

# APCD Series Air Cooled Packaged Chillers

Range 4 TR to 386 TR  
( 14 kW to 1358 kW )



Bulletin # 003/2010

Supersedes Bulletin # 003/2009



R-22



# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### General Features

#### High Energy Efficiency Ratio (EER)

**APCD** chillers use high efficiency semi-hermetic compressors having the unique Discus® valve design. The EER of **APCD** is substantially higher compared to units using equivalent conventional compressors. EER ratings for **APCD** chillers at ARI conditions are listed in Capacity Ratings.

#### Parallel Compressor Operation

APCD chillers are equipped with single compressor models, multi compressors with independent refrigeration circuits and multiple compressors with parallel operation.

APCD chillers equipped with multiple compressors connected in parallel in order to achieve greater operating flexibility. By cycling individual compressors the system capacity can be modulated with full power savings for the compressors in operation.

By using the system of parallel compressors operation, uncomplicated unload start is achieved by a simple time delay starting of single compressors as opposed to a compressor start with the total capacity.

#### Wide Operating Range

**APCD** chillers are designed, as standard, to operate at a wide range of ambient temperatures from 50°F (10°C), or lower if optional low ambient operation kit is included, to 125°F (52°C) or higher to 131°F (55°C) if optional high ambient operation kit is included.

### Main Component Features

#### Compressors

Compressors used in **APCH** models are hermetically sealed, high efficiency, low noise, reciprocating while compressors used in **APCD** series are fully accessible, semi-hermetic, reciprocating type. Semi hermetic compressors are equipped with an oil sight glass, suction and discharge service valves and crankcase heater.

Semihermetic 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 mounting under the compressors skid and therefore, external to **APCD** chillers, AVM's may be necessary only for critical applications.

Figure 1: Compressor



The compressor motors have inherent thermal protection. This is in addition to other standard safety and protection controls. Compressors conform to DIN standards.

#### 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, (2.1 mm fin spacing), 3/8" (9.5mm) O.D. tubes. An integral subcooling circuit is provided to increase the chiller cooling capacity, without additional operating costs.

Figure 2: Condenser Coil



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

- Copper fins
- Copper fins only electro-tinned
- Copper finned coil electro-tinned after manufacturing
- Precoated Aluminum fins

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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 coat 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.

### 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 IP55 protection. The TEAO and class 'F' insulation features ensure long life and are unique to SKM. The motors are factory wired to chiller unit control panel where the motor starters are located to control the operation of these motors.

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



Figure 3: Fan

### Evaporator

All models of APCH and APCD-5009A/6011A evaporators are Braze Plate Heat Exchangers (BPHE). Channel plates, refrigerant and water connections are constructed from stainless steel with pure copper as brazing material. BPHE design and assembly process are in compliance with Europe, Pressure Equipment Directive (PED97/23/EC). Maximum working pressure of water side is 363 psig (2500 kPa) and refrigerant side is 392 psig (2700 kPa).

All other APCD models with larger capacity, the evaporators are shell and tube, direct expansion, removable head and having 1, 2, and 3 refrigerant circuits. Evaporator shell, header, tubesheet, refrigerant and water connections are made of carbon steel. Baffles are provided in the waterflow to increase the heat transfer efficiency. High efficiency tubes are in copper. Evaporators are provided with drain and vent pipes.

Maximum working pressure of waterside is 145 psig (1000 kPa) and for refrigerant side is 363 psig (2500 kPa).

All evaporators are insulated with 1" (25mm) thick flexible closed cell insulation, having K factor of 0.26 Btu.in/ft<sup>2</sup>.hr.°F (0.038 W/m.°K).

Figure 4: Evaporator



### The Casing / Structure Frame

The unit casing in **APCD** series chillers is made of zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM A653 which is phosphatized and 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% RH as per ASTM B117. Unit casing is provided with access doors for easy servicing/maintenance.

**APCD** chillers are assembled on rigid structural steel skid channels painted with one coat galvanized primer and one coat black enamel. The package is assembled for easy handling during transportation and robust support during installation and operation.

### Refrigerant Piping

The refrigeration circuit piping is fabricated from ACR grade copper piping. Each refrigeration circuit includes filter drier, liquid line solenoid valve, thermostatic expansion valve, sight glass, shut off valve and hot gas muffler. For single compressor circuits, additional vibration eliminators are provided. After fabrication the refrigeration circuit suction line is insulated with ½" (13mm) wall thickness closed cell pipe insulation.

### Control Panel

The unit mounted Control Panel enclosure is fabricated out of heavy gauge sheet steel, which is phosphatized and baked after an electrostatic powder coat finish. The enclosure conforms to IP-54 as per guidelines in IEC-529. Control Panel for all APCH models and APCD-5009A and 6011A are with dead front panel cover screwed on to the enclosure. All other APCD model are with external panels with hinged doors and key fastener provided for easy access and security. These panels are ventilated through louvers and filters. The panel is factory wired in accordance with NEC-430 & 440 labeled, tagged and feature 220V/240V single, phase controls and the following as standard.

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- Individual compressor and condenser fan motor contactors.
- Circuit breakers for compressors.
- Condenser fan motor protector circuit breaker.
- Anti-recycle timer to prevent rapid cycling and short cycling of compressors.
- Compressor low pressure safety switch, factory set for each circuit.
- Compressor oil failure and high pressure safety switch, one each per compressor, factory set.
- Head pressure control, by fan cycling, for low ambient operation.
- Freeze protection thermostat.
- Multi-step temperature controller to control chiller capacity.
- Control ON / OFF toggle switch for each circuit.
- Control circuit fuses.
- Manual pump-down switch for each circuit.
- Run/Trip and control ON indication lights.
- Power and control circuit terminal blocks.

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**Note : Standard Items are for general information and guidance. The actual supplied item may vary depending on machine size and / or series H or D.**

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### Optional Features

#### SKM Microprocessor Controller - MAGNUM

The Magnum Microprocessor Control System is available for APCD Series chiller as an **optional** feature. Our high energy efficient Chiller has a full function microprocessor control unit designed to keep the chiller running at its most Energy Efficient Level. The Magnum is a rugged microprocessor based controller that is designed for the hostile environment of HVAC/R industry.

Magnum provides flexibility with set points and control options that can be selected prior to commissioning a system or when the unit is live and functioning. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the system. It is designed to safeguard the system that is being controlled, eliminate the need for manual intervention and to provide a simple but meaningful man-machine-interface.

This microprocessor provides complete operational control for the chiller and has built-in auto diagnostic capability that can signal off normal operation or alarm conditions as well as shutting down the chiller or system, if necessary.

#### The Main Features of the controller are as follows:

- A large graphical LCD Display (2.8" diagonal) with back-lit that can be seen in bright or dim lighting.
- A nine button generic keypad that is so user friendly, it is rarely requires a reference manual.
- Battery backed up Built in Real time clock to program the chiller for 2 starts and 2 stops daily to provide the information about the Running hours of the compressors.
- The multiple authorization levels to provide tight security of the control system.
- The system provides 'last time' enabled & disabled, number of cycles, and total run hours.
- Automatic Lead/Lag changeover of the compressors.
- Pump-down at the beginning and end of every circuit cycle (for DX type evaporator).
- Capacity control based on leaving chilled water temperature. A special control zone based on leaving water temperature that reduces compressor cycling, and improved unit part load efficiency.
- START/STOP Facility from remote through Volt Free Contact (VFC) is a standard feature.
- Common Run, Fault and remote mode operation status volt free contacts provided for remote signaling.

#### Display Information

SKM APCD chillers offer a graphics LCD display which allows the operator to access different parameters of the chiller. Operator can view and change the setpoint of chiller parameters. The graphical display has lot of features, trending is one of the key features of graphical display, which shows last 25 samples with an appropriate scale to allow it to fit on the display.

The well designed keypad with three function keys, four direction keys and two selection keys allows the operator to navigate through different Menu, such as:

- Status
- Outputs
- Inputs
- Alarms
- Graphs
- Setpoint





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## Optional Features available for Magnum

### PC Support Software for Magnum

**MCS-Connect** program provides both local and remote communications to the MAGNUM independent of the type of software. Through this program, the status of the controller can be viewed and proper authorization changes can be made to the system. Configuration files can be transmitted to or received from a Magnum unit. The Magnum automatically performs history logging; this program has complete graphic functions.

### 485 Network

The MCS 485 Network can support up to 20 Magnums and their associated I/O's. Access to this network can be local, via RS 232 connection, or remote via 14.4K Baud modem. When using the dial up through the modem, there will be no degradation in the performance of the network. Each Magnum in the network must be assigned to a unique address when the configuration file is build using **MCS-Config** program. This address will be the key in establishing communications with the appropriate Magnum system. This address can be changed from the LCD/keypad of the unit. The current address of Magnum can be viewed or changed with factory authorization. RS 232 transmission should not exceed 30 feet in length and RS 485 transmission should not exceed 1 mile without repeater.

### Ethernet Port

Communications can be through the 100 MBPS Ethernet communications port on the Magnum. It is necessary to use a crossover cable when connected directly to this port from a PC.

## Requirements for PC Software

To install and run the program, we suggest the following system requirements:

### Front End System Requirements

- Windows 2000 or above.
- Pentium 166 MHz or above.
- 10 Gigabyte hard disk with at least 25 Megabytes free as minimum.
- CD Drive
- Super VGA display capable of displaying 256 colors
- 64 Megabytes of RAM or more is recommended
- 19.2k baud modem

## BMS Communication Protocols

Magnum supports BACnet MSTP, BACnet IP, Modbus RTU, Modbus TCP/IP, Lonworks and Johnson N2. Each protocols are supported with various baud rates.

Since green buildings are the major issue in HVAC industry and building integration is one of the tools to save energy.

Complete control of the chillers along with the monitoring is possible if any of the above protocols are used to connect chillers to the BMS. The details of the parameters to be controlled, number of chillers in the building, the protocol, etc., are required before the order as costing of the BMS interface depends on these parameters.

## Hard Wired of BMS Connection

Within the hard wire structure there are five options as follows:

1. **Run / Stop – (BMS to Magnum)**  
A Run / Stop input is provided, by chiller, to allow the end user to provide an enable / disable signal from a building management system. This input allows for a normal shutdown of the chiller package.
2. **Emergency Stop – (BMS to Magnum)**  
The EMER. STOP input is an input that allows for immediate shut down. This feature is used for safety, especially in explosion proof installations. The chiller bypasses the normal shutdown and shuts down immediately.
3. **Chilled Water Reset – (BMS to Magnum) 'Max Trg Reset'**  
Is a function of a signal from the building management system. This value is used to adjust the control LEV LIQ TARG set point #1. The amount of the actual adjustment is proportionally based upon the associated analog input value. The analog value can be between 0 and 5 volts.
4. **Compressor Run – (Magnum to BMS)**  
This is a relay output (VFC) closure from the Chiller Controls to the BMS indicating the compressor/s is/are running.
5. **Alarm – (Magnum to BMS)**  
This is a relay output (VFC) closure from the Magnum to the BMS indicating a problem. Communications to analysis the problem may be direct at the keypad, communications through PCconnection or direct from the BMS.



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### Factory Installed Options

#### Low Ambient Operation Kit (LAO)

For operation down to 25°F (-4°C) ambient. Specify minimum design ambient temperature on order.

#### High Ambient Operation Kit (HAO)

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

#### Alternative Condenser 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).

#### Galvanized Frame (GFB)

Hot dip galvanized after manufacture, steel frame and base.

#### IP55 Control Panel Enclosure (ICP)

Control Panel for special applications to meet IP55 requirements.

#### Evaporator Casing (ECA/ECG/ECS)

Shell and insulation casing enclosed in a jacket/casing of aluminium, galvanized or stainless steel as required, injected with polyurethane foam.

#### Condenser Coil Guard (CGP)

Coil wire mesh guard, in galvanized and painted finish for condensers.

#### Electronic Expansion Valve (EEV)

To provide energy saving benefits over mechanical thermostatic expansion valve (TXV).

#### Run Hour Meter(s) (RHM)

To monitor operating hours of each compressor.

#### Main Isolator (ISO)

With door interlock for main power isolation. (consult SKM)

#### 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.

#### Unload Start Kit (USK)

This option is required when the compressor needs a high starting torque such as when load is high. Not required for D50 and D60 compressors.

#### Individual Refrigerant Circuit (IRC)

For independent refrigeration circuits other than standard arrangement shown, consult SKM.

#### Load Limit Control Kit (LCK)

To prevent nuisance trip-out when the entering chilled water temperature is above 76°F (24.4°C) at start up or where chillers may be subject to shut down for long periods during season.

#### Lead/Lag Control Switch (LLS)

To manually reverse compressors operational sequence.

#### Voltage Monitoring Module (VMM)

To prevent chiller operation in the event of phase burn-out, phase reversal, and under voltage/over voltage on the incoming line voltage.

#### Voltage Monitoring Module (DVM)

To meet DEWA regulations. This option is available for Dubai, UAE only.

#### Evaporator Freeze Up Protection (EFP)

Heating cable with thermostat to prevent evaporator freeze-up where low ambient temperatures below 32°F (0°C) are anticipated with/out chiller operation.

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**Ammeter & Phase Selector Switch (AMPC)**  
To indicate running AMPS of each compressor.

**Ammeter & Phase Selector switch (AMPI)**  
To indicate running AMPS on main incomer of a chiller.

**Voltmeter & Selector Switch (VSS)**  
For incoming line voltage.

**Pressure Gauges (SDG)**  
Suction, discharge and oil pressure indication of each refrigerant circuit.

**Low Noise Fan & Motor (LNF)**  
Low noise Fan & Motor assembly can be provided for applications where minimal unit sound is required.

**Pressure Relief Valve (PRV)**  
To protect the chiller from hi-pressure in the event of primary high pressure safeties are failed.

**Marine Paint (MP)**  
To provide increased corrosion resistant in coastal environments and off-shore locations.

**Compressor Sound Enclosure (CSE)**  
To reduce compressor sound, compressor sound enclosure with insulated panels is mounted around the compressor.

**Vibration Eliminator (DVE)**  
For parallel compressor circuiting, vibration eliminators can be provided as an option.

**Capacity Control Steps (CRS1/2)**  
Where loads may vary greatly and finer capacity control is desired the standard control steps may not suffice. Additional capacity control steps are available as options CRS1 or CRS2.

### Options for Field Installation

**Chilled Water Flow Switch (CWFS)**

**Fault Status Indicator Panel (CSIP)**

**Multi-chillers seq. panel (CSQP)**

with lead-lag capability for each chiller along with lead-lag option (factory installed) for compressors (Contact SKM for details)

**Anti-vibration mounts, spring type (CAVM)**



# SKM Air Cooled Packaged Chillers APCD Series - R22

## ENGINEERING SPECIFICATIONS - 50 HZ

Model		APCH						APCD						
		5004 A	5006 A	5008 A	5009 A	5012 A	5017 A	5018 A	5022 A	5024 A	5025 A	5030 A	5032 A	
Cooling Capacity (1)	TR	4.5	6.6	8.4	10.0	13.5	18.6	19.4	23.6	25.9	27.4	32.4	32.5	
	kW	15.8	23.2	29.6	35.2	47.5	65.4	68.2	83.0	91.1	96.4	114.0	114.3	
Cooling Capacity (2)	TR	4.1	5.9	7.5	9.1	12.3	17.0	17.6	21.5	23.7	24.8	29.1	29.6	
	kW	14.3	20.7	26.3	32.0	43.3	59.8	61.9	75.6	83.4	87.2	102.3	104.1	
Compressor		Fully Hermetic Reciprocating						Semi-Hermetic Reciprocating Discus 1450 rpm						
1	Code x Qty	- x #	MT 64 x 1	MT 100 x 1	MT 125 x 1	D10 x 1	D15 x 1	D25 x 1	D10 x 2	D10 x 1	D15 x 2	D35 x 1	D40 x 1	D15 x 1
	Oil Charge (SUNISO - 3GS)	USGal	0.5 x 1	1 x 1	1 x 1	1 x 1	1 x 1	1.1 x 1	1 x 2	1 x 1	1 x 2	1.1 x 1	2 x 1	1 x 1
2	Code x Qty	- x #	-	-	-	-	-	-	-	D15 x 1	-	-	-	D25 x 1
	Oil Charge (SUNISO - 3GS)	USGal	-	-	-	-	-	-	-	1 x 1	-	-	-	1.1 x 1
Condenser Coil		-	Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins											
Area	ft <sup>2</sup>	9.7	12.2	13.1	13.1	16.6	26.3	26.3	35.8	35.8	35.8	54.0	54.0	
	m <sup>2</sup>	0.9	1.1	1.2	1.2	1.5	2.4	2.4	3.3	3.3	3.3	5.0	5.0	
Condenser Fan		-	Propeller direct drive 960 rpm											
Code x Qty	- x #	628 x 1	729 x 1	823 x 1	823 x 1	723 x 2	823 x 2	823 x 2	829 x 2	829 x 2	829 x 2	829 x 3	829 x 3	
	Airflow Rate	cfm	4389	7454	8909	8497	13154	16994	16994	21032	21032	21032	32880	31608
Condenser Fan Motor		-	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected											
Size x Qty	kW x #	0.37 x 1	1.1 x 1	1.5 x 1	1.5 x 1	0.75 x 2	1.5 x 2	1.5 x 2	1.5 x 2	1.5 x 2	1.5 x 2	1.5 x 3	1.5 x 3	
Evaporator		-	Direct Expansion BPHE						Direct Expansion Shell & Tube					
Code x Qty	- x #	1V25T-28x1	1V25T-42x1	1V80-50 x 1	1V80-58 x 1	1056 x 1	1056 x 1	2056 x 1	2095 x 1	2095 x 1	1095 x 1	1120 x 1	2120 x 1	
	Ref. Circuits	#	1	1	1	1	1	2	2	2	1	1	2	
Water Volume	USGal	0.4	0.6	0.7	0.9	4.0	4.0	4.0	5.7	5.7	5.7	7.9	7.9	
	Litre	1.55	2.33	2.78	3.22	15.3	15.3	15.3	21.7	21.7	21.7	30.0	30.0	
Refrigerant Charge (R22)	Lb	9.7	10.2	10.9	13.9	18.0	27.3	27.8	36.1	36.1	36.0	41.7	54.2	
	Kg	4.4	4.6	4.9	6.3	8.2	12.4	12.6	16.4	16.4	16.3	18.9	24.6	
Operating Weight (Approx.)	Lb	598	712	756	1034	1380	1550	1820	2330	2350	2141	2450	2835	
	Kg	271	323	343	469	626	703	825	1057	1066	971	1111	1286	

Model		APCD												
		5120 B	5125 B	5135 B	5140 B	5145 B	5150 B	5155 B	5160 B	5165 B	5170 B	5180 B	5190 B	
Cooling Capacity (1)	TR	123.6	128.5	134.7	140.4	146.0	150.1	155.3	160.4	165.4	170.2	183.4	193.2	
	kW	434.7	451.9	473.7	493.8	513.5	527.9	546.2	564.1	581.7	598.6	645.0	679.5	
Cooling Capacity (2)	TR	112.7	117.0	121.3	127.1	132.7	136.9	141.6	146.2	150.7	155.1	165.2	173.5	
	kW	396.4	411.5	426.6	447.0	466.7	481.5	498.0	514.2	530.0	545.5	581.0	610.2	
Compressor		-	Semi-Hermetic Reciprocating Discus 1450 rpm											
1	Code x Qty	- x #	D50 x 1	D60 x 3	D40 x 3	D40 x 2	D40 x 1	D50 x 4	D50 x 3	D50 x 2	D50 x 1	D60 x 4	D35 x 3	D40 x 6
	Oil Charge (SUNISO - 3GS)	USGal	2 x 1	2 x 3	2 x 3	2 x 2	2 x 1	2 x 4	2 x 3	2 x 2	2 x 1	2 x 4	1.1 x 3	2 x 6
2	Code x Qty	- x #	D60 x 2	-	D50 x 1	D50 x 2	D50 x 3	-	D60 x 1	D60 x 2	D60 x 3	-	D40 x 3	-
	Oil Charge (SUNISO - 3GS)	USGal	2 x 2	-	2 x 1	2 x 2	2 x 3	-	2 x 1	2 x 2	2 x 3	-	2 x 3	-
Condenser Coil		-	Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins											
Area	ft <sup>2</sup>	160.0	160.0	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	320.0	320.0	
	m <sup>2</sup>	14.9	14.9	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	29.7	29.7	
Condenser Fan		-	Propeller direct drive 960 rpm											
Code x Qty	- x #	829 x 8	829 x 8	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 18	829 x 18	
	Airflow Rate	cfm	86560	86560	131184	128544	126000	126000	126000	126000	126000	196776	196776	
Condenser Fan Motor		-	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected											
Size x Qty	kW x #	1.5 x 8	1.5 x 8	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 18	1.5 x 18	
Evaporator		-	Direct Expansion Shell & Tube											
Code x Qty	- x #	1390 x 1	1390 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	3650 x 1	3650 x 1	
	Ref. Circuits	#	1	1	2	2	2	2	2	2	2	3	3	
Water Volume	USGal	23.8	23.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	60.8	60.8	
	Litre	90.0	90.0	143.0	143.0	143.0	143.0	143.0	143.0	143.0	143.0	230.0	230.0	
Refrigerant Charge (R22)	Lb	155.7	155.7	161.2	181.9	202.5	202.5	202.5	202.5	202.5	202.5	242.3	242.3	
	Kg	70.6	70.6	73.1	82.5	91.8	91.8	91.8	91.8	91.8	91.8	109.9	109.9	
Operating Weight (Approx.)	Lb	7933	7935	9535	9887	10219	10466	10468	10470	10472	10474	14447	14546	
	Kg	3598	3599	4324	4484	4634	4746	4747	4748	4749	4750	6553	6597	

Table 1

- Capacity ratings are based on standard ARI - 550 / 590 conditions of 95°F (35°C) ambient, 44°F (6.7°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.
- Capacity ratings are based on 115°F (46°C) ambient, 45°F (7.2°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.

# SKM Air Cooled Packaged Chillers APCD Series - R22

## ENGINEERING SPECIFICATIONS - 50 HZ

MODEL	APCD														
	5034 A	5035 A	5039 A	5040 A	5050 A	5065 A	5070 A	5075 A	5080 A	5085 A	5095 B	5100 B	5105 B	5110 B	5115 B
TR	36.9	37.5	42.5	42.7	52.8	64.9	70.0	74.9	80.1	85.1	98.4	103.5	108.5	113.4	118.6
kW	129.8	131.9	149.5	150.2	185.7	228.3	246.2	263.4	281.7	299.3	346.1	364.0	381.6	398.8	417.1
TR	33.5	34.1	38.4	38.8	47.8	58.4	63.5	68.4	73.1	77.5	88.4	93.5	98.6	103.5	108.2
kW	117.8	119.9	135.1	136.5	168.1	205.4	223.3	240.6	257.1	272.6	310.9	328.8	346.8	364.0	380.5
-	Semi-Hermetic Reciprocating Discus 1450 rpm														
- x #	D25 x 2	D50 x 1	D25 x 1	D60 x 1	D35 x 2	D40 x 2	D40 x 1	D50 x 2	D50 x 1	D60 x 2	D40 x 3	D40 x 2	D40 x 1	D50 x 3	D50 x 2
USGal	1.1 x 2	2 x 1	1.1 x 1	2 x 1	1.1 x 2	2 x 2	2 x 1	2 x 2	2 x 1	2 x 2	2 x 3	2 x 2	2 x 1	2 x 3	2 x 2
Litre	4 x 2	7.7 x 1	4 x 1	7.7 x 1	4.3 x 2	7.4 x 2	7.4 x 1	7.7 x 2	7.7 x 1	7.7 x 2	7.4 x 3	7.4 x 2	7.4 x 1	7.7 x 3	7.7 x 2
- x #	-	-	D35 x 1	-	-	-	D50 x 1	-	D60 x 1	-	-	D50 x 1	D50 x 2	-	D60 x 1
USGal	-	-	1.1 x 1	-	-	-	2 x 1	-	2 x 1	-	-	2 x 1	2 x 2	-	2 x 1
Litre	-	-	4.3 x 1	-	-	-	7.7 x 1	-	7.7 x 1	-	-	7.7 x 1	7.7 x 2	-	7.7 x 1
-	Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins														
ft <sup>2</sup>	54.0	54.0	54.0	54.0	80.0	106.7	106.7	106.7	106.7	106.7	160.0	160.0	160.0	160.0	160.0
m <sup>2</sup>	5.0	5.0	5.0	5.0	7.4	9.9	9.9	9.9	9.9	9.9	14.9	14.9	14.9	14.9	14.9
-	Propeller direct drive 960 rpm														
- x #	829 x 3	829 x 3	829 x 3	829 x 3	829 x 4	829 x 6	829 x 6	829 x 6	829 x 6	829 x 6	829 x 8	829 x 8	829 x 8	829 x 8	829 x 8
cfm	31608	31608	31608	31608	44752	65592	64272	63000	63000	63000	89504	88512	87520	86560	86560
l/s	14916	14916	14916	14916	21118	30953	30330	29730	29730	29730	42237	41769	41301	40848	40848
-	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected														
kW x #	1.5 x 3	1.5 x 3	1.5 x 3	1.5 x 3	1.5 x 4	1.5 x 6	1.5 x 6	1.5 x 6	1.5 x 6	1.5 x 6	1.5 x 8	1.5 x 8	1.5 x 8	1.5 x 8	1.5 x 8
-	Direct Expansion Shell & Tube														
- x #	2120 x 1	1120 x 1	2120 x 1	1120 x 1	1160R x 1	1235R x 1	1235R x 1	1235R x 1	1235R x 1	1235R x 1	1390 x 1	1390 x 1	1390 x 1	1390 x 1	1390 x 1
#	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
USGal	7.9	7.9	7.9	7.9	11.0	15.3	15.3	15.3	15.3	15.3	23.8	23.8	23.8	23.8	23.8
Litre	30.0	30.0	30.0	30.0	41.8	58.1	58.1	58.1	58.1	58.1	90.0	90.0	90.0	90.0	90.0
Lb	56.1	55.0	56.4	55.2	64.2	82.1	92.4	102.7	102.7	102.7	124.4	135.1	145.1	155.7	155.7
Kg	25.4	24.9	25.6	25.0	29.1	37.2	41.9	46.6	46.6	46.6	56.4	61.3	65.8	70.6	70.6
Lb	2930	2740	3010	2790	3980	4820	5150	5450	5510	5600	7105	7391	7653	7929	7931
Kg	1329	1243	1365	1265	1805	2186	2336	2472	2499	2540	3222	3352	3471	3596	3597

MODEL	APCD														
	5200 B	5210 B	5220 B	5230 B	5240 B	5250 B	5260 B	5270 B	5280 B	5290 B	5300 B	5310 B	5320 B	5330 B	5340 B
TR	203.1	212.7	222.1	232.4	242.3	251.8	260.9	269.3	280.9	291.9	300.2	310.6	320.8	330.7	340.4
kW	714.3	748.1	781.1	817.4	852.2	885.6	917.6	947.1	987.9	1026.6	1055.8	1092.4	1128.3	1163.1	1197.2
TR	183.4	193.2	202.7	211.9	220.8	229.5	234.1	242.7	254.3	265.4	273.8	283.2	292.4	301.4	310.1
kW	645.0	679.5	712.9	745.3	776.6	807.2	823.3	853.6	894.4	933.4	963.0	996.0	1028.4	1060.0	1090.6
-	Semi-Hermetic Reciprocating Discus 1450 rpm														
- x #	D40 x 4	D40 x 2	D50 x 6	D50 x 4	D50 x 2	D60 x 6	D40 x 8	D40 x 6	D40 x 4	D40 x 2	D50 x 8	D50 x 6	D50 x 4	D50 x 2	D60 x 8
USGal	2 x 4	2 x 2	2 x 6	2 x 4	2 x 2	2 x 6	2 x 8	2 x 6	2 x 4	2 x 2	2 x 8	2 x 6	2 x 4	2 x 2	2 x 8
Litre	7.4 x 4	7.4 x 2	7.7 x 6	7.7 x 4	7.7 x 2	7.7 x 6	7.4 x 8	7.4 x 6	7.4 x 4	7.4 x 2	7.7 x 8	7.7 x 6	7.7 x 4	7.7 x 2	7.7 x 8
- x #	D50 x 2	D50 x 4	-	D60 x 2	D60 x 4	-	-	D50 x 2	D50 x 4	D50 x 6	-	D60 x 2	D60 x 4	D60 x 6	-
USGal	2 x 2	2 x 4	-	2 x 2	2 x 4	-	-	2 x 2	2 x 4	2 x 6	-	2 x 2	2 x 4	2 x 6	-
Litre	7.7 x 2	7.7 x 4	-	7.7 x 2	7.7 x 4	-	-	7.7 x 2	7.7 x 4	7.7 x 6	-	7.7 x 2	7.7 x 4	7.7 x 6	-
-	Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins														
ft <sup>2</sup>	320.0	320.0	320.0	320.0	320.0	320.0	426.7	426.7	426.7	426.7	426.7	426.7	426.7	426.7	426.7
m <sup>2</sup>	29.7	29.7	29.7	29.7	29.7	29.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
-	Propeller direct drive 960 rpm														
- x #	829 x 18	829 x 18	829 x 18	829 x 18	829 x 18	829 x 18	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24
cfm	194112	191520	189000	189000	189000	189000	262368	262368	257088	252000	252000	252000	252000	252000	252000
l/s	91601	90378	89189	89189	89189	89189	123811	123811	121320	118919	118919	118919	118919	118919	118919
-	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected														
kW x #	1.5 x 18	1.5 x 18	1.5 x 18	1.5 x 18	1.5 x 18	1.5 x 18	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24	1.5 x 24
-	Direct Expansion Shell & Tube														
- x #	3650 x 1	3650 x 1	3650 x 1	3650 x 1	3650 x 1	3650 x 1	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2
#	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
USGal	60.8	60.8	60.8	60.8	60.8	60.8	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
Litre	230.0	230.0	230.0	230.0	230.0	230.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0
Lb	263.0	283.6	304.3	304.3	304.3	304.3	322.4	322.4	363.7	405.0	405.0	405.0	405.0	405.0	405.0
Kg	119.3	128.6	138.0	138.0	138.0	138.0	146.2	146.2	164.9	183.7	183.7	183.7	183.7	183.7	183.7
Lb	15090	15594	16117	16121	16125	16130	21278	21620	22325	22988	23352	23356	23360	23364	23368
Kg	6844	7072	7309	7311	7313	7315	9650	9805	10125	10425	10590	10592	10594	10596	10598

Table 1 ends

- Capacity ratings are based on standard ARI - 550 / 590 conditions of 95°F (35°C) ambient, 44°F (6.7°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.
- Capacity ratings are based on 115°F (46°C) ambient, 45°F (7.2°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.



# SKM Air Cooled Packaged Chillers APCD Series - R22

## ENGINEERING SPECIFICATIONS - 60 HZ

Model		APCH						APCD						
		6005 A	6007 A	6009 A	6011 A	6014 A	6020 A	6022 A	6025 A	6028 A	6030 A	6035 A	6036 A	
Cooling Capacity (1)	TR	5.2	7.6	9.7	11.4	15.4	21.3	22.1	27.1	29.7	31.2	37.1	37.4	
	kW	18.3	26.6	34.0	40.1	54.2	74.9	77.7	95.3	104.5	109.7	130.5	131.5	
Cooling Capacity (2)	TR	4.7	6.7	8.6	10.3	14.0	19.3	20.0	24.6	27.0	28.2	33.2	34.0	
	kW	16.5	23.7	30.1	36.2	49.2	67.9	70.3	86.5	95.0	99.2	116.8	119.6	
Compressor		Fully Hermetic Reciprocating						Semi-Hermetic Reciprocating Discus 1750 rpm						
1	Code x Qty	- x #	MT 64 x 1	MT 100 x 1	MT 125 x 1	D10 x 1	D15 x 1	D25 x 1	D10 x 2	D10 x 1	D15 x 2	D35 x 1	D40 x 1	D15 x 1
	Oil Charge (SUNISO - 3GS)	USGal	0.5 x 1	1 x 1	1 x 1	1 x 1	1 x 1	1.1 x 1	1 x 2	1 x 1	1 x 2	1.1 x 1	2 x 1	1 x 1
2	Code x Qty	- x #	-	-	-	-	-	-	-	D15 x 1	-	-	-	D25 x 1
	Oil Charge (SUNISO - 3GS)	USGal	-	-	-	-	-	-	-	1 x 1	-	-	-	1.1 x 1
Condenser Coil		Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins												
Area	ft <sup>2</sup>	9.7	12.2	13.1	13.1	16.6	26.3	26.3	35.8	35.8	35.8	54.0	54.0	
	m <sup>2</sup>	0.9	1.1	1.2	1.2	1.5	2.4	2.4	3.3	3.3	3.3	5.0	5.0	
Condenser Fan		Propeller direct drive 1150 rpm												
Code x Qty	- x #	628 x 1	729 x 1	823 x 1	823 x 1	723 x 2	823 x 2	823 x 2	829 x 2	829 x 2	829 x 2	829 x 3	829 x 3	
	Airflow Rate	cfm	5327	8840	10851	10355	15540	20710	20710	25480	25480	25480	39774	38286
Condenser Fan Motor	Size x Qty	kW x #	0.55 x 1	1.5 x 1	2.2 x 1	2.2 x 1	1.1 x 2	2.2 x 2	2.2 x 2	2.2 x 2	2.2 x 2	2.2 x 3	2.2 x 3	
	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected													
Evaporator		Direct Expansion BPHE						Direct Expansion Shell & Tube						
Code x Qty	- x #	1V25T-28x1	1V25T-42x1	1V80-50 x 1	1V80-58 x 1	1056 x 1	1056 x 1	2056 x 1	2095 x 1	2095 x 1	1095 x 1	1120 x 1	2120 x 1	
	Ref. Circuits	#	1	1	1	1	1	2	2	2	1	1	2	
Water Volume	USGal	0.4	0.6	0.7	0.9	4.0	4.0	4.0	5.7	5.7	5.7	7.9	7.9	
	Litre	1.55	2.33	2.78	3.22	15.3	15.3	15.3	21.7	21.7	21.7	30.0	30.0	
Refrigerant Charge (R22)	Lb	9.7	10.2	10.9	13.9	18.0	27.3	27.8	36.1	36.1	36.0	41.7	54.2	
	Kg	4.4	4.6	4.9	6.3	8.2	12.4	12.6	16.4	16.4	16.3	18.9	24.6	
Operating Weight (Approx.)	Lb	598	712	756	1034	1380	1550	1820	2330	2350	2141	2450	2835	
	Kg	271	323	343	469	626	703	825	1057	1066	971	1111	1286	

Model		APCD												
		6140 B	6145 B	6155 B	6165 B	6170 B	6175 B	6180 B	6185 B	6190 B	6195 B	6210 B	6230 B	
Cooling Capacity (1)	TR	140.5	145.9	153.2	159.9	166.3	170.9	176.6	182.2	187.7	193.1	209.0	219.9	
	kW	494.1	513.1	538.8	562.4	584.9	601.1	621.1	640.8	660.1	679.1	735.1	773.4	
Cooling Capacity (2)	TR	128.0	132.8	138.1	144.7	151.1	155.7	161.0	166.1	171.1	175.9	188.6	197.6	
	kW	450.2	467.1	485.7	508.9	531.4	547.6	566.2	584.2	601.8	618.6	663.3	695.0	
Compressor		Semi-Hermetic Reciprocating Discus 1750 rpm												
1	Code x Qty	- x #	D50 x 1	D60 x 3	D40 x 3	D40 x 2	D40 x 1	D50 x 4	D50 x 3	D50 x 2	D50 x 1	D60 x 4	D35 x 3	D40 x 6
	Oil Charge (SUNISO - 3GS)	USGal	2 x 1	2 x 3	2 x 3	2 x 2	2 x 1	2 x 4	2 x 3	2 x 2	2 x 1	2 x 4	1.1 x 4	2 x 6
2	Code x Qty	- x #	D60 x 2	-	D50 x 1	D50 x 2	D50 x 3	-	D60 x 1	D60 x 2	D60 x 3	-	D40 x 3	-
	Oil Charge (SUNISO - 3GS)	USGal	2 x 2	-	2 x 1	2 x 2	2 x 3	-	2 x 1	2 x 2	2 x 3	-	2 x 3	-
Condenser Coil		Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins												
Area	ft <sup>2</sup>	160.0	160.0	213.3	213.3	213.3	213.3	213.3	213.3	213.3	213.3	320.0	320.0	
	m <sup>2</sup>	14.9	14.9	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	29.7	29.7	
Condenser Fan		Propeller direct drive 1150 rpm												
Code x Qty	- x #	829 x 8	829 x 8	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 12	829 x 18	829 x 18	
	Airflow Rate	cfm	104704	104704	158688	155568	152664	152664	152664	152664	152664	238032	238032	
Condenser Fan Motor	Size x Qty	kW x #	2.2 x 8	2.2 x 8	2.2 x 12	2.2 x 12	2.2 x 12	2.2 x 12	2.2 x 12	2.2 x 12	2.2 x 12	2.2 x 18	2.2 x 18	
	Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected													
Evaporator		Direct Expansion Shell & Tube												
Code x Qty	- x #	1390 x 1	1390 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	2460 x 1	3650 x 1	3650 x 1	
	Ref. Circuits	#	1	1	2	2	2	2	2	2	2	3	3	
Water Volume	USGal	23.8	23.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	60.8	60.8	
	Litre	90.0	90.0	143.0	143.0	143.0	143.0	143.0	143.0	143.0	143.0	230.0	230.0	
Refrigerant Charge (R22)	Lb	155.7	155.7	161.2	181.9	202.5	202.5	202.5	202.5	202.5	202.5	242.3	242.3	
	Kg	70.6	70.6	73.1	82.5	91.8	91.8	91.8	91.8	91.8	91.8	109.9	109.9	
Operating Weight (Approx.)	Lb	7933	7935	9535	9887	10219	10466	10468	10470	10472	10474	14447	14546	
	Kg	3598	3599	4324	4484	4634	4746	4747	4748	4749	4750	6553	6597	

Table 2

- Capacity ratings are based on standard ARI - 550 / 590 conditions of 95°F (35°C) ambient, 44°F (6.7°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.
- Capacity ratings are based on 115°F (46°C) ambient, 45°F (7.2°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.

# SKM Air Cooled Packaged Chillers APCD Series - R22

## ENGINEERING SPECIFICATIONS - 60 HZ

MODEL	APCD														
	6039 A	6040 A	6046 A	6050 A	6060 A	6075 A	6080 A	6085 A	6090 A	6095 A	6110 B	6115 B	6125 B	6130 B	6135 B
TR	42.4	42.9	48.5	48.7	60.0	74.1	79.9	85.4	91.2	96.8	112.2	118.0	123.7	129.2	134.9
kW	149.1	150.9	170.6	171.3	211.0	260.6	281.0	300.4	320.8	340.4	394.6	415.0	435.1	454.4	474.4
TR	38.4	39.0	43.8	44.2	54.4	66.6	72.3	77.9	83.1	88.0	100.8	106.6	112.2	117.8	123.0
kW	135.1	137.2	154.0	155.5	191.3	234.2	254.3	274.0	292.3	309.5	354.5	374.9	394.6	414.3	432.6
Semi-Hermetic Reciprocating Discus 1750 rpm															
- x #	D25 x 2	D50 x 1	D25 x 1	D60 x 1	D35 x 2	D40 x 2	D40 x 1	D50 x 2	D50 x 1	D60 x 2	D40 x 3	D40 x 2	D40 x 1	D50 x 3	D50 x 2
USGal	1.1 x 2	2 x 1	1.1 x 1	2 x 1	1.1 x 2	2 x 2	2 x 1	2 x 2	2 x 1	2 x 2	2 x 3	2 x 2	2 x 1	2 x 3	2 x 2
Litre	4 x 2	7.7 x 1	4 x 1	7.7 x 1	4.3 x 2	7.4 x 2	7.4 x 1	7.7 x 2	7.7 x 1	7.7 x 2	7.4 x 3	7.4 x 2	7.4 x 1	7.7 x 3	7.7 x 2
- x #	-	-	D35 x 1	-	-	-	D50 x 1	-	D60 x 1	-	-	D50 x 1	D50 x 2	-	D60 x 1
USGal	-	-	1.1 x 1	-	-	-	2 x 1	-	2 x 1	-	-	2 x 1	2 x 2	-	2 x 1
Litre	-	-	4.3 x 1	-	-	-	7.7 x 1	-	7.7 x 1	-	-	7.7 x 1	7.7 x 2	-	7.7 x 1
Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins															
ft <sup>2</sup>	54.0	54.0	54.0	54.0	80.0	106.7	106.7	106.7	106.7	106.7	160.0	160.0	160.0	160.0	160.0
m <sup>2</sup>	5.0	5.0	5.0	5.0	7.4	9.9	9.9	9.9	9.9	9.9	14.9	14.9	14.9	14.9	14.9
Propeller direct drive 1150 rpm															
- x #	829 x 3	829 x 3	829 x 3	829 x 3	829 x 4	829 x 6	829 x 6	829 x 6	829 x 6	829 x 6	829 x 8	829 x 8	829 x 8	829 x 8	829 x 8
cfm	38286	38286	38286	38286	54168	79344	77784	76332	76332	76332	108336	107056	105856	104704	104704
l/s	18067	18067	18067	18067	25562	37442	36706	36021	36021	36021	51124	50520	49953	49410	49410
Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected															
kW x #	2.2 x 3	2.2 x 3	2.2 x 3	2.2 x 3	2.2 x 4	2.2 x 6	2.2 x 6	2.2 x 6	2.2 x 6	2.2 x 6	2.2 x 8	2.2 x 8	2.2 x 8	2.2 x 8	2.2 x 8
Direct Expansion Shell & Tube															
- x #	2120 x 1	1120 x 1	2120 x 1	1120 x 1	1160R x 1	1235R x 1	1235R x 1	1235R x 1	1235R x 1	1235R x 1	1390 x 1	1390 x 1	1390 x 1	1390 x 1	1390 x 1
#	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
USGal	7.9	7.9	7.9	7.9	11.0	15.3	15.3	15.3	15.3	15.3	23.8	23.8	23.8	23.8	23.8
Litre	30.0	30.0	30.0	30.0	41.8	58.1	58.1	58.1	58.1	58.1	90.0	90.0	90.0	90.0	90.0
Lb	56.1	55.0	56.4	55.2	64.2	82.1	92.4	102.7	102.7	102.7	124.4	135.1	145.1	155.7	155.7
Kg	25.4	24.9	25.6	25.0	29.1	37.2	41.9	46.6	46.6	46.6	56.4	61.3	65.8	70.6	70.6
Lb	2930	2740	3010	2790	3980	4820	5150	5450	5510	5600	7105	7391	7653	7929	7931
Kg	1329	1243	1365	1265	1805	2186	2336	2472	2499	2540	3222	3352	3471	3596	3597

MODEL	APCD														
	6240 B	6250 B	6260 B	6270 B	6280 B	6290 B	6300 B	6310 B	6330 B	6340 B	6350 B	6360 B	6370 B	6380 B	6390 B
TR	231.2	242.1	252.7	264.0	274.9	285.5	297.0	306.4	319.9	332.6	341.8	353.3	364.5	375.4	386.1
kW	813.1	851.5	888.7	928.5	966.8	1004.1	1044.5	1077.6	1125.1	1169.8	1202.1	1242.6	1281.9	1320.3	1357.9
TR	208.8	219.7	230.4	240.7	250.6	260.2	266.8	276.1	289.5	302.3	311.4	322.0	332.2	342.2	351.9
kW	734.3	772.7	810.3	846.5	881.4	915.1	938.3	971.0	1018.2	1063.2	1095.2	1132.5	1168.3	1203.5	1237.6
Semi-Hermetic Reciprocating Discus 1750 rpm															
- x #	D40 x 4	D40 x 2	D50 x 6	D50 x 4	D50 x 2	D60 x 6	D40 x 8	D40 x 6	D40 x 4	D40 x 2	D50 x 8	D50 x 6	D50 x 4	D50 x 2	D60 x 8
USGal	2 x 4	2 x 2	2 x 6	2 x 4	2 x 2	2 x 6	2 x 8	2 x 6	2 x 4	2 x 2	2 x 8	2 x 6	2 x 4	2 x 2	2 x 8
Litre	7.4 x 4	7.4 x 2	7.7 x 6	7.7 x 4	7.7 x 2	7.7 x 6	7.4 x 8	7.4 x 6	7.4 x 4	7.4 x 2	7.7 x 8	7.7 x 6	7.7 x 4	7.7 x 2	7.7 x 8
- x #	D50 x 2	D50 x 4	-	D60 x 2	D60 x 4	-	-	D50 x 2	D50 x 4	D50 x 6	-	D60 x 2	D60 x 4	D60 x 6	-
USGal	2 x 2	2 x 4	-	2 x 2	2 x 4	-	-	2 x 2	2 x 4	2 x 6	-	2 x 2	2 x 4	2 x 6	-
Litre	7.7 x 2	7.7 x 4	-	7.7 x 2	7.7 x 4	-	-	7.7 x 2	7.7 x 4	7.7 x 6	-	7.7 x 2	7.7 x 4	7.7 x 6	-
Air-cooled 3 or 4 rows, 12 fpi (2.1mm) fin spacing, copper tubes aluminum fins															
ft <sup>2</sup>	320.0	320.0	320.0	320.0	320.0	320.0	426.7	426.7	426.7	426.7	426.7	426.7	426.7	426.7	426.7
m <sup>2</sup>	29.7	29.7	29.7	29.7	29.7	29.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
Propeller direct drive 1150 rpm															
- x #	829 x 18	829 x 18	829 x 18	829 x 18	829 x 18	829 x 18	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24	829 x 24
cfm	234864	231876	228996	228996	228996	228996	317376	317376	311136	305328	305328	305328	305328	305328	305328
l/s	110832	109422	108063	108063	108063	108063	149770	149770	146825	144084	144084	144084	144084	144084	144084
Totally enclosed air over, Class-F insulation, 6 pole, IP-55 protected															
kW x #	2.2 x 18	2.2 x 18	2.2 x 18	2.2 x 18	2.2 x 18	2.2 x 18	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24	2.2 x 24
Direct Expansion Shell & Tube															
- x #	3650 x 1	3650 x 1	3650 x 1	3650 x 1	3650 x 1	3650 x 1	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2	2460 x 2
#	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
USGal	60.8	60.8	60.8	60.8	60.8	60.8	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
Litre	230.0	230.0	230.0	230.0	230.0	230.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0	286.0
Lb	263.0	283.6	304.3	304.3	304.3	304.3	322.4	322.4	363.7	405.0	405.0	405.0	405.0	405.0	405.0
Kg	119.3	128.6	138.0	138.0	138.0	138.0	146.2	146.2	164.9	183.7	183.7	183.7	183.7	183.7	183.7
Lb	15090	15594	16117	16121	16125	16130	21278	21620	22325	22988	23352	23356	23360	23364	23368
Kg	6844	7072	7309	7311	7313	7315	9650	9805	10125	10425	10590	10592	10594	10596	10598

Table 2 ends

- Capacity ratings are based on standard ARI - 550 / 590 conditions of 95°F (35°C) ambient, 44°F (6.7°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.
- Capacity ratings are based on 115°F (46°C) ambient, 45°F (7.2°C) leaving chilled water temperature, 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F/Btu (0.018 m<sup>2</sup>.°C/kW) fouling factor.



# SKM Air Cooled Packaged Chillers APCD Series - R22

## CAPACITY RATINGS - 50 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCH/D	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
EER	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
5004 A 10.4	42	4.3	4.7	10.3	7.7	4.0	5.0	9.7	6.8	3.8	5.3	9.1	6.0	3.7	5.5	8.8	5.6	3.5	5.6	8.5	5.2
	5.6	15.1	4.7	0.7	22.9	14.2	5.0	0.6	20.3	13.3	5.3	0.6	17.9	12.9	5.5	0.6	16.8	12.4	5.6	0.5	15.6
	44	4.5	4.8	10.8	8.3	4.2	5.1	10.1	7.4	4.0	5.4	9.5	6.5	3.8	5.6	9.2	6.1	3.7	5.8	8.9	5.7
	6.7	15.8	4.8	0.7	24.7	14.9	5.1	0.6	22.1	13.9	5.4	0.6	19.5	13.5	5.6	0.6	18.3	13.0	5.8	0.6	17.1
	45	4.6	4.9	11.0	8.7	4.3	5.2	10.4	7.7	4.1	5.5	9.7	6.8	3.9	5.7	9.4	6.4	3.8	5.8	9.1	6.0
7.2	16.2	4.9	0.7	25.9	15.2	5.2	0.7	23.1	14.3	5.5	0.6	20.5	13.8	5.7	0.6	19.2	13.3	5.8	0.6	17.9	
48	5.0	5.0	12.0	10.1	4.7	5.4	11.3	9.1	4.4	5.7	10.7	8.1	4.3	5.9	10.3	7.6	4.2	6.1	10.0	7.2	
8.9	17.5	5.0	0.8	30.2	16.6	5.4	0.7	27.2	15.6	5.7	0.7	24.3	15.1	5.9	0.7	22.9	14.6	6.1	0.6	21.4	
5006 A 9.8	42	6.3	6.9	15.2	7.7	5.9	7.3	14.1	6.7	5.5	7.8	13.1	5.8	5.3	8.0	12.6	5.4	5.0	8.2	12.1	4.9
	5.6	22.2	6.9	1.0	22.9	20.7	7.3	0.9	20.0	19.2	7.8	0.8	17.3	18.5	8.0	0.8	16.0	17.0	7.7	0.8	14.8
	44	6.6	7.0	15.8	8.3	6.2	7.5	14.8	7.3	5.7	7.9	13.7	6.3	5.5	8.2	13.2	5.9	5.3	8.4	12.7	5.4
	6.7	23.2	7.0	1.0	24.8	21.7	7.5	0.9	21.8	20.1	7.9	0.9	18.9	19.3	8.2	0.8	17.5	18.6	8.4	0.8	16.2
	45	6.8	7.1	16.2	8.7	6.3	7.5	15.2	7.7	5.9	8.0	14.1	6.7	5.7	8.3	13.6	6.2	5.4	8.5	13.0	5.7
7.2	23.7	7.1	1.0	26.0	22.2	7.5	1.0	22.9	20.7	8.0	0.9	19.9	19.9	8.3	0.9	18.5	19.1	8.5	0.8	17.1	
48	7.3	7.3	17.5	10.1	6.9	7.8	16.5	9.0	6.4	8.4	15.4	7.9	6.2	8.6	14.8	7.3	5.9	8.9	14.3	6.8	
8.9	25.7	7.3	1.1	30.3	24.1	7.8	1.0	26.9	22.6	8.4	1.0	23.6	21.7	8.6	0.9	22.0	20.9	8.9	0.9	20.4	
5008 A 9.2	42	8.1	9.3	19.5	6.0	7.5	9.9	18.1	5.3	7.0	10.4	16.7	4.6	6.7	10.7	16.0	4.2	6.4	11.0	15.3	3.9
	5.6	28.5	9.3	1.2	17.9	26.5	9.9	1.1	15.8	24.5	10.4	1.1	13.7	23.5	10.7	1.0	12.6	22.5	11.0	1.0	11.7
	44	8.4	9.5	20.2	6.4	7.9	10.1	18.9	5.7	7.3	10.7	17.5	4.9	7.0	11.0	16.8	4.6	6.7	11.3	16.1	4.2
	6.7	29.6	9.5	1.3	19.2	27.6	10.1	1.2	17.0	25.6	10.7	1.1	14.8	24.6	11.0	1.1	13.7	23.5	11.3	1.0	12.7
	45	8.6	9.6	20.7	6.7	8.1	10.2	19.4	5.9	7.5	10.8	18.0	5.2	7.2	11.1	17.2	4.8	6.9	11.5	16.5	4.5
7.2	30.4	9.6	1.3	20.1	28.4	10.2	1.2	17.8	26.3	10.8	1.1	15.5	25.3	11.1	1.1	14.4	24.2	11.5	1.0	13.4	
48	9.2	9.9	22.1	7.5	8.6	10.6	20.7	6.7	8.0	11.2	19.2	5.9	7.7	11.6	18.5	5.5	7.4	11.9	17.7	5.1	
8.9	32.4	9.9	1.4	22.6	30.3	10.6	1.3	20.0	28.2	11.2	1.2	17.5	27.1	11.6	1.2	16.3	26.0	11.9	1.1	15.2	
5009 A 11.5	42	9.6	8.8	23.1	6.3	9.1	9.5	21.8	5.7	8.5	10.2	20.4	5.1	8.2	10.5	19.7	4.8	7.9	10.9	19.1	4.5
	5.6	33.8	8.8	1.5	18.9	31.9	9.5	1.4	17.0	29.9	10.2	1.3	15.1	28.9	10.5	1.2	14.2	27.9	10.9	1.2	13.4
	44	10.0	8.9	23.9	6.7	9.4	9.7	22.6	6.1	8.9	10.4	21.2	5.4	8.6	10.8	20.6	5.1	8.3	11.1	19.9	4.8
	6.7	35.1	8.9	1.5	20.2	33.1	9.7	1.4	18.2	31.1	10.4	1.3	16.3	30.1	10.8	1.3	15.3	29.1	11.1	1.3	14.4
	45	10.2	9.0	24.5	7.0	9.6	9.8	23.1	6.3	9.1	10.5	21.8	5.7	8.8	10.9	21.1	5.4	8.5	11.3	20.4	5.0
7.2	35.8	9.0	1.5	21.0	33.9	9.8	1.5	18.9	31.9	10.5	1.4	17.0	30.9	10.9	1.3	16.0	29.8	11.3	1.3	15.1	
48	10.8	9.3	26.0	7.8	10.3	10.1	24.6	7.1	9.7	10.9	23.2	6.4	9.4	11.3	22.5	6.0	9.1	11.7	21.8	5.7	
8.9	38.1	9.3	1.6	23.4	36.1	10.1	1.6	21.2	34.0	10.9	1.5	19.0	32.9	11.3	1.4	18.0	31.9	11.7	1.4	17.0	
5012 A 11.7	42	13.0	12.1	31.1	6.7	12.3	13.0	29.4	6.0	11.6	14.0	27.7	5.3	11.2	14.4	26.9	4.9	10.8	14.9	26.0	4.5
	5.6	45.6	12.1	2.0	19.9	43.2	13.0	1.9	17.9	40.7	14.0	1.8	15.9	39.4	14.4	1.7	14.8	38.1	14.9	1.6	13.6
	44	13.5	12.3	32.3	7.1	12.7	13.3	30.6	6.4	12.0	14.2	28.8	5.7	11.6	14.7	27.9	5.4	11.3	15.3	27.0	5.0
	6.7	47.3	12.3	2.0	21.2	44.8	13.3	1.9	19.2	42.2	14.2	1.8	17.2	40.9	14.7	1.8	16.1	39.6	15.3	1.7	14.9
	45	13.8	12.4	33.1	7.4	13.0	13.4	31.3	6.7	12.3	14.4	29.5	6.0	11.9	14.9	28.6	5.7	11.5	15.5	27.7	5.3
7.2	48.5	12.4	2.1	22.1	45.9	13.4	2.0	20.1	43.3	14.4	1.9	18.0	41.9	14.9	1.8	16.9	40.6	15.5	1.7	15.8	
48	14.9	12.9	35.9	8.5	14.2	13.9	34.0	7.7	13.5	15.3	32.2	7.2	13.1	15.8	31.6	6.9	11.8	16.1	30.7	6.5	
8.9	52.6	12.9	2.3	25.4	49.8	13.9	2.1	23.1	47.5	15.3	2.0	21.0	46.0	15.8	1.9	19.9	45.1	16.1	1.9	19.4	
5017 A 11.0	42	18.1	17.1	43.5	12.5	17.1	18.4	41.1	11.0	16.1	19.7	38.7	9.7	15.6	20.4	37.5	9.2	15.1	21.0	36.2	8.6
	5.6	63.8	17.1	2.7	37.2	60.2	18.4	2.6	32.9	56.7	19.7	2.4	29.1	54.9	20.4	2.4	27.4	53.1	21.0	2.3	25.9
	44	18.6	17.3	44.7	13.3	17.6	18.7	42.4	11.7	16.6	20.0	39.9	10.4	16.1	20.7	38.7	9.7	15.6	21.4	37.5	9.2
	6.7	65.6	17.3	2.8	39.8	62.1	18.7	2.7	35.0	58.5	20.0	2.5	31.0	56.7	20.7	2.4	29.1	54.9	21.4	2.4	27.4
	45	19.0	17.5	45.5	13.9	18.0	18.9	43.1	12.2	17.0	20.2	40.7	10.8	16.5	20.9	39.5	10.1	16.0	21.6	38.3	9.5
7.2	66.7	17.5	2.9	41.6	63.2	18.9	2.7	36.5	59.7	20.2	2.6	32.2	57.9	20.9	2.5	30.3	56.1	21.6	2.4	28.5	
48	20.2	18.1	48.6	16.6	19.3	19.5	46.2	14.5	18.2	21.0	43.8	12.6	17.7	21.7	42.5	11.8	17.2	22.5	41.3	11.1	
8.9	71.2	18.1	3.1	49.6	67.7	19.5	2.9	43.2	64.1	21.0	2.8	37.8	62.3	21.7	2.7	35.4	60.5	22.5	2.6	33.1	
5018 A 11.3	42	18.9	17.4	45.3	13.8	17.8	18.8	42.7	12.0	16.7	20.2	40.1	10.5	16.2	20.9	38.8	9.8	15.6	21.6	37.5	9.2
	5.6	66.4	17.4	2.9	41.1	62.6	18.8	2.7	35.8	58.8	20.2	2.5	31.3	56.9	20.9	2.4	29.3	54.9	21.6	2.4	27.4
	44	19.4	17.6	46.6	14.8	18.3	19.1	44.0	12.8	17.3	20.5	41.4	11.2	16.7	21.2	40.1	10.4	16.1	22.0	38.7	9.7
	6.7	68.3	17.6	2.9	44.3	64.5	19.1	2.8	38.3	60.7	20.5	2.6	33.4	58.7	21.2	2.5	31.2	56.7	22.0	2.4	29.1
	45	19.8	17.8	47.4	15.5	18.7	19.2	44.9	13.4	17.6	20.7	42.2	11.6	17.0	21.5	40.9	10.9	16.5	22.2	39.5	10.2
7.2	69.5	17.8	3.0	46.4	65.7	19.2	2.8	40.1	61.9	20.7	2.7	34.8	59.9	21.5	2.6	32.5	57.9	22.2	2.5	30.4	
48	21.1	18.3	50.6	18.7	20.0	19.9	48.0	16.1	18.9	21.5	45.4	13.8	18.4	22.3	44.0	12.8	17.8	23.2	42.7	11.9	
8.9	74.2	18.3	3.2	56.0	70.4	19.9	3.0	48.0	66.5	21.5	2.9	41.3	64.5	22.3	2.8	38.3	62.6	23.2	2.7	35.7	
5022 A 11.9	42	22.7	20.4	54.5	8.8	21.4	22.0	51.4	7.9	20.2	23.7	48.4	7.0	19.5	24.5	46.8	6.6	18.8	25.3	45.2	6.1
	5.6	79.8	20.4	3.4	26.4	75.3	22.0	3.2	23.6	70.9	23.7	3.1	20.9	68.6	24.5	3.0	19.6	66.3	25.3	2.9	18.3
	44	23.6	20.7	56.6	9.5	22.3	22.4	53.5	8.5	21.0	24.1	50.4	7.6	20.4	25.0	48.9	7.1	19.7	25.9	47.3	6.7
	6.7	83.0	20.7	3.6	28.5	78.5	22.4	3.4	25.5	73.9	24.1	3.2	22.7	71.6	25.0	3.1	21.3	69.2	25.9	3.0	20.0
	45	24.1	20.9	57.9	10.0	22.9	22.7	54.9	9.0	21.5	24.4	51.7	8.0	20.9	25.3	50.1	7.5	20.2	26.3	48.5	7.0

# SKM Air Cooled Packaged Chillers APCD Series - R22

## CAPACITY RATINGS - 50 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
5032 A 11.7	42	31.4	28.3	75.3	6.7	29.7	30.6	71.2	5.9	27.9	32.8	67.1	5.3	27.1	33.9	65.0	4.9	26.2	35.1	62.9	4.6
	5.6	110.4	28.3	4.8	20.0	104.3	30.6	4.5	17.8	98.3	32.8	4.2	15.7	95.2	33.9	4.1	14.7	92.1	35.1	4.0	13.8
	44	32.5	28.8	78.0	7.2	30.7	31.1	73.7	6.4	29.0	33.4	69.5	5.7	28.1	34.5	67.4	5.3	27.2	35.7	65.2	5.0
	6.7	114.3	28.8	4.9	21.5	108.1	31.1	4.7	19.1	101.9	33.4	4.4	16.9	98.7	34.5	4.2	15.9	95.5	35.7	4.1	14.8
	45	33.1	29.0	79.6	7.5	31.4	31.4	75.3	6.7	29.6	33.7	71.0	5.9	28.7	34.9	68.8	5.5	27.8	36.1	66.6	5.2
7.2	116.6	29.0	5.0	22.4	110.3	31.4	4.7	20.0	104.0	33.7	4.5	17.7	100.8	34.9	4.3	16.6	97.6	36.1	4.2	15.5	
48	36.1	30.1	86.7	8.9	34.2	32.6	82.2	8.0	32.4	35.1	77.7	7.1	31.4	36.4	75.4	6.7	30.4	37.8	73.1	6.3	
8.9	127.0	30.1	5.5	26.7	120.5	32.6	5.2	24.0	113.8	35.1	4.9	21.3	110.4	36.4	4.8	20.0	107.1	37.8	4.6	18.8	
5034 A 11.3	42	35.8	34.2	85.8	8.8	33.8	36.8	81.0	7.8	31.8	39.3	76.2	6.8	30.7	40.6	73.8	6.4	29.7	42.0	71.3	6.0
	5.6	125.8	34.2	5.4	26.2	118.8	36.8	5.1	23.3	111.7	39.3	4.8	20.5	108.1	40.6	4.7	19.1	104.5	42.0	4.5	17.8
	44	36.9	34.7	88.7	9.3	34.9	37.4	83.8	8.3	32.9	40.0	78.9	7.4	31.8	41.4	76.4	6.9	30.8	42.7	73.9	6.4
	6.7	129.9	34.7	5.6	27.9	122.8	37.4	5.3	24.9	115.6	40.0	5.0	22.0	112.0	41.4	4.8	20.6	108.3	42.7	4.7	19.2
	45	37.6	35.1	90.3	9.7	35.6	37.8	85.4	8.7	33.5	40.4	80.5	7.7	32.5	41.8	78.0	7.2	31.4	43.2	75.4	6.7
7.2	132.4	35.1	5.7	29.0	125.2	37.8	5.4	25.9	117.9	40.4	5.1	22.9	114.2	41.8	4.9	21.5	110.5	43.2	4.8	20.0	
48	40.7	36.4	97.6	11.3	38.6	39.3	92.6	10.2	36.5	42.2	87.5	9.1	35.4	43.7	84.9	8.6	34.3	45.3	82.3	8.0	
8.9	143.1	36.4	6.2	33.7	135.7	39.3	5.8	30.5	128.3	42.2	5.5	27.2	124.5	43.7	5.4	25.6	120.6	45.3	5.2	24.0	
5035 A 10.8	42	36.2	36.4	87.0	9.0	34.2	39.2	82.2	8.0	32.3	41.9	77.4	7.1	31.2	43.3	75.0	6.6	30.2	44.7	72.5	6.2
	5.6	127.4	36.4	5.5	26.9	120.4	39.2	5.2	23.9	113.4	41.9	4.9	21.1	109.9	43.3	4.7	19.8	106.2	44.7	4.6	18.5
	44	37.5	37.0	90.0	9.6	35.5	39.8	85.1	8.6	33.4	42.6	80.2	7.6	32.4	44.1	77.7	7.1	31.3	45.6	75.2	6.7
	6.7	131.8	37.0	5.7	28.8	124.7	39.8	5.4	25.7	117.6	42.6	5.1	22.8	113.9	44.1	4.9	21.3	110.2	45.6	4.7	19.9
	45	38.2	37.3	91.7	10.0	36.2	40.2	86.8	9.0	34.1	43.1	81.9	8.0	33.1	44.6	79.4	7.5	32.0	46.1	76.8	7.0
7.2	134.4	37.3	5.8	29.9	127.2	40.2	5.5	26.8	120.0	43.1	5.2	23.8	116.3	44.6	5.0	22.3	112.6	46.1	4.8	20.8	
48	41.4	38.7	99.4	11.7	39.3	41.8	94.4	10.6	37.2	44.9	89.4	9.5	36.2	46.6	86.8	8.9	35.0	48.2	84.1	8.4	
8.9	145.6	38.7	6.3	34.9	138.3	41.8	6.0	31.6	131.0	44.9	5.6	28.4	127.1	46.6	5.5	26.7	123.2	48.2	5.3	25.1	
5039 A 10.5	42	41.3	43.2	99.0	12.0	38.9	46.2	93.3	10.8	36.5	49.2	87.5	9.5	35.3	50.8	84.7	8.9	34.1	52.4	81.8	8.3
	5.6	145.1	43.2	6.2	36.0	136.8	46.2	5.9	32.2	128.2	49.2	5.5	28.4	124.1	50.8	5.3	26.5	119.9	52.4	5.2	24.7
	44	42.5	43.9	102.1	12.7	40.2	47.0	96.3	11.4	37.7	50.2	90.5	10.1	36.5	51.7	87.5	9.5	35.3	53.5	84.7	8.9
	6.7	149.6	43.9	6.4	38.1	141.3	47.0	6.1	34.2	132.7	50.2	5.7	30.3	128.2	51.7	5.5	28.4	124.1	53.5	5.3	26.5
	45	43.3	44.3	103.9	13.1	40.9	47.4	98.1	11.8	38.4	50.7	92.2	10.5	37.1	52.3	89.2	9.9	36.0	54.1	86.2	9.2
7.2	152.3	44.3	6.6	39.2	143.7	47.4	6.2	35.3	135.1	50.7	5.8	31.4	130.6	52.3	5.6	29.5	126.5	54.1	5.4	27.6	
48	46.4	46.1	111.3	14.8	43.9	49.4	105.4	13.5	41.5	52.9	99.6	12.2	40.2	54.8	96.5	11.5	39.0	56.7	93.6	10.8	
8.9	163.0	46.1	7.0	44.2	154.4	49.4	6.7	40.3	145.8	52.9	6.3	36.3	141.3	54.8	6.1	34.3	137.2	56.7	5.9	32.4	
5040 A 10.1	42	41.4	45.3	99.3	11.6	39.1	48.4	93.9	10.5	36.8	51.5	88.4	9.3	35.7	53.1	85.6	8.7	34.5	54.8	82.7	8.1
	5.6	145.4	45.3	6.3	34.8	137.6	48.4	5.9	31.3	129.6	51.5	5.6	27.8	125.4	53.1	5.4	26.0	121.2	54.8	5.2	24.3
	44	42.7	46.1	102.5	12.4	40.4	49.3	97.0	11.2	38.1	52.5	91.4	9.9	36.9	54.2	88.5	9.3	35.6	55.9	85.5	8.7
	6.7	150.2	46.1	6.5	37.0	142.2	49.3	6.1	33.3	134.0	52.5	5.8	29.7	129.7	54.2	5.6	27.9	125.4	55.9	5.4	26.0
	45	43.5	46.5	104.4	12.8	41.2	49.8	98.8	11.3	38.8	53.1	93.1	10.3	37.6	54.8	90.2	9.7	36.3	56.5	87.2	9.0
7.2	152.9	46.5	6.6	38.2	144.8	49.8	6.2	34.5	136.5	53.1	5.9	30.8	132.2	54.8	5.7	28.9	127.8	56.5	5.5	27.0	
48	46.8	48.4	112.2	14.5	44.4	51.9	106.6	13.3	42.0	55.5	100.7	12.0	40.7	57.4	97.6	11.3	39.4	59.3	94.5	10.6	
8.9	164.5	48.4	7.1	43.3	156.1	51.9	6.7	39.6	147.6	55.5	6.4	35.8	143.1	57.4	6.2	33.7	138.5	59.3	6.0	31.7	
5040 A 10.1	42	51.1	53.3	122.8	12.1	48.2	57.0	115.6	10.7	45.1	60.7	108.3	9.4	43.6	62.6	104.7	8.8	42.1	64.6	101.1	8.3
	5.6	179.9	53.3	7.7	36.1	169.4	57.0	7.3	32.0	158.7	60.7	6.8	28.2	153.4	62.6	6.6	26.4	148.2	64.6	6.4	24.7
	44	52.8	54.2	126.8	12.8	49.8	58.0	119.5	11.4	46.7	61.8	112.2	10.1	45.2	63.9	108.5	9.5	43.7	66.0	104.9	8.9
	6.7	185.8	54.2	8.0	38.4	175.1	58.0	7.5	34.2	164.4	61.8	7.1	30.2	159.0	63.9	6.8	28.3	153.7	66.0	6.6	26.5
	45	53.9	54.8	129.3	13.4	50.8	58.6	122.0	11.9	47.8	62.6	114.6	10.5	46.2	64.7	111.0	9.9	44.7	66.9	107.4	9.3
7.2	189.4	54.8	8.2	39.9	178.8	58.6	7.7	35.6	168.0	62.6	7.2	31.5	162.6	64.7	7.0	29.6	157.3	66.9	6.8	27.7	
48	56.1	56.0	134.7	14.5	53.0	60.0	127.2	12.9	49.9	64.1	119.7	11.5	48.3	66.3	115.9	10.8	46.7	68.7	112.2	10.1	
8.9	197.5	56.0	8.5	43.3	186.4	60.0	8.0	38.7	175.3	64.1	7.5	34.3	169.8	66.3	7.3	32.2	164.4	68.7	7.1	30.2	
5065 A 10.5	42	62.8	64.4	150.6	7.6	58.9	68.6	141.3	6.7	55.0	72.8	131.9	5.8	53.0	74.9	127.2	5.4	51.0	77.2	122.4	5.0
	5.6	220.7	64.4	9.5	22.6	207.1	68.6	8.9	19.9	193.3	72.8	8.3	17.5	186.4	74.9	8.0	16.3	179.4	77.2	7.7	15.1
	44	64.9	65.5	155.8	8.1	61.0	69.9	146.4	7.1	57.0	74.3	136.9	6.3	55.0	76.5	132.1	5.9	53.0	78.9	127.3	5.4
	6.7	228.3	65.5	9.8	24.1	214.5	69.9	9.2	21.4	200.6	74.3	8.6	18.8	193.6	76.5	8.3	17.5	186.5	78.9	8.0	16.3
	45	66.3	66.2	159.2	8.4	62.4	70.7	149.8	7.5	58.4	75.2	140.3	6.6	56.4	77.6	135.4	6.1	54.4	80.1	130.6	5.7
7.2	233.3	66.2	10.0	25.2	219.5	70.7															

# SKM Air Cooled Packaged Chillers APCD Series - R22

## CAPACITY RATINGS - 50 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
5095 B 10.6	42	94.9	98.1	227.7	14.6	89.1	104.5	214.0	12.9	83.3	110.9	200.0	11.2	80.4	114.3	192.9	10.4	77.4	117.9	185.8	9.5
	5.6	333.7	98.1	14.4	43.7	313.5	104.5	13.5	38.5	293.1	110.9	12.6	33.4	282.7	114.3	12.2	30.9	272.3	117.9	11.7	28.5
	44	98.4	99.9	236.2	15.7	92.6	106.6	222.2	13.9	86.6	113.4	207.9	12.1	83.6	116.9	200.7	11.3	80.6	120.6	193.4	10.4
	6.7	346.2	99.9	14.9	47.0	325.6	106.6	14.0	41.5	304.7	113.4	13.1	36.3	294.1	116.9	12.7	33.7	283.4	120.6	12.2	31.1
	7.2	352.8	100.9	15.2	48.8	332.0	107.7	14.3	43.2	310.9	114.6	13.4	37.8	300.2	118.3	12.9	35.2	289.4	122.1	12.5	32.5
5100 B 10.7	48	107.7	104.6	258.6	18.8	101.7	112.1	244.0	16.8	95.5	119.7	229.2	14.8	92.4	123.7	221.7	13.8	89.2	128.0	214.1	12.9
	8.9	379.0	104.6	16.3	56.1	357.6	112.1	15.4	50.1	335.9	119.7	14.5	44.2	324.9	123.7	14.0	41.4	313.8	128.0	13.5	38.5
	42	99.8	102.4	239.5	16.2	94.0	109.5	225.7	14.3	88.2	116.6	211.7	12.6	85.2	120.3	204.5	11.7	82.2	124.1	197.3	10.9
	5.6	351.0	102.4	15.1	48.3	330.7	109.5	14.2	42.9	310.2	116.6	13.4	37.6	299.7	120.3	12.9	35.0	289.2	124.1	12.4	32.5
	44	103.5	104.3	248.4	17.4	97.6	111.6	234.3	15.5	91.7	119.0	220.0	13.6	88.6	122.9	212.8	12.7	85.6	126.9	205.4	11.8
5105 B 10.8	6.7	364.1	104.3	15.7	51.9	343.4	111.6	14.8	46.2	322.4	119.0	13.9	40.7	311.8	122.9	13.4	38.0	300.9	126.9	13.0	35.3
	45	105.5	105.2	253.2	18.0	99.6	112.7	238.9	16.2	93.5	120.3	224.5	14.2	90.5	124.3	217.2	13.3	87.4	128.4	209.7	12.3
	7.2	371.0	105.2	16.0	53.9	350.1	112.7	15.1	48.1	329.0	120.3	14.2	42.4	318.2	124.3	13.7	39.7	307.3	128.4	13.2	36.9
	48	113.2	108.9	271.6	20.7	107.1	117.0	257.1	18.6	101.0	125.3	242.3	16.5	97.8	129.7	234.7	15.5	94.6	134.2	227.0	14.5
	8.9	398.1	108.9	17.1	61.8	376.8	117.0	16.2	55.5	355.1	125.3	15.3	49.4	344.0	129.7	14.8	46.4	332.7	134.2	14.3	43.4
5110 B 10.9	42	104.6	106.7	251.1	17.7	98.8	114.5	237.1	15.8	92.9	122.2	223.1	14.0	90.0	126.2	215.9	13.1	86.9	130.4	208.6	12.2
	5.6	368.0	106.7	15.8	53.0	347.5	114.5	15.0	47.4	326.9	122.2	14.1	41.9	316.4	126.2	13.6	39.2	305.7	130.4	13.2	36.5
	44	108.5	108.6	260.4	19.0	102.6	116.6	246.2	17.1	96.6	124.7	231.9	15.1	93.6	128.9	224.6	14.2	90.4	133.2	217.1	13.3
	6.7	381.6	108.6	16.4	56.9	360.8	116.6	15.5	51.0	339.8	124.7	14.6	45.3	329.1	128.9	14.2	42.5	318.1	133.2	13.7	39.6
	45	110.6	109.6	265.3	19.7	104.6	117.7	251.1	17.7	98.6	126.0	236.6	15.8	95.5	130.3	229.4	14.8	92.3	134.7	221.6	13.8
5115 B 10.6	7.2	388.8	109.6	16.7	59.0	367.9	117.7	15.8	53.0	346.7	126.0	14.9	47.1	335.9	130.3	14.5	44.2	324.8	134.7	14.0	41.3
	48	118.5	113.3	284.3	22.6	112.4	122.0	269.8	20.4	106.3	131.0	255.0	18.3	103.1	135.7	247.4	17.2	99.8	140.5	239.6	16.2
	8.9	416.7	113.3	17.9	67.5	395.4	122.0	17.0	61.0	373.8	131.0	16.1	54.7	362.6	135.7	15.6	51.5	351.1	140.5	15.1	48.3
	42	109.3	111.1	262.4	19.3	103.5	119.4	248.4	17.4	97.6	127.9	234.3	15.5	94.6	132.2	227.1	14.5	91.5	136.6	219.7	13.6
	5.6	384.6	111.1	16.6	57.8	364.0	119.4	15.7	51.9	343.3	127.9	14.8	46.2	332.7	132.2	14.3	43.4	321.9	136.6	13.9	40.6
5120 B 10.3	44	113.4	113.0	272.1	20.7	107.4	121.6	257.9	18.7	101.5	130.4	243.5	16.7	98.4	134.9	236.1	15.7	95.2	139.5	228.6	14.7
	6.7	398.7	113.0	17.2	62.0	377.9	121.6	16.3	55.8	356.8	130.4	15.4	49.9	346.1	134.9	14.9	47.0	334.9	139.5	14.4	44.0
	45	115.5	114.0	277.2	21.5	109.5	122.8	262.9	19.4	103.5	131.7	248.4	17.4	100.4	136.3	241.0	16.4	97.2	141.0	233.3	15.3
	7.2	406.3	114.0	17.5	64.3	385.3	122.8	16.6	58.0	364.0	131.7	15.7	51.9	353.2	136.3	15.2	48.9	341.9	141.0	14.7	45.8
	48	123.6	117.6	296.7	24.5	117.6	127.0	282.3	22.3	111.5	136.7	267.5	20.1	108.3	141.7	259.8	19.0	105.0	146.8	251.9	17.8
5125 B 10.1	8.9	434.8	117.6	18.7	73.2	413.6	127.0	17.8	66.5	392.0	136.7	16.9	60.0	380.8	141.7	16.4	56.7	369.1	146.8	15.9	53.3
	42	114.5	120.1	274.7	21.1	108.4	128.8	260.0	19.0	102.2	137.6	245.2	16.9	99.0	142.2	237.6	15.9	95.8	146.8	229.8	14.9
	5.6	402.5	120.1	17.3	63.1	381.1	128.8	16.4	56.8	359.4	137.6	15.5	50.6	348.2	142.2	15.0	47.5	336.8	146.8	14.5	44.5
	44	118.6	122.2	284.6	22.6	112.4	131.2	269.2	20.4	106.1	140.4	254.6	18.2	102.9	145.1	246.8	17.1	99.5	150.0	238.8	16.1
	6.7	417.0	122.2	18.0	67.6	395.2	131.2	17.0	60.9	373.1	140.4	16.1	54.5	361.7	145.1	15.6	51.3	350.0	150.0	15.1	48.0
5130 B 10.3	45	120.8	123.3	289.8	23.4	114.5	132.5	274.8	21.1	108.2	141.8	259.6	18.9	104.9	146.7	251.7	17.8	101.5	151.6	243.6	16.7
	7.2	424.7	123.3	18.3	70.0	402.8	132.5	17.3	63.2	380.4	141.8	16.4	56.6	368.9	146.7	15.9	53.3	357.0	151.6	15.4	50.0
	48	128.9	127.5	309.4	26.6	122.6	137.3	294.3	24.1	116.1	147.3	278.7	21.7	112.8	152.6	270.6	20.5	109.3	158.0	262.2	19.3
	8.9	453.4	127.5	19.5	79.4	431.2	137.3	18.6	72.1	408.4	147.3	17.6	64.9	396.6	152.6	17.1	61.3	384.3	158.0	16.5	57.7
	42	119.4	129.0	286.5	22.9	113.0	138.1	271.3	20.6	106.6	147.4	255.8	18.4	103.3	152.1	247.9	17.1	99.8	157.0	239.6	16.2
5135 B 10.5	5.6	419.9	129.0	18.1	68.5	397.6	138.1	17.1	61.6	374.9	147.4	16.1	55.0	363.2	152.1	15.6	51.7	351.2	157.0	15.1	48.3
	44	123.6	131.4	296.7	24.5	117.1	140.8	281.2	22.1	110.6	150.4	265.3	19.7	107.2	155.3	257.2	18.6	103.6	160.4	248.7	17.4
	6.7	434.7	131.4	18.7	73.2	412.0	140.8	17.7	66.0	388.8	150.4	16.7	59.0	376.9	155.3	16.2	55.5	364.5	160.4	15.7	52.0
	45	125.8	132.7	302.0	25.3	119.3	142.2	286.4	22.9	112.7	152.0	270.4	20.5	109.2	157.1	262.1	19.3	105.7	162.3	253.6	18.1
	7.2	442.5	132.7	19.1	75.8	419.7	142.2	18.1	68.4	396.2	152.0	17.1	61.2	384.1	157.1	16.5	57.6	371.6	162.3	16.0	54.0
5140 B 10.7	48	134.0	137.2	321.7	28.6	127.4	147.5	305.8	26.0	120.6	158.0	289.5	23.4	117.1	163.5	281.0	22.1	113.4	169.2	272.3	20.8
	8.9	471.4	137.2	20.3	85.5	448.2	147.5	19.3	77.6	424.3	158.0	18.3	69.9	411.8	163.5	17.7	66.0	399.0	169.2	17.2	62.0
	42	124.2	138.0	298.0	24.7	117.6	147.5	282.2	22.3	110.9	157.1	266.1	19.9	107.4	162.1	257.6	18.6	103.8	167.2	249.1	17.5
	5.6	436.7	138.0	18.8	73.9	413.6	147.5	17.8	66.5	389.9	157.1	16.8	59.4	377.6	162.1	16.3	55.7	365.0	167.2	15.7	52.2
	44	128.5	140.7	308.3	26.4	121.8	150.4	292.3	23.8	114.9	160.4	275.7	21.3	111.3	165.6	267.2	20.0	107.6	170.9	258.3	18.7
5145 B 10.9	6.7	451																			

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 50 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
EER	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
5155 B 10.6	42	149.9	154.6	359.8	18.1	142.0	166.1	340.7	16.3	133.9	177.6	321.5	14.6	129.9	183.6	311.7	13.7	125.7	189.6	301.6	12.9
	5.6	527.3	154.6	22.7	54.2	499.3	166.1	21.5	48.7	471.1	177.6	20.3	43.5	456.7	183.6	19.7	41.0	441.9	189.6	19.0	38.5
	44	155.3	157.3	372.7	19.4	147.2	169.1	353.3	17.5	139.0	181.0	333.7	15.7	134.9	187.2	323.6	14.8	130.5	193.5	313.3	13.9
	6.7	546.2	157.3	23.5	58.0	517.7	169.1	22.3	52.3	489.0	181.0	21.1	46.8	474.3	187.2	20.4	44.1	459.1	193.5	19.8	41.4
	45	158.0	158.6	379.3	20.1	149.9	170.6	359.7	18.1	141.6	182.7	339.9	16.2	137.4	189.0	329.7	15.3	133.0	195.4	319.2	14.4
5160 B 10.4	42	167.9	163.2	402.9	22.6	159.6	176.0	383.1	20.5	151.2	189.0	362.9	18.4	146.8	195.7	352.4	17.4	142.3	202.6	341.6	16.4
	5.6	544.8	163.2	25.4	67.5	561.4	176.0	24.2	61.2	531.8	189.0	22.9	55.1	516.5	195.7	22.2	52.0	500.6	202.6	21.6	49.0
	44	154.9	163.4	371.8	19.3	146.7	175.2	352.1	17.4	138.4	187.2	332.3	15.5	134.2	193.3	322.1	14.6	129.8	199.6	311.6	13.7
	6.7	544.8	163.4	23.5	57.7	516.0	175.2	22.2	51.9	486.9	187.2	21.0	46.4	471.9	193.3	20.3	43.7	456.6	199.6	19.7	41.0
	44	160.4	166.3	384.9	20.7	152.1	178.5	364.9	18.6	143.6	190.8	344.6	16.7	139.2	197.2	334.2	15.7	134.8	203.7	323.4	14.7
5165 B 10.3	42	165.4	175.3	396.9	21.9	156.8	187.8	376.3	19.8	148.0	200.6	355.3	17.7	143.5	207.2	344.5	16.7	138.9	213.9	333.3	15.6
	5.6	581.6	175.3	25.0	65.5	551.4	187.8	23.7	59.1	520.7	200.6	22.4	52.9	504.8	207.2	21.7	49.8	488.5	213.9	21.0	46.7
	44	178.2	182.3	427.6	25.4	169.4	195.8	406.5	23.0	160.3	209.7	384.8	20.6	155.6	216.9	373.5	19.5	150.8	224.4	361.8	18.3
	6.7	626.6	182.3	27.0	75.8	595.6	195.8	25.6	68.7	563.9	209.7	24.3	61.7	547.3	216.9	23.6	58.2	530.3	224.4	22.8	54.8
	42	164.5	180.9	394.9	21.7	155.9	193.4	374.2	19.6	147.1	206.2	353.1	17.5	142.6	212.7	342.1	16.4	137.9	219.4	330.9	15.4
5170 B 10.1	42	170.2	184.3	408.5	23.2	161.4	197.2	387.3	20.9	152.4	210.4	365.7	18.7	147.7	217.2	354.5	17.6	142.9	224.2	343.0	16.5
	5.6	598.6	184.3	25.8	69.3	567.6	197.2	24.4	62.5	535.9	210.4	23.1	55.9	519.5	217.2	22.4	52.6	502.6	224.2	21.6	49.3
	44	173.1	186.0	415.4	24.0	164.2	199.1	394.0	21.6	155.1	212.5	372.1	19.3	150.3	219.4	360.8	18.2	145.4	226.5	349.0	17.1
	6.7	608.7	186.0	26.2	71.6	577.4	199.1	24.9	64.6	545.3	212.5	23.5	57.8	528.7	219.4	22.8	54.5	511.5	226.5	22.0	51.1
	42	183.1	191.8	439.4	26.7	174.0	205.7	417.7	24.2	164.7	220.0	395.3	21.8	159.8	227.5	383.6	20.5	154.8	235.2	371.4	19.3
5180 B 10.8	42	177.0	173.3	424.8	13.2	166.6	185.5	399.9	11.7	156.1	197.5	374.6	10.4	150.8	203.7	361.8	9.7	145.4	210.1	349.1	9.0
	5.6	622.6	173.3	26.8	39.4	586.0	185.5	25.2	35.1	548.9	197.5	23.6	30.9	530.3	203.7	22.8	29.9	511.5	210.1	22.0	27.0
	44	183.4	176.1	440.1	14.1	172.8	188.8	414.7	12.6	162.0	201.3	388.9	11.1	156.6	207.8	375.9	10.4	151.2	214.5	362.8	9.7
	6.7	644.9	176.1	27.8	42.2	607.7	188.8	26.2	37.6	569.8	201.3	24.5	33.3	550.8	207.8	23.7	31.1	531.7	214.5	22.9	29.1
	45	186.8	177.6	448.2	14.6	176.1	190.5	422.6	13.1	165.2	203.3	396.5	11.6	159.7	209.9	383.3	10.8	154.2	216.8	370.2	10.1
5190 B 10.4	42	199.1	183.0	477.9	16.5	188.2	196.8	451.6	14.8	177.0	210.6	424.9	13.2	171.4	217.8	411.4	12.4	165.8	225.4	397.9	11.6
	5.6	700.3	183.0	30.2	49.4	661.8	196.8	28.5	44.3	622.6	210.6	26.8	39.4	602.9	217.8	26.0	37.1	583.1	225.4	25.1	34.8
	44	186.7	192.5	448.0	14.6	175.4	205.2	421.0	13.0	164.0	217.7	393.6	11.4	158.3	224.3	379.9	10.6	152.5	231.2	366.0	9.9
	6.7	656.5	192.5	28.3	43.7	616.9	205.2	26.6	38.7	576.7	217.7	24.8	34.0	556.7	224.3	24.0	31.8	536.3	231.2	23.1	29.6
	44	193.2	195.8	463.8	15.6	181.8	208.9	436.3	13.9	170.2	222.1	408.5	12.2	164.3	229.0	394.4	11.4	158.4	236.2	380.2	10.7
5200 B 10.5	42	203.1	204.2	487.4	17.2	191.6	218.6	459.8	15.4	180.0	233.1	431.9	13.6	174.1	240.6	417.8	12.4	168.1	248.5	403.4	11.9
	5.6	714.3	204.2	30.8	51.3	673.8	218.6	29.0	45.9	633.0	233.1	27.3	40.7	612.2	240.6	26.4	38.2	591.1	248.5	25.5	35.7
	44	206.8	205.9	496.2	17.8	195.2	220.6	468.4	15.9	183.4	235.5	440.2	14.1	177.5	243.1	425.9	13.3	171.4	251.1	411.4	12.4
	6.7	727.1	205.9	31.3	53.1	686.4	220.6	29.5	47.5	645.1	235.5	27.8	42.2	624.2	243.1	26.9	39.6	602.9	251.1	26.0	37.1
	44	219.9	212.1	527.8	20.0	208.1	227.8	499.5	18.0	196.1	243.8	470.6	16.1	190.0	252.2	456.0	15.1	183.7	260.9	441.0	14.2
5210 B 10.7	42	205.5	209.2	493.2	17.6	194.1	224.4	465.9	15.7	182.7	239.7	438.4	14.0	176.9	247.5	424.5	13.2	170.9	255.6	410.3	12.3
	5.6	722.7	209.2	31.1	52.5	682.7	224.4	29.4	47.1	642.4	239.7	27.7	41.9	622.0	247.5	26.8	39.4	601.2	255.6	25.9	36.9
	44	212.7	212.6	510.5	18.8	201.2	228.3	482.8	16.9	189.5	244.2	454.9	15.0	183.6	252.3	440.6	14.2	177.6	260.7	426.1	13.3
	6.7	748.1	212.6	32.2	56.1	707.5	228.3	30.5	50.4	666.6	244.2	28.7	45.0	645.7	252.3	27.8	42.3	624.5	260.7	26.9	39.7
	45	216.5	214.3	519.7	19.4	204.9	230.3	491.7	17.5	193.2	246.5	463.6	15.6	187.2	254.8	449.2	14.7	181.1	263.4	434.6	13.8
5220 B 10.7	42	230.1	220.5	552.2	21.8	218.3	237.5	523.9	19.7	206.3	254.8	495.2	17.7	200.2	263.8	480.5	16.7	193.9	273.1	465.4	15.7
	5.6	809.3	220.5	34.8	65.2	767.8	237.5	33.1	58.9	725.7	254.8	31.2	52.9	704.1	263.8	30.3	49.9	682.0	273.1	29.4	47.0
	44	214.6	217.5	515.1	19.1	203.2	234.1	487.6	17.2	191.7	250.7	460.1	15.4	185.8	259.2	446.0	14.5	179.9	267.9	431.7	13.6
	6.7	748.1	217.5	32.5	57.0	714.5	234.1	30.8	51.4	674.2	250.7	29.0	45.9	653.6	259.2	28.1	43.3	632.7	267.9	27.2	40.7
	44	222.1	221.0	533.1	20.4	210.5	238.0	505.3	18.4	198.9	255.2	477.3	16.5	192.9	264.0	463.0	15.6	186.8	273.0	448.4	14.6
5230 B 10.5	42	224.6	234.9	539.1	20.8	212.7	252.1	510.5	18.8	200.7	269.5	481.7	16.8	194.6	278.4	467.0	15.8	188.3	287.5	451.9	14.9
	5.6	790.0	234.9	34.0	62.8	748.2	252.1	32.2	56.1	706.0	269.5	30.4	50.2	684.4	278.4	29.5	47.3	662.3	287.5	28.5	44.4
	44	232.4	238.8	557.7	22.2	220.3	256.6	528.6	20.1	208.1	274.5	499.3	18.0	201.8	283.8	484.3	17.0	195.4	293.2	468.9	15.9
	6.7	817.2	238.8	35.2	66.4	774.7	256.6	33.4	60.0	731.7	274.5	31.5	53.8	709.7	283.8	30.6	50.7	687.1	293.2	29.6	47.6
	45	236.4	240.8	567.4	23.0	224.2	258.9	538.2	20.8	211.9	277.2	508.6	18.6	205.6	286.6	493.4	17.6	199.1</			

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 50 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
5250 B 10.0	42	243.7	269.5	585.0	24.4	231.0	288.2	554.4	22.0	218.0	307.2	523.2	19.7	211.3	316.9	507.1	18.5	204.4	326.9	490.5	17.4
	5.6	857.3	269.5	36.9	72.8	812.4	288.2	35.0	65.7	766.7	307.2	33.0	58.8	743.1	316.9	32.0	55.4	718.7	326.9	30.9	51.9
	44	251.8	274.3	604.4	25.9	238.8	293.6	573.2	23.4	225.5	313.2	541.3	21.0	218.7	323.3	524.8	19.8	211.6	333.6	507.8	18.6
	6.7	885.7	274.3	38.1	77.5	839.9	293.6	36.2	70.0	793.3	313.2	34.2	62.7	769.1	323.3	33.1	59.1	744.1	333.6	32.0	55.5
	45	256.0	276.8	614.5	26.8	242.9	296.3	583.0	24.2	229.5	316.3	550.8	21.7	222.5	326.6	534.1	20.5	215.4	337.2	516.8	19.2
	7.2	900.4	276.8	38.8	80.0	854.3	296.3	36.8	72.3	807.2	316.3	34.7	64.9	782.7	326.6	33.7	61.1	757.4	337.2	32.6	57.4
5260 B 10.5	42	270.4	285.2	648.9	29.7	257.0	305.8	616.9	27.0	243.3	327.1	584.0	24.3	236.2	338.2	566.8	22.9	228.7	349.6	549.0	21.6
	8.9	950.8	285.2	40.9	88.8	904.0	305.8	38.9	80.6	855.8	327.1	36.8	72.6	830.6	338.2	35.8	68.5	804.5	349.6	34.6	64.4
	42	251.7	258.1	604.1	12.9	236.5	275.1	567.7	11.5	221.2	292.1	530.9	10.1	213.4	300.9	512.3	9.4	205.6	310.2	493.5	8.8
	5.6	885.2	258.1	38.1	38.6	831.9	275.1	35.8	34.2	778.0	292.1	33.5	30.1	750.7	300.9	32.3	28.1	723.2	310.2	31.1	26.2
	44	260.9	262.6	626.1	13.8	245.4	280.4	589.0	12.3	229.7	298.1	551.4	10.8	221.8	307.4	532.3	10.1	213.8	317.2	513.1	9.4
	6.7	917.5	262.6	39.5	41.4	863.1	280.4	37.2	36.8	808.0	298.1	34.8	32.4	780.1	307.4	33.6	30.3	751.9	317.2	32.4	28.2
5270 B 10.5	45	265.5	264.9	637.3	14.3	249.9	283.0	599.8	12.7	234.1	301.2	561.7	11.2	226.0	310.7	542.5	10.5	217.9	320.7	523.0	9.8
	7.2	933.9	264.9	40.2	42.8	878.9	283.0	37.8	38.1	823.2	301.2	35.4	33.6	795.0	310.7	34.2	31.4	766.5	320.7	33.0	29.3
	48	283.3	273.5	679.9	16.2	267.3	293.0	641.5	14.5	251.0	312.9	602.4	12.8	242.7	323.3	582.6	12.0	234.4	334.2	562.6	11.3
	8.9	996.4	273.5	42.9	48.5	940.1	293.0	40.5	43.3	882.7	312.9	38.0	38.4	853.7	323.3	36.8	36.0	824.4	334.2	35.5	33.6
	42	259.9	268.3	623.7	13.7	244.7	286.6	587.2	12.2	229.3	304.9	550.4	10.8	221.6	314.4	531.7	10.1	213.7	324.3	512.8	9.4
	5.6	914.0	268.3	39.4	41.0	860.6	286.6	37.0	36.5	806.6	304.9	34.7	32.3	779.2	314.4	33.5	30.2	751.5	324.3	32.4	28.2
5280 B 10.7	44	269.3	273.1	646.4	14.7	253.9	292.0	609.2	13.1	238.2	311.1	571.6	11.6	230.2	321.1	552.5	10.9	222.1	331.5	533.2	10.2
	6.7	947.3	273.1	40.8	44.0	892.8	292.0	38.4	39.2	837.7	311.1	36.1	34.7	809.7	321.1	34.9	32.5	781.3	331.5	33.6	30.4
	45	274.1	275.5	657.9	15.2	258.5	294.7	620.4	13.6	242.7	314.3	582.4	12.0	234.6	324.4	563.0	11.3	226.4	335.1	543.4	10.5
	7.2	964.1	275.5	41.5	45.5	909.1	294.7	39.1	40.6	853.4	314.3	36.7	36.0	825.1	324.4	35.5	33.7	796.4	335.1	34.3	31.5
	48	292.3	284.3	701.4	17.2	276.3	305.0	663.1	15.5	260.0	326.2	624.1	13.7	251.7	337.3	604.2	12.9	243.3	348.9	584.0	12.1
	8.9	1027.9	284.3	44.3	51.5	971.7	305.0	41.8	46.2	914.5	326.2	39.4	41.1	885.4	337.3	38.1	38.6	855.7	348.9	36.8	36.2
5290 B 10.9	42	271.0	274.8	650.3	14.9	255.7	294.5	613.6	13.3	240.3	314.1	576.6	11.8	232.4	324.2	557.8	11.1	224.5	334.7	538.7	10.4
	5.6	953.0	274.8	41.0	44.5	899.2	294.5	38.7	39.8	845.0	314.1	36.4	35.3	817.4	324.2	35.2	33.2	789.5	334.7	34.0	31.0
	44	280.9	279.5	674.1	16.0	265.3	299.8	636.7	14.3	249.6	320.3	598.9	12.7	241.6	330.8	579.8	11.9	233.4	341.8	560.2	11.2
	6.7	987.8	279.5	42.5	47.7	933.0	299.8	40.2	42.7	877.7	320.3	37.8	38.0	849.6	330.8	36.6	35.7	821.0	341.8	35.3	33.4
	45	285.9	281.9	686.1	16.5	270.1	302.5	648.4	14.8	254.3	323.4	610.2	13.2	246.2	334.1	590.8	12.4	237.9	345.3	571.1	11.6
	7.2	1005.4	281.9	43.3	49.4	950.1	302.5	40.9	44.2	894.3	323.4	38.5	39.4	865.8	334.1	37.3	37.0	836.8	345.3	36.0	34.6
5290 B 10.9	48	304.6	290.4	731.0	18.7	288.6	312.5	692.6	16.8	272.3	335.0	653.6	15.0	264.0	346.7	633.7	14.2	255.5	358.8	613.3	13.3
	8.9	1071.2	290.4	46.1	55.8	1015.0	312.5	43.7	50.3	957.8	335.0	41.2	44.9	928.6	346.7	40.0	42.3	898.7	358.8	38.7	39.7
	42	281.6	281.5	675.9	16.0	266.2	302.5	638.9	14.4	250.7	323.6	601.8	12.8	242.9	334.3	582.9	12.1	234.9	345.4	563.7	11.3
	5.6	990.5	281.5	42.6	48.0	936.3	302.5	40.3	43.0	881.9	323.6	38.0	38.3	854.2	334.3	36.8	36.0	826.1	345.4	35.6	33.8
	44	291.9	286.2	700.6	17.2	276.2	307.9	662.9	15.5	260.5	329.6	625.2	13.8	252.5	340.8	605.9	13.0	244.3	352.3	586.2	12.2
	6.7	1026.6	286.2	44.2	51.4	971.5	307.9	41.8	46.2	916.1	329.6	39.4	41.2	887.9	340.8	38.2	38.8	859.1	352.3	37.0	36.4
5300 B 10.8	45	297.1	288.5	713.1	17.8	281.3	310.5	675.1	16.0	265.4	332.7	637.0	14.3	257.3	344.1	617.5	13.5	249.0	355.8	597.6	12.6
	7.2	1044.9	288.5	45.0	53.2	989.4	310.5	42.6	47.9	933.4	332.7	40.2	42.7	904.9	344.1	39.0	40.3	875.8	355.8	37.7	37.8
	48	316.3	296.8	759.2	20.1	300.3	320.2	720.8	18.2	284.1	344.0	681.9	16.3	275.8	356.3	661.9	15.4	267.2	369.0	641.4	14.5
	8.9	1112.5	296.8	47.9	60.1	1056.3	320.2	45.5	54.3	999.2	344.0	43.0	48.8	969.9	356.3	41.8	46.0	939.9	369.0	40.5	43.3
	42	289.6	291.7	695.1	16.9	274.2	313.9	658.1	15.2	258.7	336.3	620.9	13.6	250.8	347.7	602.0	12.8	242.8	359.3	582.7	12.0
	5.6	1018.7	291.7	43.9	50.6	964.4	313.9	41.5	45.5	909.9	336.3	39.2	40.7	882.2	347.7	38.0	38.3	853.8	359.3	36.8	36.0
5310 B 10.6	44	300.2	296.5	720.4	18.2	284.5	319.4	682.8	16.4	268.7	342.5	645.0	14.7	260.7	354.4	625.6	13.8	252.4	366.5	605.8	13.0
	6.7	1055.7	296.5	45.5	54.3	1000.6	319.4	43.1	48.9	945.2	342.5	40.7	43.8	916.8	354.4	39.5	41.3	887.8	366.5	38.2	38.8
	45	305.5	298.9	733.2	18.8	289.7	322.1	695.3	17.0	273.8	345.6	657.1	15.2	265.7	357.7	637.6	14.3	257.3	370.0	617.5	13.5
	7.2	1074.5	298.9	46.3	56.2	1018.9	322.1	43.9	50.7	963.0	345.6	41.5	45.4	934.4	357.7	40.2	42.8	904.9	370.0	39.0	40.3
	48	325.0	307.4	780.1	21.2	309.1	332.1	741.8	19.2	292.9	357.2	702.9	17.3	284.5	370.1	682.9	16.4	275.9	383.5	662.2	15.4
	8.9	1143.1	307.4	49.2	63.4	1087.0	332.1	46.8	57.5	1030.1	357.2	44.3	51.8	1000.7	370.1	41.2	48.9	970.3	383.5	41.8	46.1
5320 B 10.4	42	299.9	309.2	719.7	18.1	283.9	332.1	681.4	16.3	267.9	355.3	643.0	14.6	259.7	367.1	623.3	13.7	251.3	379.2	603.2	12.9
	5.6	1054.6	309.2	45.4	54.2	998.6	332.1	43.0	48.7	942.2	355.3	40.6	43.5	913.4	367.1	39.3	41.0	883.9	379.2	38.1	38.5
	44	310.6	314.5	745.5	19.4	294.4	338.2	706.6	17.5	278.1	362.1	667.4	15.7	269.7	374.3	647.3	14.8	261.1	386.9	626.6	13.9
	6.7	1092.4	314.5	47.0	58.0	1035.5	338.2	44.6	52.3	978.0	362.1	42.1	46.8	948.5	374.3	40.8	44.1	918.3	386.9	39.5	41.4
	45	316.1	317.2	758.6	20.1	299.7	341.2	719.4	18.1	283.2	365.5	679.8	16.2	274.8	378.0	659.4	15.3	266.0	390.8	638.5	14.4
	7.2	1111.6	317.2	47.9	60.0	1054.2	341.2	45.4	54.1	996.1	365.5	42.9	48.5	966.3	378.0	41.6	45.7	935.6	390.8	40.3	42.9
5330 B 10.3	48	335.8	326.5	805.8	22.6	319.2	352.0	766.2	20.5	302.4	377.9	725.8	18.4	293.7	391.4	704.9	17.4	284.7			

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 60 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCH/D	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
EER	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6005 A 9.8	42	5.0	5.7	12.0	10.1	4.7	6.0	11.3	9.0	4.4	6.4	10.6	8.0	4.3	6.5	10.2	7.5	4.1	6.7	9.9	7.0
	5.6	17.6	5.7	0.8	30.3	16.5	6.0	0.7	27.0	15.5	6.4	0.7	23.9	15.0	6.5	0.6	22.4	14.4	6.7	0.6	20.9
	44	5.2	5.8	12.5	10.9	4.9	6.1	11.8	9.8	4.6	6.5	11.0	8.7	4.4	6.7	10.7	8.1	4.3	6.9	10.3	7.6
	6.7	18.3	5.8	0.8	32.7	17.2	6.1	0.7	29.2	16.2	6.5	0.7	25.9	15.6	6.7	0.7	24.3	15.1	6.9	0.6	22.7
	45	5.3	5.8	12.7	11.4	5.0	6.2	12.0	10.2	4.7	6.6	11.3	9.0	4.5	6.8	10.9	8.5	4.4	7.0	10.5	8.0
6007 A 9.2	42	5.7	6.0	13.7	13.0	5.4	6.4	13.0	11.8	5.1	6.8	12.2	10.6	4.9	7.0	11.9	9.9	4.8	7.3	11.5	9.3
	5.6	25.6	8.3	1.1	30.1	23.9	8.8	1.0	26.3	22.2	9.4	1.0	22.8	21.3	9.6	0.9	21.1	20.4	9.9	0.9	19.4
	44	7.6	8.4	18.1	10.9	7.1	9.0	17.0	9.5	6.6	9.5	15.8	8.3	6.3	9.8	15.2	7.7	6.1	10.1	14.6	7.1
	6.7	26.6	8.4	1.1	32.4	24.9	9.0	1.1	28.5	23.2	9.5	1.0	24.8	22.3	9.8	1.0	23.0	21.3	10.1	0.9	21.2
	45	7.7	8.5	18.6	11.3	7.2	9.1	17.4	10.0	6.7	9.7	16.2	8.7	6.5	10.0	15.6	8.1	6.2	10.3	14.9	7.4
6009 A 8.6	42	8.3	8.7	19.9	13.0	7.8	9.4	18.7	11.5	7.3	10.0	17.5	10.1	7.0	10.4	16.9	9.5	6.8	10.7	16.2	8.8
	5.6	32.8	11.2	1.4	23.0	30.6	11.9	1.3	20.3	28.3	12.5	1.2	17.7	27.1	12.9	1.2	16.4	25.9	13.2	1.1	15.1
	44	9.7	11.4	23.2	8.2	9.0	12.1	21.7	7.3	8.4	12.8	20.1	6.3	8.0	13.2	19.3	5.9	7.7	13.5	18.5	5.5
	6.7	34.0	11.4	1.5	24.5	31.7	12.1	1.4	21.7	29.4	12.8	1.3	18.9	28.2	13.2	1.2	17.6	27.0	13.5	1.2	16.3
	45	9.9	11.5	23.7	8.5	9.2	12.2	22.1	7.6	8.6	13.0	20.6	6.6	8.2	13.4	19.8	6.2	7.9	13.8	18.9	5.7
6011 A 10.6	42	11.0	10.6	26.4	8.0	10.4	11.4	24.9	7.2	9.8	12.2	23.4	6.5	9.4	12.6	22.6	6.1	9.1	13.0	21.8	5.7
	5.6	38.7	10.6	1.7	24.0	36.5	11.4	1.6	21.6	34.3	12.2	1.5	19.4	33.2	12.6	1.4	18.2	32.0	13.0	1.4	17.1
	44	11.4	10.7	27.3	8.5	10.8	11.6	25.8	7.7	10.1	12.4	24.3	6.9	9.8	12.8	23.5	6.5	9.4	13.3	22.7	6.1
	6.7	40.0	10.7	1.7	25.5	37.8	11.6	1.6	23.1	35.6	12.4	1.5	20.7	34.4	12.8	1.5	19.5	33.2	13.3	1.4	18.3
	45	11.6	10.8	27.9	8.9	11.0	11.7	26.4	8.0	10.3	12.5	24.8	7.2	10.0	13.0	24.0	6.8	9.7	13.5	23.2	6.4
6014 A 10.8	42	14.9	14.6	35.7	8.4	14.1	15.7	33.7	7.6	13.2	16.9	31.7	6.9	12.8	17.5	30.7	6.5	12.4	18.1	29.7	6.1
	5.6	52.3	14.6	2.3	25.2	49.4	15.7	2.1	22.8	46.5	16.9	2.0	20.5	45.0	17.5	1.9	19.4	43.5	18.1	1.9	18.2
	44	15.4	14.8	36.9	8.9	14.5	16.0	34.8	8.1	13.7	17.2	32.8	7.3	13.2	17.8	31.8	6.9	12.8	18.4	30.8	6.5
	6.7	54.0	14.8	2.3	26.6	51.1	16.0	2.2	24.1	48.1	17.2	2.1	21.8	46.6	17.8	2.0	20.6	45.1	18.4	1.9	19.4
	45	15.7	15.0	37.6	9.3	14.8	16.2	35.6	8.4	14.0	17.4	33.6	7.6	13.6	18.0	32.5	7.2	13.1	18.7	31.5	6.8
6020 A 10.1	42	20.8	20.6	49.9	17.9	19.6	22.1	47.1	15.3	18.5	23.6	44.3	13.0	17.9	24.4	42.9	12.1	17.3	25.2	41.5	11.2
	5.6	73.1	20.6	3.1	53.6	69.1	22.1	3.0	45.6	65.0	23.6	2.8	38.9	62.9	24.4	2.7	36.1	60.8	25.2	2.6	33.6
	44	21.3	20.9	51.2	19.4	20.2	22.4	48.4	16.4	19.0	23.9	45.6	14.0	18.4	24.7	44.2	13.0	17.9	25.6	42.9	12.0
	6.7	75.0	20.9	3.2	57.9	71.0	22.4	3.1	49.1	66.9	23.9	2.9	41.8	64.8	24.7	2.8	38.7	62.8	25.6	2.7	36.0
	45	21.6	21.0	51.9	20.3	20.5	22.6	49.2	17.2	19.3	24.2	46.4	14.6	18.8	25.0	45.1	13.6	18.2	25.8	43.7	12.6
6022 A 10.4	42	28.8	28.7	69.1	14.1	27.2	31.0	65.3	12.6	25.6	33.2	61.5	11.2	24.8	34.3	59.5	10.5	24.0	35.5	57.6	9.9
	5.6	101.2	28.7	4.4	42.1	95.7	31.0	4.1	37.7	90.1	33.2	3.9	33.5	87.3	34.3	3.8	31.5	84.4	35.5	3.6	29.5
	44	29.7	29.2	71.2	14.9	28.1	31.5	67.4	13.4	26.5	33.8	63.6	12.0	25.7	35.0	61.6	11.3	24.9	36.2	59.7	10.6
	6.7	104.3	29.2	4.5	44.7	98.8	31.5	4.3	40.2	93.2	33.8	4.0	35.8	90.3	35.0	3.9	33.7	87.4	36.2	3.8	31.6
	45	30.1	29.4	72.4	15.4	28.6	31.7	68.6	13.9	27.0	34.1	64.8	12.4	26.2	35.3	62.9	11.7	25.4	36.6	60.9	11.0
6025 A 11.1	42	26.1	24.6	62.7	11.7	24.7	26.5	59.2	10.4	23.2	28.4	55.7	9.2	22.4	29.4	53.9	8.6	21.7	30.4	52.0	8.1
	5.6	91.9	24.6	4.0	34.9	86.8	26.5	3.7	31.1	81.6	28.4	3.5	27.6	78.9	29.4	3.4	25.8	76.2	30.4	3.3	24.1
	44	27.1	24.9	64.9	12.5	25.6	26.9	61.4	11.4	24.1	28.9	57.8	9.9	23.3	30.0	56.0	9.3	22.5	31.0	54.1	8.7
	6.7	95.1	24.9	4.1	37.3	89.9	26.9	3.9	33.2	84.7	28.9	3.6	29.7	82.0	30.0	3.5	27.9	79.3	31.0	3.4	26.1
	45	27.6	25.1	66.2	13.0	26.1	27.2	62.7	11.6	24.6	29.2	59.1	10.4	23.9	30.3	57.2	9.7	23.1	31.4	55.4	9.1
6028 A 10.6	42	28.8	28.7	69.1	14.1	27.2	31.0	65.3	12.6	25.6	33.2	61.5	11.2	24.8	34.3	59.5	10.5	24.0	35.5	57.6	9.9
	5.6	101.2	28.7	4.4	42.1	95.7	31.0	4.1	37.7	90.1	33.2	3.9	33.5	87.3	34.3	3.8	31.5	84.4	35.5	3.6	29.5
	44	29.7	29.2	71.2	14.9	28.1	31.5	67.4	13.4	26.5	33.8	63.6	12.0	25.7	35.0	61.6	11.3	24.9	36.2	59.7	10.6
	6.7	104.3	29.2	4.5	44.7	98.8	31.5	4.3	40.2	93.2	33.8	4.0	35.8	90.3	35.0	3.9	33.7	87.4	36.2	3.8	31.6
	45	30.1	29.4	72.4	15.4	28.6	31.7	68.6	13.9	27.0	34.1	64.8	12.4	26.2	35.3	62.9	11.7	25.4	36.6	60.9	11.0
6030 A 10.2	42	30.3	31.9	72.8	15.6	28.6	34.1	68.6	13.9	26.8	36.4	64.4	12.3	25.9	37.5	62.3	11.5	25.1	38.7	60.1	10.7
	5.6	106.6	31.9	4.6	46.6	100.5	34.1	4.3	41.6	94.4	36.4	4.1	36.7	91.3	37.5	3.9	34.4	88.1	38.7	3.8	32.1
	44	31.2	32.4	74.8	16.5	29.5	34.7	70.7	14.8	27.7	37.0	66.5	13.1	26.8	38.3	64.4	12.3	25.9	39.5	62.3	11.5
	6.7	109.7	32.4	4.7	49.3	103.6	34.7	4.5	44.1	97.5	37.0	4.2	39.1	94.4	38.3	4.1	36.7	91.2	39.5	3.9	34.4
	45	31.6	32.6	76.0	17.0	30.0	35.0	71.9	15.2	28.2	37.4	67.7	13.6	27.4	38.7	65.6	12.8	26.5	40.0	63.5	12.0
6035 A 9.7	42	37.1	39.7	90.7	19.8	35.5	42.3	85.2	18.6	33.2	45.0	79.8	7.5	32.1	46.4	77.0	7.0	30.9	47.8	74.2	6.5
	5.6	126.3	38.7	5.4	26.4	118.5	41.2	5.1	23.1	110.6	43.6	4.8	20.1	106.6	44.9	4.6	18.6	102.6	46.3	4.4	17.2
	44	37.1	39.3	89.0	9.4	34.8	41.9	83.6	8.3	32.6	44.5	78.2	7.2	31.4	45.8	75.4	6.7	30.3	47.3	72.6	6.2
	6.7	130.5	39.3	5.6	28.2	122.5	41.9	5.3	24.8	114.6	44.5	4.9	21.6	110.5	45.8	4.8	20.0	106.4	47.3	4.6	18.5

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 60 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6036 A 10.9	42	36.2	34.1	86.8	9.0	34.2	36.8	82.0	8.0	32.1	39.4	77.2	7.0	31.1	40.7	74.7	6.6	30.1	42.1	72.3	6.1
	5.6	127.2	34.1	5.5	26.8	120.2	36.8	82.0	23.8	113.1	39.4	4.9	21.0	109.5	40.7	4.7	19.6	105.9	42.1	4.6	18.3
	44	37.4	34.6	89.7	9.6	35.3	37.4	84.8	8.5	33.3	40.0	79.9	7.6	32.2	41.4	77.4	7.1	31.2	42.8	74.9	6.6
	6.7	131.4	34.6	5.7	28.6	124.3	37.4	5.4	25.6	117.0	40.0	5.0	22.6	113.4	41.4	4.9	21.1	109.8	42.8	4.7	19.7
	45	38.1	34.9	91.4	9.9	36.0	37.7	86.5	8.9	34.0	40.4	81.5	7.9	32.9	41.8	79.0	7.4	31.9	43.2	76.5	6.9
7.2	133.9	34.9	5.8	29.7	126.7	37.7	5.5	26.6	119.4	40.4	5.1	23.5	115.7	41.8	5.0	22.0	112.0	43.2	4.8	20.6	
48	41.2	36.1	98.8	11.5	39.1	39.1	93.8	10.5	37.0	42.1	88.7	9.4	35.9	43.6	86.1	8.8	34.8	45.2	83.5	8.3	
8.9	144.8	36.1	6.2	34.5	137.5	39.1	5.9	31.2	130.0	42.1	5.6	28.0	126.2	43.6	5.4	26.3	122.4	45.2	5.3	24.8	
6039 A 10.5	42	41.1	41.3	98.6	11.5	38.8	44.2	93.0	10.3	36.4	47.1	87.4	9.1	35.3	48.6	84.6	8.5	34.1	50.2	81.8	7.9
	5.6	144.5	41.3	6.2	34.4	136.4	44.2	5.9	30.7	128.1	47.1	5.5	27.2	124.0	48.6	5.3	25.4	119.9	50.2	5.2	23.7
	44	42.4	41.9	101.7	12.2	40.1	44.9	96.1	11.0	37.7	47.9	90.4	9.7	36.5	49.5	87.6	9.1	35.3	51.1	84.8	8.5
	6.7	149.1	41.9	6.4	36.4	140.9	44.9	6.1	32.8	132.5	47.9	5.7	29.1	128.3	49.5	5.5	27.3	124.2	51.1	5.3	25.5
	45	43.1	42.3	103.5	12.6	40.8	45.3	97.9	11.3	38.4	48.4	92.2	10.1	37.2	50.0	89.3	9.5	36.0	51.7	86.5	8.9
7.2	151.7	42.3	6.5	37.6	143.5	45.3	6.2	33.9	135.1	48.4	5.8	30.2	130.9	50.0	5.6	28.4	126.8	51.7	5.5	26.6	
48	46.3	43.7	111.2	14.3	44.0	47.1	105.5	13.0	41.6	50.5	99.8	11.8	40.4	52.2	96.9	11.1	39.2	54.1	94.1	10.5	
8.9	163.0	43.7	7.0	42.7	154.7	47.1	6.7	39.0	146.2	50.5	6.3	35.2	142.0	52.2	6.1	33.3	137.8	54.1	5.9	31.4	
6040 A 10.1	42	41.5	43.8	99.6	11.7	39.2	47.0	94.2	10.5	36.9	50.3	88.7	9.3	35.8	51.9	85.9	8.8	34.6	53.6	83.0	8.2
	5.6	145.9	43.8	6.3	35.0	138.0	47.0	5.9	31.5	129.9	50.3	5.6	27.9	125.8	51.9	5.4	26.2	121.7	53.6	5.2	24.5
	44	42.9	44.5	102.9	12.5	40.6	47.8	97.4	11.2	38.2	51.1	91.8	10.0	37.0	52.9	88.9	9.4	35.8	54.6	86.0	8.8
	6.7	150.8	44.5	6.5	37.2	142.7	47.8	6.1	33.6	134.5	51.1	5.8	29.9	130.3	52.9	5.6	28.1	126.0	54.6	5.4	26.3
	45	43.7	44.9	104.8	12.9	41.3	48.2	99.2	11.6	39.0	51.6	93.6	10.4	37.8	53.4	90.7	9.8	36.6	55.2	87.7	9.2
7.2	153.6	44.9	6.6	38.5	145.4	48.2	6.3	34.8	137.1	51.6	5.9	31.1	132.9	53.4	5.7	29.2	128.6	55.2	5.5	27.4	
48	47.0	46.4	112.9	14.6	44.7	50.0	107.2	13.4	42.2	53.7	101.4	12.1	41.0	55.7	98.4	11.5	39.8	57.7	95.4	10.8	
8.9	165.5	46.4	7.1	43.8	157.1	50.0	6.8	40.0	148.6	53.7	6.4	36.2	144.2	55.7	6.2	34.3	139.8	57.7	6.0	32.3	
6046 A 9.8	42	47.0	51.9	113.0	15.1	44.4	55.4	106.6	13.7	41.7	59.0	100.2	12.3	40.4	60.9	96.9	11.6	38.9	62.8	93.5	10.8
	5.6	165.4	51.9	7.1	45.3	156.1	55.4	6.7	41.1	146.8	59.0	6.3	36.7	142.0	60.9	6.1	34.5	136.8	62.8	5.9	32.3
	44	48.5	52.7	116.4	15.9	45.8	56.4	110.0	14.5	43.0	60.1	103.4	13.0	41.6	61.9	99.7	12.2	40.2	64.0	96.4	11.5
	6.7	170.6	52.7	7.3	47.4	161.0	56.4	6.9	43.3	151.3	60.1	6.5	38.9	146.1	61.9	6.3	36.4	141.3	64.0	6.1	34.3
	45	49.3	53.2	118.3	16.3	46.6	56.8	111.8	14.9	43.8	60.7	105.2	13.4	42.4	62.7	101.9	12.7	40.9	64.7	98.1	11.8
7.2	173.4	53.2	7.5	48.6	163.7	56.8	7.1	44.5	154.1	60.7	6.6	40.1	149.2	62.7	6.4	37.9	143.7	64.7	6.2	35.4	
48	52.5	55.1	125.9	17.8	49.8	59.1	119.5	16.5	47.0	63.2	112.9	15.1	45.7	65.5	109.6	14.4	43.8	67.5	105.3	13.4	
8.9	184.7	55.1	7.9	53.2	175.1	59.1	7.5	49.4	165.4	63.2	7.1	45.2	160.6	65.5	6.9	43.0	154.1	67.5	6.6	40.2	
6050 A 9.5	42	47.2	54.2	113.3	14.7	44.7	57.9	107.2	13.4	42.1	61.6	101.0	12.0	40.7	63.6	97.8	11.3	39.3	65.5	94.4	10.6
	5.6	166.0	54.2	7.1	44.0	157.1	57.9	6.8	40.0	148.0	61.6	6.4	36.0	143.3	63.6	6.2	33.8	138.3	65.5	6.0	31.6
	44	48.7	55.2	116.9	15.5	46.1	59.0	110.7	14.2	43.5	62.8	104.3	12.8	42.1	64.8	101.0	12.0	40.6	66.8	97.5	11.3
	6.7	171.3	55.2	7.4	46.3	162.2	59.0	7.0	42.3	152.8	62.8	6.6	38.1	148.0	64.8	6.4	35.9	142.9	66.8	6.2	33.7
	45	49.5	55.7	118.9	15.9	46.9	59.5	112.6	14.6	44.2	63.5	106.2	13.2	42.8	65.5	102.8	12.4	41.4	67.6	99.3	11.7
7.2	174.2	55.7	7.5	47.5	165.0	59.5	7.1	43.5	155.6	63.5	6.7	39.4	150.7	65.5	6.5	37.1	145.5	67.6	6.3	34.8	
48	52.9	57.8	126.9	17.5	50.3	62.0	120.6	16.3	47.5	65.3	114.1	14.9	46.1	68.5	110.6	14.1	44.6	70.8	107.1	13.4	
8.9	186.0	57.8	8.0	52.3	176.8	62.0	7.6	48.6	167.1	66.3	7.2	44.5	162.1	68.5	7.0	42.3	156.9	70.8	6.8	39.9	
6060 A 9.7	42	58.2	64.2	139.7	15.6	54.9	68.5	131.9	13.9	51.6	73.0	123.8	12.3	49.9	75.3	119.8	11.5	48.2	77.8	115.7	10.7
	5.6	204.8	64.2	8.8	46.6	193.2	68.5	8.3	41.5	181.5	73.0	7.8	36.7	175.5	75.3	7.6	34.4	169.5	77.8	7.3	32.1
	44	60.0	65.2	144.0	16.5	56.7	69.7	136.0	14.8	53.3	74.4	127.9	13.1	51.6	76.8	123.8	12.3	49.9	79.4	119.7	11.5
	6.7	211.0	65.2	9.1	49.4	199.3	69.7	8.6	44.2	187.5	74.4	8.1	39.1	181.4	76.8	7.8	36.7	175.4	79.4	7.5	34.3
	45	61.1	65.8	146.5	17.1	57.7	70.4	138.6	15.3	54.4	75.2	130.5	13.6	52.6	77.8	126.3	12.8	50.9	80.4	122.1	11.9
7.2	214.7	65.8	9.2	51.2	203.1	70.4	8.7	45.8	191.2	75.2	8.2	40.7	185.1	77.8	8.0	38.2	178.9	80.4	7.7	35.7	
48	63.7	67.3	152.8	18.6	60.2	72.1	144.4	16.6	56.7	77.1	136.1	14.8	54.9	79.7	131.8	13.9	53.1	82.5	127.4	13.0	
8.9	223.9	67.3	9.6	55.7	211.7	72.1	9.1	49.8	199.4	77.1	8.6	44.2	193.1	79.7	8.3	41.5	186.7	82.5	8.0	38.8	
6075 A 9.7	42	71.8	77.5	172.3	9.8	67.4	82.5	161.7	8.7	62.9	87.4	151.0	7.6	60.7	90.1	145.6	7.1	58.4	92.8	140.1	6.6
	5.6	252.5	77.5	10.9	29.3	237.0	82.5	10.2	25.9	221.3	87.4	9.5	22.7	213.4	90.1	9.2	21.1	205.3	92.8	8.8	19.6
	44	74.1	78.8	177.8	10.4	69.6	83.9	167.1	9.2	65.2	89.1	156.4	8.1	62.9	91.9	150.9	7.6	60.6	94.8	145.4	7.1
	6.7	260.5	78.8	11.2	31.2	244.9	83.9	10.5	27.6	229.2	89.1	9.9	24.3	221.2	91.9	9.5	22.7	213.1	94.8	9.2	21.1
	45	75.5	79.6	181.3	10.8	71.1	84.9	170.7	9.6	66.6	90.3	160.0	8.5	64.4	93.1	154.5	7.9	62.1	96.1	149.0	

# SKM Air Cooled Packaged Chillers APCD Series - R22

## CAPACITY RATINGS - 60 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USGpm	ftwg	TR	kW	USGpm	ftwg	TR	kW	USGpm	ftwg	TR	kW	USGpm	ftwg	TR	kW	USGpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6110 B 9.8	42	108.3	117.8	259.9	19.0	101.8	125.4	244.3	16.8	95.2	133.1	228.5	14.7	91.8	137.1	220.4	13.7	88.5	141.4	212.3	12.7
	5.6	380.9	117.8	16.4	56.7	358.0	125.4	15.4	50.2	334.8	133.1	14.4	44.0	323.0	137.1	13.9	40.9	311.1	141.4	13.4	37.9
	44	112.2	120.1	269.2	20.3	105.5	127.9	253.3	18.0	98.9	135.9	237.3	15.9	95.5	140.2	229.1	14.8	92.0	144.7	220.8	13.7
	6.7	394.4	120.1	17.0	60.7	371.2	127.9	16.0	53.9	347.7	135.9	15.0	47.4	335.7	140.2	14.5	44.2	323.5	144.7	13.9	41.0
	45	114.2	121.2	274.1	21.0	107.6	129.2	258.1	18.7	100.8	137.5	242.0	16.5	97.4	141.8	233.7	15.4	93.9	146.4	225.3	14.3
7.2	401.6	121.2	17.3	62.8	378.3	129.2	16.3	56.0	354.6	137.5	15.3	49.3	342.5	141.8	14.7	46.0	330.2	146.4	14.2	42.8	
6115 B 9.9	42	122.0	125.7	292.8	23.9	115.3	134.3	276.7	21.4	108.5	143.3	260.3	19.0	105.0	148.1	251.9	17.8	101.4	153.3	243.3	16.7
	5.6	429.0	125.7	18.5	71.4	405.5	134.3	17.5	64.0	381.5	143.3	16.4	56.9	369.1	148.1	15.9	53.3	356.5	153.3	15.3	49.8
	42	113.9	123.0	273.4	20.9	107.4	131.3	257.7	18.7	100.7	139.7	241.7	16.5	97.3	144.1	233.6	15.4	93.9	148.8	225.3	14.3
	5.6	400.7	123.0	17.3	62.6	377.6	131.3	16.3	55.8	352.8	139.7	15.2	49.2	342.3	144.1	14.7	45.9	330.2	148.8	14.2	42.8
	44	118.0	125.2	283.2	22.4	111.3	133.8	267.2	20.0	104.5	142.6	250.9	17.7	101.1	147.2	242.6	16.6	97.6	152.0	234.2	15.5
6.7	414.9	125.2	17.9	66.9	391.5	133.8	16.9	59.8	367.7	142.6	15.8	52.9	355.6	147.2	15.3	49.5	343.3	152.0	14.8	46.2	
6120 B 10.0	45	120.1	126.4	288.3	23.2	113.4	135.1	272.2	20.7	106.6	144.1	255.8	18.4	103.1	148.8	247.5	17.2	99.6	153.8	239.0	16.1
	7.2	422.5	126.4	18.2	69.3	398.9	135.1	17.2	62.0	374.9	144.1	16.1	55.0	362.7	148.8	15.6	51.5	350.2	153.8	15.1	48.1
	42	128.2	130.7	307.6	26.2	121.4	140.1	291.3	23.7	114.5	149.9	274.7	21.1	110.9	155.0	266.2	19.9	107.3	160.5	257.6	18.6
	8.9	450.7	130.7	19.4	78.5	426.9	140.1	18.4	70.7	402.6	149.9	17.3	63.1	390.1	155.0	16.8	59.4	377.4	160.5	16.2	55.7
	42	119.4	128.2	286.6	22.9	112.8	137.2	270.8	20.5	106.1	146.4	254.7	18.2	102.7	151.2	246.5	17.1	99.2	156.1	238.2	16.0
5.6	420.0	128.2	18.1	68.5	396.8	137.2	17.1	61.4	373.2	146.4	16.1	54.5	361.2	151.2	15.6	51.1	349.0	156.1	15.0	47.8	
6130 B 10.1	44	123.7	130.4	296.8	24.5	116.9	139.7	280.7	22.0	110.1	149.3	264.3	19.6	106.6	154.2	255.9	18.4	103.1	159.4	247.4	17.2
	6.7	434.9	130.4	18.7	73.3	411.3	139.7	17.7	65.8	387.3	149.3	16.7	58.6	375.0	154.2	16.1	55.0	362.6	159.4	15.6	51.5
	45	125.9	131.5	302.2	25.4	119.1	141.1	285.9	22.8	112.2	150.8	269.4	20.3	108.7	155.9	260.9	19.1	105.2	161.2	252.4	17.9
	7.2	442.8	131.5	19.1	75.8	419.0	141.1	18.0	68.2	394.7	150.8	17.0	60.8	382.4	155.9	16.5	57.1	360.8	161.2	15.9	53.5
	48	134.1	135.7	322.0	28.7	127.3	145.9	305.5	25.9	120.3	156.4	288.7	23.2	116.7	162.0	280.2	21.9	113.1	167.8	271.5	20.6
8.9	471.8	135.7	20.3	85.6	447.7	145.9	19.3	77.5	424.7	156.4	18.2	69.5	410.6	162.0	17.7	65.6	397.8	167.8	17.1	61.7	
6135 B 9.9	42	124.8	133.4	299.5	24.9	118.2	143.2	283.6	22.5	111.4	153.1	267.4	20.0	108.0	158.2	259.2	18.9	104.5	163.5	250.8	17.7
	5.6	438.9	133.4	18.9	74.5	415.6	143.2	17.9	67.1	391.9	153.1	16.9	59.9	379.8	158.2	16.4	56.4	367.5	163.5	15.8	52.9
	44	129.2	135.6	310.1	26.7	122.5	145.7	293.9	24.1	115.6	155.9	277.4	21.5	112.1	161.3	268.9	20.3	108.5	166.8	260.4	19.0
	6.7	454.4	135.6	19.6	79.7	430.7	145.7	18.5	71.9	406.4	155.9	17.5	64.3	394.1	161.3	17.0	60.6	381.6	166.8	16.4	56.9
	45	131.5	136.7	315.7	27.6	124.7	147.0	299.3	24.9	117.8	157.5	282.6	22.3	114.2	162.9	274.1	21.0	110.6	168.5	265.5	19.8
7.2	462.6	136.7	19.9	82.5	438.6	147.0	18.9	74.5	414.2	157.5	17.8	66.7	401.7	162.9	17.3	62.9	389.0	168.5	16.7	59.1	
6140 B 9.6	48	140.0	140.7	335.9	31.1	133.1	151.7	319.3	28.2	126.0	163.0	302.4	25.4	122.4	168.9	293.8	24.0	118.8	175.1	285.0	22.7
	8.9	492.2	140.7	21.2	92.9	468.0	151.7	20.1	84.3	443.1	163.0	19.1	75.9	430.5	168.9	18.5	71.8	417.7	175.1	18.0	67.8
	42	130.4	143.9	313.1	27.2	123.6	154.1	296.5	24.5	116.5	164.6	279.7	21.9	112.9	170.0	271.0	20.6	109.2	175.6	262.1	19.3
	5.6	458.8	143.9	19.8	81.2	434.5	154.1	18.7	73.1	409.8	164.6	17.6	65.4	397.1	170.0	17.1	61.5	384.1	175.6	16.5	57.6
	44	134.9	146.4	323.9	29.0	127.9	157.0	307.0	26.2	120.7	167.8	289.8	23.4	117.1	173.4	280.9	22.1	113.3	179.2	271.8	20.7
6.7	474.6	146.4	20.4	86.6	449.9	157.0	19.4	78.2	424.7	167.8	18.3	70.0	411.7	173.4	17.7	65.9	398.4	179.2	17.2	61.9	
6145 B 9.4	45	137.3	147.7	329.5	30.0	130.2	158.4	312.5	27.1	123.0	169.5	295.1	24.2	119.2	175.2	286.2	22.9	115.4	181.2	277.0	21.5
	7.2	482.9	147.7	20.8	89.5	458.0	158.4	19.7	80.9	432.5	169.5	18.6	72.5	419.4	175.2	18.1	68.3	405.9	181.2	17.5	64.1
	48	145.7	152.2	349.7	33.6	138.6	163.7	332.6	30.5	131.2	175.7	314.9	27.5	127.4	181.9	305.8	26.0	123.5	188.4	296.4	24.4
	8.9	512.5	152.2	22.1	100.4	487.3	163.7	21.0	91.1	461.5	175.7	19.9	82.1	448.2	181.9	19.3	77.6	434.3	188.4	18.7	73.1
	42	135.9	154.4	326.2	29.4	128.8	165.1	309.1	26.1	121.5	176.1	291.5	23.7	117.7	181.8	282.4	22.3	113.7	187.6	273.0	20.9
5.6	478.1	154.4	20.6	87.8	452.9	165.1	19.5	79.2	427.2	176.1	18.4	70.8	413.8	181.8	17.8	66.6	400.0	187.6	17.2	62.4	
6150 B 9.6	44	140.5	157.2	337.2	31.3	133.2	168.3	319.7	28.3	125.7	179.6	301.8	25.3	121.9	185.5	292.5	23.8	117.8	191.6	282.8	22.3
	6.7	494.1	157.2	21.3	93.6	468.5	168.3	20.2	84.5	442.2	179.6	19.0	75.6	428.6	185.5	18.5	71.2	414.5	191.6	17.8	66.8
	45	142.9	158.6	342.9	32.3	135.5	169.9	325.3	29.2	128.0	181.5	307.2	26.2	124.1	187.5	297.8	24.7	120.0	193.8	288.0	23.1
	7.2	502.5	158.6	21.6	96.6	476.7	169.9	20.5	87.4	450.1	181.5	19.4	78.3	436.3	187.5	18.8	73.7	422.1	193.8	18.2	69.2
	48	151.2	163.6	363.0	36.1	143.9	175.7	345.3	32.8	136.2	188.3	326.9	29.5	132.2	194.9	317.4	27.9	128.1	201.7	307.5	26.2
8.9	531.9	163.6	22.9	107.8	506.0	175.7	21.8	97.9	479.7	188.3	20.6	88.2	465.1	194.9	20.0	83.3	450.6	201.7	19.4	78.4	
6155 B 9.6	42	141.2	164.9	338.9	31.6	133.8	176.1	321.2	28.5	126.2	187.6	302.9	25.5	122.2	193.5	293.3	24.0	117.8	199.4	282.6	22.3
	5.6	496.7	164.9	21.4	94.5	470.7	176.1	20.3	85.3	443.9	187.6	19.1	76.2	429.9	193.5	18.5	71.6	414.1	199.4	17.8	66.7
	44	145.9	167.9	350.0	33.6	138.3	179.5	332.0	30.4	130.5	191.5	313.3	27.2	126.5	197.7	303.5	25.6	121.6	203.6	291.9	23.7
	6.7	513.0	167.9	22.1	100.6	486.5	179.5	20.9	90.8	459.1	191.5	19.8	81.3	444.8	197.7	19.1	76.5	427.8	203.6	18.4	71.0
	45	148.3	169.5	355.8	34.7	140.7	181.3	337.6	31.4	132.8	193.5	318.8	28.1	128.7	199.8	308.9	26.5	123.7	205.7	296.8	24.5
7.2	521.4	169.5	22.4	103.8	494.8	181.3	21.3	93.8	467.1	193.5	20.1	84.0	452.6	199.8	19.5	79.1	434.9	205.7	18.7	73.3	
6160 B 10.1	48	156.6	174.9	375.8	38.6	149.0	187.6	357.5	35.0	141.0	200.8	338.3	31.5	136.8	207.7	328.4	29.8	131.0	213.7	314.5	27.4

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 60 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
EER	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6180 B 9.9	42	170.7	185.4	409.7	23.3	161.8	198.9	388.2	21.0	152.7	212.5	366.4	18.8	148.0	219.5	355.2	17.7	143.2	226.7	343.7	16.6
	5.6	600.4	185.4	25.9	69.8	568.9	198.9	24.5	62.8	536.9	212.5	23.1	56.1	520.5	219.5	22.4	52.8	503.7	226.7	21.7	49.6
	44	176.6	188.5	423.9	24.9	167.5	202.4	402.0	22.5	158.2	216.5	379.6	20.1	153.4	223.7	368.2	18.9	148.5	231.3	356.5	17.8
	6.7	621.2	188.5	26.7	74.5	589.1	202.4	25.4	67.2	556.3	216.5	24.0	60.1	539.5	223.7	23.2	56.6	522.4	231.3	22.5	53.2
	45	179.6	190.1	431.1	25.8	170.4	204.1	409.0	23.2	161.0	218.5	386.4	20.8	156.1	225.9	374.7	19.6	151.2	233.5	362.9	18.4
7.2	631.8	190.1	27.2	77.0	599.3	204.1	25.8	69.5	566.2	218.5	24.4	62.2	549.2	225.9	23.6	58.6	531.8	233.5	22.9	55.1	
6185 B 9.7	42	189.9	195.3	455.8	28.7	180.6	210.2	433.4	26.0	171.0	225.5	410.3	23.4	166.1	233.5	398.5	22.1	161.0	241.8	386.5	20.8
	8.9	668.0	195.3	28.8	85.8	635.1	210.2	27.3	77.8	601.3	225.5	25.9	69.9	584.0	233.5	25.1	66.1	566.3	241.8	24.4	62.2
	42	176.2	195.7	423.0	24.8	167.0	209.6	400.9	22.4	157.7	223.7	378.4	20.0	152.8	231.0	366.8	18.8	147.9	238.5	354.9	17.6
	5.6	619.9	195.7	26.7	74.2	587.5	209.6	25.3	66.8	554.5	223.7	23.9	59.7	537.5	231.0	23.1	56.2	520.0	238.5	22.4	52.7
	44	182.2	199.1	437.4	26.5	172.9	213.4	414.8	23.9	163.3	228.0	391.8	21.4	158.3	235.6	380.0	20.1	153.2	243.4	367.7	18.9
6.7	641.0	199.1	27.6	79.2	607.9	213.4	26.2	71.5	574.2	228.0	24.7	63.9	556.8	235.6	24.0	60.2	538.9	243.4	23.2	56.5	
6190 B 9.5	42	181.6	206.0	435.9	26.3	172.2	220.3	413.2	23.7	162.5	234.9	390.1	21.2	157.5	242.5	378.1	20.0	152.3	250.3	365.6	18.7
	5.6	638.8	206.0	27.5	78.7	605.6	220.3	26.1	70.9	571.6	234.9	24.6	63.4	554.0	242.5	23.9	59.6	535.8	250.3	23.1	55.9
	44	187.7	209.6	450.5	28.1	178.1	224.4	427.4	25.3	168.2	239.6	403.7	22.7	163.1	247.4	391.4	21.3	157.8	255.5	378.6	20.0
	6.7	660.2	209.6	28.4	83.9	626.3	224.4	27.0	75.7	591.6	239.6	25.5	67.8	573.5	247.4	24.7	63.8	554.9	255.5	23.9	59.8
	45	190.8	211.4	457.9	29.0	181.1	226.4	434.6	26.2	171.1	241.9	410.6	23.4	165.9	249.9	398.1	22.1	160.5	258.1	385.2	20.7
7.2	671.1	211.4	28.9	86.6	636.8	226.4	27.4	78.2	601.7	241.9	25.9	70.0	583.4	249.9	25.1	66.0	564.5	258.1	24.3	61.9	
6195 B 9.4	42	201.1	217.4	482.6	32.1	191.3	233.4	459.0	29.1	181.1	250.0	434.7	26.2	175.8	258.6	422.0	24.7	170.3	267.6	408.8	23.2
	8.9	707.2	217.4	30.4	95.9	672.7	233.4	29.0	87.0	637.0	250.0	27.4	78.3	618.4	258.6	26.6	73.9	599.1	267.6	25.8	69.5
	42	186.9	216.2	448.5	27.8	177.2	231.0	423.2	25.1	167.3	246.1	401.5	22.4	162.1	253.9	389.0	21.1	156.4	261.8	375.4	19.7
	5.6	657.3	216.2	28.3	83.2	623.3	231.0	26.8	75.0	588.3	246.1	25.3	67.0	570.1	253.9	24.5	63.1	550.1	261.8	23.7	58.8
	44	193.1	220.1	463.3	29.6	183.2	235.4	439.6	26.8	173.0	251.1	415.3	23.9	167.7	259.2	402.5	22.5	161.6	267.1	387.7	21.0
6.7	679.0	220.1	29.2	88.6	644.3	235.4	27.7	80.0	608.5	251.1	26.2	71.6	589.8	259.2	25.4	67.4	568.2	267.1	24.5	62.6	
6210 B 10.0	42	196.2	222.0	470.8	30.6	186.2	237.6	446.9	27.6	175.9	253.6	422.2	24.7	170.5	261.9	409.3	23.3	164.1	269.8	393.9	21.6
	7.2	690.0	222.0	29.7	91.4	654.9	237.6	28.2	82.6	618.7	253.6	26.6	73.9	599.8	261.9	25.8	69.6	577.3	269.8	24.9	64.6
	48	206.4	228.5	495.5	33.8	196.4	245.0	471.4	30.7	186.0	262.2	446.3	27.6	180.5	271.1	433.1	26.0	173.2	279.1	415.6	24.0
	8.9	726.1	228.5	31.3	101.0	690.7	245.0	29.7	91.6	654.0	262.2	28.2	82.4	634.7	271.1	27.3	77.7	609.0	279.1	26.2	71.7
	42	202.0	208.3	484.8	17.0	190.3	222.7	456.7	15.2	178.5	237.1	428.3	13.4	172.5	244.6	414.0	12.6	166.5	252.4	399.5	11.7
5.6	710.4	208.3	30.6	50.8	669.3	222.7	28.8	45.3	627.7	237.1	27.0	40.1	606.7	244.6	26.1	37.5	585.4	252.4	25.2	35.0	
6230 B 9.6	44	209.0	211.8	501.5	18.1	197.1	226.8	473.0	16.2	185.1	241.7	444.1	14.4	179.0	249.5	429.5	13.5	172.8	257.6	414.7	12.6
	6.7	734.9	211.8	31.6	54.2	693.1	226.8	29.8	48.4	650.9	241.7	28.0	42.9	629.5	249.5	27.1	40.3	607.8	257.6	26.2	37.7
	45	212.6	213.7	510.3	18.7	200.7	228.9	481.6	16.8	188.6	244.1	452.5	14.9	182.4	252.0	437.8	14.0	176.2	260.3	422.8	13.1
	7.2	747.8	213.7	32.2	56.0	705.7	228.9	30.4	50.2	663.2	244.1	28.6	44.5	641.5	252.0	27.6	41.8	619.6	260.3	26.7	39.1
	48	225.8	220.1	541.9	21.0	213.6	236.3	512.8	18.9	201.3	252.7	483.1	16.9	195.0	261.2	468.0	15.9	188.6	270.2	452.7	14.9
8.9	794.1	220.1	34.2	62.9	751.4	236.3	32.3	56.6	708.0	252.7	30.5	50.5	685.8	261.2	29.5	47.5	663.3	270.2	28.6	44.5	
6240 B 9.7	42	212.8	231.0	510.6	18.8	200.0	246.0	480.0	16.7	187.1	261.0	449.0	14.7	180.5	268.9	433.3	13.7	173.9	277.3	417.4	12.8
	5.6	748.3	231.0	32.2	56.1	703.3	246.0	30.3	49.8	657.9	261.0	28.3	43.8	634.9	268.9	27.3	41.0	611.7	277.3	26.3	38.1
	44	219.9	235.1	527.8	20.0	207.0	250.6	496.8	17.8	193.9	266.3	465.4	15.7	187.3	274.5	449.5	14.7	180.5	283.2	433.3	13.7
	6.7	773.5	235.1	33.3	59.8	728.0	250.6	31.3	53.2	682.0	266.3	29.4	47.0	658.7	274.5	28.4	43.9	635.0	283.2	27.3	41.0
	45	223.7	237.2	536.9	20.7	210.7	253.0	505.7	18.4	197.6	269.0	474.1	16.3	190.9	277.4	458.1	15.2	184.1	286.4	441.7	14.2
7.2	786.8	237.2	33.9	61.8	741.1	253.0	31.9	55.1	694.8	269.0	29.9	48.7	671.3	277.4	28.9	45.6	647.3	286.4	27.9	42.5	
6250 B 9.9	48	237.1	244.7	569.0	23.1	224.0	261.5	537.6	20.7	210.7	278.8	505.6	18.4	203.9	288.0	489.2	17.3	196.9	297.7	472.5	16.2
	8.9	833.8	244.7	35.9	69.0	787.8	261.5	33.9	61.9	740.9	278.8	31.9	55.1	717.0	288.0	30.9	51.7	692.4	297.7	29.8	48.4
	42	223.6	241.0	536.7	20.6	210.8	257.5	505.9	18.4	197.8	274.0	474.7	16.3	191.2	282.6	458.9	15.3	184.5	291.6	442.9	14.3
	5.6	786.4	241.0	33.9	61.7	741.3	257.5	31.9	55.1	695.6	274.0	29.9	48.8	672.5	282.6	29.0	45.7	649.0	291.6	27.9	42.7
	44	231.2	245.1	554.8	22.0	218.2	262.1	523.6	19.7	205.0	279.3	491.9	17.5	198.3	288.2	475.8	16.4	191.5	297.6	459.5	15.3
6.7	813.0	245.1	35.0	65.8	767.3	262.1	33.0	58.9	720.9	279.3	31.0	52.2	697.3	288.2	30.0	49.0	673.4	297.6	29.0	45.8	
6260 B 9.9	45	235.1	247.2	564.3	22.7	222.0	264.5	532.9	20.4	208.8	282.0	501.0	18.1	202.0	291.1	484.8	17.0	195.1	300.7	468.3	15.9
	7.2	827.0	247.2	35.6	67.9	780.9	264.5	33.6	60.9	734.2	282.0	31.6	54.1	710.4	291.1	30.6	50.8	686.3	300.7	29.5	47.5

# SKM Air Cooled Packaged Chillers

## APCD Series - R22

### CAPACITY RATINGS - 60 HZ

Model	LCWT	Condenser Entering Temperature °F (°C)																			
		95°F (35°C)				105°F (40.6°C)				115°F (46.1°C)				120°F (48.9°C)				125°F (51.7°C)			
		Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD	Ccap	PI	WFR	WPD
APCD EER	°F	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg	TR	kW	USgpm	ftwg
	°C	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa	kW	kW	l/s	kPa
6290 B 9.3	42	276.7	322.0	664.2	31.1	262.5	344.0	629.9	28.1	247.8	366.5	594.7	25.1	240.2	378.1	576.4	23.7	231.9	389.8	556.5	22.1
	5.6	973.3	322.0	41.9	92.9	923.0	344.0	39.7	83.9	871.5	366.5	37.5	75.1	844.7	378.1	36.4	70.8	815.5	389.8	35.1	66.2
	44	285.5	327.5	685.1	33.0	270.9	350.2	650.2	29.8	256.0	373.5	614.3	26.8	248.1	385.6	595.5	25.2	239.3	397.5	574.3	23.5
	6.7	1004.0	327.5	43.2	98.6	952.8	350.2	41.0	89.2	900.2	373.5	38.8	80.0	872.7	385.6	37.6	75.3	841.5	397.5	36.2	70.3
	45	289.9	330.3	695.9	34.0	275.3	353.4	660.7	30.8	260.2	377.2	624.5	27.6	252.3	389.5	605.5	26.0	243.1	401.4	583.4	24.2
7.2	1019.7	330.3	43.9	101.6	968.2	353.4	41.7	92.0	915.1	377.2	39.4	82.5	887.3	389.5	38.2	77.8	855.0	401.4	36.8	72.4	
6300 B 9.7	42	287.0	309.8	688.8	16.6	269.8	330.0	647.5	14.8	252.4	350.3	605.7	13.0	243.6	361.0	584.6	12.1	234.6	372.2	563.1	11.3
	5.6	1009.4	309.8	43.5	49.7	948.8	330.0	40.8	44.1	887.6	350.3	38.2	38.8	856.6	361.0	36.9	36.2	825.2	372.2	35.5	33.7
	44	297.0	315.6	712.9	17.8	279.6	336.5	671.0	15.8	261.9	357.6	628.6	13.9	253.0	368.7	607.1	13.0	243.8	380.4	585.2	12.1
	6.7	1044.7	315.6	45.0	53.2	983.3	336.5	42.3	47.3	921.2	357.6	39.7	41.7	889.7	368.7	38.3	39.0	857.6	380.4	36.9	36.3
	45	302.1	318.5	725.1	18.4	284.6	339.7	682.9	16.4	266.8	361.2	640.2	14.4	257.7	372.6	618.5	13.5	248.5	384.6	596.4	12.6
7.2	1062.6	318.5	45.7	55.0	1000.8	339.7	43.1	48.9	938.2	361.2	40.4	43.2	906.4	372.6	39.0	40.4	874.0	384.6	37.6	37.6	
6310 B 9.6	42	296.1	322.5	710.6	17.7	278.8	344.0	669.2	15.7	261.3	365.8	627.2	13.9	252.5	377.2	605.9	13.0	243.5	389.2	584.4	12.1
	5.6	1041.3	322.5	44.8	52.8	980.6	344.0	42.2	47.0	919.2	365.8	39.6	41.5	888.0	377.2	38.2	38.8	856.3	389.2	36.9	36.2
	44	306.4	328.4	735.4	18.9	288.9	350.6	693.4	16.9	271.1	373.3	650.7	14.9	262.1	385.2	629.0	14.0	252.9	397.7	607.0	13.0
	6.7	1077.7	328.4	46.4	56.5	1016.1	350.6	43.7	50.4	953.6	373.3	41.1	44.6	921.8	385.2	39.7	41.7	889.5	397.7	38.3	38.9
	45	311.7	331.3	748.1	19.5	294.0	353.9	705.7	17.4	276.1	377.0	662.7	15.4	267.0	389.2	640.7	14.5	257.7	402.0	618.4	13.5
7.2	1096.2	331.3	47.2	58.4	1034.1	353.9	44.5	52.1	971.1	377.0	41.8	46.2	938.9	389.2	40.4	43.2	906.3	402.0	39.0	40.4	
6330 B 9.9	42	309.0	330.0	741.6	19.2	291.6	353.1	699.9	17.2	274.1	376.4	657.8	15.2	265.1	388.5	636.3	14.3	256.1	401.0	614.6	13.3
	5.6	1086.7	330.0	46.8	57.4	1025.7	353.1	44.2	51.3	963.9	376.4	41.5	45.5	932.5	388.5	40.1	42.7	900.6	401.0	38.8	39.9
	44	319.9	335.7	767.7	20.5	302.2	359.5	725.3	18.4	284.3	383.7	682.3	16.3	275.2	396.2	660.4	15.3	265.9	409.3	638.3	14.4
	6.7	1124.9	335.7	48.4	61.4	1062.9	359.5	45.8	55.0	999.9	383.7	43.0	48.8	967.8	396.2	41.7	45.9	935.3	409.3	40.3	42.9
	45	325.4	338.5	780.9	21.2	307.6	362.7	738.2	19.0	289.5	387.3	694.8	16.9	280.3	400.1	672.7	15.9	270.9	413.5	650.2	14.9
7.2	1144.4	338.5	49.3	63.5	1081.7	362.7	46.6	56.9	1018.1	387.3	43.8	50.6	985.7	400.1	42.4	47.5	952.8	413.5	41.0	44.5	
6340 B 10.1	42	321.3	337.9	771.1	20.7	303.9	362.5	729.3	18.6	286.2	387.2	686.9	16.6	277.3	400.0	665.4	15.6	268.2	413.1	643.6	14.6
	5.6	1129.9	337.9	48.6	62.0	1068.7	362.5	46.0	55.6	1006.7	387.2	43.3	49.5	975.1	400.0	42.0	46.5	943.1	413.1	40.6	43.6
	44	332.6	343.3	798.3	22.2	314.9	368.7	755.7	19.9	296.9	394.3	712.5	17.8	287.7	407.6	690.5	16.7	278.4	421.3	668.2	15.7
	6.7	1169.8	343.3	50.4	66.3	1107.4	368.7	47.7	59.6	1044.1	394.3	45.0	53.1	1011.9	407.6	43.6	50.0	979.1	421.3	42.2	46.9
	45	338.4	346.1	812.1	22.9	320.5	371.9	769.1	20.6	302.3	397.9	725.4	18.4	293.0	411.4	703.2	17.3	283.6	425.4	680.6	16.3
7.2	1190.1	346.1	51.2	68.5	1127.1	371.9	48.5	61.6	1063.0	397.9	45.8	55.0	1030.5	411.4	44.4	51.8	997.4	425.4	42.9	48.6	
6350 B 10.0	42	330.1	350.3	792.3	21.9	312.7	376.3	750.5	19.7	295.1	402.5	708.2	17.6	285.1	416.0	686.6	16.5	276.9	429.9	664.6	15.5
	5.6	1161.0	350.3	50.0	65.3	1099.8	376.3	47.3	58.8	1037.8	402.5	44.7	52.5	1006.1	416.0	43.3	49.4	973.9	429.9	41.9	46.4
	44	341.8	355.9	820.2	23.4	324.0	382.7	777.6	21.1	305.9	409.8	734.3	18.8	296.7	423.8	712.1	17.8	287.4	438.3	689.7	16.7
	6.7	1202.0	355.9	51.7	69.9	1139.5	382.7	49.1	63.0	1076.0	409.8	46.3	56.3	1043.6	423.8	44.9	53.1	1010.7	438.3	43.5	49.9
	45	347.7	358.7	834.4	24.2	329.7	385.9	791.3	21.8	311.4	413.5	747.5	19.5	302.1	427.7	725.1	18.4	292.7	442.4	702.4	17.3
7.2	1222.8	358.7	52.6	72.2	1159.6	385.9	49.9	65.2	1095.3	413.5	47.2	58.3	1062.6	427.7	45.7	55.0	1029.3	442.4	44.3	51.7	
6360 B 9.9	42	341.5	370.9	819.5	23.3	323.5	397.8	776.4	21.0	305.3	425.0	732.8	18.8	296.0	439.0	710.4	17.7	286.5	453.5	687.5	16.6
	5.6	1200.9	370.9	51.7	69.8	1137.8	397.8	49.0	62.8	1073.8	425.0	46.2	56.1	1041.0	439.0	44.8	52.8	1007.5	453.5	43.4	49.6
	44	353.3	377.1	847.9	24.9	335.0	404.8	804.0	22.5	316.4	432.9	759.3	20.1	306.8	447.5	736.4	18.9	297.1	462.5	712.9	17.8
	6.7	1242.5	377.1	53.5	74.5	1178.2	404.8	50.7	67.2	1112.7	432.9	47.9	60.1	1079.1	447.5	46.5	56.6	1044.8	462.5	45.0	53.2
	45	359.3	380.1	862.3	25.8	340.8	408.3	817.9	23.2	322.0	436.9	772.7	20.8	312.3	451.8	749.5	19.6	302.4	467.1	725.8	18.4
7.2	1263.6	380.1	54.4	77.0	1198.6	408.3	51.6	69.5	1132.0	436.9	48.7	62.2	1098.4	451.8	47.3	58.6	1063.6	467.1	45.8	55.1	
6370 B 9.7	42	352.5	391.4	846.0	24.8	334.1	419.2	801.8	22.4	315.3	447.4	756.8	20.0	305.7	462.0	733.6	18.8	295.7	477.0	709.7	17.6
	5.6	1239.7	391.4	53.4	74.2	1174.9	419.2	50.6	66.8	1109.0	447.4	47.7	59.7	1075.0	462.0	46.3	56.2	1040.0	477.0	44.8	52.7
	44	364.5	398.1	874.8	26.5	345.7	426.8	829.7	23.9	326.5	456.0	783.7	21.4	316.6	471.2	759.9	20.1	306.4	486.8	735.5	18.9
	6.7	1281.9	398.1	55.2	79.2	1215.8	426.8	52.3	71.5	1148.4	456.0	49.4	63.9	1113.6	471.2	47.9	60.2	1077.8	486.8	46.4	56.5
	45	370.6	401.5	889.4	27.4	351.6	430.6	843.8	24.7	332.2	460.4	797.3	22.1	322.2	475.8	773.2	20.8	311.9	491.7	748.5	19.6
7.2	1303.3	401.5	56.1	81.8	1236.6	430.6	53.2	73.8	1168.3	460.4	50.3	66.1	1133.1	475.8	48.8	62.3	1096.9	491.7	47.2	58.5	
6380 B 9.5	42	363.3	411.9	871.9	26.3	344.4	440.6	826.5	23.7	325.1	469.8	802.2	21.2	315.1	484.9	756.1	20.0	304.7	500.5	731.3	18.7
	5.6	1277.6	411.9	55.0	78.7	1211.2	440.6	52.1	70.9	1143.3	469.8	49.2	63.4	1108.1	4						

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Capacity Correction & Limits

ALTITUDE CORRECTION FACTORS			
Altitude		Capacity Multiplier	Power Multiplier
Feet	Meter		
0	0	1	1
2000	610	0.99	1.01
4000	1219	0.98	1.02
6000	1829	0.97	1.03
8000	2438	0.96	1.04
10000	3048	0.95	1.05

Table 5

COOLER FOULING FACTORS			
English	SI	Capacity Multiplier	Power Multiplier
0.0001	0.018	1.00	1.00
0.00025	0.044	0.99	1.00
0.00050	0.088	0.98	0.99
0.00100	0.176	0.95	0.98
0.00200	0.352	0.90	0.96

Table 6

RANGE CORRECTION FACTORS			
Range		Capacity Multiplier	Power Multiplier
° F	° C		
8	4.4	0.995	0.998
10	5.6	1.000	1.000
12	6.7	1.005	1.002
14	7.8	1.010	1.004
16	8.9	1.015	1.006

Table 7

FIN MATERIAL CORRECTION FACTORS		
Tube Material / Fin Material	Capacity Multiplier	Power Multiplier
Copper / Copper	1.010	0.992
Copper / Precoated	0.995	1.001

Table 8

Unit ratings are based on sea level altitude, copper tube/aluminum fins condenser, ARI 550-590 standard of 10°F (5.5°C) range and 0.0001 ft<sup>2</sup>.h°F (0.018m<sup>2</sup>.°C/kW) fouling factor. For higher altitude, the use of alternative condenser material, other range and fouling factor, apply the above factors.

## Operation Limits

TEMPERATURE RANGE LIMITS		
LIMIT	° F	° C
Minimum Range Limit	8	4.4
Maximum Range Limit	16	8.9

Table 9

EVAPORATOR TEMPERATURE LIMITS		
LIMIT	° F	° C
Maximum leaving chilled water temperature	60	15.6
(1) Maximum entering chilled water temperature	76	24.4
(2) Minimum leaving chilled water temperature	40	4.4

Table 10

EVAPORATOR PRESSURE LIMITS					
PRESSURE		REFRIGERANT		WATER	
		psig	kPa	psig	kPa
Max Working Pressure	APCH 5004A / 6005A - APCD 5009A / 6011A	392	2700	363	2500
	APCD 5012A / 6014A - APCD 5340B / 6390B	363	2500	145	1000
Test Pressure	APCH 5004A / 6005A - APCD 5009A / 6011A	725	5000	725	5000
	APCD 5012A / 6014A - APCD 5340B / 6390B	399	2750	207	1430

Table 11

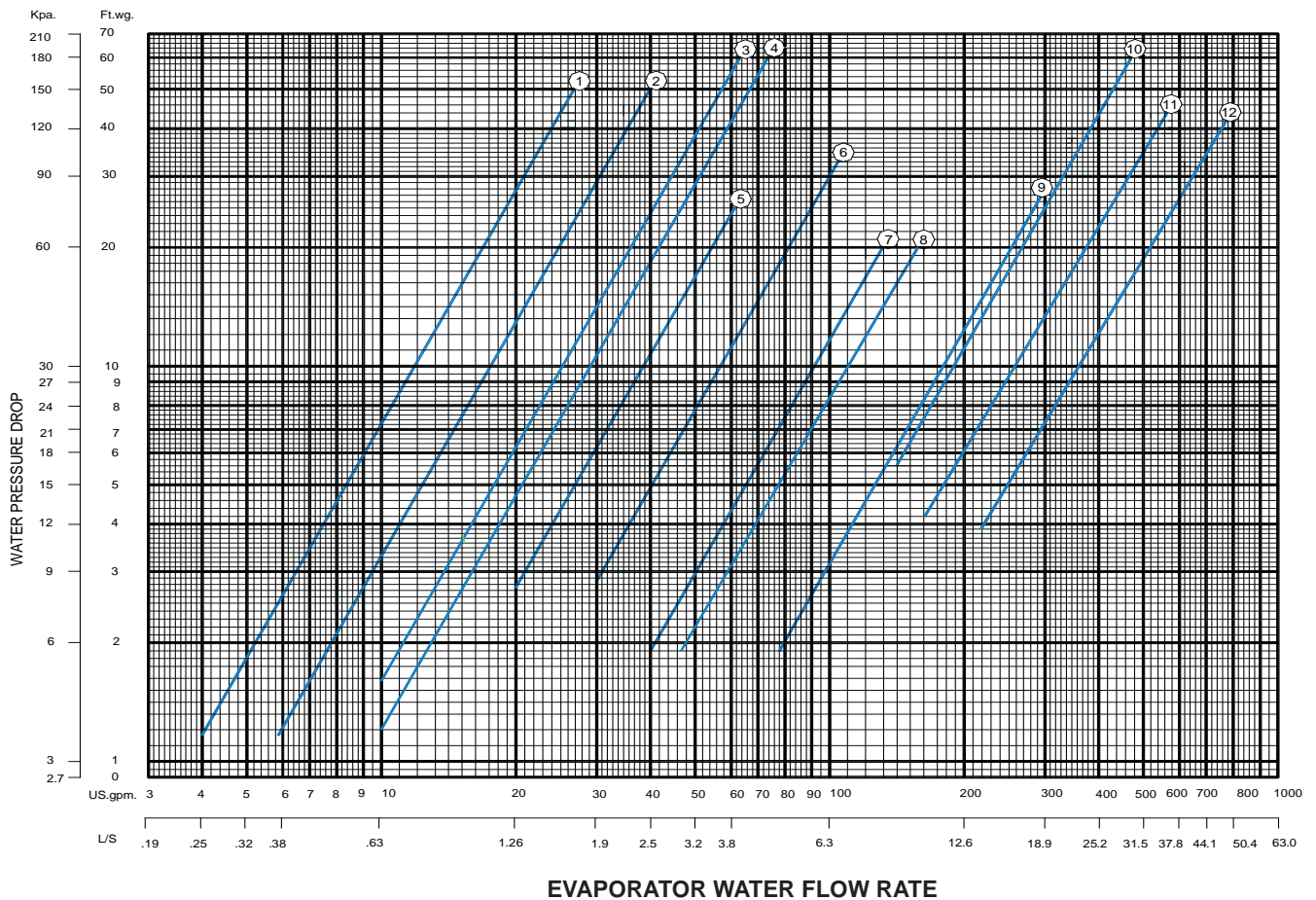
CONDENSER PRESSURE LIMITS		
REFRIGERANT PRESSURE	psig	kPa
Design Working Pressure	300	2068
Test Pressure	450	3100

Table 12

- (1) For short periods.
- (2) For lower temperatures, brine solutions to be used. Consult SKM.

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Evaporator Water Pressure Drop



Curve #	Evaporator	APCH / D	Water Flow Rate	
			Minimum Usgpm/L/s	Maximum Usgpm/L/s
1	V25T-28	5004 A, 6005 A	4.0 / 0.25	40.0 / 2.52
2	V25T-42	5006 A, 6007 A	4.0 / 0.25	40.0 / 2.52
3	V80-50	5008 A, 6009 A	10.0 / 0.63	75.0 / 4.73
4	V80-58	5009 A, 6011 A	10.0 / 0.63	75.0 / 4.73
5	1056 2056	5012 A, 6014A, 5017 A, 5018 A, 6020 A & 6022 A	25.0 / 1.58	55.0 / 3.47
6	1095 2095	5025 A, 6030 A, 5022 A, 5024 A, 6025 A & 6028 A	30.0 / 1.89	95.0 / 6.0
7	1120 2120	5030 A - 5040 A & 6035 A - 6050 A 5032 A - 5039 A & 6036 A - 6046 A	40.0 / 2.52	130.0 / 8.2
8	1160R	5050 A, 6060 A	50.0 / 3.15	155.0 / 9.78
9	1235R	5065 A - 5085 A & 6075 A - 6095 A	95.0 / 6.0	255.0 / 16.1
10	1390	5095 B - 5125 B & 6110 B - 6145 B	160.0 / 10.1	500.0 / 31.55
11	2460	5135 B - 5170 B & 6155 B - 6195 B	175.0 / 11.04	540.0 / 34.07
	2460(2 nos.)*	5260 B* - 5340B* & 6300 B* - 6390 B*		
12	3650	5180 B - 5250 B & 6210 B - 6290 B	210.0 / 13.25	720.0 / 45.42

Table 13

**Note:** \* To calculate the water pressure drop for models APCD-5260B-5340B & APCD-6300B-6390B, use curve #11 and HALVE the WFR as the evaporators are connected in parallel.



# SKM Air Cooled Packaged Chillers APCD Series - R22

## Selection Procedure

**APCD** Chillers should be selected with specific Design Considerations, requirements and parameters of the intended application. Care and good engineering should lead to an efficient and cost effective selection. Sample procedures are shown below:

### Example 1: (IP System)

Select an Air Cooled Package Chiller giving a capacity of 112.0 TR to cool water from 56°F to 44°F at 2000 ft. altitude, 0.00075 fouling factor, power supply 415V/3Ph/50Hz an 115 °F ambient Temperature.

Find compressor power input in KW.

#### Selection:

Apply the following factors to convert the required capacity to tabulated capacity ratings.

	Capacity Multiplier	Power Multiplier
Range (12 °F)	1.005	1.002
Altitude	0.99	1.01
Fouling Factor	0.965	0.985

$$\begin{aligned} \text{Tabulated rated capacity} &= \frac{112}{1.005 \times 0.99 \times 0.965} \\ &= 116.7 \text{ TR} \end{aligned}$$

Refer to capacity rating 50Hz under 115 °F condenser entering air temperature and select a chiller giving a capacity nearest larger to 116.7 at 44 °F LCWT. Select model APCD 5135B giving a capacity of 119.1 TR and PI = 155.6 kW.

Apply correction factors to the selected unit to find actual capacity and P I.

$$\begin{aligned} \text{Capacity} &= 119.1 \times 1.005 \times 0.99 \times 0.965 \\ &= 114.4 \text{ TR} \\ \text{P I} &= 155.6 \times 1.002 \times 1.01 \times 0.985 \\ &= 155.1 \text{ kW} \end{aligned}$$

#### Calculation of Water Flow Rate (WFR)

To calculate the water flow rate to be circulated, use the following:

$$\begin{aligned} \text{WFR (US gpm)} &= \frac{\text{C.CAP (TR)} \times 24}{\text{Range (°F)}} \\ &= \frac{114.4 \times 24}{12} = 228.8 \text{ US gpm} \end{aligned}$$

Determine the pressure drop from chart on Page 23, using 228.8 gpm, pressure drop reading is 7.6 ft. wg.

### Example 2: (SI System)

Select an Air Cooled Package Chiller giving a capacity of 460.0 kW of refrigeration to cool water from 14.5°C to 6.7°C at 610M altitude, 0.132 fouling factor, power supply 380V/3Ph/60Hz and 40.6 °C ambient Temperature.

Find compressor power input in kW.

#### Selection:

Apply the following factors to convert the required capacity to tabulated capacity ratings.

	Capacity Multiplier	Power Multiplier
Range (7.8 °C)	1.010	1.004
Altitude	0.99	1.01
Fouling Factor	0.965	0.985

$$\begin{aligned} \text{Tabulated rated capacity} &= \frac{460}{1.01 \times 0.99 \times 0.965} \\ &= 476.3 \text{ kW} \end{aligned}$$

Refer to capacity rating 60Hz under 40.6 °C condenser entering air temperature and select a chiller giving a capacity nearest larger to 476.3 at 6.7 °C LCWT. Select model APCD 6145B giving a capacity of 486.5 kW and PI = 179.5 kW.

Apply correction factors to the selected unit to find actual capacity and P I.

$$\begin{aligned} \text{Capacity} &= 486.5 \times 1.01 \times 0.99 \times 0.965 \\ &= 469.4 \text{ kW} \\ \text{P I} &= 179.5 \times 1.004 \times 1.01 \times 0.985 \\ &= 179.3 \text{ kW} \end{aligned}$$

#### Calculation of Water Flow Rate (WFR)

To calculate the water flow rate to be circulated, use the following:

$$\begin{aligned} \text{WFR (L/s)} &= \frac{\text{C.CAP (kW)} \times 0.239}{\text{Range (°C)}} \\ &= \frac{469.4 \times 0.239}{7.8} = 14.4 \text{ L/s.} \end{aligned}$$

Determine the pressure drop from chart on Page 23, using 14.4 L/s, pressure drop reading is 43.7 kPa.

**For more details refer to other specifications and dimensional drawings for the selected model.**

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Capacity Control Steps

Models APCH / D		Standard Capacity Steps %	Optional Capacity Steps	
			CRS 1	CRS 2
5004A to 8A	6005 A to 9A	100 - 0	-	-
5009A to 12A	6011A to 14A	100 - 0	100 - 67 - 0	-
5017 A	6020 A	100 - 0	100 - 50 - 0	-
5018A to 24A	6022A to 28A	100 - 50 - 0	100 - 83 - 50 - 33 - 0	-
5022 A	6025 A	100 - 56 - 0	100 - 85 - 56 - 38 - 0	-
5025 A	6030 A	100 - 0	100 - 67 - 0	100 - 67 - 33 - 0
5030 A	6035 A	100 - 0	100 - 67 - 0	100 - 67 - 33 - 0
5032 A	6036 A	100 - 59 - 0	100 - 86 - 59 - 30 - 0	-
5034 A	6039 A	100 - 50 - 0	100 - 75 - 50 - 25 - 0	-
5035 A	6040 A	100 - 0	100 - 75 - 0	100 - 75 - 50 - 0
5039 A	6046 A	100 - 61 - 0	100 - 81 - 61 - 41 - 0	100 - 81 - 61 - 41 - 20 - 0
5040 A	6050 A	100 - 0	100 - 75 - 0	100 - 75 - 50 - 0
5050 A	6060 A	100 - 50 - 0	100 - 83 - 50 - 33 - 0	100 - 83 - 67 - 50 - 33 - 17 - 0
5065 A	6075 A	100 - 50 - 0	100 - 83 - 50 - 33 - 0	100 - 83 - 67 - 50 - 33 - 17 - 0
5070 A	6080 A	100 - 54 - 0	100 - 85 - 54 - 40 - 0	100 - 85 - 69 - 54 - 40 - 27 - 0
5075 A	6085 A	100 - 50 - 0	100 - 88 - 50 - 38 - 0	100 - 88 - 75 - 50 - 38 - 25 - 0
5080 A	6090 A	100 - 53 - 0	100 - 88 - 53 - 39 - 0	100 - 88 - 76 - 53 - 39 - 26 - 0
5085 A	6095 A	100 - 50 - 0	100 - 88 - 50 - 38 - 0	100 - 88 - 75 - 50 - 38 - 25 - 0
5095 B	6110 B	100 - 67 - 33 - 0	100 - 67 - 33 - 22 - 0	100 - 89 - 67 - 56 - 33 - 22 - 0
5100 B	6115 B	100 - 68 - 37 - 0	100 - 68 - 37 - 28 - 0	100 - 89 - 68 - 58 - 37 - 28 - 0
5105 B	6125 B	100 - 70 - 35 - 0	100 - 70 - 35 - 26 - 0	100 - 90 - 70 - 61 - 35 - 26 - 0
5110 B	6130 B	100 - 67 - 33 - 0	100 - 67 - 33 - 25 - 0	100 - 92 - 67 - 58 - 33 - 25 - 0
5115 B	6135 B	100 - 68 - 36 - 0	100 - 68 - 36 - 27 - 0	100 - 92 - 68 - 60 - 36 - 27 - 0
5120 B	6140 B	100 - 69 - 34 - 0	100 - 69 - 34 - 26 - 0	100 - 92 - 69 - 60 - 34 - 26 - 0
5125 B	6145 B	100 - 67 - 33 - 0	100 - 67 - 33 - 25 - 0	100 - 92 - 67 - 58 - 33 - 25 - 0
5135 B	6155 B	100 - 76 - 52 - 28 - 0	100 - 76 - 52 - 44 - 28 - 21 - 0	100 - 92 - 76 - 68 - 52 - 44 - 28 - 21 - 0
5140 B	6165 B	100 - 77 - 54 - 27 - 0	100 - 77 - 54 - 47 - 27 - 20 - 0	100 - 92 - 77 - 69 - 54 - 47 - 27 - 20 - 0
5145 B	6170 B	100 - 78 - 52 - 26 - 0	100 - 78 - 52 - 45 - 26 - 19 - 0	100 - 93 - 78 - 71 - 52 - 45 - 26 - 19 - 0
5150 B	6175 B	100 - 75 - 50 - 25 - 0	100 - 75 - 50 - 44 - 25 - 19 - 0	100 - 94 - 75 - 69 - 50 - 44 - 25 - 19 - 0
5155 B	6180 B	100 - 76 - 51 - 27 - 0	100 - 76 - 51 - 45 - 27 - 20 - 0	100 - 94 - 76 - 70 - 51 - 45 - 27 - 20 - 0
5160 B	6185 B	100 - 76 - 53 - 26 - 0	100 - 76 - 53 - 46 - 26 - 20 - 0	100 - 94 - 76 - 70 - 53 - 46 - 26 - 20 - 0
5165 B	6190 B	100 - 77 - 51 - 26 - 0	100 - 77 - 51 - 45 - 26 - 19 - 0	100 - 94 - 77 - 70 - 51 - 45 - 26 - 19 - 0
5170 B	6195 B	100 - 75 - 50 - 25 - 0	100 - 75 - 50 - 44 - 25 - 19 - 0	100 - 94 - 75 - 69 - 50 - 44 - 25 - 19 - 0
5180 B	6210 B	100-84-66-51-33-18-0	100-84-66-51-33-26-18-12-0	Nil
5190 B	6230 B	100 - 83 - 67 - 50 - 33 - 17 - 0	100 - 83 - 67 - 50 - 33 - 28 - 17 - 11 - 0	Nil
5200 B	6240 B	100 - 84 - 68 - 53 - 37 - 18 - 0	100 - 84 - 68 - 53 - 37 - 32 - 18 - 14 - 0	Nil
5210 B	6250 B	100 - 85 - 70 - 52 - 35 - 17 - 0	100 - 85 - 70 - 52 - 35 - 31 - 17 - 13 - 0	Nil
5220 B	6260 B	100 - 83 - 67 - 50 - 33 - 17 - 0	100 - 83 - 67 - 50 - 33 - 29 - 17 - 13 - 0	Nil
5230 B	6270 B	100 - 84 - 68 - 52 - 36 - 18 - 0	100 - 84 - 68 - 52 - 36 - 31 - 18 - 13 - 0	Nil
5240 B	6280 B	100 - 84 - 69 - 52 - 34 - 17 - 0	100 - 84 - 69 - 52 - 34 - 30 - 17 - 13 - 0	Nil
5250 B	6290 B	100 - 83 - 67 - 50 - 33 - 17 - 0	100 - 83 - 67 - 50 - 33 - 29 - 17 - 13 - 0	Nil
5260 B	6300 B	100 - 88 - 75 - 63 - 50 - 38 - 25 - 13 - 0	Nil	Nil
5270 B	6310 B	100 - 88 - 76 - 64 - 52 - 40 - 28 - 14 - 0	Nil	Nil
5280 B	6330 B	100 - 88 - 77 - 65 - 54 - 40 - 27 - 13 - 0	Nil	Nil
5290 B	6340 B	100 - 89 - 78 - 65 - 52 - 39 - 26 - 13 - 0	Nil	Nil
5300 B	6350 B	100 - 88 - 75 - 63 - 50 - 38 - 25 - 13 - 0	Nil	Nil
5310 B	6360 B	100 - 88 - 76 - 63 - 51 - 39 - 27 - 13 - 0	Nil	Nil
5320 B	6370 B	100 - 88 - 76 - 64 - 53 - 39 - 26 - 13 - 0	Nil	Nil
5330 B	6380 B	100 - 88 - 77 - 64 - 51 - 38 - 26 - 13 - 0	Nil	Nil
5340 B	6390 B	100 - 88 - 75 - 63 - 50 - 38 - 25 - 13 - 0	Nil	Nil

Table 14

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Standard Compressor Startup Method

Models	Power Supply	Standard Compressor Starting
Using Compressor MH 6, MH10, M H12	380~415V / 3Ph / 50Hz 380V / 3Ph / 60Hz 460V / 3Ph / 60Hz 220V / 3Ph / 60Hz	DOL
Using Compressor D10, D15, D25, D35, D40, D35+D40 & D40+D50	380~415V / 3Ph / 50Hz 380V / 3Ph / 60Hz 440V / 3Ph / 50Hz	DOL
Using Compressor D50, D50+D60 & D60	460V / 3Ph / 60Hz	PWS
Using Compressor D35, D40, D50 & D60	220V / 3Ph / 60Hz	PWS

Table 15

## Optional Part Winding Start

All chillers with standard DOL start compressors as shown, do not, generally require part winding start due to the use of multiple compressors allowing smaller electrical load increments. Maximum Instantaneous current flow (ICF) as shown on electrical specifications, page 27-31, must be used in determining the need of such part winding start.

In case of two values of ICF (DOL & PWS) shown in electrical data, pages 27-31, the unit must be supplied as in DOL as standard and PWS as optional. Specify PWS.

In case only one value is shown, this means that the unit will be supplied, as standard, either DOL or PWS.

## Standard Power Entry Connections

Power Supply	Model APCH/D	No. of Entry Points
380 440V / 3Ph / 50 Hz	5004A 5340B	One
380V / 3Ph / 60 Hz	6005A 6390B	
220V / 3Ph / 60 Hz	6005A 6240B	Two
	6250B 6390B	

Table 16

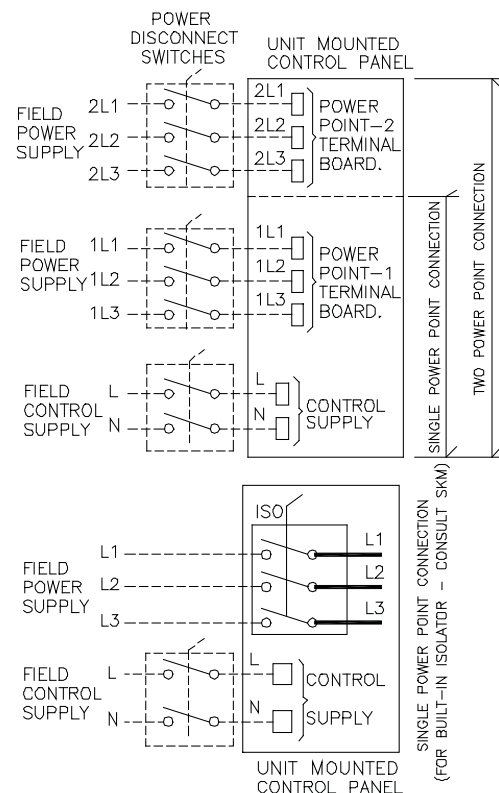
### Notes :

All cable terminations are from the external isolator. Isolator is field supplied and field installed (by others) within close proximity of the chiller in accordance with local codes and regulations.

## Voltages Range

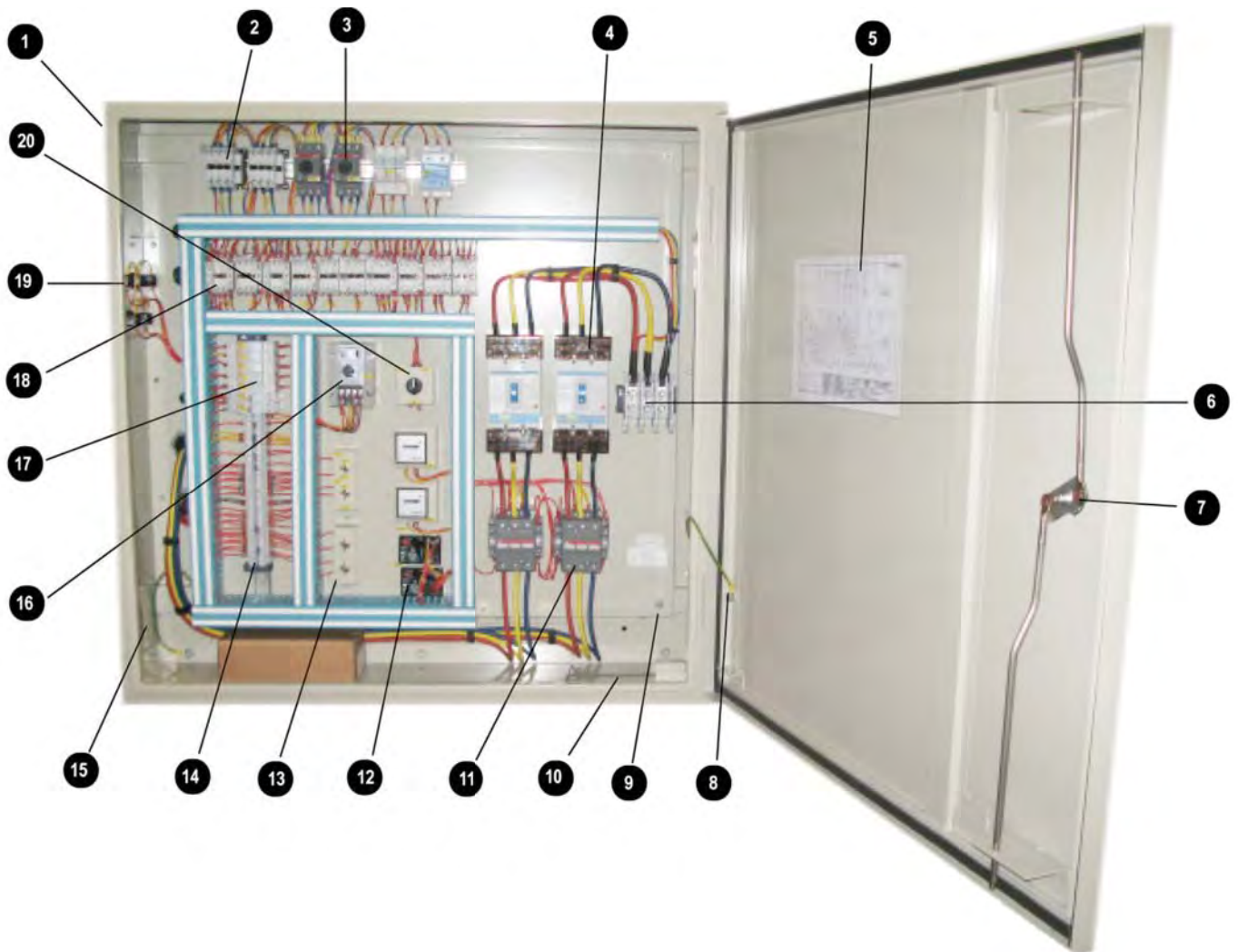
Unit Name Plate Power Supply (V / Ph / Hz)	Allowable Voltage Range	
	Minimum	Maximum
380 415 / 3 / 50	360	440
440 / 3 / 50	396	500
380 / 3 / 60	342	418
460 / 3 / 60	414	506
220 / 3 / 60	200	260

Table 17



# SKM Air Cooled Packaged Chillers APCD Series - R22

## Control Panel Components Layout (Typical)



### Description:

1. IP-54 Panel Enclosure with hinged door with key and lock.
2. Condenser Fan Motor Contactor.
3. Condenser Fan Motor Protection Circuit Breaker.
4. Compressor Circuit Breaker.
5. Wiring Diagram.
6. Incoming Supply Power Terminal / Busbars.
7. Lock & Key.
8. Door Earthing.
9. Earth Terminal.
10. Detachable plate for cable entry.
11. Compressor Contactor.
12. Anti- Recycling Time Delay Relays.
13. Control ON/OFF & Manual/Auto Pump Down switches.
14. Control Circuit Terminal Board.
15. Filtered Ventilation.
16. Electronic Temperature Controller.
17. Control Fuses & Reset Push Buttons.
18. Control Logic Relays.
19. Indication Lamps.
20. Selector Switch.

# SKM Air Cooled Packaged Chillers APCD Series - R22

## ELECTRICAL DATA

*Rated Power Supply - 380-415V/3Ph/50Hz*

MODEL	UNIT CHARACTERISTICS				COMPRESSOR				CONDENSER FAN MOTOR			
	APC H/D	MFA	MCA	ICF		QTY	MOC	RLA	LRA	QTY	FLA	LRA
				DOL	PWS							
5004A	25	15	72	-	1	15	10.7	67	1	1.4	4.7	
5006A	40	23	104	-	1	22	15.7	90	1	3.4	14.4	
5008A	63	28	124	-	1	27	19.3	105	1	4.2	18.7	
5009A	50	28	140	-	1	21	19	121	1	4.2	18.7	
5012A	63	37	140	108	1	29	26	129	2	2.2	8.7	
5017A	100	55	222	172	1	42	37	199	2	4.2	18.7	
5018A	80	51	163	133	2	21	19	121	2	4.2	18.7	
5022A	100	60	171	139	1+1	29+21	26+19	129+121	2	4.2	18.7	
5024A	100	67	178	146	2	29	26	129	2	4.2	18.7	
5025A	160	80	327	251	1	64	57	304	2	4.2	18.7	
5030A	200	103	331	255	1	81	72	304	3	4.2	18.7	
5032A	125	85	252	202	1+1	42+29	37+26	199+129	3	4.2	18.7	
5034A	160	96	263	213	2	42	37	199	3	4.2	18.7	
5035A	200	116	-	416	1	88	83	458	3	4.2	18.7	
5039A	200	121	368	292	1+1	64+42	57+37	304+199	3	4.2	18.7	
5040A	250	138	-	432	1	108	100	476	3	4.2	18.7	
5050A	250	145	392	316	2	64	57	304	4	4.2	18.7	
5065A	315	187	416	340	2	81	72	304	6	4.2	18.7	
5070A	315	201	570	501	1+1	88+81	83+72	458+304	6	4.2	18.7	
5075A	315	212	-	512	2	88	83	458	6	4.2	18.7	
5080A	400	233	-	527	1+1	108+88	100+83	476+458	6	4.2	18.7	
5085A	400	250	-	544	2	108	100	476	6	4.2	18.7	
5095B	400	268	496	420	3	81	72	304	8	4.2	18.7	
5100B	400	281	650	581	1+2	88+81	83+72	458+304	8	4.2	18.7	
5105B	400	292	661	592	2+1	88+81	83+72	458+304	8	4.2	18.7	
5110B	400	303	-	603	3	88	83	458	8	4.2	18.7	
5115B	500	325	-	619	1+2	108+88	100+83	476+458	8	4.2	18.7	
5120B	500	342	-	636	2+1	108+88	100+83	476+458	8	4.2	18.7	
5125B	500	359	-	653	3	108	100	476	8	4.2	18.7	
5135B	500	370	739	670	1+3	88+81	83+72	458+304	12	4.2	18.7	
5140B	500	381	750	681	2+2	88+81	83+72	458+304	12	4.2	18.7	
5145B	500	392	761	692	3+1	88+81	83+72	458+304	12	4.2	18.7	
5150B	500	403	-	703	4	88	83	458	12	4.2	18.7	
5155B	630	424	-	719	1+3	108+88	100+83	476+458	12	4.2	18.7	
5160B	630	441	-	736	2+2	108+88	100+83	476+458	12	4.2	18.7	
5165B	630	458	-	753	3+1	108+88	100+83	476+458	12	4.2	18.7	
5170B	630	475	-	770	4	108	100	476	12	4.2	18.7	
5180B	630	481	709	633	3+3	81+64	72+57	304+304	18	4.2	18.7	
5190B	630	526	754	678	6	81	72	304	18	4.2	18.7	
5200B	800	550	919	850	2+4	88+81	83+72	458+304	18	4.2	18.7	
5210B	800	572	941	872	4+2	88+81	83+72	458+304	18	4.2	18.7	
5220B	800	594	-	894	6	88	83	458	18	4.2	18.7	
5230B	800	633	-	927	2+4	108+88	100+83	476+458	18	4.2	18.7	
5240B	800	667	-	961	4+2	108+88	100+83	476+458	18	4.2	18.7	
5250B	1000	701	-	995	6	108	100	476	18	4.2	18.7	
5260B	800	695	923	847	8	81	72	304	24	4.2	18.7	
5270B	1000	720	1088	1020	2+6	88+81	83+72	458+304	24	4.2	18.7	
5280B	1000	742	1110	1042	4+4	88+81	83+72	458+304	24	4.2	18.7	
5290B	1000	764	1132	1064	6+2	88+81	83+72	458+304	24	4.2	18.7	
5300B	1000	786	-	1086	8	88	83	458	24	4.2	18.7	
5310B	1000	824	-	1118	2+6	108+88	100+83	476+458	24	4.2	18.7	
5320B	1000	858	-	1152	4+4	108+88	100+83	476+458	24	4.2	18.7	
5330B	1000	892	-	1186	6+2	108+88	100+83	476+458	24	4.2	18.7	
5340B	1250	926	-	1220	8	108	100	476	24	4.2	18.7	

Table 18

### NOTE:

220-240V/1PH/50Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch

# SKM Air Cooled Packaged Chillers APCD Series - R22

## ELECTRICAL DATA

Rated Power Supply - 440V/3Ph/50Hz

MODEL	UNIT CHARACTERISTICS				COMPRESSOR				CONDENSER FAN MOTOR			
	APC H/D	MFA	MCA	ICF		QTY	MOC	RLA	LRA	QTY	FLA	LRA
				DOL	PWS							
5004A	25	15	71	-	1	15	10.7	67	1	1.1	4.3	
5006A	40	22	103	-	1	22	15.7	90	1	2.7	13.1	
5008A	50	28	121	-	1	27	19.3	105	1	3.6	16.0	
5009A	50	27	143	-	1	21	19	127	1	3.6	16.0	
5012A	63	36	145	111	1	29	26	135	2	1.9	7.9	
5017A	100	53	229	176	1	42	37	209	2	3.6	16.0	
5018A	80	50	166	134	2	21	19	127	2	3.6	16.0	
5022A	100	59	174	140	1+1	29+21	26+19	135+127	2	3.6	16.0	
5024A	100	66	181	147	2	29	26	135	2	3.6	16.0	
5025A	160	78	339	259	1	64	57	319	2	3.6	16.0	
5030A	200	101	342	262	1	81	72	319	3	3.6	16.0	
5032A	125	83	258	206	1+1	42+29	37+26	209+135	3	3.6	16.0	
5034A	160	94	269	217	2	42	37	209	3	3.6	16.0	
5035A	200	115	-	432	1	88	83	481	3	3.6	16.0	
5039A	200	119	379	299	1+1	64+42	57+37	319+209	3	3.6	16.0	
5040A	250	136	-	448	1	108	100	500	3	3.6	16.0	
5050A	200	143	403	323	2	64	57	319	4	3.6	16.0	
5065A	315	184	425	345	2	81	72	319	6	3.6	16.0	
5070A	315	197	587	515	1+1	88+81	83+72	481+319	6	3.6	16.0	
5075A	315	208	-	526	2	88	83	481	6	3.6	16.0	
5080A	400	230	-	542	1+1	108+88	100+83	500+481	6	3.6	16.0	
5085A	400	247	-	559	2	108	100	500	6	3.6	16.0	
5095B	400	263	504	424	3	81	72	319	8	3.6	16.0	
5100B	400	277	666	594	1+2	88+81	83+72	481+319	8	3.6	16.0	
5105B	400	288	677	605	2+1	88+81	83+72	481+319	8	3.6	16.0	
5110B	400	299	-	616	3	88	83	481	8	3.6	16.0	
5115B	500	320	-	632	1+2	108+88	100+83	500+481	8	3.6	16.0	
5120B	500	337	-	649	2+1	108+88	100+83	500+481	8	3.6	16.0	
5125B	500	354	-	666	3	108	100	500	8	3.6	16.0	
5135B	500	363	753	680	1+3	88+81	83+72	481+319	12	3.6	16.0	
5140B	500	374	764	691	2+2	88+81	83+72	481+319	12	3.6	16.0	
5145B	500	385	775	702	3+1	88+81	83+72	481+319	12	3.6	16.0	
5150B	500	396	-	713	4	88	83	481	12	3.6	16.0	
5155B	630	417	-	730	1+3	108+88	100+83	500+481	12	3.6	16.0	
5160B	630	434	-	747	2+2	108+88	100+83	500+481	12	3.6	16.0	
5165B	630	451	-	764	3+1	108+88	100+83	500+481	12	3.6	16.0	
5170B	630	468	-	781	4	108	100	500	12	3.6	16.0	
5180B	630	470	711	632	3+3	81+64	72+57	319+319	18	3.6	16.0	
5190B	630	515	756	676	6	81	72	319	18	3.6	16.0	
5200B	630	540	929	857	2+4	88+81	83+72	481+319	18	3.6	16.0	
5210B	800	562	951	879	4+2	88+81	83+72	481+319	18	3.6	16.0	
5220B	800	584	973	901	6	88	83	481	18	3.6	16.0	
5230B	800	622	-	934	2+4	108+88	100+83	500+481	18	3.6	16.0	
5240B	800	656	-	968	4+2	108+88	100+83	500+481	18	3.6	16.0	
5250B	800	690	-	1002	6	108	100	500	18	3.6	16.0	
5260B	800	680	922	842	8	81	72	319	24	3.6	16.0	
5270B	800	705	1095	1023	2+6	88+81	83+72	481+319	24	3.6	16.0	
5280B	1000	727	1117	1045	4+4	88+81	83+72	481+319	24	3.6	16.0	
5290B	1000	749	1139	1067	6+2	88+81	83+72	481+319	24	3.6	16.0	
5300B	1000	771	-	1089	8	88	83	481	24	3.6	16.0	
5310B	1000	809	-	1122	2+6	108+88	100+83	500+481	24	3.6	16.0	
5320B	1000	843	-	1156	4+4	108+88	100+83	500+481	24	3.6	16.0	
5330B	1000	877	-	1190	6+2	108+88	100+83	500+481	24	3.6	16.0	
5340B	1250	911	-	1224	8	108	100	500	24	3.6	16.0	

Table 19

### NOTE:

220V/1PH/50Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch



# SKM Air Cooled Packaged Chillers APCD Series - R22

## ELECTRICAL DATA

Rated Power Supply - 380V/3Ph/60 Hz

MODEL	UNIT CHARACTERISTICS				COMPRESSOR				CONDENSER FAN MOTOR			
	APC H/D	MFA	MCA	ICF		QTY	MOC	RLA	LRA	QTY	FLA	LRA
				DOL	PWS							
6005A	40	17	78	-	1	17.5	12.5	72	1	1.7	5.6	
6007A	50	27	126	-	1	26	18.7	110	1	3.8	16.0	
6009A	63	32	178	-	1	30	21.4	150	1	5.4	27.5	
6011A	63	34	186	-	1	26	23	158	1	5.4	27.5	
6014A	80	45	167	-	1	35	31	152	2	3.2	12.2	
6020A	125	67	261	204	1	50	45	228	2	5.4	27.5	
6022A	100	63	214	-	2	26	23	158	2	5.4	27.5	
6025A	125	73	208	-	1+1	35+26	31+23	152+158	2	5.4	27.5	
6028A	125	81	216	-	2	35	31	152	2	5.4	27.5	
6030A	200	96	365	282	1	76	68	332	2	5.4	27.5	
6035A	250	122	370	287	1	97	85	332	3	5.4	27.5	
6036A	160	103	297	-	1+1	50+35	45+31	228+152	3	5.4	27.5	
6039A	200	117	311	254	2	50	45	228	3	5.4	27.5	
6040A	250	140	-	468	1	106	99	505	3	5.4	27.5	
6046A	250	146	415	332	1+1	76+50	68+45	332+228	3	5.4	27.5	
6050A	315	166	-	530	1	130	120	579	3	5.4	27.5	
6060A	250	175	444	361	2	76	68	332	4	5.4	27.5	
6075A	315	224	472	389	2	97	85	332	6	5.4	27.5	
6080A	400	241	645	569	1+1	106+97	99+85	505+332	6	5.4	27.5	
6085A	400	255	-	583	2	106	99	505	6	5.4	27.5	
6090A	500	281	-	646	1+1	130+106	120+99	579+505	6	5.4	27.5	
6095A	500	302	-	667	2	130	120	579	6	5.4	27.5	
6110B	500	319	567	484	3	97	85	332	8	5.4	27.5	
6115B	500	337	740	665	1+2	106+97	99+85	505+332	8	5.4	27.5	
6125B	500	351	754	679	2+1	106+97	99+85	505+332	8	5.4	27.5	
6130B	500	365	-	693	3	106	99	505	8	5.4	27.5	
6135B	630	391	-	755	1+2	130+106	120+99	579+505	8	5.4	27.5	
6140B	630	412	-	776	2+1	130+106	120+99	579+505	8	5.4	27.5	
6145B	630	433	-	797	3	130	120	579	8	5.4	27.5	
6155B	630	444	847	771	1+3	106+97	99+85	505+332	12	5.4	27.5	
6165B	630	458	861	785	2+2	106+97	99+85	505+332	12	5.4	27.5	
6170B	630	472	875	799	3+1	106+97	99+85	505+332	12	5.4	27.5	
6175B	630	486	-	813	4	106	99	505	12	5.4	27.5	
6180B	800	512	-	876	1+3	130+106	120+99	579+505	12	5.4	27.5	
6185B	800	533	-	897	2+2	130+106	120+99	579+505	12	5.4	27.5	
6190B	800	554	-	918	3+1	130+106	120+99	579+505	12	5.4	27.5	
6195B	800	575	-	939	4	130	120	579	12	5.4	27.5	
6210B	800	578	825	742	3+3	97+76	85+68	332+332	18	5.4	27.5	
6230B	800	628	876	793	6	97	85	332	18	5.4	27.5	
6240B	800	660	1063	988	2+4	106+97	99+85	505+332	18	5.4	27.5	
6250B	800	688	1091	1016	4+2	106+97	99+85	505+332	18	5.4	27.5	
6260B	1000	716	1119	1044	6	106	99	505	18	5.4	27.5	
6270B	1000	763	-	1127	2+4	130+106	120+99	579+505	18	5.4	27.5	
6280B	1000	805	-	1169	4+2	130+106	120+99	579+505	18	5.4	27.5	
6290B	1000	847	-	1211	6	130	120	579	18	5.4	27.5	
6300B	1000	831	1079	996	8	97	85	332	24	5.4	27.5	
6310B	1000	862	1266	1190	2+6	106+97	99+85	505+332	24	5.4	27.5	
6330B	1000	890	1294	1218	4+4	106+97	99+85	505+332	24	5.4	27.5	
6340B	1250	918	1322	1246	6+2	106+97	99+85	505+332	24	5.4	27.5	
6350B	1250	946	-	1274	8	106	99	505	24	5.4	27.5	
6360B	1250	994	-	1358	2+6	130+106	120+99	579+505	24	5.4	27.5	
6370B	1250	1036	-	1400	4+4	130+106	120+99	579+505	24	5.4	27.5	
6380B	1250	1078	-	1442	6+2	130+106	120+99	579+505	24	5.4	27.5	
6390B	1250	1120	-	1484	8	130	120	579	24	5.4	27.5	

Table 20

### NOTE:

220V/1PH/60Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch

# SKM Air Cooled Packaged Chillers APCD Series - R22

## ELECTRICAL DATA

Rated Power Supply - 460V/3Ph/60 Hz

MODEL	UNIT CHARACTERISTICS				COMPRESSOR				CONDENSER FAN MOTOR		
	MFA	MCA	ICF		QTY	MOC	RLA	LRA	QTY	FLA	LRA
			DOL	PWS							
6005A	32	15	74	-	1	15	10.7	67	1	1.6	6.6
6007A	40	23	107	-	1	22	15.7	90	1	3.7	17.3
6009A	50	29	137	-	1	27	19.3	105	1	5.0	31.5
6011A	50	29	145	-	1	21	19	113	1	5.0	31.5
6014A	80	38	140	110	1	29	26	123	2	2.9	14.4
6020A	100	56	237	187	1	42	37	200	2	5.0	31.5
6022A	80	53	169	140	2	21	19	113	2	5.0	31.5
6025A	100	62	179	148	1+1	29+21	26+19	123+113	2	5.0	31.5
6028A	100	69	186	155	2	29	26	123	2	5.0	31.5
6030A	160	81	329	256	1	64	57	292	2	5.0	31.5
6035A	200	104	334	261	1	81	71	292	3	5.0	31.5
6036A	125	87	268	218	1+1	42+29	37+26	200+123	3	5.0	31.5
6039A	160	98	279	229	2	42	37	200	3	5.0	31.5
6040A	250	119	-	431	1	88	83	458	3	5.0	31.5
6046A	200	123	371	298	1+1	64+42	57+37	292+200	3	5.0	31.5
6050A	250	140	-	448	1	108	100	478	3	5.0	31.5
6060A	250	148	396	323	2	64	57	292	4	5.0	31.5
6075A	315	190	420	347	2	81	71	292	6	5.0	31.5
6080A	315	205	586	517	1+1	88+81	83+71	458+292	6	5.0	31.5
6085A	315	217	-	529	2	88	83	458	6	5.0	31.5
6090A	400	238	-	546	1+1	108+88	100+83	478+458	6	5.0	31.5
6095A	400	255	-	563	2	108	100	478	6	5.0	31.5
6110B	400	271	501	428	3	81	71	292	8	5.0	31.5
6115B	400	286	667	598	1+2	88+81	83+71	458+292	8	5.0	31.5
6125B	400	298	679	610	2+1	88+81	83+71	458+292	8	5.0	31.5
6130B	400	310	-	622	3	88	83	458	8	5.0	31.5
6135B	500	331	-	639	1+2	108+88	100+83	478+458	8	5.0	31.5
6140B	500	348	-	656	2+1	108+88	100+83	478+458	8	5.0	31.5
6145B	500	365	-	673	3	108	100	478	8	5.0	31.5
6155B	500	377	758	689	1+3	88+81	83+71	458+292	12	5.0	31.5
6165B	500	389	770	701	2+2	88+81	83+71	458+292	12	5.0	31.5
6170B	500	401	782	713	3+1	88+81	83+71	458+292	12	5.0	31.5
6175B	500	413	-	725	4	88	83	458	12	5.0	31.5
6180B	630	434	-	742	1+3	108+88	100+83	478+458	12	5.0	31.5
6185B	630	451	-	759	2+2	108+88	100+83	478+458	12	5.0	31.5
6190B	630	468	-	776	3+1	108+88	100+83	478+458	12	5.0	31.5
6195B	630	485	-	793	4	108	100	478	12	5.0	31.5
6210B	630	492	722	649	3+3	81+64	71+57	292+292	18	5.0	31.5
6230B	630	534	764	691	6	81	71	292	18	5.0	31.5
6240B	800	561	942	873	2+4	88+81	83+71	458+292	18	5.0	31.5
6250B	800	585	966	897	4+2	88+81	83+71	458+292	18	5.0	31.5
6260B	800	609	-	921	6	88	83	458	18	5.0	31.5
6270B	800	647	-	955	2+4	108+88	100+83	478+458	18	5.0	31.5
6280B	800	681	-	989	4+2	108+88	100+83	478+458	18	5.0	31.5
6290B	1000	715	-	1023	6	108	100	478	18	5.0	31.5
6300B	800	706	936	863	8	81	71	292	24	5.0	31.5
6310B	1000	733	1114	1045	2+6	88+81	83+71	458+292	24	5.0	31.5
6330B	1000	757	1138	1069	4+4	88+81	83+71	458+292	24	5.0	31.5
6340B	1000	781	1162	1093	6+2	88+81	83+71	458+292	24	5.0	31.5
6350B	1000	805	-	1117	8	88	83	458	24	5.0	31.5
6360B	1000	843	-	1151	2+6	108+88	100+83	478+458	24	5.0	31.5
6370B	1000	877	-	1185	4+4	108+88	100+83	478+458	24	5.0	31.5
6380B	1250	911	-	1219	6+2	108+88	100+83	478+458	24	5.0	31.5
6390B	1250	945	-	1253	8	108	100	478	24	5.0	31.5

Table 21

### NOTE:

220V/1PH/60Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch



# SKM Air Cooled Packaged Chillers APCD Series - R22

## ELECTRICAL DATA

Rated Power Supply - 220V/3Ph/60 Hz

MODEL	UNIT CHARACTERISTICS				COMPRESSOR				CONDENSER FAN MOTOR			
	APC H/D	MFA	MCA	ICF		QTY	MOC	RLA	LRA	QTY	FLA	LRA
				DOL	PWS							
6005A	50	29	147	-	1	29	20.7	137	1	3.0	9.7	
6007A	80	45	185	-	1	43	30.7	157	1	6.7	27.7	
6009A	100	58	258	-	1	54	38.6	210	1	9.4	47.6	
6011A	100	59	322	-	1	45	40	274	1	9.4	47.6	
6014A	160	80	290	224	1	61	55	263	2	5.5	21.2	
6020A	200	116	476	371	1	91	78	419	2	9.4	47.6	
6022A	160	109	371	-	2	45	40	274	2	9.4	47.6	
6025A	200	128	360	-	1+1	61+45	55+40	263+274	2	9.4	47.6	
6028A	200	143	375	-	2	61	55	263	2	9.4	47.6	
6030A	315	168	-	515	1	139	119	611	2	9.4	47.6	
6035A	400	214	-	525	1	177	149	611	3	9.4	47.6	
6036A	315	181	540	-	1+1	91+61	78+55	419+263	3	9.4	47.6	
6039A	315	204	563	459	2	91	78	419	3	9.4	47.6	
6040A	500	244	-	882	1	193	173	960	3	9.4	47.6	
6046A	400	255	755	603	1+1	139+91	119+78	611+419	3	9.4	47.6	
6050A	500	289	-	918	1	237	209	1002	3	9.4	47.6	
6060A	500	305	-	653	2	139	119	611	4	9.4	47.6	
6075A	630	392	-	702	2	177	149	611	6	9.4	47.6	
6080A	630	422	-	1060	1+1	193+177	173+149	960+611	6	9.4	47.6	
6085A	630	446	-	1084	2	193	173	960	6	9.4	47.6	
6090A	800	491	-	1119	1+1	237+193	209+173	1002+960	6	9.4	47.6	
6095A	800	527	-	1155	2	237	209	1002	6	9.4	47.6	
6110B	800	559	-	870	3	177	149	611	8	9.4	47.6	
6115B	800	589	-	1227	1+2	193+177	173+149	960+611	8	9.4	47.6	
6125B	800	613	-	1251	2+1	193+177	173+149	960+611	8	9.4	47.6	
6130B	1000	637	-	1275	3	193	173	960	8	9.4	47.6	
6135B	1000	682	-	1311	1+2	237+193	209+173	1002+960	8	9.4	47.6	
6140B	1000	718	-	1347	2+1	237+193	209+173	1002+960	8	9.4	47.6	
6145B	1000	754	-	1383	3	237	209	1002	8	9.4	47.6	
6155B	1000	776	-	1414	1+3	193+177	173+149	960+611	12	9.4	47.6	
6165B	1000	800	-	1438	2+2	193+177	173+149	960+611	12	9.4	47.6	
6170B	1000	824	-	1462	3+1	193+177	173+149	960+611	12	9.4	47.6	
6175B	1250	848	-	1486	4	193	173	960	12	9.4	47.6	
6180B	1250	893	-	1522	1+3	237+193	209+173	1002+960	12	9.4	47.6	
6185B	1250	929	-	1558	2+2	237+193	209+173	1002+960	12	9.4	47.6	
6190B	1250	965	-	1594	3+1	237+193	209+173	1002+960	12	9.4	47.6	
6195B	1250	1001	-	1630	4	237	209	1002	12	9.4	47.6	
6210B	1250	1011	-	1321	3+3	177+139	149+119	611+611	18	9.4	47.6	
6230B	1250	1100	-	1411	6	177	149	611	18	9.4	47.6	
6240B	1500	1154	-	1792	2+4	193+177	173+149	960+611	18	9.4	47.6	
6250B	1500	1202	-	1840	4+2	193+177	173+149	960+611	18	9.4	47.6	
6260B	1500	1250	-	1888	6	193	173	960	18	9.4	47.6	
6270B	800+1250	527+848	-	1155+1486	2+4	237+193	209+173	1002+960	18	9.4	47.6	
6280B	1250+630	1001+446	-	1630+1084	4+2	237+193	209+173	1002+960	18	9.4	47.6	
6290B	1250+800	1001+527	-	1630+1155	6	237	209	1002	18	9.4	47.6	
6300B	1000+1000	746+746	-	1056+1056	8	177	149	611	24	9.4	47.6	
6310B	1000+1000	776+776	-	1414+1414	2+6	193+177	173+149	960+611	24	9.4	47.6	
6330B	1000+1000	800+800	-	1438+1438	4+4	193+177	173+149	960+611	24	9.4	47.6	
6340B	1000+1000	824+824	-	1462+1462	6+2	193+177	173+149	960+611	24	9.4	47.6	
6350B	1250+1250	848+848	-	1486+1486	8	193	173	960	24	9.4	47.6	
6360B	1250+1250	893+893	-	1522+1522	2+6	237+193	209+173	1002+960	24	9.4	47.6	
6370B	1250+1250	929+929	-	1558+1558	4+4	237+193	209+173	1002+960	24	9.4	47.6	
6380B	1250+1250	965+965	-	1594+1594	6+2	237+193	209+173	1002+960	24	9.4	47.6	
6390B	1250+1250	1001+1001	-	1630+1630	8	237	209	1002	24	9.4	47.6	

Table 22

### NOTE:

220V/1PH/60Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Legend (Electrical)

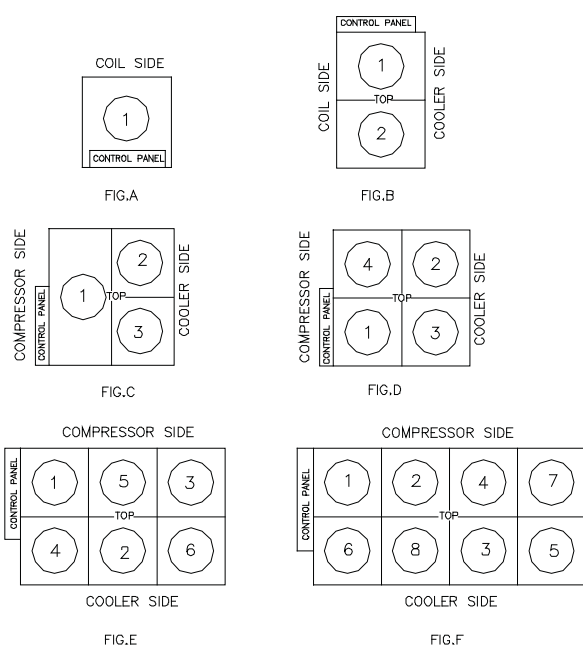
**FLA** Full Load Amps  
**Hz** Hertz  
**ICF** Max. Instantaneous Current Flow during starting  
**LRA** Locked Rotor Amps  
**MCA** Minimum Circuit Amps

**MFA** Maximum Fuse Amps  
**MOC** Maximum Operating Current  
**Ph** Phase  
**RLA** Rated Load Amps at LCWT 45°F (7.2°C) and ambient temperature 115°F (46°C)  
**V** Volts

## General Notes

1. Minimum circuit amps (MCA) is based on 125% of the rated load Amps of the largest compressor motor plus 100 % of the rated load Amps for all other loads included in the circuit (per NEC article 430-24).
2. Maximum Fuse Amps (MFA) is based upon 225% of the rated load Amps for the largest compressor motor plus 100% of the rated Amps for all other loads included in the circuit.
3. Maximum Instantaneous current flow (ICF) during starting is the sum of LRA for the starting compressor, plus the total RLA/FLA for all other compressor(s) and condenser motors running.
4. The PI mentioned in the capacity ratings (Page # 12-21) is the actual Power Consumption of the compressors only and should not be used to calculate cable or disconnect switch sizes. Refer Electrical Specifications on pages 28-33 for the same.

## Condenser Fan Operating Logic



Model APCH / D	Figure #	Fan Operation Through Auxiliary Contact of Compressor Contactor			Compressor Fan Sequence of Operation		
		C1	C2	C3	Step 1	Step 2	Step 3
5004 A 5009 A	A	1					
6005 A 6001 A							
5012 A, 5017 A, 5025 A	B				2		
6014 A, 6020 A, 6030 A							
5018 A 5024 A	B	2	2				
6022 A, 6028 A							
5030 A, 5035 A, 5040 A	C	2			3		
6035 A, 6040A, 6050A							
5032 A, 5034 A, 5039 A	C	2	2		3		
6036 A, 6039 A, 6046 A							
5050 A	D	2			3	4	
6060 A							
5065 A 5085 A	E	2	3		4	5	
6075 A 6095 A							
5095 A 5125 B	F	2	3	3	6	7	
6110 B 6145 B		3	4	5			8

Table 23

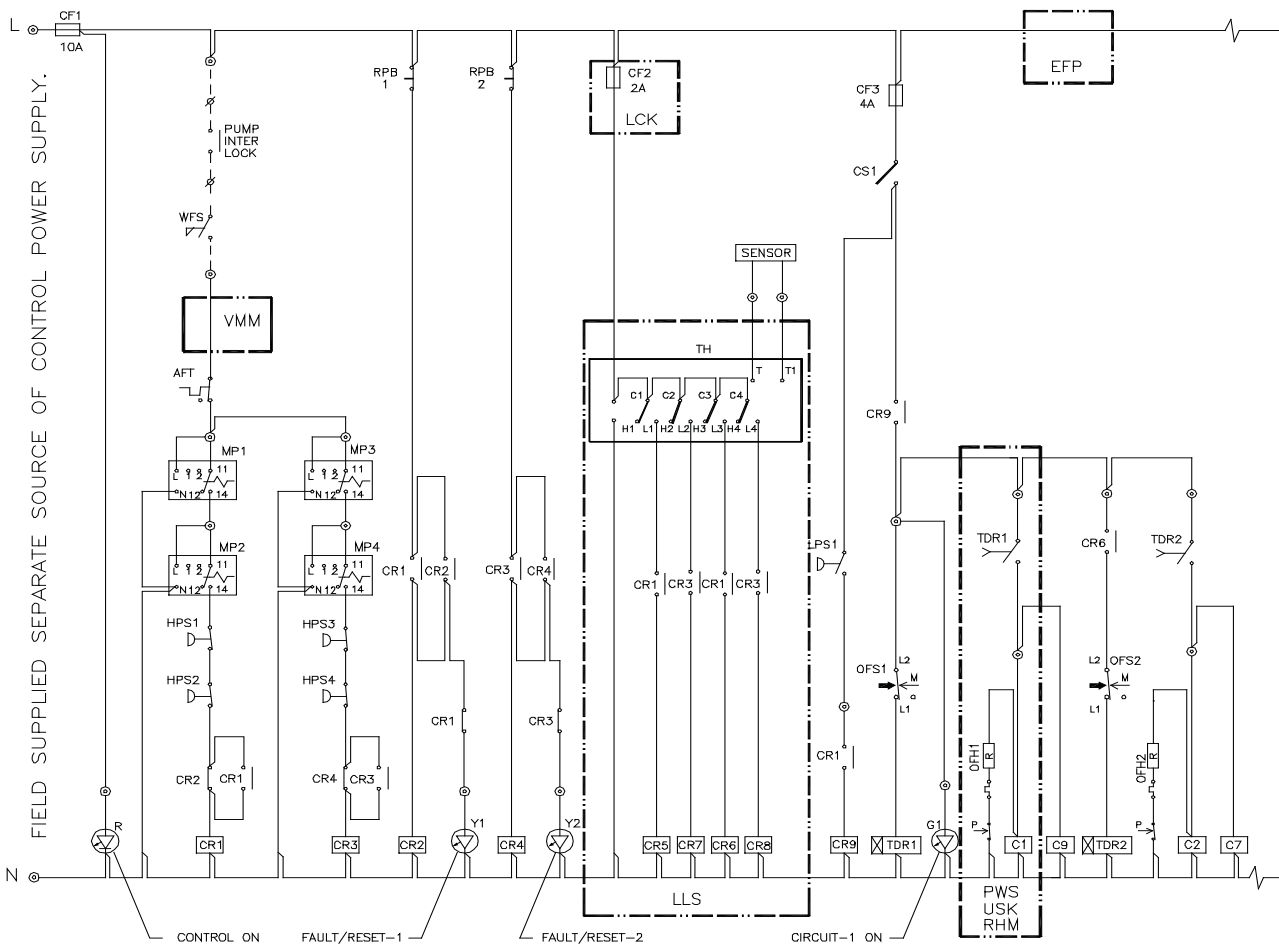
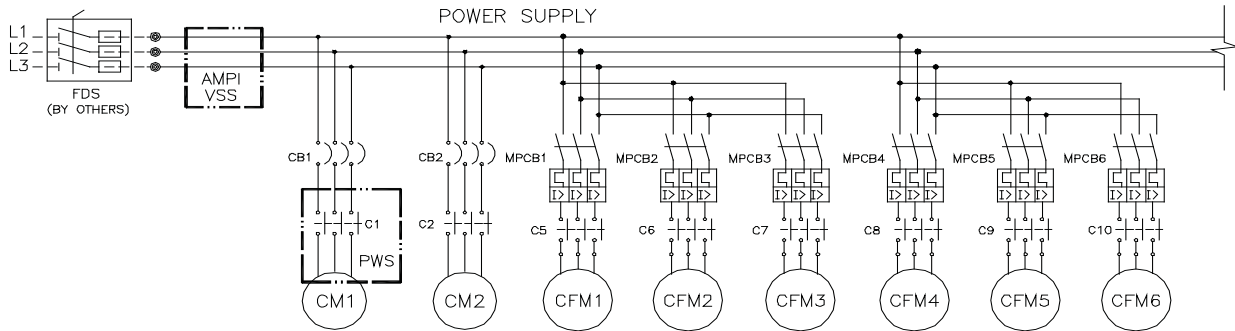
### Notes :

Fan-1 runs immediately upon first call of cooling except single fan models  
 APCD 5135 - 5170 B and 6155 - 6195 B Condenser Fans  
 Logic = 2 x Fig. E  
 APCD 5180 - 5250B and 6210 - 6290B Condenser Fans  
 Logic = 3 x Fig. E  
 APCD 5260 - 5340B and 6300 - 6390B Condenser Fans  
 Logic = 4 x Fig. E

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Typical Wiring Diagram

The typical wiring diagram shown below is for Models APCD 5145B. For all other models, individual diagrams are available in drawing pocket located in the Control Panel.

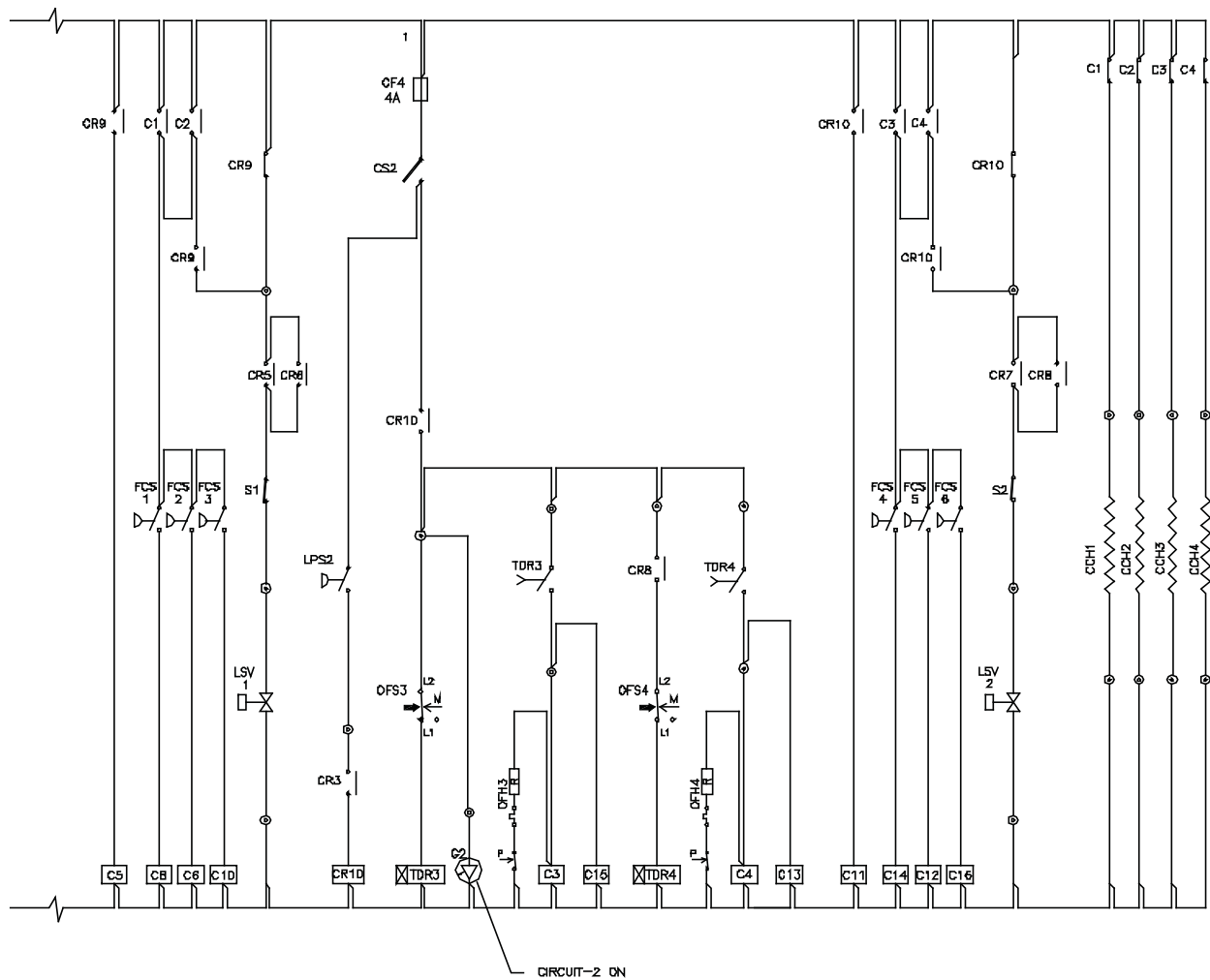
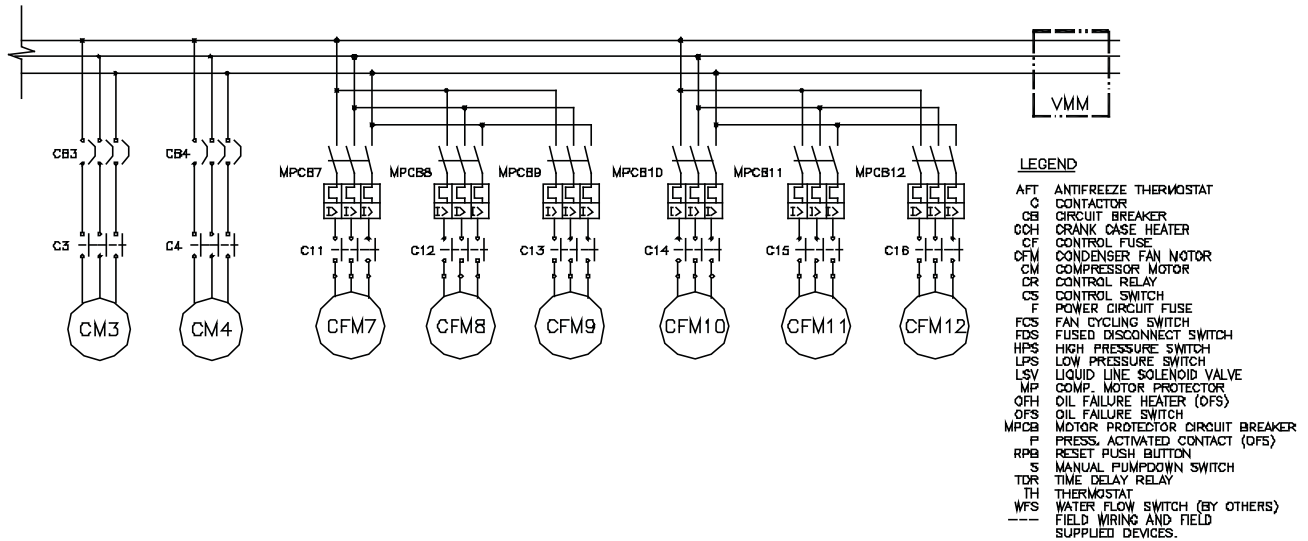


**Note:**

Shaded area indicate location / connection point for factory installed optional features.  
Refer page # 38 for schematic representation of optional features.

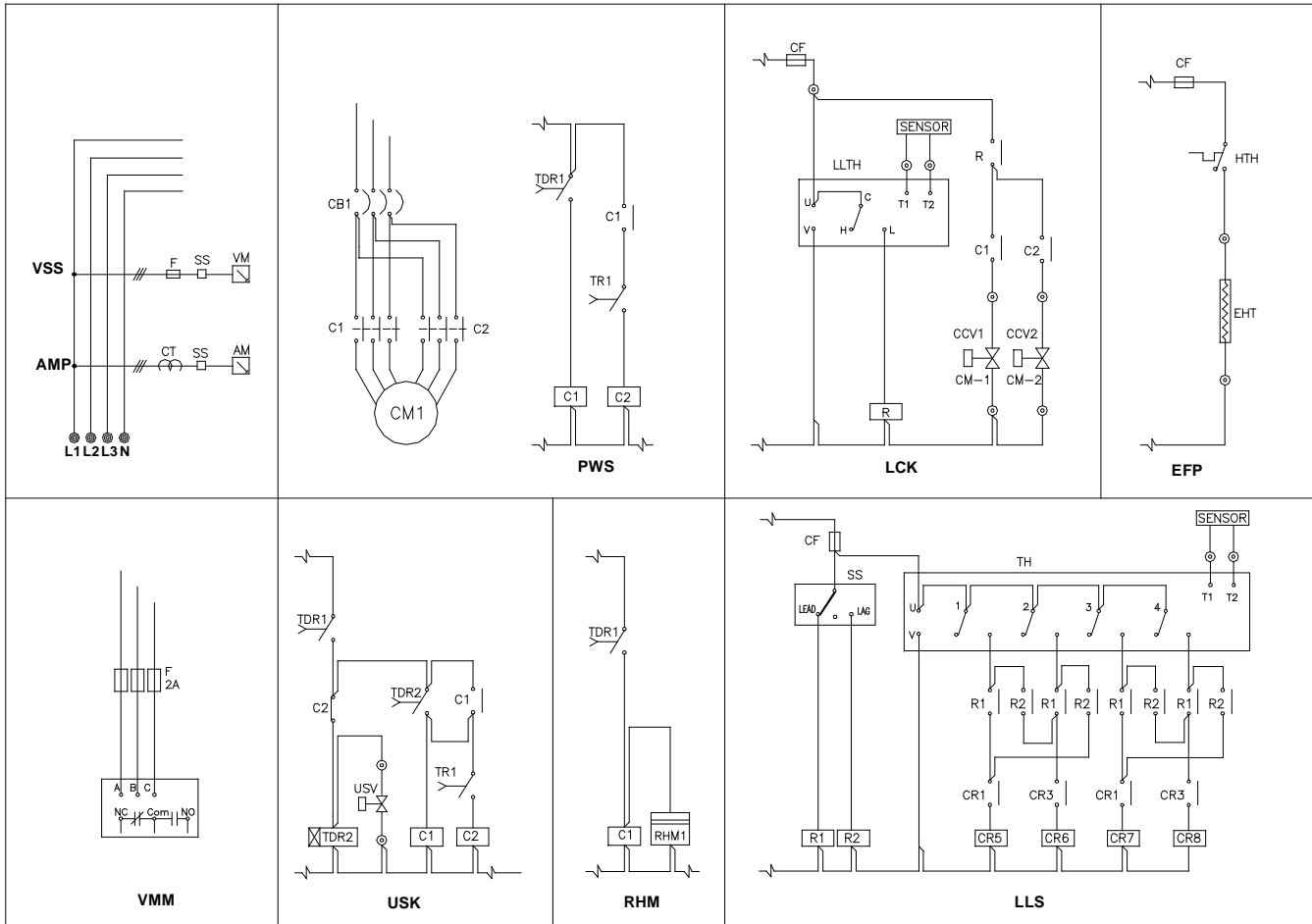
# SKM Air Cooled Packaged Chillers APCD Series - R22

## Typical Wiring Diagram



# SKM Air Cooled Packaged Chillers APCD Series - R22

## Optional Features Electrical Schematic



### LEGEND

<b>C</b>	CONTACTOR
<b>CCV</b>	CAPACITY CONTROL VALVE
<b>CR/R</b>	CONTROL RELAY
<b>CT</b>	CURRENT TRANSFORMER
<b>EHT</b>	EVAP. HEATER TAPE
<b>HTH</b>	HEATING THERMOSTAT
<b>LLTH</b>	LOAD LIMIT THERMOSTAT
<b>SS</b>	LEAD/LAG SELETOR SWITCH
<b>TDR</b>	TIME DELAY RELAY
<b>TH</b>	THERMOSTAT
<b>TR</b>	TIMER (PWS)
<b>USV</b>	UNLOAD SOLENOID VALVE

### OPTION

<b>AMP</b>	AMMETER & SELECTOR SWITCH
<b>EFP</b>	EVAP. FREEZE PROTECTION KIT
<b>LCK</b>	LOAD LIMIT CONTROL KIT
<b>LLS</b>	LEAD/LAG SWITCH
<b>PWS</b>	PART WINDING START
<b>RHM</b>	RUN HOUR METER
<b>USK</b>	UNLOAD START KIT
<b>VMM</b>	VOLTAGE MONITORING MODULE
<b>VSS</b>	VOLTMETER & SELECTOR SWITCH

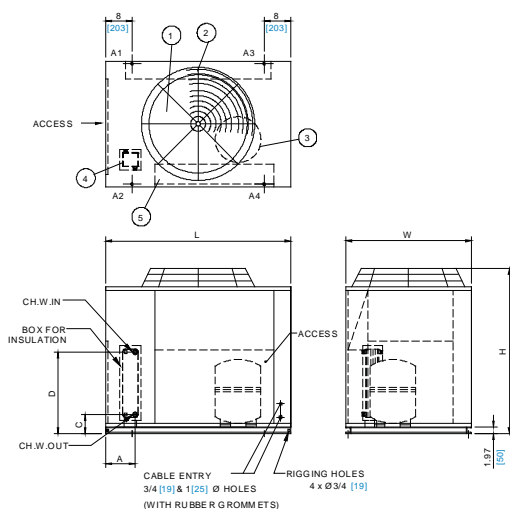
# SKM Air Cooled Packaged Chillers APCD Series - R22

## Dimensional Data

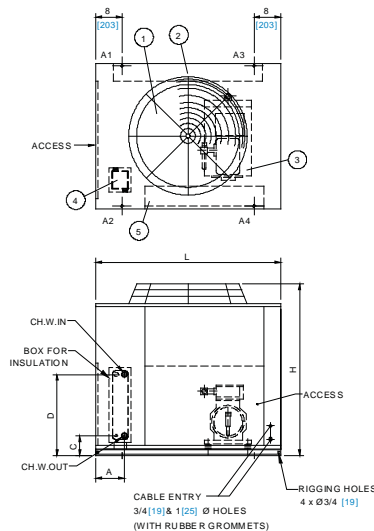
APCH Models - 5004A-5008A & 6005A-6009A

APCD Models - 5009A-5025A & 6011A-6030A

APCH-5004A, 5006A, 5008A  
APCH-6005A, 6007A, 6009A



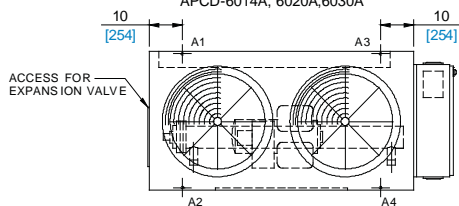
APCD-5009A  
APCD-6011A



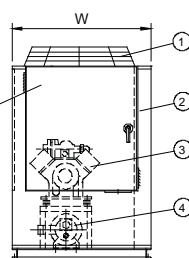
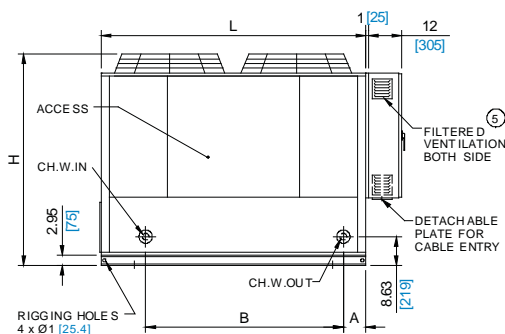
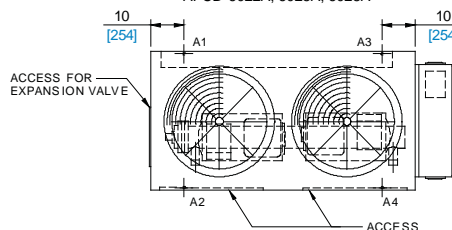
MODEL	L	W	H	A	B	C	D	CH.W. IN/OUT Ø	LOAD AT EACH POINT Lb/Kg				OPT.WT. Lb/Kg
									A1	A2	A3	A4	
5004A 6005A	45 [1143]	34 [864]	51 [1295]	8.92 [226]	-	5.85 [148]	24.7 [627]	1 1/4 MPT [32]	147 67	95 43	158 72	198 90	598 271
5006A 6007A	56 [1422]	38 [965]	50 [1270]	-	-	-	-	-	162 73	159 72	181 82	210 95	712 323
5008A 6009A	56 [1422]	44 [1118]	52 [1321]	8.73 [222]	-	6.02 [153]	24.53 [623]	1 1/2 MPT [36]	188 85	161 73	192 87	215 98	756 343
5009A 6011A	56 [1422]	44 [1118]	52 [1321]	8.73 [222]	-	6.02 [153]	24.53 [623]	1 1/2 MPT [36]	229 104	201 91	305 138	299 136	1034 469
5012A 6014A	68 [1727]	44 [1118]	65 [1651]	7 [178]	-	-	-	-	325 147	290 132	390 177	375 170	1380 626
5017A 6020A	80 [2032]	42 [1067]	65 [1651]	19.72 [501]	40.55 [1030]	-	-	-	400 182	320 145	450 204	380 172	1550 703
5018A 6022A	80 [2032]	42 [1067]	65 [1651]	8.66 [220]	-	-	-	2 1/2 MPT [63]	440 199	381 173	539 244	460 209	1820 825
5022A 6025A	88 [2235]	48 [1219]	77 [1956]	7 [178]	60.24 [1530]	-	-	-	550 249	515 234	640 290	625 284	2330 1057
5024A 6028A	88 [2235]	48 [1219]	77 [1956]	7 [178]	60.24 [1530]	-	-	-	560 254	525 238	640 290	625 284	2350 1066
5025A 6030A	88 [2235]	48 [1219]	77 [1956]	7 [178]	60.24 [1530]	-	-	-	525 238	450 204	600 272	566 257	2141 971

Table 24

APCD-5012A, 5017A, 5025A  
APCD-6014A, 6020A, 6030A



APCD-5018A, 5022A, 5024A  
APCD-6022A, 6025A, 6028A



### LEGEND

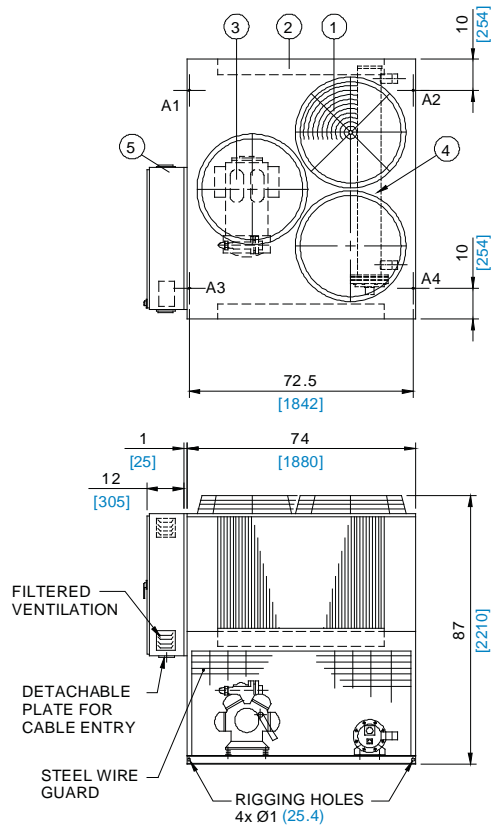
- ① COND. FAN
- ② COND. COIL
- ③ COMPRESSOR
- ④ EVAPORATOR
- ⑤ CONTROL PANEL

ALL DIMENSIONS ARE IN INCHES [MM]

A1-A4 ARE LOADING POINTS Ø3/4 [19]

# SKM Air Cooled Packaged Chillers APCD Series - R22

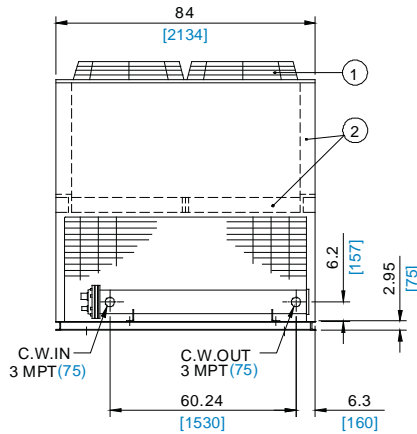
## APCD Models - 5030A-5040A & 6035A-6050A



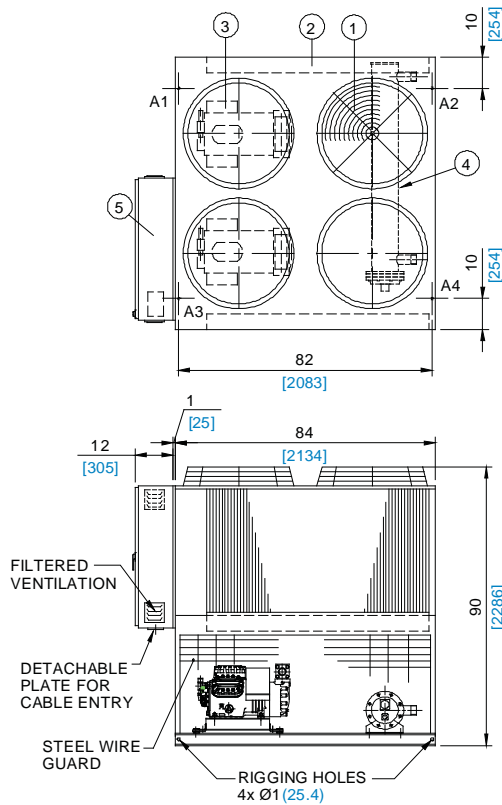
MODEL APCD-	LOAD AT EACH POINT Lb/Kg				OPT.WT. Lb/Kg
	A1	A2	A3	A4	
5030A	630	530	710	580	2450
6035A	286	240	322	263	1111
* 5032 A	755	635	815	630	2835
6036A	342	288	370	286	1286
* 5034 A	771	639	880	640	2930
6039A	350	290	399	290	1329
5035 A	719	591	800	630	2740
6040A	326	268	363	286	1243
* 5039A	781	649	910	670	3010
6046A	354	294	413	304	1365
5040A	730	590	840	630	2790
6050A	331	267	381	286	1265

Table 25

\* MODEL WITH 2-COMPRESSORS



## APCD Models - 5050A & 6060A



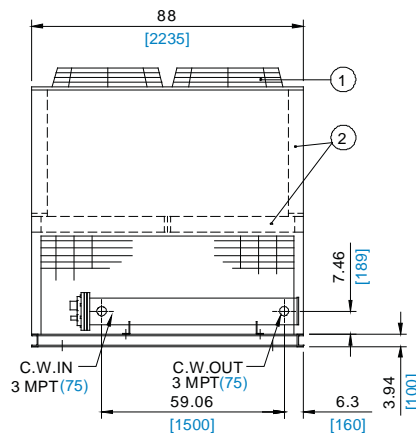
### LEGEND

- ① COND. FAN
- ② COND. COIL
- ③ COMPRESSOR
- ④ EVAPO RATOR
- ⑤ CONTROL PANEL

ALL DIMENSIONS ARE IN INCHES (MM)  
A1-A4 ARE LOADING POINTS Ø3/4 (19)

MODEL APCD-	LOAD AT EACH POINT Lb/Kg				OPT.WT. Lb/Kg
	A1	A2	A3	A4	
5050A	1091	829	1180	880	3980
6060A	495	376	535	399	1805

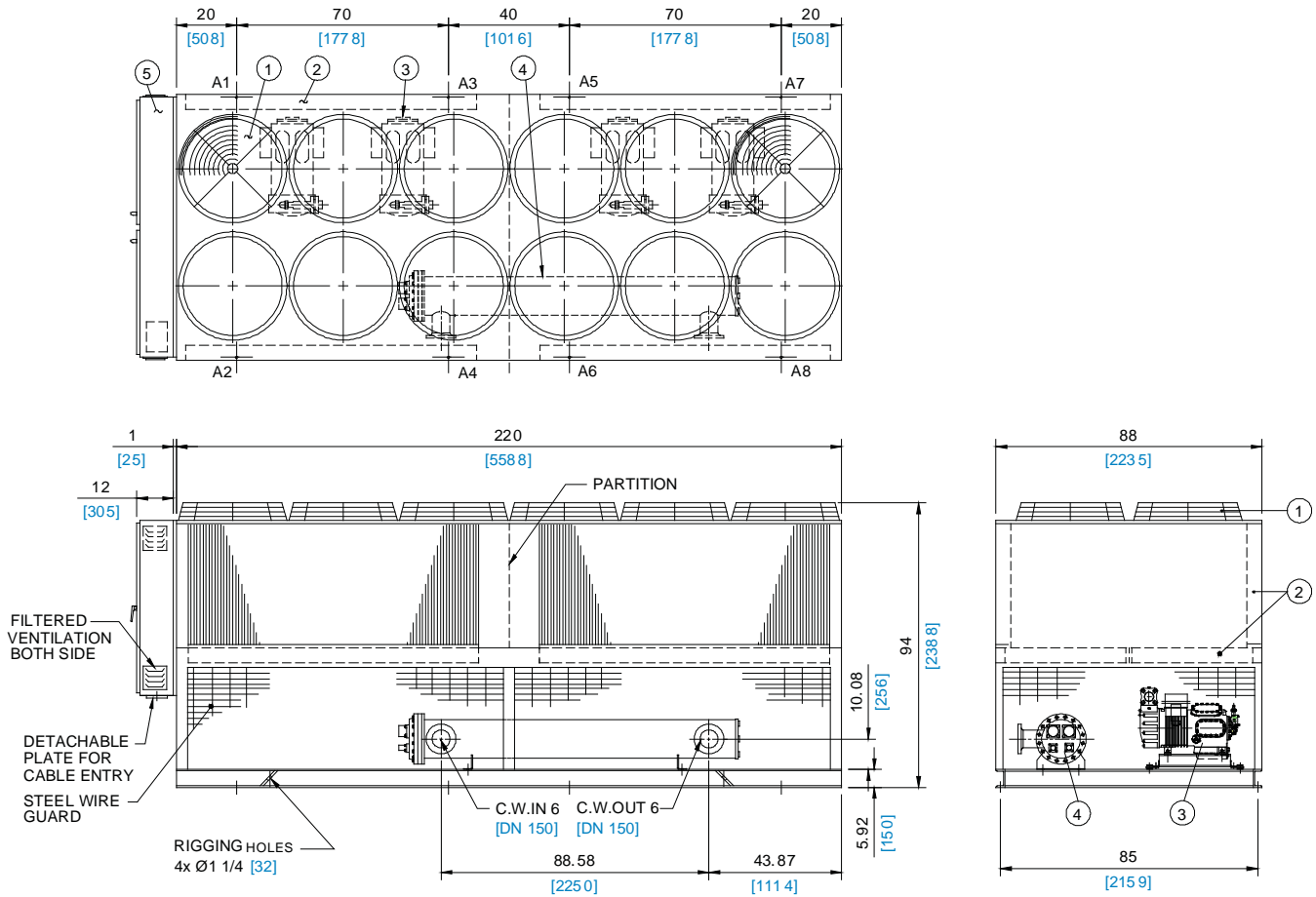
Table 26





# SKM Air Cooled Packaged Chillers APCD Series - R22

## APCD Models - 5135B-5170B & 6155B-6195B



MODEL APCD-	LOAD ON EACH POINT Lb/Kg								OPT. WT. Lb/Kg
	A1	A2	A3	A4	A5	A6	A7	A8	
5135B	1415	1050	1311	1195	1215	1081	1222	1046	9535
6155B	642	476	595	542	551	490	554	474	4324
5140B	1464	1082	1434	1251	1238	1104	1245	1069	9887
6165B	664	491	650	567	561	501	565	485	4484
5145B	1484	1102	1454	1272	1354	1156	1297	1100	10219
6170B	673	500	659	577	614	524	588	499	4634
5150B	1495	1111	1464	1281	1393	1175	1405	1142	10466
6175B	677	504	664	581	632	533	637	518	4746
5155B	1496	1111	1465	1281	1393	1175	1405	1142	10468
6180B	678	504	664	581	632	533	637	518	4747
5160B	1496	1111	1465	1281	1394	1175	1406	1142	10470
6185B	678	504	664	581	632	533	638	518	4748
5165B	1497	1111	1466	1281	1394	1175	1406	1142	10472
6190B	679	504	665	581	632	533	637	518	4749
5170B	1497	1111	1466	1281	1395	1175	1407	1142	10474
6195B	679	504	665	581	632	533	638	518	4750

Table 29

### LEGEND

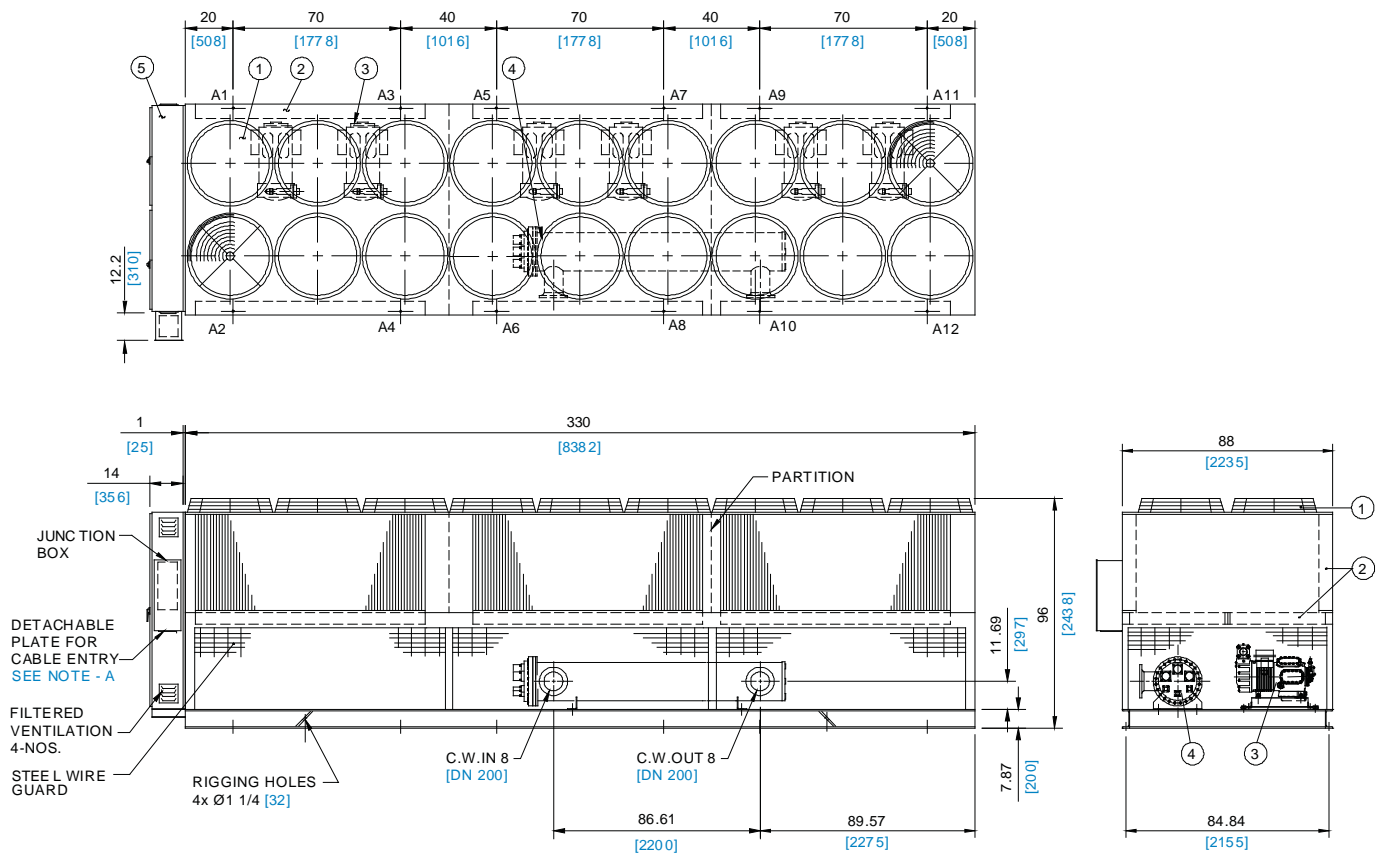
- ① COND. FAN
- ② COND. COIL
- ③ COMPRESSOR
- ④ EVAPORATOR
- ⑤ CONTROL PANEL

ALL DIMENSIONS ARE IN INCHES [MM]

A1-A8 ARE LOADING POINTS Ø3/4 [19]

# SKM Air Cooled Packaged Chillers APCD Series - R22

## APCD Models - 5180B-5250B & 6210B-6290B



### LEGEND

- ① COND. FAN
- ② COND. COIL
- ③ COMPRESSOR
- ④ EVAPORATOR
- ⑤ CONTROL PANEL

### NOTE - A

2 POINT CABLE ENTRY FOR MODEL # 6270, 6280 & 6290 WITH POWER SUPPLY 220V / 3Ph / 60 Hz - ONE EACH SIDE. CERTIFIED DRGS. ARE AVAILABLE ON REQUEST.

ALL DIMENSIONS ARE IN INCHES [MM]

A1-A12 ARE LOADING POINTS Ø3/4 [19]

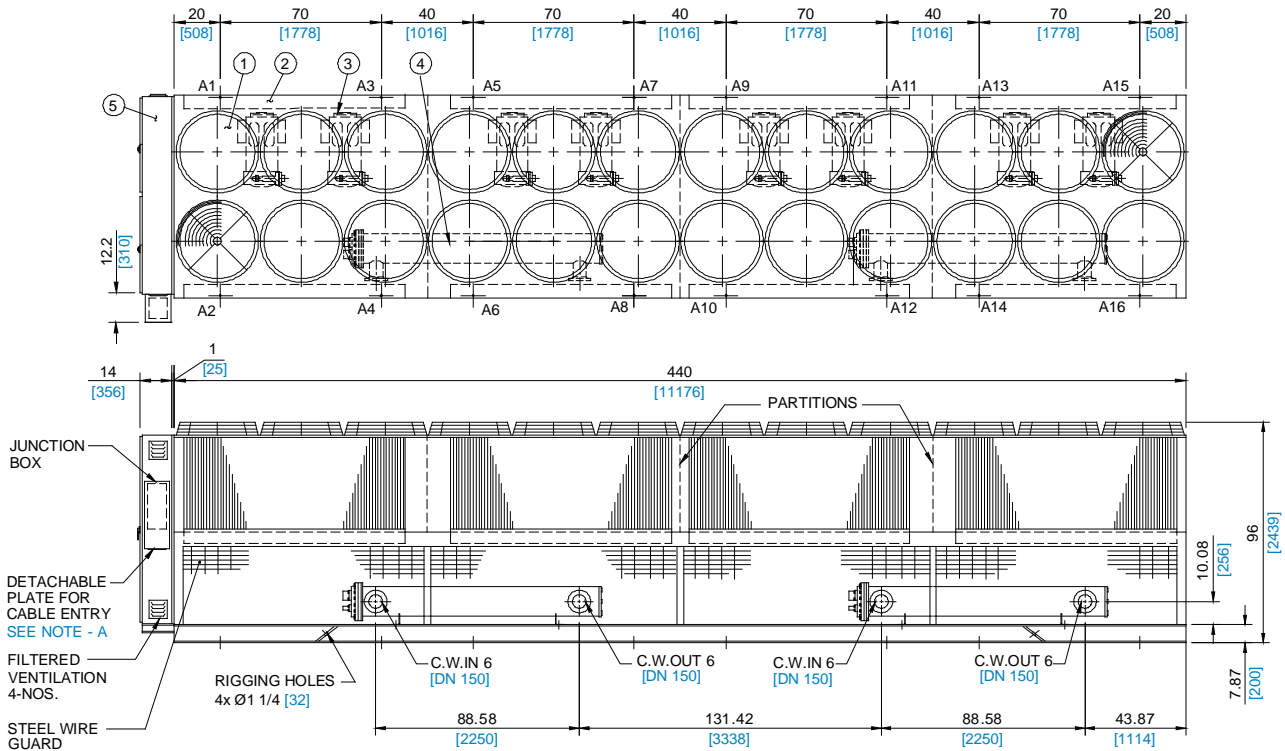
MODEL APCD-	LOAD ON EACH POINT Lb/Kg											OPT. WT. Lb/Kg	
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11		A12
5180B 6210B	1486 674	1166 529	1164 528	840 381	1260 571	1190 540	1286 583	1257 570	1337 606	1457 661	1164 528	840 381	14447 6552
5190B 6230B	1486 674	1166 529	1187 538	850 386	1260 571	1190 540	1307 593	1269 575	1337 606	1457 661	1187 538	850 386	14546 6597
5200B 6240B	1629 739	1224 555	1338 607	910 413	1276 579	1206 547	1323 600	1286 583	1353 614	1474 668	1204 546	867 393	15090 6844
5210B 6250B	1642 745	1237 561	1351 613	923 418	1416 642	1260 571	1470 667	1342 609	1367 620	1488 675	1218 552	880 399	15594 7072
5220B 6260B	1657 752	1252 568	1366 618	938 425	1431 649	1276 579	1485 674	1357 616	1508 684	1543 700	1366 619	938 425	16117 7309
5230B 6270B	1658 752	1253 568	1367 620	939 426	1431 649	1276 579	1485 674	1357 615	1508 684	1543 700	1366 619	938 425	16121 7311
5240B 6280B	1658 752	1253 568	1367 620	939 426	1433 650	1276 579	1486 674	1358 616	1508 684	1543 700	1366 619	938 425	16125 7313
5250B 6290B	1658 752	1253 568	1367 620	939 426	1433 650	1276 579	1487 674	1358 616	1510 685	1543 700	1367 620	939 426	16130 7315

Table 30



# SKM Air Cooled Packaged Chillers APCD Series - R22

## APCD Models - 5260B-5340B & 6300B-6390B



### LEGEND

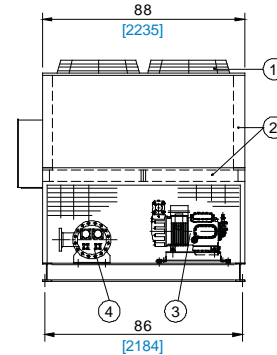
- ① COND FAN
- ② COND COIL
- ③ COMPRESSOR
- ④ EVAPORATOR
- ⑤ CONTROL PANEL

ALL DIMENSIONS ARE IN INCHES [MM]

A1-A16 ARE LOADING POINTS Ø34 [19]

### NOTE - A

2 POINT CABLE ENTRY FOR MODEL # 6300 To 6390 WITH POWER SUPPLY 220V / 3Ph / 60 Hz - ONE EACH SIDE. CERTIFIED DRGS. ARE AVAILABLE ON REQUEST.



MODEL APCD-	LOAD ON EACH POINT Lb/Kg																OPT. WT. Lb/Kg
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	
5260B	1615	1301	1403	1330	1376	1241	1361	1201	1290	976	1403	1330	1376	1241	1361	1201	21006
6300B	732	590	636	603	624	563	617	545	585	443	636	603	624	563	617	545	9526
5270B	1712	1334	1433	1341	1376	1241	1361	1201	1387	1009	1433	1341	1376	1241	1361	1201	21348
6310B	776	605	650	608	624	563	617	545	629	458	650	608	624	563	617	545	9682
5280B	1734	1357	1457	1363	1495	1296	1415	1234	1409	1032	1457	1363	1495	1297	1415	1234	22053
6330B	786	615	661	618	678	587	642	560	639	468	661	618	678	588	642	560	10001
5290B	1785	1388	1573	1417	1515	1316	1435	1254	1460	1062	1573	1418	1515	1316	1435	1254	22716
6340B	810	629	723	643	687	597	651	569	662	481	713	643	687	597	651	569	10302
5300B	1786	1389	1575	1418	1547	1328	1533	1289	1461	1064	1575	1418	1547	1328	1533	1289	23080
6350B	810	630	714	643	702	602	695	585	662	483	714	643	702	602	695	585	10467
5310B	1788	1389	1575	1418	1547	1328	1533	1289	1463	1064	1575	1418	1547	1328	1533	1289	23084
6360B	811	630	714	643	702	602	695	585	663	483	714	643	702	602	695	585	10469
5320B	1788	1389	1575	1418	1548	1329	1533	1289	1463	1064	1575	1418	1548	1329	1533	1289	23088
6370B	811	630	714	643	702	603	695	585	663	483	714	643	702	603	695	585	10471
5330B	1788	1389	1576	1418	1549	1329	1533	1289	1463	1064	1576	1418	1549	1329	1533	1289	23092
6380B	811	630	715	643	702	603	695	585	663	483	715	643	702	603	695	585	10473
5340B	1788	1389	1576	1418	1550	1330	1533	1289	1463	1064	1576	1418	1550	1330	1533	1289	23096
6390B	811	630	715	643	703	603	695	585	663	483	715	643	703	603	695	584	10474

Table 31

# SKM Air Cooled Packaged Chillers APCD Series - R22

## Location/Space Requirements

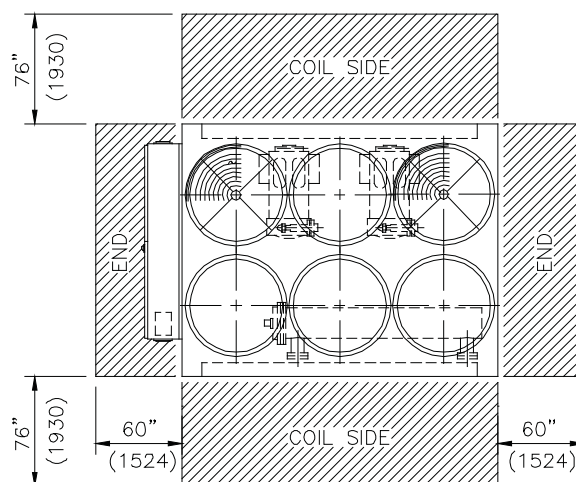
Due to the vertical air flow discharge condenser design, it is recommended that certain precautions are to be taken before installation. There should be no obstruction on the air flow.

Orient the unit so that prevailing winds blow parallel to the unit length thus minimizing the effects on condensing pressure. If it is not practical to orient the unit in this manner, a wind deflecting shield should be considered.

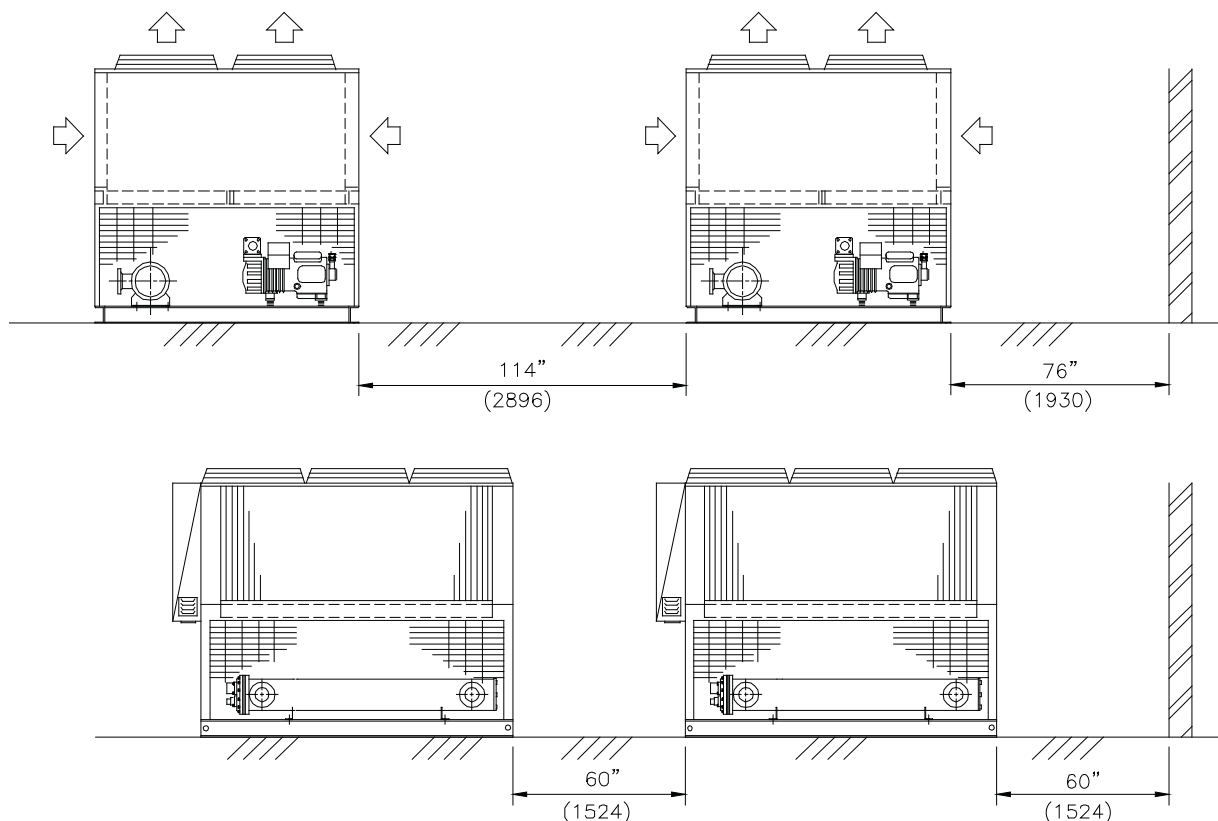
It is also necessary to provide adequate clearance on all sides of the unit for service access and satisfactory performance. This will prevent excessive condensing temperatures and enhance system performance and operating economy.

Refer to Figure A for recommended clearance around chillers to avoid warm air recirculation or coil starvation.

### Single Unit Installation



### Multiple Unit Installation



# SKM Air Cooled Packaged Chillers APCD Series - R22

## Application / Installation

### Foundation

A flat concrete foundation or floor which can support the weight of the equipment must be provided as the unit must be level for proper operation and functioning of controls.

### Vibration Isolation

Under certain critical conditions it is recommended that vibration isolators of rubber-in-shear or spring type be installed under the base.

The isolators must be designed for the operating weight of the unit. For operating load points refer to the Dimensional Data. Correct selection of types of isolators depends upon application and structure.

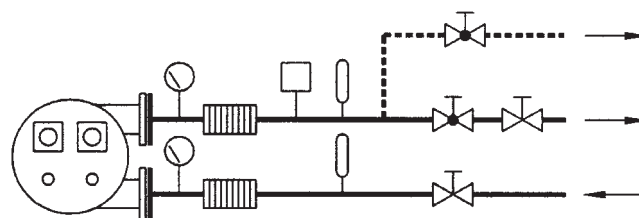
To further reduce the transmission of vibration, it is recommended that flexible water connections suitable for the system pressure be installed on the water inlet and outlet connections of the chiller. For critical applications or locations, services of a noise and vibration expert is recommended.

### Water Piping Practices

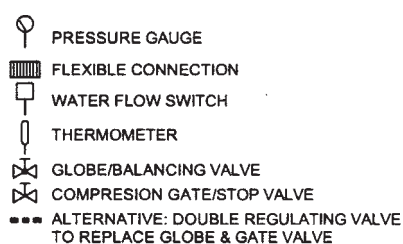
Due to the variety of piping practices, it is advisable to follow the recommendations of local authorities. They can supply the installer with the proper building and safety codes required for a safe and proper installation. Basically the piping should be designed with a minimum number of bends and changes in elevation to keep the system cost down and performance up. It should contain :

1. Vibration eliminators to reduce vibration and noise transmission to the building.

2. Shut-off valves to isolate the unit from the piping system during unit servicing.
3. Manual or automatic air vent valves at the high points of the system so that the air can be vented.
4. An expansion tank to control system pressure allowing water to expand on increase of water temperature.
5. Make necessary arrangements to install a water flow switch on the leaving water connection to ensure adequate waterflow and wire it with the terminals provided in the unit control panel. This will safeguard against slugging the compressor on start-up and shut down the unit should the water flow be interrupted. Refer to the Installation instruction sheet furnished with the water flow switch.
6. Temperature and pressure indicators located at the unit to aid in unit servicing.
7. A strainer or some means of removing foreign matter from the water before it enters the pump. It should be placed far enough upstream to prevent cavitation at the pump inlet (consult pump manufacturer for recommendations). The use of a strainer will prolong pump life and thus keep system performance up. All building water piping must be flushed prior to making final connection to the chiller.
8. Prior to insulating the piping and filling the system a preliminary leak check should be made.
9. Piping insulation should include a vapor barrier to prevent moisture condensation and possible damage to the building structure. It is important to have the vapor barrier on the outside of the insulation to prevent condensation within the insulation on the cold surface of the pipe.



TYPICAL CHILLED WATER PIPING



# SKM Air Cooled Packaged Chillers APCD Series - R22

## Unit Sizing

It is strongly recommended to size the chiller for the present load. For future expansion, it is recommended to install another chiller to meet the additional load demand.

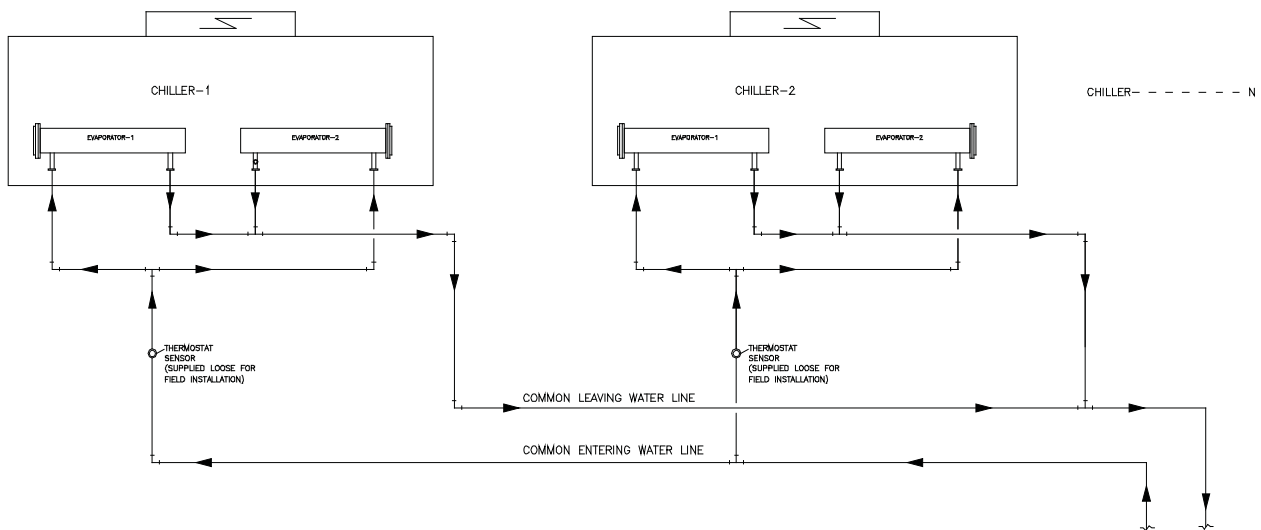
Over sizing of chillers by more than 10% at design conditions must be avoided. Over sizing causes energy inefficiency (more power consumption), erratic system operation and shortened compressor life due to excessive cycling of compressors.

## Multiple Chiller Operation

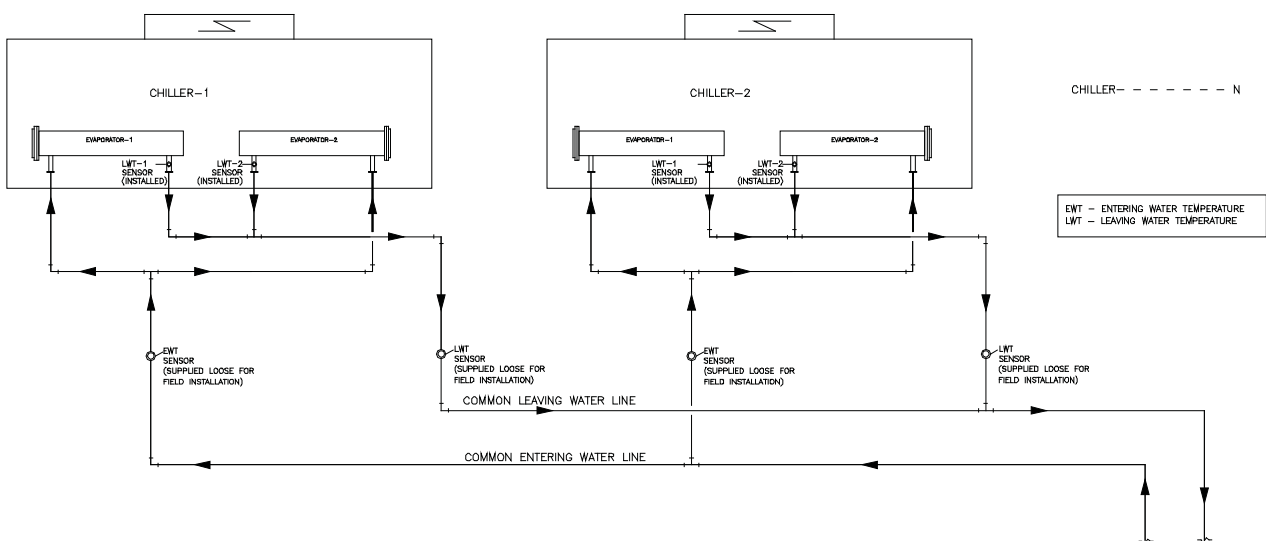
If the capacity requires installing more than one chiller unit or where standby units are desired, units should be of equal size (or near) to ensure balanced water flow.

SKM recommends that water flow supply & return are connected either parallel in case of range < 16°F (8.9°C) or in series if range > 16°F (8.9°C).

## Chilled Water Piping for Multiple Chiller Installation (With Standard Controls)



## Chilled Water Piping for Multiple Chiller Installation (With Microprocessor-Magnum Option)



**For chillers with two evaporators, pipes for leaving and entering water, from one evaporator should be joined to the corresponding pipe from the other evaporator, before connecting to the main header of the installation.**

# SKM Air Cooled Packaged Chillers APCD Series - R22

## GUIDE SPECIFICATIONS

### GENERAL

The contractor shall supply and install factory assembled air-cooled packaged water chillers, the number and capacity of which shall be as indicated in the capacity schedule shown on the drawings.

Each machine shall consist of at least one refrigerating circuit comprising of hermetic/semi hermetic reciprocating high efficiency compressor(s), air-cooled condenser, evaporator, interconnecting refrigerant piping, controls, safety devices and accessories.

The machine shall be factory assembled, leak tested, evacuated and completely charged with refrigerant R - 22. All factory wiring and piping shall be contained within the machine enclosure. All electrical components shall be protected from the weather.

Air cooled chillers shall be rated in accordance with ARI - 550/590. Each machine shall be capable of operating satisfactorily in a wide range of ambient air temperatures ranging from 50°F (10°C) to 125°F (52°C).

Unless indicated otherwise on electrical wiring diagram, each unit shall be factory equipped to connect to only one electrical power feeder with the necessary circuit breakers, if so specified.

Each unit shall be mounted on anti vibration isolators flexible enough to dampen any vibrations.

### COMPRESSOR

Compressors used in Air Cooled Packaged Chillers shall be hermetically sealed, high efficiency, low noise reciprocating/high efficiency and fully accessible semi hermetic reciprocating type with discus valve design. The compressors shall be equipped with crank case heater, refrigerant gas cooled electric motor, preset internal relief valves, oil sight glass, and inherent thermistor motor protection. Semi hermetic compressors shall be with a reversible oil pump. Compressors shall be mounted on anti-vibration mounts to minimize vibration transmission. All compressors shall be provided with an individual 3 pole MCCB for overcurrent, short circuit protection & Isolation in case it is required. Individual 3 pole contactors for switching of the compressors shall be rated for AC3 duty. To reduce the starting inrush on the power supply system, compressors shall be provided with part winding starting if so specified.

### EVAPORATOR

Units with smaller capacity shall be with Brazed Plate Heat Exchanger (BPHE). Brazed plate heat exchanger's channel plates, refrigerant and water connections shall be constructed from stainless steel with pure copper as brazing material. The design and assembly process shall comply with Europe Pressure Equipment Directive PED 97/23/EC and maximum working pressure of water side shall be 363 psig (2500 kPa) and refrigerant side shall be 392 psig (2700 kPa).

Larger capacity evaporators shall be of shell and tube, direct expansion with removable head, having 1, 2, and 3 refrigerant circuits. Evaporator header, tube sheet, shell and water connections shall be made of carbon steel. Baffels shall be made of brass/carbon steel. High efficiency tubes shall be in copper.

The evaporator shall be provided with water drain, air vent and fittings for temperature sensors. The evaporator shall be designed for maximum working pressure of water side shall be 145 psig (1000 kPa) and for refrigerant side 363 psig (2500 kPa).

Shell and tube evaporator design, materials specifications and assembly process shall be in compliance with the following codes: CE, GOST, UDT, and ASME.

The shell shall be insulated with 1" (25mm) thick flexible closed cell insulation with a maximum K factor of 0.26 Btu.in/ft<sup>2</sup>.hr.°F (0.038 W/m.°K).

### CONDENSER COIL

Condenser coil shall be air cooled and shall be constructed of seamless copper tubes, maximum 4 rows deep, 3/8" (9.52 mm) O.D. and mechanically bonded to the wavy type aluminum fins. Fins spacing shall be maximum 12 FPI (2.1mm). Slit fins shall not be accepted.

Precoated fins shall be used for saline and corrosive environment (if so specified). Integral sub cooling circuit in each coil shall be provided to increase the chiller cooling capacity, without additional operating cost. The coils shall be tested against leakage by air pressure of 450 psig (3100 kPa) under water.

### CONDENSER FANS & MOTORS

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. The fan assembly shall be protected with an acrylic coated 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. Condenser fan motors shall be provided with individual 3 pole contactor rated for AC3 duty operation & motor protector circuit breaker for short circuit, over current protection & isolation.

### REFRIGERATION CIRCUITS

Refrigeration circuits piping shall be fabricated from ACR grade copper pipes and each refrigeration circuit shall include a removable core filter drier, liquid line solenoid valve, thermostatic expansion valve, shut of valve, sight glass and hot gas muffler. For single compressor circuits, vibration absorbers on suction and discharge lines shall be provided.

Suction line shall be insulated with ½" (13mm) wall thickness closed cell pipe insulation with maximum k factor 0.26 Btu.in/ft<sup>2</sup>.hr.°F (0.038 W/m.°K).

# SKM Air Cooled Packaged Chillers APCD Series - R22

## GUIDE SPECIFICATIONS

### CASING

Machine casing shall be made of heavy gauge zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM-A 635. To provide an extremely tough, scratch resistance, excellent anti-corrosive protection, fabricated steel shall be thoroughly de-greased and then phosphatized before application of an average 60 micron backed electrostatic polyester dry powder coating in RAL 7032 color scheme. This finish shall pass 1000-hour, 5% salt spray test at 95°F (35°C) and 95% relative humidity (ASTM B 117).

Machine casing shall be provided with access doors for easy service and maintenance and painted steel wire guard for compressors section.

The machine shall be fully assembled on welded rigid structural steel skid painted with one coat primer and minimum one coat of rust-preventing black enamel.

### CONTROL PANEL & CONTROLS

The unit control panel enclosures shall be fabricated out of heavy gauge sheet steel. The enclosure shall be phosphatized and baked after an electrostatic dry powder coat finish and shall be conform to IP-54 protection as per guidelines in IEC-529. Control Panels shall be with dead front panel cover screwed on the enclosure or external panels with hinged doors and key fasteners shall be provided for easy access and security.

Panels shall be factory wired in accordance with NEC 430 & 440, labeled, tagged and shall feature 220/240V single phase controls and to include the following as minimum

- Individual compressor and condenser fan motor contactors.
- Circuit breakers for compressors. (if applicable)
- Condenser fan motor protector circuit breaker.
- Anti-recycle timer to prevent rapid cycling and short cycling of compressors.

- Compressor low pressure safety switch, factory set for each circuit.
- Compressor oil failure and high pressure safety switch, one per compressor, factory set.
- Head pressure control, by fan cycling, for low ambient operation.
- Freeze protection thermostat.
- Multi-step temperature controller to control chiller capacity.
- Control ON / OFF toggle switch for each circuit.
- Control circuit fuses.
- Manual pump-down switch for each circuit.
- Run/Trip indication lights.
- Power and control circuit terminal blocks.

### MICROPROCESSOR CONTROL

Microprocessor Controls with transducers and sensors shall be provided for the chiller operation if so specified.

The main features of the controller includes graphical LCD with back-lit screen, a nine button generic keypad, battery backed -up real time clock to program the chiller for 2 starts and 2 stops daily to provide the information about the running hours of the compressors. The multiple authorization levels provides maximum security of the control system. Automatic lead/lag control for the compressors, pump down at the beginning and end of every circuit cycle, capacity control based on leaving chilled water temperature, remote start/stop facility and volt free contacts for common run, fault and remote mode operation for remote indication, etc.