

PAC-F Series Packaged Air Conditioners

Range 10 TR to 55 TR
(35 kW to 195 kW)

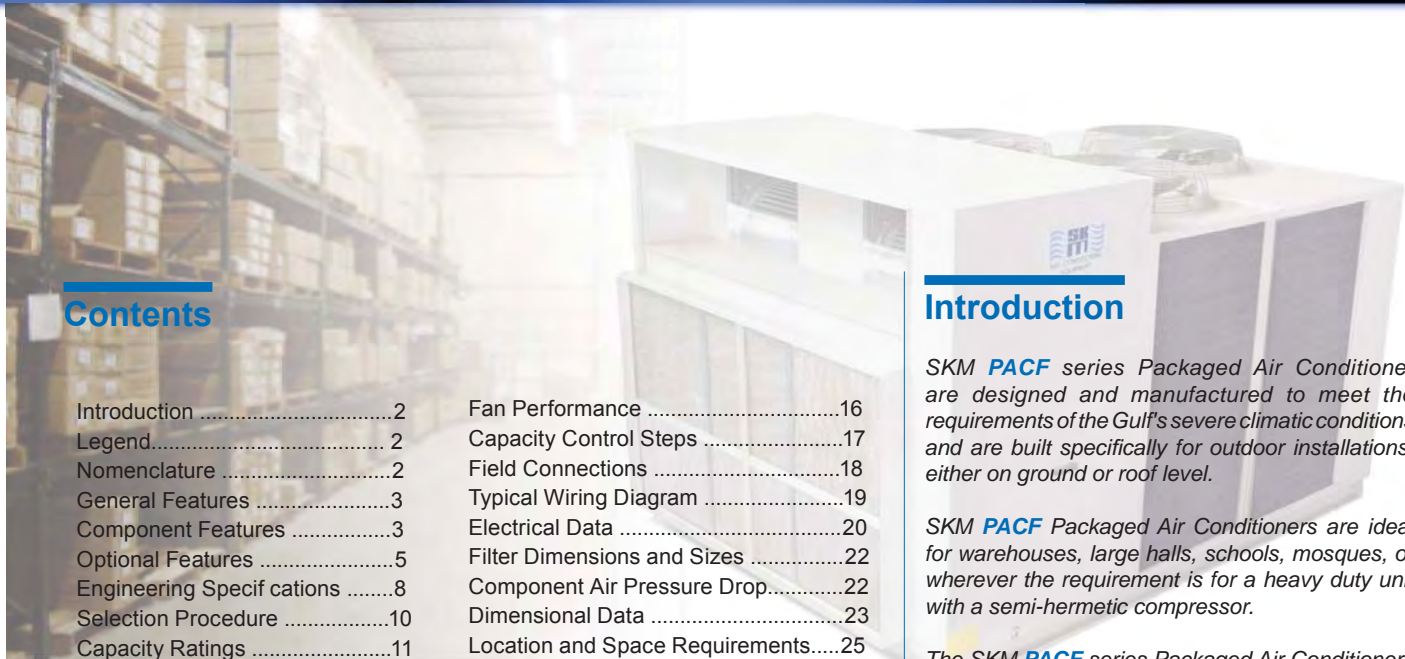


Bulletin # 015/2008 - A

Supersedes Bulletin # 015/2007



SKM Packaged Air Conditioning Units PAC-F Series - R22



Contents

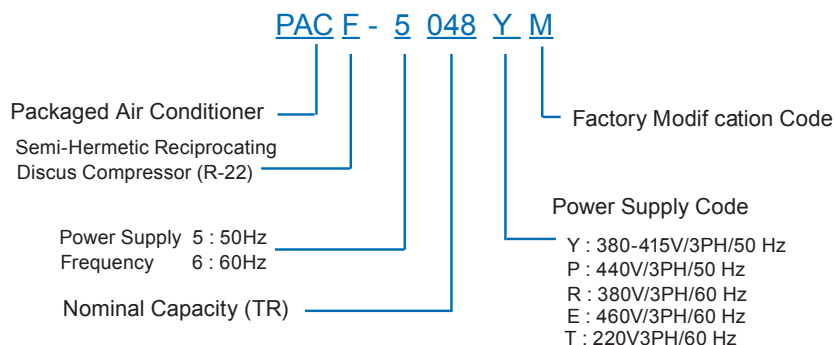
Introduction	2	Fan Performance	16
Legend.....	2	Capacity Control Steps	17
Nomenclature	2	Field Connections	18
General Features	3	Typical Wiring Diagram	19
Component Features	3	Electrical Data	20
Optional Features	5	Filter Dimensions and Sizes	22
Engineering Specifications	8	Component Air Pressure Drop.....	22
Selection Procedure	10	Dimensional Data	23
Capacity Ratings	11	Location and Space Requirements.....	25
		Guide Specifications.....	27

Legend

The following legends are used throughout this manual:

BPF..... By-pass Factor	MBH.... BTUH x 1000
cfm Cubic feet per minute	Ph Phase
EER Energy Efficiency Ratio	Pa Pascals
Hz Hertz	PD Pressure Drop
inwg Inches of water gauge	PI Power Input
KW Kilowatts	RPM Rotations per Minute
kg kilogram	TR Tons of Refrigeration = 12 MBH
lbs Pounds weight (British units)	V Volts
L/S Liters per second	

Nomenclature



Introduction

SKM **PACF** series Packaged Air Conditioner are designed and manufactured to meet the requirements of the Gulf's severe climatic conditions and are built specifically for outdoor installations, either on ground or roof level.

SKM **PACF** Packaged Air Conditioners are ideal for warehouses, large halls, schools, mosques, or wherever the requirement is for a heavy duty unit with a semi-hermetic compressor.

The SKM **PACF** series Packaged Air Conditioners are available in 16 different **PACF** models: 10.0 - 50.0 TR (37.0 - 175.0 kW) 50 Hz & 11.0 - 55.0 TR (40.0 - 193.0 kW) 60Hz at nominal conditions in single and double individual refrigeration circuits. Larger units can be custom designed and built to suit most requirements.

SKM **PACF** series Packaged Air Conditioners are self contained units consisting of a heavy duty semi-hermetic compressor(s), condenser coil(s), evaporator coil, expansion valve(s), connecting piping and all necessary liquid line & safety controls.

SKM **PACF** series Packaged Air Conditioners are factory assembled, leak tested, evacuated, internally wired, fully charged with refrigerant. Each unit is fully factory tested before despatch and is ready for installation. All that is required on site is to connect ducts, drain lines and main power supply.

SKM **PACF** series Packaged Air Conditioners are rated in accordance with ARI-360. SKM provides qualified service and stocks of replacement parts in all major cities of the G.C.C. countries and Pakistan. See back cover for details or call SKM.

SKM Air Conditioning Equipment,



Built in the Gulf...for the World

SKM Packaged Air Conditioning Units PAC-F Series - R22

General Features

The **PACF** series is a new unique series from SKM. The **PACF** series incorporates all the salient features of the SKM F-Series condensing units combined with a high efficiency cooling coil, evaporator blower and motor.

The complete **PACF** package provides an extremely rugged, heavy duty, long-life, energy efficient and self-contained package air conditioner that will provide cooling at higher efficiency over a long and extended life. What makes **PACF** series the pride of SKM products is the use of:

- Discus®, heavy duty, energy efficient Copeland compressors.
- Totally enclosed, Class F insulated, IP55 protected condenser and evaporator fan motors.
- Heavy duty condenser and evaporator coils optimised in design for long-life maintenance free operation.
- Cabinet construction specifically designed for Gulf climates.
- IP 54 Electrical panel with many features, as standard.

The SKM **PACF** series packaged air conditioning units are durable, dependable, strong, reliable, versatile, quiet and energy efficient. Wherever a heavy duty packaged air-conditioner is required, the **PACF** series should be an automatic choice.

Component Features

Compressor

Compressors used in **PACF** series are fully accessible, semi-hermetic, reciprocating type. They are equipped with an oil sight glass, suction and discharge service valves and crankcase heater. All compressors are refrigerant gas cooled and equipped with an oil pressure lubrication system. The oil pump working in either direction is protected by an oil screen and a valve provided for the fitting of an oil pressure gauge.

For protection, all compressors are equipped with preset internal relief valve between suction and discharge sides.

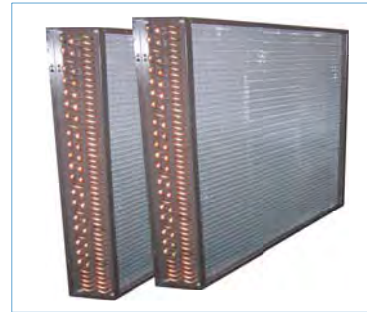
The compressors are provided with vibration isolator springs under the compressor and therefore, external to **PACF** series, AVM's may be necessary only for critical applications.

The compressor motors have inherent thermal protection. This is in addition to other standard safety and protection controls. Compressors conform to DIN standards. SKM **PACF** series uses the Copeland Discus® series semi-hermetic compressors exclusively.



Condensers

Condenser coils are manufactured from seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer.



All coils are tested against leakage by air pressure of 450 psig (3100 KPa) under water. All standard coils are 3 or 4 rows/12 FPI, 3/8" (9.5 mm) O.D. tubes. An integral subcooling circuit is provided to increase the cooling capacity, without additional operating costs.

For different application requirements, other optional condenser fin materials are available:

- Copper fins
- Copper fins electro-tinned after manufacturing
- Precoated Aluminum fins
The pre-coated is hydrophobic polyurethane resin. This option provides substantial corrosion protection beyond standard coil construction.
- Aeris Guard Coil Coating
The Aeris Guard Coil is a self etching high performance modified epoxy finish that is specifically designed to coat and protect Aluminum and Copper surfaces. In addition, the coating is ideal for the protection of ferrous and non ferrous materials.

SKM **PACF** series, all models, are restricted to a 12FPI (2.1 mm) fin spacing condenser coil. Gulf dust storms and the general level of available maintenance in Gulf countries ensures this condenser coil design shall provide long life and maintenance-free service with the least possibility of blockage on the condenser. Ample condenser surface and sensible air flow across the condenser ensures a low temperature differential between condensing temperature and the high Gulf ambients making the **PACF** packaged unit perform efficiently and durably.

Condenser Fans

The condenser fans are propeller type, aluminium alloy blades, directly driven by electric motors. Motors are Totally Enclosed Air Over (TEAO) six pole with class 'F' insulation and minimum IP55 protection. The TEAO and class 'F' insulation features ensure long life and are unique to SKM. The motors are factory wired, using wires specially selected for high ambients operation, to unit control panel where the motor contactors are located to control the operation of these motors.



SKM Packaged Air Conditioning Units PAC-F Series - R22

The condenser fans are individually statically and dynamically balanced at the factory. Complete fan assembly is provided with suitable acrylic coated fan guard.

Evaporator

Evaporator coils are manufactured from seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All evaporator coils are tested against leakage by air pressure of 250 psig (1720 kPa) under water. The DX evaporator coils are complete with headers of seamless copper tubing. Supply headers incorporate a correctly sized distributor. For different application requirements, other evaporator coil material and/or treatment are available on request.

- Copper fins
- Copper fins electro-tinned after manufacturing
- Precoated Aluminum fins

The pre-coated is hydrophobic polyurethane resin. This option provides substantial corrosion protection beyond standard coil construction.

- Aeris Guard Coil Coating
The Aeris Guard Coil is a self etching high performance modified epoxy finish that is specifically designed to coat and protect Aluminum and Copper surfaces. In addition, the coating is ideal for the protection of ferrous and non ferrous materials.

Evaporator coils are rated in accordance with ARI-410. Evaporator coil supplied with suitable size thermostatic expansion valve(s) and multi-circuited distributors providing capacity modulation to match the compressors. The cross wave fin and staggered tube design uses the evaporator surface effectively by creating uniform air turbulence and optimum heat transfer over the entire finned surface. Requirements for higher face velocities can be handled by use of moisture eliminators to avoid carryover.

Evaporator Fan Drive

PACF series models 5020 and 6022 onwards have dual fans mounted on a single heavy duty shaft driven by a single electric motor, Class F insulated, IP55 protected and totally enclosed, rated for continuous operation.

The motor is fitted with an adjustable vee-belt drive, as standard. Shaft ends insert into oversized, tapered lock self-aligning, long-life bearings. Drive package is factory selected for the medium air flow rate as shown in the capacity ratings. Alternative drive packages to meet specific job or client requirements are provided if required or specified with enquiry/order.

Refrigerant Circuit

PACF series comes complete, as standard, with correctly sized and piped refrigerant lines including sight glass, filter drier, thermostatic expansion valve, solenoid valve, shut-off valve, hot gas discharge muffler, discharge and suction vibration isolators and a full operating charge of R-22 in each circuit.

Piping is fabricated from ACR grade copper piping. Suction line is insulated with 1/2" (12mm) wall thickness closed cell pipe insulation.

Filter Section

PACF series provides a range of filter sections and filters to meet requirements for the most demanding applications.

1. Flat or vee filter sections to accommodate 1" or 2" cleanable aluminum media filters can be provided.
2. A bag filter section to house 22", 30" or 36" deep bag filters having efficiencies as desired can also be provided, as required. Filter sections come with latches to provide easy access for removal and maintenance.
3. On 100% fresh air applications an initial sand trap louver can effectively minimize entrance of sand into the air stream.

To order a sand trap louver from SKM, specify fresh air opening size with option ASL.

Casing/Structure

Designed for ease of handling and low costs to install. The **PACF** Air Cooled Packaged Units are factory assembled and mounted on a rugged base. The unit casing used in **PACF** Packaged units is made of zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM A653 which is phosphatized then baked after an electrostatic powder coat of approximately 60 microns.

This finish and coating can pass a 1000 hour in 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117. The entire casing panels are designed to be leak proof against rain and ensure rain cannot enter the **PACF** series packaged air conditioner interior. Evaporator section sealed by the use of vinyl gasketing material.

The evaporator section is insulated from all sides with black-neoprene faced heavy density 1" thick ber glass insulation. The insulation cum sound liner meets the fire requirements of NFPA90A and is secured with mechanical fasteners in addition to water resistant adhesive.

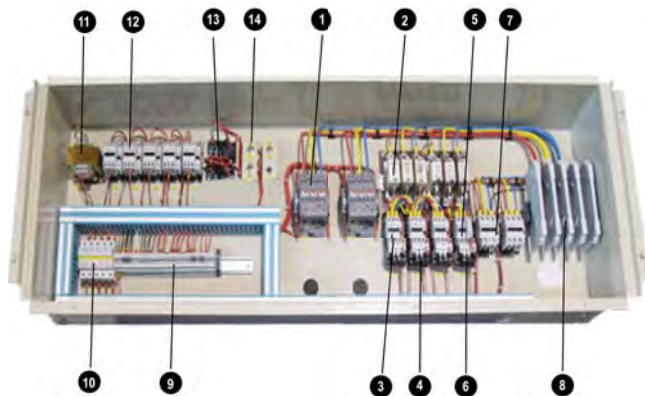
For applications requiring an inner skin in the evaporator section, option DSE provides 0.8 mm galvanized inner skin. Suitable isolation to ensure no cold-bridges and no condensation on the exterior of the units is provided. The condensate drain pan is heavily insulated to ensure condensation does not occur. Stainless steel condensate drain pans are available on request.

Electrical Control Panel

The unit mounted IP-54 control panel enclosure comprises all starting, operating and safety controls. A dead front panel cover screwed onto the enclosure prevents unauthorized personnel from tampering with controls. Safety and operating controls are arranged for easy accessibility.

All wiring is sized as per NEC regulations. Wiring is fully ferruled enabling ease of proper identification. The control panel is factory wired for 220-240V 1 PH 50/60Hz control power supply. An additional built-in 24 volts fused low voltage transformer at no extra cost, allows the user to easily hook up his 24 volts room thermostat without taking any burden of arranging and installing a low voltage transformer while commissioning the unit.

SKM Packaged Air Conditioning Units PAC-F Series - R22



Typical Control Panel

Description:

- | | |
|------------------------------|---------------------------|
| 1. Compressor Contactor | 8. Power Terminal Block |
| 2. Power Circuit Fuses | 9. Control Terminal Block |
| 3. CFM Contactor | 10. Control Fuse |
| 4. CFM Overload Relay | 11. Transformer |
| 5. EFM Contactor | 12. Control Relay |
| 6. EFM Overload Relay | 13. Time Delay Relay |
| 7. Heater Contactor (option) | 14. ON/OFF Switch |

The following are the **standard** components used in all **PACF** Packaged Air Conditioners:

- Individual compressor, condenser fan motors and evaporator contactors.
- Fuses for condenser/evaporator fan per NEC.
- Individual condenser/evaporator fan over current protection.
- Anti-recycle timer to prevent rapid cycling and short cycling of compressors.
- Low pressure safety switch, high pressure safety switch, oil failure switch one per compressor.
- Head pressure control by fan cycling for low ambient operation down to 50°F (10°C).
- Control disconnect toggle switch.
- Control circuit fuses.
- 24 volts low voltage fused transformer for user supplied and installed room thermostat.
- Power and control circuit terminal blocks.
- Liquid line solenoid valve.

Optional Features

PACF series stands for flexibility. These heavy duty packaged air conditioners are available with a multitude of optional features which makes design and selection extremely easy and capable of matching the most stringent of requirements.

Factory Installed

Microprocessor Based Control (MCP)

The controller consists of modules with on board display and user interface terminals. The modules are available in both panel and DIN rail versions. The controller has compact dimensions and manage

package unit with up to 4 steps and 2 circuits. The controller has the following features.

- Built in anti recycle timer to prevent compressor short cycling.
- Auto, lead/lag of the compressor.
- Common alarm available through the dry contact.
- Remote start/stop of the unit.
- Cooling and heating function are available.
- BMS connectivity with external converter (Protocol: MODBUS)

Following parameters can display on the controller LCD:

- Return or space air temperature.
- High pressure, low pressure and air flow alarm.
- Capacity steps.
- Icon of different modes.



The user interface has two options; it could be Remote Terminal and Room Terminal.

Remote terminal:

It is sophisticated graphic LCD for the panel mounting, installation on the unit, or remote wall mounting, for the complete control of the unit. This terminal has an excellent feature for servicing and setting up the unit. It can interface easily through RS485 terminal and require external temperature sensor to control the unit.



Room terminal:

It has LCD with icons for remote wall-mounting in the room as a simple user interface, with built in temperature plus humidity sensor and the band management, for use in residential or smaller commercial services applications. Due to the built in temperature sensor, external sensors are not required.



Note: For customize control system, please consult SKM

SKM Packaged Air Conditioning Units PAC-F Series - R22

Electric Heating

(HC@)

The heater batteries shown below are the standard available for this option:

Electric heater batteries are available with finned type elements. Heating elements are constructed from high quality 80/20 nickel chrome resistance wire centered in metal tubes by compressed magnesium oxide. Helical fins tightly wound round tubular heating element.

Standard components included when ordered are:

- 3 pole magnetic contactor per stage
- 1 primary over current protection provided by Auto reset high limit safety cut-out
- 1 secondary over current protection provided by Manual reset high limit safety cut-out for positive break
- Control fuse
- Control switch
- Power fuses per NEC if total load exceeds 48 amps
- Factory installed air flow switch

Following are the two standard Electrical Heating Options kW rating, options other than those specified below can be supplied on request. Consult SKM for full details.

PACF		Option 1		Option 2	
		Heater kW	Stages	Heater kW	Stages
5011	6012	18.0	2	24.0	2
5014	6015			24.0	
5020	6022	24.0		30.0	
5021	6023			30.0	
5024	6027	30.0		36.0	
5028	6031			36.0	
5029	6032	36.0		48.0	
5030	6034			48.0	
5033	6037	48.0		60.0	
5035	6041			60.0	
5039	6043	48.0	72.0		
5040	6044		72.0		
5042	6046	60.0			
5047	6052				
5048	6053	60.0			
5049	6054				

Table 1

Alternative Condenser Material

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

- For Copper Fins, specify (FC).
- For Copper Fins only electroplated, specify (CFT).
- For Copper Finned Coils with electroplated after manufacturing, specify (FCT).
- For Pre Coated aluminum fins, specify (FAP).
- For Aluminum Fins with Aeris Coat Protection, specify (FAA).
- For Copper Fins with Aeris Coat Protection, specify (FCA).

Alternative Evaporator Material

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

- For Copper Fins, specify (FC).
- For Copper Fins only electroplated, specify (CFT).
- For Copper Finned Coils with electroplated after manufacturing, specify (FCT).
- For Pre Coated aluminum fins, specify (FAP).
- For Aluminum Fins with Aeris Coat Protection, specify (FAA).
- For Copper Fins with Aeris Coat Protection, specify (FCA).

Capacity Control Steps

(SCK)

To provide additional capacity steps on the units. See table 8 (Page 17) for optional steps available.

Condenser Coil Guard

(CGP)

Coil wire mesh guard, galvanneal and painted finish for condensers. Recommended on ground level installations where coil needs to be protected against vandalism.

Control Transformer

(CXT)

This option is necessary and available for PACF models rated for 440V/3PH/50Hz or 460V/3PH/60Hz only. When ordering for these voltages this option **must** be ordered.

Double Skin Evaporator

(DSE)

Inner skin of 0.8mm galvanized sheet in the evaporator section provided with no cold bridges. Recommended for 100% fresh air applications.

Filter Section

(FFS/VFS/BFS)

Can be provided for flat filters or vee filters configuration for relatively higher or lower, respectively, face velocities on the filters. Bag filter section can be provided, additionally, if required.

Flat filter sections can accommodate 1" or 2" thick cleanable media aluminium or synthetic filters for particle/dust removal.

The Bag Filter section can house 22", 30" or 36" deep bag filters to meet specific requirements of efficiencies or contaminants in the air stream. Specify on enquiry / order write up.

High Ambient Operation Kit

(HAO)

For operation, at reduced load, at ambient temperature between 125°F (52°C) and 131°F (55°C) maximum.

Hot Gas Bypass System

(GBP)

With solenoid to enable operation of a large sized unit at very low loads, during low ambients due to application requirements.

IP-55 Control Panel

(ICP)

IP55 enclosure for extra protection against the elements.

Isolated Condenser Fan Motor

(CMS)

For elimination of extraneous noise and vibrations from condenser fan motor, the motors are individually isolated from the frame.

Low Ambient Operation Kit

(LAO)

For operation down to lower than normal Gulf ambients. It is also required for special applications.

SKM Packaged Air Conditioning Units PAC-F Series - R22

<p>Part Winding Start (PWS) Where specifically required by local codes, compressors may be with Part Winding Start to reduce the high inrush current at starting. Refer page 17 table 7 for more details.</p>	<p>Sand Trap Louvre (ASL) Inlet of 100% fresh air units or at inlet of fresh air opening of mixing box.</p>
<p>Unload Start Kit (USK) This option is required when the compressor needs a high starting torque such as when the load is high. Not required for D50 and D60 compressor</p>	<p>Condenser & Evaporator Fans with polyglycoat coating (PGF) To give more protection for fans against corrosion.</p>
<p>Pressure Gauges (SDG) Suction, discharge and oil pressure indication of each refrigerant circuit. Gauges mounted outside the Control Panel.</p>	<p>Marine Paint (MP) To provide increased corrosion resistance, coastal environments and offshore locations.</p>
<p>Pump Down Facility (PD) For providing means to pump down circuit refrigerant gas into condenser.</p>	<p>Galvanized Frame And Base (GFB) Steel frame and base which are hot dip galvanized after manufacture. This is recommended for highly corrosive environments.</p>
<p>Run Hour Meter(s) (RHM) To monitor operating hours of each compressor.</p>	<p>Mixing Box With / Without Sand Trap Louvre and Bird Screen on Fresh Air Side. (BMX)</p>
<p>Stainless Steel Drain Pan (SSP) Heavy gauge 316 stainless steel drain pan under the entire cooling coil and moisture eliminator Insulation under drain pan as per SKM standard.</p>	<p>Options for Field Installations</p>
<p>Voltage Monitoring Module (VMM) To prevent Packaged Air Conditioner operation in the event of Phase burn-out, Phase reversal, and Under / Over voltage on the incoming line voltage.</p>	<p>Anti-vibration mounts (CAVM) Recommended for roof mounted units or other locations in the vicinity of occupied spaces, where noise may be objectionable.</p>
<p>Voltage Monitoring Module (DVM) To meet DEWA Regulations, modified module with time delay relay This option is available for Dubai, UAE only.</p>	<p>Cooling Only Thermostat (Not with Option MCP) (COTS) Single stage or two stage wall mounted type are available from SKM. When option SCK ordered, customer must obtain thermostat to match total available steps and type desired.</p>
<p>Lead Lag Switch For double circuit units. (LLS)</p>	<p>Cooling Heating Thermostat (Not with Option MCP) (CHTS) Single stage or two stage cooling with single or two stage heating versions are available from SKM. Specify when ordering. Any other requirements to be procured by customer from any control vendor to suit.</p>
<p>Electronic Expansion Valves (EEV) To improve Energy Efficiency Ratio and to increase the range of operation conditions.</p>	<p>Hi-Lo and Oil Pressure Gauges (CSDG) Without piping or isolating pet cocks.</p>
<p>Manual Reset Type High Pressure Switch (MHP) To replace the factory set auto reset type pressure switch with adjustable manual reset pressure switch.</p>	<p>Special custom built units incorporating specially required features like units for larger capacities, units with heat pipe, units with anti-condensation resistance heaters embedded in condenser motors, explosion proof units incorporating open driven compressors etc. can be manufactured on request.</p>
<p>External Overload Protection (EOP) For those electrical specification requires additional overload protection for the compressors.</p>	<p>For off-shore applications, special units with stainless steel panels and explosion proof units suitable for classified areas or zones (Class-I Div I, Div II / Zone-I, Zone II, etc.) can be manufactured as per customer requirement.</p>
<p>Extra Shut Off Valve (XFV) To fully isolate filter drier, an additional shut-off valve can be incorporated in the liquid line.</p>	<p>Contact SKM for all such applications or requirements.</p>
<p>Two inch insulation For evaporator section (2SG)</p>	
<p>Anti Spark Fan & Belt (SPF) For special applications like explosion proof units.</p>	

SKM Packaged Air Conditioning Units PAC-F Series - R22

ENGINEERING SPECIFICATIONS - 50 Hn

Model	PACF	5011	5014	5020	5021	5024	5028	5029	5030										
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 95°F (35°C) Ambient Temperature	TR	10.6	13.9	20.5	21.2	24.8	27.6	30.2	30.6										
	kW	37.4	48.8	72.2	74.6	87.1	96.9	106.1	107.5										
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 115°F (46°C) Ambient Temperature	TR	9.8	12.7	18.9	19.5	22.7	25.2	27.6	28.1										
	kW	34.3	44.7	66.3	68.5	79.8	88.8	97.2	98.8										
Compressor	Type	Semi-Hermetic Reciprocating Discus 1450 RPM																	
	Code	-	D10	-	D15	-	D25	-	D10	D10	D15	D10	D15	D15	D35	-	D25	D10	
	Quantity	-	1	-	1	-	1	-	1	1	1	1	1	1	1	-	1	1	
	Oil Charge	US Gal	1.0	-	1.0	-	1.1	-	1.0	1.0	1.0	1.0	1.0	1.0	1.1	-	1.1	1.0	
	Liter	3.8	-	3.8	-	4.0	-	3.8	3.8	3.8	3.8	3.8	3.8	4.3	-	4.0	3.8		
Condenser Coil	Type	Air cooled 3 or 4 rows 12 FPI (2.1 mm) fin spacing Cu tubes Al fins																	
	Face Area	ft²	13.1	16.6	26.3	35.0	40.0												
		m²	1.2	1.5	2.4	3.3	3.7												
Condenser Fan	Type	Propeller direct drive 960 RPM																	
	Code / Qty.	-	823/1	723/2	823/2	823/3													
	Air Flow Rate	cfm	8500	11140	17000	25980	26820	25620											
		l/s	4011	5257	8022	12260	12656	12090											
Condenser Motor	Type	Totally enclosed, air over Class F insulation, 6-pole, IP-55																	
	Size / Qty.	kW	1.5/1	0.75/2	1.5/2	1.5/3													
Evaporator Coil	Type	Direct expansion, cross wave fin staggered tubes																	
	Face Area	ft²	9.0	11.7	14.6	17.2	18.8	20.8											
		m²	0.8	1.1	1.4	1.6	1.7	1.9											
Evaporator Fan	Type	Centrifugal double inlet double width belt drive																	
	Code / Qty.	-	15/1	12/2	15/2														
	Air Flow Rate	cfm	4500	5800	7300	8600	9400	10400											
		l/s	2124	2737	3445	4058	4436	4908											
Evaporator Motor	Type	Totally enclosed, Class F insulation, IP55																	
	Size	kW	2.2	3.0	4.0	5.5													
Refrigerant (R-22) Operating Charge	lbs	19.8	24.2	30.8	2 x 18.7	23.1 + 18.7	2 x 23.1	48.4	30.8 + 18.7										
	kg	9	11	14	2 x 8.5	10.5 + 8.5	2 x 10.5	22	14 + 8.5										
Number of Refrigerant Circuits	-	1	1	1	2	2	1	2											
Unit Operating Weight	lbs	1330	1536	2128	2396	2719	2793	2750	3008										
	kg	609	698	967	1089	1236	1269	1250	1367										

Model	PACF	5033	5035	5039	5040	5042	5047	5048	5049										
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 95°F (35°C) Ambient Temperature	TR	34.0	35.3	40.9	41.2	41.5	49.1	48.9	49.5										
	kW	119.7	124.0	143.8	144.8	145.8	172.6	171.8	174.1										
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 115°F (46°C) Ambient Temperature	TR	31.2	32.1	37.5	37.7	38.2	45.1	44.5	45.3										
	kW	109.8	113.0	132.0	132.5	134.4	158.4	156.7	159.5										
Compressor	Type	Semi-Hermetic Reciprocating Discus 1450 RPM																	
	Code	-	D25	D15	D40	-	D25	D25	D35	D10	D50	-	D60	-	D40	D15	D35	D25	
	Quantity	-	1	1	1	-	1	1	1	1	1	-	1	-	1	1	1	1	
	Oil Charge	US Gal	1.1	1.0	2.0	-	1.1	1.1	1.1	1.0	2.0	-	2.0	-	2.0	1.0	1.1	1.1	
	Liter	4.0	3.8	7.4	-	4.0	4.0	4.3	3.8	7.7	-	7.7	-	7.4	3.8	4.3	4.0		
Condenser Coil	Type	Air cooled 3 or 4 rows 12 FPI (2.1 mm) fin spacing Cu tubes Al fins																	
	Face Area	ft²	53.3	64.0	72.0														
		m²	5.0	5.9	6.7														
Condenser Fan	Type	Propeller direct drive 960 RPM																	
	Code / Qty.	-	829/3	823/4	829/4														
	Air Flow Rate	cfm	32790	37160	43840														
		l/s	15474	17536	20688														
Condenser Motor	Type	Totally enclosed, air over Class F insulation, 6-pole, IP-55																	
	Size / Qty.	kW	1.5/3	1.5/4	1.5/4														
Evaporator Coil	Type	Direct expansion, cross wave fin staggered tubes																	
	Face Area	ft²	23.4	25.0	29.2	34.4													
		m²	2.2	2.3	2.7	3.2													
Evaporator Fan	Type	Centrifugal double inlet double width belt drive																	
	Code / Qty.	-	15/2	18/2	18/2														
	Air Flow Rate	cfm	11700	12500	14600	17200													
		l/s	5520	5899	6890	8117													
Evaporator Motor	Type	Totally enclosed, Class F insulation, IP55																	
	Size	kW	5.5	7.5															
Refrigerant (R-22) Operating Charge	lbs	30.8 + 22	52.8	2 x 30	46.2 + 22	63.8	68.2	50.6 + 22	48.4 + 30.8										
	kg	14 + 10	24.0	2 x 14	21 + 10	29.0	31.0	23 + 10	22 + 14										
Number of Refrigerant Circuits	-	2	1	2	2	1	1	2	2										
Unit Operating Weight	lbs	3105	2914	3636	3647	3482	3709	3893	3924										
	kg	1412	1324	1652	1658	1583	1686	1769	1784										

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

Table 2

SKM Packaged Air Conditioning Units PAC-F Series - R22

ENGINEERING SPECIFICATIONS - 60 Hn

Model	PACF	6012	6015	6022	6023	6027	6031	6032	6034						
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 95°F (35°C) Ambient Temperature	TR	11.7	15.2	22.6	23.3	27.1	30.1	33.1	33.6						
	kW	41.1	53.3	79.4	81.9	95.4	105.9	116.4	118.0						
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 115°F (46°C) Ambient Temperature	TR	10.8	14.0	20.8	21.4	25.0	27.9	30.5	30.9						
	kW	37.8	49.2	73.1	75.3	88.0	97.9	107.1	108.8						
Compressor	Type	SemiH ermetic Reciprocating Discus 1750 RPM													
	Code	D10	D15	D25	D25	D10	D10	D15	D10	D15	D15	D35	D25	D10	
	Quantity	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Oil Charge	US Gal	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	
	Liter	3.8	3.8	4.0	3.8	3.8	3.8	3.8	3.8	3.8	4.3	4.0	3.8		
Condenser Coil	Type	Air cooled 3 or 4 rows 12 FPI (2.1 mm) fin spacing Cu tubes Al fins													
	Face Area	ft ²	13.1	16.6	26.3	26.3	35.0	35.0	40.0	40.0					
		m ²	1.2	1.5	2.4	2.4	3.3	3.3	3.7	3.7					
Condenser Fan	Type	Propeller direct drive 1150 RPM													
	Code / Qty.	823/1	723/2	823/2	823/2	823/3	823/3	823/3	823/3	823/3	823/3	823/3	823/3	823/3	
	Air Flow Rate	cfm	10360	12820	20720	20720	31680	31680	32670	32670	32670	32670	31230	31230	
		l/s	4889	6050	9778	9778	14950	14950	15417	15417	15417	15417	14737	14737	
Condenser Motor	Type	Totally enclosed, air over Class F insulation, 6p ole, IP 55													
	Size / Qty.	kW	2.2/1	1.1/2	2.2/2	2.2/2	2.2/3	2.2/3	2.2/3	2.2/3	2.2/3	2.2/3	2.2/3	2.2/3	
Evaporator Coil	Type	Direct expansion, cross wave fin staggered tubes													
	Face Area	ft ²	9.0	11.7	14.6	14.6	17.2	17.2	18.8	18.8	20.8	20.8	20.8	20.8	
		m ²	0.8	1.1	1.4	1.4	1.6	1.6	1.7	1.7	1.9	1.9	1.9	1.9	
Evaporator Fan	Type	Centrifugal double inlet double width belt drive													
	Code / Qty.	15/1	15/1	12/2	12/2	15/2	15/2	15/2	15/2	15/2	15/2	15/2	15/2	15/2	
	Air Flow Rate	cfm	4500	5800	7300	7300	8600	8600	9400	9400	10400	10400	10400	10400	
		l/s	2124	2737	3445	3445	4058	4058	4436	4436	4908	4908	4908	4908	
Evaporator Motor	Type	Totally enclosed, Class F insulation, IP55													
	Size	KW	2.2	3.0	3.0	3.0	4.0	4.0	5.5	5.5	5.5	5.5	5.5	5.5	
Refrigerant (R 22) Operating Charge	lbs	19.8	24.2	30.8	2 x 18.7	23.1 + 18.7	2 x 23.1	48.4	30.8 + 18.7						
	kg	9	11	14	2 x 8.5	10.5 + 8.5	2 x 10.5	22	14 + 8.5						
Number of Refrigerant Circuits		1	1	1	2	2	2	1	2						
Unit Operating Weight	lbs	1339	1536	2128	2396	2719	2793	2750	3008						
	kg	609	698	967	1089	1236	1269	1250	1367						

Model	PACF	6037	6041	6043	6044	6046	6052	6053	6054						
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 95°F (35°C) Ambient Temperature	TR	37.3	38.6	45.0	45.2	45.5	53.8	53.5	54.3						
	kW	131.1	135.9	158.1	158.9	160.0	189.1	188.2	190.8						
Cooling Capacity @ 80°/67°F (26.6/19.4°C) & 115°F (46°C) Ambient Temperature	TR	34.4	35.3	41.4	41.5	41.9	49.6	49.1	49.9						
	kW	120.9	124.3	145.4	146.0	147.5	174.4	172.5	175.4						
Compressor	Type	SemiH ermetic Reciprocating Discus 1750 RPM													
	Code	D25	D15	D40	D25	D25	D35	D10	D50	D60	D40	D15	D35	D25	
	Quantity	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Oil Charge	US Gal	1.1	1.0	2.0	1.1	1.1	1.1	1.0	2.0	2.0	2.0	1.0	1.1	
	Liter	4.0	3.8	7.4	4.0	4.0	4.3	3.8	7.7	7.7	7.4	3.8	4.0		
Condenser Coil	Type	Air cooled 3 or 4 rows 12 FPI (2.1 mm) fin spacing Cu tubes Al fins													
	Face Area	ft ²	53.3	64.0	64.0	72.0	72.0	72.0	72.0	72.0					
		m ²	5.0	5.9	5.9	6.7	6.7	6.7	6.7	6.7					
Condenser Fan	Type	Propeller direct drive 1150 RPM													
	Code / Qty.	829/3	829/3	823/4	823/4	829/4	829/4	829/4	829/4	829/4					
	Air Flow Rate	cfm	39660	45240	45240	53040	53040	53040	53040	53040					
		l/s	18716	21349	21349	25030	25030	25030	25030	25030					
Condenser Motor	Type	Totally enclosed, air over Class F insulation, 6p ole, IP 55													
	Size / Qty.	kW	2.2/3	2.2/4	2.2/4	2.2/4	2.2/4	2.2/4	2.2/4	2.2/4					
Evaporator Coil	Type	Direct expansion, cross wave fin staggered tubes													
	Face Area	ft ²	23.4	25.0	29.2	29.2	34.4	34.4	34.4	34.4					
		m ²	2.2	2.3	2.7	2.7	3.2	3.2	3.2	3.2					
Evaporator Fan	Type	Centrifugal double inlet double width belt drive													
	Code / Qty.	15/2	15/2	18/2	18/2	18/2	18/2	18/2	18/2						
	Air Flow Rate	cfm	11700	12500	14600	14600	17200	17200	17200	17200					
		l/s	5521	5899	6890	6890	8117	8117	8117	8117					
Evaporator Motor	Type	Totally enclosed, Class F insulation, IP55													
	Size	kW	5.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5					
Refrigerant (R 22) Operating Charge	lbs	30.8 + 22	52.8	2 x 30.8	46.2 + 22	63.8	68.2	50.6 + 22	48.4 + 30.8						
	kg	14 + 10	24	2 x 14	21 + 10	29	31	23 + 10	22 + 14						
Number of Refrigerant Circuits		2	1	2	2	1	1	2	2						
Unit Operating Weight	lbs	3105	2914	3636	3647	3482	3709	3893	3942						
	kg	1412	1324	1652	1658	1583	1688	1769	1784						

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

Table 3



SKM Packaged Air Conditioning Units PAC-F Series - R22

Selection Procedure

PACF series packaged air-conditioners should be selected with care and using sound engineering judgement. Selections based on rating total capacity alone or air flow rate alone may not be correct. To meet requirements of a specific application, sample procedure for selection is given in examples below.

Application Requirements	Example 1: English Units	Example 2: SI Units
Required total cooling capacity.....	442.0 MBH.....	129.5 kW
Sensible cooling capacity.....	310.0 MBH.....	90.8 kW
Condenser entering air temp db.....	115°F.....	46°C
Evaporator entering air temp. db/wb.....	84/69°F.....	28.9/20.6
Evaporator air flow rate.....	14,400 cfm.....	6797 l/s
External static pressure.....	1.2 inwg.....	300 Pa
Electric power supply.....	380V/3PH/50Hz.....	380V/3PH/50Hz

Select **PACF** model, Evaporator fan motor size and find leaving db/wb conditions.

Selection Procedure:

Enter capacity ratings table (50Hz) at required condenser entering air temperature. Select a unit having total capacity equal or more than specified. Select unit model **PACF-5039**, by interpolation, at 14,400 cfm (6,797 l/s) and 69°F (20.6°C) wb. Unit will provide 463.8 MBH (135.9 kW) total cooling capacity, 279 MBH (81.8 kW) sensible cooling at 80°F (26.7°C) evaporator entering air bulb.

<p>To calculate sensible capacity (SC2) at conditions other than 80°F (26.7°C) evaporator entering air dry bulb, use the formulae as shown</p> <p>Observe the rule of signs if E_{db} above 80°F (26.7°C) SCC to be added to SC1. If E_{db} is less than 80°F (26.7°C) SCC to be subtracted.</p>	$SC2 = SC1 + SCC$ $= SC1 + 0.0011 (1 - BPF)(EDB - 80) \times cfm$ $= 279 + 0.0011 (1 - 0.21)(84 - 80) \times 14,400$ $= 329 \text{ MBH}$ <p>where</p> <p>SC2 = corrected sensible capacity at given evap. entering air dry bulb °</p> <p>SC1 = sensible capacity at 80°F (26.7°C) DB evaporator entering air temperature</p> <p>SCC = sensible cooling correction</p> <p>BPF = bypass factor</p> <p>E_{db} = evaporator entering air dry bulb</p> <p>cfm & L/S = evaporator air flow rate</p>	$SC2 = SC1 + SCC$ $= SC1 + 0.00123 (1 - BPF)(E_{db} - 26.7) \times l/s$ $= 81.8 + 0.00123 (1 - 0.21)(28.9 - 26.7) \times 6797$ $= 96.3 \text{ kW}$
Calculate leaving evaporator air temperature	$L_{db} = E_{db} - \frac{\text{Sensible capacity (MBH)}}{0.0011 \times cfm}$ $= 84 - \frac{329}{0.0011 \times 14400}$ $= 63.2^\circ\text{F}$ <p>where</p> <p>E_{db} = Entering evaporator air dry bulb temperature</p> <p>L_{db} = Leaving evaporator air dry bulb temperature</p> <p>L_{wb} = Leaving air wet bulb temperature corresponding to enthalpy of air leaving evaporator coil</p>	$L_{db} = E_{db} - \frac{\text{Sensible capacity (KW)}}{0.00123 \times L/S}$ $= 28.9 - \frac{96.3}{0.00123 \times 6797}$ $= 17.3^\circ\text{C}$
Calculate leaving air wet bulb	$hL_{wb} = hE_{wb} - \frac{\text{total capacity (BTUH)}}{4.5 \times cfm}$ $= 33.25 - \frac{463.8 \times 1000}{4.5 \times 14,400}$ $= 26.09 \text{ Btu/lb}$ $= 59.46^\circ\text{F } L_{wb}$ <p>where</p> <p>hL_{wb} and hE_{wb} are leaving and entering air enthalpy respectively Btu/Lb (KJ/Kg)</p> <p>L_{wb} = Leaving air wet bulb temperature</p>	$hL_{wb} = hE_{wb} - \frac{\text{total capacity (KW)} \times 1000}{1.2 \times L/S}$ $= 59.7 - \frac{135.9 \times 1000}{1.2 \times 6797}$ $= 43.04 \text{ kJ/kg}$ $= 15.3^\circ\text{C } L_{wb}$

To find out wet bulb temperatures corresponding to enthalpy of air refer to psychrometric chart or enthalpy of saturated air tables.

Selection of evaporator fan rpm and motor size

Enter fan performance table and interpolate for 14,400 cfm (6797 l/s) and 1.2 inwg. (300 Pa) ESP to get 806 rpm and 5.5 kW absorbed power.

Motor power = 1.2 x absorbed power

= 1.2 x 5.5 = 6.6 kW

Standard selected motor size = 7.5 kW (10HP)

SKM Computer selections are available for quick and accurate selections

SKM Packaged Air Conditioning Units PAC-F Series - R22

FCGG CAPACITY RATINGS - 50 Hn

Model PACF (EER)	AFR cfm l/s (BPF)	EWB		Condenser Entering Air Temperature °F (°C)																			
				95°F (35°C)				105°F (41°C)				115°F (46°C)				125°F (52°C)							
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI
				°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh
5011 (9.9)	3600	62	16.7	112.9	33.1	91.0	26.7	8.7	108.4	31.8	89.1	26.1	9.5	103.7	30.4	87.1	25.5	10.3	98.8	28.9	85.1	24.9	11.2
	1699	67	19.4	122.8	36.0	76.5	22.4	9.1	118.0	34.6	74.7	21.9	9.9	113.0	33.1	72.8	21.3	10.8	107.8	31.6	70.8	20.8	11.7
	(0.27)	72	22.2	132.1	38.7	61.4	18.0	9.4	127.0	37.2	59.7	17.5	10.3	121.7	35.7	57.9	17.0	11.2	118.8	34.8	56.9	16.7	11.7
	4500	62	16.7	117.3	34.4	100.8	29.5	8.9	112.5	33.0	98.8	29.0	9.7	107.5	31.5	96.8	28.4	10.5	102.3	30.0	94.7	27.8	11.4
	2124	67	19.4	127.7	37.4	83.8	24.6	9.2	122.6	35.9	81.9	24.0	10.1	117.2	34.4	80.0	23.4	11.0	111.6	32.7	78.0	22.8	12.0
	(0.31)	72	22.2	137.5	40.3	66.2	19.4	9.5	132.0	38.7	64.4	18.9	10.5	126.1	37.0	62.6	18.3	11.5	123.1	36.1	61.6	18.0	12.0
5014 (9.7)	4950	62	16.7	118.9	34.9	105.4	30.9	9.0	114.0	33.4	103.4	30.3	9.8	108.9	31.9	101.4	29.7	10.6	103.6	30.4	99.3	29.1	11.5
	2336	67	19.4	129.5	38.0	87.2	25.6	9.3	124.3	36.4	85.3	25.0	10.2	118.8	34.8	83.4	24.4	11.1	113.0	33.1	81.3	23.8	12.1
	(0.33)	72	22.2	139.5	40.9	68.5	20.1	9.6	133.9	39.2	66.6	19.5	10.5	127.8	37.5	64.7	19.0	11.5	124.6	36.5	63.7	18.7	12.1
	4660	62	16.7	147.2	43.2	118.3	34.7	11.9	141.7	41.5	116.0	34.0	12.9	135.7	39.8	113.4	33.2	14.0	129.2	37.9	110.8	32.5	15.2
	2199	67	19.4	160.2	47.0	99.6	29.2	12.4	154.0	45.1	97.2	28.5	13.5	147.2	43.1	94.7	27.7	14.6	140.4	41.1	92.1	27.0	15.9
	(0.27)	72	22.2	172.3	50.5	80.0	23.4	12.8	165.4	48.5	77.6	22.8	14.0	158.4	46.4	75.3	22.1	15.2	154.8	45.4	74.1	21.7	15.9
5020 (10.1)	5800	62	16.7	153.0	44.8	130.8	38.3	12.1	146.9	43.1	128.3	37.6	13.2	140.3	41.1	125.7	36.8	14.3	133.4	39.1	122.9	36.0	15.4
	2737	67	19.4	166.5	48.8	108.8	31.9	12.6	159.7	46.8	106.3	31.2	13.7	152.5	44.7	103.7	30.4	14.9	145.3	42.6	101.1	29.6	16.2
	(0.31)	72	22.2	179.0	52.5	86.0	25.2	13.0	171.7	50.3	83.7	24.5	14.2	164.4	48.2	81.3	23.8	15.5	160.7	47.1	80.1	23.5	16.2
	6410	62	16.7	155.3	45.5	137.1	40.2	12.2	149.0	43.7	134.6	39.4	13.3	142.2	41.7	131.8	38.6	14.4	135.2	39.6	129.1	37.8	15.6
	3025	67	19.4	169.0	49.5	113.4	33.2	12.7	162.0	47.5	110.9	32.5	13.8	154.6	45.3	108.3	31.7	15.0	147.3	43.2	105.7	31.0	16.3
	(0.33)	72	22.2	181.7	53.2	89.0	26.1	13.1	174.3	51.1	86.6	25.4	14.3	166.9	48.9	84.3	24.7	15.6	163.1	47.8	83.1	24.4	16.3
5021 (10.4)	5840	62	16.7	216.7	63.5	173.6	50.9	17.2	207.8	60.9	169.7	49.7	18.6	198.5	58.2	165.6	48.5	20.1	189.1	55.4	161.6	47.4	21.7
	2756	67	19.4	235.1	68.9	146.4	42.9	17.9	225.8	66.2	142.7	41.8	19.4	216.2	63.4	138.9	40.7	21.0	206.5	60.5	135.1	39.6	22.7
	(0.18)	72	22.2	252.6	74.0	118.1	34.6	18.5	242.9	71.2	114.7	33.6	20.1	233.0	68.3	111.2	32.6	21.8	227.9	66.8	109.4	32.1	22.7
	7300	62	16.7	226.8	66.5	193.4	56.7	17.6	217.3	63.7	189.4	55.5	19.1	207.4	60.8	185.3	54.3	20.6	197.4	57.9	181.2	53.1	22.2
	3445	67	19.4	246.3	72.2	161.3	47.3	18.3	236.4	69.3	157.5	46.2	19.8	226.2	66.3	153.7	45.0	21.5	215.8	63.2	149.7	43.9	23.3
	(0.21)	72	22.2	264.9	77.6	127.9	37.5	18.9	254.6	74.6	124.4	36.5	20.6	244.0	71.5	120.9	35.4	22.3	238.5	69.9	119.0	34.9	23.3
5024 (9.8)	8000	62	16.7	230.4	67.5	202.4	59.3	17.7	220.7	64.7	198.3	58.1	19.2	210.5	61.7	194.2	56.9	20.7	200.4	58.7	190.0	55.7	22.4
	3775	67	19.4	250.4	73.4	167.9	49.2	18.4	240.2	70.4	164.1	48.1	20.0	229.8	67.3	160.2	47.0	21.7	219.1	64.2	156.3	45.8	23.5
	(0.22)	72	22.2	269.4	79.0	132.3	38.8	19.0	258.8	75.9	128.7	37.7	20.7	247.9	72.7	125.2	36.7	22.5	242.3	71.0	123.4	36.2	23.5
	5840	62	16.7	222.9	65.3	176.4	51.7	17.4	213.9	62.7	172.4	50.5	18.9	204.7	60.0	168.3	49.3	20.5	195.1	57.2	164.1	48.1	22.2
	2756	67	19.4	242.2	71.0	149.3	43.7	18.0	232.8	68.2	145.5	42.6	19.7	223.1	65.4	141.6	41.5	21.4	212.8	62.4	137.6	40.3	23.3
	(0.18)	72	22.2	260.6	76.4	120.9	35.4	18.6	250.7	73.5	117.4	34.4	20.4	240.2	70.4	113.7	33.3	22.3	229.0	67.1	109.8	32.2	24.3
5028 (9.8)	7300	62	16.7	233.8	68.5	196.4	57.6	17.8	224.2	65.7	192.3	56.4	19.3	214.2	62.8	188.2	55.1	21.0	203.9	59.8	183.9	53.9	22.8
	3445	67	19.4	254.4	74.6	164.3	48.2	18.4	244.3	71.6	160.5	47.0	20.2	233.6	68.5	156.5	45.9	22.0	222.4	65.2	152.2	44.6	23.9
	(0.21)	72	22.2	274.0	80.3	131.0	38.4	19.1	263.1	77.1	127.3	37.3	20.9	251.4	73.7	123.4	36.2	22.9	245.3	71.9	121.3	35.6	23.9
	8000	62	16.7	237.7	69.7	205.4	60.2	17.9	227.9	66.8	201.3	59.0	19.5	217.7	63.8	197.1	57.8	21.2	207.0	60.7	192.7	56.5	23.0
	3775	67	19.4	258.8	75.9	171.1	50.1	18.6	248.4	72.8	167.1	49.0	20.3	237.4	69.6	163.0	47.8	22.2	225.8	66.2	158.7	46.5	24.1
	(0.22)	72	22.2	278.8	81.7	135.4	39.7	19.2	267.5	78.4	131.6	38.6	21.1	255.5	74.9	127.6	37.4	23.1	249.1	73.0	125.6	36.8	24.1
5029 (9.7)	6880	62	16.7	260.1	76.2	206.7	60.6	20.5	250.5	73.3	202.2	59.3	22.3	239.5	70.2	197.6	57.9	24.1	228.2	66.9	192.7	56.5	26.1
	3247	67	19.4	283.0	82.9	174.9	51.3	21.2	272.0	79.7	170.5	50.0	23.2	260.4	76.3	165.9	48.6	25.2	248.4	72.8	161.2	47.2	27.4
	(0.18)	72	22.2	304.4	89.2	141.5	41.5	21.9	292.6	85.8	137.3	40.3	24.0	280.3	82.1	133.0	39.0	26.2	273.9	80.3	130.8	38.3	27.3
	8600	62	16.7	272.9	80.0	230.3	67.5	20.9	261.9	76.8	225.7	66.1	22.8	250.2	73.3	220.7	64.7	24.7	238.0	69.8	215.7	63.2	26.7
	4058	67	19.4	297.1	87.1	192.6	56.4	21.7	285.1	83.6	188.1	55.1	23.7	272.4	79.8	183.3	53.7	25.8	259.5	76.1	178.4	52.3	28.1
	(0.21)	72	22.2	319.7	93.7	153.3	44.9	22.4	306.9	89.9	148.9	43.7	24.5	293.6	86.1	144.5	42.4	26.8	286.8	84.1	142.2	41.7	28.0
5029 (9.7)	9460	62	16.7	277.7	81.4	241.4	70.8	21.1	266.3	78.1	236.7	69.4	22.9	254.2	74.5	231.7	67.9	24.9	241.7	70.8	226.6	66.4	27.0
	4464	67	19.4	302.5	88.6	200.9	58.9	21.9	290.0	85.0	196.2	57.5	23.9	277.0	81.2	191.3	56.1	26.0	263.6	77.3	186.4	54.6	28.3
	(0.22)	72	22.2	325.5	95.4	158.7	46.5	22.6	312.2	91.5	154.2	45.2	24.7	298.7	87.5	149.8	43.9	27.1	291.7	85.5	147.5	43.2	28.3
	7520	62	16.7	289.3	84.8	228.1	66.9	23.7	278.6	81.7	223.3	65.5	25.7	267.1	78.3	218.2	64.0	27.8	254.6	74.6	212.8	62.4	30.1
	3549	67	19.4	314.8	92.3	193.4	56.7	24.6	302.7	88.7	188.5	55.2	26.7	289.6	84.9	183.3	53.7	29.0	276.3	81.0	178.0	52.2	31.6
	(0.18)	72	22.2	338.5	99.2	156.7	45.9	25.4	325.2	95.3	152.0	44.6	27.7	311.3	91.2	147.1	43.1	30.2	297.5	87.2	142.3	41.7	32.9
5029 (

SKM Packaged Air Conditioning Units PAC-F Series - R22

; FCGG75 D57 HMF5 HB; G!) \$' < n

Model PACF (EER)	AFR	Condenser Entering Air Temperature °F (°C)																					
		EWB		95°F (35°C)					105°F (41°C)					115°F (46°C)					125°F (52°C)				
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI
		°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW
5030 (9.8)	8320	62	16.7	322.0	94.4	253.3	74.3	25.5	309.1	90.6	247.6	72.6	27.8	295.6	86.6	241.6	70.8	30.1	281.8	82.6	235.5	69.0	32.5
		67	19.4	349.4	102.4	214.5	62.9	26.6	335.9	98.5	209.0	61.3	28.9	321.8	94.3	203.4	59.6	31.4	307.4	90.1	197.7	57.9	34.0
	(0.18)	72	22.2	375.5	110.0	173.8	50.9	27.5	361.3	105.9	168.7	49.5	30.0	346.6	101.6	163.5	47.9	32.6	331.3	97.1	158.2	46.4	35.4
	10400	62	16.7	337.7	99.0	281.9	82.6	26.1	323.8	94.9	275.9	80.9	28.4	309.3	90.7	269.9	79.1	30.7	294.6	86.3	263.7	77.3	33.2
		67	19.4	366.9	107.5	235.8	69.1	27.2	352.3	103.3	230.3	67.5	29.6	337.2	98.8	224.6	65.8	32.1	321.6	94.3	218.8	64.1	34.8
	(0.21)	72	22.2	394.6	115.7	188.2	55.2	28.1	379.3	111.2	182.9	53.6	30.7	363.4	106.5	177.5	52.0	33.4	355.1	104.1	174.8	51.2	34.8
	11440	62	16.7	343.6	100.7	295.3	86.5	26.4	329.3	96.5	289.3	84.8	28.7	314.5	92.2	283.2	83.0	31.0	299.4	87.7	276.9	81.2	33.5
		67	19.4	373.5	109.5	245.9	72.1	27.4	358.5	105.1	240.3	70.4	29.8	343.0	100.5	234.4	68.7	32.4	327.0	95.8	228.5	67.0	35.2
	(0.22)	72	22.2	401.8	117.8	194.7	57.1	28.3	386.1	113.2	189.4	55.5	30.9	369.6	108.3	183.9	53.9	33.7	361.1	105.8	181.2	53.1	35.1
	5033 (10.0)	9360	62	16.7	358.2	105.0	283.2	83.0	28.8	344.2	100.9	276.9	81.2	31.3	329.3	96.5	270.4	79.2	33.9	313.8	92.0	263.6	77.3
67			19.4	389.0	114.0	239.6	70.2	30.0	373.9	109.6	233.5	68.5	32.6	357.9	104.9	227.2	66.6	35.3	341.7	100.2	220.8	64.7	38.3
(0.18)		72	22.2	418.0	122.5	193.9	56.8	31.0	401.9	117.8	188.2	55.2	33.8	385.3	112.9	182.4	53.5	36.7	368.4	108.0	176.5	51.7	39.9
11700		62	16.7	375.7	110.1	315.3	92.4	29.5	360.4	105.6	308.8	90.5	32.0	344.1	100.9	302.0	88.5	34.6	327.5	96.0	295.1	86.5	37.4
		67	19.4	408.4	119.7	263.6	77.3	30.7	391.8	114.9	257.4	75.4	33.4	374.7	109.8	250.9	73.5	36.2	357.3	104.7	244.4	71.6	39.3
(0.21)		72	22.2	438.9	128.6	210.0	61.6	31.7	421.6	123.6	204.0	59.8	34.6	404.0	118.4	198.1	58.1	37.6	395.0	115.8	195.1	57.2	39.2
12870		62	16.7	382.2	112.0	330.4	96.8	29.7	366.4	113.4	323.8	94.9	32.3	349.7	102.5	316.8	92.9	34.9	332.7	97.5	309.9	90.8	37.8
		67	19.4	415.6	121.8	274.9	80.6	30.9	398.6	116.8	268.5	78.7	33.6	381.0	111.7	261.9	76.8	36.5	363.2	106.5	255.3	74.8	39.6
(0.22)		72	22.2	446.8	130.9	217.2	63.7	31.9	429.0	125.8	211.3	61.9	34.8	411.1	120.5	205.4	60.2	37.9	401.9	117.8	202.4	59.3	39.6
5035 (9.1)		10000	62	16.7	371.8	109.0	297.6	87.2	32.2	355.4	104.2	290.4	85.1	34.7	338.3	99.2	282.9	82.9	37.2	320.8	94.0	275.4	80.7
	67		19.4	403.5	118.3	251.1	73.6	33.5	386.3	113.2	244.2	71.6	36.2	368.5	108.0	237.2	69.5	39.0	350.1	102.6	230.1	67.4	42.1
	(0.18)	72	22.2	433.7	127.1	202.6	59.4	34.8	415.7	121.8	196.3	57.5	37.6	397.0	116.4	189.7	55.6	40.5	387.4	113.5	186.4	54.6	42.1
	12500	62	16.7	389.1	114.1	331.6	97.2	32.9	371.6	108.9	324.2	95.0	35.5	353.3	103.6	316.6	92.8	38.1	334.6	98.1	308.9	90.5	41.0
		67	19.4	423.0	124.0	276.6	81.1	34.3	404.5	118.6	269.6	79.0	37.1	385.4	112.9	262.4	76.9	39.9	365.6	107.2	255.0	74.7	43.1
	(0.21)	72	22.2	455.1	133.4	219.6	64.4	35.6	435.6	127.7	213.0	62.4	38.5	415.4	121.8	206.2	60.4	41.5	405.1	118.7	202.8	59.4	43.1
	13750	62	16.7	395.7	116.0	347.6	101.9	33.2	377.6	110.7	340.1	99.7	35.8	358.9	105.2	332.4	97.4	38.4	339.8	99.6	324.7	95.2	41.4
		67	19.4	430.3	126.1	288.5	84.6	34.6	411.4	120.6	281.4	82.5	37.4	391.7	114.8	274.1	80.3	40.3	381.6	111.8	270.4	79.3	41.8
	(0.22)	72	22.2	463.1	135.7	227.3	66.6	35.9	443.1	129.9	220.7	64.7	38.8	422.3	123.8	213.9	62.7	41.8	411.7	120.7	210.4	61.7	43.5
	5039 (10.1)	11680	62	16.7	432.0	126.6	346.6	101.6	34.6	414.1	121.4	338.7	99.3	37.5	395.5	115.9	330.5	96.9	40.5	376.8	110.4	322.5	94.5
67			19.4	468.6	137.3	292.2	85.6	36.0	449.9	131.9	284.7	83.5	39.1	430.7	126.2	277.2	81.2	42.3	411.2	120.5	269.6	79.0	45.8
(0.18)		72	22.2	503.2	147.5	235.5	69.0	37.3	483.9	141.8	228.6	67.0	40.5	464.0	136.0	221.7	65.0	44.0	453.9	133.0	218.2	63.9	45.8
14600		62	16.7	451.9	132.5	386.1	113.2	35.4	432.8	126.9	378.1	110.8	38.4	413.0	121.0	369.9	108.4	41.4	393.1	115.2	361.6	106.0	44.7
		67	19.4	490.8	143.9	321.8	94.3	36.8	470.9	138.0	314.3	92.1	40.0	450.4	132.0	306.6	89.9	43.3	429.6	125.9	298.7	87.6	46.9
(0.21)		72	22.2	527.7	154.7	255.1	74.8	38.1	507.0	148.6	248.1	72.7	41.5	485.8	142.4	241.0	70.6	45.0	474.8	139.2	237.4	69.6	47.0
16060		62	16.7	459.4	134.6	404.8	118.6	35.7	439.8	128.9	396.7	116.3	38.7	419.6	123.0	388.4	113.8	41.8	399.2	117.0	380.1	111.4	45.1
		67	19.4	499.2	146.3	335.6	98.4	37.1	478.8	140.3	328.0	96.1	40.3	457.8	134.2	320.2	93.9	43.6	447.2	131.1	316.3	92.7	45.4
(0.22)		72	22.2	536.9	157.4	264.1	77.4	38.4	515.7	151.2	257.1	75.4	41.8	493.9	144.8	250.0	73.3	45.5	482.6	141.5	246.4	72.2	47.4
5040 (10.1)		11680	62	16.7	434.0	127.2	347.5	101.8	34.9	416.2	122.0	339.6	99.5	37.8	397.6	116.5	331.4	97.1	40.9	378.3	110.9	323.1	94.7
	67		19.4	471.2	138.1	293.2	85.9	36.3	452.3	132.6	285.7	83.7	39.4	432.5	126.8	277.9	81.4	42.7	412.2	120.8	270.0	79.1	46.3
	(0.18)	72	22.2	506.6	148.5	236.6	69.4	37.5	486.6	142.6	229.6	67.3	40.8	465.7	136.5	222.3	65.1	44.4	455.0	133.4	218.6	64.1	46.2
	14600	62	16.7	454.4	133.2	387.2	113.5	35.7	435.2	127.5	379.1	111.1	38.7	415.1	121.7	370.7	108.7	41.8	394.4	115.6	362.2	106.2	45.2
		67	19.4	494.0	144.8	323.0	94.7	37.1	473.6	138.8	315.3	92.4	40.3	452.2	132.5	307.3	90.1	43.7	430.4	126.1	299.0	87.6	47.4
	(0.21)	72	22.2	531.6	155.8	256.4	75.2	38.3	509.9	149.5	249.1	73.0	41.8	487.4	142.9	241.6	70.8	45.4	476.0	139.5	237.8	69.7	47.3
	16060	62	16.7	462.0	135.4	405.9	119.0	36.0	442.3	129.6	397.7	116.6	39.0	421.6	123.6	389.2	114.2	42.1	400.4	117.4	380.6	111.5	45.6
		67	19.4	502.6	147.3	336.9	98.8	37.4	481.5	141.1	329.0	96.4	40.6	459.6	134.7	320.9	94.0	44.1	448.4	131.4	316.8	92.8	45.9
	(0.22)	72	22.2	541.0	158.6	265.5	77.8	38.6	518.7	152.0	258.1	75.6	42.1	495.5	145.2	250.6	73.4	45.8	483.9	141.8	246.7	72.3	47.7
	5042 (9.8)	11680	62	16.7	436.1	127.8	348.4	102.1	36.7	419.1	122.8	340.9	99.9	39.8	401.6	117.7	333.2	97.7	43.1	383.4	112.4	325.4	95.4
67			19.4	474.1	138.9	294.4	86.3	38.2	456.4	133.8	287.3	84.2	41.5	438.1	128.4	280.0	82.1	44.9	418.7	122.7	272.5	79.9	48.7
(0.18)		72	22.2	510.2	149.5	237.9	69.7	39.4	491.6	144.1	231.3	67.8	43.0	472.2	13								

SKM Packaged Air Conditioning Units PAC-F Series - R22

; FCGG75 D57 HMF5 HB; G!)* \$<n

Model PACF (EER)	AFR		Condenser Entering Air Temperature °F (°C)																								
	cfm l/s (BPF)	EWB		95°F (35°C)						105°F (41°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW				
5048 (9.7)	13760	62	16.7	514.9	150.9	411.0	120.5	44.3	493.0	144.5	401.3	117.6	47.8	470.0	137.8	391.2	114.7	51.4	446.1	130.8	380.9	111.6	55.4				
	6493	67	19.4	559.1	163.9	347.0	101.7	46.1	535.7	157.0	337.7	99.0	49.9	511.2	149.8	328.0	96.1	53.8	498.7	146.2	323.2	94.7	56.0				
	(0.18)	72	22.2	600.8	176.1	280.2	82.1	47.8	576.0	168.8	271.4	79.6	51.8	550.4	161.3	262.5	76.9	56.0	537.4	157.5	257.9	75.6	58.3				
	17200	62	16.7	539.3	158.1	457.8	134.2	45.3	515.6	151.1	447.9	131.3	48.9	490.7	143.8	437.4	128.2	52.6	465.2	136.3	426.9	125.1	56.8				
	8117	67	19.4	586.2	171.8	382.1	112.0	47.2	560.9	164.4	372.6	109.2	51.1	534.5	156.7	362.7	106.3	55.2	521.2	152.8	357.6	104.8	57.3				
	(0.21)	72	22.2	630.3	184.7	303.5	89.0	49.0	603.7	176.9	294.5	86.3	53.1	576.3	168.9	285.3	83.6	57.4	562.3	164.8	280.6	82.3	59.7				
	18920	62	16.7	548.5	160.8	479.9	140.7	45.7	524.0	153.6	469.8	137.7	49.3	498.4	146.1	459.2	134.6	53.1	472.3	138.4	448.6	131.5	57.3				
	8928	67	19.4	596.4	174.8	398.6	116.8	47.6	570.3	167.2	388.7	113.9	51.5	543.3	159.2	378.7	111.0	55.6	529.6	155.2	373.7	109.5	57.9				
	(0.22)	72	22.2	641.4	188.0	314.2	92.1	49.4	614.1	180.0	305.0	89.4	53.5	586.1	171.8	295.9	86.7	57.9	571.7	167.6	291.3	85.4	60.3				
5049 (9.9)	13760	62	16.7	522.6	153.2	414.4	121.5	43.7	501.1	146.9	404.8	118.7	47.3	478.5	140.2	394.9	115.8	51.0	455.5	133.5	384.9	112.8	55.0				
	6493	67	19.4	566.6	166.1	350.1	102.6	45.5	543.8	159.4	340.9	99.9	49.3	520.1	152.4	331.5	97.2	53.3	508.0	148.9	326.8	95.8	55.4				
	(0.18)	72	22.2	608.3	178.3	282.9	82.9	47.1	584.4	171.3	274.4	80.4	51.1	559.7	164.0	265.7	77.9	55.4	547.3	160.4	261.4	76.6	57.7				
	17200	62	16.7	547.3	160.4	461.3	135.2	44.7	524.0	153.6	451.4	132.3	48.4	499.7	146.5	441.2	129.3	52.2	475.0	139.2	431.0	126.3	56.3				
	8117	67	19.4	594.1	174.1	385.1	112.9	46.6	569.5	166.9	375.8	110.2	50.5	544.1	159.5	366.3	107.4	54.6	531.2	155.7	361.4	105.9	56.8				
	(0.21)	72	22.2	638.4	187.1	306.3	89.8	48.2	612.7	179.6	297.5	87.2	52.4	586.2	171.8	288.6	84.6	56.8	573.4	168.1	284.3	83.3	59.1				
	18920	62	16.7	556.6	163.1	483.3	141.7	45.1	532.6	156.1	473.3	138.7	48.8	507.7	148.8	463.1	135.7	52.6	482.4	141.4	452.7	132.7	56.8				
	8928	67	19.4	604.4	177.2	401.6	117.7	47.0	579.1	169.7	392.1	114.9	50.9	553.1	162.1	382.2	112.0	55.0	540.0	158.3	377.5	110.6	57.3				
	(0.22)	72	22.2	649.7	190.4	317.0	92.9	48.6	623.3	182.7	308.1	90.3	52.8	596.2	174.8	299.2	87.7	57.3	583.3	171.0	295.0	86.5	59.6				

Table 4 ends

- Notes :
1. Capacity ratings are based on 80°F (26.7°C) entering air dry bulb temperature.
 2. Capacity is gross capacity which does not include the effect of evaporator fan motor heat.
 3. Direct interpolation is permissible. Do not extrapolate.
 4. EER Energy Efficiency Ratio in BTU/W based on ARI conditions 95°F (35°C) ambient and 80/67°F (26.6/19.5°C) DB/WB air on evaporator coil.
 5. Shaded Values are at 120°F (49°C) condenser entering air temperature.

; FCGG75 D57 HMF5 HB; G!* \$<n

Model PACF (EER)	AFR		Condenser Entering Air Temperature °F (°C)																								
	cfm l/s (BPF)	EWB		95°F (35°C)						105°F (41°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW				
6012 (9.1)	3600	62	16.7	-	-	-	-	-	118.7	34.8	93.5	27.4	11.2	113.9	33.4	91.4	26.8	12.1	108.5	31.8	89.1	26.1	13.1				
	1699	67	19.4	134.4	39.4	81.0	23.7	10.7	129.3	37.9	79.0	23.2	11.6	124.0	36.3	76.9	22.5	12.6	118.2	34.7	74.8	21.9	13.7				
	(0.27)	72	22.2	144.6	42.4	65.8	19.3	11.1	139.2	40.8	63.9	18.7	12.1	133.5	39.1	61.9	18.1	13.1	130.5	38.3	60.9	17.8	13.7				
	4500	62	16.7	128.8	37.7	105.5	30.9	10.5	123.7	36.3	103.4	30.3	11.4	118.4	34.7	101.2	29.7	12.3	112.7	33.0	98.9	29.0	13.3				
	2124	67	19.4	140.2	41.1	88.5	25.9	10.9	134.8	39.5	86.4	25.3	11.9	129.0	37.8	84.3	24.7	12.9	126.0	36.9	83.2	24.4	13.4				
	(0.31)	72	22.2	151.0	44.2	70.7	20.7	11.3	145.1	42.5	68.7	20.1	12.3	139.0	40.7	66.7	19.6	13.4	135.9	39.8	65.7	19.3	14.0				
	4950	62	16.7	130.8	38.3	110.2	32.3	10.6	125.6	36.8	108.1	31.7	11.5	120.1	35.2	105.9	31.0	12.4	114.2	33.5	103.5	30.3	13.4				
	2336	67	19.4	142.5	41.8	91.9	26.9	11.0	136.8	40.1	89.8	26.3	12.0	130.9	38.4	87.7	25.7	13.0	127.8	37.5	86.6	25.4	13.5				
	(0.33)	72	22.2	153.3	44.9	72.9	21.4	11.4	147.3	43.2	71.0	20.8	12.4	141.1	41.4	69.0	20.2	13.5	138.0	40.4	68.0	19.9	14.1				
6015 (9.0)	4660	62	16.7	-	-	-	-	-	155.3	45.5	121.8	35.7	15.3	149.2	43.7	119.1	34.9	16.6	142.5	41.8	116.3	34.1	17.9				
	2199	67	19.4	174.7	51.2	105.2	30.8	14.7	168.4	49.4	102.7	30.1	15.9	161.8	47.4	100.2	29.4	17.3	158.3	46.4	98.8	29.0	18.0				
	(0.27)	72	22.2	187.4	54.9	85.2	25.0	15.2	180.7	53.0	82.9	24.3	16.5	173.6	50.9	80.5	23.6	18.0	169.8	49.8	79.1	23.2	18.7				
	5800	62	16.7	167.7	49.2	136.9	40.1	14.4	161.4	47.3	134.3	39.4	15.6	154.8	45.4	131.6	38.6	16.9	151.4	44.4	130.2	38.1	17.6				
	2737	67	19.4	181.8	53.3	114.5	33.6	14.9	175.1	51.3	112.0	32.8	16.3	168.0	49.2	109.4	32.1	17.6	164.2	48.1	108.0	31.6	18.4				
	(0.31)	72	22.2	195.2	57.2	91.4	26.8	15.5	188.0	55.1	89.0	26.1	16.9	180.3	52.9	86.5	25.3	18.4	176.3	51.7	85.1	25.0	19.2				
	6410	62	16.7	170.4	49.9	143.2	42.0	14.5	163.9	48.0	140.6	41.2	15.7	157.1	46.0	137.8	40.4	17.0	153.5	45.0	136.4	40.0	17.7				
	3025	67	19.4	184.7	54.1	119.2	34.9	15.1	177.8	52.1	116.6	34.2	16.4	170.5	50.0	114.0	33.4	17.8	166.5	48.8	112.5	33.0	18.5				
	(0.33)	72	22.2	198.4	58.1	94.4	27.7	15.6	191.0	56.0	92.0	27.0	17.0	183.0	53.6	89.5	26.2	18.5	178.9	52.4	88.1	25.8	19.3				

Table 5



SKM Packaged Air Conditioning Units PAC-F Series - R22

GROSS CAPACITY RATINGS - 60 Hz

Model PACF (EER)	AFR		Condenser Entering Air Temperature °F (°C)																				
	cfm l/s (BPF)	EWB	95°F (35°C)					105°F (41°C)				115°F (46°C)				125°F (52°C)							
			Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI						
			°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW				
6022 (9.3)	5840	62	16.7	-	-	-	-	-	228.1	178.7	52.4	22.0	219.1	64.2	174.7	23.6	209.2	61.3	170.3	49.9	25.5		
	2756 (0.18)	67	19.4	257.4	75.4	155.5	45.6	21.1	247.9	72.7	151.6	44.4	22.8	237.9	69.7	147.5	43.2	24.7	227.3	66.6	143.3	42.0	26.7
	7300	62	22.2	276.7	81.1	126.8	37.2	21.8	266.5	78.1	123.0	36.1	23.7	255.6	74.9	119.1	34.9	25.6	244.7	71.7	115.3	33.8	27.8
	3445 (0.21)	67	19.4	249.2	73.0	203.0	59.5	20.8	239.6	70.2	198.9	58.3	22.5	229.5	67.3	194.6	57.0	24.2	218.7	64.1	190.0	55.7	26.1
	8000	67	19.4	271.0	79.4	170.7	50.0	21.6	260.5	76.4	166.7	48.8	23.4	249.4	73.1	162.4	47.6	25.3	238.1	69.8	158.1	46.4	27.4
	3775 (0.22)	72	22.2	291.4	85.4	137.1	40.2	22.3	280.1	82.1	133.1	39.0	24.3	268.4	78.7	129.1	37.8	26.3	262.6	77.0	127.1	37.3	27.4
	8000	62	16.7	253.7	74.4	212.2	62.2	21.0	243.8	71.4	208.0	61.0	22.7	233.2	68.4	203.6	59.7	24.4	222.2	65.1	199.0	58.3	26.3
	3775	67	19.4	275.9	80.9	177.5	52.0	21.8	265.1	77.7	173.4	50.8	23.6	253.6	74.3	169.1	49.6	25.5	242.0	70.9	164.8	48.3	27.6
	8000	72	22.2	296.7	87.0	141.5	41.5	22.5	285.0	83.5	137.5	40.3	24.5	273.1	80.0	133.5	39.1	26.5	267.1	78.3	131.5	38.5	27.6
	5840	62	16.7	-	-	-	-	-	234.1	68.6	181.4	53.2	22.2	224.6	65.8	177.1	51.9	24.0	214.1	62.8	172.5	50.5	26.0
	2756 (0.18)	67	19.4	264.7	77.6	158.5	46.5	21.3	254.9	74.7	154.4	45.3	23.1	244.4	71.6	150.2	44.0	25.1	233.3	68.4	145.7	42.7	27.2
	7300	62	22.2	284.9	83.5	129.8	38.0	22.0	274.3	80.4	125.9	36.9	24.0	263.2	77.1	121.8	35.7	26.0	257.4	75.4	119.8	35.1	27.2
3445 (0.21)	67	19.4	256.5	75.2	206.3	60.5	21.0	246.5	72.3	201.9	59.2	22.8	235.9	69.1	197.3	57.8	24.6	224.5	65.8	192.5	56.4	26.6	
8000	67	19.4	279.4	81.9	174.0	51.0	21.8	268.5	78.7	169.8	49.8	23.7	257.0	75.3	165.3	48.4	25.7	244.9	71.8	160.7	47.1	28.0	
3775 (0.22)	72	22.2	300.7	88.1	140.3	41.1	22.5	289.1	84.7	136.3	39.9	24.6	277.0	81.2	132.1	38.7	26.8	270.8	79.4	129.9	38.1	27.9	
8000	62	16.7	261.4	76.6	215.5	63.2	21.2	251.0	73.6	211.0	61.8	23.0	240.0	70.3	206.4	60.5	24.8	228.3	66.9	201.5	59.1	26.9	
3775	67	19.4	284.7	83.4	180.9	53.0	22.0	273.4	80.1	176.6	51.8	23.9	261.6	76.7	172.1	50.4	26.0	255.4	74.9	169.8	49.8	27.1	
8000	72	22.2	306.4	89.8	144.8	42.5	22.7	294.4	86.3	140.7	41.2	24.8	282.0	82.7	136.5	40.0	27.0	275.7	80.8	134.4	39.4	28.2	
6880	62	16.7	-	-	-	-	-	274.0	80.3	212.9	62.4	26.8	263.1	77.1	208.0	61.0	28.4	251.2	73.6	202.7	59.4	30.7	
3247 (0.18)	67	19.4	309.0	90.6	185.5	54.4	25.1	297.7	87.3	180.9	53.0	27.3	285.9	83.8	176.1	51.6	29.6	273.1	80.0	170.9	50.1	32.1	
8600	62	16.7	299.6	87.8	241.8	70.9	24.8	288.0	84.4	236.8	69.4	26.9	276.0	80.9	231.6	67.9	29.1	263.0	77.1	226.1	66.3	31.5	
4058 (0.21)	67	19.4	325.5	95.4	203.6	59.7	25.7	313.1	91.8	198.8	58.3	28.0	300.2	88.0	193.7	56.8	30.4	293.3	86.0	191.2	56.0	31.7	
9460	72	22.2	349.9	102.6	163.8	48.0	26.6	336.7	98.7	159.2	46.7	29.0	322.9	94.6	154.4	45.3	31.6	315.7	92.5	151.9	44.5	33.0	
4464 (0.22)	67	19.4	331.7	97.2	211.9	62.1	25.9	318.9	93.5	207.1	60.7	28.2	305.5	89.5	202.0	59.2	30.7	298.5	87.5	199.4	58.4	32.0	
8000	72	22.2	356.7	104.5	169.3	49.6	26.8	343.1	100.5	164.6	48.2	29.3	328.8	96.4	159.8	46.8	31.9	321.3	94.2	157.3	46.1	33.3	
3549 (0.18)	62	16.7	-	-	-	-	-	-	-	-	-	-	293.7	86.1	230.1	67.4	32.8	280.6	82.3	224.2	65.7	35.5	
9400	67	19.4	343.4	100.7	205.1	60.1	29.0	331.2	97.1	200.1	58.6	31.5	318.5	93.4	194.9	57.1	34.2	304.5	89.2	189.2	55.5	37.1	
4436 (0.21)	72	22.2	368.3	108.0	167.7	49.1	30.0	355.4	104.2	162.9	47.7	32.7	341.7	100.2	157.9	46.3	35.5	334.3	98.0	155.2	45.5	37.0	
10340	62	16.7	333.6	97.8	267.0	78.2	28.6	321.0	94.1	261.5	76.6	31.0	308.1	90.3	255.9	75.0	33.6	294.0	86.2	249.9	73.2	36.3	
4879 (0.22)	67	19.4	361.5	106.0	224.8	65.9	29.7	348.2	102.1	219.5	64.3	32.3	334.2	98.0	214.1	62.8	35.1	318.6	93.4	208.1	61.0	38.1	
8320	72	22.2	388.1	113.7	181.0	53.0	30.7	373.9	109.6	176.0	51.6	33.5	358.8	105.2	170.8	50.1	36.5	350.7	102.8	168.0	49.2	38.1	
3926 (0.18)	62	16.7	339.7	99.6	279.2	81.8	28.8	326.8	95.8	273.6	80.2	31.3	313.4	91.9	268.0	78.5	33.9	298.9	87.6	261.9	76.7	36.6	
9400	67	19.4	368.4	108.0	233.8	68.5	30.0	354.6	103.9	228.6	67.0	32.6	340.1	99.7	223.1	65.4	35.4	332.3	97.4	220.2	64.5	36.9	
4908 (0.22)	72	22.2	395.6	115.9	187.0	54.8	31.0	380.9	111.6	181.9	53.3	33.8	365.2	107.0	176.6	51.8	36.9	357.0	104.6	173.8	50.9	38.5	
8320	62	16.7	-	-	-	-	-	-	-	-	-	-	320.3	93.9	252.6	74.0	35.3	305.7	89.6	246.0	72.1	38.1	
3926 (0.18)	67	19.4	377.2	110.6	225.9	66.2	31.4	362.9	106.4	220.0	64.5	34.1	348.0	102.0	213.9	62.7	36.8	332.5	97.5	207.7	60.9	39.8	
10400	72	22.2	404.8	118.6	184.5	54.1	32.5	389.8	114.3	179.0	52.5	35.3	374.1	109.7	173.3	50.8	38.2	358.0	104.9	167.6	49.1	41.4	
5399 (0.22)	62	16.7	366.1	107.3	294.2	86.2	31.0	351.5	103.0	287.8	84.4	33.5	336.1	98.5	281.2	82.4	36.2	320.3	93.9	274.4	80.4	39.0	
9400	67	19.4	397.2	116.4	247.6	72.6	32.2	381.7	111.9	241.6	70.8	34.9	365.5	107.1	235.3	69.0	37.8	348.8	102.2	229.0	67.1	40.9	
8320	72	22.2	426.6	125.0	199.3	58.4	33.3	410.3	120.3	193.6	56.8	36.2	393.3	115.3	187.7	55.0	39.2	375.9	110.2	181.7	53.3	42.5	
3926 (0.18)	62	16.7	373.0	109.3	307.7	90.2	31.2	357.8	104.9	301.3	88.3	33.8	342.0	100.2	294.6	86.3	36.5	325.7	95.5	287.8	84.4	39.4	
5399 (0.22)	67	19.4	404.7	118.6	257.7	75.5	32.5	388.7	113.9	251.6	73.8	35.2	372.1	109.1	245.4	71.9	38.1	355.0	104.0	238.9	70.0	41.2	
9400	72	22.2	434.9	127.5	206.0	60.4	33.6	418.1	122.5	200.2	58.7	36.5	400.5	117.4	194.2	56.9	39.5	391.6	114.8	191.3	56.1	41.2	
8320	62	16.7	-	-	-	-	-	-	-	-	-	-	325.0	95.3	254.7	74.6	35.2	310.6	91.0	248.2	72.8	38.0	
3926 (0.18)	67	19.4	381.5	111.8	227.6	66.7	31.4	367.8	107.8	222.0	65.1	34.0	353.2	103.5	216.0	63.3	36.7	337.6	98.9	209.7	61.5	39.8	
10400	72	22.2	410.3	120.3	186.6	54.7	32.4	395.5	115.9	181.1	53.1	35.2	379.7	111.3	175.3	51.4	38.1	363.4	106.5	169.5	49.7	41.4	
5399 (0.22)	62	16.7	370.1	108.5	295.9	86.7	30.9	356.1	104.4	289.8	84.9	33.5	341.4	100.1	283.5	83.1	36.1	325.4	95.4	276.6	81.1	39.0	
9400	67	19.4	402.6	118.0	249.8	73.2	32.1	387.4	113.5	243.8	71.5	34.8	371.2	108.8	237.5	69.6	37.7	354.3	103.9	231.1	67.7	40.8	
8320	72	22.2	433.1	126.9	201.6	59.1	33.2	416.6	122.1	195.8	57.4	36.1	399.4	117.1	189.9								

SKM Packaged Air Conditioning Units

PAC-F Series - R22

GROSS CAPACITY RATINGS - 60 Hz

Model PACF (EER)	AFR	EWB		Condenser Entering Air Temperature °F (°C)																			
				95°F (35°C)				105°F (41°C)				115°F (46°C)				125°F (52°C)							
				Total Capacity		Sensible Capacity		PI		Total Capacity		Sensible Capacity		PI		Total Capacity		Sensible Capacity		PI			
				°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh
6041 (8.5)	10000	62	16.7	-	-	-	-	389.6	114.2	305.6	89.6	40.7	371.5	108.9	297.5	87.2	43.7	352.9	103.4	289.3	84.8	47.0	
	4719 (0.18)	67	19.4	441.0	129.3	266.3	78.1	39.5	422.8	123.9	258.9	75.9	42.6	404.1	118.4	251.3	73.7	45.8	384.4	112.7	243.5	71.4	49.5
		72	22.2	473.3	138.7	216.9	63.6	41.0	454.4	133.2	210.0	61.5	44.3	434.8	127.5	203.0	59.5	47.7	424.7	124.5	199.4	58.4	49.6
	12500	62	16.7	427.6	125.3	348.1	102.0	38.8	408.8	119.8	340.0	99.6	41.8	389.4	114.1	331.7	97.2	44.9	369.4	108.3	323.3	94.8	48.3
	5899 (0.21)	67	19.4	463.7	135.9	292.3	85.7	40.6	444.2	130.2	284.7	83.4	43.7	424.0	124.3	277.0	81.2	47.0	413.6	121.2	273.0	80.0	48.9
		72	22.2	498.1	146.0	234.4	68.7	42.1	477.8	140.0	227.4	66.6	45.5	456.5	133.8	220.1	64.5	49.0	445.7	130.6	216.4	63.4	50.9
	13750	62	16.7	435.3	127.6	364.2	106.8	39.2	416.0	121.9	356.1	104.4	42.2	396.1	116.1	347.7	101.9	45.3	375.5	110.1	339.3	99.4	48.8
	6489 (0.22)	67	19.4	472.3	138.4	304.3	89.2	41.0	452.3	132.6	296.8	87.0	44.1	431.5	126.5	289.0	84.7	47.5	420.7	123.3	284.9	83.5	49.3
	72	22.2	507.5	148.8	242.3	71.0	42.6	486.6	142.6	235.2	68.9	45.9	464.6	136.2	227.8	66.8	49.5	453.7	133.0	224.2	65.7	51.4	
6043 (9.4)	11680	62	16.7	-	-	-	-	454.3	133.2	356.6	104.5	44.3	424.0	124.3	277.0	81.2	47.0	413.6	121.2	273.0	80.0	48.9	
	5512 (0.18)	67	19.4	512.6	150.2	310.0	90.9	42.6	493.6	144.7	302.3	88.6	46.1	473.3	138.7	294.1	86.2	49.8	452.2	132.5	285.6	83.7	53.9
		72	22.2	551.0	161.5	252.6	74.0	44.1	530.3	155.4	245.1	71.8	47.8	508.6	149.1	237.3	69.6	51.7	497.6	145.8	233.5	68.4	53.9
	14600	62	16.7	496.2	145.4	405.1	118.7	42.0	477.1	139.8	396.9	116.3	45.3	456.7	133.9	388.1	113.8	48.8	435.2	127.5	379.1	111.1	52.7
	6890 (0.21)	67	19.4	539.5	158.1	340.5	99.8	43.6	518.5	152.0	332.3	97.4	47.2	496.2	145.4	323.8	94.9	51.1	484.8	142.1	319.5	93.7	53.1
		72	22.2	579.9	170.0	273.1	80.1	45.1	557.2	163.3	265.3	77.8	49.0	533.9	156.5	257.2	75.4	53.1	522.4	153.1	253.3	74.2	55.3
	16060	62	16.7	505.5	148.2	424.1	124.3	42.3	485.5	142.3	415.7	121.9	45.7	464.4	136.1	406.8	119.2	49.3	442.2	129.6	397.7	116.6	53.2
	7579 (0.22)	67	19.4	549.7	161.1	354.7	104.0	44.0	527.8	154.7	346.4	101.5	47.7	504.8	147.9	337.8	99.0	51.5	493.1	144.5	333.4	97.7	53.6
	72	22.2	590.8	173.2	282.3	82.7	45.5	567.4	166.3	274.3	80.4	49.5	543.5	159.3	266.4	78.1	53.6	531.9	155.9	262.5	76.9	55.8	
6044 (9.4)	11680	62	16.7	-	-	-	-	456.3	133.8	357.5	104.8	44.6	436.8	128.0	348.7	102.2	48.1	416.5	122.1	339.7	99.6	51.9	
	5512 (0.18)	67	19.4	515.4	151.1	311.2	91.2	42.9	495.5	145.2	303.0	88.8	46.5	474.7	139.1	294.6	86.4	50.3	453.1	132.8	286.0	83.8	54.4
		72	22.2	553.5	162.2	253.5	74.3	44.4	532.5	156.1	245.9	72.1	48.2	510.7	149.7	238.1	69.8	52.2	499.4	146.4	234.1	68.6	54.4
	14600	62	16.7	499.4	146.4	406.5	119.1	42.2	479.1	140.4	397.7	116.6	45.7	457.8	134.2	388.6	113.9	49.3	435.8	127.7	379.4	111.2	53.2
	6890 (0.21)	67	19.4	542.2	158.9	341.6	100.1	43.9	520.6	152.6	333.2	97.6	47.6	498.1	146.0	324.6	95.1	51.6	486.5	142.6	320.2	93.9	53.6
		72	22.2	582.8	170.8	274.1	80.3	45.5	559.9	164.1	266.2	78.0	49.4	536.3	157.2	258.1	75.6	53.6	524.4	153.7	254.0	74.4	55.8
	16060	62	16.7	508.5	149.1	425.4	124.7	42.6	487.5	142.9	416.6	122.1	46.1	465.6	136.5	407.4	119.4	49.8	443.0	129.8	398.0	116.7	53.7
	7579 (0.22)	67	19.4	552.4	161.9	355.7	104.3	44.3	530.1	155.4	347.3	101.8	48.1	506.9	148.6	338.6	99.2	52.0	495.0	145.1	334.1	97.9	54.1
	72	22.2	593.8	174.0	283.4	83.1	45.9	570.3	167.1	275.3	80.7	49.9	545.9	160.0	267.2	78.3	54.1	533.8	156.5	263.1	77.1	56.3	
6046 (9.1)	11680	62	16.7	-	-	-	-	459.1	134.6	358.7	105.1	47.0	440.3	129.1	350.3	102.7	50.7	420.7	123.3	341.6	100.1	54.7	
	5512 (0.18)	67	19.4	518.2	151.9	312.4	91.6	45.1	499.1	146.3	304.5	89.2	48.9	479.1	140.4	296.4	86.9	52.9	458.1	134.3	288.0	84.4	57.3
		72	22.2	557.1	163.3	254.9	74.7	46.6	536.9	157.4	247.5	72.5	50.7	515.9	151.2	239.9	70.3	54.9	505.0	148.0	236.1	69.2	57.2
	14600	62	16.7	502.0	147.1	407.7	119.5	44.5	482.5	141.4	399.2	117.0	48.1	462.0	135.4	390.4	114.4	52.0	440.7	129.2	381.4	111.8	56.0
	6890 (0.21)	67	19.4	545.8	160.0	342.9	100.5	46.2	525.0	153.9	334.8	98.1	50.1	503.3	147.5	326.5	95.7	54.3	492.0	144.2	322.3	94.5	56.5
		72	22.2	587.1	172.1	275.6	80.8	47.8	565.2	165.7	268.0	78.6	52.0	542.5	159.0	260.2	76.3	56.4	531.0	155.2	256.3	75.1	58.7
	16060	62	16.7	511.5	149.9	426.7	125.1	44.8	491.2	144.0	418.1	122.5	48.5	470.1	137.8	409.2	119.9	52.4	448.1	131.3	400.1	117.3	56.6
	7579 (0.22)	67	19.4	556.2	163.0	357.1	104.7	46.6	534.7	156.7	349.0	102.3	50.6	512.4	150.2	340.6	99.8	54.8	500.8	146.8	336.3	98.6	57.0
	72	22.2	598.4	175.4	284.9	83.5	48.2	575.9	168.8	277.2	81.2	52.4	552.6	162.0	269.4	79.0	56.9	541.0	158.6	265.5	77.8	59.2	
6052 (8.7)	13760	62	16.7	-	-	-	-	543.7	159.4	423.9	124.3	57.2	521.7	152.9	414.0	121.3	61.6	497.9	145.9	403.4	118.2	66.3	
	6493 (0.18)	67	19.4	613.0	179.7	369.0	108.2	55.3	590.5	173.1	359.7	105.4	59.8	567.0	166.2	350.2	102.6	64.6	554.5	162.5	345.2	101.2	67.1
		72	22.2	658.4	193.0	301.0	88.2	57.4	634.7	186.0	292.4	85.7	62.2	609.7	178.7	283.4	83.1	67.3	596.7	174.9	278.7	81.7	70.0
	17200	62	16.7	594.2	174.2	481.5	141.1	54.4	571.2	167.4	471.5	138.2	58.7	547.1	160.4	461.2	135.2	63.3	534.4	156.6	455.8	133.6	65.7
	8117 (0.21)	67	19.4	645.3	189.1	404.9	118.7	56.8	620.8	182.0	395.4	115.9	61.5	595.2	174.4	385.5	113.0	66.4	581.7	170.5	380.4	111.5	69.0
		72	22.2	693.5	203.3	325.4	95.4	59.1	667.7	195.7	316.4	92.7	64.0	640.4	187.7	307.0	90.0	69.3	626.9	183.8	302.4	88.6	71.9
	18920	62	16.7	605.2	177.4	503.8	147.7	54.9	581.4	170.4	493.7	144.7	59.3	556.6	163.1	483.3	141.7	63.9	543.5	159.3	477.8	140.1	66.3
	8928 (0.22)	67	19.4	657.4	192.7	421.6	123.6	57.4	632.3	185.3	412.1	120.8	62.1	605.8	177.6	402.1	117.9	67.1	592.0	173.5	396.9	116.3	69.7
	72	22.2	706.8	207.2	336.3	98.6	59.7	680.2	199.4	327.2	95.9	64.7	652.0	191.1	317.7	93.1	70.0	638.5	187.1	313.2	91.8	72.6	
6053 (8.9)	13760	62	16.7	-	-	-	-	540.6	158.4	422.5	123.8	56.2	516.4	151.4	411.7	120.7	60.4	491.5	144.1	400.6	117.4	65.0	
	6493 (0.18)	67	19.4	610.7	179.0	368.1	107.9	54.3	586.4	171.9	358.1	105.0	58.7	561.1	164.5	347.9	102.0	63.3	548.0	160.6	342.6	100.4	65.7
		72	22.2	655.2	192.0	299.9	87.9	56.4	629.8	184.6	290.6	85.2	61.0										

SKM Packaged Air Conditioning Units PAC-F Series - R22

FAN PERFORMANCE

Model PACF	Air Flow Rate		Internal Static Pressure		External Static Pressure in.wg (Pa)																			
					0.2 (50)		0.4 (100)		0.6 (149)		0.8 (199)		1.0 (249)		1.2 (299)		1.4 (349)		1.6 (399)		1.8 (448)		2.0 (498)	
	cfm	l/s	in.wg	Pa	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW
5011 6012	3600	1699	0.45	111.5	546	0.54	613	0.65	679	0.76	742	0.88	802	1.01	860	1.15	916	1.29	969	1.43	1019	1.58	1068	1.73
	4500	2124	0.69	173.0	650	0.99	705	1.11	759	1.24	812	1.38	863	1.52	914	1.68	963	1.83	1011	2.00	1057	2.16	1102	2.34
	4950	2336	0.83	206.8	702	1.28	752	1.41	802	1.55	850	1.70	898	1.85	945	2.01	991	2.18	1036	2.35	1080	2.52	1123	2.70
5014 6015	4660	2199	0.44	110.1	587	0.91	642	1.02	695	1.15	748	1.28	800	1.41	850	1.56	900	1.71	949	1.87	996	2.03	1042	2.20
	5800	2737	0.68	169.6	706	1.66	750	1.80	794	1.95	837	2.10	880	2.26	922	2.42	964	2.59	1005	2.76	1046	2.94	1086	3.13
	6410	3025	0.82	204.7	769	2.20	809	2.36	849	2.51	888	2.67	927	2.84	966	3.02	1004	3.19	1042	3.38	1080	3.57	1117	3.76
5020 6022	5840	2756	0.44	110.4	694	1.09	772	1.27	849	1.46	925	1.67	999	1.88	1070	2.10	1139	2.33	1205	2.57	1269	2.82	1331	3.07
	7300	3445	0.69	171.4	830	2.00	893	2.22	956	2.44	1018	2.68	1079	2.92	1140	3.17	1200	3.43	1258	3.70	1315	3.98	-	-
	8000	3775	0.82	203.5	895	2.58	953	2.81	1010	3.05	1067	3.30	1124	3.56	1180	3.82	-	-	-	-	-	-	-	-
5021 6023	5840	2756	0.44	110.4	694	1.09	772	1.27	849	1.46	925	1.67	999	1.88	1070	2.10	1139	2.33	1205	2.57	1269	2.82	1331	3.07
	7300	3445	0.69	171.4	830	2.00	893	2.22	956	2.44	1018	2.68	1079	2.92	1140	3.17	1200	3.43	1258	3.70	1315	3.98	-	-
	8000	3775	0.82	203.5	895	2.58	953	2.81	1010	3.05	1067	3.30	1124	3.56	1180	3.82	-	-	-	-	-	-	-	-
5024 6027	6880	3247	0.44	110.3	567	1.07	640	1.29	711	1.53	779	1.79	844	2.06	905	2.34	964	2.64	1020	2.94	1074	3.25	1125	3.57
	8600	4058	0.69	171.2	674	1.93	733	2.19	792	2.47	849	2.76	905	3.07	959	3.39	1012	3.73	1063	4.07	1113	4.42	1161	4.79
	9460	4464	0.82	204.8	727	2.50	782	2.78	835	3.08	888	3.39	940	3.71	991	4.05	1040	4.40	1088	4.76	1135	5.13	1181	5.52
5028 6031	7520	3549	0.44	110.7	577	1.26	646	1.48	712	1.73	777	2.00	839	2.27	899	2.57	957	2.87	1012	3.19	1065	3.51	1116	3.84
	9400	4436	0.69	171.9	689	2.29	745	2.56	799	2.85	853	3.15	906	3.47	957	3.80	1008	4.14	1057	4.49	1105	4.86	1152	5.23
	10340	4879	0.83	205.5	745	2.98	795	3.27	846	3.57	895	3.89	944	4.23	992	4.57	1040	4.94	1086	5.32	1131	5.70	1176	6.09
5029 6032	8320	3926	0.44	109.7	592	1.53	655	1.76	717	2.02	777	2.29	836	2.58	893	2.88	948	3.19	1002	3.52	1054	3.86	1104	4.20
	10400	4908	0.68	170.5	710	2.81	761	3.10	811	3.39	861	3.70	910	4.03	958	4.37	1005	4.71	1051	5.07	1097	5.45	1142	5.84
	11440	5399	0.82	203.9	769	3.67	816	3.97	862	4.29	907	4.62	952	4.97	997	5.32	1041	5.69	1084	6.08	1127	6.47	1169	6.87
5030 6034	8320	3926	0.44	109.7	592	1.53	655	1.76	717	2.02	777	2.29	836	2.58	893	2.88	948	3.19	1002	3.52	1054	3.86	1104	4.20
	10400	4908	0.68	170.5	710	2.81	761	3.10	811	3.39	861	3.70	910	4.03	958	4.37	1005	4.71	1051	5.07	1097	5.45	1142	5.84
	11440	5399	0.82	203.9	769	3.67	816	3.97	862	4.29	907	4.62	952	4.97	997	5.32	1041	5.69	1084	6.08	1127	6.47	1169	6.87
5033 6037	9360	4417	0.44	109.7	617	1.96	674	2.21	730	2.48	785	2.76	839	3.05	893	3.37	945	3.69	996	4.03	1045	4.38	1094	4.74
	11700	5521	0.68	170.5	745	3.65	791	3.95	836	4.26	880	4.58	925	4.92	969	5.27	1012	5.63	1056	6.01	1098	6.40	1140	6.80
	12870	6073	0.82	203.9	808	4.77	851	5.10	892	5.44	934	5.79	974	6.15	1015	6.52	1055	6.90	1095	7.30	1134	7.70	1173	8.12
5035 6041	10000	4719	0.44	110.1	635	2.28	689	2.54	742	2.81	794	3.10	846	3.40	896	3.72	946	4.05	995	4.39	1043	4.75	1090	5.12
	12500	5899	0.69	171.0	768	4.25	812	4.57	856	4.90	899	5.24	941	5.59	982	5.95	1024	6.32	1065	6.70	1105	7.10	1145	7.50
	13750	6489	0.82	204.5	834	5.57	875	5.91	914	6.27	953	6.63	992	7.00	1030	7.38	1068	7.78	1106	8.18	1143	8.59	1180	9.02
5039 6043	11680	5512	0.44	110.4	497	2.12	552	2.48	604	2.85	654	3.24	703	3.63	749	4.05	794	4.47	837	4.90	879	5.35	919	5.81
	14600	6890	0.69	171.4	595	3.89	640	4.33	683	4.77	726	5.23	767	5.70	808	6.18	847	6.68	885	7.18	922	7.69	959	8.22
	16060	7579	0.82	204.9	643	5.06	685	5.53	725	6.01	763	6.50	802	7.01	839	7.52	876	8.05	912	8.59	947	9.13	982	9.69
5040 6044	11680	5512	0.44	110.4	497	2.12	552	2.48	604	2.85	654	3.24	703	3.63	749	4.05	794	4.47	837	4.90	879	5.35	919	5.81
	14600	6890	0.69	171.4	595	3.89	640	4.33	683	4.77	726	5.23	767	5.70	808	6.18	847	6.68	885	7.18	922	7.69	959	8.22
	16060	7579	0.82	204.9	643	5.06	685	5.53	725	6.01	763	6.50	802	7.01	839	7.52	876	8.05	912	8.59	947	9.13	982	9.69
5042 6046	11680	5512	0.44	110.4	497	2.12	552	2.48	604	2.85	654	3.24	703	3.63	749	4.05	794	4.47	837	4.90	879	5.35	919	5.81
	14600	6890	0.69	171.4	595	3.89	640	4.33	683	4.77	726	5.23	767	5.70	808	6.18	847	6.68	885	7.18	922	7.69	959	8.22
	16060	7579	0.82	204.9	643	5.06	685	5.53	725	6.01	763	6.50	802	7.01	839	7.52	876	8.05	912	8.59	947	9.13	982	9.69
5047 6052	13760	6493	0.44	110.3	525	2.97	573	3.37	621	3.78	666	4.21	710	4.64	753	5.10	795	5.56	835	6.03	875	6.51	913	7.01
	17200	8117	0.69	171.2	633	5.51	672	6.00	712	6.51	750	7.02	787	7.54	823	8.07	859	8.61	894	9.16	929	9.73	963	10.30
	18920	8928	0.82	204.8	686	7.19	723	7.73	758	8.27	793	8.82	828	9.38	861	9.96	895	10.54	928	11.13	960	11.73	992	12.34
5048 6053	13760	6493	0.44	110.3	525	2.97	573	3.37	621	3.78	666	4.21	710	4.64	753	5.10	795	5.56	835	6.03	875	6.51	913	7.01
	17200	8117	0.69	171.2	633	5.51	672	6.00	712	6.51	750	7.02	787	7.54	823	8.07	859	8.61	894	9.16	929	9.73	963	10.30
	18920	8928	0.82	204.8	686	7.19	723	7.73	758	8.27	793	8.82	828	9.38	861	9.96	895	10.54	928	11.13	960	11.73	992	12.34
5049 6054	13760	6493	0.44	110.3	525	2.97	573	3.37	621	3.78	666	4.21	710	4.64	753	5.10	795	5.56	835	6.03	875	6.51	913	7.01
	17200	8117	0.69	171.2	633	5.51	672	6.00	712	6.51	750	7.02	787	7.54	823	8.07	859	8.61	894	9.16	929	9.73	963	10.30
	18920	8928	0.82	204.8	686	7.19	723	7.73	758	8.27	793	8.82	828	9.38	861	9.96	895	10.54	928	11.13	960	11.73	992	12.34

SKM Packaged Air Conditioning Units PAC-F Series - R22

Compressor Starting

The **PACF** Packaged Air Conditioner compressors are provided, as per Table 7, with the shown standard mode of compressor starting. All PACF Packaged air conditioners with standard DOL start compressors as shown, do not, generally require part winding start.

Maximum Instantaneous Current Flow (ICF) as shown in Electrical Specifications, Pages 20 & 21, must be used in determining the need for such part winding start. If part winding start is required, please specify option PWS at enquiry/order for the models shown in Table 7.

Model	Power Supply, V/Ph/Hz						
	380-415/3/50 440/3/50 460/3/60		380/3/60		220/3/60		
	PACF	Standard	Option	Standard	Option	Standard	Option
5011	6012	DOL	PWS	DOL	-	DOL	-
5014	6015				PWS		PWS
5020	6022				-		-
5021	6023				PWS		PWS
5024	6027				-		-
5028	6031				PWS		PWS
5029	6032				-		DOL
5030	6034				PWS		PWS
5033	6037				-		DOL
5035	6041				PWS		PWS
5039	6043				-		DOL
5040	6044				PWS		PWS
5042	6046				-		DOL
5047	6052				PWS		PWS
5048	6053				DOL		DOL
5049	6054				PWS		PWS

Table 7

Capacity Control Steps

The number of capacity control steps required is determined by application and load. For loads with a wide variation and desired operation over a longer operational season extending beyond summer months it is recommended that option SCK be considered.

Optional steps (specify option SCK) as shaded, require a factory certified wiring diagram. Please furnish the details of user supplied and installed thermostat in order for factory to provide the certified wiring diagram compatible with the thermostat. Failure to furnish the details required at the time of order will result in units being supplied as per the standard wiring schematic of SKM.

Option SCK matched with option HC@ requires a field selection and supply of correct thermostat and same is not available from SKM in its **PACF** series.

If electric heater option HC@, is also ordered, the thermostat option CHTS, is available for standard steps of cooling as per Table 8 and standard steps of Heating as per Table 1 on page 6 only.

PACF	Standard	Number of Steps	Optional	Number of Steps	
5011	6012	100-0	1	100-66-0	2
5014	6015	100-0	1	100-66-0	2
5020	6022	100-0	1	100-50-0	2
5021	6023	100-50-0	2	100-83-50-33-0	4
5024	6027	100-56-0	2	100-56-37-0	3
5028	6031	100-50-0	2	100-83-50-33-0	4
5029	6032	100-0	1	100-66-0	2
5030	6034	100-66-0	2	100-66-33-0	3
5033	6037	100-60-0	2	100-60-30-0	3
5035	6041	100-0	1	100-66-0	2
5039	6043	100-50-0	2	100-75-50-25-0	4
5040	6044	100-74-0	2	100-74-49-0	3
5042	6046	100-0	1	100-75-50-0	3
5047	6052	100-0	1	100-75-50-0	3
5048	6053	100-72-0	2	100-72-47-0	3
5049	6054	100-59-0	2	100-80-59-40-0	4

Table 8

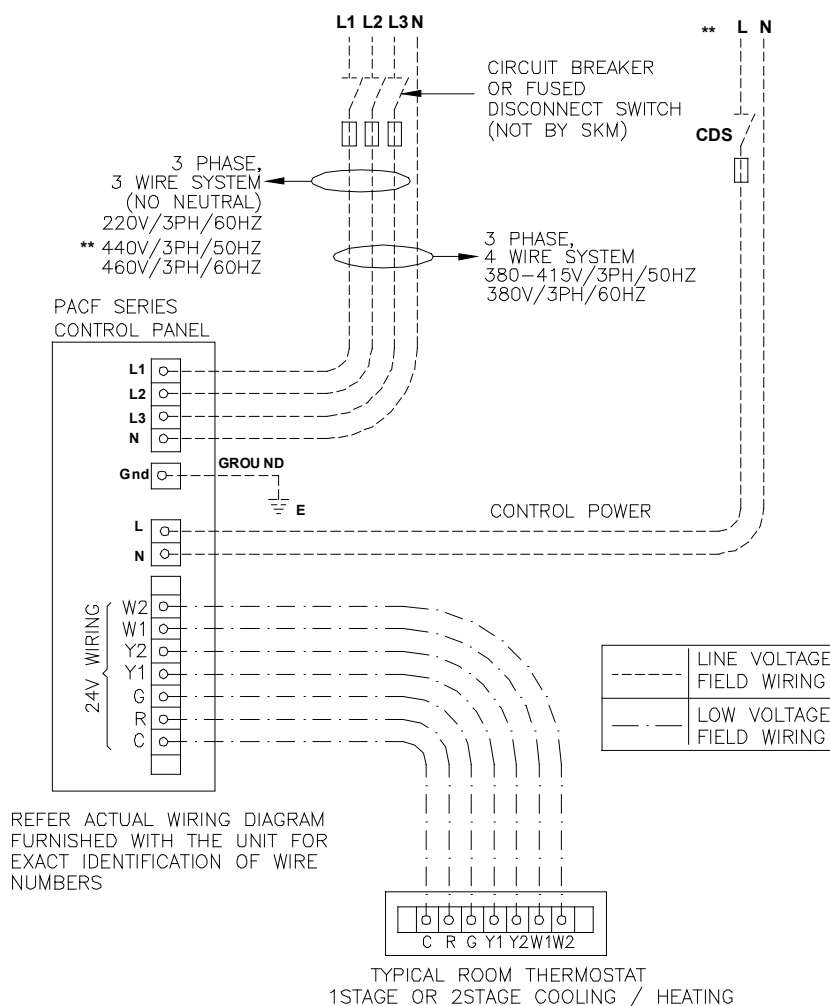
SKM Packaged Air Conditioning Units PAC-F Series - R22

Field Connections

PACF series self-contained heavy duty air cooled packaged units are designed for minimum field interaction. Power hook-ups and control wiring of thermostat as per Electrical hook-up diagram is all that is required to electrically connect any model of the **PACF** series. Every SKM **PACF** series package air conditioning unit requires, at most, field installed fused disconnect switches or circuit breakers, and a 24 volt temperature control thermostat. Refer to Field Wiring Schematic below for a schematic representation of required field electrical hook-ups for a standard **PACF** packaged air conditioning unit. All field wiring must be done in accordance with applicable local and national codes. For maximum recommended fuse sizes and minimum circuit amps for wire sizing, refer to Electrical Rating Data on pages 20 & 21 of this Bulletin.

Duct work should be connected with flexible connections to the **PACF** series. One or two drains, suitably trapped, are required to be connected to the drain outlet of all models of **PACF** series. The **PACF** series is then ready to provide cooling, on demand. See IOM Manual for full details on field connections and requirements.

Field Wiring Schematic



** PAC-F SERIES UNITS RATED FOR 440V/3PH/50HZ AND 460V/3PH/60HZ (3 WIRE SYSTEM) REQUIRE SEPARATE SOURCE OF CONTROL POWER SUPPLY THRU FIELD SUPPLIED AND INSTALLED 15A/220V FUSED CONTROL DISCONNECT SWITCH OR ORDER WITH FACTORY BUILT-IN OPTION 'CXT'.

SKM Packaged Air Conditioning Units PAC-F Series - R22

ELECTRICAL DATA

380 - 415V / 3 Ph / 50 Hz (Tolerance : 342V - 440V)

Model PACF	Unit Characteristic				Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	ICF		Quantity	MOC	RLA Each	LRA Each	Quantity	FLA Each	LRA Each	FLA Each	LRA Each
			DOL	PWS									
5011	63	35	145	115	1	21	21	121	1	4.2	18.7	5.2	25.6
5014	80	46	154	121	1	29	28	129	2	2.2	8.7	7.1	35.1
5020	125	65	244	194	1	42	40	199	2	4.2	18.7	7.1	35.1
5021	100	62	158	127	2	21	21	121	2	4.2	18.7	7.1	35.1
5024	125	77	186	154	1+1	29+21	28+21	129+121	3	4.2	18.7	9.2	49.4
5028	125	84	193	161	2	29	28	129	3	4.2	18.7	9.2	49.4
5029	160	100	372	296	1	64	61	304	3	4.2	18.7	12.0	72.0
5030	160	95	259	209	1+1	42+21	40+21	199+121	3	4.2	18.7	12.0	72.0
5033	160	102	266	216	1+1	42+29	40+28	199+129	3	4.2	18.7	12.0	72.0
5035	200	125	375	299	1	81	78	304	3	4.2	18.7	15.2	117.0
5039	160	118	290	240	2	42	40	199	4	3.4	14.4	15.2	117.0
5040	200	126	376	300	1+1	64+21	61+21	304+121	4	3.4	14.4	15.2	117.0
5042	250	132	531	462	1	88	83	458	4	3.4	14.4	15.2	117.0
5047	315	167	566	495	1	108	108	476	4	4.2	18.7	15.2	117.0
5048	250	157	393	317	1+1	81+29	78+28	304+129	4	4.2	18.7	15.2	117.0
5049	250	148	405	329	1+1	64+42	61+40	304+199	4	4.2	18.7	15.2	117.0

Table 9

440V / 3 Ph / 50 Hz (Tolerance : 400V - 462V)

Model PACF	Unit Characteristic				Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	ICF		Quantity	MOC	RLA Each	LRA Each	Quantity	FLA Each	LRA Each	FLA Each	LRA Each
			DOL	PWS									
5011	63	34	148	116	1	21	21	127	1	3.6	16.0	4.7	25.0
5014	80	45	149	124	1	29	28	135	2	1.9	7.9	6.5	33.5
5020	125	63	248	196	1	42	40	209	2	3.6	16.0	6.5	33.5
5021	100	60	162	130	2	21	21	127	2	3.6	16.0	6.5	33.5
5024	125	74	187	154	1+1	29+21	28+21	135+127	3	3.6	16.0	8.0	43.0
5028	125	81	194	161	2	29	28	135	3	3.6	16.0	8.0	43.0
5029	160	97	378	298	1	64	61	319	3	3.6	16.0	10.6	65.0
5030	160	92	264	212	1+1	42+21	40+21	209+127	3	3.6	16.0	10.6	65.0
5033	160	99	271	219	1+1	42+29	40+28	209+135	3	3.6	16.0	10.6	65.0
5035	200	122	381	301	1	81	78	319	3	3.6	16.0	13.9	104
5039	160	114	295	243	2	42	40	209	4	2.7	13.1	13.9	104
5040	200	121	386	306	1+1	64+21	61+21	319+127	4	2.7	13.1	13.9	104
5042	250	128	547	476	1	88	83	481	4	2.7	13.1	13.9	104
5047	315	163	578	503	1	108	108	500	4	3.6	16.0	13.9	104
5048	250	153	400	320	1+1	81+29	78+28	319+135	4	3.6	16.0	13.9	104
5049	250	144	412	332	1+1	64+42	61+40	319+209	4	3.6	16.0	13.9	104

Table 10

380V / 3 Ph / 60 Hz (Tolerance : 342V - 418V)

Model PACF	Unit Characteristic				Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	ICF		Quantity	MOC	RLA Each	LRA Each	Quantity	FLA Each	LRA Each	FLA Each	LRA Each
			DOL	PWS									
6012	80	41	190	-	1	26	25	158	1	5.4	27.5	4.9	22.8
6015	100	55	183	-	1	35	34	152	2	3.2	12.2	6.7	31.3
6022	125	77	290	233	1	50	48	228	2	5.4	27.5	6.7	31.3
6023	100	73	201	-	2	26	25	158	2	5.4	27.5	6.7	31.3
6027	125	92	223	-	1+1	35+26	34+25	152+158	3	5.4	27.5	8.4	44.0
6031	160	101	232	-	2	35	34	152	3	5.4	27.5	8.4	44.0
6032	200	119	426	343	1	76	73	332	3	5.4	27.5	11.7	65.0
6034	160	112	303	-	1+1	50+26	48+25	228+158	3	5.4	27.5	11.7	65.0
6037	200	121	312	-	1+1	50+35	48+34	228+152	3	5.4	27.5	11.7	65.0
6041	250	147	430	347	1	97	93	332	3	5.4	27.5	15.0	99.0
6043	200	138	331	274	2	50	48	228	4	3.8	16.0	15.0	99.0
6044	225	146	412	-	1+1	76+26	73+25	332+158	4	3.8	16.0	15.0	99.0
6046	315	162	-	508	1	106	106	505	4	3.8	16.0	15.0	99.0
6052	400	197	-	617	1	130	129	579	4	5.4	27.5	15.0	99.0
6053	315	186	447	-	1+1	97+35	93+34	332+152	4	5.4	27.5	15.0	99.0
6054	250	175	461	378	1+1	76+50	73+48	332+228	4	5.4	27.5	15.0	99.0

Table 11

SKM Packaged Air Conditioning Units PAC-F Series - R22

ELECTRICAL DATA

460V / 3 Ph / 60 Hz (Tolerance : 396V - 528V)

Model PACF	Unit Characteristic				Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	ICF		Quantity	MOC	RLA	LRA	Quantity	FLA	LRA	FLA	LRA
			DOL	PWS			Each	Each		Each	Each	Each	Each
6012	63	35	149	121	1	21	21	113	1	5.0	31.5	4.5	26.3
6015	80	47	158	127	1	29	28	123	2	2.9	14.4	6.2	36.5
6022	125	66	269	219	1	42	40	200	2	5.0	31.5	6.2	36.5
6023	100	63	150	122	2	21	21	113	2	5.0	31.5	6.2	36.5
6027	125	78	193	163	1+1	29+21	28+21	123+113	3	5.0	31.5	7.8	51.0
6031	125	85	200	170	2	29	28	123	3	5.0	31.5	7.8	51.0
6032	200	101	397	324	1	64	61	292	3	5.0	31.5	10.2	75.0
6034	160	96	273	223	1+1	42+21	40+21	200+113	3	5.0	31.5	10.2	75.0
6037	160	103	280	230	1+1	42+29	40+28	200+123	3	5.0	31.5	10.2	75.0
6041	250	126	400	327	1	81	78	292	3	5.0	31.5	13.5	114
6043	160	118	296	246	2	42	40	200	4	3.7	17.3	13.5	114
6044	200	125	369	296	1+1	64+21	61+21	292+113	4	3.7	17.3	13.5	114
6046	250	138	541	472	1	88	88	458	4	3.7	17.3	13.5	114
6052	315	168	618	546	1	108	108	478	4	5.0	31.5	13.5	114
6053	250	159	407	334	1+1	81+29	78+28	292+123	4	5.0	31.5	13.5	114
6054	250	149	419	346	1+1	64+42	61+40	292+200	4	5.0	31.5	13.5	114

Table 12

220V / 3 Ph / 60 Hz (Tolerance : 187V - 253V)

Model PACF	Unit Characteristic				Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	ICF		Quantity	MOC	RLA	LRA	Quantity	FLA	LRA	FLA	LRA
			DOL	PWS			Each	Each		Each	Each	Each	Each
6012	125	71	330	-	1	45	43	274	1	9.4	47.6	8.3	39.5
6015	160	96	317	-	1	61	59	263	2	5.5	21.2	11.5	54.2
6022	250	135	526	421	1	91	84	419	2	9.4	47.6	11.5	54.2
6023	200	127	347	-	2	45	43	274	2	9.4	47.6	11.5	54.2
6027	250	159	387	-	1+1	61+45	59+43	263+274	3	9.4	47.6	14.7	76.2
6031	250	175	403	-	2	61	59	263	3	9.4	47.6	14.7	76.2
6032	400	208	-	621	1	139	128	611	3	9.4	47.6	20.3	112.5
6034	315	196	549	-	1+1	91+45	84+43	419+274	3	9.4	47.6	20.3	112.5
6037	315	212	565	-	1+1	91+61	84+59	419+263	3	9.4	47.6	20.3	112.5
6041	500	257	-	627	1	177	163	611	3	9.4	47.6	26	171.5
6043	400	241	598	493	2	91	84	419	4	6.7	27.7	26	171.5
6044	400	255	749	-	1+1	139+45	128+43	611+274	4	6.7	27.7	26	171.5
6046	500	284	-	953	1	193	185	960	4	6.7	27.7	26	171.5
6052	630	346	-	1068	1	237	226	1002	4	9.4	47.6	26	171.5
6053	500	326	810	-	1+1	177+61	163+59	611+263	4	9.4	47.6	26	171.5
6054	500	307	835	682	1+1	139+91	128+84	611+419	4	9.4	47.6	26	171.5

Table 13

Voltage imbalance between phases to be < 2%

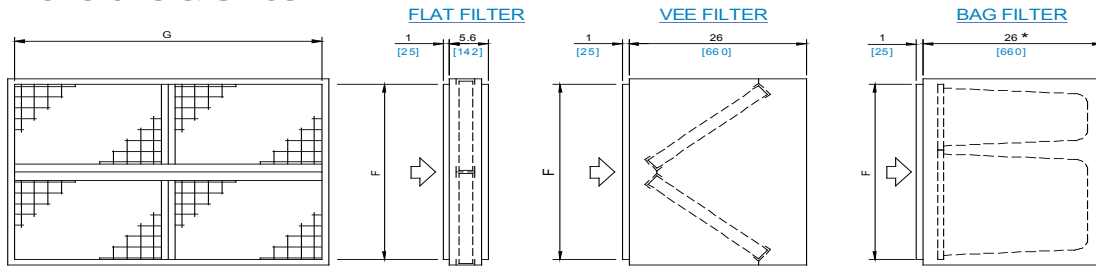
LEGEND :

- MFA Maximum Fuse Amperes
- MCA Minimum Circuit Amperes (for wire sizing). Complies with NEC Article 430.24
- RLA Rated Load Amperes at 80/67°F (26.6/19.4°C) DB/WB return air temperature and 115°F (46°C) ambient temperature.
- MOC Maximum Operating Current
- ICF Instantaneous Current Flow
- DOL For Direct On Line Starting of Compressor
- PWS For Part Winding Start of Compressor
- LRA Locked Rotor Amperes (DOL)
- FLA Full Load Amperes



SKM Packaged Air Conditioning Units PAC-F Series - R22

Filter Dimensions & Sizes



MODEL PACF-	F	G	FLAT FILTER		VEE FILTER		BAG FILTER						
			SIZE H x L	QTY.	SIZE H x L	QTY.	SIZE H x L	QTY.	SIZE H x L	QTY.	SIZE H x L	QTY.	
5011	30	43	16x20 (406x508)	2	25x20 (635x508)	2	12x20 (305x508)	1	12x24 (305x610)	1			
6012	(762)	(1092)	16x25 (406x635)	2	25x25 (635x635)	2	20x20 (508x508)	1	20x24 (508x610)	1			
5014	30	56	16x20 (406x508)	4	25x20 (635x508)	4	12x24 (305x610)	1	20x24 (508x610)	1			
6015	(762)	(1422)	16x16 (406x406)	2	25x16 (635x406)	2	12x20 (305x508)	1	20x20 (508x508)	1			
							12x12 (305x305)	1	20x12 (508x305)	1			
5020	30	70	16x25 (406x535)	4	25x25 (635x635)	4	12x24 (305x610)	3					
6022	(762)	(1778)	16x20 (406x508)	2	25x20 (635x508)	2	20x24 (508x610)	3					
5021	30	70	16x25 (406x535)	4	25x25 (635x635)	4	12x24 (305x610)	3					
6023	(762)	(1778)	16x20 (406x508)	2	25x20 (635x508)	2	20x24 (508x610)	3					
5024	33	75	16x25 (406x535)	6	25x25 (635x635)	6	12x24 (305x610)	1	20x24 (508x610)	1			
6027	(838)	(1905)					12x20 (305x508)	2	20x20 (508x508)	2			
							12x12 (305x305)	1	20x12 (508x305)	1			
5028	36	75	20x25 (508x635)	3	25x25 (635x635)	6	12x24 (305x610)	1	24x24 (610x610)	1			
6031	(914)	(1905)	16x25 (406x535)	3			12x20 (305x508)	2	24x20 (610x508)	2			
							12x12 (305x305)	1	24x12 (610x305)	1			
5029	40	75	20x25 (508x635)	6	20x25 (508x635)	9	20x24 (508x610)	2					
6032	(1016)	(1905)					20x20 (508x508)	4					
							20x12 (508x305)	2					
5030	40	75	20x25 (508x635)	6	20x25 (508x635)	9	20x20 (508x508)	4					
6034	(1016)	(1905)					20x12 (508x305)	2					
5033	45	75	25x25 (635x635)	3	20x25 (508x635)	9	20x24 (508x610)	1	24x24 (610x610)	1			
6037	(1143)	(1905)	20x25 (508x635)	3			20x20 (508x508)	2	24x20 (610x508)	2			
							20x12 (508x305)	1	24x12 (610x305)	1			
5035	48	75	25x25 (635x635)	6	25x25 (635x635)	9	24x24 (610x610)	2					
6041	(1219)	(1905)					24x20 (610x508)	4					
							24x12 (610x305)	2					
5039	56	75	20x25 (508x635)	3	25x25 (635x635)	9	12x24 (305x610)	1	20x24 (508x610)	1	24x24 (610x610)	1	
6043	(1422)	(1905)	16x25 (406x535)	3			12x20 (305x508)	2	24x20 (610x508)	2	24x20 (610x508)	2	
							12x12 (305x305)	1	20x12 (508x305)	1	24x12 (610x305)	1	
5040	56	75	20x25 (508x635)	6	25x25 (635x635)	9	12x24 (305x610)	1	20x24 (508x610)	1	24x24 (610x610)	1	
6044	(1422)	(1905)	16x25 (406x535)	3			12x20 (305x508)	2	20x20 (508x508)	2	24x20 (610x508)	2	
							12x12 (305x305)	1	20x12 (508x305)	1	24x12 (610x305)	1	
5042	56	75	20x25 (508x635)	6	25x25 (635x635)	9	12x24 (305x610)	1	20x24 (508x610)	1	24x24 (610x610)	1	
6046	(1422)	(1905)	16x25 (406x535)	3			12x20 (305x508)	2	20x20 (508x508)	2	24x20 (610x508)	2	
							12x12 (305x305)	1	20x12 (508x305)	1	24x12 (610x305)	1	
5047	66	75	25x25 (635x635)	6	25x25 (635x635)	12	20x24 (508x610)	1	24x24 (610x610)	2			
6052	(1676)	(1905)	16x25 (406x535)	3			20x20 (508x508)	2	24x20 (610x508)	2			
							20x12 (508x305)	1	24x12 (610x305)	1			
5048	66	75	25x25 (635x635)	6	25x25 (635x635)	12	20x24 (508x610)	1	24x24 (610x610)	2			
6053	(1676)	(1905)	16x25 (406x535)	3			20x20 (508x508)	2	24x20 (610x508)	2			
							20x12 (508x305)	1	24x12 (610x305)	1			
5049	66	75	25x25 (635x635)	6	25x25 (635x635)	12	20x24 (508x610)	1	24x24 (610x610)	2			
6054	(1676)	(1905)	16x25 (406x535)	3			20x20 (508x508)	2	24x20 (610x508)	2			
							20x12 (508x305)	1	24x12 (610x305)	1			

ALL DIMENSIONS ARE IN INCHES (MM)

Table 14

* BAG FILTER IS APPLICABLE FOR 22" DEPTH

COMPONENT AIR PRESSURE DROP

Components		Coil Face Velocity							
		fpm	300	350	400	450	500	550	600
Flat Filters	1" cleanable aluminum filter	in.wg	0.020	0.030	0.050	0.060	0.070	0.090	0.120
		Pa	5	8	13	15	18	23	31
	2" cleanable aluminum filter	in.wg	0.050	0.070	0.100	0.120	0.180	0.220	0.260
		Pa	13	18	25	31	46	56	66
	1" activated carbon filter (disposable)	in.wg	0.130	0.160	0.200	0.260	N.R.	N.R.	N.R.
		Pa	33	40	51	66	N.R.	N.R.	N.R.
Vee Filters	2" activated carbon filter (disposable)	in.wg	0.100	0.120	0.160	0.200	0.250	N.R.	N.R.
		Pa	25	31	41	51	64	N.R.	N.R.
	1" cleanable aluminum filter	in.wg	0.010	0.015	0.025	0.030	0.035	0.045	0.060
		Pa	3	4	6	8	19	11	15
	2" cleanable aluminum filter	in.wg	0.025	0.035	0.050	0.060	0.090	0.110	0.130
		Pa	6	9	13	15	23	28	33
Vee Filters	1" activated carbon filter (disposable)	in.wg	0.065	0.080	0.100	0.130	0.160	0.210	0.260
		Pa	17	20	25	33	41	53	66
	2" activated carbon filter (disposable)	in.wg	0.050	0.060	0.080	0.100	0.125	0.160	0.210
		Pa	13	15	20	25	32	41	53

* Initial pressure drop based on 95% bag filter dust spot efficiency
N.R. = Not Recommended
3 rows/10fpi coil is standard for models PACF - 5011, 5014, 6012 & 6015.
All other models are with 4 rows/10fpi.

Bag Filters	22" depth	in.wg	0.220	0.300	0.380	0.490	0.600	0.730	0.860
		Pa	56	76	97	124	152	185	218
	30" depth	in.wg	0.200	0.270	0.350	0.450	0.550	0.670	0.790
		Pa	51	69	89	114	140	170	201
	36" depth	in.wg	0.180	0.250	0.320	0.410	0.500	0.610	0.720
		Pa	46	64	81	104	127	155	183
Electric Heater	in.wg	0.010	0.020	0.024	0.028	0.035	0.040	0.045	
	Pa	3	5	6	7	9	10	11	
Casing	in.wg	0.150	0.150	0.150	0.150	0.150	0.150	0.150	
	Pa	38	38	38	38	38	38	38	
Evaporator Coil 3R - 10 fpi	BPF		0.24	0.26	0.28	0.3	0.32	0.33	0.35
	PD Dry	in.wg	0.070	0.100	0.120	0.150	0.180	0.210	0.250
		Pa	18	25	31	38	46	53	64
	PD Wet	in.wg	0.090	0.130	0.160	0.200	0.230	0.270	0.330
Pa		23	33	41	51	58	69	84	
Evaporator Coil 4R - 10 fpi	BPF		0.15	0.17	0.19	0.2	0.22	0.23	0.24
	PD Dry	in.wg	0.100	0.130	0.160	0.200	0.240	0.280	0.330
		Pa	25	33	41	51	61	71	84
	PD Wet	in.wg	0.130	0.170	0.210	0.260	0.310	0.360	0.430
Pa		33	43	53	66	79	91	109	
Moisture Eliminator	in.wg	0.030	0.040	0.060	0.080	0.100	0.110	0.120	
	Pa	8	10	15	20	25	28	30	

Table 15

SKM Packaged Air Conditioning Units PAC-F Series - R22

Dimensional Data

CERTIFIED DRAWINGS ARE
AVAILABLE ON REQUEST

MODEL PACF-	LOAD AT EACH POINT Lbs.(Kg)				TOTAL WEIGHT
	A1	A2	A3	A4	
5011	254	250	373	462	1339
6012	(115)	(114)	(170)	(210)	(609)

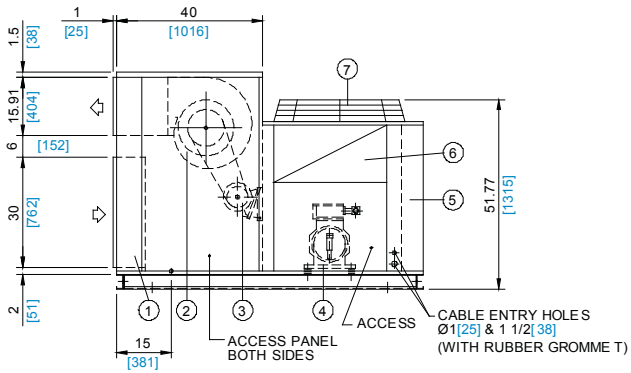
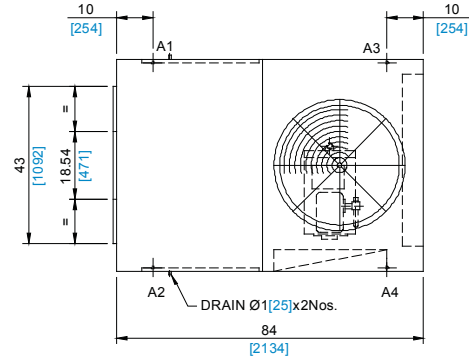
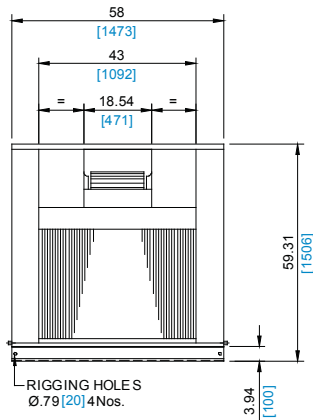
Table 16

LEGEND

- ① EVAPORATOR COIL ⑤ CONDENSER COIL
- ② EVAPORATOR FAN ⑥ CONTROL PANEL
- ③ FAN MOTOR ⑦ CONDENSER FAN
- ④ COMPRESSOR

A1- A4 ARE LOADING POINTS Ø.79 (20)

ALL DIMENSIONS ARE IN INCHES (MM)



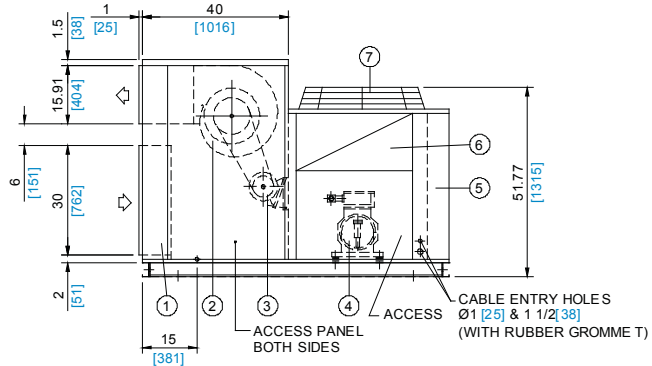
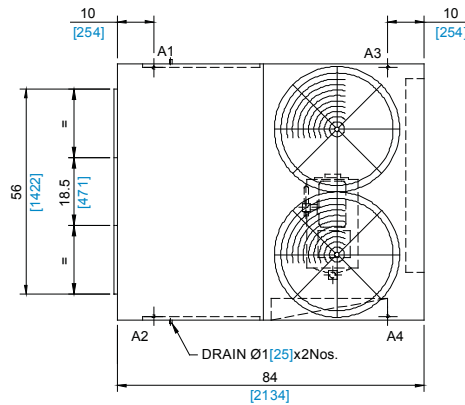
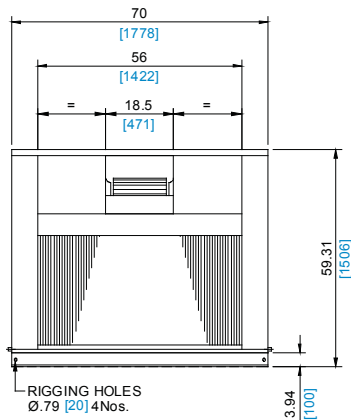
CERTIFIED DRAWINGS ARE
AVAILABLE ON REQUEST

MODEL PACF-	LOAD AT EACH POINT Lbs.(Kg)				TOTAL WEIGHT
	A1	A2	A3	A4	
5014	286	282	437	531	1536
6015	(130)	(128)	(199)	(241)	(698)

Table 17

A1- A4 ARE LOADING POINTS Ø.79 (20)

ALL DIMENSIONS ARE IN INCHES (MM)



SKM Packaged Air Conditioning Units PAC-F Series - R22

Dimensional Data

MODEL PACF-	LOAD AT EACH POINT Lbs.(Kg)				TOTAL WEIGHT
	A1	A2	A3	A4	
* 5020 6022	460 (209)	435 (198)	619 (281)	614 (279)	2128 (967)
5021 6023	487 (221)	462 (210)	726 (330)	721 (328)	2396 (1089)

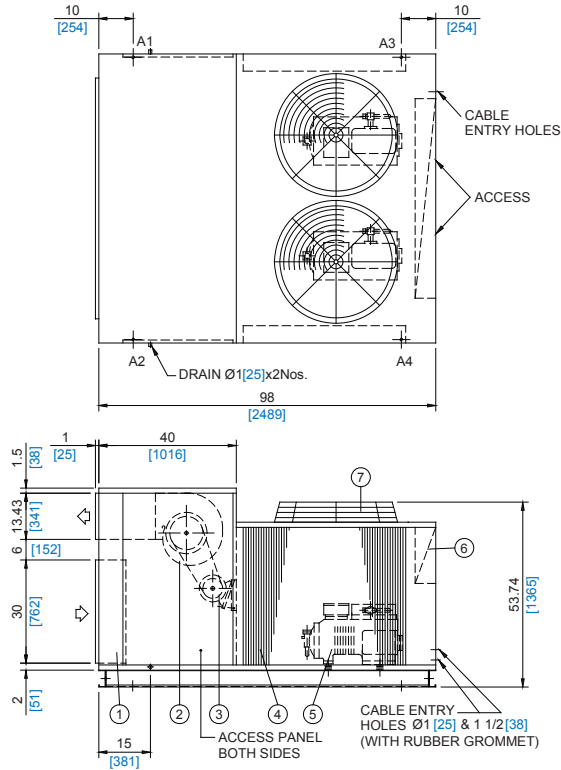
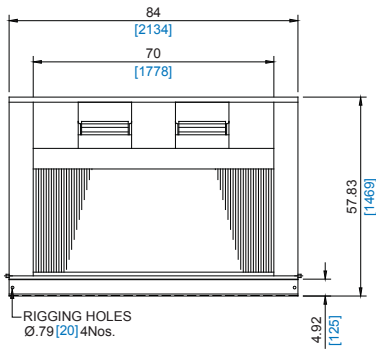
Table 18

* MODEL WITH 1-COMPRESSOR

LEGEND

- ① EVAPORATOR COIL ⑤ CONDENSER COIL
- ② EVAPORATOR FAN ⑥ CONTROL PANEL
- ③ FAN MOTOR ⑦ CONDENSER FAN
- ④ COMPRESSOR

A1- A4 ARE LOADING POINTS Ø.79 [20]
ALL DIMENSIONS ARE IN INCHES (MM)



MODEL PACF-	DIMENSIONS INCHES(MM)				LOAD AT EACH POINT Lbs.(Kg)				TOTAL WEIGHT
	L	F	H1	H	A1	A2	A3	A4	
5024 6027	120 (3048)	33 (838)	53.74 (1365)	63.31 (1608)	591 (269)	563 (256)	777 (353)	788 (358)	2719 (1238)
5028 6031	116 (2946)	36 (914)	61.73 (1568)	66.31 (1684)	605 (275)	575 (261)	808 (367)	805 (366)	2793 (1269)
* 5029 6032	116 (2946)	40 (1016)	61.73 (1568)	70.31 (1786)	633 (288)	588 (267)	767 (349)	762 (346)	2750 (1250)
5030 6034	116 (2946)	40 (1016)	61.73 (1568)	70.31 (1786)	656 (298)	617 (280)	845 (384)	890 (405)	3008 (1367)
5033 6037	120 (3048)	45 (1143)	73.74 (1873)	75.31 (1913)	678 (308)	637 (290)	879 (400)	911 (414)	3105 (1412)
* 5035 6041	120 (3048)	48 (1219)	73.74 (1873)	78.31 (1989)	676 (307)	624 (284)	810 (368)	804 (365)	2914 (1324)

* MODEL WITH 1-COMPRESSOR

LEGEND

- ① EVAPORATOR COIL ⑤ CONDENSER COIL
- ② EVAPORATOR FAN ⑥ CONTROL PANEL
- ③ FAN MOTOR ⑦ CONDENSER FAN
- ④ COMPRESSOR

A1- A4 ARE LOADING POINTS Ø.79 [20]
ALL DIMENSIONS ARE IN INCHES (MM)

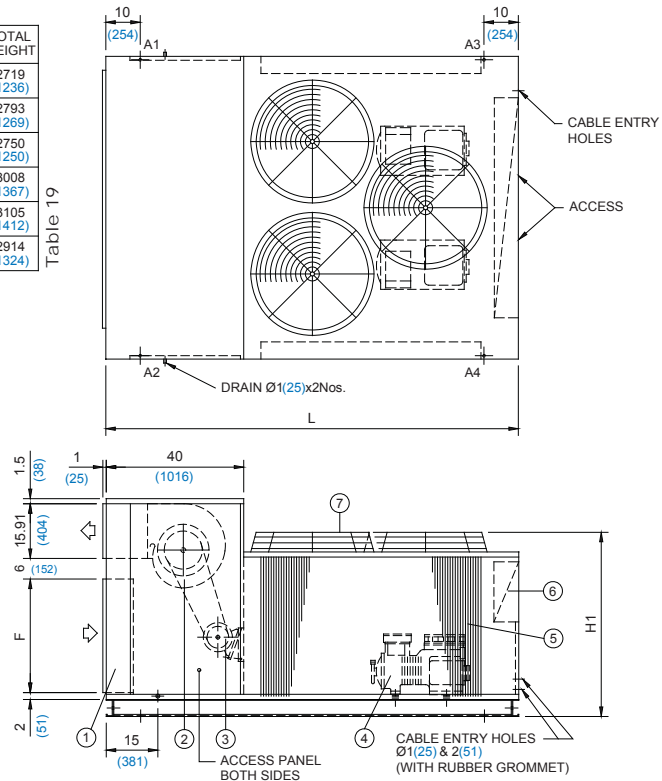
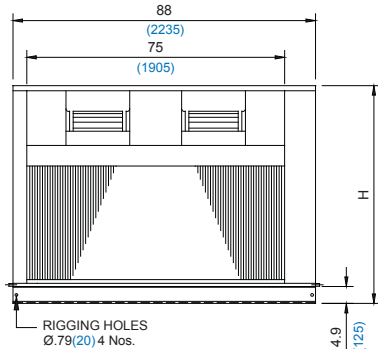


Table 19

SKM Packaged Air Conditioning Units PAC-F Series - R22

Dimensional Data

CERTIFIED DRAWINGS ARE
AVAILABLE ON REQUEST

MODEL PACF-	F	H1	H	A1	A2	A3	A4	TOTAL WEIGHT
5039	56	77.75	89.22	789	738	1057	1052	3636
6043	(1422)	(1975)	(2266)	(359)	(335)	(480)	(478)	(1652)
5040	56	77.75	89.22	785	744	1009	1109	3647
6044	(1422)	(1975)	(2266)	(357)	(338)	(459)	(504)	(1658)
* 5042	56	77.75	89.22	774	722	996	990	3482
6046	(1422)	(1975)	(2266)	(352)	(328)	(453)	(450)	(1583)
* 5047	66	85.75	99.22	820	768	1063	1058	3709
6052	(1676)	(2178)	(2520)	(373)	(349)	(483)	(481)	(1686)
5048	66	85.75	99.22	834	790	1100	1169	3893
6053	(1676)	(2178)	(2520)	(379)	(359)	(500)	(531)	(1759)
5049	66	85.75	99.22	839	791	1131	1163	3924
6054	(1676)	(2178)	(2520)	(381)	(360)	(514)	(529)	(1784)

* MODEL WITH 1-COMPRESSOR

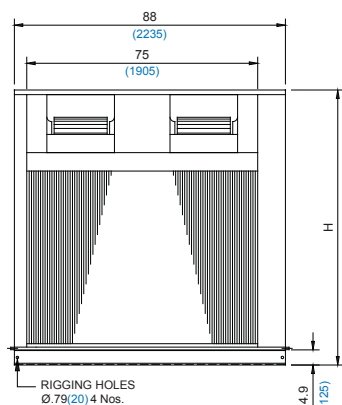
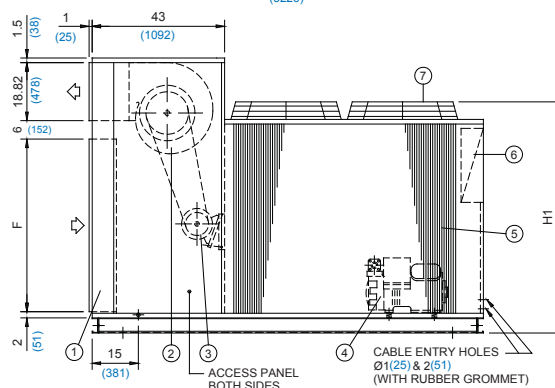
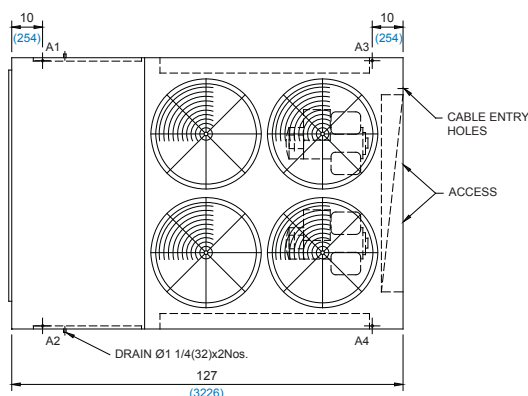


Table 20



Location and Space Requirements

PACF series Packaged Air-Conditioners should be located on a flat base either on the ground or on a roof top strong enough to hold the operating weight of the selected PAC-F model. The unit should be located with free and unhindered provision for supply of ambient air to the condenser coil and removal of heated air from it. The unit should not be located in the vicinity of steam, hot air or fume exhausts.

Site units away from noise sensitive places or consider suitable anti-vibration mounts with other treatment to minimize noise and vibration transmission. Do not duct or obstruct condenser fan discharge in any way.

Consider option CGP/CGG if located on ground level where protection against vandalism is desired.

For parallel location of multiple units a minimum clearance between the units must be 50% more than the recommended clearance for single unit installation.

Do not duct fan exhaust and do not place any obstruction on any fan outlet

PACF		A	B	C
5011	6012			
5014	6015		30	
5020	6022		(762)	
5021	6023	48		72
5024	6027	(1219)		(1829)
5028	6031			
5029	6032			
5030	6034			
5033	6037	60		90
5035	6041	(1524)		(2286)
5039	6043		36	
5040	6044	64	(914)	96
5042	6046	(1626)		(2438)
5047	6052			
5048	6053	72		108
5049	6054	(1829)		(2743)

Table 21

SKM Packaged Air Conditioning Units PAC-F Series - R22

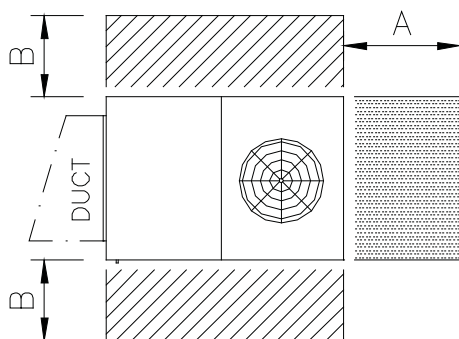
Single Unit Installation



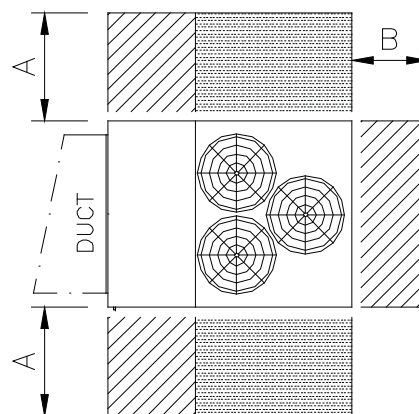
SPACING FOR SERVICE



SPACING FOR AIR FLOW

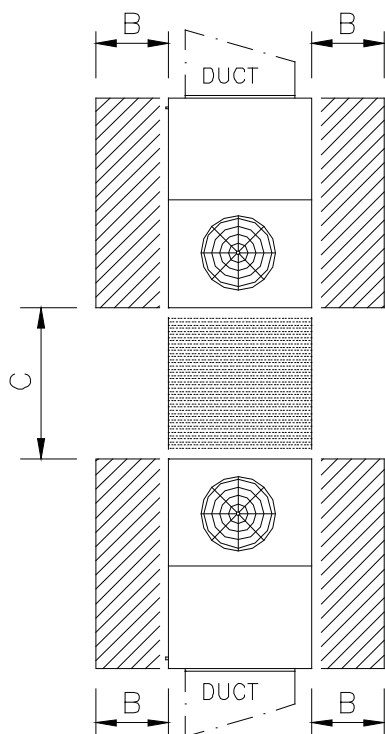


PACF-5011,5014
PACF-6012,6015

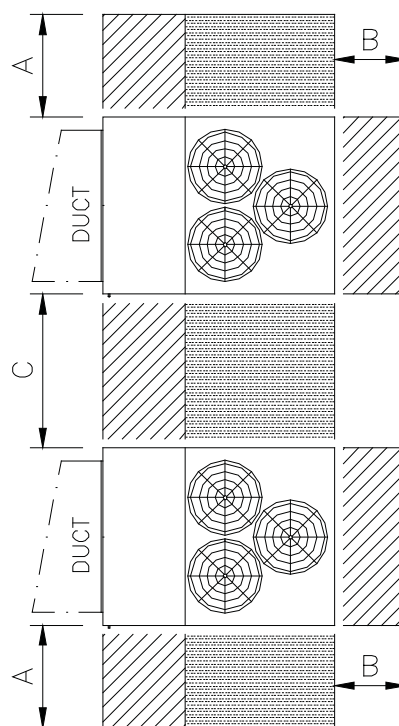


PACF-5020 TO 5049
PACF-6022 TO 6054

Multiple Units Installation



PACF-5011,5014
PACF-6012,6015



PACF-5020 TO 5049
PACF-6022 TO 6054



SPACING FOR SERVICE



SPACING FOR AIR FLOW

SKM Packaged Air Conditioning Units PAC-F Series - R22

GUIDE SPECIFICATIONS

GENERAL FEATURES

Packaged air conditioners shall be composed of compressor(s), condenser coil(s), evaporator coil, expansion valve(s), connecting piping, all necessary liquid line accessories and safety controls.

Unit shall be factory assembled, internally wired, fully refrigerant charged with R-22 and thoroughly tested before delivery.

Units should be capable to operate from 50°F (10°C) to 125°F (52°C) ambient temperature, and shall be selected in accordance with project requirements and installed as per Installation, Operation & Maintenance Manual.

CONDENSER COIL(S)

Coil shall be air cooled with integral sub-cooling circuit, constructed of seamless copper tubes 3/8" OD mechanically bonded to wavy Aluminium (Copper) fins with maximum 12 FPI (2.1mm) spacing. Coil shall be tested against leakage by pressurizing air at 450 psig (3100 kPa) in coil, under water, cleaned and dehydrated at the factory. Coil shall conform to ARI-410.

COMPRESSOR(S)

Compressor shall be of high energy efficiency ratio, fully accessible, semi hermetic reciprocating type with disc valves, equipped with crankcase heater, oil pump, refrigerant gas cooled electric motor, preset internal relief valve, inherent thermistor motor protection, suction and discharge service valves, oil sight glass and shall be mounted on spring anti vibration mounts to minimize vibration transmissions. Compressors shall conform to DIN standards.

CONDENSER FAN(S) & MOTOR(S)

The machine shall be furnished with direct driven propeller type discharging air upward condenser fans. Fans shall be constructed of corrosion resistant blades such as heavy gauge aluminum. The fan and drive shall be held in proper alignment. Fan assemblies shall be provided with heavy gauge, rust resistant steel wire fan guard. All condenser fans shall be individually, statically, and dynamically balanced for vibration free operation.

Condenser fan motor shall be Totally Enclosed Air Over (TEAO), 3-phase type, 6 poles with Class F insulation, Class B temperature rise and IP55 protection. Also, Motor shall be with permanently lubricated bearings and inherent corrosion resistance shaft.

EVAPORATOR

Evaporator coil shall be constructed of seamless copper tubes mechanically bonded to aluminum (copper) cross-wave fins with maximum 10 fpi (2.54mm) spacing. Coil consists of headers of seamless copper tubing, thermostatic expansion valve(s) multi-circuited distributor(s). These coils shall be tested against leakage by air pressure of 250 psig (720 kPa) under water, cleaned & dehydrated at the factory. Coil shall conform to ARI-410.

EVAPORATOR FAN & DRIVE

Evaporator fan shall be forward curved, double inlet double width (DIDW) centrifugal type, statically and dynamically balanced, mounted on single heavy duty shaft with permanently lubricated bearings and belt driven by "V" belts with an adjustable variable pitch motor pulley. Motor shall be totally enclosed fan cooled (TEFC) 4 poles, class F insulated, minimum IP55 protected and factory wired to unit control panel.

REFRIGERANT PIPING

The refrigerant circuit piping shall be fabricated from ACR grade copper piping, with 1 or 2 refrigeration circuits, each liquid line shall include shut off valve, filter drier, sight glass, solenoid valve and thermostatic expansion valve.

Discharge line shall include Hot Gas Muffler close to compressor. Suction line shall be insulated with 1/2" (12 mm) wall thickness enclosed cell pipe insulation with maximum K factor 0.28 Btu.in/ft².h.°F. (0.040 W/m²°K).

CASING

Unit casing shall be made of zinc coated galvanized steel sheets conforming to JIS-G3302 and ASTM A653 which shall be phosphatized and then electrostatically dry powder coated to approximately 60 microns to provide an extremely tough, scratch resistance, excellent anti-corrosive protection that can pass 1000 Hrs in 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117.

Evaporator section shall be sealed with vinyl gaskets and completely insulated faced with black glass tissue (BGT) heavy density, fire retardant, permanent odorless fibre glass insulation of minimum 1" (25 mm) thickness and 32 Kg/m³ density having maximum K factor 0.23 Btu.in /ft².h.°F (0.033 W/m²°K).

Unit casing shall be provided with access panels for easy service and maintenance of all units parts.

FILTERS

Units shall be supplied with a range of filter sections with at least one or two 1" or 2" thick, with 54% or 72% dust arrestance, respectively in accordance with ASHRAE 52.1, if so specified.

A bag filter section to house 22", 30", or 36" deep bag filters having efficiency as desired shall be provided, if so specified.

For 100% Fresh Air Application, a sand trap louver shall be provided, if so specified.

CONTROL PANEL

The panel shall be factory wired in accordance with NEC 430 & 440, and conforms to IP54 requirements. Control Panel shall contain individual electrical components' contactors, overload relays, transformer, anti-recycling time delay relay, control circuit disconnect switch, power & control circuit terminal blocks, High / low pressure & oil failure switch. (Please refer to page 4 for detailed information of Control Panel).