85	821	9.92	871	11.74	919	13.59	965	15.49	1010	17.44
	22500	821	9.99	852	11.13	900	13.04	946	15.01	991	17.01	1034	19.05
	24000	853	11.26	883	12.44	930	14.46	975	16.54	1018	18.65	1059	20.78
SPU-840	21000	789	8.85	821	9.92	871	11.74	919	13.59	965	15.49	1010	17.44
	22500	821	9.99	852	11.13	900	13.04	946	15.01	991	17.01	1034	19.05
	24000	853	11.26	883	12.44	930	14.46	975	16.54	1018	18.65	1059	20.78
	25500	887	12.68	915	13.90	961	16.02	1005	18.19	1046	20.40	1086	22.64
SPU-960	24000	853	11.26	883	12.44	930	14.46	975	16.54	1018	18.65	1059	20.78
	25600	887	12.68	915	13.90	961	16.02	1005	18.19	1046	20.40	1086	22.64
	27200	925	14.45	953	15.72	997	17.94	1040	20.21	1080	22.55	1119	24.90
	28800	962	16.33	989	17.63	1032	19.91	1073	22.29	1112	24.72	1135	26.21
SPU-1080	27000	712	11.64	740	13.00	785	15.32	827	17.67	868	20.02	907	22.43
	28800	740	13.04	767	14.50	810	16.96	851	19.44	890	21.94	928	24.46
	30600	768	14.61	794	16.13	836	18.73	875	21.35	913	23.98	950	26.65
	32400	796	16.31	822	17.90	862	20.63	901	23.39	938	26.17	973	28.97
SPU-1200	30000	758	14.08	785	15.58	827	18.12	867	20.69	905	23.28	942	25.90
	32000	790	15.92	815	17.49	856	20.18	895	22.92	932	25.67	968	28.44
	34000	822	17.98	847	19.61	886	22.44	924	25.32	960	28.23	995	31.15
	36000	855	20.25	879	21.94	917	24.88	954	27.90	989	30.98	1016	33.44

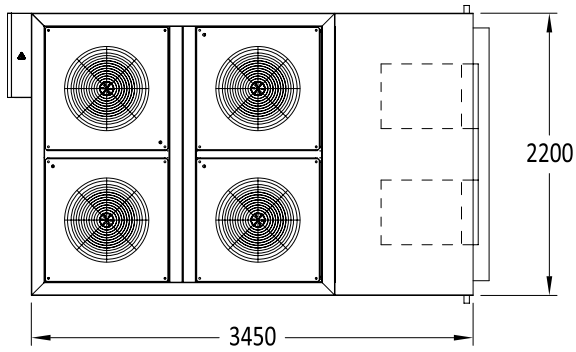
LEGEND:

RPM : Fan Speed in revolution per minute
 BHP : Fan absorbed power

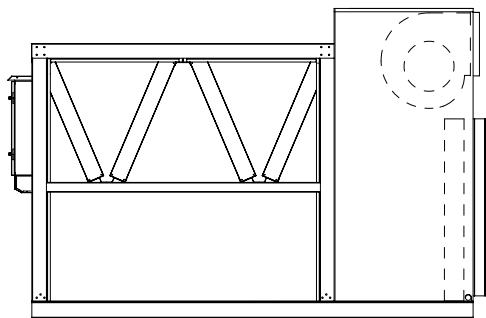
Note:

1. Internal Static pressure is based on pressure drops through evaporator coil, fan casing and 2" washable filters.
2. Blue shaded area indicates the operating range of a standard motor and drive combination.
3. Green shaded area indicates the operating range of a standard motor with non standard drive combination.
4. Gray shaded area indicates operating range using non standard motor and drive combination.
5. To determine the power of motor to be installed, just multiply the value of the absorbed power indicated above by 1.2.

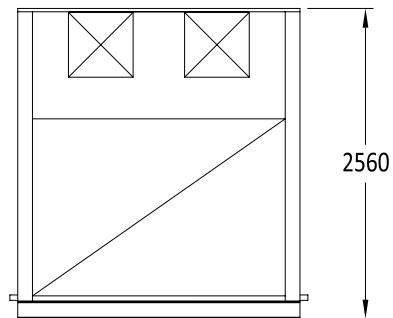
UNIT DIMENSIONS



TOP VIEW

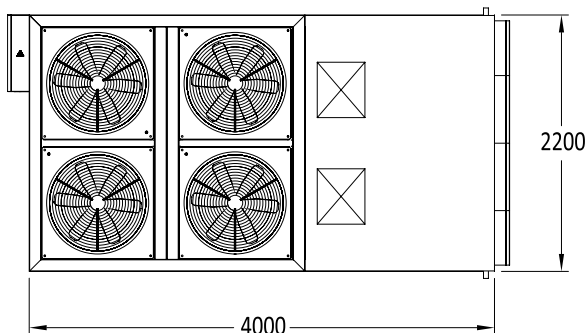


FRONT VIEW

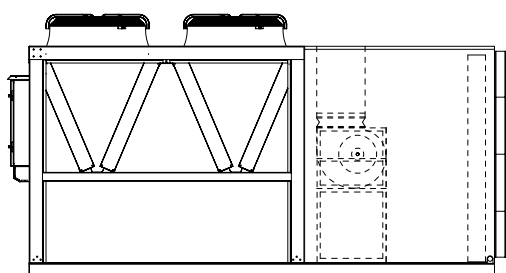


SIDE VIEW

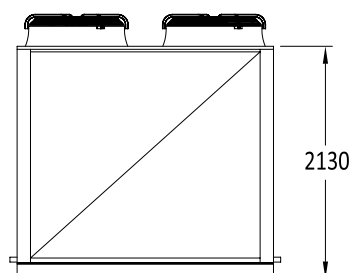
SPU-420/480
(ALL DIMENSIONS ARE IN MM)



TOP VIEW



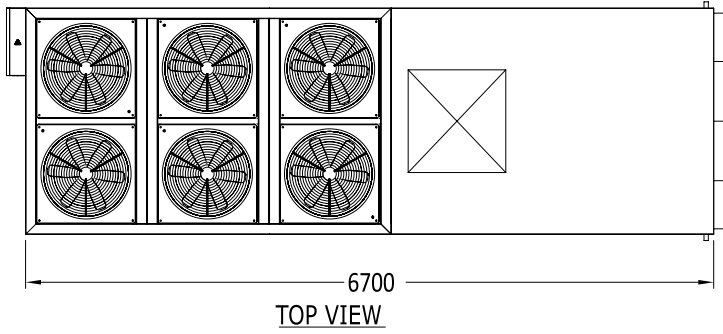
FRONT VIEW



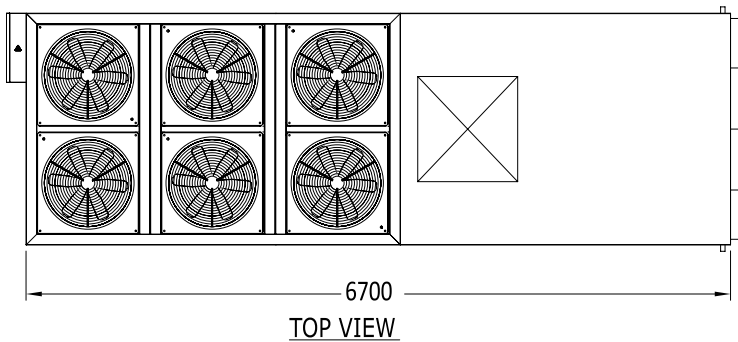
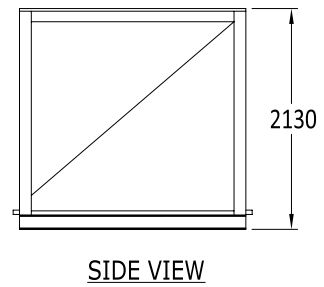
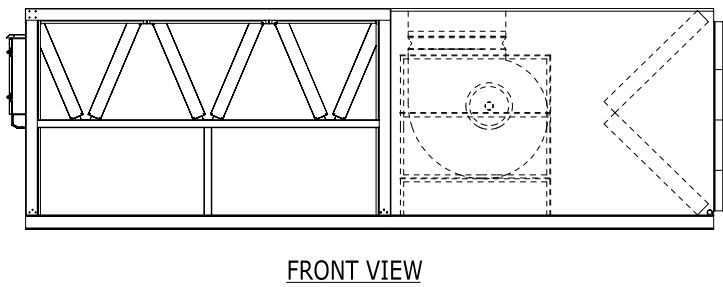
SIDE VIEW

SPU-540/600
(ALL DIMENSIONS ARE IN MM)

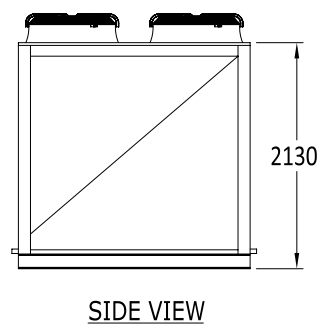
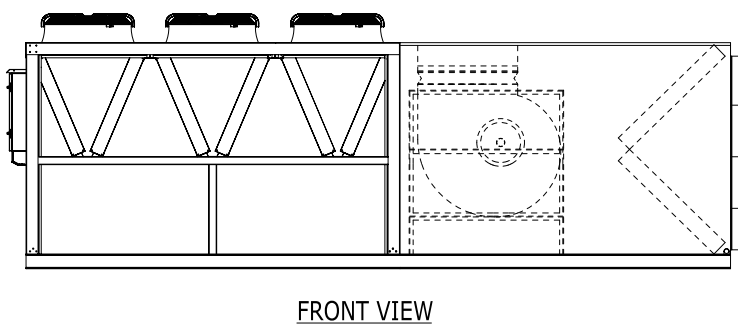
UNIT DIMENSIONS



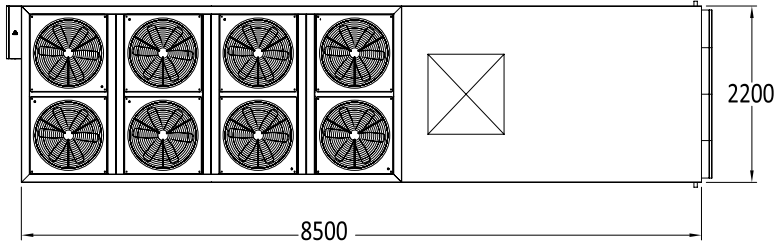
SPU-660/720
(ALL DIMENSIONS ARE IN MM)



SPU-780
(ALL DIMENSIONS ARE IN MM)

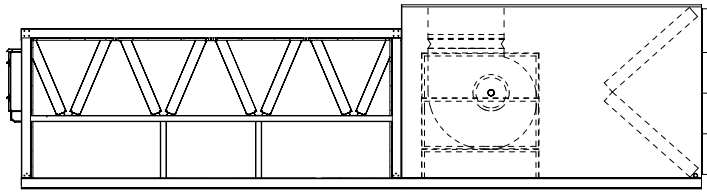


UNIT DIMENSIONS

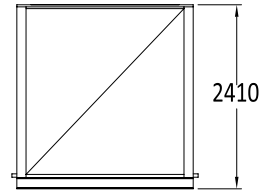


TOP VIEW

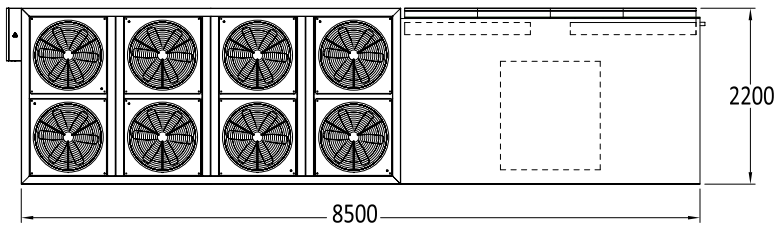
SPU-840/960
(ALL DIMENSIONS ARE IN MM)



FRONT VIEW

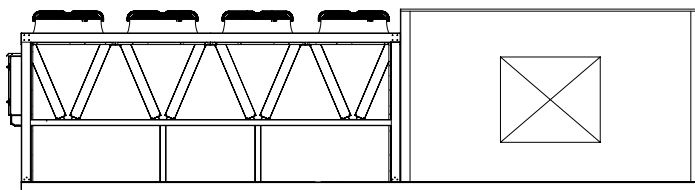


SIDE VIEW

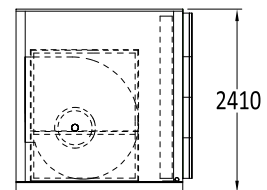


TOP VIEW

SPU-1080/1200
(ALL DIMENSIONS ARE IN MM)



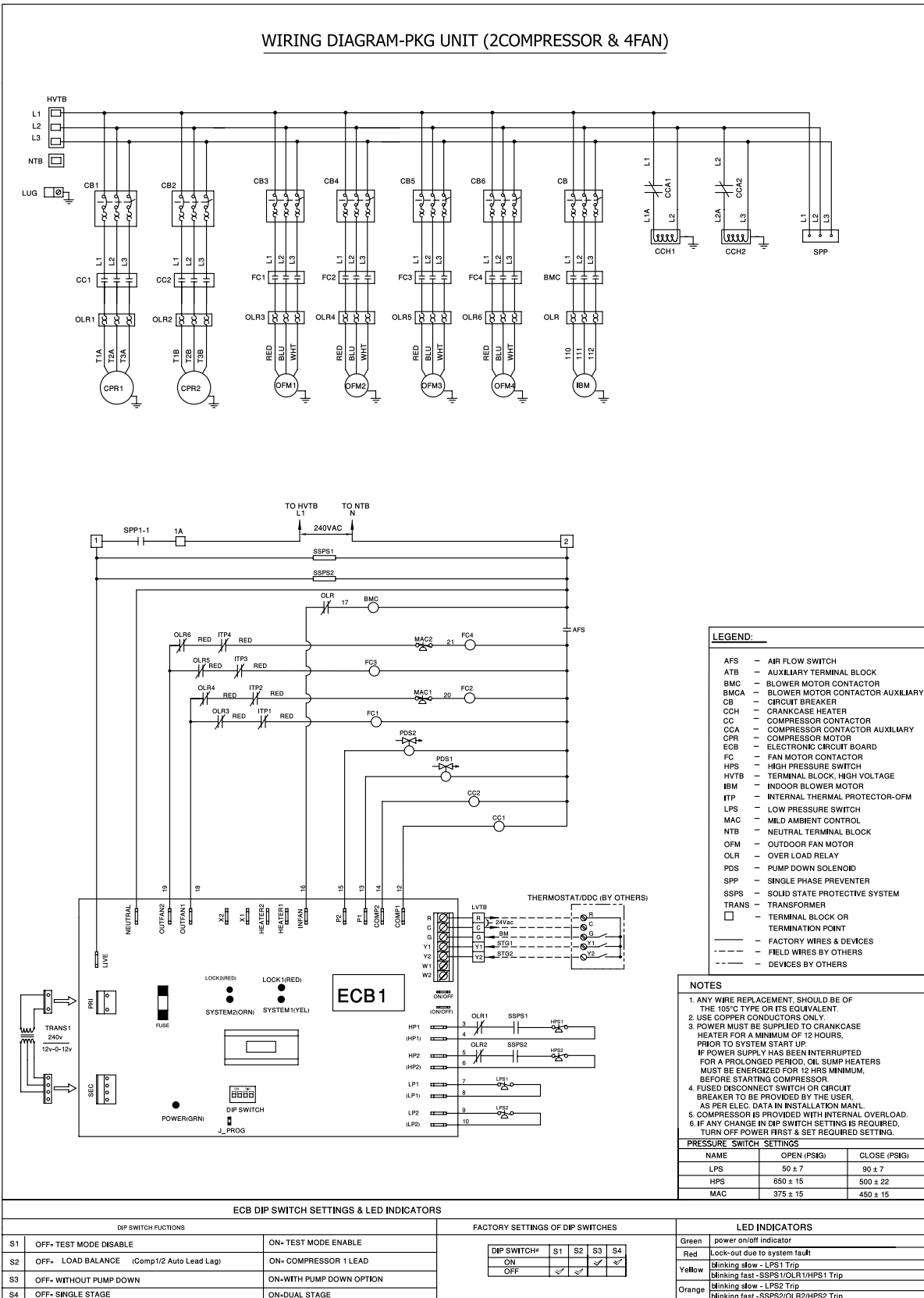
FRONT VIEW



SIDE VIEW

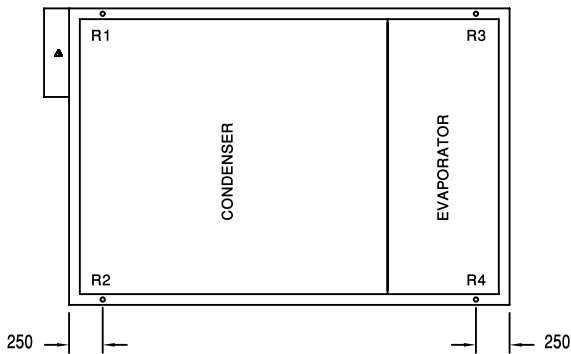
TYPICAL WIRING DIAGRAM

WIRING DIAGRAM-PKG UNIT (2COMPRESSOR & 4FAN)

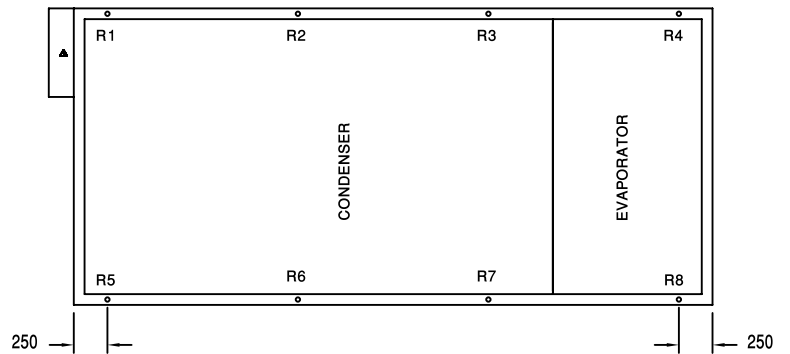


LOAD DISTRIBUTION (4 ROWS)

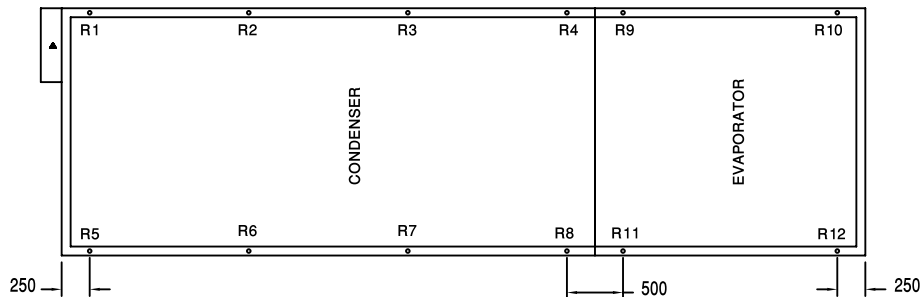
SPU-420/480/540/600
(ALL DIMENSIONS ARE IN MM)



SPU-660/720/780
(ALL DIMENSIONS ARE IN MM)



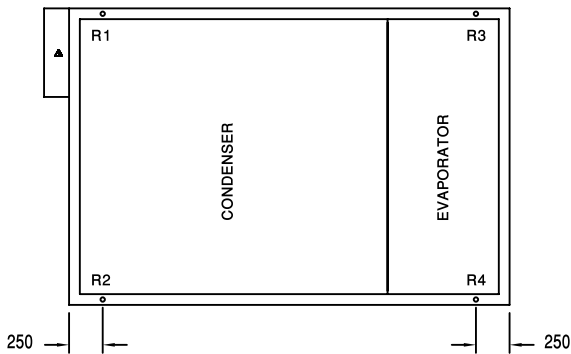
SPU-840/960/1080/1200
(ALL DIMENSIONS ARE IN MM)



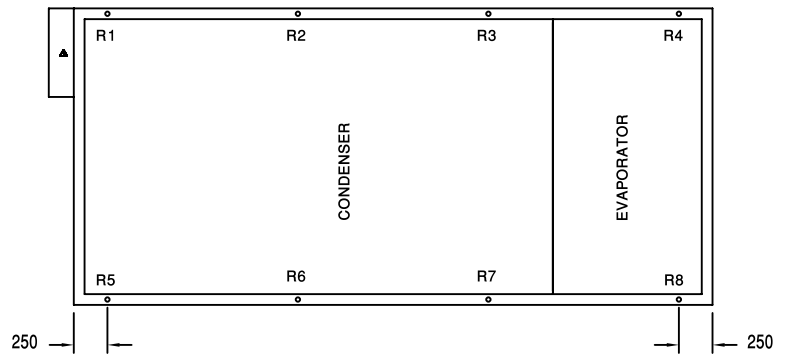
MODEL	LOAD DISTRIBUTION (kg)												Total Weight
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	
SPU-420	414	389	332	325	-	-	-	-	-	-	-	-	1460
SPU-480	462	435	371	363	-	-	-	-	-	-	-	-	1631
SPU-540	471	443	378	370	-	-	-	-	-	-	-	-	1662
SPU-600	489	461	392	385	-	-	-	-	-	-	-	-	1727
SPU-660	297	320	274	251	274	295	253	232	-	-	-	-	2197
SPU-720	303	326	280	256	280	301	258	237	-	-	-	-	2242
SPU-780	317	341	293	268	293	315	270	248	-	-	-	-	2345
SPU-840	304	293	293	236	281	270	270	218	245	265	200	217	3092
SPU-960	358	345	345	279	293	282	282	228	273	296	223	242	3445
SPU-1080	365	352	352	284	299	288	288	232	278	301	228	247	3513
SPU-1200	376	362	362	293	308	297	297	240	287	311	235	254	3621

LOAD DISTRIBUTION (6 ROWS)

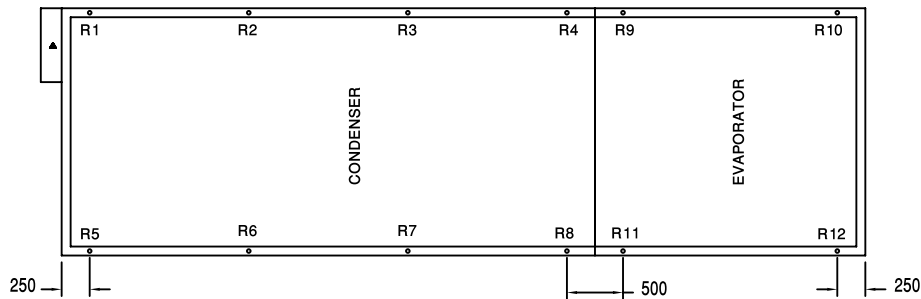
SPU-420/480/540/600
(ALL DIMENSIONS ARE IN MM)



SPU-660/720/780
(ALL DIMENSIONS ARE IN MM)



SPU-840/960/1080/1200
(ALL DIMENSIONS ARE IN MM)



MODEL	LOAD DISTRIBUTION (kg)												Total Weight
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	
SPU-420	428	403	343	336	-	-	-	-	-	-	-	-	1510
SPU-480	476	448	382	374	-	-	-	-	-	-	-	-	1681
SPU-540	488	459	391	384	-	-	-	-	-	-	-	-	1722
SPU-600	506	477	406	398	-	-	-	-	-	-	-	-	1787
SPU-660	306	330	283	259	283	305	261	239	-	-	-	-	2267
SPU-720	313	337	289	264	289	311	266	244	-	-	-	-	2312
SPU-780	328	353	303	277	303	326	279	256	-	-	-	-	2425
SPU-840	312	300	300	242	288	277	277	224	251	272	206	223	3172
SPU-960	367	354	354	286	301	290	290	234	280	303	229	248	3535
SPU-1080	376	362	362	292	307	296	296	239	286	310	234	254	3613
SPU-1200	388	373	373	302	317	306	306	247	295	320	242	262	3731

About RIC

Refrigeration Industries Company (KSE 504) is a group holding company with diversified interests in manufacturing, contracting and services. Recognized regionally for our engineering capabilities and management excellence, RIC and its subsidiaries offer a wide range of high quality products and services that cater to both residential and commercial customers, in the areas of climate control technologies and specialized storage solutions.

In view of the growing Kuwait infrastructure and the limitations imposed on it by the country's arid climate, the Refrigeration Industries Company was established 43 years ago in 1973, by Amiri Decree. The company's operations began with the construction of the first cold stores in the region, to enable the storage of the imported foods, on which Kuwait relied. Along with the development and advancement of the country, so has RIC prospered and expanded, and is now a milestone in the history of modern Kuwait.

RIC takes pride in its successful record and the many accolades it has garnered over time, but the greatest achievement has been the provision of comfort and protection from the harsh climate, to the people of Kuwait.

More than 43 years of uninterrupted service, overcoming extreme weather conditions, war, economic recessions and ever increasing competition, is testimony to the fact that RIC has met the expectations and responsibilities that was envisioned at the beginning and also highlights the tenacity and vision to exceed them in the future.

Facts throughout the years

- 1973 Warehouses were established by Amiri Decree.
- 1979 RIC Constructed the Medical Cold Stores Complex, the world's largest at that time.
- 1980 RIC Air Conditioning manufacturing plant set up in Sulaihya.
- 1981 Production of Package & Mini-Split A/Cs started under York-Gulf.
- 1984 RIC was listed in Kuwait Stock Exchange.
- 1986 COOLEX brand Production Launched.
- 1991 RIC rebuilt the manufacturing plant destroyed during the war.
- 1997 Achieved ISO Certification ISO 9001:1994.
- 2002 ETL Designed testing lab became fully operational.
- 2004 Privatization of RIC.
- 2010 COOLEX becomes the first A/C Unit to Pass MEW's new regulations.
- 2010 RIC Factory Renovation and Expansion into neighboring countries.
- 2012 Achieved UL & AHRI Certification for Coolex Units.
- 2014 Achieved SASO Certification for Concealed Ducted Split Series.
- 2014 Achieved EUROVENT Certification for Air Handling Units AHU.
- 2014 Achieved UL Certification for Air Cooled Chillers.
- 2015 Achieved ISO 17025 Certification for Psychrometric Laboratory.
- 2016 Achieved Energy Efficiency Certification for Concealed Ducted Split Series & Rooftop Package units (Kingdom of Bahrain).

نبذة عن الشركة

شركة صناعات التبريد (متداولة في سوق الكويت للأوراق المالية برقم 504) هي شركة متنوعة الأنشطة تعمل في مجال التصنيع والمقاولات والخدمات. ونحن نقدم مجموعة كبيرة من المنتجات والخدمات والحلول التقنية في مجال مواجهة الظروف المناخية وحلول التخزين. وقد حازت الشركة على إعراف إقليمي بقدراتها الهندسية وكفاءتها الإدارية.

شركة صناعات التبريد هي مجموعة شركات تهدف إلى توفير أعلى مستويات الجودة من حيث المنتجات والخدمات التي تلبى إحتياجات عملائها السكنية والتجارية. وعلى مدى ثلاثة وأربعين عاماً مضت على إنشاء شركتنا فقد إستطعنا أن نوظد أقدامنا في جميع قطاعات السوق الكويتي. ونحن إذ نفتخر بإنجازات التي حققناها، إلا أننا أشد فخراً بأننا تمكنا من الوقوف إلى جانب أهل الكويت على مدى سنوات طويلة في مواجهة تقلبات الظروف المناخية القاسية سواء من حيث درجات الحرارة العالية أو الأتربة أو الرطوبة.

وباعتبارها إحدى الشركات الصناعية العاملة في دولة الكويت، فقد واجهت الشركة تحديات وأمال كبيرة في سعيها لتحقيق النجاح، وقد كانت الشركة - ولا تزال - معلماً من المعالم المهمة في نظر أهل الكويت لما قدمته من منتجات وخدمات إستطاعت أن تغير الطبيعة القاسية لمناخ الكويت. فبعد نحو 43 عاماً تقريبا، لا يزال السؤال مطروحا حول تحقيقنا لهذه التوقعات، فهل إستطاعت الشركة أن تتحمل مسؤولياتها على الوجه الأكمل؟ ويأتي الرد بالإيجاب، فعلى مدى ثلاثة وأربعين عاماً تقريبا لم تتوقف الشركة خلالها عن الإستمرار في تقديم خدماتها وأعمالها رغم الصعوبات التي تمثلت في ظروف الطقس القاسية أو الحروب أو الكساد الاقتصادي أو إرتفاع حدة المنافسة، فقد كانت كل واحدة من هذه الظروف بمثابة شهادة على أننا حققنا ما وعدنا به وما عقدنا العزم على تنفيذه.

حقائق وتواريخ

- 1973 تم إنشاء المستودعات بناء على مرسوم أميري.
- 1979 عهدت وزارة الصحة الكويتية لشركة صناعات التبريد بإنشاء مجمع مستودعات مخازن التبريد الطبية، وقد كان هذا المجمع حينها هو الأضخم من نوعه على مستوى العالم، وقد وصلت تكلفته إلى 12,000,000 دينار كويتي.
- 1980 تم إنشاء مصنع مكيفات الهواء التابع لشركة صناعات التبريد في الصليبية.
- 1981 بدء إنتاج أجهزة التكييف المدمجة والمنفصلة الصغيرة تحت علامة York-Gulf.
- 1984 تم قيد شركة صناعات التبريد في سوق الكويت للأوراق المالية.
- 1986 بدء إنتاج مكيفات علامة كولكس.
- 1991 قامت شركة صناعات التبريد بإعادة بناء مصنعها الذي دمرته الحرب.
- 1997 الحصول على شهادة الأيزو 9001:1994
- 2002 بدء تشغيل مختبر فحص وحدات التكييف (ETL)
- 2004 خصخصة شركة صناعات التبريد.
- 2010 كانت وحدات كولكس أول وحدات تكييف هواء تجتاز اللوائح التي أقرتها (وزارة الكهرباء والماء).
- 2010 تم تجديد مصنع شركة صناعات التبريد وبدء التوسع والتصدير إلى الدول المجاورة.
- 2012 الحصول على شهادة UL و AHRI لأجهزة التكييف كولكس.
- 2014 الحصول على شهادة SASO لأجهزة التكييف المنفصلة.
- 2014 الحصول على شهادة EUROVENT لأجهزة مناولة الهواء.
- 2014 الحصول على شهادة UL لمبردات الهواء الشيلر.
- 2015 الحصول على شهادة الأيزو ISO 17025 لمختبر السيكرومترية.
- 2016 الحصول على شهادة كفاء الطاقة لأجهزة التكييف المنفصلة والوحدات المدمجة (مملكة البحرين).

COOLEX DISTRIBUTORS

Sultanate of Oman

Al Noor Projects Engineering & Trading Company

Address: Third Floor, Oman House
P.O. Box: 1047, P.C: 114 Hay Al Mina - Muscat
Tel : +968 24709402/403
Fax : +968 24709401
Email : info@alnoorprojects.com
Email : gm@alnoorprojects.com
Website: www.alnoorprojects.com

Kingdom of Saudi Arabia KSA

Al-Etmad for Refrigeration and Air Conditioning Industries Company

Address: Al Qortobah Quartier, King Abdullah Road
Riyadh – KSA, P.O. Box 50467 Riyadh 11533
Tel : + 966 11 2447789
Fax : + 966 11 4958812
Mobile : + 966 560034240
Email : abunaif722@ksacooler.com
Website: www.Cooler.com

Iran

Capital ICEBERG Limited Company

Address: No. 31, 3rd Floor, Aghdasieyh Trade Center
Aghdasieyh Street. Tehran – Iran
Tel : +98 (021) 26110510
Fax : +98 (021) 26110510
Mobile : +98 912 119 2961
Email : info@capitaliceberg.com
Email : saeed.s@capitaliceberg.com
Email : sara.s@capitaliceberg.com
Website: www.capitaliceberg.com

Egypt

Total Group Egypt Company

Address: 4 Buildings Al-Noor – Sheraton Housings
Cairo – Egypt
Tel : +202267240/837
Mobile : +20109966627
Mobile : +21201299444
Email : adel@cooling-eg.com
Email : ahmad@cooling-eg.com
Website: www.cooling-eg.com

United Arab Emirates UAE

Obaid Humaid Al-Tayer Engineering Division Al Tayer Group

Address: Dubai – UAE, PO Box 2623
Tel : +971 4 2011272
Fax : +971 4 2825008
Mobile : +971 50 3500747
Email : bkrishnan@altayer-eng.com
Website: www.altayer.com

Republic of Iraq

SWEER Company Limited

Address: Al Senak -Jumhuriya Street - Baghdad-Iraq
P.O. Box: 8095
Tel : +964 1 8181196
Mobile : +964 7705 884444
Email : sweerco@yahoo.com
Website: www.sweerco.com

Sudan

Abina For Advises And Engineering Work Company

Address: Katrena Street - East Qurashi Park
Sudan – Khartoum
Tel : +249 574064
Fax : +249 574064
Mobile : +249 900900246/247/248/249/250/251/252
Email : maha1237@yahoo.com

Syrian Arab Republic

Team for Engineering & Trading co.

Address: Damascus - Kafer Souseh
P.O.Box: 16311
Tel : +963 11 222 2996
Tel-Fax : +963 11 222 1125
Mobile : +963 93 322 6288
Mobile : +963 94 421 1146
Email : info@team-syr.net
Email : georgeyoussef@team-syr.net
Website: www.team-syr.net

Kingdom of Bahrain

Y.K. Almoayyed & Sons

Address: EHAD – Project Department, Sehla Workshop
P.O. Box 143, Manama, Kingdom of Bahrain
Tel : +973 17 400 444, Extn. 205
Direct : +973 17 405 250
Fax : +973 17 400 388
Email : Pradeep@almoayyed.com.bh
Email : anshul.bawa@almoayyed.com.bh
Website: www.almoayyed.com

State of Qatar

Al Jaber for air conditioning & Refrigeration industries

Address: PO.Box 23546 Doha
Tel : +974 44210963
Fax : +974 44448919
Mobile : +974 55610321
Mobile : +974 55843255
Email : Customercare@jaric-qatar.com
Website: www.jaric-qa.com

Islamic Republic of Pakistan

AG TEK Pvt. Ltd.

Address: 179-S, Imperial Garden Paragon City
Lahore - Pakistan
Tel : +92-42-37187640-43
Fax : +92-42-37187644
Cell : +92-300-4745624
Mobile : +92-321-2280011
Email : info@agtek.com.pk
Email : coo@agtek.com.pk
Website: www.agtek.com.pk

Nepal

Global Air Conditioning And Trading Pvt Ltd

Address: SINAMANGAL-9, KATHMANDU-NEPAL
Tel : +977 9813388560
Email : ajay.sharma2852@gmail.com

Please contact Sales and Marketing Department
sales@ric.com.kw or www.cooler.com.kw for
specific information on the current design and
specifications. Ref no.: CPCF20-5-000

CENTRAL AIR CONDITIONING AND SPLIT UNIT
Cooler continuously works towards the improvement of
its products. Hence, the design and specifications of the
ordered product may vary without prior notice.

COOLEX is a subsidiary of the RIC Group
www.ric.com.kw



www.coolex.com.kw

