

R-22

PACU Series Rooftop Packaged Air Conditioners



Range 2 TR to 6 TR
(7 kW to 21 kW)



اجهزة تكييف هواء
AIR CONDITIONING EQUIPMENT

*you name it
we cool it*



www.skm.ae



Sharjah Economic Excellence
Award winner

SKM Rooftop Packaged Airconditioners PACU Series - R22

Contents

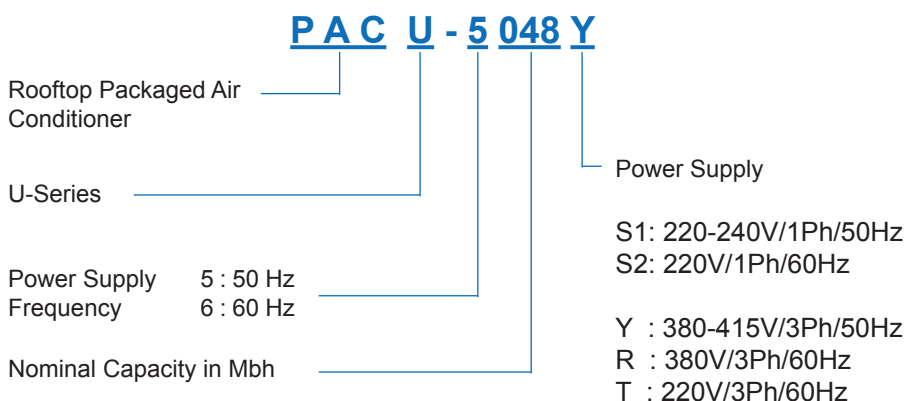
Introduction	2	Fan Performance	9
Legend	2	Typical Wiring Diagram	11
Nomenclature	2	Electrical Data	12
Main Component Features	3	Dimensional Data	13
Optional Features	4	Recommended Clearances	14
Engineering Specifications	5	Installation and commissioning	15
Capacity Ratings	7	Guide Specifications	16

Legend

The following legends are used throughout this manual:

cfm..... Cubic feet per minute	Ph..... Phase
Hz..... Hertz	PI..... Power Input of Compressor
kW..... Kilowatt	SST..... Saturated Suction Temperature
kg..... Kilogram	TR..... Tons of Refrigeration
lbs..... Pounds	V..... Volts
L/S..... Liter per second	
MBH..... BTUH x 1000	

Nomenclature



i SKM reserves the right to change, in part or in whole the specifications of its Air Conditioning Equipment at any time in order to add the latest technology. Therefore, the enclosed information may change without any prior notice.

Introduction

SKM PACU Rooftop packaged series has been developed to satisfy the needs in air conditioning practices, meets high quality of job requirements every time and to deliver the best in small range of package air conditioner.

PACU series are designed for compact heavy duty, self contained units with space saving design for either ground level, rooftop, or slab-mounted installation. Units are available in sizes 2, 2.5, 3, 4, 5, & 6TR in 50&60 Hz at nominal condition.

SKM rooftop packaged air conditioners are internally wired and all that is required to be done on site is ducting, and power supply connection which reduces installation work and consequently keeps costs to a minimum.

SKM Air Conditioning Equipment,



You name it.... We cool it.

SKM Rooftop Packaged Airconditioners PACU Series - R22

Main Component Features

PACU rooftop package air conditioners incorporate many features and benefits which provides a heavy duty, robust and long lasting residential and small commercial unit's application.

It is combined with high efficiency components to provide an extremely rugged and energy efficient packaged air conditioner that will provide cooling with higher efficiency for a long and extended period of time.

PACU rooftop Packaged Air conditioners are yet another model in the top class range of SKM products which uses the following basic components:

Cabinet Construction

Panels are heavy duty zinc coated galvanized steel, and it uses latest technology electrostatic powder baked finish which ensures a long lasting and durable cabinet. Panel and access doors are also provided for inspection and access for all internal parts. Evaporator section is fully insulated with 1/2" (12mm) fiber glass insulation.

Compressor

Compressors are hermetically sealed scroll for all models. It is located on engineered mounts for safe; quiet & vibration free operation. These types of compressor are equipped with internal motor protection & selected based on its reliability and power efficiency.

Condenser

Condenser coils are manufactured from inner grooved copper tubes mechanically bonded to waffle louver aluminum fins to ensure optimum heat transfer. All coils are tested against leakage by air pressure 450psig (3100 kPa) under water. The additional condenser surface provides more cooling using less energy at no additional cost.

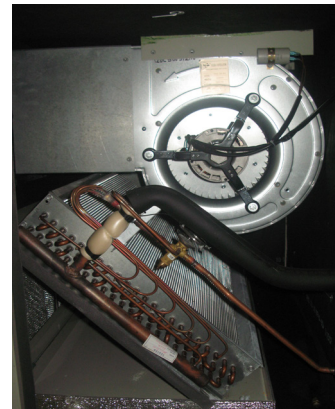
Condenser fans are propeller type, upward air discharge with aluminum blades and directly driven by permanently lubricated motors.

Motors are internally protected for overloads and totally enclosed air over (TEAO), six poles with Class F insulation and minimum IP55 protection. The TEAO and Class F insulation features ensure long life and are unique to SKM.

Evaporator

Cooling coils are manufactured from 3/8"OD inner grooved copper tubes mechanically bonded to aluminum fins to ensure optimum heat transfer. Evaporator section is fully insulated with fiber glass insulation with corresponding thickness to prevent condensation on the unit casing.

Evaporator fans are centrifugal type with forward curved blades directly driven by electric motors and designed to meet the system air pressure and flow. These fans are statically and dynamically balanced, complete with self aligning, lubricated for life ball bearing which is suitable for continuous operation.



Refrigerant Components

PACU units come with complete factory sized metering device & filter drier.

Control and Safety

Control system includes high and low pressure switch, internal motor protector for compressor and condenser fan motors. Three minutes delay keeps the unit from restarting after shutdown to prevent short cycling.

Filter

One (1") inch thickness cleanable expanded aluminum filter media is available as standard in this unit.

SKM Rooftop Packaged Airconditioners PACU Series - R22

Options and Accessories

Electric Heater (HTR1)

The following heaters are available as optional accessories on request. Components include electric heater elements, magnetic contactor, thermal safety cut-out and air flow switch.

PACU Models		Number Of Heater Elements
50Hz	60Hz	
5025	6025	1 x 1.5
5030	6030	1 x 1 + 1.5 x 1.0
5035	6035	1 x 1 + 1.5 x 1.5
5048	6048	3 x 1.0
5060	6060	3 x 1.5
5065	6065	
5070	6070	

Table 1

High & Low Pressure Gauges (SDG1)

Unit mounted for each compressor to monitor the high and low operating side.

2" (50mm) Flat Filter Section (FSIP2)

For heavy filtration need a section can be provided without or with aluminium cleanable filter (2AF).

Liquid Line Sight Glass (RSG)

To monitor refrigerant charge and to provide visual indication of moisture presence in the system.

Shut-Off Valve (SFV)

To fully isolate refrigerant filter drier; an additional shut-off valve can be incorporated in the liquid line.

Alternative Evaporator Coil Material

Made of copper tubes and alternative fin material and/or protective coats.

- for copper fins specify (EFC).
- for precoated aluminium fins specify (EFAP)
- for aluminium fins with aeris coat protection, specify (EFAA).
- for copper fins with aeris coat protection, specify (EFCA).

Alternative Condenser Material

- for copper fins specify (FC).
- for precoated aluminium fins specify (FAP).
- for aluminium fins with aeris coat protection, specify (FAA).
- for copper fins with aeris coat protection, specify (FCA).

Condenser Coil Guard (CGP)

Wire mesh guard; in painted finish for condenser coils. Recommended on ground level installations where coil needs to be protected against vandalism.

Double Skin Insulation (DSI)

Inner skin in the evaporator section is provided with foam insulation.

Voltage Monitoring Module (VMM)

Provide protection to the PACU –series 3 phase power supply unit in the event of:

- Phase burn out.
- Phase reversal.
- Under/over voltage on the incoming line voltage.

Voltage Monitoring Modules (DVM)

To meet DEWA regulations 3 phase power supply units modified module and time delay relay. This option is available For Dubai U.A.E. only.

Low Voltage Thermostats (COTS/CHTS)

1 stage for wall mounting and for either cooling (COTS) or cooling/heating (CHTS) operation.

Rotalock Valves on compressors (RVC)

For additional facilitation of maintenance of unit.

SKM Rooftop Packaged Airconditioners PACU Series - R22

ENGINEERING SPECIFICATIONS - 50 Hz

Model PACU		5025	5030	5035	5048	5060	5065	5070		
Cooling Capacity (1)	MBh	26.9	28.4	33.2	46.3	62.3	64.8	73.4		
	kW	7.9	8.3	9.7	13.6	18.2	19.0	21.5		
Cooling Capacity (2)	MBh	24.7	26.0	30.4	42.6	57.1	59.7	67.3		
	kW	7.2	7.6	8.9	12.5	16.7	17.5	19.7		
Cooling Capacity (3)	MBh	24.3	25.5	30.0	41.9	56.2	58.8	66.3		
	kW	7.1	7.5	8.8	12.3	16.5	17.2	19.4		
Capacity Steps	%	100-0								
Power Supply	V / Ph / Hz	220~240-1-50			380~415-3-50					
Compressor	Type	Hermetic Scroll								
	Quantity	1								
Condenser	Coil	Type	Waffle louvered fins and 3/8"OD Hi-X efficiency tubes							
		Face Area	ft ²	12.0		13.78		15.5		
			m ²	1.1		1.28		1.4		
	Fan	Type - Drive	Propeller - Direct Drive							
		Code	460			560				
		Qty	1			1				
		Air Flow	cfm	2180	2180	2110	4250	4300	4300	4300
	l/s		1029	1029	996	2006	2029	2029	2029	
	Motor	Size	100			250				
		Quantity	1			1				
Evaporator	Coil	Type	Cross Wave Fin 3/8"OD Hi-X efficiency tubes							
		Face Area	ft ²	2.33	2.72		4.28		5.50	
			m ²	0.22	0.25		0.40		0.51	
	Fan	Type-Drive	Centrifugal - Direct Driven							
		Code	8-7III	8-9III	8-8I	9-9III	12-9I			
		Blower Qty.	1	1	1	1	1			
		Air Flow	cfm	850	1000	1200	1600	2000	2200	
	l/s		401	472	566	755	944	1038		
	Motor	Size	300			450	550	750		
	Metering Device	Type	Expansion valves							
Refrigerant Operating Charge (R-22)	lbs	4.2	4.3	6.7	7.9	8.3	9.1	9.6		
	kg	1.9	2.0	3.0	3.6	3.8	4.1	4.4		
Operating Weight Approximate	lbs	384	416	469	508	528	547	560		
	kg	174	189	213	230	239	248	254		

Notes:

Table 2

Capacity ratings are based on standard AHRI 210/240 & 340/360.

1. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) drybulb/wetbulb and condenser entering air temperature of 95°F (35°C) dry bulb.
2. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) drybulb/wetbulb and condenser entering air temperature of 115°F (46°C) dry bulb.
3. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) dry bulb/wet bulb and condenser entering air temperature of 118.4°F(48°C) dry bulb.

Capacity is gross capacity which does not include the effect of evaporator fan motor heat.

SKM Rooftop Packaged Airconditioners PACU Series - R22

ENGINEERING SPECIFICATIONS - 60 Hz

Model PACU			6025	6030	6035	6048	6060	6065	6070	
Cooling Capacity (1)	MBh		28.9	30.4	37.3	52.3	62.6	66.4	77.5	
	kW		8.5	8.9	10.9	15.3	18.3	19.5	22.7	
Cooling Capacity (2)	MBh		26.6	28.1	34.4	48.3	58.0	61.3	71.7	
	kW		7.8	8.2	10.1	14.2	17.0	17.9	21.0	
Cooling Capacity (3)	MBh		26.3	27.7	33.9	47.6	57.1	60.4	70.7	
	kW		7.7	8.1	9.9	13.9	16.7	17.7	20.7	
Capacity Steps	%		100-0							
Power Supply	V / Ph / Hz		220-1-60			380-3-60				
			-			220-3-60				
Compressor	Type		Hermetic Scroll							
	Quantity		1							
Condenser	Coil	Type	Waffle louvered fins and 3/8"OD Hi-X efficiency tubes							
		Face Area	ft ²	12.0			13.78	15.5		
			m ²	1.1			1.28	1.4		
	Fan	Type - Drive		Propeller - Direct Drive						
		Code		460			560			
		Qty		1			1			
		Air Flow	cfm	2350	2350	2310	5120	5260	5260	5260
	l/s		1109	1109	1090	2416	2482	2482	2482	
	Motor	Size	Watt	100			370			
		Quantity	#	1			1			
Evaporator	Coil	Type	Cross Wave Fin 3/8"OD Hi-X efficiency tubes							
		Face Area	ft ²	2.33	2.72		4.28	5.50		
			m ²	0.22	0.25		0.40	0.51		
	Fan	Type-Drive		Centrifugal - Direct Driven						
		Code		7-7III	7-7I	8-7III	9-9III	10-10I		
		Blower Qty.		1	1	1	1	1		
		Air Flow	cfm	850	1000	1200	1600	2000	2200	
	l/s		401	472	566	755	944	1038		
Motor	Size	Watt	200		300	450	550			
Metering Device	Type		Expansion valves							
Refrigerant Operating Charge (R-22)	lbs		4.2	4.3	6.7	7.9	8.3	9.1	9.6	
	kg		1.9	2.0	3.0	3.6	3.8	4.1	4.4	
Operating Weight Approximate	lbs		384	416	469	508	528	547	560	
	kg		174	189	213	230	239	248	254	

Notes:

Table 3

Capacity ratings are based on standard AHRI 210/240 & 340/360.

1. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) drybulb/wetbulb and condenser entering air temperature of 95°F (35°C) dry bulb.
2. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) drybulb/wetbulb and condenser entering air temperature of 115°F (46°C) dry bulb.
3. Evaporator entering air conditions of 80°F/67°F (27°C/19.5°C) dry bulb/wet bulb and condenser entering air temperature of 118.4°F(48°C) dry bulb.

Capacity is gross capacity which does not include the effect of evaporator fan motor heat.

SKM Rooftop Packaged Airconditioners PACU Series - R22

CAPACITY RATINGS - 50 Hz

Model PACU	AFR cfm l/s (BPF)	EWB		Condenser Entering Air Temperature																													
				95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						118.4°F (48°C)						125.6°F (52°C)					
				Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*					
				MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW			
5025	642	62	16.7	23.6	6.9	19.9	5.8	1.9	22.6	6.6	19.5	5.7	2.2	21.4	6.3	19	5.6	2.5	21	6.1	18.8	5.5	2.6	20.1	5.9	18.4	5.4	2.8					
	303	67	19.4	25.6	7.5	16.7	4.9	2.0	24.6	7.2	16.2	4.8	2.2	23.5	6.9	15.8	4.6	2.5	23.1	6.8	15.7	4.6	2.6	22.4	6.6	15.4	4.5	2.8					
	0.17	72	22.2	27.8	8.1	13.4	3.9	2.0	26.6	7.8	13	3.8	2.3	25.5	7.5	12.6	3.7	2.6	25.1	7.4	12.5	3.7	2.7	24.3	7.1	12.2	3.6	2.8					
	850	62	16.7	24.6	7.2	22.9	6.7	1.9	23.3	6.8	22.3	6.5	2.2	22	6.4	21.8	6.4	2.5	21.5	6.3	21.5	6.3	2.6	20.7	6.1	20.7	6.1	2.8					
	401	67	19.4	26.9	7.9	18.9	5.5	2.0	25.8	7.6	18.5	5.4	2.3	24.7	7.2	18.1	5.3	2.6	24.3	7.1	17.9	5.3	2.6	23.5	6.9	17.7	5.2	2.8					
	0.2	72	22.2	29.1	8.5	14.8	4.3	2.0	27.9	8.2	14.4	4.2	2.3	26.7	7.8	14	4.1	2.6	26.3	7.7	13.9	4.1	2.7	25.5	7.5	13.6	4	2.8					
	1283	62	16.7	25.4	7.5	25.4	7.5	2.0	24.2	7.1	24.2	7.1	2.2	22.9	6.7	22.9	6.7	2.5	22.5	6.6	22.5	6.6	2.6	21.7	6.4	21.7	6.4	2.8					
	606	67	19.4	28.6	8.4	23.1	6.8	2.0	27.4	8	22.7	6.6	2.3	26.1	7.6	22.2	6.5	2.6	25.5	7.5	22	6.5	2.7	24.5	7.2	21.7	6.4	2.8					
	0.26	72	22.2	30.8	9	17.4	5.1	2.0	29.5	8.6	17	5	2.3	28.2	8.3	16.6	4.9	2.6	27.8	8.1	16.5	4.8	2.7	-	-	-	-	-					
	749	62	16.7	24.7	7.2	22	6.4	1.9	23.3	6.8	21.4	6.3	2.2	22	6.5	20.8	6.1	2.5	21.6	6.3	20.7	6.1	2.6	20.8	6.1	20.3	6	2.8					
353	67	19.4	27.1	7.9	18.3	5.4	2.0	25.9	7.6	17.9	5.2	2.3	24.8	7.3	17.5	5.1	2.6	24.4	7.1	17.3	5.1	2.7	23.6	6.9	17	5	2.8						
0.17	72	22.2	29.3	8.6	14.5	4.3	2.0	28.1	8.2	14.1	4.1	2.3	26.8	7.9	13.7	4	2.6	26.4	7.7	13.5	4	2.7	25.6	7.5	13.3	3.9	2.8						
1000	62	16.7	25.3	7.4	25.3	7.4	2.0	24.1	7.1	24.1	7.1	2.2	22.8	6.7	22.8	6.7	2.5	22.4	6.6	22.4	6.6	2.6	21.6	6.3	21.6	6.3	2.8						
472	67	19.4	28.4	8.3	21	6.2	2.0	27.2	8	20.6	6	2.3	26	7.6	20.1	5.9	2.6	25.5	7.5	20	5.8	2.7	24.4	7.2	19.6	5.7	2.8						
0.2	72	22.2	30.6	9	16.2	4.7	2.0	29.3	8.6	15.8	4.6	2.3	28	8.2	15.4	4.5	2.6	27.6	8.1	15.2	4.5	2.7	27.4	8	15.2	4.4	2.7						
1497	62	16.7	26.4	7.7	26.4	7.7	2.0	25.2	7.4	25.2	7.4	2.2	23.9	7	23.9	7	2.5	23.5	6.9	23.5	6.9	2.6	22.6	6.6	22.6	6.6	2.8						
707	67	19.4	29.7	8.7	25.7	7.5	2.0	28.2	8.3	25.1	7.4	2.3	26.7	7.8	24.6	7.2	2.6	26.2	7.7	24.4	7.2	2.7	25.2	7.4	24.1	7.1	2.8						
0.26	72	22.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
749	62	16.7	28.3	8.3	23.6	6.9	2.2	27.1	7.9	23	6.7	2.5	25.8	7.6	22.5	6.6	2.8	25.3	7.4	22.2	6.5	3	24.2	7.1	21.8	6.4	3.2						
353	67	19.4	30.6	9	19.7	5.8	2.2	29.4	8.6	19.2	5.6	2.5	28.1	8.2	18.7	5.5	2.9	27.7	8.1	18.6	5.4	3	26.8	7.9	18.2	5.3	3.2						
0.17	72	22.2	33.2	9.7	15.9	4.7	2.2	31.9	9.3	15.4	4.5	2.6	30.5	8.9	15	4.4	2.9	30	8.8	14.8	4.3	3	29.2	8.5	14.5	4.2	3.2						
1200	62	16.7	30.1	8.8	29.8	8.7	2.2	28.6	8.4	28.6	8.4	2.5	27	7.9	27	7.9	2.9	26.4	7.8	26.4	7.8	3	25.5	7.5	25.5	7.5	3.2						
566	67	19.4	33.2	9.7	24.5	7.2	2.2	31.9	9.3	24	7	2.6	30.4	8.9	23.5	6.9	2.9	30	8.8	23.3	6.8	3	29	8.5	23	6.7	3.2						
0.23	72	22.2	35.9	10.5	18.9	5.5	2.3	34.4	10.1	18.4	5.4	2.6	32.9	9.6	17.9	5.3	3	32.4	9.5	17.8	5.2	3.1	31.4	9.2	17.5	5.1	3.3						
1497	62	16.7	30.6	9	30.6	9	2.2	29.1	8.5	29.1	8.5	2.5	27.6	8.1	27.6	8.1	2.9	27.1	7.9	27.1	7.9	3	26.1	7.6	26.1	7.6	3.2						
707	67	19.4	34.2	10	27.2	8	2.3	32.8	9.6	26.7	7.8	2.6	31.3	9.2	26.2	7.7	2.9	30.8	9	26	7.6	3	29.6	8.7	25.6	7.5	3.2						
0.26	72	22.2	36.9	10.8	20.6	6	2.3	35.3	10.4	20.1	5.9	2.6	33.8	9.9	19.7	5.8	3	33.2	9.7	19.5	5.7	3.1	32.3	9.5	19.2	5.6	3.3						
1176	62	16.7	40.6	11.9	35.3	10.3	2.9	38.8	11.4	34.5	10.1	3.2	36.7	10.8	33.6	9.9	3.6	36	10.6	33.3	9.8	3.8	34.7	10.2	32.8	9.6	4.1						
555	67	19.4	44	12.9	29.4	8.6	2.9	42.4	12.4	28.7	8.4	3.3	40.6	11.9	28.1	8.2	3.7	40	11.7	27.8	8.2	3.8	38.8	11.4	27.4	8	4.1						
0.17	72	22.2	47.5	13.9	23.3	6.8	3.0	45.7	13.4	22.7	6.7	3.3	43.7	12.8	22	6.5	3.8	43.1	12.6	21.8	6.4	3.9	41.7	12.2	21.3	6.3	4.2						
1600	62	16.7	41.7	12.2	41.1	12	2.9	39.9	11.7	39.9	11.7	3.2	37.9	11.1	37.9	11.1	3.7	37.2	10.9	37.2	10.9	3.8	35.9	10.5	35.9	10.5	4.1						
755	67	19.4	46.3	13.6	33.9	9.9	2.9	44.5	13.1	33.2	9.7	3.3	42.6	12.5	32.5	9.5	3.7	41.9	12.3	32.3	9.5	3.9	40.5	11.9	31.8	9.3	4.2						
0.2	72	22.2	49.8	14.6	26.2	7.7	3.0	47.8	14	25.5	7.5	3.4	45.7	13.4	24.8	7.3	3.8	44.9	13.2	24.6	7.2	4	43.5	12.7	24.1	7.1	4.3						
2353	62	16.7	43.2	12.7	43.2	12.7	2.9	41.4	12.1	41.4	12.1	3.3	39.5	11.6	39.5	11.6	3.7	38.8	11.4	38.8	11.4	3.8	37.5	11	37.5	11	4.1						
1110	67	19.4	48.7	14.3	41	12	3.0	46.3	13.6	40.2	11.8	3.3	43.9	12.9	39.4	11.5	3.8	43	12.6	39.1	11.5	3.9	41.4	12.1	38.5	11.3	4.2						
0.26	72	22.2	52.1	15.3	30.6	9	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
1513	62	16.7	54.7	16	46.5	13.6	4.1	52.5	15.4	45.5	13.3	4.7	49.6	14.5	44.3	13	5.3	48.6	14.2	43.8	12.8	5.5	46.7	13.7	43	12.6	5.8						
714	67	19.4	59.3	17.4	38.9	11.4	4.2	57	16.7	37.9	11.1	4.7	54.5	16	37	10.8	5.3	53.7	15.7	36.6	10.7	5.5	52.1	15.3	36	10.6	5.9						
0.17	72	22.2	64.1	18.8	31.1	9.1	4.3	61.6	18	30.2	8.8	4.8	59	17.3	29.3	8.6	5.4	58.1	17	29	8.5	5.6	56.4	16.5	28.4	8.3	6						
2000	62	16.7	56.8	16.7	53.4	15.7	4.1	53.9	15.8	52.2	15.3	4.7	50.9	14.9	50.9	14.9	5.3	49.9	14.6	49.9	14.6	5.5	48.1	14.1	48.1	14.1	5.8						
944	67	19.4	62.3	18.2	44.1	12.9	4.2	59.7	17.5	43.2	12.7	4.8	57.1	16.7	42.2	12.4	5.4	56.2	16.5	41.9	12.3	5.6	54.6	16	41.3	12.1	5.9						
0.2	72	22.2	67	19.6	34.3	10.1	4.3	64.2	18.8	33.4	9.8	4.9	61.5	18	32.5	9.5	5.5	60.6	17.8	32.2	9.4	5.7	58.7	17.2	31.6	9.3	6.1						
3025	62	16.7	58.8	17.2	58.8	17.2	4.2	56	16.4	56	16.4	4.7	53.2	15.6	53.2	15.6	5.3	52.2	15.3	52.2	15.3	5.5	50.5	14.8	50.5	14.8	5.9						
1428	67	19.4	65.8	19.3	53.9	15.8	4.3	63.1	18.5	52.9	15.5	4.9	59.8	17.5	51.8	15.2	5.5	58.7	17.2	51.4	15.1	5.7	56.5	16.6	50.7	14.8	6						
0.26	72	22.2	70.2	20.6	40.3	11.8	4.4	67.3	19.7	39.4	11.6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
1513	62	16.7	56.3	16.5	47.2	13.8	4.3	53.9	15.8	46.2	13.5	4.9	51.5	15.1	45.1	13.2	5.6	50.5	14.8	44.7	13.1	5.8	48.5	14.2	43.8	12.8	6.2						
714	67	19.4	60.8	17.8	39.4	11.6	4.4	58.5	17.1	38.5	11.3	5	56.1	16.4	37.6	11	5.7	55.2	16.2	37.3	10.9	5.9	53.7	15.7	36.6	10.7	6.3						
0.17	72	22.2	65.8	19.3	31.7	9.3	4.5	63.3	18.5	30.8	9	5.1	60.7	17.8	29.9	8.8	5.8	59.8	17.5	29.6	8.7	6	58.1	17	29	8.5	6.4						
2200	62	16.7	59.1	17.3	56.8	16.6	4.3	56.2	16.5	55.6	16.3	5	53.2	15.6	53.2	15.6	5.6	52.3	15.3	52.3	15.3	5.8	50.5	14.8	50.5	14.8	6.2						
1038	67	19.4	64.8	19	46.7	13.7	4.5	62.3	18.3	45.8	13.4	5.1	59.7	17.5	44.8	13.1	5.7	58.8	17.2	44.5	13	6	57.1	1									

SKM Rooftop Packaged Airconditioners PACU Series - R22

CAPACITY RATINGS - 60 Hz

Model PACU	AFR cfm /ls (BPF)	EWB		Condenser Entering Air Temperature																													
				95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						118.4°F (48°C)						125.6°F (52°C)					
				Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*	Total Capacity		Sensible Capacity		PI*					
		MBh	KW	MBh	KW	KW	MBh	KW	MBh	KW	KW	MBh	KW	MBh	KW	KW	MBh	KW	MBh	KW	KW	MBh	KW	MBh	KW	KW							
6025	642	62	16.7	25.5	7.5	20.7	6.1	2.1	24.7	7.2	20.4	6	2.4	23.8	7	20	5.9	2.6	23.5	6.9	19.9	5.8	2.7	22.8	6.7	19.6	5.7	2.9					
	303	67	19.4	27.4	8	17.4	5.1	2.1	26.5	7.8	17	5	2.4	25.5	7.5	16.6	4.9	2.7	25.1	7.4	16.5	4.8	2.8	24.4	7.2	16.2	4.7	2.9					
	0.17	72	22.2	29.7	8.7	14.1	4.1	2.2	28.6	8.4	13.7	4	2.4	27.5	8.1	13.3	3.9	2.7	27.1	7.9	13.2	3.9	2.8	26.4	7.8	12.9	3.8	2.9					
	850	62	16.7	26.7	7.8	23.8	7	2.1	25.8	7.6	23.4	6.9	2.4	24.7	7.2	22.9	6.7	2.7	24.2	7.1	22.7	6.7	2.7	23.4	6.9	22.4	6.6	2.9					
	401	67	19.4	28.9	8.5	19.7	5.8	2.2	27.8	8.2	19.3	5.6	2.4	26.7	7.8	18.8	5.5	2.7	26.3	7.7	18.7	5.5	2.8	25.6	7.5	18.4	5.4	2.9					
	0.2	72	22.2	31.1	9.1	15.5	4.5	2.2	30	8.8	15.1	4.4	2.5	28.9	8.5	14.8	4.3	2.7	28.6	8.4	14.6	4.3	2.8	27.9	8.2	14.4	4.2	3.0					
	1283	62	16.7	27.9	8.2	27.9	8.2	2.1	26.6	7.8	26.6	7.8	2.4	25.3	7.4	25.3	7.4	2.7	24.9	7.3	24.9	7.3	2.8	24.1	7.1	24.1	7.1	2.9					
	606	67	19.4	30.6	9	23.8	7	2.2	29.5	8.6	23.4	6.9	2.5	28.3	8.3	23	6.7	2.7	28	8.2	22.9	6.7	2.8	27.3	8	22.6	6.6	3.0					
	0.26	72	22.2	32.9	9.6	18.1	5.3	2.2	31.8	9.3	17.7	5.2	2.5	30.9	9.1	17.5	5.1	2.8	30.6	9	17.4	5.1	2.8	30.5	8.9	17.3	5.1	2.9					
	749	62	16.7	26.8	7.9	22.9	6.7	2.1	25.9	7.6	22.5	6.6	2.4	24.7	7.2	22	6.4	2.7	24.3	7.1	21.8	6.4	2.7	23.4	6.9	21.4	6.3	2.9					
353	67	19.4	29	8.5	19.1	5.6	2.2	27.9	8.2	18.7	5.5	2.4	26.8	7.8	18.2	5.3	2.7	26.4	7.7	18.1	5.3	2.8	25.7	7.5	17.8	5.2	2.9						
0.17	72	22.2	31.3	9.2	15.2	4.5	2.2	30.1	8.8	14.8	4.3	2.5	29.1	8.5	14.5	4.2	2.7	28.7	8.4	14.3	4.2	2.8	28.1	8.2	14.1	4.1	3.0						
1000	62	16.7	27.8	8.1	26.4	7.7	2.1	26.5	7.8	25.9	7.6	2.4	25.2	7.4	25.2	7.4	2.7	24.8	7.3	24.8	7.3	2.8	24	7	24	7	2.9						
472	67	19.4	30.4	8.9	21.8	6.4	2.2	29.3	8.6	21.3	6.3	2.5	28.1	8.2	20.9	6.1	2.7	27.7	8.1	20.8	6.1	2.8	27.1	7.9	20.5	6	3.0						
0.2	72	22.2	32.7	9.6	16.9	4.9	2.2	31.6	9.3	16.5	4.8	2.5	30.7	9	16.2	4.8	2.8	30.4	8.9	16.1	4.7	2.8	30.2	8.8	16.1	4.7	2.9						
1497	62	16.7	28.7	8.4	28.7	8.4	2.2	27.4	8	27.4	8	2.4	26.1	7.7	26.1	7.7	2.7	25.7	7.5	25.7	7.5	2.8	24.9	7.3	24.9	7.3	2.9						
707	67	19.4	32.1	9.4	26.5	7.8	2.2	30.9	9.1	26.1	7.6	2.5	29.5	8.7	25.6	7.5	2.7	29.1	8.5	25.5	7.5	2.8	28.3	8.3	25.2	7.4	3.0						
0.26	72	22.2	34.2	10	19.8	5.8	2.3	33.4	9.8	19.5	5.7	2.5	32.7	9.6	19.3	5.7	2.8	32.5	9.5	19.3	5.6	2.9	32.4	9.5	19.2	5.6	2.9						
749	62	16.7	-	-	-	-	-	30.7	9	24.6	7.2	3.1	29.4	8.6	24	7	3.5	28.9	8.5	23.8	7	3.7	28.1	8.2	23.5	6.9	4.0						
353	67	19.4	34.5	10.1	21.3	6.3	2.7	33.1	9.7	20.7	6.1	3.1	31.7	9.3	20.2	5.9	3.6	31.2	9.2	20	5.9	3.7	30.4	8.9	19.6	5.8	4.0						
0.17	72	22.2	37	10.8	17.3	5.1	2.8	35.7	10.5	16.8	4.9	3.2	34.3	10.1	16.3	4.8	3.6	33.8	9.9	16.1	4.7	3.7	32.9	9.7	15.8	4.6	4.0						
1200	62	16.7	34.5	10.1	31.6	9.3	2.7	33.1	9.7	31	9.1	3.1	31.6	9.3	30.4	8.9	3.6	31	9.1	30.1	8.8	3.7	29.9	8.8	29.7	8.7	4.0						
566	67	19.4	37.2	10.9	26	7.6	2.8	35.9	10.5	25.4	7.5	3.2	34.4	10.1	24.9	7.3	3.6	33.9	9.9	24.7	7.2	3.7	33	9.7	24.4	7.1	4.0						
0.23	72	22.2	40.2	11.8	20.3	6	2.8	38.7	11.4	19.8	5.8	3.2	37.2	10.9	19.3	5.7	3.6	36.7	10.8	19.2	5.6	3.8	35.7	10.5	18.8	5.5	4.0						
1497	62	16.7	35.5	10.4	35.3	10.4	2.8	33.8	9.9	33.8	9.9	3.2	32	9.4	32	9.4	3.6	31.5	9.2	31.5	9.2	3.7	30.4	8.9	30.4	8.9	4.0						
707	67	19.4	38.4	11.3	28.7	8.4	2.8	37	10.8	28.2	8.3	3.2	35.5	10.4	27.7	8.1	3.6	35	10.3	27.5	8.1	3.7	34	10	27.2	8	4.0						
0.26	72	22.2	41.5	12.2	22.1	6.5	2.8	39.9	11.7	21.6	6.3	3.2	38.3	11.2	21.1	6.2	3.6	37.8	11.1	20.9	6.1	3.8	36.7	10.8	20.6	6	4.0						
1176	62	16.7	45.9	13.5	37.7	11	3.4	44.2	13	36.9	10.8	3.8	42.3	12.4	36	10.6	4.3	41.6	12.2	35.7	10.5	4.5	40.3	11.8	35.2	10.3	4.8						
555	67	19.4	49.5	14.5	31.6	9.3	3.5	47.7	14	30.8	9	3.9	45.8	13.4	30.1	8.8	4.4	45.1	13.2	29.8	8.7	4.5	43.8	12.8	29.3	8.6	4.8						
0.17	72	22.2	53.5	15.7	25.5	7.5	3.5	51.6	15.1	24.8	7.3	4	49.5	14.5	24.1	7.1	4.4	48.8	14.3	23.8	7	4.6	47.4	13.9	23.3	6.8	4.9						
1600	62	16.7	48.3	14.2	43.8	12.8	3.4	46.4	13.6	43	12.6	3.9	43.9	12.9	41.9	12.3	4.3	43	12.6	41.6	12.2	4.5	41.4	12.1	40.9	12	4.8						
755	67	19.4	52.3	15.3	36.1	10.6	3.5	50.4	14.8	35.4	10.4	3.9	48.3	14.2	34.6	10.2	4.4	47.6	13.9	34.4	10.1	4.6	46.2	13.5	33.9	9.9	4.9						
0.2	72	22.2	56.5	16.5	28.4	8.3	3.6	54.4	15.9	27.7	8.1	4	52.1	15.3	26.9	7.9	4.5	51.3	15	26.7	7.8	4.7	49.8	14.6	26.2	7.7	5.0						
2353	62	16.7	50	14.6	50	14.6	3.5	47.7	14	47.7	14	3.9	45.3	13.3	45.3	13.3	4.4	44.5	13	44.5	13	4.5	43	12.6	43	12.6	4.8						
1110	67	19.4	55.3	16.2	43.3	12.7	3.6	53.2	15.6	42.6	12.5	4	50.9	14.9	41.8	12.3	4.5	50.2	14.7	41.5	12.2	4.6	48.6	14.3	41	12	4.9						
0.26	72	22.2	59.5	17.4	32.9	9.6	3.6	57.1	16.7	32.2	9.4	4.1	54.7	16	31.4	9.2	4.6	53.8	15.8	31.1	9.1	4.7	52.2	15.3	30.6	9	5.1						
1513	62	16.7	54.8	16.1	46.6	13.6	4.1	52.7	15.5	45.6	13.4	4.6	50.4	14.8	44.6	13.1	5.1	49.5	14.5	44.2	13	5.3	47.7	14	43.5	12.7	5.7						
714	67	19.4	59.5	17.4	38.9	11.4	4.2	57.4	16.8	38.1	11.2	4.7	55.2	16.2	37.2	10.9	5.2	54.4	16	36.9	10.8	5.4	53	15.5	36.4	10.7	5.8						
0.17	72	22.2	64.5	18.9	31.2	9.2	4.3	62.3	18.3	30.4	8.9	4.8	59.9	17.6	29.6	8.7	5.4	59.1	17.3	29.3	8.6	5.5	57.5	16.8	28.8	8.4	5.9						
2000	62	16.7	57	16.7	53.5	15.7	4.1	54.3	15.9	52.4	15.3	4.6	51.7	15.1	51.3	15	5.2	50.8	14.9	50.8	14.9	5.3	49.1	14.4	49.1	14.4	5.7						
944	67	19.4	62.6	18.3	44.2	13	4.2	60.3	17.7	43.4	12.7	4.7	58	17	42.5	12.5	5.3	57.1	16.7	42.2	12.4	5.5	55.6	16.3	41.6	12.2	5.8						
0.2	72	22.2	67.8	19.9	34.6	10.1	4.3	65.3	19.1	33.8	9.9	4.9	62.7	18.4	32.9	9.6	5.4	61.8	18.1	32.6	9.6	5.6	60.1	17.6	32.1	9.4	6.0						
3025	62	16.7	59	17.3	59	17.3	4.2	56.5	16.6	56.5	16.6	4.7	53.9	15.8	53.9	15.8	5.2	53.1	15.6	53.1	15.6	5.4	51.4	15.1	51.4	15.1	5.7						
1428	67	19.4	66.5	19.5	54.1	15.9	4.3	64	18.8	53.3	15.6	4.8	61.1	17.9	52.2	15.3	5.4	60	17.6	51.8	15.2	5.6	57.9	17	51.1	15	5.9						
0.26	72	22.2	71.7	21	40.8	12	4.4	69	20.2	39.9	11.7	4.9	66.1	19.4	39.1	11.4	5.5	65.2	19.1	38.8	11.4	5.7	-	-	-	-	-						
1513	62	16.7	57.8	16.9	47.9	14	4.4	55.6	16.3	46.9	13.7	5	53.2	15.6	45.8	13.4	5.6	52.4	15.4	45.5	13.3	5.8	50.6	14.8	44.7	13.1	6.2						
714	67	19.4	62.3	18.3	40.1	11.7	4.5	60.1	17.6	39.2	11.5	5.1	57.6	16.9	38.2	11.2	5.7	56.8	16.6	37.8	11.1	5.9	55.2	16.2	37.2	10.9	6.3						
0.17	72	22.2	67.3	19.7	32.2	9.4	4.6	64.8	19	31.3	9.2	5.2	62.2	18.2	30.4	8.9	5.8	61.4	18	30.1	8.8	6	59.8	17.5	29.6	8.7	6.4						
2200	62	16.7	61.2	17.9	57.6	16.9	4.5	58.2	17.1	56.4	16.5	5.1	55.2	16.2	55.2	16.2	5.7	54.2	15.9	54.2	15.9	5.8	52.3	15									

SKM Rooftop Packaged Airconditioners PACU Series - R22

Fan Performance - 50 Hz

5025	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		0.11 (27)	0.20 (50)	0.30 (75)	0.46 (114)	0.50 (125)	0.60 (150)	0.77 (191)	0.83 (206)	-	-
	CMH	2000	1991	1980	1760	1705	1568	1444	1400	-	-
	CFM	1177	1172	1165	1036	1004	923	850	824	-	-
	LPS	556	553	550	489	474	436	401	389	-	-

5030	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		-	0.20 (50)	0.30 (75)	0.40 (100)	0.55 (137)	0.60 (150)	0.70 (175)	0.80 (200)	0.92 (228)	1.0 (250)
	CMH	-	2190	2092	1995	1850	1820	1760	1597	1400	1200
	CFM	-	1289	1231	1174	1089	1071	1036	940	824	706
	LPS	-	608	581	554	514	506	489	444	389	333

5035	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		0.15 (37.7)	0.20 (50)	0.30 (75)	0.45 (112)	0.50 (125)	0.60 (150)	0.76 (190)	0.80 (200)	0.90 (225)	1.00 (250)
	CMH	2220	2192	2135	2050	2038	1945	1800	1754	1640	1526
	CFM	1307	1290	1257	1207	1200	1145	1059	1032	965	898
	LPS	617	609	593	569	566	540	500	487	456	424

5048	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		0.16 (40.6)	0.20 (50)	0.3 (75)	0.43 (108)	0.50 (125)	0.6 (150)	0.70 (175)	0.80 (200)	0.9 (225)	1.0 (250)
	CMH	3000	2973	2907	2820	2776	2713	2650	2560	2470	2380
	CFM	1766	1750	1711	1660	1634	1597	1560	1507	1454	1401
	LPS	833	826	808	783	771	754	736	711	686	661

5060	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		-	-	-	0.45 (113)	0.51 (127)	0.63 (156)	0.70 (175)	0.78 (195)	0.94 (235)	1.0 (250)
	CMH	-	-	-	3650	3560	3400	3269	3120	2700	2540
	CFM	-	-	-	2148	2095	2001	1924	1836	1589	1495
	LPS	-	-	-	1014	989	944	908	867	750	706

5065	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		-	-	0.32 (79)	0.40 (100)	0.53 (132)	0.60 (150)	0.68 (169)	0.83 (208)	0.90 (225)	1.0 (250)
	CMH	-	-	4000	3900	3690	3555	3400	3100	2853	2500
	CFM	-	-	2354	2295	2172	2092	2001	1825	1679	1471
	LPS	-	-	1111	1083	1025	988	944	861	793	694

5070	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		-	0.22 (53)	0.30 (75)	0.40 (100)	0.45 (112)	0.61 (151)	0.70 (169)	0.77 (193)	0.90 (225)	1.0 (250)
	CMH	-	4000	3900	3760	3690	3400	3231	3100	2761	2500
	CFM	-	2354	2295	2213	2172	2001	1902	1825	1625	1471
	LPS	-	1111	1083	1044	1025	944	898	861	767	694

Notes:

1. Air Flow values are based on pressure drops through evaporator coil, fan casing and 1" washable flat filter
2. Air flow rates shown are based on high speed only.
3. Direct driven fans are with single phase & three speed motor type.

Table 6

SKM Rooftop Packaged Airconditioners PACU Series - R22

Fan Performance - 60 Hz

Model	Air Flow Rate	External Estatic Pressure [in.wg. (Pa)]									
		0.12 (29)	0.20 (50)	0.34 (84)	0.45 (112)	0.50 (125)	0.60 (150)	0.76 (190)	0.85 (212)	0.90 (225)	1.0 (250)
6025	CMH	1800	1735	1620	1562	1536	1484	1400	1320	1276	1188
	CFM	1059	1021	953	919	904	873	824	777	751	699
	LPS	500	482	450	434	427	412	389	367	354	330
	6030	CMH	1886	1872	1838	1800	1721	1693	1630	1540	1440
CFM		1110	1102	1082	1059	1013	996	959	906	848	789
LPS		524	520	511	500	478	470	453	428	400	372
6035		CMH	2226	2177	2090	2048	2018	1959	1900	1812	1723
	CFM	1310	1281	1230	1205	1188	1153	1118	1067	1014	962
	LPS	618	605	581	569	561	544	528	503	479	454
	6048	CMH	3258	3179	3100	3030	2993	2940	2867	2794	2750
CFM		1918	1871	1825	1783	1762	1730	1687	1644	1619	1569
LPS		905	883	861	842	831	817	796	776	764	741
6060		CMH	-	4200	4100	3942	3879	3785	3607	3500	3300
	CFM	-	2472	2413	2320	2283	2228	2123	2060	1942	-
	LPS	-	1167	1139	1095	1078	1051	1002	972	917	-
	6065	CMH	-	4200	4100	3950	3880	3738	3636	3331	3250
CFM		-	2472	2413	2325	2284	2200	2140	1961	1913	-
LPS		-	1167	1139	1097	1078	1038	1010	925	903	-
6070		CMH	4200	4185	4100	4000	3700	3600	3467	3250	-
	CFM	2472	2463	2413	2354	2178	2119	2041	1913	-	-
	LPS	1167	1163	1139	1111	1028	1000	963	903	-	-

Notes:

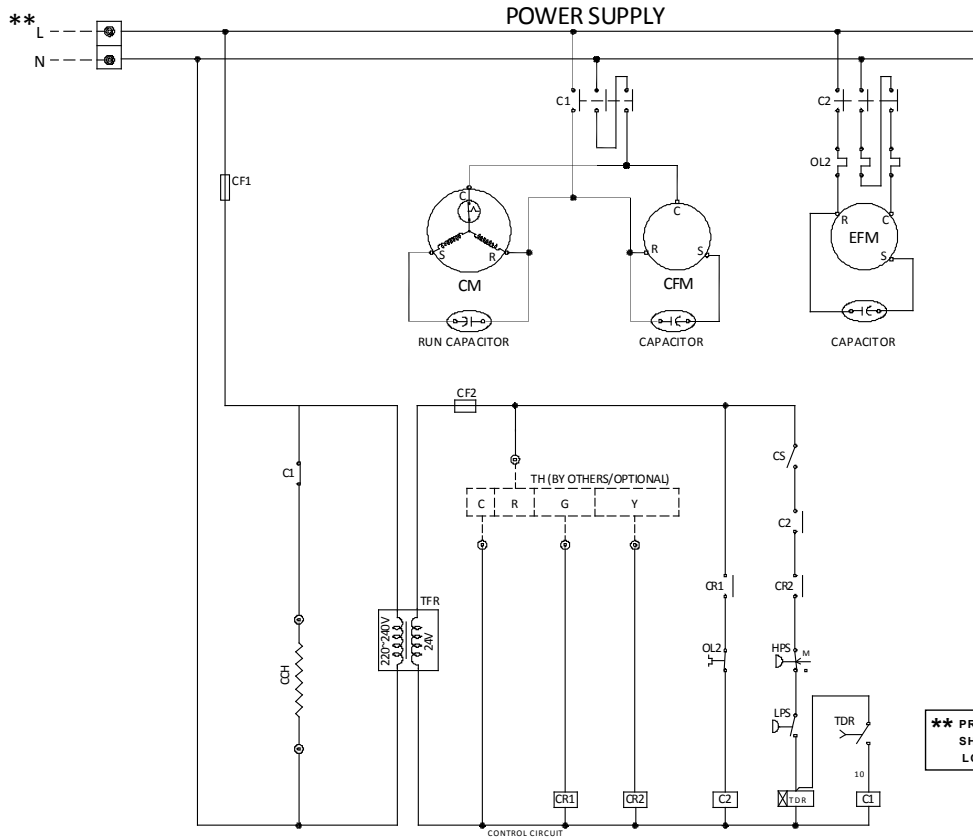
1. Air Flow values are based on pressure drops through evaporator coil, fan casing and 1" washable flat filter
2. Air flow rates shown are based on high speed only.
3. Direct driven fans are with single phase & three speed motor type.

Table 7

SKM Rooftop Packaged Airconditioners PACU Series - R22

Typical Wiring Diagram

PACU Models - 5025, 5030, 5035

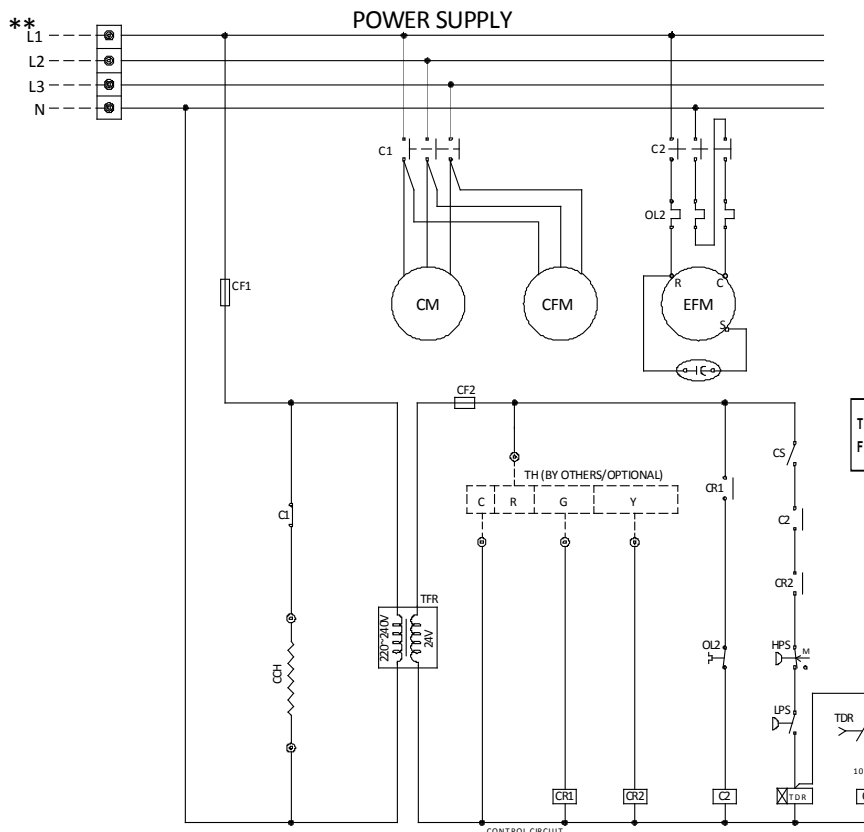


LEGEND

C	CONTACTOR
CAP	CAPACITOR
CCH	CRANK CASE HEATER
CF	CONTROL FUSE
CFM	CONDENSER FAN MOTOR
CM	COMPRESSOR MOTOR
CS	CONTROL SWITCH
EFM	EVAPORATOR FAN MOTOR
HPS	HIGH PRESSURE SWITCH
LPS	LOW PRESSURE SWITCH
TH	THERMOSTAT
TDR	TIME DELAY RELAY
OL	OVER LOAD RELAY
CR	CONTROL RELAY
TFR	CONTROL TRANSFORMER
---	FIELD WIRING AND
---	FIELD SUPPLIED DEVICES

**** PROVIDE OVERCURRENT, EARTH FAULT PROTECTION, SHORT CIRCUIT AND DISCONNECT MEANS AS REQUIRED BY LOCAL & NATIONAL ELECTRIC CODE.**

PACU Models - 5048, 5060, 5065 & 5070



TYPICAL WIRING DIAGRAM IS FOR 50Hz POWER SUPPLY. FOR 60Hz POWER SUPPLY PLEASE CONSULT SKM

SKM Rooftop Packaged Airconditioners PACU Series - R22

ELECTRICAL DATA

50Hz

Power Supply: 220-240V/1Ph/50Hz

Model PACU	Unit Characteristics		Compressor		Condenser Motor FLA	Evaporator Motor FLA
	MFA	MCA	RLA	LRA		
5025	40	23	13.2	65	0.9	3.7
5030	40	23	13.2	65	0.9	3.7
5035	50	27	16.4	82	0.9	3.7

Power Supply: 380-415V/3Ph/50Hz

Model PACU	Unit Characteristics		Compressor		Condenser Motor FLA	Evaporator Motor FLA
	MFA	MCA	RLA	LRA		
5048	25	18	8	50	0.75	5
5060	32	20	10	74	0.75	4.7
5065	32	21	10	74	0.75	5.4
5070	40	23	12	101	0.75	5.4

Table 8

60Hz

Power Supply: 220V/1Ph/60Hz

Model PACU	Unit Characteristics		Compressor		Condenser Motor FLA	Evaporator Motor FLA
	MFA	MCA	RLA	LRA		
6025	40	24	14.3	61.5	0.9	2.6
6030	40	24	14.3	61.5	0.9	2.6
6035	50	29	18.4	95	0.9	3.28

Power Supply: 380V/3Ph/60Hz

Model PACU	Unit Characteristics		Compressor		Condenser Motor FLA	Evaporator Motor FLA
	MFA	MCA	RLA	LRA		
6048	32	20	9	54	1.1	5.6
6060	32	22	11	75	1.1	4.7
6065	32	22	11	64	1.1	4.7
6070	32	22	12	70	1.1	4.7

Power Supply: 220V/3Ph/60Hz

Model PACU	Unit Characteristics		Compressor		Condenser Motor FLA	Evaporator Motor FLA
	MFA	MCA	RLA	LRA		
6048	50	31	16	91	2.5	5.6
6060	50	31	17	124	2.5	4.7
6065	63	36	21	128	2.5	4.7
6070	63	36	21	156	2.5	4.7

Table 9

Legend :

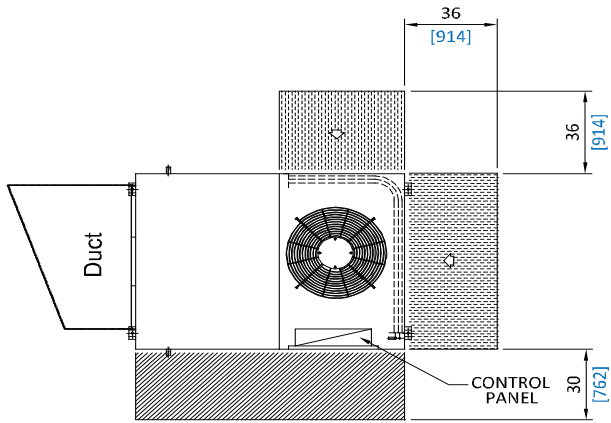
- RLA** Rated Load Amperes
- FLA** Full Load Amperes
- LRA** Locked Rotor Amperes
- MCA** Minimum Circuit Amperes (for wire sizing).
- MFA** Maximum Fuse Amperes (for Fuse Sizing)

Notes :

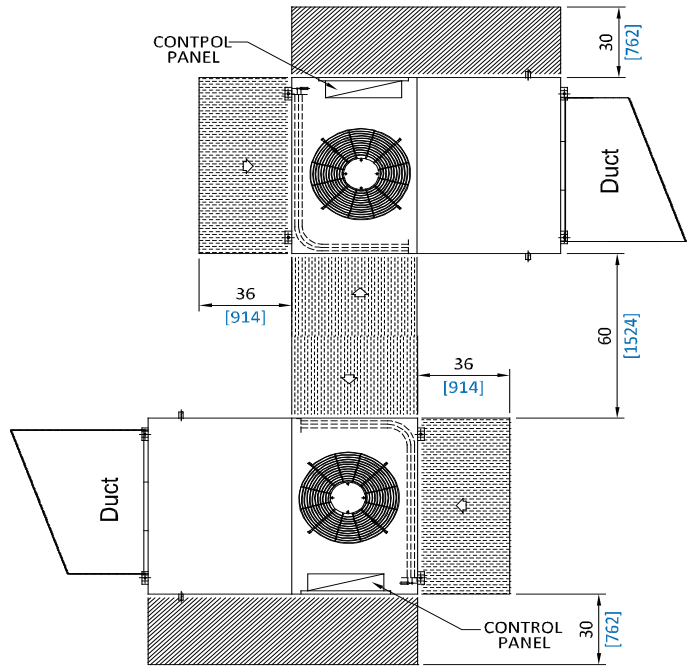
Voltage imbalance between phases to be less than 2%.

SKM Rooftop Packaged Airconditioners PACU Series - R22

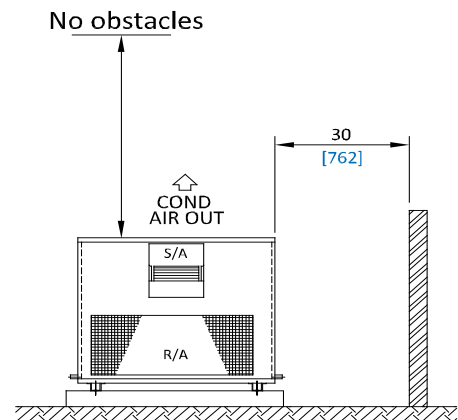
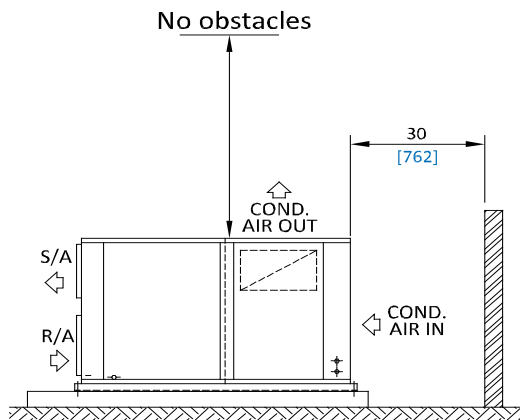
Recommended Clearances



Single Unit Installation



Multiple Unit Installation



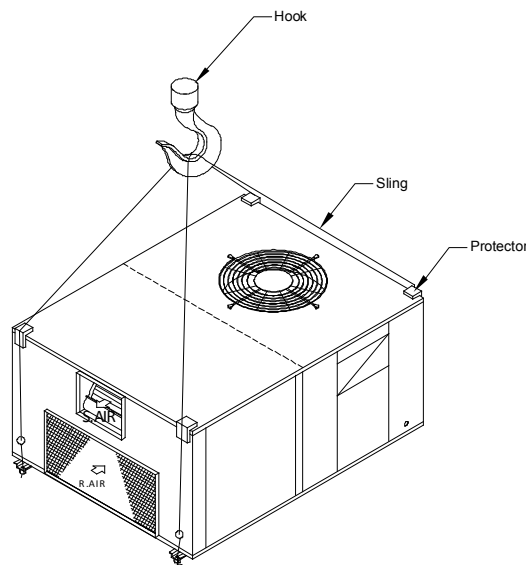
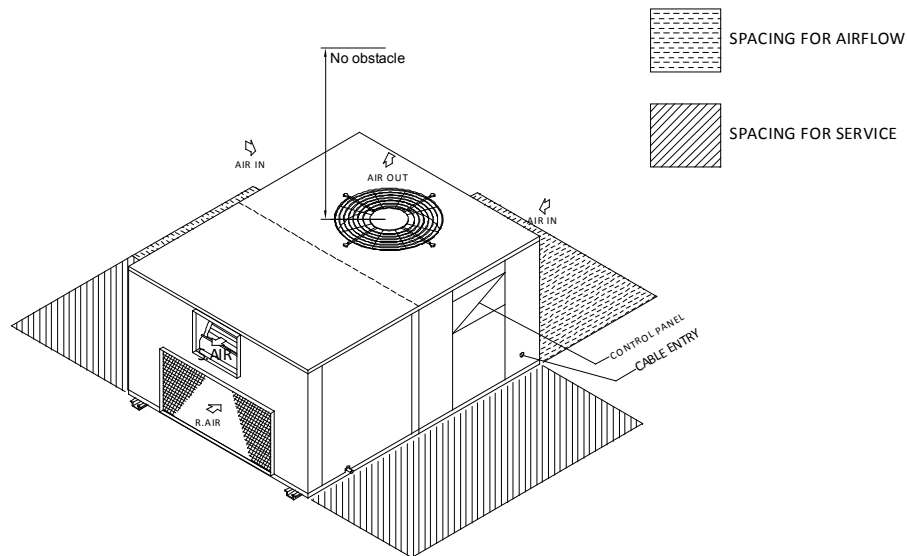
ALL DIMENSIONS ARE IN INCHES [mm]

SKM Rooftop Packaged Airconditioners PACU Series - R22

Installation and Commissioning

- Install the unit in such a location which is flat and strong enough to support its weight.
- Provide a trap of over 2" (50mm) in the drain piping for water seal.
- All field wiring must comply with applicable local and national codes.
- Connect supply and return ducts as shown.
- Service spacing should be provided as shown in the figure. If any obstacles are around the unit, distributed air is short-circuited. In this scenario, unit stops working frequently and access to the unit is difficult during inspection and aftersales services.

INSTALLATION & COMMISSIONING



GUIDE SPECIFICATIONS

GENERAL

Packaged air conditioners shall be composed of compressor; condenser and evaporator coils with fans, refrigerant piping, electrical components and enclosing cabinet in one piece. These units shall be factory assembled, internally wired, fully refrigerant charged with R-22, tested under strict quality standards & are suitable for outdoor rooftop installation ground level.

COMPRESSOR(S)

Compressor(s) shall be hermetically sealed scroll type, refrigerant gas cooled, furnished with internal motor protection and mounted on engineering mounts for perfect vibration isolations.

CONDENSER COIL

Condenser coils shall be air cooled with integral sub cooler, constructed of special inner grooved seamless copper tubes 3/8" OD mechanically expanded into waffle louver aluminum cross fins. These coils shall be tested against leakage by air pressure of 450 psig (3100 kPa) under water, cleaned & dehydrated at the factory.

CONDENSER FANS & MOTORS

Condenser Fans shall be direct driven propeller type discharging air vertically upward, equipped with statically & dynamically balanced aluminum alloy blades, inherent corrosion resistant shaft & PVC coated steel wire fan guard. Condenser fan motor(s) shall be Totally Enclosed Air over (TEAO), 6 poles with class-F insulation, minimum IP55 protection & wired to unit control panel.

EVAPORATOR COIL

Evaporator coil shall be constructed of special innergrooved copper tubes 3/8" OD mechanically bonded to aluminum fins. Coil consists of headers of seamless copper tubing, refrigerant control device & multi-circuited distributor(s). These coils shall be tested against leakage by air pressure of 300 psig (2068 Kpa) under water, cleaned & dehydrated at the factory. Coil shall conform to AHRI - 410.

EVAPORATOR FAN AND MOTOR

Fans of evaporator shall be forward curved, centrifugal type, statically and dynamically balanced, mounted on a single heavy duty shaft with permanently lubricated bearings which is directly driven by electric motor. Motor shall be internally protected with class. B insulation & IP 20 protection and wired to unit control panel.

FILTER

Cooling unit shall be provided with cleanable media, easy access, and minimum 1" thick coarse filter having average extraction efficiency of 54% as per ASHRAE standards 52.1 or equivalent.

CASING

Units casing shall be made of Zinc coated galvanized steel sheets, which are then electro statically, powder coated to provide an extremely tough, scratch resistance & excellent anti-corrosive protection. Casing shall pass 1000 hours in 5% salt spray testing at 95° F (35°C) and 95% relative humidity as per ASTM B117.

CONTROL PANEL

The control panel shall contain electrical components, contactors, overload relays, control relays, transformer, anti-recycle time relay delay, control circuit disconnect switch. Power & control circuit terminal blocks & high and low pressure switch.



HEAD OFFICE

P.O Box: 6004
Sharjah, United Arab Emirates
Tel: +971 6 5347347
Fax: +971 6 5349292
Email: sales@skm.ae

Spare Parts Division

Sharjah, United Arab Emirates
Tel: +971 6 5347347
Fax: +971 6 5349292
Email: spareparts@skm.ae

Service Centre

Sharjah, United Arab Emirates
Tel: +971 6 5347347
Fax: +971 6 5349292
Email: aftersales@skm.ae

REGIONAL OFFICES

UAE

Abu Dhabi P.O Box: 27788
Abu Dhabi, United Arab Emirates
Tel: +971 2 6445223
Fax: +971 2 6445145
Email: abudhabisales@skm.ae

Al Ain Al Ain, United Arab Emirates
Tel: +971 3 7619921
Fax: +971 3 7619941
Email: alainsales@skm.ae

Dubai P.O Box: 98822
Dubai, United Arab Emirates
Tel: +971 4 2940900
Fax: +971 4 2940029
Email: dubaisales@skm.ae

Kuwait

P.O Box: 1215-PC 15463
Dasman, Kuwait
Tel: +965 2 2492200
Fax: +965 2 2494400
Email: kuwaitisales@skm.ae

Saudi Arabia

AL Messila HVAC Equipment Factory
(Part of SKM A/C factory in
Saudi Arabia)
Saudi Arabia, Eastern provenance
AD Dammam
2nd industrial city
Abqiq main road Hail Street
Tel: +966 13 8123332/ 4 / 5
Fax: +966 13 8123337/+96613 8123092

Egypt

9 Mosadak Street,
3rd floor, Dokki, Giza, Egypt
Tel: +20 2 37619617 / +20 2 37621974
Fax: +20 2 37621973
Email: egyptsales@skm.ae

Algeria

Aissat Idir (EX-ENMA) City
Bldg1, Flat 2, Dar El Beida Algiers,
Algeria
Tel: +213 21 508197
Fax: +213 21 508197
Email: algeriasales@skm.ae

DISTRIBUTORS

Saudi Arabia

mdaqqqa@fawaz.com

Dammam
Fawaz Ref. & Air Conditioning Co.
P.O Box: 1189
Al Khobar, Saudi Arabia
Tel: +966 13 8598666
Fax: +966 13 8598520
Email: abarbarawi@fawaz.com

Jeddah
Fawaz Ref. & Air Conditioning Co.
P.O Box: 13218
Jeddah, Saudi Arabia
Tel: +966 12 6675704
Fax: +966 12 6608316
Email: jrabdu@fawaz.com

Riyadh
Fawaz Ref. & Air Conditioning Co.
P.O Box: 85123
Riyadh, Saudi Arabia
Tel: +966 11 4794499
Fax: +966 11 4785354
Email: szaidan@fawaz.com

Jordan

Ideal A/C Systems Co. L.L.C
Al Gardenz Street, Building 111,
Al Bakri Complex
P.O Box 5502 Amman, Jordan 11953
Tel: +962 6 5538640
Fax: +962 6 5538641
Email: tariq@idealac.com

Qatar

Mannai Trading Co. WLL
P.O Box: 76
Doha, Qatar
Tel: +974 4 4558787 / +974 4 4558788
Fax: +974 4 4558781
Email: dohasales@skm.ae
HVAC@mannai.com.qa

Iraq

Al Rawbitt Al Iraqia Co.
Erbil – Bagdad – Basra
Tel: +964 7507441111
+964 7711117776
+965 99608916
Email: info@alrawabitt.com

Kuwait (for Unitary Products Only)

British Link Kuwait (BLK)
P.O Box: 53054 Al Nuzha
Tel: +965 1820099
Fax: +965 22465005
Email: rawad@blk.com.kw

Forest (Global Distributor for
Minisplit, VRF & Window)
Head Office- Kuwait
Tel: +965 182 0099 - Ext 500
Fax: +965 2249 6197
Email: forest@forestunited.com
website: www.forestunited.com