

R-134a

APCY-S Series Screw Chillers



Range 50 TR to 455 TR
(176 kW to 1600 kW)



*you name it
we cool it*



www.skmaircon.com

@skmaircon



facebook.com/skmaircon



SKM Compact Screw Chillers

APCY-S Series - R-134a

Contents

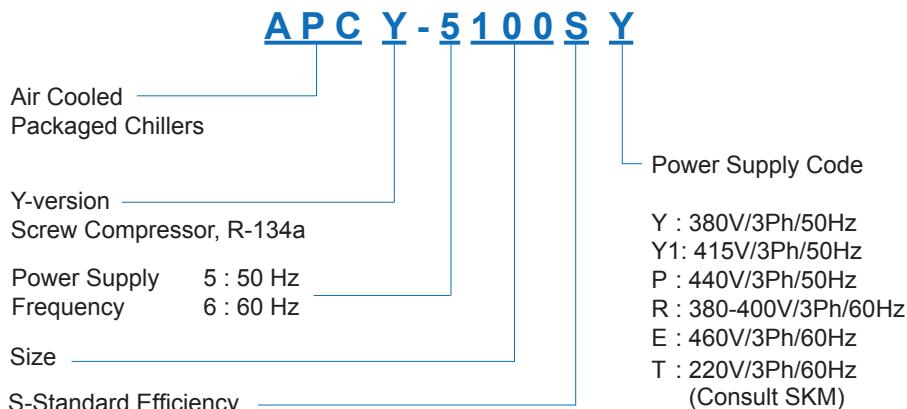
Introduction	2
Legend.....	2
Nomenclature	2
General Features	3
Main Component Features	3
Microprocessor Control	4
Optional Features	6
General Data	8
Capacity Ratings	12
IPLV Calculatio	28
Capacity Correction &Limits	30
Water Pressure Drop	31
Selection Procedure	33
Electrical Data	34
Typical Wiring Diagram	40
Power Entry Connection	40
Dimensional Data	41
Center of Gravity	51
Loading points	52
Sound Data	54
Location And Space Requirements	55
Water Piping Practices	56
Guide Specifications	60

Legend

The following legends are used throughout this manual:

cfm.....	Cubic feet per minute
EER	Energy Efficiency Ratio
Hz	Hertz
kW	Kilowatts
kg.....	Kilogram
lbs	Pounds
l/s	Liters per second
MBH.....	Btu/hr x 1000
Ph	Phase
PI	Power Input of Compressor
TR.....	Tons of Refrigeration
V	Volts

Nomenclature



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

Introduction

SKM **APCY-S** Series environment friendly (R-134a) Air Cooled Screw Chillers are designed and manufactured to provide utmost performance, efficiency, reliability, to meet the requirements and long life from Gulf's severe climatic condition.

APCY-S Series Chillers have low noise and minimum vibration ideal for vast range of applications including hotels, high-rise buildings, stores, hospitals, and modern cooling applications of modern manufacturing industries.

APCY-S units are factory assembled, leak tested, evacuated, internally wired and fully charged with refrigerant R-134a. Every unit is fully tested before delivery and is ready for installation.

APCY-S Chillers are designed and manufactured as per SKM Quality, Environment, Occupational, Health and Safety Management Systems that confirms with ISO 9001:2015, ISO 14001:2015, and OHSAS 18001:2007.

APCY-S Chillers are "Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at www.ahridirectory.org"

SKM provides qualified service and stock of replacement parts in all major cities of the G.C.C. countries, Egypt, Jordan, and Pakistan.

See back cover for details or call SKM.

S.K.M Airconditioning LLC



You name it....We cool it.

SKM Compact Screw Chillers

APCY-S Series - R-134a

General Features

High COP

APCY-S Series chillers provide tremendous savings in operating costs by using high efficiency, semi hermetic screw compressor. High COP is made possible due to perfect screw profile and precise machining. The stepless capacity control provides precise capacity as required by the system load, and thus giving higher part load efficiencies. The compressor can be loaded from 25 or 35 to 100% of capacity depending upon the requirement through state of the art microprocessor control which precisely monitors the water temperature and accurately modulates the compressor accordingly.

Maintenance Free Operation

APCY-S Series chillers have compact design and are supplied as a complete package, ready to be wired and piped for operation. Screw compressors in SKM **APCY-S** Series provide virtually maintenance free operation as there are fewer moving parts. Special bearings facilitate longer run periods of compressor without any need for maintenance.

Wide Operating Range

APCY-S chillers are designed, as standard, to operate at a wide range of ambient temperatures from 25oF (-4°C) to 127.4oF (53°C).

Main Component Features

Compressors

APCY-S Series Chillers use high performance and high efficiency screw compressors which are with 5:6 ratio screw rotor profile designed specifically for modern refrigerant characteristics, double-walled rotor housing, robust in construction and have a very few moving parts to minimize noise and ensure rigidity. Screw Compressors are directly flanged on a three stage oil separator with low oil carry over and pressure drop demister to ensure minimal refrigerant dilution in the oil and maintain high oil viscosity. Oil sight glass, oil drain valve, oil heater, discharge check valve, discharge stop valve are available as standard.

APCY-S screw compressors have excellent bearing life and superior compressor reliability. Screw compressors utilize the combination of 11 axial and radial bearings and a axial balance piston design.

Continuous (Stepless) capacity control system and automatic start unloading are provided as standard.

All compressors are provided with motor winding temperature protection, discharge temperature protection, phase reversal protection, phase failure protection and oil level protection.

Condensers

Condenser coils are manufactured from seamless Hi-x copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All coils are tested against leakage by air pressure of 450 psig (3102 kPa) under water. All standard coils are 3 rows ,16 FPI (1.59 mm fin spacing), 3/8" (9.5mm) O.D. tubes.

Condenser fin materials should be matched with site conditions to inhibit coil corrosion and ensure extended equipment life.

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

- Copper fins
- Copper fins electro-tinned after manufacturing
- Precoated Aluminum fins
The pre-coated is hydrophobic polyurethane resin. This option provides substantial corrosion protection beyond standard coil construction.
- Aeris Guard Coil Coating.

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

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

Evaporator

APCY-S evaporators are direct expansion, shell and tube, with removable head, and having 1, 2, 3 or 4 refrigerant circuits. Evaporator shell is made of steel. Tubes of copper fixed to steel end plates. Baffles are provided in the water flow to increase heat transfer efficiency. Evaporators are provided with drain and vent plugs. Cooler shell is insulated with 1.0" (25mm) thick flexible closed cell insulation, K factor 0.28 Btu. in/ft².h.of (0.04W/m.oK). Maximum working pressure of waterside is 145 psig (1000 kPa) and refrigerant side is 239.3 psig (1650 kPa).

Electronic Expansion Valve

APCY-S series chillers use electronic expansion valve for precise control refrigerant mass flow. Our electronic expansion valve improves EER (Energy Efficiency Ratio) at full & part-load conditions. Also it improves temperature control & increases the range of operating conditions.



SKM Compact Screw Chillers

APCY-S Series - R-134a

Casing/Structure Frame

The unit casing in **APCY-S** series chillers is made of zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM A 653 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.

APCY-S 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, electronic expansion valve, and shut off valve. The refrigeration circuit suction line is insulated with ½" (13mm) wall thickness closed cell pipe insulation.

Economizer

All units are equipped with economiser circuit. Economiser operation improves both cooling capacity and efficiency by increasing sub cooling where part of the liquid refrigerant is flashed to an intermediate pressure which is used to cool the remaining liquid refrigerant. This flash refrigerant is then fed into a compressor where it helps to cool the vapour from the main circuit. The economiser channel is integrated into the control slide to enable sub cooling circuit to operate regardless of the compressor load condition. The components of an economiser cycle include thermostatic expansion valve, plate type heat exchanger, solenoid valve & ECO muffler kit.

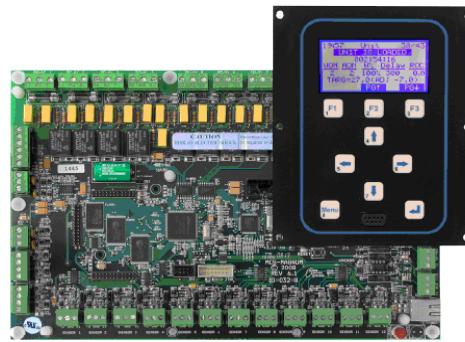
Control Panel

The unit mounted chiller control panel enclosure is fabricated out of heavy gauge sheet steel in phosphatized powder coated baked finish. The enclosure conforms to IP54 as per guidelines in IEC 529. A hinged access door and key-fastener is provided for easy access and security. The panel is factory wired in accordance with NEC 430 & 440, labeled, tagged and features 220V / 240V controls.

- All compressors are with part winding start as standard.
- Individual compressor and condenser fan motor contactors.
- Thermal magnetic circuit breakers for compressors and condenser fan motors.
- Voltage monitoring module for protection against under voltage, over voltage, phase loss, phase reversal and phase unbalance of the incoming voltage.

- Circuit breaker for control circuit.
- Remote/Off/Local selector switch.
- Microprocessor master board with graphical display.
- Microprocessor expansion boards as required.
- Electronic expansion valve control boards.
- Control Relays.
- Control circuit on/off switch and pump down switches.
- Volt free contacts for run, common fault and auto mode indications.
- Provision for accepting volt free contact for remote start/stop.
- Control terminal blocks and power terminal blocks/bus bars.

Micropocessor Controller



Microprocessor control system is available for **APCY-S** series chiller as a standard 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. It is a rugged microprocessor based controller that is designed for the hostile environment of HVAC industry.

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

SKM Compact Screw Chillers

APCY-S Series - R-134a

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 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.
- Multiple authorization levels to provide tight security of the control system.
- Two operating schedules per each day of the week and 8 holidays.
- 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.
- 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).
- Common Run, Fault and remote mode operation status volt free contacts provided for remote signaling.

Display Information

SKM APCY-S chillers offer a graphics LCD display which allows the operator to access different parameters of the chiller. Operator can view and change the set point 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.
- Service tools.
- Lockout Reset.
- Lockout Alarm.
- Password.

System Control Philosophy

The unit may be enabled or disabled manually or through the use of an external signal from a building automation system.

Control is based upon leaving chilled water temperature. How fast the temperature changes is calculated and capacity decisions are based upon the rate, the current temperature, and the control temperature zone.

Capacity is never added if the system is moving toward the temperature target at an acceptable rate. The unit will monitor all control functions and stage the compressor to maintain the required operating capacity.

Easy Accessible Measurements Include:

- Status of the chiller.
- Status of each circuit/compressor.
- Status of condenser fans.
- Leaving and Entering chilled water temperature.
- Suction pressure and temperature for each refrigerant circuit.
- Discharge pressure and temperature for each refrigerant circuit.
- Suction and discharge superheat for each refrigerant circuit.
- Oil pressure for each compressor.
- Winding temperature for each compressor.
- Ampere draw for each compressor.
- Expansion valve opening percentage.
- Ambient temperature.
- All active set points.
- Run time for each compressor.
- Number of compressor starts.
- Lockout and alarm status.
- Status of water flow switch, voltage monitor, compressor internal motor protector, oil level switch, run/stop input and pump down switches.
- Log of last 100 alarms.
- Lead compressor identification.
- Date and time.
- Graphs of all inputs and outputs.



SKM Compact Screw Chillers

APCY-S Series - R-134a

System Protection

The following system protection controls will automatically act to insure system reliability and protection of the unit.

- Low suction pressure protection.
- High discharge pressure protection.
- High discharge temperature protection.
- Low discharge pressure protection.
- Low oil pressure protection.
- Low oil level protection.
- High compressor motor winding temperature protection.
- Low superheat protection.
- High compressor ampere protection.
- Compressor internal thermal protection.
- Freeze protection.
- Under voltage, over voltage, phase loss, phase reversal and phase unbalance protection.
- Chilled water flow loss protection.
- Sensor error protection.
- Pump down.
- Anti-recycle.
- Time delay between stages.
- 4-Levels of passwords to restrict the intentional mishandling.

Optional Features available for the Micro Controller

PC Support Software

PC software to communicate with **APCY-S** microprocessor is available as an optional feature. Software is named **MCS-Connect** and it can provide both local and remote communications to the chiller microprocessor. This program allows viewing the entire status of chiller, inputs, outputs, set points, alarms, graphs etc. Through proper authorization, changes can be made to the system. Configuration files can be transmitted to or received from the unit. Communication between PC and chiller microprocessor can be made through RS-232 serial port or Ethernet port.

If there is more than one chiller, these chillers can be connected together via Rs-485 network which can support up to 20 chillers. Access to this network can be local, via RS 232 or Ethernet connection, or remote via 14.4K Baud modem. Each chiller in the network must be assigned to a unique address. This address can be changed from the LCD/keypad of the unit or through **MCS-Connect** software. RS 232 transmission should not exceed 50 feet in length and RS 485 transmission should not exceed 1 mile without repeater. For Ethernet communication, it is necessary to use a crossover cable when connected directly to a PC.

This software can run with Windows 2000 or newer version.

BMS Communication

BMS communication with the chiller microprocessor is possible through hardwired signals or major BMS protocols.

Hard wired signals

Volt free contacts for Run, Common fault and Auto mode indications and provision for remote start/stop are provided as standard feature. In addition to these, below options can be provided if specified.

- Emergency Stop – A volt free contact from BMS to chiller, which is normally closed and opens on an emergency shut down condition. It will make the chiller to shut down immediately bypassing normal shut down procedure.
- Chilled water reset – A 0-5VDC signal from BMS to chiller, which allows resetting chilled water set point around an acceptable range.

BMS protocols

The chiller controller is capable to interface with four major building management systems, which are BACnet, Modbus, Lonworks and Johnson N2, by adding optional hardware. This interface allows to monitor the status of chiller and individual circuits, all inputs and outputs, chilled water set point etc. The required BMS protocol and number of chillers needs to be specified during the time of order as costing of the BMS interface involves these parameters.

Factory Installed Options

Alternative Condenser Material

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

- Condenser coil with Pre Coated Aluminum fins, specify **(FAP)**.
- Condenser coil with Aeris Coated Aluminum fins, specify **(FAA)**.
- Condenser coil with Copper fins, specify **(FC)**.
- Condenser coil with Aeris Coated copper fins, specify **(FCA)**.
- Electrotinned copper fins for Condenser coil, specify **(CFT)** (consult SKM).

Galvanized Frame **(GFB)**

Hot dip galvanized after manufacture, steel frame and base.

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

Evaporator enclosed in a casing of Aluminium /Galvanized Steel / Stainless Steel, and injected with polyurethane foam. 1.5" (38mm) insulation thickness.

SKM Compact Screw Chillers

APCY-S Series - R-134a

Condenser Coil Guard	(CGP)	Evaporator Freeze Up Protection	(EFP)
Galvanized wire mesh guard with painted finish for condenser coils. Recommended on ground level installations where coil needs to be protected against vandalism.		Heating cable with thermostat to prevent evaporator freeze-up where low ambient temperatures below 32°F (0°C) are anticipated with/out chiller operation.	
Pressure Relief Valve	(PRV)	IP55 Control Panel Enclosure	(ICP)
To protect the chiller unit from being over-pressurized.		Control Panel for special applications to meet IP55 requirements.	
Marine Paint	(MP)	Main Isolator	(ISO)
Marine Painting on casing and steel structure, to improve corrosion resistance in coastal environments and off-shore locations.		For main power isolation. (consult SKM)	
Compressor Sound Enclosure	(CSE)	Star/Delta Starter For Compressors	(SDS)
compressor sound enclosure with insulated panels is mounted around the compressor, to reduce sound.		For models with part winding start to reduce starting current of compressors by reduced voltage starting method. Compressors will be started in star and after few seconds it will be changed over to delta. (Consult SKM).	
ASME Stamped Evaporator	(STE)	Soft Starter	(SFS)
Shell and Tube evaporator with ASME stamp.		To reduce the starting current of compressors using reduced voltage starting method. Compressors will be started using electronic solid state soft starters that will ramp up the speed of the compressors to rated speed within few seconds thus reducing the mechanical & electrical stresses .	
Pressure Guages(Suction/Discharge)	(SDG1)	Voltmeter & Selector Switch	(VSS)
Suction & discharge pressure indication of each refrigerant circuit. Gauges are mounted outside the Control Panel.		For incoming line voltage.	
Extra Shut Off Valve	(XVF)	UL 1995	(UL-LISTED)
Extra Shut off valve in liquid line to fully isolate the filter drier.		Unit construction are certified and in compliance of UL 1995 safety standards. Consult SKM for availability of selected models .	
Suction Shut off Valve	(SSOV)	<hr/>	
Screw compressors are with suction shut off valves to isolate the compressor from the evaporator, this may be beneficial when servicing the chiller.		Options for Field Installation	
Ammeter & Phase Selector Switch	(AMPC)	Chilled Water Flow Switch	(CWFS)
To indicate running AMPS of each compressor.		To control the chilled water flow.	
Ammeter & Phase Selector switch	(AMPI)	Anti-vibration mounts, spring type	(CAVM)
To indicate running AMPS on main incomer of a chiller.		Recommended for roof mounted units or other locations in the vicinity of occupied spaces, where noise/vibration may be objectionable. Can be supplied loose for site installation.	
BMS Interface thru protocol	(BMSP)	Hi-Lo Pressure Gauges-Loose	(CSDG1)
For interacting the units with major BMS protocols such as BACNet, Modbus or LON. Extra hardware may be required depending on the protocol.		Without piping or isolating pet cocks.	
Condenser Fan Motors with built-in Anti-Condensation Heaters.	(CFMA)		
Where application so requires.			
Voltage Monitoring Module as per DEWA	(DVM)		
Under voltage relay as per DEWA specification.This option is available for Dubai,UAE only.			

SKM Compact Screw Chillers

APCY-S Series - R-134a

GENERAL DATA - 50 Hz (Standard Efficiency)

Model	APCY	5050 S	5060 S	5070 S	5085 S	5100 S	5110 S	5120 S
Compressor	-	Semi Hermetic, Screw						
Qty	#	1	1	1	1	1	2	2
Oil Charge(CPI Solest 220) Ckt (A / B / C / D)	US Gal	4.2	4.2	4.0	4.8	6.1	4.2 / 4.2	4.2 / 4.2
	Litre	16.0	16.0	15.0	18.0	23.0	16 / 16	16 / 16
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins						
Face Area (Total)	ft ²	75.0	83.3	100.0	153.3	153.3	173.3	208.0
	m ²	7.0	7.7	9.3	14.3	14.3	16.1	19.3
Condenser Fan	-	Propeller Direct Drive						
Quantity	#	4	4	6	6	6	6	8
Air Flow Rate	cfm	42680	43768	61944	68268	68268	69540	91280
	l/s	20141	20654	29231	32216	32216	32816	43075
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected						
Size x Quantity	kW x #	1.5 x 4	1.5 x 4	1.5 x 6	1.5 x 6	1.5 x 6	1.5 x 6	1.5 x 8
Evaporator	-	Direct Expansion Shell and Tube						
Quantity	#	1	1	1	1	1	1	1
Refrigerant Circuits	#	1	1	1	1	1	2	2
Water Volume	US Gal	15.1	14.0	29.3	27.5	27.5	39.4	39.4
	Litre	57.0	53.0	111.0	104.0	104.0	149.0	149.0
Refrigerant Charge (R134a)	lbs	79.2	83.1	113.2	150.8	150.8	183.3	204.3
	kg	35.9	37.7	51.4	68.4	68.4	83.1	92.6

Model	APCY	5230 S	5240 S	5255 S	5265 S	5280 S	5295 S	5305 S
Compressor	-	Semi Hermetic, Screw						
Qty	#	3	3	3	3	3	3	4
Oil Charge(CPI Solest 220) Ckt (A / B / C / D)	US Gal	4.8 / 4.0 / 4.0	4.0 / 4.8 / 4.8	4.8 / 4.8 / 4.8	6.1 / 4.8 / 4.8	4.8 / 6.1 / 6.1	6.1 / 6.1 / 6.1	4.8 / 4.0 / 4.0 / 4.0
	Litre	18 / 15 / 15	15 / 18 / 18	18 / 18 / 18	23 / 18 / 18	18 / 23 / 23	23 / 23 / 23	18 / 15 / 15 / 15
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins						
Face Area (Total)	ft ²	393.3	376.0	409.3	409.3	460.0	460.0	496.0
	m ²	36.6	34.9	38.0	38.0	42.8	42.8	46.1
Condenser Fan	-	Propeller Direct Drive						
Quantity	#	14	14	16	16	18	18	18
Air Flow Rate	cfm	161616	160552	182080	182080	204804	204804	207216
	l/s	76267	75764	85924	85924	96647	96647	97785
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected						
Size x Quantity	kW x #	1.5 x 14	1.5 x 14	1.5 x 16	1.5 x 16	1.5 x 18	1.5 x 18	1.5 x 18
Evaporator	-	Direct Expansion Shell and Tube						
Quantity	#	1	1	1	1	1	1	1
Refrigerant Circuits	#	3	3	3	3	3	3	4
Water Volume	US Gal	100.6	100.6	97.7	97.7	114.5	114.5	115.5
	Litre	380.8	380.8	369.7	369.7	433.5	433.5	437.2
Refrigerant Charge (R134a)	lbs	327.2	326.0	357.1	357.1	399.0	399.0	417.1
	kg	148.4	147.9	161.9	161.9	181.0	181.0	189.2

Table 1

SKM Compact Screw Chillers

APCY-S Series - R-134a

GENERAL DATA - 50 Hz (Standard Efficiency)

Model	APCY	5135 S	5145 S	5155 S	5165 S	5185 S	5195 S	5210 S	5220 S
Compressor	-				Semi Hermetic, Screw				
Qty	#	2	2	2	2	2	2	3	3
Oil Charge(CPI Solest 220)	US Gal	4.0/4.2	4.0/4.0	4.8/4.0	4.8/4.8	6.1/4.8	6.1/6.1	4.2/4.0/4.0	4.0/4.0/4.0
Ckt (A / B / C / D)	Litre	15/16	15/15	18/15	18/18	23/18	23/23	16/15/15	15/15/15
Condenser Coil	-			Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins					
Face Area (Total)	ft ²	240.0	240.0	256.0	256.0	306.7	306.7	344.0	360.0
	m ²	22.3	22.3	23.8	23.8	28.5	28.5	32.0	33.5
Condenser Fan	-			Propeller Direct Drive					
Quantity	#	8	8	10	10	12	12	12	12
Air Flow Rate	cfm	93184	93184	113820	113820	136536	136536	138936	139776
	l/s	43974	43974	53712	53712	64431	64431	65564	65960
Condenser Fan Motor	-			Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected					
Size x Quantity	kW x #	1.5 x 8	1.5 x 8	1.5 x 10	1.5 x 10	1.5 x 12	1.5 x 12	1.5 x 12	1.5 x 12
Evaporator	-			Direct Expansion Shell and Tube					
Quantity	#	1	1	1	1	1	1	1	1
Refrigerant Circuits	#	2	2	2	2	2	2	3	3
Water Volume	US Gal	47.8	85.6	85.6	85.6	84.8	84.8	75.8	75.8
	Litre	181.0	324.0	324.0	324.0	321.0	321.0	286.9	286.9
Refrigerant Charge (R134a)	lbs	196.4	209.0	226.8	235.5	272.4	272.4	283.8	293.4
	kg	89.1	94.8	102.9	106.8	123.6	123.6	128.7	133.0

Model	APCY	5310 S	5320 S	5330 S	5345 S	5355 S	5365 S	5380 S	5395 S
Compressor	-				Semi Hermetic, Screw				
Qty	#	4	4	4	4	4	4	4	4
Oil Charge(CPI Solest 220)	US Gal	4.8/4.0/4.8/4.0	4.8/4.8/4.8/4.0	4.8/4.8/4.8/4.8	6.1/4.8/4.8/4.8	6.1/4.8/6.1/4.8	6.1/4.8/6.1/4.8	6.1/6.1/6.1/4.8	6.1/6.1/6.1/6.1
Ckt (A / B / C / D)	Litre	18/15/18/15	18/18/18/15	18/18/18/18	23/18/18/18	23/18/23/18	23/18/23/18	23/23/23/18	23/23/23/23
Condenser Coil	-			Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins					
Face Area (Total)	ft ²	496.0	512.0	512.0	562.7	562.7	562.7	613.3	613.3
	m ²	46.1	47.6	47.6	52.3	52.3	52.3	57.0	57.0
Condenser Fan	-			Propeller Direct Drive					
Quantity	#	18	20	20	22	22	22	24	24
Air Flow Rate	cfm	207216	227640	227640	250360	250360	250360	273072	273072
	l/s	97785	107423	107423	118145	118145	118145	128863	128863
Condenser Fan Motor	-			Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected					
Size x Quantity	kW x #	1.5 x 18	1.5 x 20	1.5 x 20	1.5 x 22	1.5 x 22	1.5 x 22	1.5 x 24	1.5 x 24
Evaporator	-			Direct Expansion Shell and Tube					
Quantity	#	1	1	1	1	1	2	2	2
Refrigerant Circuits	#	4	4	4	4	4	4	4	4
Water Volume	US Gal	115.5	115.5	115.5	115.5	115.5	169.6	169.6	169.6
	Litre	437.2	437.2	437.2	437.2	437.2	642.0	642.0	642.0
Refrigerant Charge (R134a)	lbs	425.8	443.6	452.3	481.2	481.2	516.0	544.9	544.9
	kg	193.1	201.2	205.1	218.2	218.2	234.0	247.1	247.1

Table 2

SKM Compact Screw Chillers

APCY-S Series - R-134a

GENERAL DATA - 60 Hz (Standard Efficiency)

Model	APCY	6060 S	6070 S	6085 S	6100 S	6115 S	6130 S	6145 S
Compressor Qty	-				Semi Hermetic, Screw			
	#	1	1	1	1	1	2	2
Oil Charge(CPI Solest 220)	US Gal	4.2	4.2	4.0	4.8	6.1	4.2 / 4.2	4.2 / 4.2
Ckt (A / B / C / D)	Litre	16.0	16.0	15.0	18.0	23.0	16 / 16	16 / 16
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins						
Face Area (Total)	ft ²	75.0	83.3	100.0	153.3	153.3	240.0	240.0
	m ²	7.0	7.7	9.3	14.3	14.3	22.3	22.3
Condenser Fan	-	Propeller Direct Drive						
Quantity	#	4	4	6	6	6	8	8
Air Flow Rate	cfm	51552	52792	74988	82200	82200	112128	112128
	l/s	24327	24913	35387	38790	38790	52913	52913
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected						
Size x Quantity	kW x #	2.0 x 4	2.0 x 4	2.0 x 6	2.0 x 6	2.0 x 6	2.0 x 6	2.0 x 8
Evaporator	-	Direct Expansion Shell and Tube						
Quantity	#	1	1	1	1	1	1	1
Refrigerant Circuits	#	1	1	1	1	1	2	2
Water Volume	US Gal	14.0	29.3	27.5	27.5	39.4	47.8	47.8
	Litre	53.0	111.0	104.0	104.0	149.0	181.0	181.0
Refrigerant Charge (R134a)	lbs	77.8	103.4	110.8	150.8	166.5	194.8	196.0
	kg	35.3	46.9	50.3	68.4	75.5	88.4	88.9

Model	APCY	6270 S	6285 S	6295 S	6310 S	6320 S	6335 S	6350 S
Compressor Qty	-				Semi Hermetic, Screw			
	#	3	3	3	3	3	3	3
Oil Charge(CPI Solest 220)	US Gal	4.8 / 4.0 / 4.0	4.0 / 4.8 / 4.8	4.8 / 4.8 / 4.8	6.1 / 4.8 / 4.8	6.1 / 4.8 / 4.8	4.8 / 6.1 / 6.1	6.1 / 6.1 / 6.1
Ckt (A / B / C / D)	Litre	18 / 15 / 15	15 / 18 / 18	18 / 18 / 18	23 / 18 / 18	23 / 18 / 18	18 / 23 / 23	23 / 23 / 23
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins						
Face Area (Total)	ft ²	393.3	376.0	409.3	409.3	409.3	460.0	460.0
	m ²	36.6	34.9	38.0	38.0	38.0	42.8	42.8
Condenser Fan	-	Propeller Direct Drive						
Quantity	#	14	14	16	16	16	18	18
Air Flow Rate	cfm	194516	193256	219232	219232	219232	246600	246600
	l/s	91792	91198	103456	103456	103456	116371	116371
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected						
Size x Quantity	kW x #	2.0 x 14	2.0 x 14	2.0 x 16	2.0 x 16	2.0 x 16	2.0 x 18	2.0 x 18
Evaporator	-	Direct Expansion Shell and Tube						
Quantity	#	1	1	1	1	1	1	1
Refrigerant Circuits	#	3	3	3	3	3	3	3
Water Volume	US Gal	97.7	97.7	97.7	97.7	114.5	114.5	114.5
	Litre	369.7	369.7	369.7	369.7	433.5	433.5	433.5
Refrigerant Charge (R134a)	lbs	330.6	329.4	357.1	357.1	370.1	399.0	399.0
	kg	149.9	149.4	161.9	161.9	167.9	181.0	181.0

Table 3

SKM Compact Screw Chillers

APCY-S Series - R-134a

GENERAL DATA - 60 Hz (Standard Efficiency)

Model Compressor	APCY -	6160 S	6170 S	6185 S	6200 S	6215 S	6230 S	6245 S	6260 S
Semi Hermetic, Screw									
Qty	#	2	2	2	2	2	2	3	3
Oil Charge(CPI Solest 220)	US Gal	4.0 / 4.2	4.0 / 4.0	4.8 / 4.0	4.8 / 4.8	6.1 / 4.8	6.1 / 6.1	4.2 / 4.0 / 4.0	4.0 / 4.0 / 4.0
Ckt (A / B / C / D)	Litre	15 / 16	15 / 15	18 / 15	18 / 18	23 / 18	23 / 23	16 / 15 / 15	15 / 15 / 15
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins							
Face Area (Total)	ft ²	240.0	240.0	256.0	256.0	306.7	306.7	344.0	360.0
	m ²	22.3	22.3	23.8	23.8	28.5	28.5	32.0	33.5
Condenser Fan	-	Propeller Direct Drive							
Quantity	#	8	8	10	10	12	12	12	12
Air Flow Rate	cfm	112128	112128	137040	137040	164400	164400	167184	168192
	l/s	52913	52913	64669	64669	77580	77580	78894	79370
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected							
Size x Quantity	kW x #	2.0 x 8	2.0 x 8	2.0 x 10	2.0 x 10	2.0 x 12	2.0 x 12	2.0 x 12	2.0 x 12
Evaporator	-	Direct Expansion Shell and Tube							
Quantity	#	1	1	1	1	1	1	1	1
Refrigerant Circuits	#	2	2	2	2	2	2	3	3
Water Volume	US Gal	85.6	85.6	84.8	84.8	84.8	84.8	100.6	100.6
	Litre	324.0	324.0	321.0	321.0	321.0	321.0	380.8	380.8
Refrigerant Charge (R134a)	lbs	208.6	209.0	234.8	243.5	272.4	272.4	290.0	299.5
	kg	94.6	94.8	106.5	110.4	123.6	123.6	131.5	135.8

Model Compressor	APCY -	6365 S	6375 S	6385 S	6395 S	6410 S	6435 S	6450 S	6475 S
Semi Hermetic, Screw									
Qty	#	4	4	4	4	4	4	4	4
Oil Charge(CPI Solest 220)	US Gal	4.8 / 4.0 / 4.0 / 4.0	4.8 / 4.0 / 4.8 / 4.0	4.8 / 4.8 / 4.8 / 4.0	4.8 / 4.8 / 4.8 / 4.8	6.1 / 4.8 / 4.8 / 4.8	6.1 / 4.8 / 6.1 / 4.8	6.1 / 6.1 / 6.1 / 4.8	6.1 / 6.1 / 6.1 / 6.1
Ckt (A / B / C / D)	Litre	18 / 15 / 15 / 15	18 / 15 / 18 / 15	18 / 18 / 18 / 15	18 / 18 / 18 / 18	23 / 18 / 18 / 18	23 / 18 / 23 / 18	23 / 23 / 23 / 18	23 / 23 / 23 / 23
Condenser Coil	-	Air Cooled 3 rows, 16 fpi (1.59mm) fin spacing, copper tubes Aluminum fins							
Face Area (Total)	ft ²	496.0	496.0	512.0	512.0	562.7	562.7	613.3	613.3
	m ²	46.1	46.1	47.6	47.6	52.3	52.3	57.0	57.0
Condenser Fan	-	Propeller Direct Drive							
Quantity	#	18	18	20	20	22	22	24	24
Air Flow Rate	cfm	249408	249408	274080	274080	301444	301444	328800	328800
	l/s	117696	117696	129338	129338	142251	142251	155161	155161
Condenser Fan Motor	-	Totally enclosed air over, Class F insulation, 6 pole, IP - 55 protected							
Size x Quantity	kW x #	2.0 x 18	2.0 x 18	2.0 x 20	2.0 x 20	2.0 x 22	2.0 x 22	2.0 x 24	2.0 x 24
Evaporator	-	Direct Expansion Shell and Tube							
Quantity	#	2	2	2	2	2	2	2	2
Refrigerant Circuits	#	4	4	4	4	4	4	4	4
Water Volume	US Gal	169.6	169.6	169.6	169.6	169.6	169.6	169.6	169.6
	Litre	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0
Refrigerant Charge (R134a)	lbs	451.9	460.6	478.4	487.1	516.0	516.0	544.9	544.9
	kg	204.9	208.9	217.0	220.9	234.0	234.0	247.1	247.1

Table 4

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																	
		85						95						105					
		Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD
APCY	°F	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O
5050 S	40	49.7	51.31	6	11.6	119.2	6.5	47.8	58.04	6	9.9	114.8	6	45.5	66.04	6	8.3	109.3	5.5
	42	51	51.69	6	11.8	122.4	6.8	49.2	58.51	6	10.1	118.1	6.4	46.9	66.6	6	8.5	112.6	5.8
	44	52.7	52.17	6	12.1	126.5	7.3	50.9	59.08	6	10.3	122.1	6.8	48.5	67.26	6	8.7	116.5	6.2
	45	53.6	52.41	6	12.3	128.6	7.5	51.7	59.37	6	10.5	124.1	7	49.4	67.6	6	8.8	118.5	6.4
5060 S	48	56.2	53.13	6	12.7	134.8	8.3	54.2	60.22	6	10.8	130.1	7.7	51.7	68.56	6	9.1	124.2	7
	40	57.3	59.65	6	11.5	137.6	7.7	55.1	67.7	6	9.8	132.2	7.1	52.3	77.17	6	8.1	125.6	6.4
	42	59	60.19	6	11.8	141.5	8.1	56.7	68.35	6	10	136.1	7.5	54	77.93	6	8.3	129.5	6.8
	44	60.9	60.82	6	12	146.1	8.6	58.6	69.1	6	10.2	140.6	8	55.8	78.77	6	8.5	133.9	7.3
5070 S	45	61.9	61.15	6	12.1	148.5	8.9	59.6	69.48	6	10.3	143	8.3	56.8	79.2	6	8.6	136.2	7.5
	48	64.8	62.13	6	12.5	155.6	9.8	62.5	70.61	6	10.6	149.9	9.1	59.6	80.44	6	8.9	143	8.3
	40	68.9	71.8	9	11.5	165.3	22.7	66.3	81.11	9	9.8	159.1	21.1	63.1	92.16	9	8.2	151.4	19.1
	42	71.4	72.54	9	11.8	171.3	24.4	68.8	82	9	10.1	165.1	22.7	65.5	93.2	9	8.4	157.3	20.6
5085 S	44	73.8	73.24	9	12.1	177	26	71.1	82.82	9	10.3	170.6	24.2	67.8	94.14	9	8.6	162.7	22
	45	74.9	73.58	9	12.2	179.9	26.8	72.2	83.23	9	10.4	173.4	25	68.9	94.6	9	8.7	165.4	22.7
	48	78.5	74.62	9	12.6	188.3	29.4	75.7	84.44	9	10.8	181.6	27.4	72.2	95.95	9	9	173.4	25
	40	79.9	79.75	9	12	191.8	13.2	77.1	90.1	9	10.3	185.1	12.3	73.7	102.54	9	8.6	176.8	11.3
5100 S	42	82.7	80.48	9	12.3	198.6	14.1	79.9	90.98	9	10.5	191.8	13.2	76.4	103.55	9	8.9	183.4	12.1
	44	85.5	81.18	9	12.6	205.1	15	82.6	91.81	9	10.8	198.2	14.1	79	104.5	9	9.1	189.6	12.9
	45	86.9	81.54	9	12.8	208.5	15.5	84	92.24	9	10.9	201.5	14.5	80.3	104.99	9	9.2	192.8	13.3
	48	91	82.59	9	13.2	218.3	16.9	88	93.48	9	11.3	211.2	15.9	84.2	106.38	9	9.5	202.2	14.6
5110 S	40	91.5	92.59	9	11.9	219.6	17.1	88	105.01	9	10.1	211.3	15.9	83.8	119.76	9	8.4	201.1	14.4
	42	94.7	93.54	9	12.1	227.2	18.3	91.2	106.16	9	10.3	218.8	17	86.9	121.11	9	8.6	208.5	15.5
	44	97.8	94.49	9	12.4	234.7	19.5	94.2	107.29	9	10.5	226.1	18.1	89.8	122.4	9	8.8	215.6	16.5
	45	99.4	94.97	9	12.6	238.5	20.1	95.8	107.86	9	10.7	229.9	18.7	91.3	123.06	9	8.9	219.2	17
5120 S	48	104.2	96.44	9	13	250.1	22	100.4	109.59	9	11	241.1	20.5	95.8	125	9	9.2	230	18.7
	40	100.2	101.7	9	11.8	240.5	11.1	96.4	115.59	9	10	231.2	10.3	91.6	131.98	9	8.3	219.9	9.4
	42	103.8	102.82	9	12.1	249.2	11.8	99.9	116.9	9	10.3	239.7	11	95	133.49	9	8.5	228	10
	44	107.1	103.83	9	12.4	251.7	12.6	103.1	118.1	9	10.5	247.5	11.7	98.1	134.87	9	8.7	235.5	10.7
5135 S	45	108.9	104.37	9	12.5	261.3	13	104.8	118.73	9	10.6	251.6	12.1	99.8	135.6	9	8.8	239.5	11
	48	114	105.9	9	12.9	273.5	14.1	109.7	120.55	9	10.9	263.4	13.2	104.6	137.67	9	9.1	251	12
	40	115.2	115.01	12	12	276.4	14.4	111	130.28	12	10.2	265.5	13.4	105.9	148.41	12	8.6	254.1	12.3
	42	119.3	116.15	12	12.3	286.4	15.4	115.1	131.64	12	10.5	276.2	14.4	109.9	149.98	12	8.8	263.6	13.2
5145 S	44	123.2	117.21	12	12.6	295.6	16.4	118.9	132.9	12	10.7	285.3	15.3	113.5	151.41	12	9	272.4	14
	45	125.2	117.75	12	12.8	300.4	16.9	120.8	133.55	12	10.9	290	15.8	115.4	152.14	12	9.1	277	14.5
	48	131.1	119.4	12	13.2	314.7	18.5	126.6	135.46	12	11.2	304	17.3	121.1	154.27	12	9.4	290.6	15.9
	40	127.4	126.95	12	12	305.7	13.6	122.8	144.08	12	10.2	294.8	12.7	117.2	164.41	12	8.6	281.2	11.6
5155 S	42	131.9	126.26	12	12.3	316.6	14.7	127.2	145.62	12	10.5	305.3	13.6	121.4	166.16	12	8.8	291.4	12.4
	44	136.4	129.55	12	12.6	327.3	15.7	131.6	147.14	12	10.7	315.7	14.6	125.6	167.87	12	9	301.5	13.3
	45	138.6	130.2	12	12.8	332.7	16.3	133.8	147.9	12	10.9	321	15.1	127.7	168.72	12	9.1	306.6	13.7
	48	145.4	132.17	12	13.2	349	18	140.4	150.19	12	11.2	336.9	16.7	134.1	171.25	12	9.4	321.9	15.2
5145 S	40	140.9	142.38	12	11.9	338.1	10.5	135.4	161.96	12	10	325	9.6	128.7	185	12	8.3	308.8	8.6
	42	145.4	143.88	12	12.1	349.9	11.2	139.8	163.72	12	10.2	335.5	10.3	132.9	186.99	12	8.5	319	9.3
	44	150.4	145.57	12	12.4	361.1	12	144.8	165.71	12	10.5	347.5	11.1	137.9	189.26	12	8.7	330.8	10
	45	153.5	146.58	12	12.6	368.4	12.4	147.8	166.9	12	10.6	354.7	11.5	140.9	190.62	12	8.9	338	10.5
5165 S	48	160.9	149.05	12	13	386.1	13.6	155.2	169.8	12	11	372.5	12.7	148.2	193.88	12	9.2	355.7	11.6
	40	150.7	151.86	15	11.9	361.6	12	145.1	172.24	15	10.1	348.4	11.1	138.3	196.44	15	8.4	331.9	10.1
	42	155.6	153.32	15	12.2	373.4	12.8	149.9	173.97	15	10.3	359.8	11.9	142.9	198.41	15	8.6	343	10.8
	44	160.9	154.92	15	12.5	386.2	13.6	155.2	175.88	15	10.6	372.5	12.7	148.1	200.6	15	8.9	355.5	11.6
5155 S	45	164.1	155.87	15	12.6	393.8	14.1	158.3	177.01	15	10.7	380	13.2	151.3	201.9	15	9	363	12.1
	48	171.7	158.16	15	13	412.1	15.4	166	179.73	15	11.1	398.4	14.5	158.9	205	15	9.3	381.4	13.3
	40	158.5	166.06	15	11.5	380.4	13.2	152.5	187.61	15	9.8	366	12.3	145.1	214.3	15	8.1	348.2	11.1
	42	163.7	166.79	15	11.8	392.9	14.1	157.5	189.64	15	10	378	13.1	149.9	216.6	15	8.3	359.8	11.9
5185 S	44	169.2	168.64	15	12	406.2	15	163	191.84	15	10.2	391.1	14	155.3	219.1	15	8.5	372.7	12.7
	45	172.5	169.73	15	12.2	414	15.5	166.2	193.13	15	10.3	398.9	14.5	158.5	220.58	15	8.6	380.4	13.2
	48	180.2	172.34	15	12.5	432.5	16.9	174	196.21	15	10.6	417.5</td							

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																	
		115						118.4						125					
		Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD
APCY	°F	ton _b	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _b	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _b	kW	kW	Btu / W.h	gpm	ft H ₂ O
5050 S	40	42.8	75.28	6	6.8	102.8	4.9	41.8	78.71	6	6.4	100.3	4.7	39.7	85.77	6	5.6	95.2	4.3
	42	44.2	75.96	6	7	106.1	5.2	43.2	79.42	6	6.5	103.7	5	41.1	86.56	6	5.7	98.5	4.5
	44	45.8	76.71	6	7.2	109.9	5.5	44.7	80.59	6	6.7	107.3	5.3	42.5	87.38	6	5.8	102.1	4.8
	45	46.6	77.08	6	7.2	111.8	5.7	45.5	80.59	6	6.8	109.2	5.5	43.3	87.8	6	5.9	103.9	5
5060 S	48	48.8	78.14	6	7.5	117.2	6.3	47.7	81.67	6	7	114.5	6	45.4	88.91	6	6.1	109	5.4
	40	49.1	88.03	6	6.7	117.8	5.7	47.9	92.03	6	6.2	114.9	5.4	45.3	100.24	6	5.4	108.8	4.9
	42	50.7	88.89	6	6.8	121.7	6.1	49.5	92.93	6	6.4	118.8	5.8	47	101.2	6	5.6	112.7	5.2
	44	52.5	89.8	6	7	126	6.5	51.3	93.86	6	6.6	123	6.2	48.7	102.16	6	5.7	116.8	5.6
5070 S	45	53.4	90.27	6	7.1	128.2	6.7	52.2	94.33	6	6.6	125.2	6.4	49.6	102.65	6	5.8	119	5.8
	48	56.1	91.6	6	7.4	134.7	7.4	54.9	95.68	6	6.9	131.6	7.1	52.2	104.02	6	6	125.2	6.4
	40	59.3	104.95	9	6.8	142.3	17	57.8	109.69	9	6.3	138.8	16.2	54.9	119.45	9	5.5	131.7	14.6
	42	61.7	106.13	9	7	148	18.3	60.2	110.91	9	6.5	144.6	17.5	57.2	120.74	9	5.7	137.3	15.9
5085 S	44	63.8	107.1	9	7.2	153.2	19.6	62.4	111.96	9	6.7	149.7	18.7	59.3	121.83	9	5.8	142.3	17
	45	64.9	107.66	9	7.2	155.8	20.2	63.4	112.48	9	6.8	152.3	19.4	60.3	122.36	9	5.9	144.8	17.6
	48	68.1	109.11	9	7.5	163.5	22.2	66.6	113.95	9	7	159.8	21.3	63.4	123.87	9	6.1	152.1	19.3
	40	69.5	117.03	9	7.1	166.8	10.2	68	122.43	9	6.7	163.1	9.7	64.7	133.57	9	5.8	155.2	8.9
5100 S	42	72.2	118.17	9	7.3	173.2	10.9	70.6	123.6	9	6.9	169.4	10.5	67.2	134.8	9	6	161.4	9.5
	44	74.7	119.22	9	7.5	179.2	11.6	73.1	124.68	9	7	175.3	11.1	69.6	135.92	9	6.1	167.2	10.2
	45	76	119.75	9	7.6	182.4	12	74.3	125.22	9	7.1	178.4	11.5	70.9	136.49	9	6.2	170.2	10.5
	48	79.7	121.24	9	7.9	191.4	13.2	78	126.73	9	7.4	187.3	12.6	74.5	138.02	9	6.5	178.8	11.6
5110 S	40	78.8	136.82	9	6.9	189.1	12.9	76.9	143.14	9	6.4	184.6	12.3	73	156.15	9	5.6	175.2	11.1
	42	81.8	138.35	9	7.1	196.2	13.8	79.8	144.73	9	6.6	191.6	13.2	75.9	157.85	9	5.8	182.1	12
	44	84.6	139.79	9	7.3	203.1	14.7	82.7	146.2	9	6.8	198.4	14.1	78.6	159.39	9	5.9	188.6	12.8
	45	86.1	140.51	9	7.4	206.6	15.2	84.1	146.95	9	6.9	201.8	14.5	80	160.16	9	6	192	13.2
5120 S	48	90.4	142.59	9	7.6	216.9	16.7	88.3	149.06	9	7.1	212	16	84.1	162.31	9	6.2	201.8	14.5
	40	86	150.88	9	6.8	206.4	8.3	83.9	157.83	9	6.4	201.3	8	79.5	172.18	9	5.5	190.8	7.2
	42	89.3	152.57	9	7	214.2	8.9	87.1	159.61	9	6.5	209	8.5	82.6	174.07	9	5.7	198.2	7.7
	44	92.3	154.11	9	7.2	221.4	9.5	90	161.21	9	6.7	216.1	9.1	85.5	175.77	9	5.8	205.1	8.2
5135 S	45	93.9	154.93	9	7.3	225.3	9.8	91.6	162.06	9	6.8	219.9	9.4	87	176.67	9	5.9	208.8	8.5
	48	98.4	157.22	9	7.5	236.2	10.7	96.1	164.4	9	7	230.7	10.2	91.4	179.11	9	6.1	219.3	9.3
	40	99.7	169.37	12	7.1	239.3	11	97.4	177.12	12	6.6	233.8	10.5	92.6	193.1	12	5.8	222.2	9.6
	42	103.6	171.11	12	7.3	248.6	11.8	101.2	178.92	12	6.8	242.9	11.3	96.3	194.96	12	5.9	231.1	10.3
5145 S	44	107.1	172.66	12	7.4	251.7	12.6	104.7	180.51	12	7	251.3	12	99.7	196.61	12	6.1	239.3	11
	45	109	173.47	12	7.5	261.6	13	106.6	181.33	12	7.1	255.8	12.4	101.5	197.46	12	6.2	243.6	11.4
	48	114.4	175.75	12	7.8	274.7	14.2	111.9	183.64	12	7.3	268.7	13.7	106.7	199.82	12	6.4	256.2	12.5
	40	110.4	187.88	12	7.1	265	10.4	107.8	196.58	12	6.6	258.8	9.9	102.5	214.46	12	5.7	246	9.2
5155 S	42	114.5	189.81	12	7.2	274.7	11.1	111.8	198.54	12	6.8	268.4	10.6	106.4	216.5	12	5.9	255.3	9.7
	44	118.5	191.67	12	7.4	284.4	11.8	115.8	200.45	12	6.9	278	11.3	110.2	218.46	12	6.1	264.6	10.3
	45	120.5	192.59	12	7.5	289.3	12.2	117.8	201.39	12	7	282.8	11.7	112.2	219.42	12	6.1	269.3	10.7
	48	126.8	195.31	12	7.8	304.2	13.5	124	204.14	12	7.3	297.5	12.9	118.2	222.23	12	6.4	283.6	11.7
5165 S	40	120.7	211.44	12	6.9	289.7	7.4	117.7	221.19	12	6.4	282.5	7	111.5	241.2	12	5.5	267.6	6
	42	124.8	213.62	12	7	299.6	8	121.8	223.43	12	6.5	292.3	7.6	115.4	243.54	12	5.7	277.1	6.6
	44	129.7	216.13	12	7.2	311.2	8.8	126.6	226	12	6.7	303.8	8.3	120.2	246.23	12	5.9	288.5	7.3
	45	132.6	217.63	12	7.3	318.3	9.2	129.6	227.54	12	6.8	310.9	8.8	123.2	247.84	12	6	295.6	7.8
5185 S	48	140	221.2	12	7.6	336	10.3	136.9	231.2	12	7.1	328.5	9.9	130.5	251.63	12	6.2	313.1	8.9
	40	130.2	224.41	15	7	312.4	8.8	127.1	234.77	15	6.5	305	8.4	120.7	256.07	15	5.7	289.6	7.4
	42	134.6	226.58	15	7.1	323	9.5	131.5	237	15	6.7	315.5	9	124.9	258.4	15	5.8	299.8	8.1
	44	139.7	229.01	15	7.3	335.3	10.3	136.6	239.5	15	6.8	327.8	9.8	130	261.02	15	6	311.9	8.8
5155 S	45	142.8	230.45	15	7.4	342.8	10.8	139.7	240.98	15	7	335.2	10.3	133.1	262.57	15	6.1	319.4	9.3
	48	150.5	233.86	15	7.7	361.2	12	147.3	244.47	15	7.2	353.6	11.5	140.7	266.2	15	6.3	337.7	10.5
	40	136.3	245.06	15	6.7	327.1	9.8	133	256.44	15	6.2	319.1	9.3	126.1	279.82	15	5.4	302.6	8.2
	42	140.9	247.58	15	6.8	338.2	10.5	137.6	259.02	15	6.4	330.1	10	130.5	282.51	15	5.5	313.3	8.9
5165 S	44	146.2	250.36	15	7	350.9	11.3	142.8	261.88	15	6.5	342.7	10.8	135.7	285.5	15	5.7	325.7	9.7
	45	149.4	252	15	7.1	358.6	11.8	146	263.56	15	6.6	350.3	11.3	138.9	287.25	15	5.8	333.3	10.2
	48	157.2	255.84	15	7.4	377.2	13	153.8	267.49	15	6.9	369	12.5	146.6	291.32	15	6	351.9	11.4
	40	154.7	256.44																

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb.*F																					
		85								95								105					
		Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD				
APCY	*F	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O				
5230 S	40	223.8	222.07	21	12.1	537	4.6	215.5	252	21	10.3	517.1	4.3	205.2	287.48	21	8.6	492.6	4				
	42	232	224.52	21	12.4	556.7	4.9	223.4	254.86	21	10.5	536.1	4.6	213	290.76	21	8.8	511.2	4.2				
	44	239.3	228.71	21	12.7	574.3	5.2	230.6	257.47	21	10.7	553.5	4.9	220	293.67	21	9	527.9	4.5				
	45	243.2	227.89	21	12.8	583.8	5.4	234.5	258.87	21	10.9	562.9	5	223.8	295.24	21	9.1	537.1	4.6				
5240 S	40	231.5	236.94	21	11.7	555.5	4.9	222.5	269.35	21	9.9	534	4.6	211.6	307.61	21	8.3	507.8	4.2				
	42	239.9	239.76	21	12	575.9	5.2	230.8	272.67	21	10.2	553.9	4.9	219.5	311.35	21	8.5	526.9	4.5				
	44	247.5	242.29	21	12.3	594	5.6	238.2	275.62	21	10.4	571.6	5.2	226.7	314.66	21	8.6	544.1	4.7				
	45	251.6	243.65	21	12.4	603.7	5.7	242.1	277.2	21	10.5	581.2	5.3	230.6	316.44	21	8.7	553.5	4.9				
5255 S	40	244	245.76	24	11.9	585.5	5.4	234.9	278.8	24	10.1	563.8	5	223.8	318.03	24	8.4	537.1	4.6				
	42	252.5	248.35	24	12.2	606	5.7	243.3	281.88	24	10.4	583.9	5.3	232	321.55	24	8.7	556.7	4.9				
	44	261.2	251	24	12.5	626.8	6.1	251.7	284.97	24	10.6	604.2	5.7	240.1	325	24	8.9	576.3	5.2				
	45	265.3	252.25	24	12.6	636.6	6.2	255.7	286.42	24	10.7	613.7	5.8	244	326.6	24	9	585.5	5.4				
5265 S	48	277.7	256.05	24	13	666.5	6.8	267.9	290.79	24	11.1	642.9	6.4	255.8	331.4	24	9.3	613.8	5.8				
	40	255.9	259.45	24	11.8	614.1	5.8	246.1	294.7	24	10	590.6	5.4	234.1	336.39	24	8.4	561.9	5				
	42	264.7	262.3	24	12.1	635.4	6.2	254.8	298.1	24	10.3	611.5	5.8	242.6	340.28	24	8.6	582.3	5.3				
	44	273.9	265.26	24	12.4	657.3	6.6	263.5	301.56	24	10.5	632.8	6.2	251.2	344.15	24	8.8	602.8	5.6				
5280 S	45	278.2	266.68	24	12.5	667.7	6.8	267.9	303.2	24	10.6	642.9	6.4	255.2	345.95	24	8.9	612.5	5.8				
	48	291.3	270.96	24	12.9	699.1	7.5	280.6	308.12	24	10.9	673.5	6.9	267.6	351.36	24	9.1	642.2	6.3				
	40	279.2	269.18	27	12.4	670	5.3	269	305.18	27	10.6	645.6	5	256.4	347.83	27	8.8	615.4	4.6				
	42	288.2	271.78	27	12.7	691.8	5.6	277.8	308.26	27	10.8	666.8	5.3	265	351.34	27	9.1	636	4.8				
5295 S	44	297.7	274.52	27	13	714.6	6	287.1	311.51	27	11.1	689.1	5.6	274	355	27	9.3	657.7	5.1				
	45	302.7	275.97	27	13.2	726.5	6.2	292	313.21	27	11.2	700.8	5.8	278.8	356.9	27	9.4	669.1	5.3				
	48	319.8	280.99	27	13.7	767.5	6.9	308.6	318.95	27	11.6	740.6	6.4	294.8	363.16	27	9.7	707.4	5.9				
	40	291.4	282.85	27	12.4	699.3	5.8	280.5	321.05	27	10.5	673.1	5.4	267.1	366.16	27	8.8	641	4.9				
5305 S	42	300.9	285.72	27	12.6	722.1	6.1	289.7	324.46	27	10.7	695.3	5.7	276	370.04	27	9	662.4	5.2				
	44	310.8	288.76	27	12.9	745.9	6.5	299.4	328.05	27	11	718.5	6.1	285.4	374.08	27	9.2	685	5.5				
	45	316	290.36	27	13.1	758.3	6.7	304.4	329.93	27	11.1	730.7	6.3	290.3	376.18	27	9.3	696.8	5.7				
	48	334	296.03	27	13.5	801.5	7.5	321.9	336.4	27	11.5	772.5	7	307.1	383.21	27	9.6	737	6.4				
5310 S	40	297.6	295.74	27	12.1	714.2	5.9	286.4	335.96	27	10.2	687.5	5.5	272.7	383.45	27	8.5	654.5	5				
	42	308.2	299.07	27	12.4	739.7	6.3	296.8	339.89	27	10.5	712.4	5.9	282.8	387.88	27	8.7	678.7	5.4				
	44	318.7	302.36	27	12.6	764.8	6.7	307	343.72	27	10.7	736.9	6.3	292.7	392.17	27	9	702.5	5.7				
	48	336.1	307.82	27	13.1	806.6	7.4	324.2	350.06	27	11.1	778	6.9	309.5	399.21	27	9.3	742.8	6.3				
5320 S	40	305.7	309.31	27	11.9	733.6	6.2	294	351.75	27	10	705.6	5.8	279.7	401.76	27	8.4	671.2	5.3				
	42	316.6	312.95	27	12.1	759.9	6.6	304.7	356.02	27	10.3	731.2	6.2	290	406.57	27	8.6	696	5.6				
	44	327.3	316.53	27	12.4	811.3	7.1	315.1	360.18	27	10.5	756.3	6.6	300.1	411.21	27	8.8	720.3	6				
	45	332.9	318.38	27	12.5	798.9	7.3	320.5	362.32	27	10.6	769.3	6.8	305.4	413.59	27	8.9	733	6.2				
5330 S	48	345.2	322.48	27	12.8	828.4	7.8	332.6	367.05	27	10.9	798.3	7.3	317.3	418.81	27	9.1	761.4	6.7				
	40	315.6	318.8	30	11.9	757.4	6.6	303.8	362.06	30	10.1	729.2	6.1	289.4	413.25	30	8.4	694.5	5.6				
	42	326.9	322.39	30	12.2	784.6	7	314.9	366.29	30	10.3	755.8	6.6	300.1	418.03	30	8.6	720.3	6				
	44	338	325.93	30	12.4	811.3	7.5	325.8	370.42	30	10.6	781.8	7	310.7	422.65	30	8.8	745.6	6.4				
5345 S	45	343.8	327.75	30	12.6	825	7.7	331.4	372.54	30	10.7	795.3	7.2	316.1	425.01	30	8.9	758.7	6.6				
	48	356.4	331.76	30	12.9	855.3	8.3	343.8	377.19	30	10.9	825.2	7.7	328.3	430.17	30	9.2	788	7.1				
	40	323.6	332.29	30	11.7	776.6	6.9	313.1	377.77	30	9.9	747.1	6.4	296.2	431.48	30	8.2	711	5.9				
	42	335.2	336.17	30	12	804.4	7.4	322.6	382.33	30	10.1	774.3	6.9	307.2	436.63	30	8.4	737.3	6.3				
5355 S	44	346.6	340.01	30	12.2	831.8	7.9	333.7	386.79	30	10.4	801	7.3	318	441.61	30	8.6	763.2	6.7				
	45	352.4	341.98	30	12.4	845.9	8.1	339.5	389.08	30	10.5	814.7	7.6	323.6	444.15	30	8.7	776.6	6.9				
	48	365.3	346.32	30	12.7	876.8	8.7	352.2	394.08	30	10.7	845.2	8.1	336	449.68	30	9	806.4	7.4				
	40	337.9	339.05	33	12	810.9	7.5	325.5	384.74	33	10.2	781.3	7	310.4	438.99	33	8.5	744.8	6.4				
5365 S	42	350	342.73	33	12.3	840	8	337.4	389.11	33	10.4	809.8	7.5	321.9	443.98	33	8.7	772.6	6.6				
	44	362	346.38	33	12.5	868.7	8.5	349.1	393.41	33	10.6	837.9	8	333	448.82	33	8.9	799.8	7.3				
	45	368.1	348.25	33	12.7	883.4	8.8	355.1	395.61	33	10.8	852.3	8.2	339.1	451.28	33	9	813.9	7.5				
	48	381.5	352.35	33	13	915.5	9.5	368.3	400.4	33	11	884	8.8	352.1	456.64	33	9.3	845	8.1				
5355 S	40	349.4	352.61	33	11.9	838.6	8	336.4	400.51	33	10.1	807.4	7.4	320.4	457.21	33	8.4	769	6.8				
	42	361.9	356.56	33	12.2	868.6	8.5	348.6	405.21	33	10.3	836.7	8	323.2	462.6	33							

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																	
		115					118.4					125							
		Capacity ton _h	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD ft H ₂ O	Capacity ton _h	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD ft H ₂ O	Capacity ton _h	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD ft H ₂ O
APCY	°F	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O
5230 S	40	193.1	328.43	21	7.1	463.4	3.6	188.5	343.57	21	6.6	452.3	3.5	178.9	374.72	21	5.7	429.5	3.2
	42	200.5	332.01	21	7.2	481.2	3.8	195.8	347.23	21	6.8	469.9	3.7	186	378.5	21	5.9	446.4	3.4
	44	207.3	335.17	21	7.4	497.4	4	202.5	350.46	21	6.9	485.9	3.9	192.5	381.83	21	6.1	462.1	3.6
	45	211	336.89	21	7.5	506.5	4.2	206.2	352.22	21	7	494.9	4	196.2	383.66	21	6.1	470.9	3.7
5240 S	48	220.5	341.08	21	7.8	529.1	4.5	215.5	356.46	21	7.3	517.2	4.3	205.2	387.94	21	6.3	492.6	4
	40	198.6	351.62	21	6.8	476.7	3.8	193.7	367.87	21	6.3	465	3.6	183.6	401.26	21	5.5	440.8	3.3
	42	206.3	355.69	21	7	495	4	201.3	372.03	21	6.5	483	3.8	190.9	405.55	21	5.6	458.2	3.5
	44	213.2	359.27	21	7.1	511.6	4.2	208.1	375.68	21	6.6	499.4	4.1	197.6	409.3	21	5.8	474.1	3.7
5255 S	45	217	361.2	21	7.2	520.8	4.4	211.9	377.66	21	6.7	508.6	4.2	201.3	411.34	21	5.9	483.1	3.9
	48	226.7	365.95	21	7.4	544.1	4.7	221.4	382.45	21	6.9	531.5	4.5	210.5	416.16	21	6.1	505.3	4.2
	40	210.6	363.35	24	7	505.3	4.1	205.6	380.12	24	6.5	493.4	4	195.2	414.64	24	5.7	468.6	3.7
	42	218.5	367.23	24	7.1	524.4	4.4	213.4	384.11	24	6.7	512.3	4.2	202.9	418.8	24	5.8	487	3.9
5265 S	44	226.3	370.94	24	7.3	543.2	4.7	221.1	387.88	24	6.8	530.7	4.5	210.3	422.64	24	6	504.8	4.1
	45	230	372.63	24	7.4	552	4.8	224.7	389.59	24	6.9	539.3	4.6	213.8	424.37	24	6	513.1	4.2
	48	241.4	377.71	24	7.7	579.2	5.3	235.9	394.72	24	7.2	566.2	5	224.7	429.55	24	6.3	539.2	4.6
	40	220	384.4	24	6.9	527.9	4.5	214.6	402.14	24	6.4	515.1	4.3	203.6	438.62	24	5.6	486.6	3.9
5280 S	42	228.2	388.71	24	7	547.7	4.8	222.8	406.58	24	6.6	534.7	4.6	211.6	443.26	24	5.7	507.7	4.2
	44	236.4	392.88	24	7.2	567.4	5.1	230.9	410.82	24	6.7	554.1	4.8	219.3	447.58	24	5.9	526.4	4.4
	45	240.2	394.79	24	7.3	576.6	5.2	234.6	412.75	24	6.8	563.1	5	223	449.53	24	6	535.1	4.6
	48	252.1	400.51	24	7.6	605.1	5.7	246.3	418.52	24	7.1	591.2	5.4	234.3	455.35	24	6.2	562.4	5
5295 S	40	241.5	397.02	27	7.3	579.5	4.1	235.8	415.21	27	6.8	566	4	224.1	452.6	27	5.9	537.9	3.6
	42	249.7	400.87	27	7.5	599.3	4.4	244	419.14	27	7	585.6	4.2	232	456.68	27	6.1	556.9	3.9
	44	258.5	404.83	27	7.7	620.3	4.6	252.6	423.19	27	7.2	606.3	4.5	240.5	460.83	27	6.3	577.1	4.1
	45	263.1	406.87	27	7.8	631.4	4.8	257.2	425.26	27	7.3	617.2	4.6	244.9	462.95	27	6.3	587.8	4.2
5310 S	48	278.4	413.41	27	8.1	668	5.3	272.2	431.83	27	7.6	653.3	5.1	259.4	469.5	27	6.6	622.5	4.7
	40	251.2	418.03	27	7.2	602.9	4.4	245.2	437.19	27	6.7	588.5	4.2	232.8	476.53	27	5.9	558.8	3.9
	42	259.8	422.29	27	7.4	623.5	4.7	253.7	441.55	27	6.9	608.8	4.5	241	481.04	27	6	578.5	4.1
	44	268.9	426.68	27	7.6	645.3	5	262.7	446.02	27	7.1	630.4	4.8	249.8	485.64	27	6.2	599.4	4.4
5320 S	45	273.6	428.94	27	7.7	656.7	5.1	267.4	448.31	27	7.2	641.7	4.9	254.4	487.98	27	6.3	610.4	4.5
	48	289.6	436.24	27	8	695.1	5.7	283.1	455.66	27	7.5	679.4	5.5	269.5	495.29	27	6.5	646.8	5
	40	256.4	438.06	27	7	615.4	4.5	250.3	458.22	27	6.6	600.7	4.3	237.5	499.64	27	5.7	570	4
	42	266.1	442.89	27	7.2	638.7	4.8	259.8	463.16	27	6.7	623.6	4.6	246.8	504.74	27	5.9	592.3	4.2
5345 S	44	275.7	447.52	27	7.4	661.7	5.1	269.3	467.87	27	6.9	646.4	4.9	256	509.57	27	6	614.5	4.5
	45	280.7	449.88	27	7.5	673.7	5.3	274.3	470.28	27	7	658.3	5.1	260.9	512.03	27	6.1	626.1	4.7
	48	292.1	455.07	27	7.7	701	5.7	285.5	475.55	27	7.2	685.3	5.5	271.9	517.41	27	6.3	652.6	5
	40	262.7	459.2	27	6.9	630.4	4.7	256.3	480.39	27	6.4	615.1	4.5	243	523.89	27	5.6	583.2	4.1
5330 S	42	272.6	464.43	27	7	654.3	5	266.1	485.73	27	6.6	638.6	4.8	252.5	529.4	27	5.7	606	4.4
	44	282.4	469.42	27	7.2	677.8	5.4	275.8	490.81	27	6.7	661.8	5.1	261.9	534.6	27	5.9	628.6	4.7
	45	287.5	471.97	27	7.3	690.1	5.5	280.8	493.4	27	6.8	674	5.3	266.9	537.24	27	6	640.5	4.8
	48	299.1	477.51	27	7.5	717.8	6	292.3	499.05	27	7.1	701.4	5.7	278.1	542.99	27	6.1	667.4	5.2
5355 S	40	272.2	472.23	30	6.9	653.2	5	265.7	494.02	30	6.5	637.7	4.8	252.2	538.83	30	5.6	605.4	4.4
	42	282.5	477.45	30	7.1	678.1	5.4	275.9	499.37	30	6.6	662.2	5.1	262.1	544.34	30	5.8	629.1	4.7
	44	292.7	482.44	30	7.3	702.5	5.7	286	504.44	30	6.8	686.3	5.5	271.9	549.54	30	5.9	652.6	5
	45	298	484.97	30	7.4	715.3	5.9	291.2	507.01	30	6.9	698.9	5.7	277.1	552.17	30	6	664.9	5.2
5345 S	48	310	490.49	30	7.6	743.9	6.4	303	512.62	30	7.1	727.3	6.1	288.7	557.88	30	6.2	692.8	5.6
	40	278.4	493.29	30	6.8	668.1	5.2	271.7	516.12	30	6.3	652	5	257.7	563.02	30	5.5	618.5	4.6
	42	288.9	498.91	30	6.9	693.5	5.6	282.1	521.86	30	6.5	677	5.4	267.8	568.95	30	5.6	642.7	4.9
	44	299.3	504.27	30	7.1	718.4	6	292.3	527.31	30	6.7	701.6	5.7	277.8	574.52	30	5.8	666.7	5.2
5355 S	45	304.8	506.98	30	7.2	731.4	6.2	297.7	530.07	30	6.7	714.4	5.9	283	577.33	30	5.9	679.2	5.4
	48	316.9	512.88	30	7.4	760.5	6.6	309.7	536.05	30	6.9	743.3	6.4	294.8	583.4	30	6.1	707.5	5.8
	40	292.3	501.65	33	7	701.4	5.7	285.4	524.84	33	6.5	685.1	5.5	271.2	572.56	33	5.7	651	5
	42	303.4	507.15	33	7.2	728.2	6.1	296.5	530.48	33	6.7	711.5	5.9	281.9	578.42	33	5.8	676.7	5.3
5345 S	44	314.4	512.4	33	7.4	754.5	6.5	307.3	535.84	33	6.9	737.5	6.3	292.5	583.92	33	6	702	5.7
	45	320.1	515.05	33	7.5	768.2	6.8	312.9	538.54	33	7								

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																	
		85						95						105					
		Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD
APCY	°F	ton _n	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _n	kW	Btu / W.h	gpm	ft H ₂ O	ton _n	kW	kW	Btu / W.h	gpm	ft H ₂ O	
6060 S	40	61.4	65.99	8	11.2	147.3	8.8	58.9	74.7	8	9.5	141.3	8.1	55.8	84.91	8	7.9	134	7.3
	42	63.5	66.73	8	11.4	152.4	9.4	60.9	75.58	8	9.7	146.3	8.7	57.8	85.91	8	8.1	138.8	7.8
	44	65.5	67.44	8	11.7	157.3	10	62.9	76.41	8	9.9	151	9.2	59.7	86.85	8	8.3	143.3	8.3
	45	66.6	67.82	8	11.8	159.8	10.3	64	76.85	8	10	153.5	9.5	60.7	87.35	8	8.3	145.8	8.6
6070 S	40	68.1	75.87	8	10.8	163.5	22.2	65.2	86.14	8	9.1	156.4	20.4	61.7	98.13	8	7.5	148	18.3
	42	70.6	76.87	8	11	169.5	23.9	67.7	87.32	8	9.3	162.4	21.9	64.1	99.48	8	7.7	153.8	19.7
	44	72.9	77.79	8	11.3	175.1	25.4	69.9	88.38	8	9.5	167.7	23.4	66.2	100.66	8	7.9	159.9	21
	45	74.1	78.25	8	11.4	177.8	26.2	71	88.91	8	9.6	170.4	24.1	67.3	101.25	8	8	161.5	21.7
6085 S	40	83.4	91.85	12	10.9	200.1	14.3	80	103.86	12	9.2	192	13.2	75.9	118	12	7.7	182.2	12
	42	86.3	92.87	12	11.2	207.1	15.3	82.9	105.07	12	9.5	198.9	14.1	78.7	119.4	12	7.9	188.9	12.8
	44	89.1	93.85	12	11.4	213.9	16.3	85.6	106.22	12	9.7	205.4	15	81.3	120.7	12	8.1	195.2	13.6
	45	90.6	94.35	12	11.5	217.4	16.8	87	106.81	12	9.8	208.8	15.5	82.7	121.37	12	8.2	198.5	14.1
6100 S	40	94.8	95.84	12	11.9	227.5	18.3	91.1	108.54	12	10.1	218.7	17	86.6	123.29	12	8.4	207.9	15.4
	42	94.8	100.51	12	11.3	227.4	18.3	91.3	113.65	12	9.6	219.1	17	87	129.29	12	8.1	208.7	15.5
	44	98.1	101.48	12	11.6	235.4	19.6	94.5	114.82	12	9.9	226.9	18.2	90.2	130.65	12	8.3	216.4	16.6
	45	101.3	102.42	12	11.9	243.2	20.8	97.7	115.95	12	10.1	234.5	19.4	93.2	131.96	12	8.5	223.7	17.7
6115 S	40	103	102.9	12	12	247.2	21.5	99.3	116.53	12	10.2	238.4	20	94.8	132.62	12	8.6	227.5	18.3
	42	107.9	104.36	12	12.4	259.1	23.6	104.2	118.25	12	10.6	250	22	99.5	134.56	12	8.9	238.7	20.1
	44	112.1	118.4	12	11.4	269.1	6	107.6	134.45	12	9.6	258.2	5.5	102	153.27	12	8	244.9	5
	45	116	119.81	12	11.6	278.5	6.4	111.4	136.11	12	9.8	267.3	5.9	105.7	155.15	12	8.2	253.6	5.3
6130 S	44	119.7	121.14	12	11.9	287.3	6.7	114.9	137.67	12	10	275.8	6.2	109.1	156.89	12	8.3	261.8	5.7
	45	121.6	121.83	12	12	291.8	6.9	116.7	138.47	12	10.1	280.2	6.4	110.9	157.79	12	8.4	266.1	5.8
	48	127.5	124	12	12.3	305.9	7.6	122.5	140.97	12	10.4	293.9	7	116.4	160.57	12	8.7	278.4	6.4
	40	122.8	121.84	16	12.1	294.7	12.7	118.7	137.27	16	10.4	284.9	11.8	113.6	155.8	16	8.7	272.6	10.9
6145 S	42	127.1	122.85	16	12.4	305.1	13.6	123	138.49	16	10.7	295.1	12.7	117.7	157.21	16	9	282.5	11.7
	44	131.4	123.84	16	12.7	315.4	14.6	127.2	139.69	16	10.9	305.2	13.6	121.8	158.61	16	9.2	292.3	12.5
	45	133.6	124.34	16	12.9	320.6	15.1	129.3	140.3	16	11.1	310.3	14.1	123.9	159.32	16	9.3	297.3	12.9
	48	140.1	125.86	16	13.4	336.3	16.6	135.7	142.14	16	11.5	325.7	15.6	130.1	161.44	16	9.7	312.3	14.3
6160 S	40	138	142.25	16	11.6	331.2	16.1	133.1	161.08	16	9.9	319.4	14.9	127	183.47	16	8.3	304.8	13.6
	42	143	143.73	16	11.9	343.3	17.4	138	162.82	16	10.2	331.1	16.1	131.7	185.45	16	8.5	316.1	14.6
	44	147.9	145.18	16	12.2	355	18.6	142.7	164.53	16	10.4	342.5	17.3	136.3	187.37	16	8.7	327.1	15.7
	45	150.4	145.9	16	12.4	360.9	19.3	145.1	165.38	16	10.5	348.3	17.9	138.6	188.33	16	8.8	332.7	16.3
6170 S	40	157.8	148.1	16	12.8	378.8	21.3	152.4	167.94	16	10.9	365.7	19.8	145.7	191.19	16	9.1	349.6	18
	42	154.1	161.05	16	11.5	369.9	12.5	148.1	182.87	16	9.7	355.5	11.6	140.8	208.58	16	8.1	337.8	10.5
	44	162.73	161.73	16	11.7	381.9	13.3	153	184.85	16	9.9	367.1	12.4	145.4	210.83	16	8.3	349.1	11.2
	45	164.5	164.56	16	12	394.9	14.2	158.3	187.02	16	10.2	379.9	13.2	150.7	213.32	16	8.5	361.7	12
6185 S	40	167.7	165.64	16	12.2	402.5	14.7	161.5	188.31	16	10.3	387.5	13.7	153.8	214.81	16	8.6	369.2	12.5
	42	175.4	168.24	16	12.5	420.9	16	169.1	191.4	16	10.6	405.9	15	161.5	218.35	16	8.9	387.6	13.7
	44	176.6	181.63	16	11.3	410.2	15.3	163.9	206.81	16	9.5	393.4	14.1	155.5	236.25	16	7.9	373.1	12.7
	45	179.9	185.1	16	11.7	431.8	16.8	172.8	210.93	16	9.8	414.7	15.6	164.2	240.99	16	8.2	394	14.2
6200 S	40	187.7	188.12	16	12	450.4	18.2	180.6	214.54	16	10.1	433.4	16.9	172	245.16	16	8.4	412.8	15.5
	42	193.2	193.6	20	11.4	439.6	14.1	176	219.81	20	9.6	422.4	13	167.2	250.62	20	8	401.4	11.8
	44	195.1	197.74	20	11.8	468.3	16	187.5	224.65	20	9.8	436.6	13.9	172.9	253.41	20	8.2	414.9	12.6
	45	198.1	198.78	20	12	475.4	16.5	190.4	225.85	20	10.1	456.9	15.3	181	257.4	20	8.4	434.5	13.8
6215 S	40	206.8	201.84	20	12.3	496.2	17.9	198.8	229.37	20	10.4	477.1	16.6	189.1	261.27	20	8.7	453.8	15.1
	42	209.2	219.11	24	11.5	502.1	18.4	201.4	248.5	24	9.7	483.4	17.1	191.8	283.21	24	8.1	460.4	15.5
	44	205.1	215.96	20	11.4	492.3	17.7	196.8	245.81	20	9.6	472.3	16.3	186.7	280.46	20	8	448.1	14.7
	45	208.2	217.19	20	11.5	499.8	18.2	199.8	247.23	20	9.7	479.6	16.8	189.6	282.03	20	8.1	455.1	15.1
6220 S	40	217.5	220.86	20	11.8	512.9	19.7	208.6	251.36	24	10	500.7	18.3	198.7	286.41	24	8.3	476.8	16.6
	42	219.11	219.24	24	11.5	502.1	18.4	201.4	248.5	24	9.7	483.4	17.1	191.8	283.21	24	8.1	460.4	15.5
	44	221.6	233.26	24	11.3	533.1	20.6	213.6	268.24	24	9.6	512.7	19.1	203.2	306.08	24	8	487.6	17.3
	45	227.1	224.96	24	12.1	545.1	21.5	218.7	256.33	24	10.3	524.8	20	208.3	290.87	24	8.6	499.9	18.2
6225 S	40	222.1	236.02	24	11.3	533.1	20.6	213.6	268.24	24	9.6	512.7	19.1	203.2	306.08	24	8	487.6	17.3
	42	230.5	239.03	24	11.6	553.1	22.1	221.5	271.69	24	9.8	531.6	20.5						

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																		
		115							118.4							125				
		Capacity ton _s	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD	Capacity ton _s	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD	Capacity ton _s	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	EER	WFR	WPD	
APCY	°F																			
6060 S	40	52.2	96.59	8	6.5	125.4	6.4	50.9	100.89	8	6.1	122.2	6.1	48.1	109.72	8	5.3	115.5	5.5	
	42	54.2	97.69	8	6.7	130	6.9	52.8	102.02	8	6.2	126.7	6.5	49.9	110.9	8	5.4	119.9	5.9	
	44	56	98.72	8	6.8	134.3	7.3	54.6	103.08	8	6.4	131	7	51.7	112	8	5.5	124	6.3	
	45	57	99.27	8	6.9	136.7	7.6	55.5	103.64	8	6.4	133.3	7.2	52.6	112.58	8	5.6	126.3	6.5	
	48	59.6	100.71	8	7.1	143	8.3	58.1	105.11	8	6.6	139.5	7.9	55.1	114.07	8	5.8	132.3	7.1	
6070 S	40	57.5	111.82	8	6.2	138.1	16	56	116.85	8	5.8	134.4	15.2	52.8	127.17	8	5	126.8	13.6	
	42	59.9	113.31	8	6.3	143.7	17.3	58.3	118.39	8	5.9	139.9	16.4	55.1	128.78	8	5.1	132.2	14.7	
	44	61.9	114.59	8	6.5	148.6	18.5	60.3	119.69	8	6	144.8	17.6	57	130.11	8	5.3	136.9	15.8	
	45	63	115.22	8	6.6	151.1	19.1	61.4	120.34	8	6.1	147.3	18.1	58	130.78	8	5.3	139.3	16.3	
	48	66	117.01	8	6.8	158.4	20.9	64.3	122.14	8	6.3	154.4	19.9	60.9	132.6	8	5.5	146.2	17.9	
6085 S	40	71.1	134.26	12	6.4	170.6	10.6	69.3	140.26	12	5.9	166.3	10.1	65.6	152.59	12	5.2	157.3	9.1	
	42	73.8	135.82	12	6.5	177	11.4	71.9	141.87	12	6.1	172.6	10.8	68.1	154.29	12	5.3	163.4	9.8	
	44	76.3	137.26	12	6.7	183.1	12.1	74.4	143.35	12	6.2	178.6	11.5	70.5	155.83	12	5.4	169.2	10.4	
	45	77.6	138	12	6.7	186.3	12.5	75.7	144.11	12	6.3	181.7	11.9	71.8	156.62	12	5.5	172.3	10.8	
	48	81.4	140.06	12	7	195.3	13.7	79.4	146.2	12	6.5	190.6	13	75.3	158.75	12	5.7	180.8	11.8	
6100 S	40	81.8	147.4	12	6.7	196.3	13.8	79.9	154.12	12	6.2	191.7	13.2	75.8	167.96	12	5.4	182	12	
	42	84.9	148.95	12	6.8	203.8	14.8	82.9	155.73	12	6.4	199.1	14.2	78.8	169.68	12	5.6	189.2	12.9	
	44	87.9	150.4	12	7	210.9	15.8	85.9	157.22	12	6.6	206.1	15.1	81.7	171.24	12	5.7	196	13.8	
	45	89.4	151.14	12	7.1	214.6	16.4	87.4	157.98	12	6.6	209.7	15.6	83.1	172.02	12	5.8	199.5	14.2	
	48	93.9	153.24	12	7.4	225.3	18	91.8	160.12	12	6.9	220.3	17.2	87.4	174.2	12	6	209.7	15.7	
6115 S	40	95.5	174.8	12	6.6	229.2	4.4	93.1	182.73	12	6.1	223.4	4.2	88	198.99	12	5.3	211.3	3.8	
	42	99	176.86	12	6.7	237.6	4.7	96.5	184.84	12	6.3	231.6	4.5	91.3	201.18	12	5.4	219.2	4.1	
	44	102.3	178.76	12	6.9	245.4	5	99.7	186.78	12	6.4	239.3	4.8	94.4	203.18	12	5.6	226.6	4.3	
	45	104	179.73	12	6.9	249.5	5.2	101.4	187.77	12	6.5	243.4	4.9	96.1	204.21	12	5.6	230.5	4.5	
	48	109.3	182.71	12	7.2	262.4	5.7	106.7	190.79	12	6.7	256	5.4	101.2	207.29	12	5.9	242.9	4.9	
6130 S	40	107.4	177.39	16	7.3	257.8	9.9	105.1	185.42	16	6.8	252.1	9.5	100.1	202.01	16	5.9	240.4	8.9	
	42	111.4	178.99	16	7.5	267.3	10.5	109	187.08	16	7	261.5	10.1	103.9	203.77	16	6.1	249.4	9.4	
	44	115.3	180.57	16	7.7	276.8	11.2	112.9	188.71	16	7.2	270.9	10.8	107.7	205.48	16	6.3	258.5	9.9	
	45	117.3	181.35	16	7.8	281.6	11.6	114.8	189.52	16	7.3	275.6	11.1	109.7	206.33	16	6.4	263.2	10.2	
	48	123.4	183.69	16	8.1	296.1	12.8	120.8	191.91	16	7.6	290	12.3	115.5	208.81	16	6.6	277.2	11.2	
6145 S	40	119.7	209.37	16	8.6	287.3	12	117	219.87	16	6.4	280.7	11.5	111.2	238.73	16	5.6	266.9	10.5	
	42	124.2	211.55	16	7	298	13	121.3	221.2	16	6.6	291.2	12.4	115.4	241.04	16	5.7	277.1	11.2	
	44	128.6	213.65	16	7.2	308.7	13.9	125.7	223.35	16	6.8	301.7	13.3	119.7	243.26	16	5.9	287.2	12	
	45	130.8	214.69	16	7.3	314	14.4	127.9	224.41	16	6.8	307	13.8	121.8	244.35	16	6	292.4	12.5	
	48	137.7	217.75	16	7.6	330.4	16	134.6	227.52	16	7.1	323.1	15.3	128.4	247.52	16	6.2	308	13.9	
6160 S	40	132.1	238.12	16	6.7	317	9.1	128.8	249.02	16	6.2	309.1	8.6	122	271.41	16	5.4	292.8	7.6	
	42	136.6	240.61	16	6.8	327.7	9.8	133.2	251.58	16	6.4	319.7	9.3	126.3	274.1	16	5.5	303.1	8.3	
	44	141.7	243.39	16	7	340.1	10.6	138.3	254.46	16	6.5	332	10.1	131.4	277.12	16	5.7	315.3	9	
	45	144.8	245.05	16	7.1	347.6	11.1	141.5	256.16	16	6.6	339.5	10.6	134.5	278.92	16	5.8	322.7	9.5	
	48	152.5	248.98	16	7.3	366	12.3	149.1	260.21	16	6.9	357.9	11.7	142.1	283.14	16	6	341	10.7	
6170 S	40	140.7	266.83	16	6.3	337.8	10.5	137.1	279.07	16	5.9	328.9	9.9	129.6	304.29	16	5.1	311	8.8	
	42	145.5	269.88	16	6.5	349.3	11.2	141.8	282.25	16	6	340.3	10.6	134.1	307.59	16	5.2	321.9	9.4	
	44	150.9	273.22	16	6.6	362.1	12	147.1	285.7	16	6.2	353.1	11.4	139.3	311.24	16	5.4	334.4	10.2	
	45	154.1	275.19	16	6.7	369.8	12.5	150.3	287.73	16	6.3	360.8	11.9	142.5	313.39	16	5.5	342	10.7	
	48	161.9	279.85	16	6.9	388.5	13.8	158.1	292.54	16	6.5	379.5	13.2	150.3	318.44	16	5.7	360.7	11.9	
6185 S	40	156.9	285.96	20	6.6	376.5	10.3	153	289.99	20	6.1	367.1	9.8	144.9	325.73	20	5.3	347.7	8.7	
	42	162.2	288.99	20	6.7	389.3	11	158.2	302.09	20	6.3	379.7	10.5	149.9	328.93	20	5.5	359.7	9.3	
	44	167.4	291.87	20	6.9	401.7	11.8	163.3	305.02	20	6.4	391.9	11.2	154.8	331.95	20	5.6	371.5	10	
	45	170	293.32	20	7	408.1	12.2	165.9	306.5	20	6.5	398.2	11.6	157.3	333.47	20	5.7	377.6	10.4	
	48	177.7	297.41	20	7.2	426.4	13.3	173.4	310.64	20	6.7	416.2	12.7	164.6	337.65	20	5.8	395	11.4	
6200 S	40	163.9	312.91	20	6.3	393.3	11.3	159.7	327.19	20	5.9	383.2	10.7	150.9	356.45	20	5.1	362.3	9.5	
	42	169.5	316.45	20	6.4	406.8	12.1	165.2	330.8	20	6	396.4	11.5	156.2	360.15	20	5.2	374.9	10.2	
	44	174.9	319.79	20	6.6	419.8	12.9	170.5	334.19	20	6.1	409.2	12.2	161.3	363.63	20	5.3	387.2	10.9	
	45	177.7	321.47	20	6.6	426.4	13.3	173.2	335.9	20	6.2	415.7	12.6	164	365.38	20	5.4	393.6	11.3	
	48	185.7	326.22	20	6.8	445.7	14.5	181.1	340.7</											

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (IP) (Standard Efficiency)

Model	LWT	Condenser Entering Air Dry Bulb, °F																				
		85						95						105								
		Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD	Capacity	Total Power ⁽²⁾	Fan Power ⁽²⁾	EER	WFR	WPD			
APCY	°F	ton _h	kW	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	Btu / W.h	gpm	ft H ₂ O	ton _h	kW	Btu / W.h	gpm	ft H ₂ O
6270 S	40	266.2	280.84	28	11.4	638.9	6.3	255.7	318.91	28	9.6	613.6	5.8	242.8	363.74	28	8	582.7	5.3			
	42	275.3	283.98	28	11.6	660.8	6.7	264.6	322.66	28	9.8	635.1	6.2	251.6	368.06	28	8.2	603.8	5.7			
	44	284.9	287.27	28	11.9	683.7	7.1	273.9	326.51	28	10.1	657.3	6.6	260.5	372.41	28	8.4	625.1	6			
	45	289.4	288.85	28	12	694.7	7.4	278.3	328.35	28	10.2	667.9	6.8	264.7	374.44	28	8.5	635.2	6.2			
6285 S	48	303.1	293.6	28	12.4	727.4	8	291.6	333.86	28	10.5	699.7	7.5	277.5	380.57	28	8.7	666	6.8			
	40	274.9	300.49	28	11	659.8	6.7	263.5	341.82	28	9.3	632.4	6.2	249.7	390.22	28	7.7	599.4	5.6			
	42	284.3	304.09	28	11.2	682.2	7.1	272.7	346.1	28	9.5	654.4	6.6	258.7	395.13	28	7.9	620.8	6			
	44	294.1	307.91	28	11.5	705.9	7.6	282.2	350.54	28	9.7	677.3	7	267.8	400.1	28	8	642.8	6.4			
6295 S	45	298.8	309.75	28	11.6	717.2	7.8	286.8	352.67	28	9.8	688.2	7.2	272.2	402.44	28	8.1	653.2	6.6			
	48	312.9	315.3	28	11.9	751	8.5	300.4	359.03	28	10	721	7.9	285.3	409.44	28	8.4	684.7	7.2			
	40	287.2	310.31	32	11.1	689.3	7.3	275.9	352.29	32	9.4	662.1	6.7	262	401.72	32	7.8	628.9	6.1			
	42	296.9	313.7	32	11.4	712.7	7.7	285.4	356.35	32	9.6	685	7.2	271.4	406.42	32	8	651.3	6.5			
6310 S	44	307.3	317.34	32	11.6	737.5	8.3	295.5	360.64	32	9.8	709.2	7.7	281.1	411.26	32	8.2	674.6	7			
	45	312.3	319.11	32	11.7	749.6	8.5	300.3	362.7	32	9.9	720.8	7.9	285.7	413.55	32	8.3	685.8	7.2			
	48	327.2	324.42	32	12.1	785.2	9.3	314.8	368.84	32	10.2	755.4	8.6	299.7	420.35	32	8.6	719.2	7.9			
	40	300.7	327.9	32	11	721.7	7.9	288.4	372.75	32	9.3	692.3	7.3	273.6	425.33	32	7.7	656.6	6.6			
6320 S	42	310.8	331.68	32	11.2	745.8	8.4	295.3	371.26	32	9.5	716	7.8	283.2	430.53	32	7.9	679.7	7.1			
	44	321.6	335.8	32	11.5	771.9	9	308.9	382.08	32	9.7	741.3	8.3	293.4	435.95	32	8.1	704.1	7.6			
	45	326.9	337.83	32	11.6	784.6	9.3	314	384.41	32	9.8	753.5	8.6	298.2	438.53	32	8.2	715.8	7.8			
	48	342.5	343.85	32	12	822	10.2	329.1	391.33	32	10.1	789.8	9.4	312.8	446.14	32	8.4	750.7	8.5			
6335 S	40	311	331.77	32	11.2	746.4	6.5	298.3	377.27	32	9.5	716	6	283	430.39	32	7.9	679.1	5.5			
	42	321.1	335.61	32	11.5	770.7	6.9	308.1	381.75	32	9.7	739.5	6.4	292.4	435.44	32	8.1	701.8	5.8			
	44	331.7	339.66	32	11.7	796	7.4	318.4	386.44	32	9.9	764.1	6.8	302.3	440.67	32	8.2	725.5	6.2			
	45	337.2	341.78	32	11.8	809.2	7.6	323.7	388.89	32	10	777	7	307.5	443.37	32	8.3	737.9	6.4			
6350 S	48	356.7	349.39	32	12.3	856	8.5	342.5	397.44	32	10.3	821.9	7.8	325.3	452.58	32	8.6	780.8	7.1			
	40	328.6	339.79	36	11.6	788.6	7.2	315.9	385.61	36	9.8	758.2	6.7	300.4	439.45	36	8.2	721	6.1			
	42	339.4	343.45	36	11.9	814.6	7.7	326.4	389.92	36	10	783.4	7.1	310.5	444.33	36	8.4	745.3	6.5			
	44	350.7	347.29	36	12.1	841.6	8.2	337.4	394.41	36	10.3	809.7	7.6	321.1	449.37	36	8.6	770.7	6.9			
6365 S	45	356.5	349.29	36	12.2	855.7	8.5	343.1	396.74	36	10.4	823.4	7.9	326.7	451.97	36	8.7	784	7.1			
	48	377.7	356.62	36	12.7	906.4	9.4	363.4	405.06	36	10.8	872.2	8.8	346.1	460.99	36	9	830.6	8			
	40	342.3	357.3	36	11.5	821.5	7.8	328.7	405.99	36	9.7	789	7.2	312.2	462.98	36	8.1	749.4	6.6			
	42	353.6	361.41	36	11.7	848.7	8.3	339.7	410.79	36	9.9	815.3	7.7	322.8	468.38	36	8.3	774.6	7			
6375 S	44	365.4	365.7	36	12	876.9	8.9	351.1	415.77	36	10.1	842.6	8.2	333.8	473.96	36	8.5	801	7.4			
	45	371.4	367.94	36	12.1	891.5	9.1	357	418.36	36	10.2	856.8	8.5	339.5	476.83	36	8.5	814.7	7.7			
	48	393.8	376.24	36	12.6	945	10.2	378.4	427.7	36	10.6	908.2	9.5	359.8	486.89	36	8.9	863.6	8.6			
	40	354.5	374.84	36	11.3	850.8	13.2	340.2	426.11	36	9.6	816.6	12.2	322.9	486.22	36	8	775	10.9			
6385 S	42	366.2	379.09	36	11.6	878.9	14.1	351.5	431.04	36	9.8	843.6	13	333.6	491.75	36	8.1	800.7	11.7			
	44	377.4	383.15	36	11.8	905.7	15	362.3	435.77	36	10	869.5	13.8	344	497.05	36	8.3	825.6	12.5			
	45	383.1	385.23	36	11.9	919.3	15.4	367.8	438.19	36	10.1	882.7	14.2	349.3	499.74	36	8.4	838.3	12.8			
	48	399.7	391.35	36	12.3	959.3	16.8	363.8	445.2	36	10.3	921.2	15.5	364.6	507.43	36	8.6	875.1	14			
6395 S	40	363.8	392.52	36	11.1	873.2	13.9	348.9	446.68	36	9.4	837.3	12.8	330.8	510	36	7.8	793.9	11.5			
	42	376	397.2	36	11.4	902.3	14.9	360.5	452.09	36	9.6	852	13.7	341.8	516.04	36	7.9	820.3	12.3			
	44	387.4	401.65	36	11.6	929.8	15.8	371.6	457.25	36	9.8	891.8	14.5	352.4	521.78	36	8.1	845.8	13.1			
	45	393.3	403.93	36	11.7	943.9	16.3	377.2	459.88	36	9.8	905.4	15	357.9	524.71	36	8.2	856.9	13.5			
6410 S	48	410.4	410.67	36	12	985	17.7	393.7	467.56	36	10.1	945	16.3	373.6	533.08	36	8.4	896.7	14.7			
	40	375.6	404.44	40	11.1	901.6	14.9	360.7	459.69	40	9.4	865.6	13.7	342.4	524.48	40	7.8	821.8	12.3			
	42	388.4	409.11	40	11.4	932.1	15.9	372.9	465.11	40	9.6	894.9	14.6	354	530.53	40	8	849.6	13.2			
	44	400.3	413.52	40	11.6	960.8	16.8	384.4	470.24	40	9.8	922.6	15.6	365.1	536.27	40	8.2	876.2	14			
6435 S	45	406.4	415.77	40	11.7	975.4	17.3	390.3	472.85	40	9.9	936.7	16	370.8	539.18	40	8.3	889.8	14.5			
	48	424.3	422.48	40	12.1	1018.4	18.9	407.6	480.52	40	10.2	978.2	17.4	387.3	547.57	40	8.5	929.5	15.8			
	40	384.8	422.02	40	10.9	923.5	15.6	369.2	480.16	40	9.2	886	14.4	350.2	548.16	40	7.7	840.4	12.9			
	42	398	427.12	40</																		

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (IP) (Standard Efficiency)

Model	LWT °F	Condenser Entering Air Dry Bulb, °F												125					
		115						118.4						125					
		Capacity ton _s	Total Power ^① kW	Fan Power ^② kW	EER	WFR Btu / W.h	WPD ft H ₂ O	Capacity ton _s	Total Power ^① kW	Fan Power ^② kW	EER	WFR Btu / W.h	WPD ft H ₂ O	Capacity ton _s	Total Power ^① kW	Fan Power ^② kW	EER	WFR Btu / W.h	WPD ft H ₂ O
APCY	40	227.7	415.22	28	6.6	546.4	4.7	222	434.22	28	6.1	532.8	4.5	210.2	473.25	28	5.3	504.6	4.1
	42	236.2	420.06	28	6.7	566.8	5	230.4	439.22	28	6.3	552.9	4.8	218.4	478.51	28	5.5	524.2	4.4
	44	244.7	424.79	28	6.9	587.2	5.4	238.7	444.05	28	6.5	573	5.1	226.5	483.49	28	5.6	543.5	4.7
	45	248.7	428.98	28	7	596.8	5.5	242.7	446.27	28	6.5	582.4	5.3	230.2	485.75	28	5.7	552.5	4.8
	48	261	433.53	28	7.2	626.3	6.1	254.8	452.91	28	6.7	611.4	5.8	241.9	492.52	28	5.9	580.6	5.3
6270 S	40	233.6	445.56	28	6.3	560.6	5	227.5	465.93	28	5.9	546.1	4.7	215	507.71	28	5.1	516.1	4.3
	42	242.2	451.03	28	6.4	581.4	5.3	236.1	471.57	28	6	566.6	5	223.4	513.64	28	5.2	536.1	4.6
	44	251	458.41	28	6.6	602.3	5.6	244.7	477.06	28	6.2	587.2	5.4	231.6	519.26	28	5.4	555.9	4.9
	45	255.1	458.9	28	6.7	612.2	5.8	248.7	479.58	28	6.2	596.8	5.5	235.5	521.82	28	5.4	565.1	5
	48	267.6	466.33	28	6.9	642.4	6.4	261.1	487.1	28	6.4	626.5	6.1	247.4	529.44	28	5.6	593.9	5.5
6285 S	40	245.7	458.48	32	6.4	589.7	5.4	239.6	479.43	32	6	575	5.2	226.9	522.46	32	5.2	544.5	4.7
	42	254.8	463.76	32	6.6	611.5	5.8	248.6	484.89	32	6.2	596.6	5.5	235.7	528.21	32	5.4	565.7	5
	44	264.1	469.03	32	6.8	633.9	6.2	257.7	490.26	32	6.3	618.6	5.9	244.5	533.74	32	5.5	586.8	5.4
	45	268.5	471.48	32	6.8	644.4	6.4	262.1	492.74	32	6.4	628.9	6.1	248.7	536.27	32	5.6	596.8	5.5
	48	281.9	478.73	32	7.1	676.6	7	275.3	500.1	32	6.6	660.6	6.7	261.5	543.74	32	5.8	627.5	6.1
6310 S	40	256.1	485.52	32	6.3	614.7	5.9	249.6	507.7	32	5.9	599	5.6	236	553.18	32	5.1	566.4	5
	42	265.5	491.36	32	6.5	637.2	6.3	258.8	513.72	32	6	621.2	6	245.1	559.53	32	5.3	588.2	5.4
	44	275.2	497.24	32	6.6	660.4	6.7	268.4	519.72	32	6.2	644.1	6.4	254.3	565.69	32	5.4	610.2	5.8
	45	279.8	499.98	32	6.7	671.5	6.9	272.9	522.5	32	6.3	664.9	6.6	258.6	568.51	32	5.5	620.6	6
	48	293.7	508.06	32	6.9	704.9	7.6	286.6	530.67	32	6.5	687.8	7.2	271.8	576.79	32	5.7	652.4	6.5
6320 S	40	264.9	490.99	32	6.5	635.7	4.8	258.1	513.26	32	6	619.5	4.6	244.1	558.85	32	5.2	585.8	4.2
	42	273.9	498.47	32	6.6	657.4	5.1	267	518.86	32	6.2	640.8	4.9	252.7	564.64	32	5.4	606.4	4.5
	44	283.4	502.11	32	6.8	680.2	5.5	276.4	524.61	32	6.3	663.3	5.2	261.8	570.54	32	5.5	628.2	4.7
	45	288.4	505.01	32	6.9	692.2	5.7	281.3	527.55	32	6.4	675.1	5.4	265.5	573.53	32	5.6	639.7	4.9
	48	305.3	514.55	32	7.1	732.8	6.3	297.9	537.13	32	6.7	714.9	6	282.5	585.08	32	5.8	677.9	5.4
6335 S	40	282.1	501.15	36	6.8	677	5.4	275.2	523.88	36	6.3	660.4	5.2	260.8	570.5	36	5.5	626	4.7
	42	291.8	506.48	36	6.9	700.2	5.8	284.7	529.34	36	6.5	683.3	5.5	270.1	576.16	36	5.6	648.1	5
	44	301.9	511.95	36	7.1	724.7	6.2	294.7	534.92	36	6.6	707.4	5.9	279.8	581.9	36	5.8	671.5	5.3
	45	307.3	514.75	36	7.2	737.4	6.4	300	537.77	36	6.7	720	6.1	284.9	584.82	36	5.8	683.8	5.5
	48	325.7	524.15	36	7.5	781.6	7.1	318.1	547.22	36	7	763.3	6.8	302.3	594.27	36	6.1	725.4	6.2
6350 S	40	292.8	528.1	36	6.7	702.6	5.8	285.4	552.05	36	6.2	685.1	5.5	270.3	601.12	36	5.4	648.7	5
	42	302.8	533.99	36	6.8	726.8	6.2	295.3	558.07	36	6.4	708.8	5.9	279.8	607.35	36	5.5	671.5	5.3
	44	313.3	540	36	7	752	6.6	305.7	564.2	36	6.5	733.7	6.3	289.9	613.64	36	5.7	695.7	5.7
	45	318.8	543.09	36	7	765.2	6.8	311.1	567.33	36	6.6	746.7	6.5	295.1	616.84	36	5.7	708.3	5.9
	48	338.1	553.51	36	7.3	811.3	7.6	329.9	577.8	36	6.9	791.8	7.3	313.1	627.26	36	6	751.5	6.6
6365 S	40	302.5	555	36	6.5	725.9	9.5	294.8	580.33	36	6.1	707.5	9	278.9	632.25	36	5.3	669.3	8
	42	312.6	561.01	36	6.7	750.2	10.2	304.7	586.47	36	6.2	731.3	9.7	288.4	638.6	36	5.4	692.2	8.6
	44	322.5	566.75	36	6.8	774	10.9	314.5	592.33	36	6.4	754.7	10.3	297.8	644.64	36	5.5	714.7	9.2
	45	327.6	569.65	36	6.9	786.2	11.3	319.5	595.28	36	6.4	766.7	10.7	302.7	647.67	36	5.6	726.4	9.5
	48	342.1	577.78	36	7.1	821.1	12.3	333.7	603.5	36	6.6	801	11.7	316.4	655.96	36	5.8	759.3	10.5
6375 S	40	309.5	582.29	36	6.4	742.7	10	301.5	608.87	36	5.9	723.5	9.5	284.9	663.33	36	5.2	683.8	8.4
	42	319.9	588.82	36	6.5	767.1	10.7	311.7	615.53	36	6.1	748	10.2	294.7	670.18	36	5.3	707.2	9
	44	330	595.02	36	6.7	792	11.4	321.6	621.85	36	6.2	771.9	10.8	304.3	676.68	36	5.4	730.3	9.6
	45	335.2	598.16	36	6.7	804.5	11.8	326.7	625.04	36	6.3	784.2	11.2	309.2	679.94	36	5.5	742.2	10
	48	350.1	606.95	36	6.9	840.4	12.9	341.4	633.92	36	6.5	819.4	12.3	323.3	688.88	36	5.6	776	11
6385 S	40	320.8	598.62	40	6.4	770	10.8	312.7	625.92	40	6	750.6	10.2	295.9	681.89	40	5.2	710.2	9.1
	42	331.8	605.17	40	6.6	796.3	11.6	323.5	632.61	40	6.1	776.3	11	306.2	688.79	40	5.3	734.9	9.8
	44	342.4	611.38	40	6.7	821.7	12.3	333.9	638.93	40	6.3	801.3	11.7	316.3	695.29	40	5.5	759	10.5
	45	347.8	614.51	40	6.8	834.7	12.7	339.2	642.12	40	6.3	814.1	12.1	321.4	698.55	40	5.5	771.5	10.8
	48	363.5	623.34	40	7	872.4	13.9	354.6	651.04	40	6.5	851.1	13.2	336.2	707.53	40	5.7	807	11.9
6395 S	40	327.7	625.82	40	6.3	786.6	11.3	319.3	654.38	40	5.9	766.4	10.7	301.9	712.89	40	5.1	724.5	3.5
	42	339	632.9	40	6.4	813.5	12.1	330.3	661.59	40	6	792.8	11.5	312.4	720.31	40	5.2	749.7	10.2
	44	349.8	639.57	40	6.6	835.5	12.9	341	668.39	40	6.1	818.3	12.2	322.7	727.27	40	5.3	774.4	10.9
	45	355.4	642.94	40	6.8	852.8	13.3	346.4	671.81	40	6.4	831.4	12.6	328	730.77	40</td			

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		32						35						38					
		Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD
APCY	°C	kW	kW	kW	WW	L/s	kPa	kW	kW	WW	L/s	kPa	kW	kW	kW	WW	L/s	kPa	
5050 S	5	173	54.34	6	3.2	8.3	23.4	169.3	58.15	6	2.9	8.1	22.5	165.3	62.33	6	2.7	7.9	21.4
	6	177.9	54.78	6	3.2	8.5	24.7	174.3	58.63	6	3	8.3	23.8	170.2	62.86	6	2.7	8.1	22.7
	7	183.3	55.25	6	3.3	8.8	26.2	179.6	59.15	6	3	8.6	25.2	175.4	63.42	6	2.8	8.4	24.1
	8	189	55.74	6	3.4	9	27.7	185.2	59.69	6	3.1	8.9	26.7	180.9	64	6	2.8	8.7	25.5
	9	194	56.18	6	3.5	9.3	29	190.1	60.16	6	3.2	9.1	28	185.7	64.51	6	2.9	8.9	26.8
5060 S	5	199.7	63.33	6	3.2	9.6	27.7	195.2	67.88	6	2.9	9.3	26.5	190.3	72.84	6	2.6	9.1	25.2
	6	205.5	63.92	6	3.2	9.8	29.3	201	68.52	6	2.9	9.6	28.1	196	73.54	6	2.7	9.4	26.7
	7	211.5	64.54	6	3.3	10.1	31	207	69.19	6	3	9.9	29.7	201.9	74.26	6	2.7	9.7	28.3
	8	217.9	65.19	6	3.3	10.4	32.8	213.3	69.9	6	3.1	10.2	31.5	208.2	75.01	6	2.8	10	30
	9	223.7	65.78	6	3.4	10.7	34.5	219	70.53	6	3.1	10.5	33.1	213.7	75.67	6	2.8	10.2	31.6
5070 S	5	241.5	76.15	9	3.2	11.6	83.1	236.3	81.43	9	2.9	11.3	79.6	230.5	87.22	9	2.6	11	75.8
	6	249.3	76.86	9	3.2	11.9	88.6	244	82.21	9	3	11.7	84.9	238.1	88.07	9	2.7	11.4	80.8
	7	256.5	77.53	9	3.3	12.3	93.8	251.2	82.94	9	3	12	89.9	245.2	88.85	9	2.8	11.7	85.7
	8	264.1	78.23	9	3.4	12.6	99.5	258.7	83.69	9	3.1	12.4	95.4	252.6	89.66	9	2.8	12.1	91
	9	271.2	78.87	9	3.4	13	104.9	265.6	84.38	9	3.1	12.7	100.6	259.4	90.39	9	2.9	12.4	95.9
5085 S	5	280.4	84.53	9	3.3	13.4	48	274.8	90.41	9	3	13.1	46.2	268.5	96.9	9	2.8	12.8	44.2
	6	289.1	85.23	9	3.4	13.8	50.9	283.4	91.18	9	3.1	13.6	49	277	97.73	9	2.8	13.3	46.9
	7	297.6	85.92	9	3.5	14.2	53.9	291.9	91.93	9	3.2	14	51.9	285.4	98.55	9	2.9	13.7	49.7
	8	306.6	86.64	9	3.5	14.7	57.1	300.8	92.72	9	3.2	14.4	55	294.2	99.39	9	3	14.1	52.7
	9	314.7	87.29	9	3.6	15.1	60	308.7	93.41	9	3.3	14.8	57.8	302	100.13	9	3	14.4	55.4
5100 S	5	320.1	98.34	9	3.3	15.3	62	313.2	105.38	9	3	15	59.5	305.6	113.11	9	2.7	14.6	56.7
	6	330	99.28	9	3.3	15.8	65.9	323	106.41	9	3	15.5	63.2	315.2	114.22	9	2.8	15.1	60.2
	7	339.8	100.2	9	3.4	16.3	69.8	332.7	107.42	9	3.1	15.9	66.9	324.7	115.32	9	2.8	15.5	63.8
	8	350	101.17	9	3.5	16.7	74	342.8	108.48	9	3.2	16.4	71	334.7	116.46	9	2.9	16	67.7
	9	359.7	102.1	9	3.5	17.2	78.1	352.2	109.48	9	3.2	16.8	74.9	343.9	117.52	9	2.9	16.5	71.4
5110 S	5	351.5	108.24	9	3.2	16.8	40.2	343.7	116.1	9	3	16.4	38.5	335.1	124.69	9	2.7	16	36.7
	6	362.2	109.26	9	3.3	17.3	42.6	354.3	117.21	9	3	16.9	40.8	345.4	125.89	9	2.7	16.5	38.9
	7	372.6	110.26	9	3.4	17.8	44.9	364.6	118.3	9	3.1	17.4	43.1	355.6	127.07	9	2.8	17	41.1
	8	384	111.34	9	3.4	18.4	47.6	375.9	119.48	9	3.1	18	45.7	366.7	128.36	9	2.9	17.5	43.6
	9	393.5	112.24	9	3.5	18.8	49.9	385.1	120.45	9	3.2	18.4	47.9	375.7	129.39	9	2.9	18	45.7
5120 S	5	404	122.12	12	3.3	19.3	52.5	395.7	130.77	12	3	18.9	50.4	386.3	140.26	12	2.8	18.5	48.2
	6	416.5	123.19	12	3.4	19.9	55.7	408	131.95	12	3.1	19.5	53.5	398.5	141.53	12	2.8	19.1	51.1
	7	428.6	124.23	12	3.4	20.5	58.8	420	133.08	12	3.2	20.1	56.5	410.3	142.74	12	2.9	19.6	54.1
	8	441.6	125.34	12	3.5	21.1	62.3	432.8	134.29	12	3.2	20.7	59.9	423	144.04	12	2.9	20.2	57.3
	9	453.1	126.33	12	3.6	21.7	65.5	444.2	135.35	12	3.3	21.2	63	434.2	145.16	12	3	20.8	60.3
5135 S	5	446.3	134.89	12	3.3	21.3	50.4	437.1	144.58	12	3	20.9	48.2	426.8	155.21	12	2.7	20.4	45.9
	6	460.3	136.15	12	3.4	22	53.7	450.9	145.96	12	3.1	21.6	51.5	440.3	156.69	12	2.8	21.1	49
	7	474.2	137.42	12	3.5	22.7	57.2	464.7	147.33	12	3.2	22.2	54.8	453.9	158.16	12	2.9	21.7	52.2
	8	488.4	138.69	12	3.5	23.4	60.7	478.6	148.71	12	3.2	22.9	58.3	467.6	159.63	12	2.9	22.4	55.5
	9	502.6	139.97	12	3.6	24	64.4	492.6	150.08	12	3.3	23.6	61.8	481.4	161.09	12	3	23	59
5145 S	5	492.5	151.51	12	3.3	23.6	38.2	481.6	162.57	12	3	23	36.5	469.3	174.63	12	2.7	22.4	34.7
	6	506.9	153	12	3.3	24.2	40.4	495.8	164.18	12	3	23.7	38.7	483.4	176.37	12	2.7	23.1	36.8
	7	523.8	154.74	12	3.4	25.1	43	512.6	166.09	12	3.1	24.5	41.2	500.1	178.43	12	2.8	23.9	39.3
	8	540.8	156.49	12	3.5	25.9	45.6	529.6	168	12	3.2	25.3	43.9	517.2	180.49	12	2.9	24.7	41.9
	9	554.4	157.89	12	3.5	26.5	47.8	543.1	169.5	12	3.2	26	46	530.6	182.09	12	2.9	25.4	44
5155 S	5	527.2	161.28	15	3.3	25.2	43.5	516.1	172.82	15	3	24.7	41.8	503.7	185.47	15	2.7	24.1	39.9
	6	542.7	162.72	15	3.3	26	45.9	531.4	174.39	15	3	25.4	44.1	518.8	187.17	15	2.8	24.8	42.2
	7	560.4	164.38	15	3.4	26.8	48.8	549	176.2	15	3.1	26.3	47	536.3	189.13	15	2.8	25.7	44.9
	8	577.7	165.99	15	3.5	27.6	51.6	566.4	177.97	15	3.2	27.1	49.8	553.8	191.06	15	2.9	26.5	47.7
	9	592	167.32	15	3.5	28.3	54.1	580.7	179.41	15	3.2	27.8	52.2	568	192.6	15	2.9	27.2	50
5165 S	5	554.2	175.52	15	3.2	26.5	47.8	542.1	188.28	15	2.9	25.9	45.8	528.6	202.24	15	2.6	25.3	43.7
	6	570.4	177.2	15	3.2	27.3	50.4	558.1	190.1	15	3.1	26.7	48.4	544.4	204.21	15	2.7	26	46.2
	7	588.7	179.1	15	3.3	28.2	53.5	576.3	192.18	15	3	27.6	51.4	562.4	206.45	15	2.7	26.9	49.1
	8	606	180.91	15	3.3	29	56.5	593.7	194.17	15	3.1	28.4	54.4	580	208.61	15	2.8	27.7	52
	9	620.8	182.44	15	3.4	29.7	59.1	608.4	195.82	15	3.1	29.1	56.9	594.6	210.37	15	2.8	28.4	54.5
5185 S	5	624.9	184.69	18	3.4	29.9	49	612.1	197.79	18	3.1	29.3	47.1	597.8	212.16	18	2.8	28.6	44.9
	6	643	186.26	18	3.5	30.8	51.8	629.9	199										

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		45					48					51.67							
		Capacity	Total Power	Fan Power ^[2]	COP	WFR	WPD	Capacity	Total Power	Fan Power ^[2]	COP	WFR	WPD	Capacity	Total Power	Fan Power ^[2]	COP	WFR	WPD
APCY	°C	kW	kW	kW	W/W	L/s	kPa	kW	kW	kW	W/W	L/s	kPa	kW	kW	kW	W/W	L/s	kPa
5050 S	5	154.1	73.52	6	2.1	7.4	18.6	148.5	78.92	6	1.9	7.1	17.3	141.1	86.03	6	1.6	6.7	15.7
	6	158.9	74.16	6	2.1	7.6	19.8	153.2	79.61	6	1.9	7.3	18.4	145.7	86.78	6	1.7	7	16.7
	7	163.8	74.82	6	2.2	7.8	21.1	158.1	80.31	6	2	7.6	19.6	150.5	87.52	6	1.7	7.2	17.8
	8	169.1	75.5	6	2.2	8.1	22.4	163.2	81.03	6	2	7.8	20.9	155.4	88.28	6	1.8	7.4	19
	9	173.5	76.07	6	2.3	8.3	23.5	167.4	81.61	6	2.1	8	22	159.4	88.86	6	1.8	7.6	19.9
5060 S	5	176.8	86.01	6	2.1	8.5	21.8	170.2	92.32	6	1.8	8.1	20.3	161.4	100.58	6	1.6	7.7	18.3
	6	182.4	86.81	6	2.1	8.7	23.2	175.7	93.16	6	1.9	8.4	21.6	166.7	101.46	6	1.6	8	19.5
	7	188	87.62	6	2.1	9	24.6	181.2	94	6	1.9	8.7	22.9	172.2	102.32	6	1.7	8.2	20.7
	8	194.2	88.47	6	2.2	9.3	26.2	187.3	94.88	6	2	9	24.4	178.2	103.24	6	1.7	8.5	22.2
	9	199.4	89.17	6	2.2	9.5	27.6	192.3	95.59	6	2	9.2	25.7	183	103.94	6	1.8	8.8	23.3
5070 S	5	214.6	102.71	9	2.1	10.3	65.8	206.8	110.18	9	1.9	9.9	61.2	196.3	119.99	9	1.6	9.4	55.3
	6	221.9	103.68	9	2.1	10.6	70.3	213.9	111.2	9	1.9	10.2	65.4	203.2	121.06	9	1.7	9.7	59.2
	7	228.7	104.58	9	2.2	10.9	74.6	220.6	112.13	9	2	10.6	69.5	209.7	122.02	9	1.7	10	63
	8	235.9	105.49	9	2.2	11.3	79.3	227.6	113.08	9	2	10.9	73.9	216.6	123	9	1.8	10.4	67.1
	9	242.2	106.29	9	2.3	11.6	83.6	233.8	113.89	9	2.1	11.2	77.9	222.5	123.82	9	1.8	10.6	70.7
5085 S	5	251.2	114.39	9	2.2	12	38.9	242.5	122.88	9	2	11.6	36.4	231	134.07	9	1.7	11	33.3
	6	259.3	115.35	9	2.2	12.4	41.4	250.5	123.89	9	2	12	38.7	238.7	135.12	9	1.8	11.4	35.4
	7	267.4	116.28	9	2.3	12.8	43.8	258.4	124.86	9	2.1	12.4	41.1	246.5	136.12	9	1.8	11.8	37.6
	8	275.9	117.24	9	2.4	13.2	46.6	266.8	125.85	9	2.1	12.8	43.7	254.7	137.15	9	1.9	12.2	40
	9	283.2	118.04	9	2.4	13.5	49	273.9	126.67	9	2.2	13.1	45.9	261.5	137.96	9	1.9	12.5	42
5100 S	5	284.6	133.75	9	2.1	13.6	49.4	274.2	143.71	9	1.9	13.1	46	260.4	156.8	9	1.7	12.5	41.7
	6	293.8	135.06	9	2.2	14.1	52.5	283.2	145.09	9	2	13.5	49	269.2	158.25	9	1.7	12.9	44.4
	7	302.9	136.32	9	2.2	14.5	55.7	292.2	146.42	9	2	14	52	277.9	159.63	9	1.7	13.3	47.2
	8	312.5	137.63	9	2.3	14.9	59.2	301.5	147.77	9	2	14.4	55.2	287	161.04	9	1.8	13.7	50.2
	9	321.1	138.79	9	2.3	15.4	62.4	309.9	148.95	9	2.1	14.8	58.3	295	162.22	9	1.8	14.1	53
5110 S	5	311.3	147.56	9	2.1	14.9	32	299.7	158.57	9	1.9	14.3	29.8	284.1	172.99	9	1.6	13.6	27
	6	321.1	148.97	9	2.2	15.4	33.9	309.2	160.05	9	1.9	14.8	31.6	293.3	174.57	9	1.7	14	28.6
	7	330.9	150.35	9	2.2	15.8	35.9	318.7	161.51	9	2	15.2	33.4	302.6	176.12	9	1.7	14.5	30.3
	8	341.6	151.85	9	2.2	16.3	38.1	329.3	163.1	9	2	15.8	35.5	312.9	177.8	9	1.8	15	32.3
	9	350	153.01	9	2.3	16.7	39.9	337.4	164.29	9	2.1	16.1	37.2	320.6	179.02	9	1.8	15.3	33.8
5120 S	5	360.5	165.61	12	2.2	17.2	42.2	347.8	177.83	12	2	16.6	39.4	330.7	193.86	12	1.7	15.8	35.8
	6	372.2	167.06	12	2.2	17.8	44.8	359.2	179.33	12	2	17.2	41.9	341.8	195.42	12	1.7	16.3	38.1
	7	383.6	168.44	12	2.3	18.3	47.5	370.4	180.77	12	2	17.7	44.4	352.7	196.91	12	1.8	16.9	40.5
	8	396	169.91	12	2.3	18.9	50.5	382.6	182.29	12	2.1	18.3	47.3	364.7	198.48	12	1.8	17.4	43.1
	9	406.4	171.12	12	2.4	19.4	53.1	392.7	183.52	12	2.1	18.8	49.7	374.5	199.72	12	1.9	17.9	45.4
5135 S	5	398.3	183.6	12	2.2	19.1	39.8	384.2	197.27	12	1.9	18.4	37	365.3	215.21	12	1.7	17.5	33.6
	6	411.2	185.27	12	2.2	19.7	42.5	396.8	199.02	12	2	19	39.5	377.5	217.02	12	1.7	18.1	35.7
	7	424.2	186.93	12	2.3	20.3	45.3	409.5	200.73	12	2	19.6	42.1	389.9	218.78	12	1.8	18.6	38.1
	8	437.3	188.56	12	2.3	20.9	48.3	422.4	202.41	12	2.1	20.2	44.9	402.4	220.5	12	1.8	19.2	40.6
	9	450.6	190.17	12	2.4	21.6	51.4	435.3	204.05	12	2.1	20.8	47.8	415	222.17	12	1.9	19.9	43.3
5145 S	5	435.8	206.66	12	2.1	20.8	29.8	419.2	220.01	12	1.9	20.1	27.5	397.3	242.1	12	1.6	19	24.3
	6	449.3	208.65	12	2.2	21.5	31.8	432.6	224.09	12	1.9	20.7	29.4	410.4	244.27	12	1.7	19.6	26.2
	7	465.8	211.01	12	2.2	22.3	34.2	449	226.57	12	2	21.5	31.8	426.7	246.86	12	1.7	20.4	28.5
	8	483.1	213.41	12	2.3	23.1	36.8	466.4	229.09	12	2	22.3	34.3	444.2	249.51	12	1.8	21.2	31
	9	496.2	215.17	12	2.3	23.7	38.7	479.3	230.9	12	2.1	22.9	36.2	456.8	251.35	12	1.8	21.9	32.9
5155 S	5	469.4	219.27	15	2.1	22.5	34.7	452.4	235.56	15	1.9	21.6	32.2	429.8	256.94	15	1.7	20.6	29
	6	484	221.23	15	2.2	23.1	36.9	466.8	237.61	15	2	22.3	34.3	443.8	259.09	15	1.7	21.2	31
	7	501.3	223.5	15	2.2	24	39.5	484	240	15	2	23.2	36.9	461	261.59	15	1.8	22.1	33.5
	8	519	225.76	15	2.3	24.8	42.2	501.9	242.38	15	2.1	24	39.6	479	264.1	15	1.8	22.9	36.2
	9	533	227.48	15	2.3	25.5	44.4	515.6	244.15	15	2.1	24.7	41.7	492.5	265.91	15	1.9	23.6	38.2
5165 S	5	491.6	239.44	15	2.1	23.5	38	473.3	235.35	15	1.8	22.6	35.3	449	280.81	15	1.6	21.5	31.8
	6	506.7	241.7	15	2.1	24.2	40.3	488.2	259.71	15	1.9	23.4	37.5	463.5	283.28	15	1.6	22.2	33.9
	7	524.5	244.29	15	2.1	25.1	43.1	505.8	262.42	15	1.9	24.2	40.2	481.1	286.12	15	1.7	23	36.5
	8	542.3	246.81	15	2.2	25.9	45.9	523.8	265.08	15	2	25.1	43	499.2	288.92	15	1.7	23.9	39.2
	9	556.7	248.78	15	2.2	26.6	48.2	538	267.1	15	2	25.7	45.2	513.2	290.98	15	1.8	24.5	41.3
5185 S	5	558.1	250.61	18	2.2	26.7	39.1	538.5	269.16	18	2	25.8	36.4	512.3	293.52	18	1.7	24.5	32.8
	6	574.6	252.69	18	2.3	27.5	41.5	554.6	271.32</										

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		32						35						38					
		Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD
APCY	°C	kW	kW	kW	W/W	L/s	kPa	°C	kW	kW	W/W	L/s	kPa	°C	kW	kW	W/W	L/s	kPa
5230 S	5	785.6	236.18	21	3.3	37.6	16.7	769	253.14	21	3	36.8	16	750.3	271.72	21	2.8	35.9	15.3
	6	809.4	238.4	21	3.4	38.7	17.7	792.4	255.55	21	3.1	37.9	17	773	274.27	21	2.8	37	16.2
	7	832.7	240.56	21	3.5	39.8	18.6	815.4	257.9	21	3.2	39	17.9	796.1	276.83	21	2.9	38.1	17.1
	8	857.6	242.87	21	3.5	41	19.7	840.2	260.41	21	3.2	40.2	19	820.7	279.51	21	2.9	39.3	18.1
	9	875.7	244.54	21	3.6	41.9	20.5	857.8	262.17	21	3.3	41	19.7	837.8	281.35	21	3	40.1	18.9
5240 S	5	811.8	252.29	21	3.2	38.8	17.8	793.9	270.64	21	2.9	38	17	773.9	290.69	21	2.7	37	16.2
	6	836.4	254.84	21	3.3	40	18.6	818.1	273.4	21	3	39.1	18	797.7	293.64	21	2.7	38.2	17.2
	7	860.4	257.33	21	3.3	41.2	19.8	841.8	276.09	21	3	40.3	19	821.1	296.52	21	2.8	39.3	18.1
	8	885.9	259.96	21	3.4	42.4	21	867.1	278.93	21	3.1	41.5	20.1	846.1	299.56	21	2.8	40.5	19.2
	9	905	261.93	21	3.5	43.3	21.9	885.6	281.01	21	3.2	42.4	21	864.1	301.71	21	2.9	41.3	20
5255 S	5	854.5	261.15	24	3.3	40.9	19.3	836.5	279.87	24	3	40	18.5	816.3	300.39	24	2.7	39	17.7
	6	881.9	263.75	24	3.3	42.2	20.5	863.5	282.69	24	3.1	41.3	19.7	842.9	303.43	24	2.8	40.3	18.8
	7	908.5	266.27	24	3.4	43.5	21.7	889.7	285.42	24	3.1	42.6	20.8	868.6	306.33	24	2.8	41.5	19.9
	8	933.7	268.65	24	3.5	44.7	22.8	914.4	287.97	24	3.2	43.7	21.9	892.9	309.02	24	2.9	42.7	21
	9	961	271.21	24	3.5	46	24.1	941.4	290.71	24	3.2	45	23.2	919.5	311.93	24	2.9	44	22.2
5265 S	5	895.4	275.89	24	3.2	42.8	21.1	875.9	295.85	24	3	41.9	20.2	854.1	317.67	24	2.7	40.9	19.3
	6	923.9	278.77	24	3.3	44.2	22.4	904.1	298.98	24	3	43.2	21.5	881.9	321.05	24	2.7	42.2	20.5
	7	952.1	281.61	24	3.4	45.5	23.7	931.7	302.04	24	3.1	44.6	22.7	909	324.31	24	2.8	43.5	21.7
	8	978.6	284.29	24	3.4	46.8	25	957.8	304.92	24	3.1	45.8	24	934.6	327.35	24	2.9	44.7	22.9
	9	1007.1	287.16	24	3.5	48.2	26.4	985.9	308	24	3.2	47.2	25.3	962.3	330.62	24	2.9	46	24.2
5280 S	5	977.5	285.89	27	3.4	46.8	19.2	957	306.26	27	3.1	45.8	18.5	934.2	328.58	27	2.8	44.7	17.6
	6	1006.3	288.48	27	3.5	48.1	20.3	985.5	309.09	27	3.2	47.1	19.5	962.2	331.62	27	2.9	46	18.6
	7	1036.6	291.22	27	3.6	49.6	21.5	1015.5	312.06	27	3.3	48.6	20.6	991.8	334.8	27	3	47.4	19.7
	8	1073.1	294.52	27	3.6	51.3	22.9	1051.4	315.62	27	3.3	50.3	22.1	1027	338.57	27	3	49.1	21.1
	9	1106.7	297.57	27	3.7	52.9	24.3	1084.4	318.86	27	3.4	51.9	23.4	1059.3	341.97	27	3.1	50.7	22.4
5295 S	5	1019.5	300.61	27	3.4	48.8	20.8	997.6	322.22	27	3.1	47.7	20	973.2	345.84	27	2.8	46.6	19
	6	1049.6	303.48	27	3.5	50.2	22	1027.3	325.34	27	3.2	49.1	21.1	1002.4	349.2	27	2.9	47.9	20.1
	7	1081.2	306.51	27	3.5	51.7	23.3	1058.5	328.64	27	3.2	50.6	22.3	1033.2	352.72	27	2.9	49.4	21.3
	8	1119.5	310.21	27	3.6	53.6	24.9	1096.2	332.61	27	3.3	52.4	23.9	1070.1	356.93	27	3	51.2	22.8
	9	1155	313.67	27	3.7	55.2	26.4	1131	336.28	27	3.4	54.1	25.4	1104.1	360.77	27	3.1	52.8	24.2
5305 S	5	1043.1	314.63	27	3.3	49.9	21.4	1020.7	337.39	27	3	48.8	20.5	995.8	362.26	27	2.7	47.6	19.6
	6	1075.8	317.82	27	3.4	51.5	22.6	1053	340.85	27	3.1	50.4	21.7	1027.5	365.97	27	2.8	49.2	20.8
	7	1108.8	321.04	27	3.5	53	24	1085.6	344.32	27	3.2	51.9	23	1059.7	369.68	27	2.9	50.7	22
	8	1137.7	323.84	27	3.5	54.4	25.2	1114.3	347.36	27	3.2	53.3	24.2	1088.2	372.92	27	2.9	52.1	23.1
	9	1159.6	325.96	27	3.6	55.5	26.1	1136	349.62	27	3.2	54.3	25.1	1109.5	375.31	27	3	53.1	24
5310 S	5	1070.8	329.27	27	3.3	51.2	22.4	1047.4	353.28	27	3	50.1	21.5	1021.3	379.49	27	2.7	48.9	20.5
	6	1104.5	332.76	27	3.3	52.8	23.8	1080.6	357.05	27	3	51.7	22.8	1053.9	383.51	27	2.7	50.4	21.8
	7	1138.3	336.26	27	3.4	54.4	25.2	1114	360.82	27	3.1	53.3	24.2	1086.8	387.53	27	2.8	52	23.1
	8	1167.8	339.29	27	3.4	55.9	26.5	1143.2	364.1	27	3.1	54.7	25.4	1115.8	391.02	27	2.9	53.4	24.3
	9	1190.3	341.6	27	3.5	56.9	27.5	1165.4	366.56	27	3.2	55.7	26.4	1137.7	393.62	27	2.9	54.4	25.2
5320 S	5	1105.8	339.05	30	3.3	52.9	23.9	1082.3	363.55	30	3	51.8	22.9	1056	390.35	30	2.7	50.5	21.9
	6	1140.7	342.5	30	3.3	54.6	25.3	1116.7	367.28	30	3	53.4	24.3	1089.9	394.35	30	2.8	52.1	23.2
	7	1175.8	345.96	30	3.4	56.2	26.8	1151.3	371.02	30	3.1	55.1	25.8	1124	398.34	30	2.8	53.8	24.6
	8	1206	348.93	30	3.5	57.7	28.2	1181.4	374.24	30	3.2	56.5	27.1	1153.8	401.78	30	2.9	55.2	25.9
	9	1229.3	351.21	30	3.5	58.8	29.2	1204.4	376.68	30	3.2	57.6	28.1	1176.5	404.36	30	2.9	56.3	26.9
5330 S	5	1133.1	353.6	30	3.2	54.2	25	1108.6	379.34	30	2.9	53	24	1081.2	407.48	30	2.7	51.7	22.9
	6	1168.9	357.33	30	3.3	55.9	26.5	1143.9	383.38	30	3	54.7	25.5	1115.9	411.8	30	2.7	53.4	24.3
	7	1204.8	361.07	30	3.3	57.6	28.1	1179.3	387.41	30	3	56.4	27	1150.8	416.1	30	2.8	55	25.8
	8	1235.6	364.27	30	3.4	59.1	29.5	1209.9	390.87	30	3.1	57.9	28.4	1181.1	419.78	30	2.8	56.5	27.1
	9	1259.5	366.74	30	3.4	60.2	30.6	1233.4	393.5	30	3.1	59	29.4	1204.3	422.56	30	2.8	57.6	28.1
5345 S	5	1183.5	360.31	33	3.3	56.6	27.2	1158.9	386.2	33	3	55.4	26.1	1131.4	414.58	33	2.7	54.1	24.9
	6	1221.1	363.87	33	3.4	58.4	28.9	1196	390.08	33	3.1	57.2	27.7	1167.9	418.76	33	2.8	55.9	26.5
	7	1258.8	367.45	33	3.4	60.2	30.6	1232.3	393.96	33	3	59	29.4	1204.6	422.92	33	2.8	57.6	28.1
	8	1290.6	370.47	33	3.5	61.7	32.1	1264.9	397.25	33	3.2	60.5	30.9	1236	426.44	33	2.9	59.1	29.6
	9	1315.6	372.84	33	3.5	62.9	33.3	1289.6	399.8	33	3.2	61.7	32.1	1260.4	429.1				

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 50 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		45					48					51.67							
		Capacity kW	Total Power kW	Fan Power kW	COP	WFR L/s	WPD kPa	Capacity kW	Total Power kW	Fan Power kW	COP	WFR L/s	WPD kPa	Capacity kW	Total Power kW	Fan Power kW	COP	WFR L/s	WPD kPa
APCY	°C																		
5230 S	5	699	321.26	21	2.2	33.4	13.5	673.6	345.11	21	2	32.2	12.6	639.8	376.37	21	1.7	30.6	11.6
	6	720.9	324.17	21	2.2	34.5	14.2	695	348.11	21	2	33.2	13.3	660.5	379.46	21	1.7	31.6	12.2
	7	743	327.03	21	2.3	35.5	15.1	716.8	351.09	21	2	34.3	14.1	681.9	382.54	21	1.8	32.6	12.9
	8	767	330.05	21	2.3	36.7	16	740.5	354.22	21	2.1	35.4	15	705.3	385.77	21	1.8	33.7	13.7
	9	782.7	331.99	21	2.4	37.4	16.6	755.6	356.15	21	2.1	36.1	15.5	719.5	387.67	21	1.9	34.4	14.2
5240 S	5	719.2	344	21	2.1	34.4	14.2	693.2	369.6	21	1.9	33.1	13.3	656.6	403.11	21	1.6	31.4	12.1
	6	741.8	347.31	21	2.1	35.5	15	714.3	373.01	21	1.9	34.2	14	677.8	406.62	21	1.7	32.4	12.8
	7	764.4	350.54	21	2.2	36.6	15.9	736.5	376.36	21	2	35.2	14.8	699.5	410.07	21	1.7	33.5	13.5
	8	788.8	353.95	21	2.2	37.7	16.8	760.7	379.88	21	2	36.4	15.7	723.3	413.69	21	1.7	34.6	14.3
	9	805.3	356.18	21	2.3	38.5	17.5	776.4	382.1	21	2	37.1	16.3	738.1	415.85	21	1.8	35.3	14.9
5255 S	5	760.7	355.2	24	2.1	36.4	15.6	733.3	381.61	24	1.9	35.1	14.6	696.8	416.27	24	1.7	33.3	13.3
	6	786.3	358.64	24	2.2	37.6	16.5	758.3	385.19	24	2	36.3	15.5	721.2	419.96	24	1.7	34.5	14.2
	7	810.7	361.84	24	2.2	38.8	17.5	782.1	388.47	24	2	37.4	16.4	744	423.29	24	1.8	35.6	15
	8	833.7	364.78	24	2.3	39.9	18.4	804.5	391.46	24	2.1	38.5	17.2	765.7	426.3	24	1.8	36.6	15.8
	9	859.4	367.97	24	2.3	41.1	19.5	829.7	394.71	24	2.1	39.7	18.3	790.3	429.6	24	1.8	37.8	16.7
5265 S	5	794.6	375.81	24	2.1	38	16.9	765.3	403.77	24	1.9	36.6	15.7	726.4	440.4	24	1.6	34.7	14.3
	6	821.3	379.65	24	2.2	39.3	17.9	791.4	407.76	24	1.9	37.9	16.7	751.8	444.53	24	1.7	36	15.2
	7	846.9	383.26	24	2.2	40.5	18.9	816.3	411.46	24	2	39	17.7	775.8	448.28	24	1.7	37.1	16.1
	8	871.1	386.58	24	2.3	41.7	20	839.9	414.84	24	2	40.2	18.7	798.5	451.69	24	1.8	38.2	17
	9	897.8	390.15	24	2.3	42.9	21.2	866.1	418.48	24	2.1	41.4	19.8	824	455.37	24	1.8	39.4	18
5280 S	5	871.2	388.06	27	2.2	41.7	15.5	840.2	416.69	27	2	40.2	14.5	798.8	454.2	27	1.8	38.2	13.3
	6	898.1	391.51	27	2.3	43	16.4	866.5	420.27	27	2.1	41.4	15.4	824.4	457.9	27	1.8	39.4	14
	7	926.6	395.09	27	2.3	44.3	17.4	894.4	423.96	27	2.1	42.8	16.3	851.6	461.68	27	1.8	40.7	14.9
	8	960.2	399.2	27	2.4	45.9	18.6	927.2	428.14	27	2.2	44.4	17.4	883.4	465.89	27	1.9	42.3	15.9
	9	990.6	402.81	27	2.5	47.4	19.7	956.8	431.77	27	2.2	45.8	18.4	911.9	469.49	27	1.9	43.6	16.9
5295 S	5	906.3	408.64	27	2.2	43.4	16.7	873.4	438.8	27	2	41.8	15.6	829.6	478.27	27	1.7	39.7	14.2
	6	934.3	412.46	27	2.3	44.7	17.6	900.7	442.76	27	2	43.1	16.5	856.2	482.37	27	1.8	41	15
	7	963.8	416.41	27	2.3	46.1	18.7	929.7	446.84	27	2.1	44.5	17.5	884.4	486.55	27	1.8	42.3	15.9
	8	998.9	421	27	2.4	47.8	20	963.9	451.5	27	2.1	46.1	18.7	917.5	491.23	27	1.9	43.9	17.1
	9	1030.9	425.06	27	2.4	49.3	21.2	994.9	455.58	27	2.2	47.6	19.9	947.3	495.26	27	1.9	45.3	18.1
5305 S	5	927.2	428.4	27	2.2	44.3	17.1	893.3	460.15	27	1.9	42.7	16	848.2	501.71	27	1.7	40.6	14.6
	6	957.5	432.57	27	2.2	45.8	18.2	923	464.46	27	2	44.1	17	877.1	506.14	27	1.7	42	15.5
	7	988.5	436.7	27	2.3	47.3	19.3	953.4	468.72	27	2	45.6	18	906.7	510.52	27	1.8	43.4	16.5
	8	1016.3	440.32	27	2.3	48.6	20.3	981	472.47	27	2.1	46.9	19	933.9	514.37	27	1.8	44.7	17.4
	9	1036.9	442.94	27	2.3	49.6	21.1	1001.1	475.13	27	2.1	47.9	19.8	953.5	517.06	27	1.8	45.6	18
5310 S	5	949.8	449.08	27	2.1	45.4	17.9	914.6	482.46	27	1.9	43.7	16.7	867.8	526.11	27	1.6	41.5	15.2
	6	980.9	453.59	27	2.2	46.9	19	945	487.11	27	1.9	45.2	17.7	897.2	530.89	27	1.7	42.9	16.1
	7	1012.5	458.05	27	2.2	48.4	20.2	976	491.71	27	2	46.7	18.8	927.5	535.6	27	1.7	44.4	17.1
	8	1040.9	461.95	27	2.3	49.8	21.3	1004	495.72	27	2	48	19.9	955.1	539.72	27	1.8	45.7	18.1
	9	1061.9	464.76	27	2.3	50.8	22.1	1024.6	498.59	27	2.1	49	20.6	975.1	542.6	27	1.8	46.6	18.8
5320 S	5	983.8	461.74	30	2.1	47.1	19.1	948.1	496.06	30	1.9	45.4	17.9	900.5	541.02	30	1.7	43.1	16.2
	6	1016.1	466.24	30	2.2	48.6	20.3	979.7	500.72	30	2	46.9	19	931.3	545.82	30	1.7	44.5	17.3
	7	1048.9	470.69	30	2.2	50.2	21.6	1011.9	505.3	30	2	48.4	20.2	962.7	550.51	30	1.7	46	18.4
	8	1078.1	474.54	30	2.3	51.6	22.7	1040.8	509.27	30	2	49.8	21.3	991.1	554.58	30	1.8	47.4	19.4
	9	1099.9	477.34	30	2.3	52.6	23.6	1062.1	512.13	30	2.1	50.8	22.1	1011.9	557.46	30	1.8	48.4	20.2
5330 S	5	1055.6	490.39	33	2.2	50.5	21.8	1018	526.91	33	1.9	48.7	20.4	968	574.82	33	1.7	46.3	18.6
	6	1090.5	495.14	33	2.2	52.2	23.2	1052.2	531.84	33	2	50.3	21.7	1001.2	579.92	33	1.7	47.9	19.8
	7	1103.9	498.81	33	2.3	53.8	24.7	1086.8	536.67	33	2	52	23.1	1034.9	584.87	33	1.8	49.5	21
	8	1156.6	503.79	33	2.3	55.3	26	1117.3	540.79	33	2.1	53.4	24.3	1085.4	598.11	33	1.8	50.9	22.2
	9	1180	506.75	33	2.3	56.4	27	1140.3	543.82	33	2.1	54.5	25.3	1087.4	592.16	33	1.8	52	23.1
5345 S	5	1088.7	510.87	33	2.1	52.1	23.2	1049.4	548.95	33	1.9	50.2	21.6	997.1	598.86	33	1.7	47.7	19.6
	6	1124.8	516.02	33	2.2	53.8	24.7	1084.7	554.3	33	2	51.9	23	1031.4	604.39	33	1.7	49.3	20.9
	7	1161	521.08	33	2.2	55.5	26.2	1120.3	559.53	33	2	53.6	24.5	1066	609.76	33	1.7	51	22.3
	8	1192.5	525.36	33	2.3	57	27.6	1151.4	563.97	33	2	55.1	25.8	1096.7	614.33	33	1.8	52.5	23.5
	9	1216.6	528.59	33	2.3	58.2	28.7	1175.1	567.26	33	2.1	56.2	26.8	1119.8	617.65	33	1.8	53.6	24.4
5365 S	5	1101.1	512.65																

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		32						35						38					
		Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD
APCY	°C	kW	kW	kW	W/W	L/s	kPa	kW	kW	W/W	L/s	kPa	kW	kW	W/W	L/s	kPa		
6060 S	5	215	70.14	8	3.1	10.3	32	210	75.06	8	2.8	10	30.6	204.4	80.42	8	2.5	9.8	29
	6	221.4	70.83	8	3.1	10.6	33.9	216.3	75.81	8	2.9	10.3	32.4	210.6	81.23	8	2.6	10.1	30.7
	7	227.9	71.53	8	3.2	10.9	35.8	222.7	76.58	8	2.9	10.7	34.2	216.9	82.05	8	2.6	10.4	32.5
	8	234.7	72.28	8	3.2	11.2	37.9	229.4	77.39	8	3	11	36.2	223.5	82.92	8	2.7	10.7	34.5
	9	240.1	72.88	8	3.3	0	13	234.7	78.02	8	3	11.2	37.8	228.6	83.59	8	2.7	10.9	36
6070 S	5	238.4	80.79	8	3	11.4	81	232.6	86.59	8	2.7	11.1	77.1	226.1	92.9	8	2.4	10.8	73
	6	246	81.73	8	3	11.8	86.3	240.1	87.61	8	2.7	11.5	82.2	233.5	93.98	8	2.5	11.2	77.8
	7	253.1	82.6	8	3.1	12.1	91.3	247	88.55	8	2.8	11.8	87	240.3	94.99	8	2.5	11.5	82.3
	8	260.5	83.52	8	3.1	12.5	96.7	254.3	89.53	8	2.8	12.2	92.2	247.5	96.03	8	2.6	11.8	87.3
	9	267.2	84.34	8	3.2	12.8	101.8	260.8	90.4	8	2.9	12.5	97	253.9	96.94	8	2.6	12.1	91.9
6085 S	5	291.7	97.5	12	3	14	51.8	285	104.3	12	2.7	13.6	49.6	277.6	111.72	12	2.5	13.3	47.1
	6	300.7	98.47	12	3.1	14.4	54.9	293.8	105.35	12	2.8	14.1	52.6	286.2	112.85	12	2.5	13.7	50
	7	309.5	99.43	12	3.1	14.8	58.1	302.5	106.39	12	2.8	14.5	55.6	294.8	113.97	12	2.6	14.1	52.9
	8	318.8	100.44	12	3.2	15.2	61.6	311.7	107.49	12	2.9	14.9	58.9	303.8	115.14	12	2.6	14.5	56
	9	327	101.33	12	3.2	15.6	64.7	319.7	108.45	12	2.9	15.3	61.9	311.6	116.16	12	2.7	14.9	58.9
6100 S	5	331.7	106.58	12	3.1	15.9	66.5	324.8	114.04	12	2.8	15.5	63.9	317	122.21	12	2.6	15.2	60.9
	6	342.1	107.53	12	3.2	16.4	70.7	335	115.07	12	2.9	16	67.9	327.1	123.34	12	2.7	15.6	64.7
	7	352.3	108.46	12	3.2	16.9	74.9	345	116.09	12	3	16.5	71.9	336.9	124.44	12	2.7	16.1	66.6
	8	362.9	109.43	12	3.3	17.4	79.5	355.5	117.15	12	3	17	76.3	347.3	125.6	12	2.8	16.6	72.8
	9	372.8	110.35	12	3.4	17.8	83.8	365.3	118.14	12	3.1	17.5	80.5	356.8	126.65	12	2.8	17.1	76.8
6115 S	5	392.2	125.97	12	3.1	18.8	21.5	383.1	135.05	12	2.8	18.3	20.6	373	144.92	12	2.6	17.8	19.5
	6	404	127.3	12	3.2	19.3	22.8	394.7	136.49	12	2.9	18.9	21.8	384.3	146.46	12	2.6	18.4	20.7
	7	415.5	128.6	12	3.2	19.9	24	406	137.89	12	2.9	19.4	23	395.4	147.97	12	2.7	18.9	21.8
	8	427.7	129.99	12	3.3	20.5	25.4	418	139.39	12	3	20	24.3	407.3	149.56	12	2.7	19.5	23.1
	9	439.7	131.36	12	3.3	21	26.9	428.9	140.85	12	3.1	20.6	25.7	418.8	151.11	12	2.8	20	24.4
6130 S	5	430.7	128.91	16	3.3	20.6	46.8	422.5	137.68	16	3.1	20.2	44.9	413.2	147.34	16	2.8	19.8	42.9
	6	444.2	129.9	16	3.4	21.2	49.9	435.8	138.76	16	3.1	20.8	47.9	426.4	148.53	16	2.9	20.4	45.8
	7	457.8	130.89	16	3.5	21.9	53.1	449.2	139.85	16	3.2	21.5	51.1	439.5	149.71	16	2.9	21	48.8
	8	471.4	131.89	16	3.6	22.6	56.5	462.7	140.95	16	3.3	22.1	54.3	452.9	150.91	16	3	21.7	51.9
	9	485.2	132.89	16	3.7	23.2	59.9	476.4	142.06	16	3.4	22.8	57.7	466.3	152.11	16	3.1	22.3	55.2
6145 S	5	483.3	150.96	16	3.2	23.1	59.4	473.5	161.62	16	2.9	22.6	57	462.4	173.32	16	2.7	22.1	54.2
	6	498.8	152.39	16	3.3	23.9	63.4	488.7	163.17	16	3	23.4	60.8	477.3	174.99	16	2.7	22.8	57.9
	7	514.2	153.8	16	3.3	24.6	67.3	503.8	164.71	16	3.1	24.1	64.7	492.2	176.64	16	2.8	23.5	61.7
	8	529.7	155.22	16	3.4	25.3	71.4	519.1	166.25	16	3.1	24.8	68.6	507.2	178.29	16	2.8	24.3	65.5
	9	545.3	156.65	16	3.5	26.1	75.4	534.5	167.79	16	3.2	25.6	72.6	522.4	179.93	16	2.9	25	69.5
6160 S	5	538.6	171.2	16	3.1	25.8	45.3	526.6	183.53	16	2.9	25.2	43.4	513.2	196.99	16	2.6	24.5	41.3
	6	554.3	172.85	16	3.2	26.5	47.8	542.1	185.32	16	2.9	25.9	45.8	528.5	198.93	16	2.7	25.3	43.7
	7	572.2	174.73	16	3.3	27.4	50.7	559.9	187.38	16	3	26.8	48.7	546.1	201.16	16	2.7	26.1	46.5
	8	589.5	176.54	16	3.3	28.2	53.6	577.2	189.38	16	3	27.6	51.6	563.6	203.34	16	2.8	27	49.3
	9	604	178.06	16	3.4	28.9	56.1	591.6	191.03	16	3.1	28.3	54	577.9	205.11	16	2.8	27.6	51.7
6170 S	5	577.6	191.15	16	3	27.6	51.6	564	205.16	16	2.7	27	49.4	548.9	220.43	16	2.5	26.3	46.9
	6	594.4	193.16	16	3.1	28.4	54.5	580.5	207.34	16	2.8	27.8	52.1	565.2	222.78	16	2.5	27	49.6
	7	613	195.39	16	3.1	29.3	57.7	599	209.78	16	2.9	28.7	55.3	583.5	225.42	16	2.6	27.9	52.6
	8	630.4	197.47	16	3.2	30.2	60.9	616.5	212.08	16	2.9	29.5	58.4	601.1	227.94	16	2.6	28.8	55.6
	9	645.4	199.28	16	3.2	30.9	63.6	631.4	214.05	16	2.9	30.2	61	615.9	230.06	16	2.7	29.5	58.2
6185 S	5	640.7	205.88	20	3.1	30.6	51.5	626.3	220.68	20	2.8	30	49.2	610.3	236.83	20	2.6	29.2	46.8
	6	659.2	207.87	20	3.2	31.5	51.5	644.4	222.84	20	2.9	30.8	52	628	239.14	20	2.6	30	49.5
	7	677.5	209.85	20	3.2	32.4	57.4	662.4	224.98	20	2.9	31.7	54.9	645.6	241.43	20	2.7	30.9	52.2
	8	696.2	211.89	20	3.3	33.3	60.5	680.8	227.17	20	3	32.6	57.9	663.6	243.76	20	2.7	31.7	55.1
	9	713.8	213.8	20	3.3	34.1	63.5	697.9	229.22	20	3	33.4	60.8	680.3	245.91	20	2.8	32.5	57.8
6200 S	5	672.5	224.69	20	3	32.2	56.6	656.8	241.09	20	2.7	31.4	54	639.4	258.93	20	2.5	30.6	51.3
	6	692.2	227.07	20	3	33.1	59.8	676	243.66	20	2.8	32.3	57.1	658.1	261.66	20	2.5	31.5	54.2
	7	711.5	229.42	20	3.1	34	63.1	694.9	246.18	20	2.8	33.2	60.3	676.6	264.34	20	2.6	32.4	57.2
	8	731.2	231.84	20	3.2	35	66.5	714.3	248.77	20	2.9	34.2	63.6	695.6	267.08	20	2.6	33.3	60.4
	9	749.9	234.13	20	3.2	35.9	69.8	732.5	251.2	20	2.9	35	66.7	713.3	269.63	20	2.6	34.1	63.4
6215 S	5	732.4	232.82	24	3.1	35	66.7	716.8	249.43	24	2.9	34.3	64						

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		45						48						51.67					
		Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD
APCY	°C	kW	kW	kW	WW	L/s	kPa	kW	kW	WW	L/s	kPa	kW	kW	WW	L/s	kPa		
6060 S	5	189.3	94.6	8	2	9.1	24.9	181.9	101.38	8	1.8	8.7	23.1	172	110.24	8	1.6	8.2	20.7
	6	195.1	95.52	8	2	9.3	26.5	176.7	102.34	8	1.8	9	24.5	177.5	111.24	8	1.6	8.5	22
	7	201.1	96.45	8	2.1	9.6	28.1	193.4	103.31	8	1.9	9.2	26	183.2	112.25	8	1.6	8.8	23.4
	8	207.4	97.43	8	2.1	9.9	29.8	199.6	104.33	8	1.9	9.5	27.7	189.2	113.3	8	1.7	9.1	24.9
	9	212.2	98.16	8	2.2	10.2	31.2	204.2	105.07	8	1.9	9.8	28.9	193.6	114.04	8	1.7	9.3	26.1
6070 S	5	208.8	109.54	8	1.9	10	62.4	200.3	117.49	8	1.7	9.6	57.6	189.1	127.87	8	1.5	9	51.5
	6	215.8	110.77	8	1.9	10.3	66.5	207.1	118.77	8	1.7	9.9	61.4	195.7	129.18	8	1.5	9.4	55
	7	222.3	111.89	8	2	10.6	70.5	213.5	119.92	8	1.8	10.2	65.2	201.9	130.37	8	1.5	9.7	58.4
	8	229.2	113.04	8	2	11	74.9	220.2	121.1	8	1.8	10.5	69.3	208.4	131.58	8	1.6	10	62.2
	9	235	114	8	2.1	11.2	78.8	225.9	122.07	8	1.9	10.8	72.8	213.8	132.55	8	1.6	10.2	65.4
6085 S	5	257.3	131.43	12	2	12.3	40.7	134.7	140.89	12	1.8	11.8	37.8	234.1	153.28	12	1.5	11.2	34.1
	6	265.5	132.74	12	2	12.7	43.3	255.3	142.27	12	1.8	12.2	40.2	241.8	154.73	12	1.6	11.6	36.2
	7	273.6	134.02	12	2	13.1	45.8	263.3	143.6	12	1.8	12.6	42.6	249.5	156.12	12	1.6	11.9	38.5
	8	282.2	135.35	12	2.1	13.5	48.6	271.7	144.99	12	1.9	13	45.2	257.7	157.55	12	1.6	12.3	40.9
	9	289.5	136.46	12	2.1	13.8	51.1	278.7	146.11	12	1.9	13.3	47.5	264.4	158.68	12	1.7	12.6	42.9
6100 S	5	295.5	144.12	12	2.1	14.1	53.1	284.8	154.71	12	1.8	13.6	49.5	270.6	168.62	12	1.6	12.9	44.9
	6	305.1	145.44	12	2.1	14.6	56.5	294.2	156.1	12	1.9	14.1	52.7	279.8	170.09	12	1.6	13.4	47.8
	7	314.6	146.72	12	2.1	15	60	303.5	157.44	12	1.9	14.5	56	288.8	171.49	12	1.7	13.8	50.8
	8	324.6	148.04	12	2.2	15.5	63.8	313.3	158.82	12	2	15	59.5	298.4	172.93	12	1.7	14.3	54.1
	9	333.5	149.21	12	2.2	16	67.2	322	160.01	12	2	15.4	62.8	306.7	174.12	12	1.8	14.7	57.1
6115 S	5	345.5	171.05	12	2	16.5	16.9	332	183.55	12	1.8	15.9	15.7	314.1	199.87	12	1.6	15	14.2
	6	356.1	172.79	12	2.1	17	17.9	342.4	185.36	12	1.8	16.4	16.6	324.1	201.74	12	1.6	15.5	15
	7	366.7	174.48	12	2.1	17.5	18.9	352.6	187.11	12	1.9	16.9	17.6	334.1	203.55	12	1.6	16	15.9
	8	378.1	176.28	12	2.1	18.1	20.1	363.8	188.96	12	1.9	17.4	18.6	345	205.46	12	1.7	16.5	16.9
	9	389.1	177.96	12	2.2	18.6	21.2	374.6	190.69	12	2	17.9	19.7	355.4	207.2	12	1.7	17	17.8
6130 S	5	387.3	173.38	16	2.2	18.5	37.6	374.4	186.01	16	2	17.9	35.2	357	202.67	16	1.8	17.1	32.2
	6	399.9	174.77	16	2.3	19.1	40.1	386.7	187.49	16	2.1	18.5	37.5	369	204.24	16	1.8	17.6	34.2
	7	412.5	176.16	16	2.3	19.7	42.8	399.1	188.96	16	2.1	19.1	39.9	381.1	205.77	16	1.9	18.2	36.4
	8	425.4	177.55	16	2.4	20.3	45.6	411.7	190.41	16	2.2	19.7	42.6	393.3	207.29	16	1.9	18.8	38.8
	9	438.3	178.93	16	2.4	21	48.5	424.3	191.84	16	2.2	20.3	45.3	405.6	208.77	16	1.9	19.4	41.3
6145 S	5	431.7	204.62	16	2.1	20.7	47	416.5	219.73	16	1.9	19.9	43.6	396.2	239.56	16	1.7	19	39.4
	6	445.9	206.52	16	2.2	21.3	50.3	430.4	221.7	16	1.9	20.6	46.7	409.6	241.61	16	1.7	19.6	42.1
	7	460.1	208.39	16	2.2	22	53.7	444.2	223.63	16	2	21.2	49.9	423.1	243.6	16	1.7	20.2	45.1
	8	474.5	210.23	16	2.3	22.7	57.2	458.3	225.53	16	2	21.9	53.3	436.8	245.54	16	1.8	20.9	48.2
	9	488	212.04	16	2.3	23.4	60.9	472.5	227.39	16	2.1	22.6	56.7	450.6	247.42	16	1.8	21.6	51.4
6160 S	5	476.5	232.76	16	2	22.8	35.8	458.5	249.93	16	1.8	21.9	33.1	434.5	272.41	16	1.6	20.8	29.7
	6	491.2	235	16	2.1	23.5	38	472.9	252.29	16	1.9	22.6	35.3	448.7	274.89	16	1.6	21.5	31.7
	7	508.6	237.6	16	2.1	24.3	40.6	490.2	255.03	16	1.9	23.4	37.8	465.8	277.78	16	1.7	22.3	34.2
	8	526.3	240.18	16	2.2	25.2	43.3	508	257.76	16	2	24.3	40.5	483.7	280.68	16	1.7	23.1	36.9
	9	540.3	242.18	16	2.2	25.8	45.6	521.8	259.82	16	2	25	42.7	497.3	282.8	16	1.8	23.8	38.9
6170 S	5	508	260.85	16	1.9	24.3	40.5	487.9	280.19	16	1.7	23.3	37.5	461.3	305.48	16	1.5	22.1	33.5
	6	523.5	263.56	16	2	25	42.9	503.1	283.05	16	1.8	24.1	39.8	476.1	308.5	16	1.5	22.8	35.7
	7	541.5	266.67	16	2	25.9	45.7	520.9	286.34	16	1.8	24.9	42.5	493.7	311.98	16	1.6	23.6	38.4
	8	559.3	269.67	16	2.1	26.8	48.6	538.9	289.54	16	1.9	25.8	45.3	511.8	315.41	16	1.6	24.5	41.1
	9	573.8	272.08	16	2.1	27.4	51	553.2	292.04	16	1.9	26.5	47.6	525.9	317.98	16	1.7	25.2	43.3
6185 S	5	566.4	279.64	20	2	27.1	40.3	544.9	300.15	20	1.8	26.1	37.3	516.2	326.98	20	1.6	24.7	33.4
	6	583.1	282.24	20	2.1	27.9	42.7	561	302.85	20	1.9	26.8	39.6	531.8	329.77	20	1.6	25.4	35.5
	7	599.8	284.81	20	2.1	28.7	45.2	577.3	305.51	20	1.9	27.6	41.9	547.5	332.5	20	1.6	26.2	37.7
	8	616.9	287.4	20	2.1	29.5	47.8	594	308.17	20	1.9	28.4	44.3	563.7	335.21	20	1.7	27	39.9
	9	632.5	289.71	20	2.2	30.3	50.2	609.1	310.51	20	2	29.1	46.6	578.1	337.56	20	1.7	27.7	42
6200 S	5	591.9	306.03	20	1.9	28.3	44	568.6	328.52	20	1.7	27.2	40.6	537.8	357.88	20	1.5	25.7	36.3
	6	609.4	309.07	20	2	29.2	46.6	585.6	331.66	20	1.8	28	43.1	554.1	361.1	20	1.5	26.5	38.6
	7	626.9	312.05	20	2	30	49.3	602.6	334.73	20	1.8	28.8	45.6	570.5	364.25	20	1.6	27.3	40.9
	8	644.8	315.06	20	2	30.8	52.1	620.1	337.8	20	1.8	29.7	48.3	587.4	367.36	20	1.6	28.1	43.4
	9	661.4	317.77	20	2.1	31.6	54.7	636	340.54	20	1.9	30.4	50.7	602.6	370.09	20	1.6	28.8	45.6
6215 S	5	651	315.92	24	2.1	31.1	53.1	627.2	339.12	24	1.8	30	49.3	595.3</td					

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																	
		32					35					38							
		Capacity °C	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	COP W/W	WFR L/s	WPD kPa	Capacity kW	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	COP W/W	WFR L/s	WPD kPa	Capacity kW	Total Power ⁽²⁾ kW	Fan Power ⁽²⁾ kW	COP W/W	WFR L/s	WPD kPa
6270 S	5	930.6	298.62	28	3.1	44.5	22.7	909.6	320.15	28	2.8	43.5	21.7	886.2	343.65	28	2.6	42.4	20.7
	6	960.2	301.79	28	3.2	45.9	24.1	938.8	323.61	28	2.9	44.9	23.1	915	347.39	28	2.6	43.8	22
	7	989.6	304.95	28	3.2	47.3	25.5	967.6	327.03	28	3	46.3	24.4	943.2	351.04	28	2.7	45.1	23.3
	8	1017.4	307.95	28	3.3	48.7	26.9	994.9	330.26	28	3	47.6	25.8	969.9	354.48	28	2.7	46.4	24.5
	9	1046.9	311.14	28	3.4	50.1	28.4	1024	333.7	28	3.1	49	27.2	998.6	358.14	28	2.8	47.8	26
	5	959.9	319.86	28	3	45.9	24.1	937.2	343.2	28	2.7	44.8	23	912.2	368.61	28	2.5	43.6	21.8
	6	990.2	323.5	28	3.1	47.4	25.5	967.1	347.17	28	2.8	46.3	24.4	941.6	372.88	28	2.5	45	23.2
	7	1020.6	327.17	28	3.1	48.8	27.1	996.9	351.12	28	2.8	47.7	25.9	970.7	377.09	28	2.6	46.4	24.6
	8	1049.3	330.66	28	3.2	50.2	28.5	1025.1	354.86	28	2.9	49	27.3	998.2	381.04	28	2.6	47.7	25.9
	9	1079.6	334.35	28	3.2	51.6	30.1	1054.9	358.81	28	2.9	50.5	28.8	1027.6	385.23	28	2.7	49.2	27.4
6295 S	5	1003.3	329.82	32	3	48	26.2	980.8	353.56	32	2.8	46.9	25.1	955.7	379.47	32	2.5	45.7	23.9
	6	1035	333.28	32	3.1	49.5	27.8	1012.1	357.34	32	2.8	48.4	26.6	986.6	383.57	32	2.6	47.2	25.4
	7	1067.2	336.81	32	3.2	51	29.5	1043.7	361.17	32	2.9	49.9	28.2	1017.5	387.65	32	2.6	48.7	26.9
	8	1097.7	340.18	32	3.2	52.5	31.1	1073.6	364.79	32	2.9	51.4	29.8	1046.8	391.51	32	2.7	50.1	28.4
	9	1129.5	343.71	32	3.3	54	32.8	1105	368.59	32	3	52.9	31.5	1077.7	395.55	32	2.7	51.6	30
6310 S	5	1049.3	348.78	32	3	50.2	28.5	1025	374.11	32	2.7	49	27.3	998	401.7	32	2.5	47.7	25.9
	6	1082.2	352.64	32	3.1	51.8	30.3	1057.4	378.32	32	2.8	50.6	29	1030	406.25	32	2.5	49.3	27.5
	7	1116	356.63	32	3.1	53.4	32.1	1090.6	382.64	32	2.9	52.2	30.7	1062.4	410.86	32	2.6	50.8	29.2
	8	1148.2	360.46	32	3.2	54.9	33.9	1122.1	386.74	32	2.9	53.7	32.4	1093.3	415.2	32	2.6	52.3	30.9
6320 S	9	1181.4	364.43	32	3.2	56.5	35.8	1154.8	390.99	32	3	55.2	34.3	1125.4	419.71	32	2.7	53.8	32.6
	5	1086	353.09	32	3.1	51.9	23.5	1060.7	378.75	32	2.8	50.7	22.4	1032.7	406.63	32	2.5	49.4	21.3
	6	1118.1	356.88	32	3.1	53.5	24.8	1092.2	382.85	32	2.9	52.2	23.7	1063.6	411.02	32	2.6	50.9	22.5
	7	1151.6	360.87	32	3.2	55.1	26.3	1125.2	387.14	32	2.9	53.8	25.1	1096	415.59	32	2.6	52.4	23.9
6335 S	5	1148.2	361.1	36	3.2	54.9	26.1	1122.9	386.98	36	2.9	53.7	25	1094.7	415.2	36	2.6	52.4	23.8
	6	1182.6	364.72	36	3.2	56.6	27.6	1156.7	390.91	36	3	55.3	26.5	1127.8	419.42	36	2.7	53.9	25.2
	7	1218.3	368.52	36	3.3	58.3	29.3	1191.9	395.02	36	3	57	28.1	1162.5	423.81	36	2.7	55.6	26.7
	8	1262.7	373.25	36	3.4	60.4	31.3	1235.4	400.08	36	3.1	59.1	30.1	1204.9	429.15	36	2.8	57.6	28.7
6350 S	9	1304.5	377.73	36	3.5	62.4	33.4	1276.3	404.84	36	3.2	61	32	1244.9	434.13	36	2.9	59.5	30.5
	5	1195.1	379.99	36	3.1	57.2	28.2	1166.1	407.46	36	2.9	55.9	27	1138.1	437.36	36	2.6	54.4	25.7
	6	1230.9	384.04	36	3.2	58.9	29.9	1203.3	411.85	36	2.9	57.6	28.6	1172.6	442.05	36	2.7	56.1	27.2
	7	1268.2	388.27	36	3.3	60.7	31.6	1239.9	416.4	36	3	59.3	30.3	1208.5	446.9	36	2.7	57.8	28.8
6365 S	8	1314.8	393.59	36	3.3	62.9	33.9	1285.6	422.07	36	3	61.5	32.4	1253	452.88	36	2.8	59.9	30.9
	9	1359.1	398.66	36	3.4	65	36.1	1328.7	427.43	36	3.1	63.6	34.6	1295	458.45	36	2.8	61.9	32.9
	5	1239.4	398.93	36	3.1	59.3	48.2	1210.8	427.87	36	2.8	57.9	46	1179	459.39	36	2.6	56.4	43.7
	6	1274.8	402.93	36	3.2	61	50.9	1245.4	432.19	36	2.9	59.6	48.7	1212.9	464	36	2.6	58	46.2
6375 S	7	1309.9	406.91	36	3.2	62.7	53.7	1279.9	436.48	36	2.9	61.2	51.3	1246.6	468.58	36	2.7	59.6	48.8
	8	1345.9	410.99	36	3.3	64.4	56.6	1315.2	440.88	36	3	62.9	54.1	1281.2	473.25	36	2.7	61.3	51.4
	9	1379.3	414.8	36	3.3	66	59.4	1347.8	444.93	36	3	64.5	56.8	1313	477.51	36	2.7	62.8	54
	5	1271.5	418.04	36	3	60.8	50.7	1241.5	448.59	36	2.8	59.4	48.4	1208.3	481.81	36	2.5	57.8	45.8
6385 S	6	1308	422.42	36	3.1	62.6	53.6	1277.2	453.31	36	2.8	61.1	51.1	1243.1	486.84	36	2.6	59.5	48.5
	7	1344	426.77	36	3.1	64.3	56.5	1312.5	457.99	36	2.9	62.8	53.9	1277.7	491.82	36	2.6	61.1	51.2
	8	1381	431.25	36	3.2	66.1	59.5	1348.8	462.79	36	2.9	64.5	56.9	1313.2	496.91	36	2.6	62.8	54
	9	1415.5	435.44	36	3.3	67.7	62.4	1382.5	467.24	36	3	66.1	59.6	1346	501.57	36	2.7	64.4	56.6
6385 S	5	1313.5	430.38	40	3.1	62.8	54	1283.5	461.57	40	2.8	61.4	51.6	1250	495.54	40	2.5	59.8	49
	6	1351.7	434.75	40	3.1	64.7	57.1	1320.8	466.29	40	2.8	63.2	54.6	1286.4	500.57	40	2.6	61.5	51.9
	7	1389.3	439.07	40	3.2	66.5	60.2	1357.6	470.94	40	2.9	64.9	57.6	1322.5	505.53	40	2.6	63.3	54.7
	8	1427.8	443.51	40	3.2	68.3	63.5	1395.5	475.72	40	2.9	66.7	60.7	1359.6	510.6	40	2.7	65	57.7
6395 S	9	1464.4	447.71	40	3.3	70	66.6	1430.8	480.18	40	3	68.4	63.8	1394	515.29	40	2.7	66.7	60.6
	5	1345	449.38	40	3	64.3	56.6	1313.6	482.18	40	2.7	62.8	54	1278.8	517.85	40	2.5	61.2	51.3
	6	1384.4	454.15	40	3	66.2	59.8	1352.1	487.31	40	2.8	64.7	57.1	1316.2	523.31	40	2.5	63	54.2
	7	1422.9	458.84	40	3.1	68.1	63.1	1389.9	492.36	40	2.8	66.5	60.3	1353.2	528.68	40	2.6	64.7	57.2
6410 S	8	1462.5	463.67	40	3.2	70	66.5	1428.6	497.54	40	2.9	68.3	63.6	1391.2	534.17	40	2.6	66.5	60.4
	9	1499.9	468.27	40	3.2	71.7	69.8	1465.1	502.41	40	2.9	70.1	66.7	1426.7	539.26	40	2.6	68.2	63.4
	5	1405.9	456.91	44	3.1	67.3	61.6	1374.6	489.88	44	2.8	65.8	59	1339.7	525.84	44	2.5	64.1	56.1
	6	1448.1	461.55	44	3.1	69.3	65.2	1415.8	4										

SKM Compact Screw Chillers

APCY-S Series - R-134a

CAPACITY RATINGS - 60 Hz (SI)

Model	LWT	Condenser Entering Air Dry Bulb, °C																		
		45							48							51.7				
		Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	Capacity	Total Power ⁽¹⁾	Fan Power ⁽²⁾	COP	WFR	WPD	
6270 S	APCY	°C	kW	kW	W/W	L/s	kPa	kW	kW	W/W	L/s	kPa	kW	kW	W/W	kPa				
	5	822.6	406.07	28	2	39.3	18	791.3	436.02	28	1.8	37.9	16.7	749.9	475.23	28	1.6	35.9	15.2	
	6	850.1	410.38	28	2.1	40.7	19.1	818.3	440.54	28	1.9	39.1	17.8	776	479.95	28	1.6	37.1	16.1	
	7	876.7	414.47	28	2.1	41.9	20.3	844.1	444.76	28	1.9	40.4	18.9	800.9	484.29	28	1.7	38.3	17.1	
	8	901.9	418.27	28	2.2	43.1	21.4	868.6	448.65	28	1.9	41.5	19.9	824.4	488.24	28	1.7	39.4	18	
	9	929.4	422.34	28	2.2	44.5	22.6	895.5	452.84	28	2	42.8	21.1	850.6	492.52	28	1.7	40.7	19.1	
	5	844.1	435.8	28	1.9	40.4	18.9	810.9	467.94	28	1.7	38.8	17.5	766.9	509.92	28	1.5	36.7	15.8	
	6	872.3	440.7	28	2	41.7	20.1	838.4	473.05	28	1.8	40.1	18.6	793.5	515.25	28	1.5	38	16.8	
	7	899.6	445.37	28	2	43	21.3	864.9	477.85	28	1.8	41.4	19.7	819	520.15	28	1.6	39.2	17.8	
6285 S	5	925.5	449.69	28	2.1	44.3	22.4	890	482.27	28	1.8	42.6	20.8	843.1	524.62	28	1.6	40.3	18.8	
	9	953.6	454.3	28	2.1	45.6	23.8	917.5	486.99	28	1.9	43.9	22.1	869.9	529.42	28	1.6	41.6	20	
	5	887.2	448.29	32	2	42.4	20.7	853.5	481.32	32	1.8	40.8	19.3	808.9	524.55	32	1.5	38.7	17.4	
	6	916.9	453.03	32	2	43.9	22	882.6	486.29	32	1.8	42.2	20.5	837.2	529.75	32	1.6	40	18.6	
	7	946.1	457.61	32	2.1	45.3	23.4	911.1	491.01	32	1.9	43.6	21.8	864.6	534.58	32	1.6	41.4	19.7	
	8	973.8	461.85	32	2.1	46.6	24.7	937.9	495.35	32	1.9	44.9	23	890.4	538.99	32	1.7	42.6	20.9	
	9	1003.5	466.32	32	2.2	48	26.2	967.1	499.94	32	1.9	46.3	24.4	918.9	543.67	32	1.7	44	22.1	
	5	924.6	474.75	32	1.9	44.2	22.4	888.7	509.73	32	1.7	42.5	20.8	841.1	555.45	32	1.5	40.2	18.7	
	6	955.3	480.02	32	2	45.7	23.8	918.6	515.24	32	1.8	43.9	22.1	870.3	561.2	32	1.6	41.6	20	
6310 S	7	985.9	485.15	32	2	47.2	25.3	948.5	520.52	32	1.8	45.4	23.5	898.8	566.59	32	1.6	43	21.2	
	8	1014.9	489.9	32	2.1	48.5	26.8	976.5	525.38	32	1.9	46.7	24.9	925.8	571.51	32	1.6	44.3	22.5	
	9	1045.6	494.86	32	2.1	50	28.3	1006.7	530.46	32	1.9	48.2	26.4	955.1	576.67	32	1.7	45.7	23.8	
	5	956.4	480.19	32	2	45.7	18.4	919	515.28	32	1.8	44	17.1	869.5	561.05	32	1.5	41.6	15.5	
	6	985.7	485.11	32	2	47.2	19.5	947.6	520.38	32	1.8	45.3	18.1	897.2	566.29	32	1.6	42.9	16.4	
	7	1016.6	490.19	32	2.1	48.6	20.7	977.9	525.61	32	1.9	46.8	19.2	926.6	571.65	32	1.6	44.3	17.4	
	8	1053.7	496.14	32	2.1	50.4	22.2	1013.9	531.65	32	1.9	48.5	20.6	961.3	577.73	32	1.7	46	18.6	
	9	1087.8	501.46	32	2.2	52	23.5	1046.8	536.99	32	1.9	50.1	21.9	992.8	583.01	32	1.7	47.5	19.8	
6335 S	5	1017.5	489.98	36	2.1	48.7	20.7	979.5	525.79	36	1.9	46.9	19.3	928.9	572.59	36	1.6	44.4	17.5	
	6	1049	494.76	36	2.1	50.2	22	1010.2	530.75	36	1.9	48.3	20.4	958.6	577.71	36	1.7	45.9	18.5	
	7	1082	499.67	36	2.2	51.8	23.3	1042.5	535.83	36	1.9	49.9	21.7	990.1	582.93	36	1.7	47.4	19.7	
	8	1122.1	505.5	36	2.2	53.7	25	1081.5	541.76	36	2	51.7	23.3	1027.7	588.91	36	1.7	49.2	21.1	
	9	1159.3	510.76	36	2.3	55.5	26.6	1117.5	547.05	36	2	53.5	24.8	1062.1	594.17	36	1.8	50.8	22.5	
	5	1056.1	516.37	36	2	50.5	22.2	1015.8	554.12	36	1.8	48.6	20.7	962.3	603.38	36	1.6	46	18.6	
	6	1088.7	521.64	36	2.1	52.1	23.6	1047.6	559.58	36	1.9	50.1	21.9	993	609.01	36	1.6	47.5	19.8	
	7	1122.9	527.06	36	2.1	53.7	25	1081	565.16	36	1.9	51.7	23.3	1025.4	614.73	36	1.7	49	21	
	8	1164.7	533.51	36	2.2	55.7	26.8	1121.5	571.71	36	2	53.6	25	1064.3	621.32	36	1.7	50.9	22.6	
	9	1203.6	539.37	36	2.2	57.6	28.6	1159.1	577.59	36	2	55.4	26.6	1100.2	627.13	36	1.8	52.6	24.1	
6350 S	5	1092.5	542.78	36	2	52.3	37.5	1050	582.66	36	1.8	50.2	34.6	993.7	634.77	36	1.6	47.5	30.8	
	6	1124.2	547.96	36	2.1	53.8	39.7	1080.8	588.03	36	1.8	51.7	36.7	1023.3	640.31	36	1.6	48.9	32.8	
	7	1156.2	553.09	36	2.1	55.3	42	1112	593.34	36	1.9	53.2	38.8	1053.5	645.77	36	1.6	50.4	34.8	
	8	1188.9	558.25	36	2.1	56.9	44.4	1143.8	598.63	36	1.9	54.7	41.1	1084.2	651.17	36	1.7	51.9	36.9	
	9	1218.5	562.83	36	2.2	58.3	46.6	1172.4	603.27	36	1.9	56.1	43.2	1111.5	655.81	36	1.7	53.2	38.8	
	5	1118	569.51	36	2	53.5	39.3	1073.8	611.39	36	1.8	51.4	36.2	1015.2	666.03	36	1.5	48.6	32.2	
	6	1150.5	575.13	36	2	55	41.6	1105.3	617.2	36	1.8	52.9	38.4	1045.5	672.01	36	1.6	50	34.2	
	7	1183.3	580.68	36	2	56.6	44	1137.2	622.92	36	1.8	54.4	40.6	1076.3	677.88	36	1.6	51.5	36.4	
	8	1216.8	586.26	36	2.1	58.2	46.5	1169.8	628.63	36	1.9	56	43	1107.8	683.69	36	1.6	53	38.5	
	9	1247.3	591.24	36	2.1	59.7	48.8	1199.2	633.66	36	1.9	57.4	45.2	1135.8	688.7	36	1.6	54.3	40.5	
6385 S	5	1183.9	585.42	40	2	55.4	42.2	1113.9	628.41	40	1.8	53.3	39	1054.4	684.57	40	1.5	50.4	34.9	
	6	1192.8	591.05	40	2	57.1	44.7	1147	634.24	40	1.8	54.9	41.3	1086.2	690.57	40	1.6	52	37	
	7	1227	596.9	40	2.1	58.7	47.3	1180.3	639.96	40	1.8	56.5	43.8	1118.4	696.45	40	1.6	53.5	39.3	
	8	1262.1	602.18	40	2.1	60.4	49.9	1214.5	645.68	40	1.9	58.1	46.3	1151.4	702.27	40	1.6	55.1	41.7	
	9	1294.2	607.19	40	2.1	61.9	52.5	1245.5	650.75	40	1.9	59.6	48.7	1181.1	707.33	40	1.7	56.5	43.8	
	5	1183.9	612.06	40	1.9	56.6	44	1137.3	657.04	40	1.7	54.4	40.6	1075.5	715.75	40	1.5	51.4	36.3	
	6	1218.9	618.14	40	2	58.3	46.6	1171.2	663.32	40	1.8	56	43.1	1108.1	722.2	40	1.5	53	38.6	
	7	1253.8	624.11	40	2	60	49.3	1205.3	669.47	40	1.8	57.7	45.6	1141	728.5	40	1.6	54.6	40.9	
	8	1289.3	630.11	40	2	61.7	52.1	1240.2	675.61	40	1.8	59.3	48.3	1174.7	734.73	40	1.6	56.2	43.4	
	9	1322.7	635.53	40	2.1	63.3	54.7	1272.1	681.07	40	1.9	60.8	50.7	1205.2	740.17	40	1.6	57.6	45.6	
6410 S	5	1244.1	621.16																	

SKM Compact Screw Chillers

APCY-S Series - R-134a

IPLV CALCULATION

Model	IPLV Calculation					
	Dry Bulb*, °F	55	65	80	95	IPLV
APCY	% Load	25%	50%	75%	100%	
5050 S	Capacity, ton _R	12.7	25.5	38.2	50.9	12.1
	Power, kW	12.4	25.1	37.9	59.08	
	EER , Btu / W.h	12.3	12.2	12.1	10.3	
5060 S	Capacity, ton _R	14.7	29.3	44	58.6	12.2
	Power, kW	14.3	28.6	43.3	69.1	
	EER , Btu / W.h	12.3	12.3	12.2	10.2	
5070 S	Capacity, ton _R	17.8	35.6	53.3	71.1	12.2
	Power, kW	17	34.7	53.7	82.82	
	EER , Btu / W.h	12.6	12.3	11.9	10.3	
5085 S	Capacity, ton _R	20.7	41.3	62	82.6	12.5
	Power, kW	19.4	39.2	61	91.81	
	EER , Btu / W.h	12.8	12.6	12.2	10.8	
5100 S	Capacity, ton _R	23.6	47.1	70.7	94.2	12.6
	Power, kW	22.1	44.5	67.5	107.29	
	EER , Btu / W.h	12.8	12.7	12.6	10.5	
5110 S	Capacity, ton _R	25.8	51.6	77.3	103.1	13.5
	Power, kW	21.4	44.9	71.9	118.1	
	EER , Btu / W.h	14.5	13.8	12.9	10.5	
5120 S	Capacity, ton _R	29.7	59.5	89.2	118.9	13.6
	Power, kW	24.6	51	82.3	132.9	
	EER , Btu / W.h	14.5	14	13	10.7	
5135 S	Capacity, ton _R	32.9	65.8	98.7	131.6	13.8
	Power, kW	27	55.6	90.4	147.14	
	EER , Btu / W.h	14.6	14.2	13.1	10.7	
5145 S	Capacity, ton _R	36.2	72.4	108.6	144.8	14.0
	Power, kW	29.2	60.3	98	165.71	
	EER , Btu / W.h	14.9	14.4	13.3	10.5	
5155 S	Capacity, ton _R	38.8	77.6	116.4	155.2	14.2
	Power, kW	30.6	62.9	105	175.88	
	EER , Btu / W.h	15.2	14.8	13.3	10.6	
5165 S	Capacity, ton _R	40.8	81.5	122.3	163	14.0
	Power, kW	32.6	67.4	110.3	191.84	
	EER , Btu / W.h	15	14.5	13.3	10.2	
5185 S	Capacity, ton _R	45.8	91.7	137.5	183.3	14.5
	Power, kW	35.2	72.4	122.2	200.92	
	EER , Btu / W.h	15.6	15.2	13.5	10.9	
5195 S	Capacity, ton _R	48.8	97.7	146.5	195.3	14.3
	Power, kW	37.8	78.7	132.2	217.1	
	EER , Btu / W.h	15.5	14.9	13.3	10.8	
5210 S	Capacity, ton _R	51.9	103.7	155.6	207.4	14.1
	Power, kW	39.2	85.2	142.5	232.82	
	EER , Btu / W.h	15.9	14.6	13.1	10.7	
5220 S	Capacity, ton _R	54.4	108.9	163.3	217.7	14.0
	Power, kW	41.1	90.1	150.7	248.77	
	EER , Btu / W.h	15.9	14.5	13	10.5	

Model	IPLV Calculation					
	Dry Bulb*, °F	55	65	80	95	IPLV
APCY	% Load	25%	50%	75%	100%	
5230 S	Capacity, ton _R	57.7	115.3	173	230.6	14.2
	Power, kW	43.3	94.1	157.3	257.47	
	EER , Btu / W.h	16	14.7	13.2	10.7	
5240 S	Capacity, ton _R	59.6	119.1	178.7	238.2	14.1
	Power, kW	45	97.2	163.7	275.62	
	EER , Btu / W.h	15.9	14.7	13.1	10.4	
5255 S	Capacity, ton _R	62.9	125.9	188.8	251.7	14.4
	Power, kW	46.3	100.7	171.6	284.97	
	EER , Btu / W.h	16.3	15	13.2	10.6	
5265 S	Capacity, ton _R	65.9	131.8	197.6	263.5	14.4
	Power, kW	48.2	106.1	178.3	301.56	
	EER , Btu / W.h	16.4	14.9	13.3	10.5	
5280 S	Capacity, ton _R	71.8	143.6	215.3	287.1	14.8
	Power, kW	51	110.5	192.8	311.51	
	EER , Btu / W.h	16.9	15.6	13.4	11.1	
5295 S	Capacity, ton _R	74.9	149.7	224.6	299.4	14.5
	Power, kW	54.8	117.4	205.7	328.05	
	EER , Btu / W.h	16.4	15.3	13.1	11	
5305 S	Capacity, ton _R	76.8	153.5	230.3	307	14.7
	Power, kW	51.8	122	206.2	343.72	
	EER , Btu / W.h	17.8	15.1	13.4	10.7	
5310 S	Capacity, ton _R	78.8	157.6	236.3	315.1	14.5
	Power, kW	53.7	126.9	213.2	360.18	
	EER , Btu / W.h	17.6	14.9	13.3	10.5	
5320 S	Capacity, ton _R	81.5	162.9	244.4	325.8	14.5
	Power, kW	55.9	130.3	222.2	370.42	
	EER , Btu / W.h	17.5	15	13.2	10.6	
5330 S	Capacity, ton _R	83.4	166.9	250.3	333.7	14.4
	Power, kW	54.7	136.2	229.3	386.79	
	EER , Btu / W.h	18.3	14.7	13.1	10.4	
5345 S	Capacity, ton _R	87.3	174.6	261.8	349.1	14.4
	Power, kW	60.2	142.5	236.2	393.41	
	EER , Btu / W.h	17.4	14.7	13.3	10.6	
5355 S	Capacity, ton _R	90.2	180.4	270.5	360.7	14.5
	Power, kW	61.9	146.3	242.2	409.86	
	EER , Btu / W.h	17.5	14.8	13.4	10.6	
5365 S	Capacity, ton _R	90.8	181.6	272.3	363.1	14.5
	Power, kW	62.3	147.2	245.7	410.77	
	EER , Btu / W.h	17.5	14.8	13.3	10.6	
5380 S	Capacity, ton _R	94.7	189.4	284	378.7	14.7
	Power, kW	63.5	149.5	256.2	417.86	
	EER , Btu / W.h	17.9	15.2	13.3	10.9	
5395 S	Capacity, ton _R	97.6	195.3	292.9	390.5	14.6
	Power, kW	66.9	155.2	264.3	434.2	
	EER , Btu / W.h	17.5	15.1	13.3	10.8	

Table 21

Legend

EER Energy Efficiency Ratio. | **IPLV** Integrated Part Load Value.

* Condenser Entering Air Dry Bulb Temperature.

Notes:

1. Above Part-load performance are with following condition.

Evaporator Leaving Water Temperature : 44°F | Evaporator Water Temperature Change: 10°F | Evaporator Fouling Factor: 0.000100 h ft²/°F/Btu.

2. Power input mentioned in this page should not be used for cable or fuse selection. MCA and MFA values given in the electrical data pages (34 to 39) should be referred for the same.

3. Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at www.ahridirectory.org

SKM Compact Screw Chillers

APCY-S Series - R-134a

IPLV CALCULATION

Model	IPLV Calculation					IPLV
	Dry Bulb*, °F	55	65	80	95	
% Load	25%	50%	75%	100%	IPLV	
APCY						12.0
6060 S	Capacity, ton _R	15.7	31.5	47.2	62.9	
	Power, kW	15	31	48.4	76.4	
	EER , Btu / W.h	12.6	12.2	11.7	9.9	11.8
6070 S	Capacity, ton _R	17.5	35	52.4	69.9	
	Power, kW	17.1	34.7	55.2	88.38	
	EER , Btu / W.h	12.3	12.1	11.4	9.5	
6085 S	Capacity, ton _R	21.4	42.8	64.2	85.6	12.0
	Power, kW	20.4	41.8	66.4	106.22	
	EER , Btu / W.h	12.6	12.3	11.6	9.7	
6100 S	Capacity, ton _R	24.4	48.9	73.3	97.7	12.2
	Power, kW	22.9	46.9	75.2	115.95	
	EER , Btu / W.h	12.8	12.5	11.7	10.1	
6115 S	Capacity, ton _R	28.7	57.5	86.2	114.9	12.3
	Power, kW	26.7	54.3	88.4	137.67	
	EER , Btu / W.h	12.9	12.7	11.7	10	
6130 S	Capacity, ton _R	31.8	63.6	95.4	127.2	13.7
	Power, kW	26	52.3	91.6	139.69	
	EER , Btu / W.h	14.7	14.6	12.5	10.9	
6145 S	Capacity, ton _R	35.7	71.4	107	142.7	13.1
	Power, kW	30.4	61.6	106.1	164.53	
	EER , Btu / W.h	14.1	13.9	12.1	10.4	
6160 S	Capacity, ton _R	39.6	79.2	118.7	158.3	13.0
	Power, kW	33.9	68.9	119.7	187.02	
	EER , Btu / W.h	14	13.8	11.9	10.2	
6170 S	Capacity, ton _R	42.4	84.8	127.1	169.5	12.8
	Power, kW	36.3	75.9	129.3	209.41	
	EER , Btu / W.h	14	13.4	11.8	9.7	
6185 S	Capacity, ton _R	46.9	93.8	140.6	187.5	13.1
	Power, kW	39.9	80.4	141.8	224.65	
	EER , Btu / W.h	14.1	14	11.9	10	
6200 S	Capacity, ton _R	49.2	98.4	147.6	196.8	13.0
	Power, kW	41.9	84.3	151.4	245.81	
	EER , Btu / W.h	14.1	14	11.7	9.6	
6215 S	Capacity, ton _R	53.8	107.7	161.5	215.3	13.7
	Power, kW	43.6	89.1	155	254	
	EER , Btu / W.h	14.8	14.5	12.5	10.2	
6230 S	Capacity, ton _R	57.2	114.4	171.5	228.7	13.5
	Power, kW	46.7	94.7	168.7	274.83	
	EER , Btu / W.h	14.7	14.5	12.2	10	
6245 S	Capacity, ton _R	61.3	122.7	184	245.3	13.6
	Power, kW	50	102.1	178.1	295.2	
	EER , Btu / W.h	14.7	14.4	12.4	10	
6260 S	Capacity, ton _R	64.4	128.8	193.1	257.5	13.4
	Power, kW	53.7	108.1	188.4	315.62	
	EER , Btu / W.h	14.4	14.3	12.3	9.8	

Model	IPLV Calculation					IPLV
	Dry Bulb*, °F	55	65	80	95	
% Load	25%	50%	75%	100%	IPLV	
APCY						13.8
6270 S	Capacity, ton _R	68.5	137	205.4	273.9	
	Power, kW	55.2	112.6	195.6	326.51	
	EER , Btu / W.h	14.9	14.6	12.6	10.1	13.5
6285 S	Capacity, ton _R	70.6	141.1	211.7	282.2	
	Power, kW	58	117.6	208.2	350.54	
	EER , Btu / W.h	14.6	14.4	12.2	9.7	
6295 S	Capacity, ton _R	73.9	147.8	221.6	295.5	13.6
	Power, kW	59.9	124	212.7	360.64	
	EER , Btu / W.h	14.8	14.3	12.5	9.8	
6310 S	Capacity, ton _R	77.2	154.5	231.7	308.9	13.5
	Power, kW	63	130.6	224.2	382.08	
	EER , Btu / W.h	14.7	14.2	12.4	9.7	
6320 S	Capacity, ton _R	79.6	159.2	238.8	318.4	13.6
	Power, kW	65	132.5	231.1	386.44	
	EER , Btu / W.h	14.7	14.4	12.4	9.9	
6335 S	Capacity, ton _R	84.4	168.7	253.1	337.4	14.0
	Power, kW	67.1	136.6	237.3	394.41	
	EER , Btu / W.h	15.1	14.8	12.8	10.3	
6350 S	Capacity, ton _R	87.8	175.6	263.3	351.1	13.8
	Power, kW	70.7	144.3	250.8	415.77	
	EER , Btu / W.h	14.9	14.6	12.6	10.1	
6365 S	Capacity, ton _R	90.6	181.2	271.7	362.3	13.8
	Power, kW	71.5	146.9	262.9	435.77	
	EER , Btu / W.h	15.2	14.8	12.4	10	
6375 S	Capacity, ton _R	92.9	185.8	278.7	371.6	13.9
	Power, kW	72.9	149.6	267.6	457.25	
	EER , Btu / W.h	15.3	14.9	12.5	9.8	
6385 S	Capacity, ton _R	96.1	192.2	288.3	384.4	13.7
	Power, kW	75.9	156.9	281.3	470.24	
	EER , Btu / W.h	15.2	14.7	12.3	9.8	
6395 S	Capacity, ton _R	98.4	196.8	295.2	393.6	13.6
	Power, kW	78.7	160.7	290.4	491.62	
	EER , Btu / W.h	15	14.7	12.2	9.6	
6410 S	Capacity, ton _R	103.1	206.2	309.3	412.4	13.9
	Power, kW	81.4	166.1	296.9	499.13	
	EER , Btu / W.h	15.2	14.9	12.5	9.9	
6435 S	Capacity, ton _R	106.5	213	319.4	425.9	13.8
	Power, kW	83.5	172.7	309.1	520.65	
	EER , Btu / W.h	15.3	14.8	12.4	9.8	
6450 S	Capacity, ton _R	111	222.1	333.1	444.1	14.1
	Power, kW	85.4	176.5	317.2	528.62	
	EER , Btu / W.h	15.6	15.1	12.6	10.1	
6475 S	Capacity, ton _R	114.4	228.7	343.1	457.4	14.0
	Power, kW	88.6	183	329.4	549.66	
	EER , Btu / W.h	15.5	15	12.5	10	

Table 22

Legend

EEER Energy Efficiency Ratio. | **IPLV** Integrated Part Load Value.

* Condenser Entering Air Dry Bulb Temperature.

Notes:

1.Above Part-load performance are with following condition.

Evaporator Leaving Water Temperature : 44°F | Evaporator Water Temperature Change: 10°F | Evaporator Fouling Factor: 0.000100 h ft^{2.0}F/Btu.

2.Power input mentioned in this page should not be used for cable or fuse selection. MCA and MFA values given in the electrical data pages (34 to 39) should be referred for the same.

3.Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at www.ahridirectory.org



SKM Compact Screw Chillers

APCY-S Series - R-134a

Capacity Correction & Limits

Evaporator Chiller Limits of Operation

Maximum LCWT : 50°F (10°C)
 Maximum ECWT : 76°F (24.4°C)*
 Minimum LCWT : 40°F (4.4°C)

For Lower LCWT ethylene glycol solution to be used, consult SKM.
 (*For short periods.)

Range & Flow Limits

Range limit 8°F - 16°F (4.4°C - 8.9°C) except where limited by water flow rate limits for evaporator. For minimum & maximum water flow rate refer to page 32.

Working & Test Pressures

Evaporator Pressure		Refrigerant	Water
Maximum Working Pressure	psig	295.3	145
	kPa	1995	1000
Test Pressure	psig	384.3	207.4
	kPa	2655	1400

Table 23

Condenser Pressure		Refrigerant
Maximum Working Pressure	psig	300
	kPa	2068
Test Pressure	psig	450
	kPa	3102

Table 24

Cooler Fouling Factors

The units are rated at 0.0001 h ft²/Btu (0.0180m²K/kW). Other than this fouling factor use SKM Air Cooled Chiller Selection Software to determine the unit performance.

An increase in the fouling factor, results in decrease in the unit capacity and efficiency.

Altitude Correction Factor

The units ratings are based on sea level. Above sea level apply the following correction factors:

Altitude		Capacity Multiplier	Power Multiplier
Feet	Meters		
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 25

Range Correction Factors

Capacity ratings based on 10°F (IP) and 5°C (SI) chilled water range. For other than this range please use correction factor below.

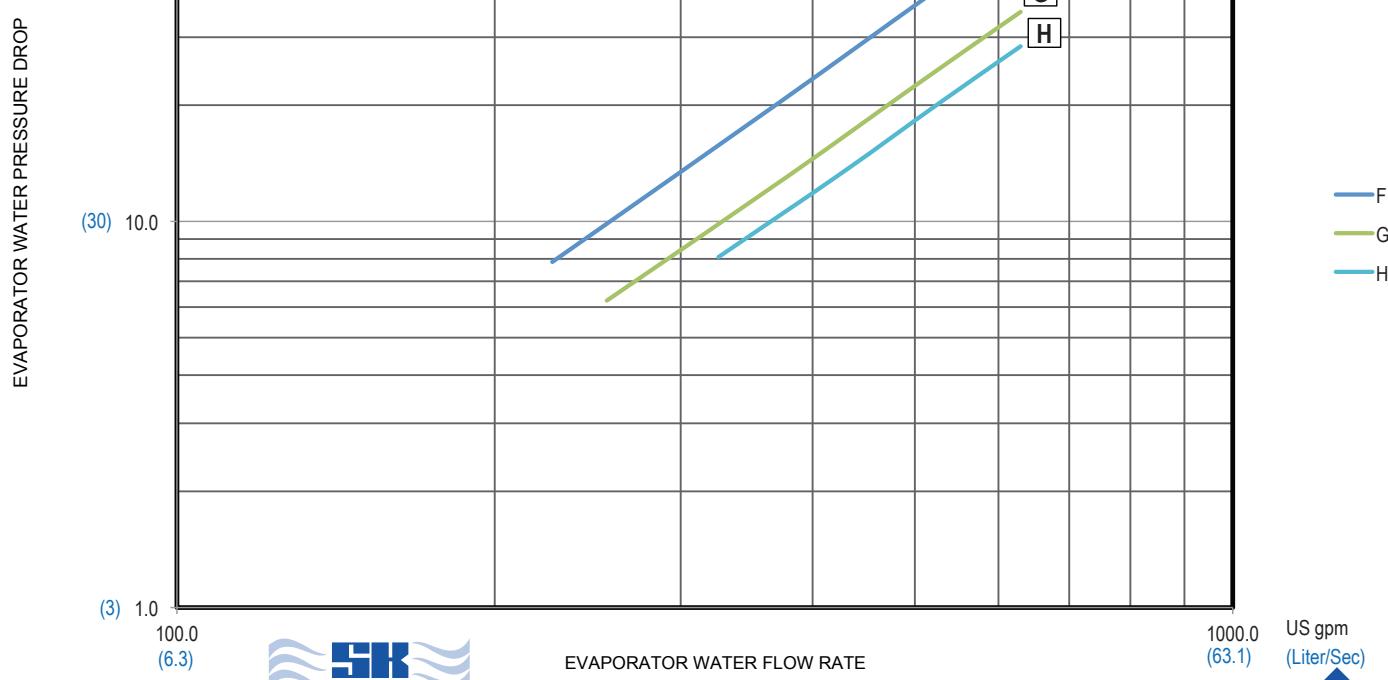
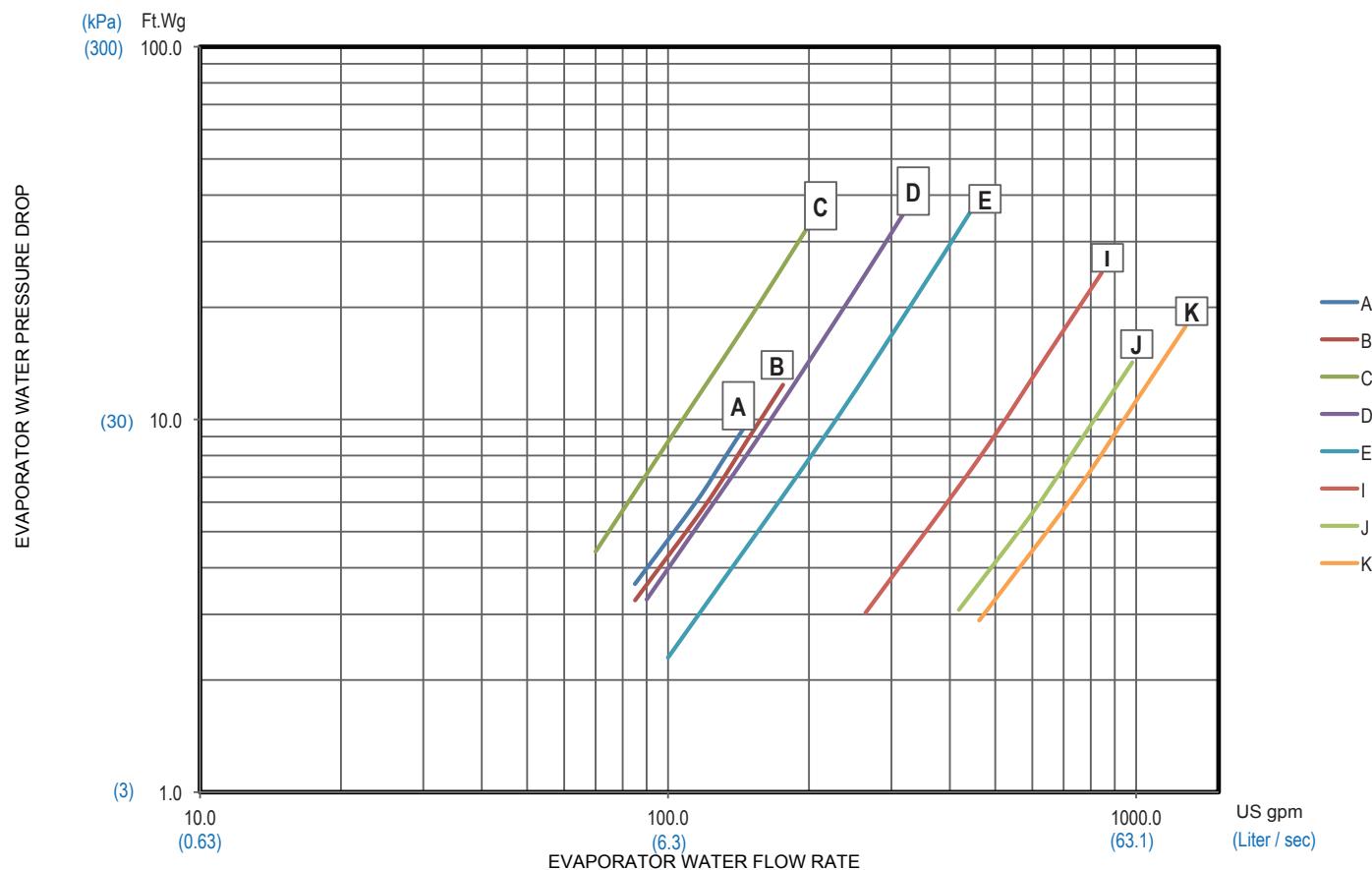
Range		Capacity Multiplier	Power Multiplier
°F	°C		
8	4.4	0.995	0.998
10	5.5	1	1
12	6.7	1.005	1.002
14	7.8	1.01	1.004
16	8.9	1.015	1.006

Table 26

SKM Compact Screw Chillers

APCY-S Series - R-134a

Evaporator Water Pressure Drop



SKM Compact Screw Chillers

APCY-S Series - R-134a

Evaporator Water Pressure Drop

Graph	APCY Models		Water Flow Rate			
	Standard Efficiency		Minimum		Maximum	
	50 Hz	60 Hz	US gpm	L/s	US gpm	L/s
A	5050S	-	85.0	5.36	148.5	9.37
B	5060S	6060S	85.0	5.36	178.0	11.23
C	5070S	6070S	70.0	4.42	208.5	13.15
D	5085S, 5100S	6085S, 6100S	90.0	5.68	323.0	20.38
E	-	6115S	120.0	7.57	451.0	28.45
E	5110S, 5120S	-	100.0	6.31	450.0	28.39
F	5135S	6130S, 6145S	226.7	14.31	656.0	41.39
G	5145, 5155, 5165	6160S, 6170S	255.4	16.11	629.6	39.72
H	5185S, 5195S	6185S, 6200S, 6215S, 6230S	325.8	20.56	662.5	41.80
	5365S, 5380S, 5395S	6365S, 6375S, 6385S, 6395S, 6410S, 6435S, 6450S, 6475S				
I	5210S, 5220S	-	264.2	16.67	843.8	53.24
J	5230S, 5240S	6245S, 6260S	418.3	26.39	883.1	55.71
J	5255S, 5265S	6270S, 6285S, 6295S, 6310S	418.3	26.39	981.2	61.90
K	5280S, 5295S, 5305S, 5310S, 5320S, 5330S, 5345S, 5355S	6320S, 6335S, 6350S	462.3	29.17	1275.6	80.48

Table 27

Note : To calculate the water pressure drop for shaded models, use the indicated graphs and halve the WFR as the evaporators are connected in parallel.

SKM Compact Screw Chillers

APCY-S Series - R-134a

Selection Procedure

APCY-S 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 170.0 TR to cool water from 54°F to 44°F at 2000 ft. altitude, 0.0001 fouling factor, power supply 415V/3Ph/50Hz and 115 °F ambient Temperature.

Selection:

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

Capacity Multiplier	
Altitude	0.99
Tabulated rated capacity	= $\frac{170}{0.99}$
	= 171.7 TR

Refer to capacity rating 50Hz under 115 °F condenser entering air temperature and select a chiller giving a capacity nearest larger to 171.7 at 44 °F LCWT. Select model APCY-S 5195-S giving a capacity of 175.3 TR.

Apply correction factors to the selected unit to find actual capacity .

$$\begin{aligned}\text{Capacity} &= 175.3 \times 0.99 \\ &= 173.5 \text{ TR}\end{aligned}$$

Calculation of Water Flow Rate (WFR)

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

$$\text{WFR (US gpm)} = \frac{\text{C.CAP (TR)} \times 24}{\text{Range } (\text{°F})}$$

Example 2: (SI System)

Select an Air Cooled Package Chiller giving a capacity of **630 kW** of refrigeration to cool water from **12°C** to **7°C** at 610M altitude, 0.018 fouling factor, power supply 380V/3Ph/60Hz and **38 °C** ambient Temperature.

Selection:

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

Capacity Multiplier	
Altitude	0.99
Tabulated rated capacity	= <u>630</u> 0.99
	= <u>636.4 kW</u>

Refer to capacity rating 60Hz under 38 °C condenser entering air temperature and select a chiller giving a capacity nearest larger to 636.4 at 7 °C LCWT. Select model 6185-S giving a capacity of 645.6 kW .

Apply correction factors to the selected unit to find actual capacity.

$$\begin{aligned}\text{Capacity} &= 645.6 \times 0.99 \\ &= 639.1 \text{ kW}\end{aligned}$$

Calculation of Water Flow Rate (WFR)

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

$$\text{WFR (L/s)} = \frac{\text{C.CAP (kW)} \times 0.239}{\text{Range } (\text{°C})}$$

$$= \frac{639.1 \times 0.239}{5} = 30.5 \text{ L/s.}$$

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



SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 380V/3PH/50Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
5050S	315	180	524	1	131	507	4	3.96	16.5
5060S	400	202	680	1	149	663	4	3.96	16.5
5070S	500	250	632	1	181	615	6	3.96	16.5
5085S	500	278	887	1	203	870	6	3.96	16.5
5100S	630	324	969	1	240	952	6	3.96	16.5
5110S	500	319	667	2	131	507	6	3.96	16.5
5120S	630	367	845	2	149	663	8	3.96	16.5
5135S	630	407	797	1+1	181+149	615+663	8	3.96	16.5
5145S	630	439	829	2	181	615	8	3.96	16.5
5155S	800	475	1088	1+1	203+181	870+615	10	3.96	16.5
5165S	800	497	1110	2	203	870	10	3.96	16.5
5185S	800	551	1196	1+1	240+203	952+870	12	3.96	16.5
5195S	1000	588	1233	2	240	952	12	3.96	16.5
5210S	800	604	994	2+1	181+149	615+663	12	3.96	16.5
5220S	1000	636	1026	3	181	615	12	3.96	16.5
5230S	1000	672	1281	1+2	203+181	870+615	14	3.96	16.5
5240S	1000	694	1307	2+1	203+181	870+615	14	3.96	16.5
5255S	1000	724	1337	3	203	870	16	3.96	16.5
5265S	1000	770	1415	1+2	240+203	952+870	16	3.96	16.5
5280S	1250	815	1460	2+1	240+203	952+870	18	3.96	16.5
5295S	1250	852	1497	3	240	952	18	3.96	16.5
5305S	1250	869	1482	1+3	203+181	870+615	18	3.96	16.5
5310S	1250	891	1504	2+2	203+181	870+615	18	3.96	16.5
5320S	1250	921	1534	3+1	203+181	870+615	20	3.96	16.5
5330S	1250	943	1556	4	203	870	20	3.96	16.5
5345S	1250	997	1642	1+3	240+203	952+870	22	3.96	16.5
5355S	1500	1034	1679	2+2	240+203	952+870	22	3.96	16.5
5365S	1500	1034	1679	2+2	240+203	952+870	22	3.96	16.5
5380S	1500	1079	1724	3+1	240+203	952+870	24	3.96	16.5
5395S	1500	1116	1761	4	240	952	24	3.96	16.5

Table 28

NOTE:

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

Legend

MFA Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.

MCA Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

ICF Maximum Instantaneous Current Flow.

RLA Rated Load Amps. (at worst operating condition) .

LRA Locked Rotor Amps.

FLA Full Load Amps.

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage.

SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 415V/3PH/50Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
5050S	315	165	498	1	119	481	4	3.96	16.5
5060S	400	187	625	1	137	608	4	3.96	16.5
5070S	400	232	612	1	166	595	6	3.96	16.5
5085S	500	257	843	1	186	826	6	3.96	16.5
5100S	630	299	908	1	220	891	6	3.96	16.5
5110S	500	292	629	2	119	481	6	3.96	16.5
5120S	500	340	778	2	137	608	8	3.96	16.5
5135S	630	377	765	1+1	166+137	595+608	8	3.96	16.5
5145S	630	406	794	2	166	595	8	3.96	16.5
5155S	630	439	1029	1+1	186+166	826+595	10	3.96	16.5
5165S	800	459	1049	2	186	826	10	3.96	16.5
5185S	800	509	1118	1+1	220+186	891+826	12	3.96	16.5
5195S	800	543	1152	2	220	891	12	3.96	16.5
5210S	800	559	947	2+1	166+137	595+608	12	3.96	16.5
5220S	800	588	976	3	166	595	12	3.96	16.5
5230S	800	621	1207	1+2	186+166	826+595	14	3.96	16.5
5240S	1000	641	1231	2+1	186+166	826+595	14	3.96	16.5
5255S	1000	669	1259	3	186	826	16	3.96	16.5
5265S	1000	711	1320	1+2	220+186	891+826	16	3.96	16.5
5280S	1000	753	1362	2+1	220+186	891+826	18	3.96	16.5
5295S	1000	787	1396	3	220	891	18	3.96	16.5
5305S	1000	803	1393	1+3	186+166	826+595	18	3.96	16.5
5310S	1000	823	1413	2+2	186+166	826+595	18	3.96	16.5
5320S	1250	851	1441	3+1	186+166	826+595	20	3.96	16.5
5330S	1250	871	1461	4	186	826	20	3.96	16.5
5345S	1250	921	1530	1+3	220+186	891+826	22	3.96	16.5
5355S	1250	955	1564	2+2	220+186	891+826	22	3.96	16.5
5365S	1250	955	1564	2+2	220+188	891+826	22	3.96	16.5
5380S	1250	997	1606	3+1	220+186	891+826	24	3.96	16.5
5395S	1250	1031	1640	4	220	891	24	3.96	16.5

Table 29

NOTE:

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

Legend

MFA Maximum Fuse Amps (for fuse/circuit breaker sizing),

complies with NEC Article 440-22 & 430-52.

MCA Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

ICF Maximum Instantaneous Current Flow.

RLA Rated Load Amps. (at worst operating condition) .

LRA Locked Rotor Amps.

FLA Full Load Amps.

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage.



SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 440V/3PH/50Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
5050S	315	156	457	1	113	441	4	3.6	16
5060S	315	174	558	1	128	542	4	3.6	16
5070S	400	217	586	1	156	570	6	3.6	16
5085S	500	240	800	1	175	784	6	3.6	16
5100S	500	280	844	1	207	828	6	3.6	16
5110S	400	276	581	2	113	441	6	3.6	16
5120S	500	317	700	2	128	542	8	3.6	16
5135S	630	352	728	1+1	156+128	570+542	8	3.6	16
5145S	630	380	756	2	156	570	8	3.6	16
5155S	630	411	974	1+1	175+156	784+570	10	3.6	16
5165S	630	430	993	2	175	784	10	3.6	16
5185S	800	477	1041	1+1	207+175	828+784	12	3.6	16
5195S	800	509	1073	2	207	828	12	3.6	16
5210S	800	522	899	2+1	156+128	570+542	12	3.6	16
5220S	800	550	927	3	156	570	12	3.6	16
5230S	800	581	1141	1+2	175+156	784+570	14	3.6	16
5240S	800	600	1163	2+1	175+156	784+570	14	3.6	16
5255S	800	626	1190	3	175	784	16	3.6	16
5265S	1000	666	1230	1+2	207+175	828+784	16	3.6	16
5280S	1000	706	1269	2+1	207+175	828+784	18	3.6	16
5295S	1000	738	1301	3	207	828	18	3.6	16
5305S	1000	752	1315	1+3	175+156	784+570	18	3.6	16
5310S	1000	771	1334	2+2	175+156	784+570	18	3.6	16
5320S	1000	797	1360	3+1	175+156	784+570	20	3.6	16
5330S	1000	816	1379	4	175	784	20	3.6	16
5345S	1250	863	1427	1+3	207+175	828+784	22	3.6	16
5355S	1250	895	1459	2+2	207+175	828+784	22	3.6	16
5365S	1250	895	1459	2+2	207+175	828+784	22	3.6	16
5380S	1250	934	1498	3+1	207+175	828+784	24	3.6	16
5395S	1250	966	1530	4	207	828	24	3.6	16

Table 30

NOTE:

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

Legend

MFA Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.
MCA Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

ICF Maximum Instantaneous Current Flow.
RLA Rated Load Amps. (at worst operating condition) .
LRA Locked Rotor Amps.
FLA Full Load Amps.

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage.

SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 380 - 400V/3PH/60Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
6060S	400	217	632	1	157	614	4	5.3	17.5
6070S	500	246	795	1	180	777	4	5.3	17.5
6085S	630	304	797	1	218	779	6	5.3	17.5
6100S	630	337	1048	1	244	1030	6	5.3	17.5
6115S	800	393	1160	1	289	1142	6	5.3	17.5
6130S	630	396	805	2	157	614	8	5.3	17.5
6145S	630	447	996	2	180	777	8	5.3	17.5
6160S	800	495	998	1+1	218+180	779+777	8	5.3	17.5
6170S	800	533	1036	2	218	779	8	5.3	17.5
6185S	1000	576	1293	1+1	244+218	1030+779	10	5.3	17.5
6200S	1000	602	1319	2	244	1030	10	5.3	17.5
6215S	1000	669	1436	1+1	289+244	1142+1030	12	5.3	17.5
6230S	1250	714	1481	2	289	1142	12	5.3	17.5
6245S	1000	734	1237	2+1	218+180	779+777	12	5.3	17.5
6260S	1000	772	1275	3	218	779	12	5.3	17.5
6270S	1250	815	1526	1+2	244+218	1030+779	14	5.3	17.5
6285S	1250	841	1558	2+1	244+218	1030+779	14	5.3	17.5
6295S	1250	878	1594	3	244	1030	16	5.3	17.5
6310S	1250	934	1701	1+2	289+244	1142+1030	16	5.3	17.5
6320S	1250	934	1701	1+2	289+244	1142+1030	16	5.3	17.5
6335S	1500	990	1757	2+1	289+244	1142+1030	18	5.3	17.5
6350S	1500	1035	1802	3	289	1142	18	5.3	17.5
6365S	1500	1054	1771	1+3	244+218	1030+779	18	5.3	17.5
6375S	1500	1080	1797	2+2	244+218	1030+779	18	5.3	17.5
6385S	1000+1000	602+576	1318+1292	3+1	244+218	1030+779	20	5.3	17.5
6395S	1000+1000	602+602	1318+1318	4	244	1030	20	5.3	17.5
6410S	1000+1000	669+602	1436+1318	1+3	289+244	1142+1030	22	5.3	17.5
6435S	1000+1000	714+602	1481+1318	2+2	289+244	1142+1030	22	5.3	17.5
6450S	1000+1000	714+669	1481+1436	3+1	289+244	1142+1030	24	5.3	17.5
6475S	1000+1000	714+714	1481+1481	4	289	1142	24	5.3	17.5

Table 31

NOTE:

220-230V/1PH/60Hz control power must be supplied from a separate source, through field supplied and installed disconnect switch

Legend

- MFA** Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.
- MCA** Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

- ICF** Maximum Instantaneous Current Flow.
- RLA** Rated Load Amps. (at worst operating condition).
- LRA** Locked Rotor Amps.
- FLA** Full Load Amps.

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage.

SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 460V/3PH/60Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
6060S	315	183	518	1	130	497	4	5	21
6070S	400	205	661	1	148	640	4	5	21
6085S	500	255	667	1	180	646	6	5	21
6100S	500	281	936	1	201	915	6	5	21
6115S	630	329	1017	1	239	996	6	5	21
6130S	500	333	663	2	130	497	8	5	21
6145S	630	373	829	2	148	640	8	5	21
6160S	630	413	835	1+1	180+148	646+640	8	5	21
6170S	630	445	867	2	180	646	8	5	21
6185S	800	481	1141	1+1	201+180	915+646	10	5	21
6200S	800	502	1162	2	201	915	10	5	21
6215S	800	560	1248	1+1	239+201	996+915	12	5	21
6230S	1000	598	1286	2	239	996	12	5	21
6245S	800	613	1035	2+1	180+148	646+640	12	5	21
6260S	1000	645	1067	3	180	646	12	5	21
6270S	1000	681	1336	1+2	201+180	915+646	14	5	21
6285S	1000	702	1362	2+1	201+180	915+646	14	5	21
6295S	1000	733	1393	3	201	915	16	5	21
6310S	1250	781	1469	1+2	239+201	996+915	16	5	21
6320S	1250	781	1469	1+2	239+201	996+915	16	5	21
6335S	1250	829	1517	2+1	239+201	996+915	18	5	21
6350S	1250	867	1555	3	239	996	18	5	21
6365S	1250	881	1541	1+3	201+180	915+646	18	5	21
6375S	1250	902	1562	2+2	201+180	915+646	18	5	21
6385S	1250	933	1593	3+1	201+180	915+646	20	5	21
6395S	1250	954	1614	4	201	915	20	5	21
6410S	1500	1012	1700	1+3	239+201	996+915	22	5	21
6435S	1500	1050	1738	2+2	239+201	996+915	22	5	21
6450S	1500	1098	1786	3+1	239+201	996+915	24	5	21
6475S	1500	1136	1824	4	239	996	24	5	21

Table 32

NOTE:

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

Legend

MFA Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.

MCA Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

ICF Maximum Instantaneous Current Flow.

RLA Rated Load Amps. (at worst operating condition) .

LRA Locked Rotor Amps.

FLA Full Load Amps.

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage.

SKM Compact Screw Chillers

APCY-S Series - R-134a

ELECTRICAL DATA

Power Supply: 220V/3PH/60Hz

MODEL APCY	UNIT CHARACTERISTICS			COMPRESSOR			CONDENSER FAN MOTOR		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA
6060S	800	375	1151	1	271	1121	4	9	29.7
6070S	800	424	1372	1	310	1342	4	9	29.7
6085S	1000	525	1420	1	377	1390	6	9	29.7
6100S	1250	580	1590	1	421	1560	6	9	29.7
6115S	1250	678	1670	1	499	1640	6	9	29.7
6130S	1000	682	1449	2	271	1121	8	9	29.7
6145S	1250	770	1718	2	310	1342	8	9	29.7
6160S	1250	853	1766	1+1	377+310	1390+1342	8	9	29.7
6170S	1500	920	1833	2	377	1390	8	9	29.7
6185S	1500	993	2012	1+1	421+377	1560+1390	10	9	29.7
6200S	1500	1037	2056	2	421	1560	10	9	29.7
6215S	1250+1250	678 + 580	1670+1590	1+1	499+421	1640+1560	12	9	29.7
6230S	1250+1250	678+678	1670+1670	2	499	1640	12	9	29.7
6245S	1500+800	920+423	1833+1372	2+1	377+310	1390+1342	12	9	29.7
6260S	1500+1000	920+507	1833+1420	3	377	1390	12	9	29.7
6270S	1500+1000	975+525	2003+1420	1+2	421+377	1560+1390	14	9	29.7
6285S	1500+1000	1037+507	2056+1420	2+1	421+377	1560+1390	14	9	29.7
6295S	1500+1250	1037+580	2056+1590	3	421	1560	16	9	29.7
6310S	1250+1500	677+1037	1670+2056	1+2	499+421	1640+1560	16	9	29.7
6320S	1250+1500	677+1037	1670+2056	1+2	499+421	1640+1560	16	9	29.7
6335S									
6350S									
6365S									
6375S									
6385S									
6395S									
6410S									
6435S									
6450S									
6475S									

For Details , Please Consult SKM

Table 33

NOTE:

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

Legend

- MFA** Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.
- MCA** Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

- ICF** Maximum Instantaneous Current Flow.
- RLA** Rated Load Amps. (at worst operating condition) .
- LRA** Locked Rotor Amps.
- FLA** Full Load Amps.

Note :

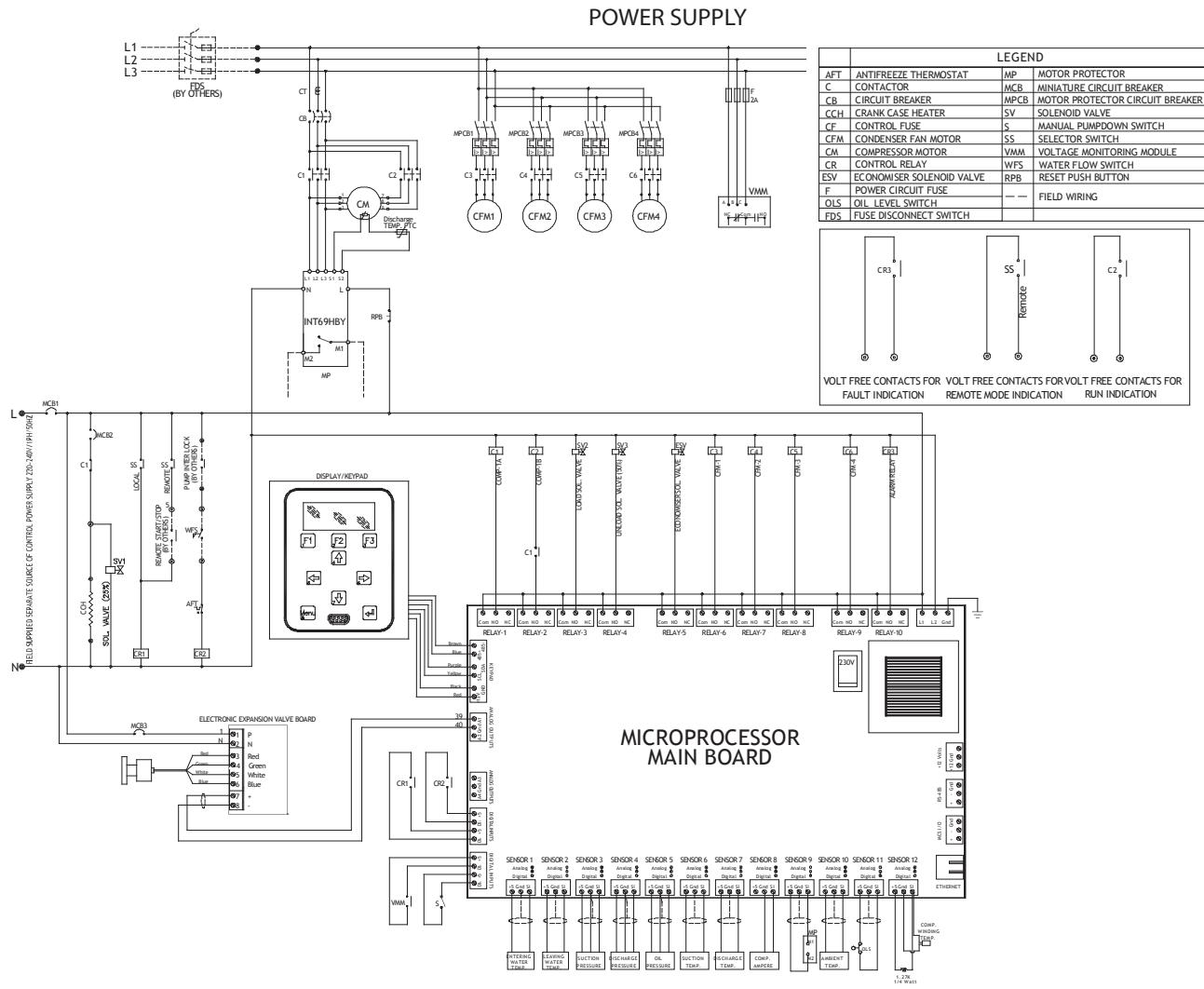
Voltage imbalance not to exceed $\pm 2\%$ of the rated voltage.



SKM Compact Screw Chillers

APCY-S Series - R-134a

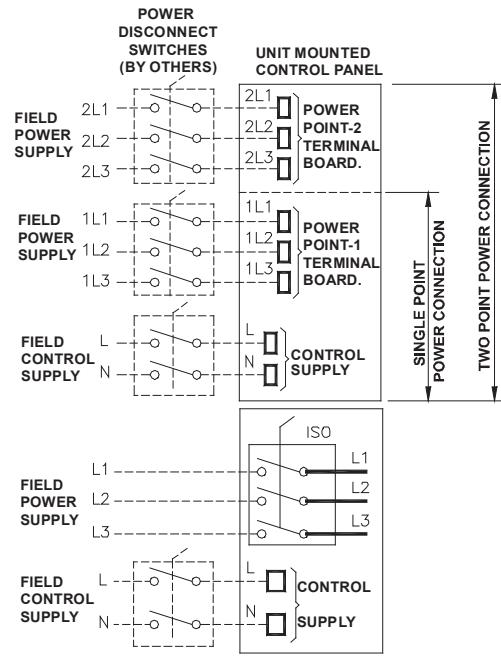
Typical Wiring Diagram



Power Entry Connections

Power Supply	Model APCY	No. of Entry Points
380V/3PH/50HZ		
415V/3PH/50HZ	5050S ~ 5395S	ONE
440V/3PH/50HZ		
220V/3PH/60HZ	6060S ~ 6200S	ONE
	6215S ~ 6320S	TWO
380-400V/3PH/60HZ	6060S ~ 6375S	ONE
	6385S ~ 6475S	TWO
460V/3PH/60HZ	6060S ~ 6475S	ONE

Table 34



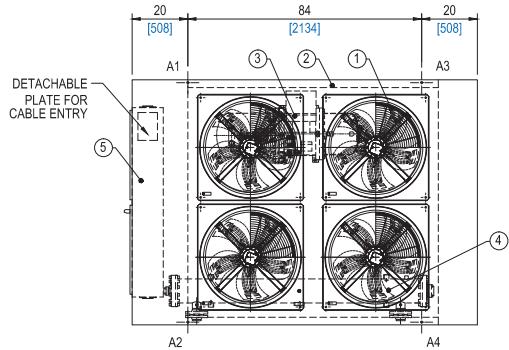
(FOR SINGLE POINT POWER CONNECTION.
WITH BUILT-IN ISOLATOR - CONSULT SKM)

SKM Compact Screw Chillers

APCY-S Series - R-134a

Dimensional Data

APCY Models - 5050S, 5060S & 6060S, 6070S

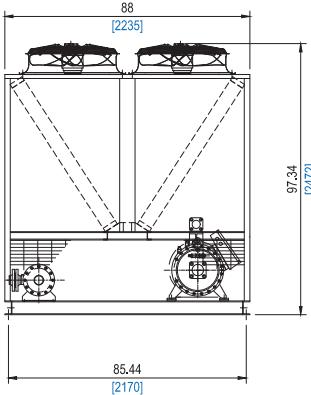
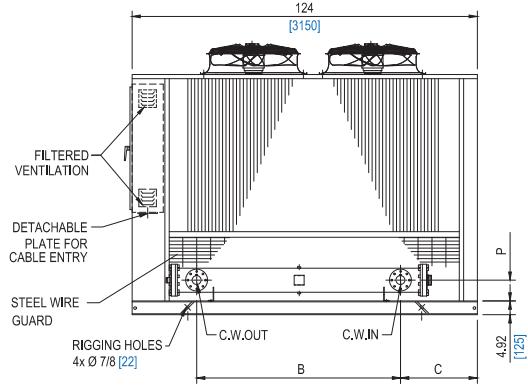


LEGEND

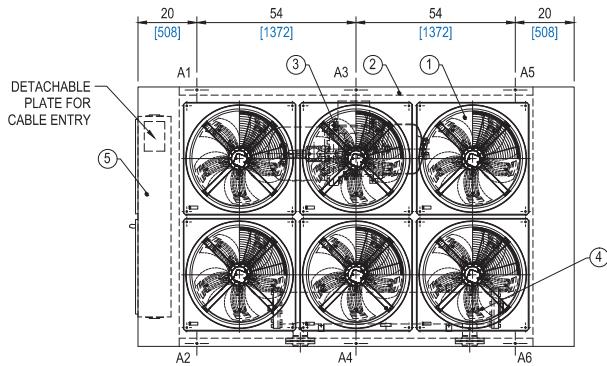
- 01. CONDENSER FAN
 - 02. CONDENSER COIL
 - 03. COMPRESSOR
 - 04. EVAPORATOR
 - 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

MODEL APCY	B	C	P	C.W. IN/OUT
5050S				3" [DN 80]
5060S	73.23 [1860]	27.56 [700]	7.48 [190]	4" [DN 100]
6060S				
6070S	57.48 [1460]	35.43 [900]	9.3 [236]	5" [DN 125]

Table 35



APCY Models - 5070S & 6085S

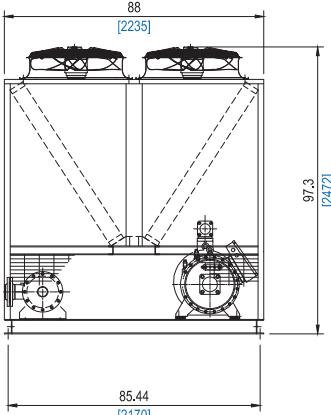
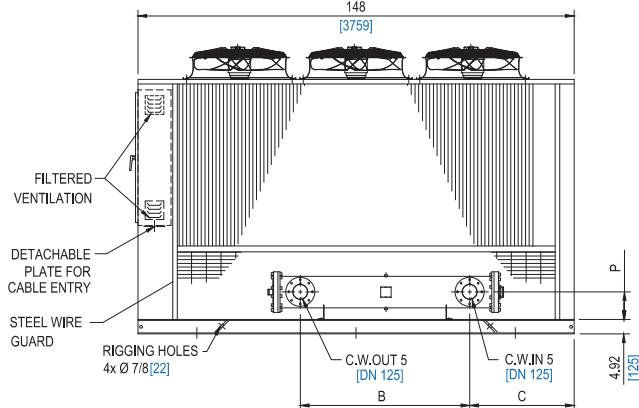


LEGEND

- 01. CONDENSER FAN
 - 02. CONDENSER COIL
 - 03. COMPRESSOR
 - 04. EVAPORATOR
 - 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

MODEL APCY	B	C	P
5070S	57.48 [1460]	35.43 [900]	9.3 [236]
6085S	73.23 [1860]	31.5 [800]	9.33 [237]

Table 36



NOTE:

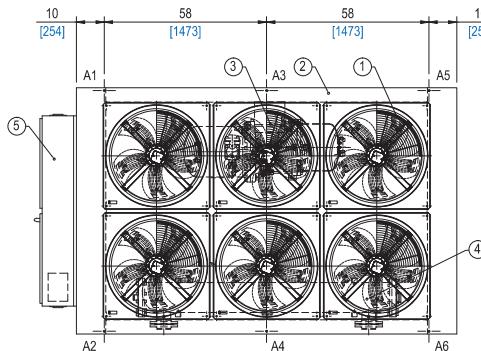
Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

APCY-S Series - R-134a

Dimensional Data

APCY Models - 5085S, 5100S & 6100S, 6115S



LEGEND

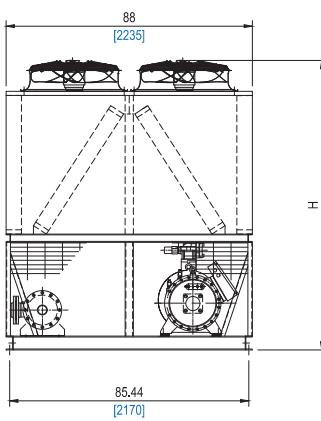
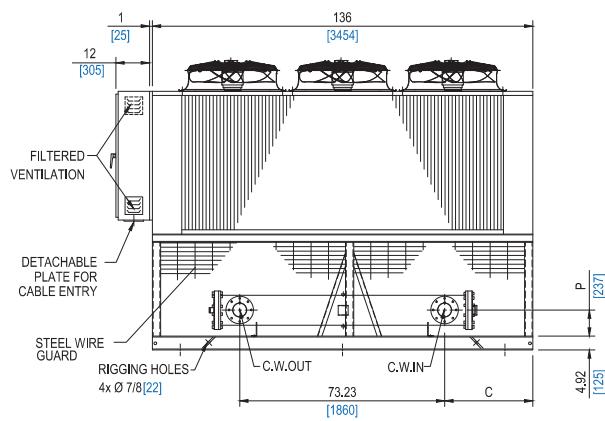
- 01. CONDENSER FAN
 - 02. CONDENSER COIL
 - 03. COMPRESSOR
 - 04. EVAPORATOR
 - 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

NOTE:

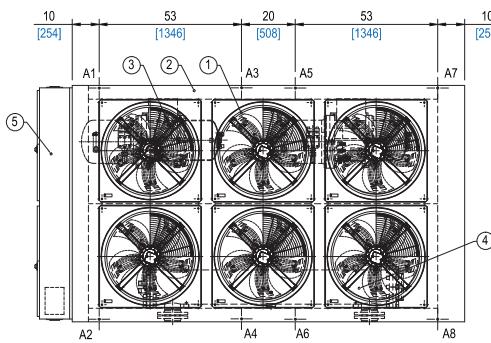
FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH

MODEL APCY-	H	C	P	C.W. IN/OUT
5085S	103.5 [2628]			
5100S	105.8 [2676]	31.5 [800]	9.33 [237]	5" [DN 125]
6100S	103.5 [2628]			
6115S	105.8 [2676]	35.43 [900]	10.32 [262]	6" [DN 150]

Table 37



APCY Model - 5110S

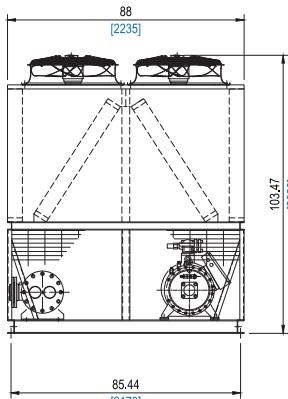
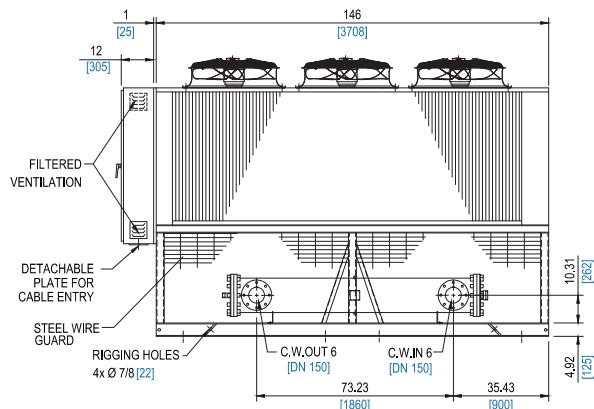


LEGEND

- 01. CONDENSER FAN
 - 02. CONDENSER COIL
 - 03. COMPRESSOR
 - 04. EVAPORATOR
 - 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

NOTE:

FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH



NOTE:

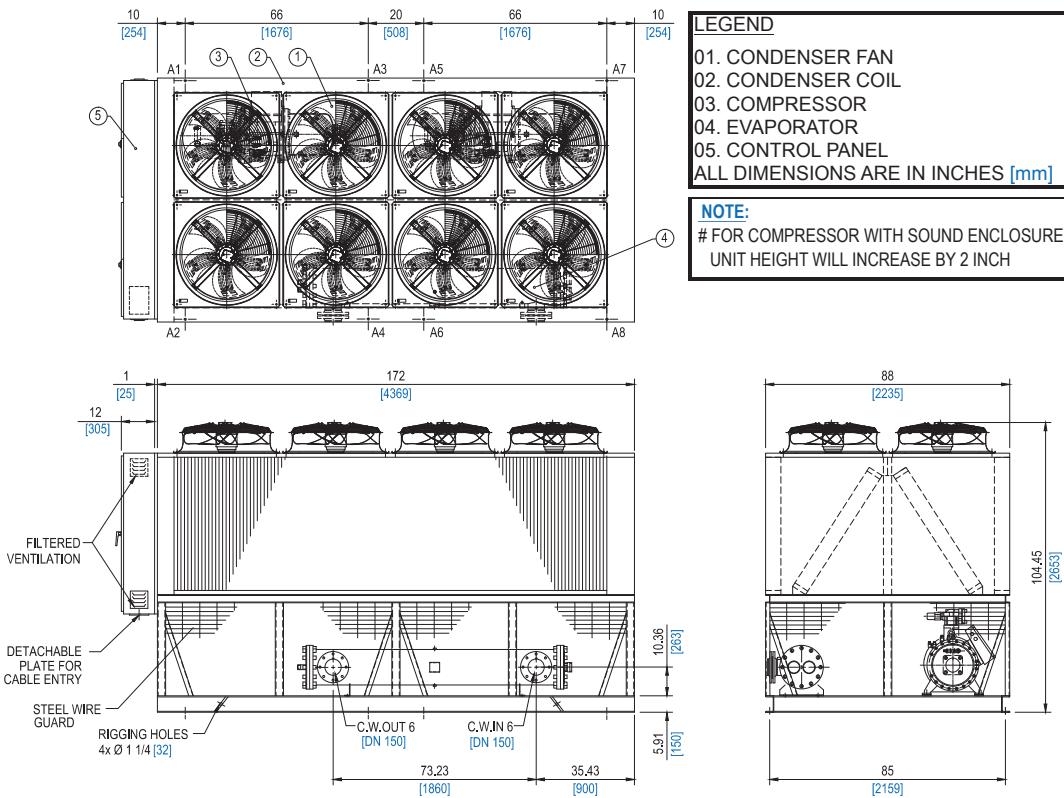
Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

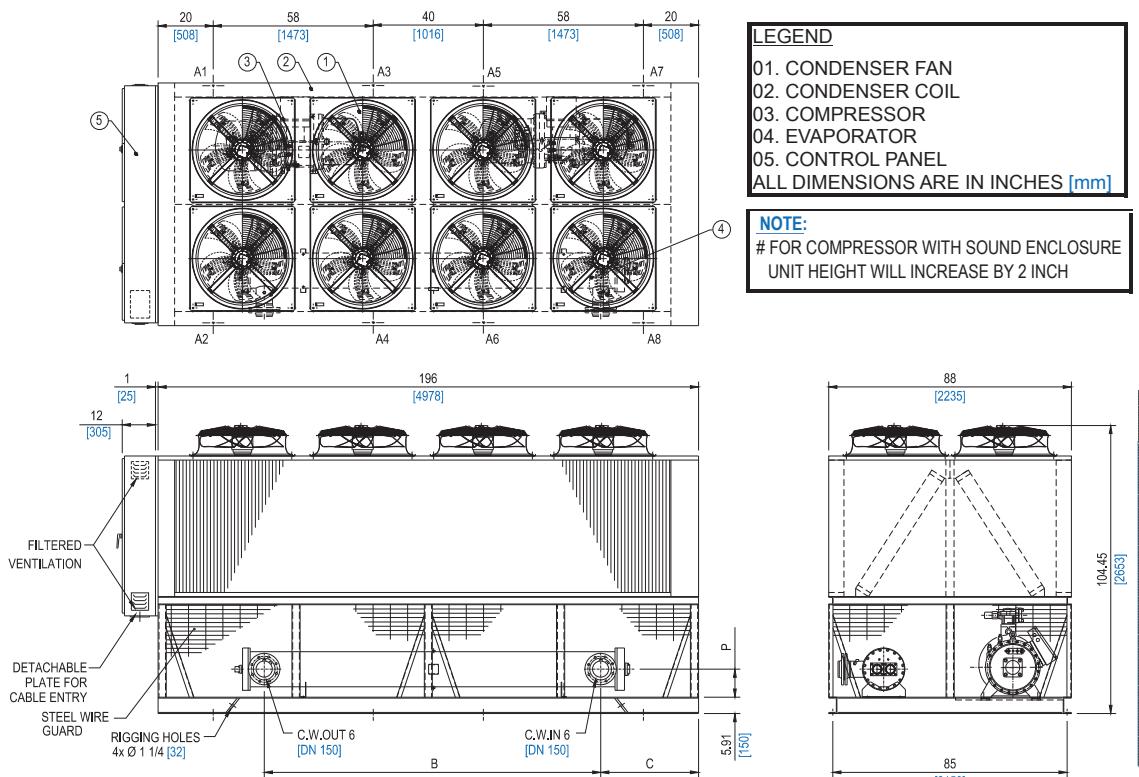
APCY-S Series - R-134a

Dimensional Data

APCY Model - 5120S



APCY Models - 5135S, 5145S & 6130S, 6145S, 6160S, 6170S



MODEL APCY	B	C	P
5135S			
6130S	122.1 [3100]	35.4 [900]	10.14 [257]
6145S			
5145S			
6160S	129.9 [3300]	33.46 [850]	11.66 [296]
6170S			

Table 38

NOTE:

Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

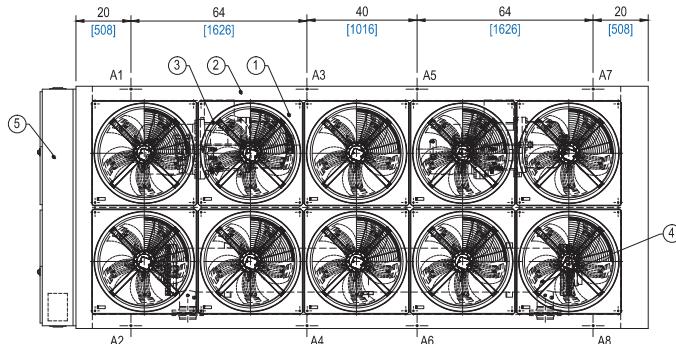


SKM Compact Screw Chillers

APCY-S Series - R-134a

Dimensional Data

APCY Models - 5155S, 5165S & 6185S, 6200S

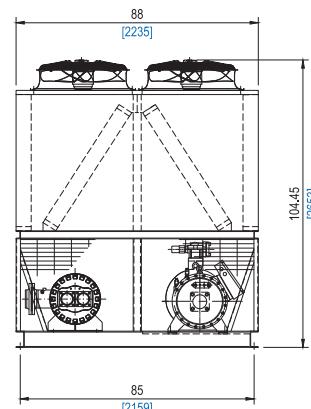


LEGEND

01. CONDENSER FAN
 02. CONDENSER COIL
 03. COMPRESSOR
 04. EVAPORATOR
 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

NOTE:

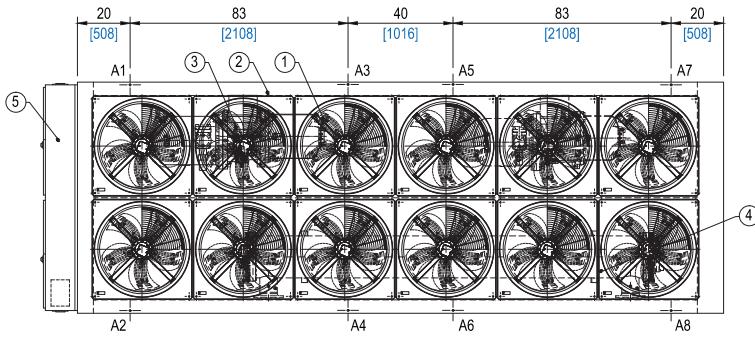
FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH



MODEL APCY	B	C
5155S	129.92 [3300]	37.4 [950]
5165S		
6185S	137.8 [3500]	35.43 [900]
6200S		

Table 38

APCY Models - 5185S, 5195S & 6215S, 6230S

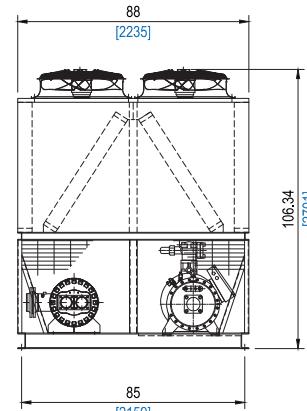
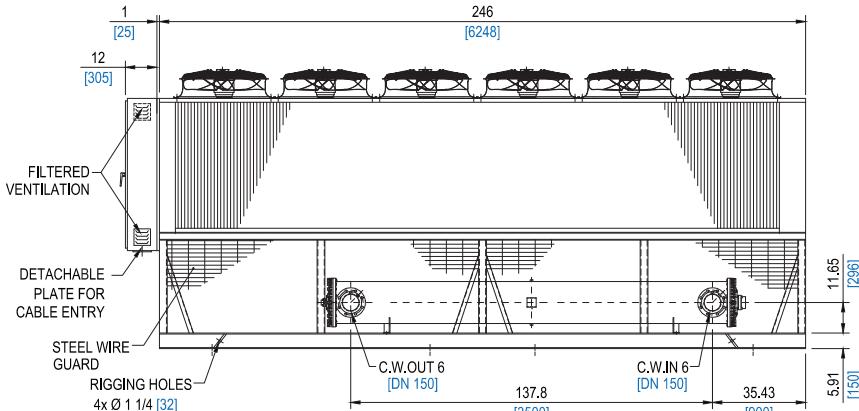


LEGEND

01. CONDENSER FAN
 02. CONDENSER COIL
 03. COMPRESSOR
 04. EVAPORATOR
 05. CONTROL PANEL
- ALL DIMENSIONS ARE IN INCHES [mm]

NOTE:

FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH



NOTE:

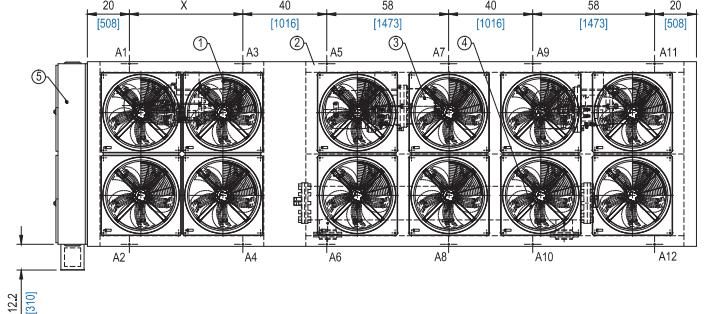
Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

APCY-S Series - R-134a

Dimensional Data

APCY Models - 5210S, 5220S & 6245S, 6260S



NOTE:

FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH

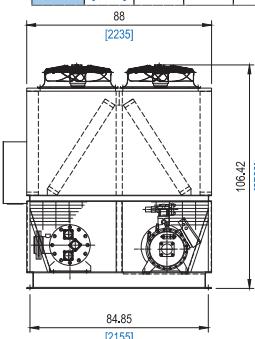
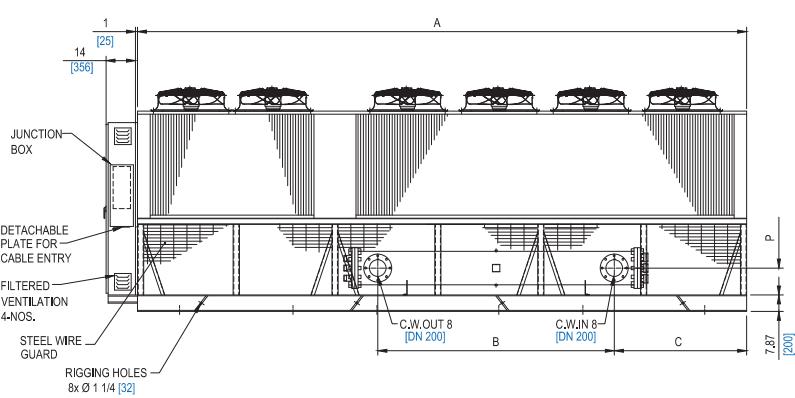
LEGEND

- 01. CONDENSER FAN
- 02. CONDENSER COIL
- 03. COMPRESSOR
- 04. EVAPORATOR
- 05. CONTROL PANEL

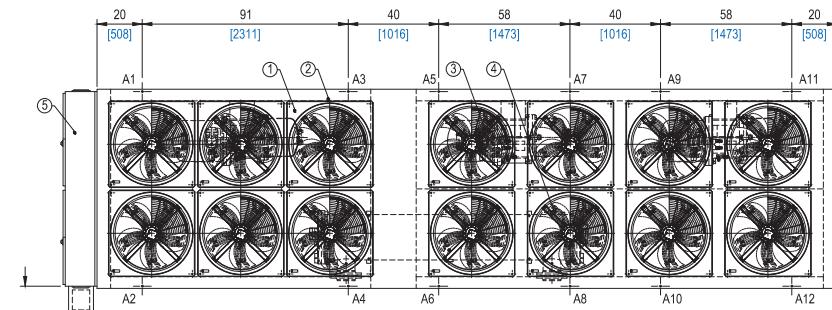
ALL DIMENSIONS ARE IN INCHES [mm]

MODEL APCY	A	B	C	P	X
5210S	290 [7366]	112.6 [2860]	62.99 [1600]	12.76 [324]	54 [1372]
5220S	302 [7671]				66 [1676]
6245S	290 [7366]	90.94 [2310]	78.74 [2000]	14.76 [375]	54 [1372]
6260S	302 [7671]				66 [1676]

Table 3



APCY Models - 5230S & 6270S

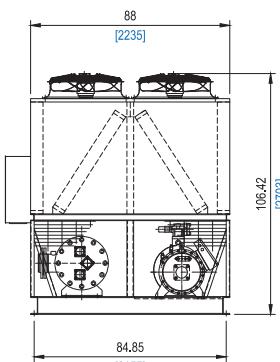
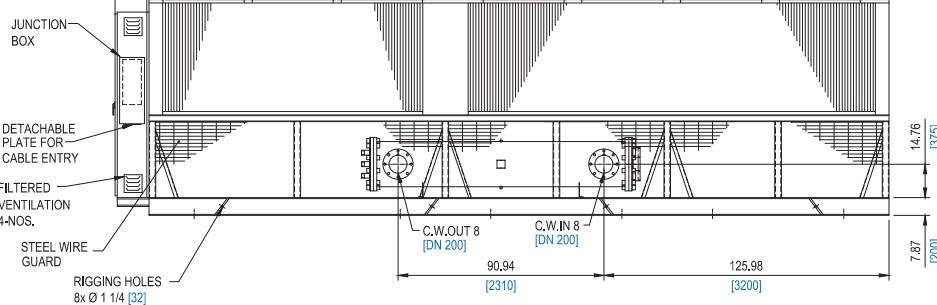


LEGEND

- 01. CONDENSER FAN
- 02. CONDENSER COIL
- 03. COMPRESSOR
- 04. EVAPORATOR
- 05. CONTROL PANEL

ALL DIMENSIONS ARE IN INCHES [mm]

NOTE:
FOR COMPRESSOR WITH SOUND ENCLOSURE
UNIT HEIGHT WILL INCREASE BY 2 INCH



NOTE:

Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

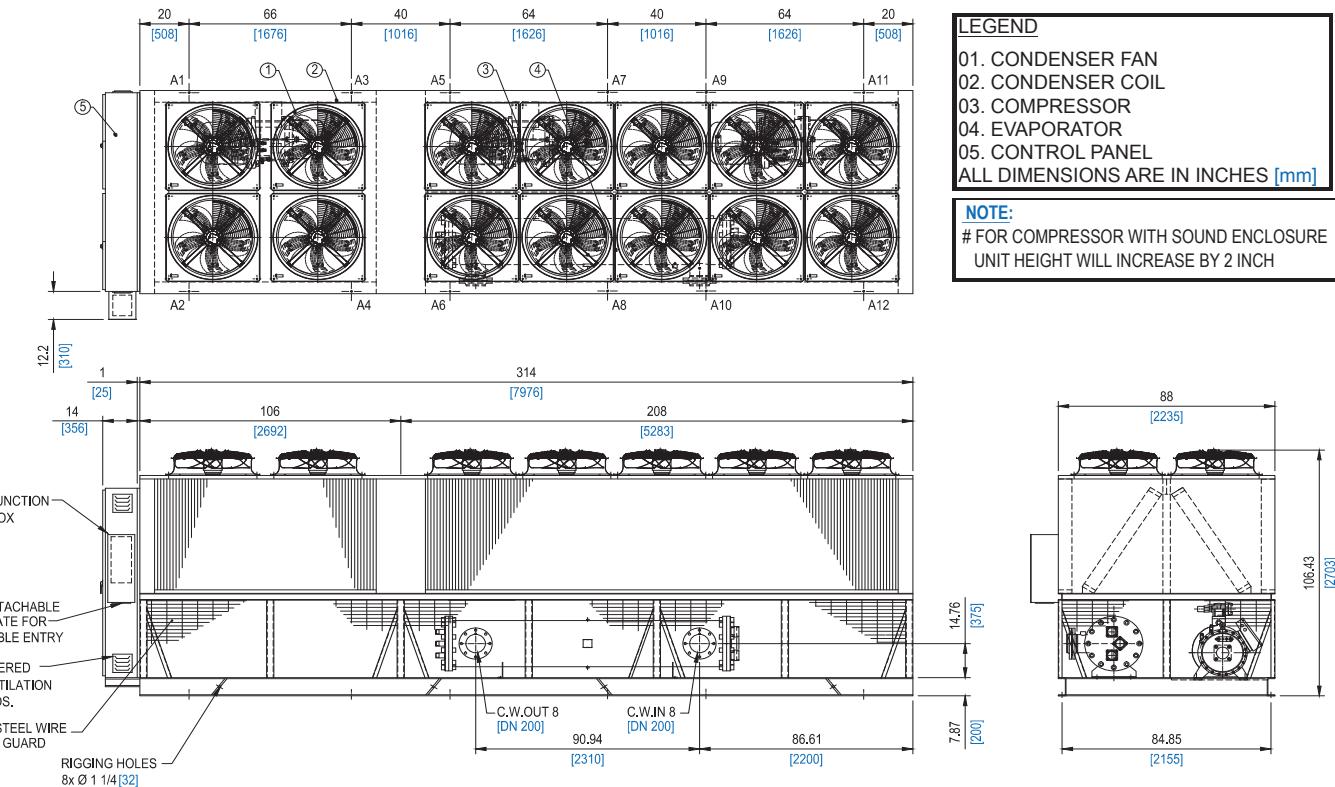


SKM Compact Screw Chillers

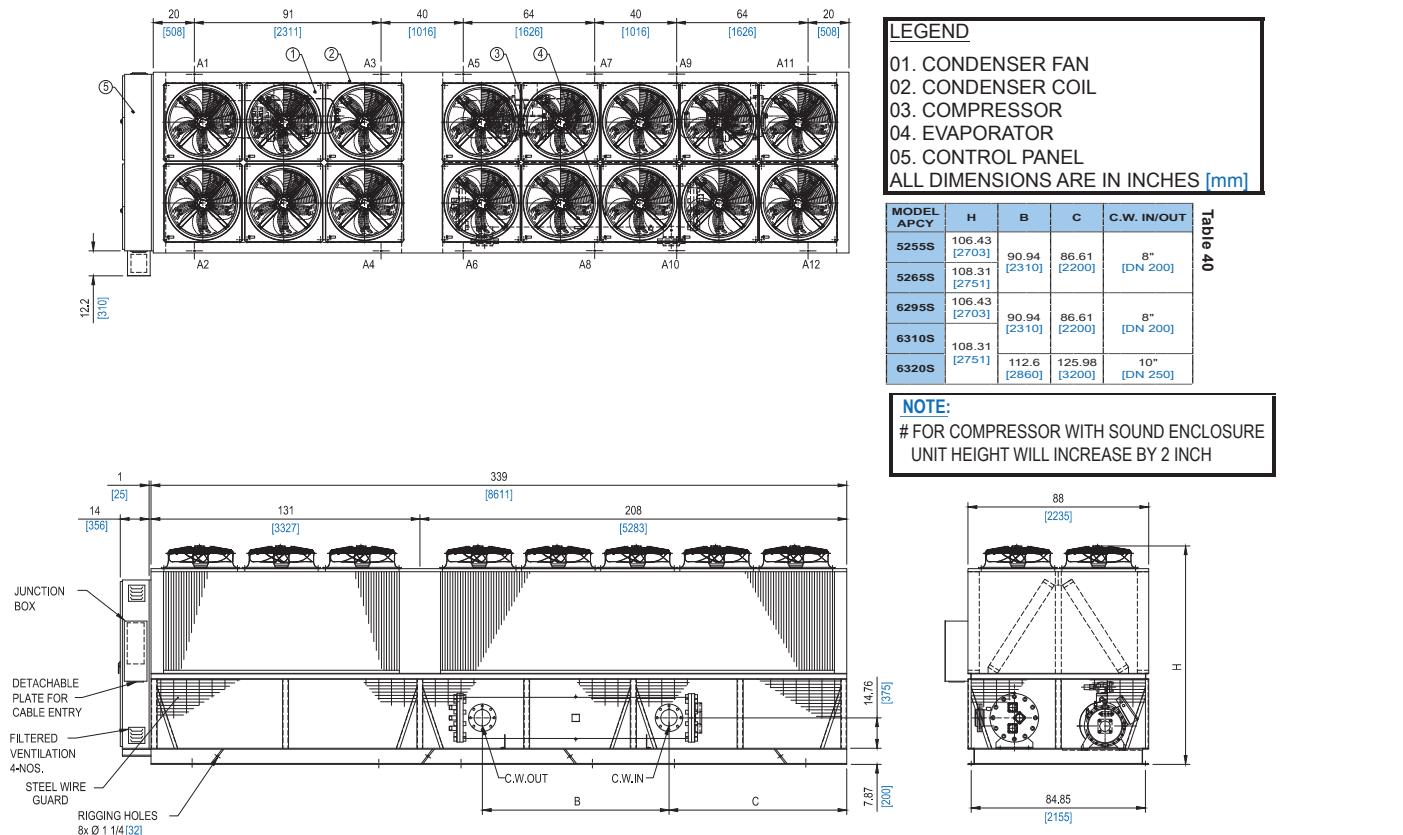
APCY-S Series - R-134a

Dimensional Data

APCY Models - 5240S & 6285S



APCY Models - 5255S, 5265S & 6295S, 6310S, 6320S



NOTE:

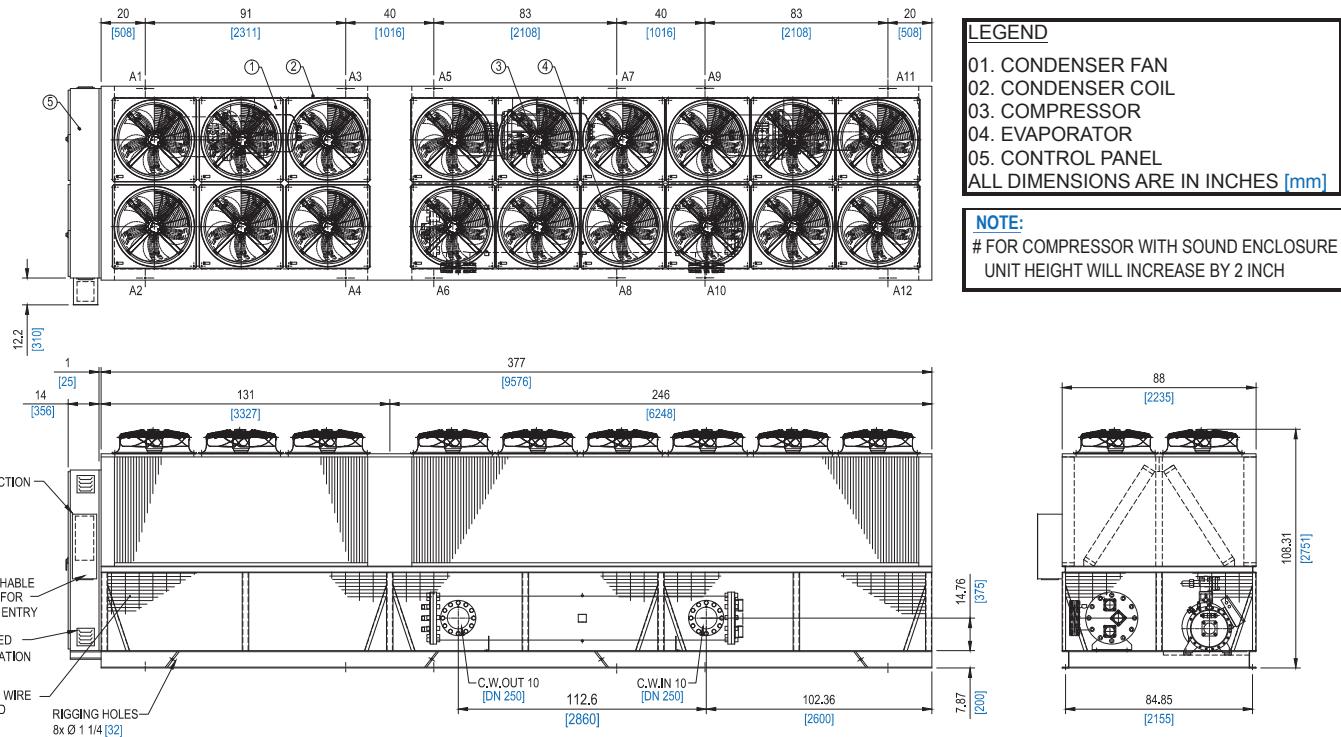
Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

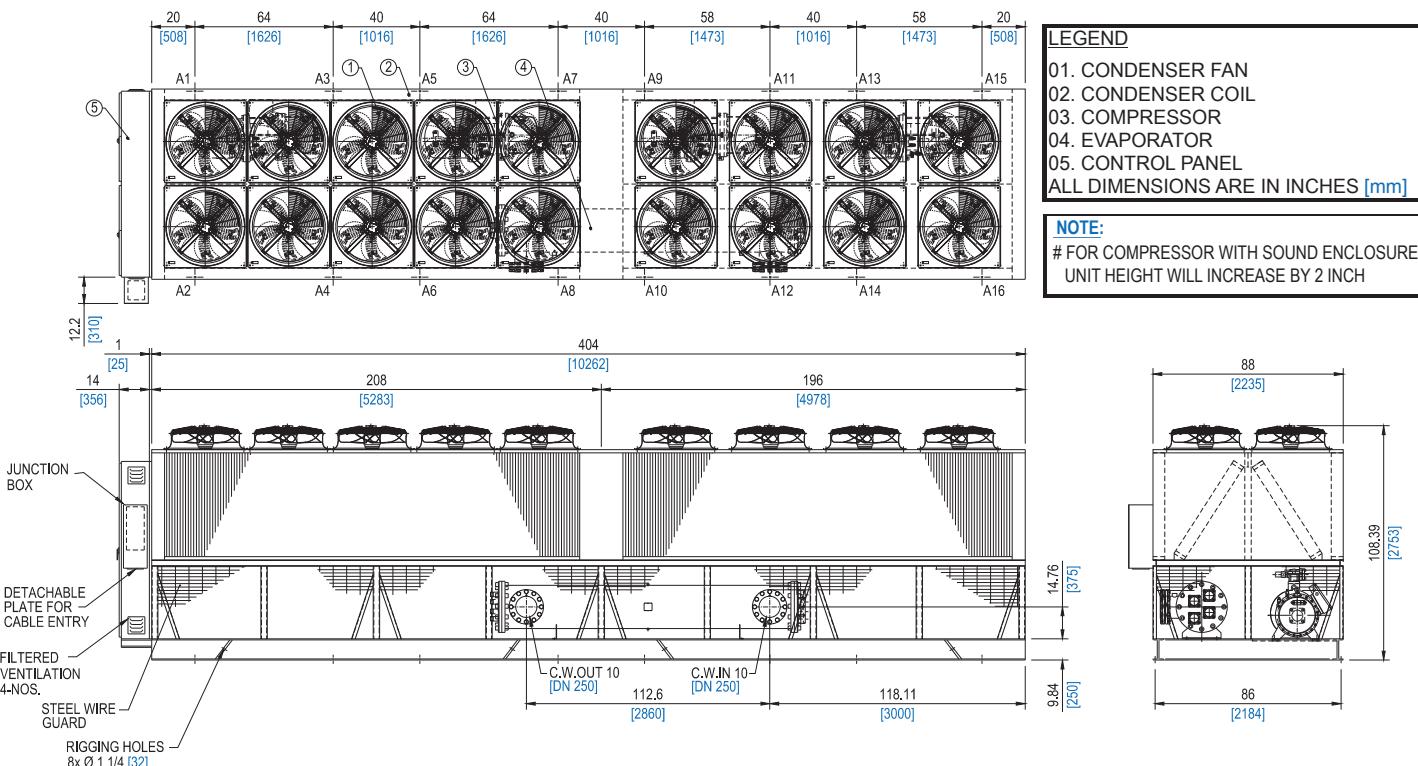
APCY-S Series - R-134a

Dimensional Data

APCY Models - 5280S, 5295S & 6335S, 6350S



APCY Models - 5305S & 5310S



NOTE:

Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

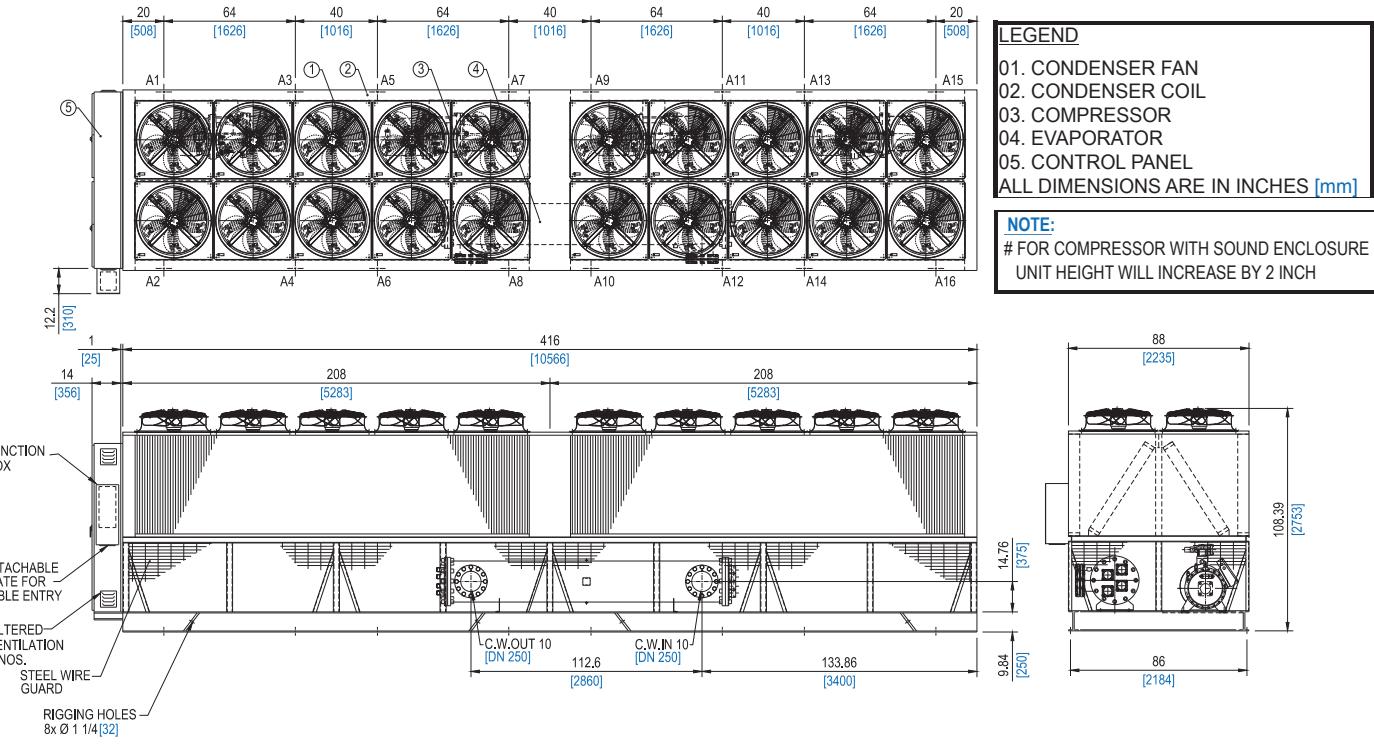


SKM Compact Screw Chillers

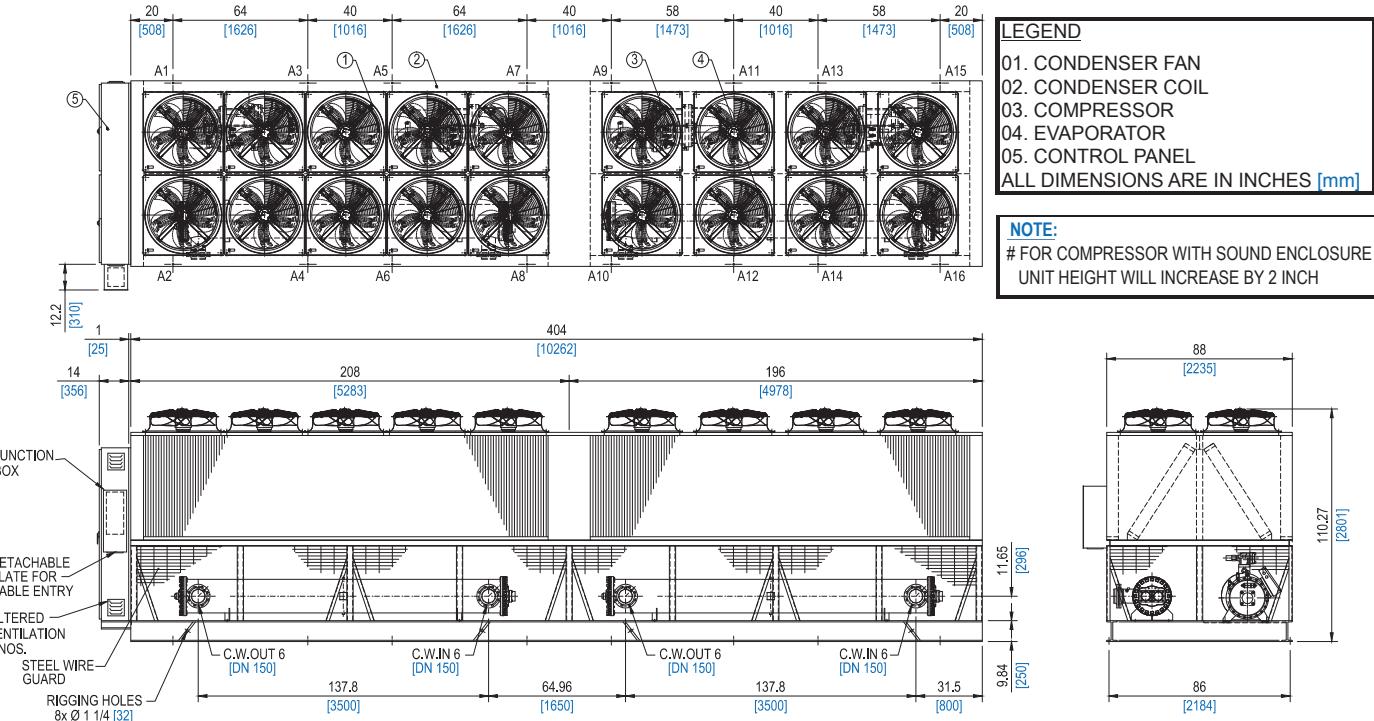
APCY-S Series - R-134a

Dimensional Data

APCY Models - 5320S & 5330S



APCY Models - 6365S & 6375S



NOTE:

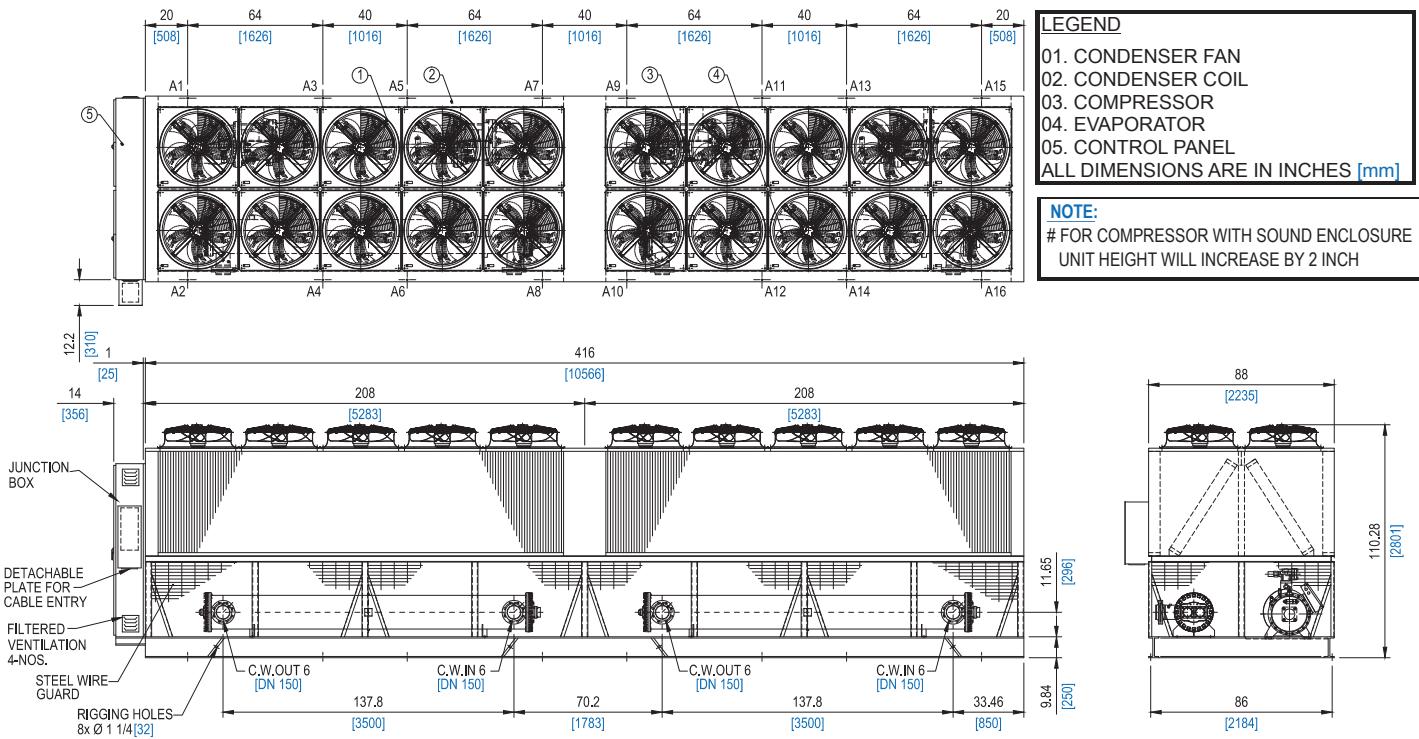
Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

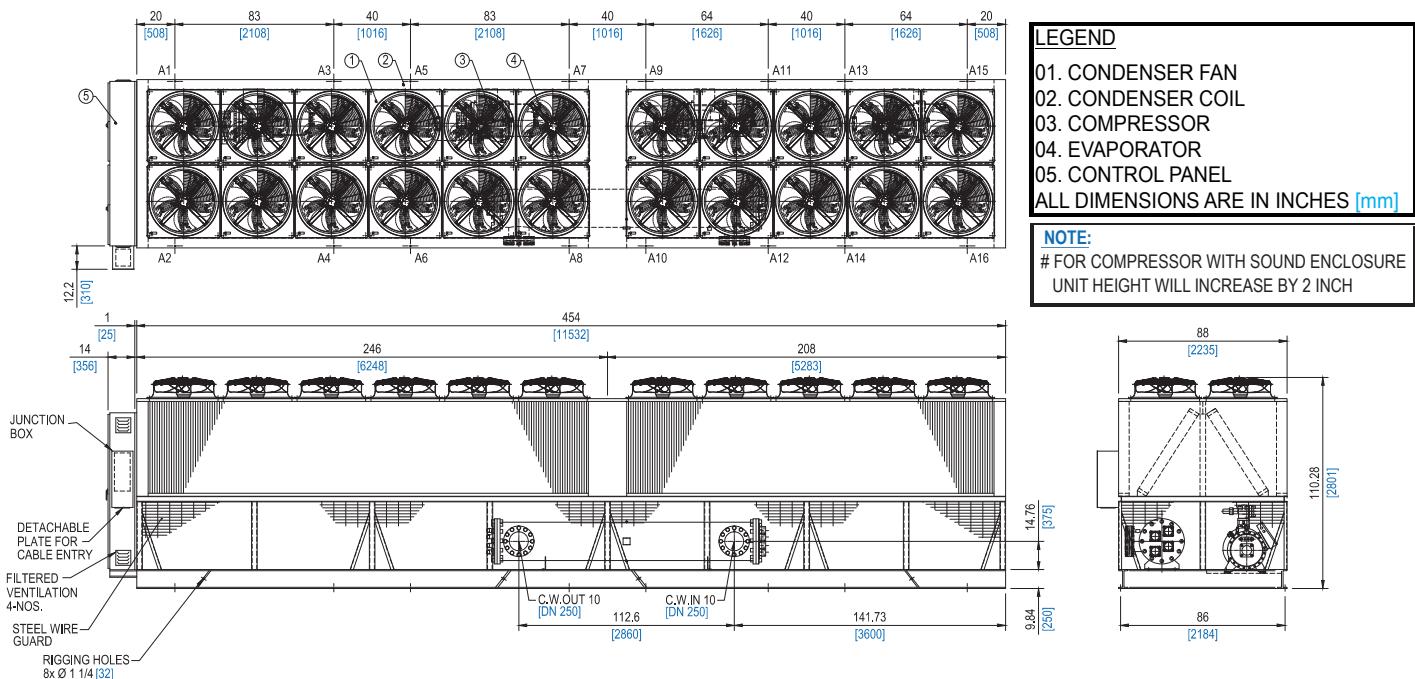
APCY-S Series - R-134a

Dimensional Data

APCY Models - 6385S & 6395S



APCY Models - 5345S & 5355S



NOTE:

Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

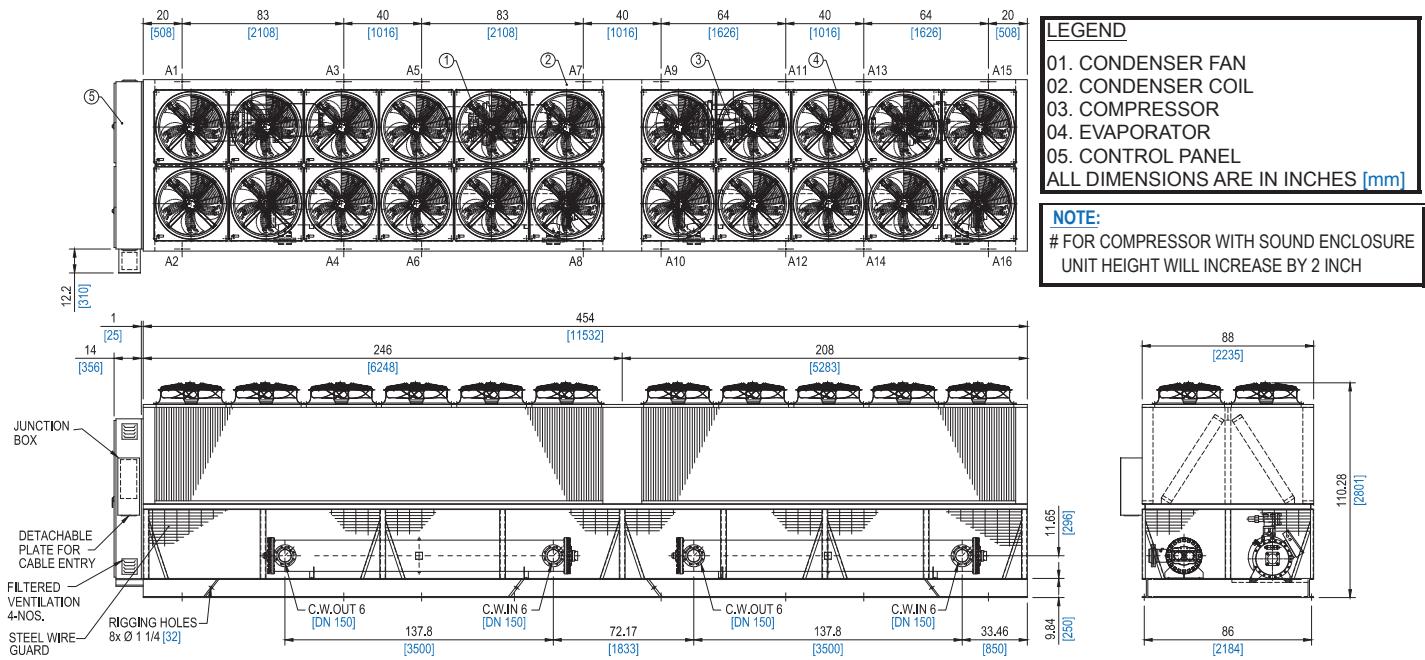


SKM Compact Screw Chillers

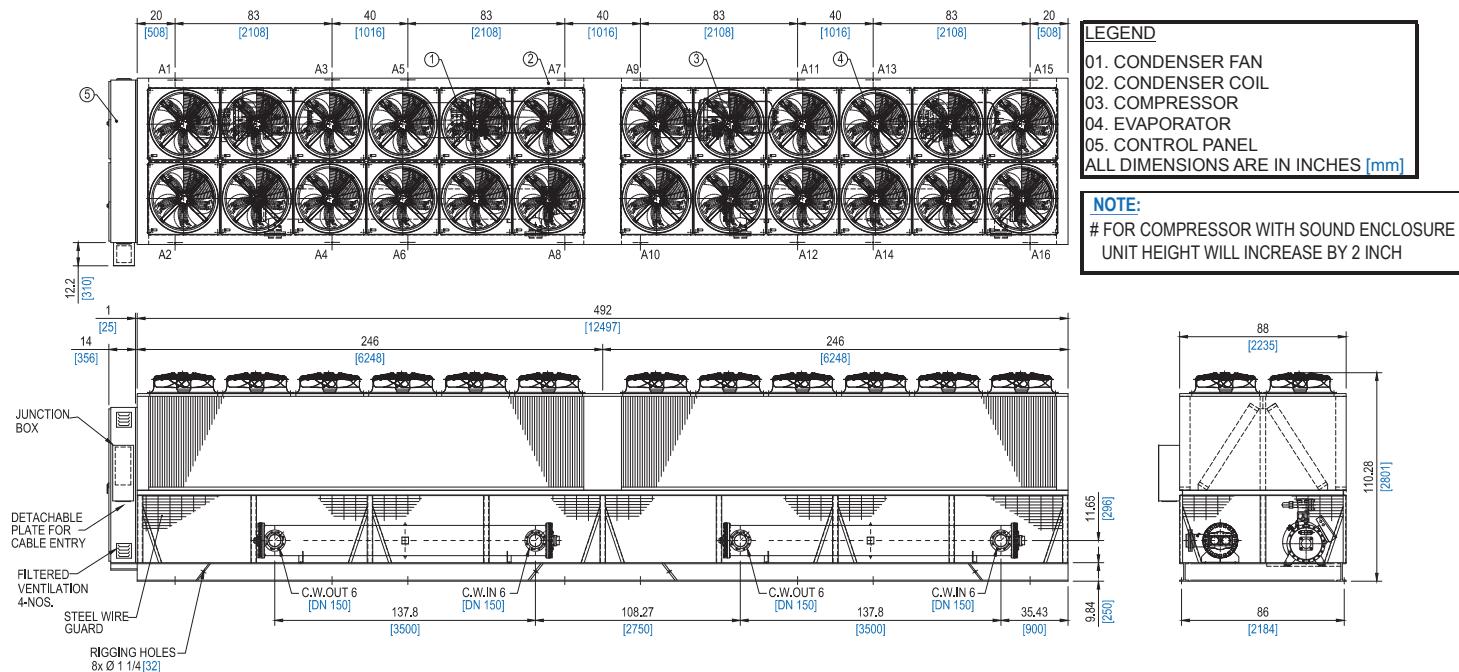
APCY-S Series - R-134a

Dimensional Data

APCY Models - 5365S & 6410S, 6435S



APCY Models - 5380S, 5395S & 6450S, 6475S



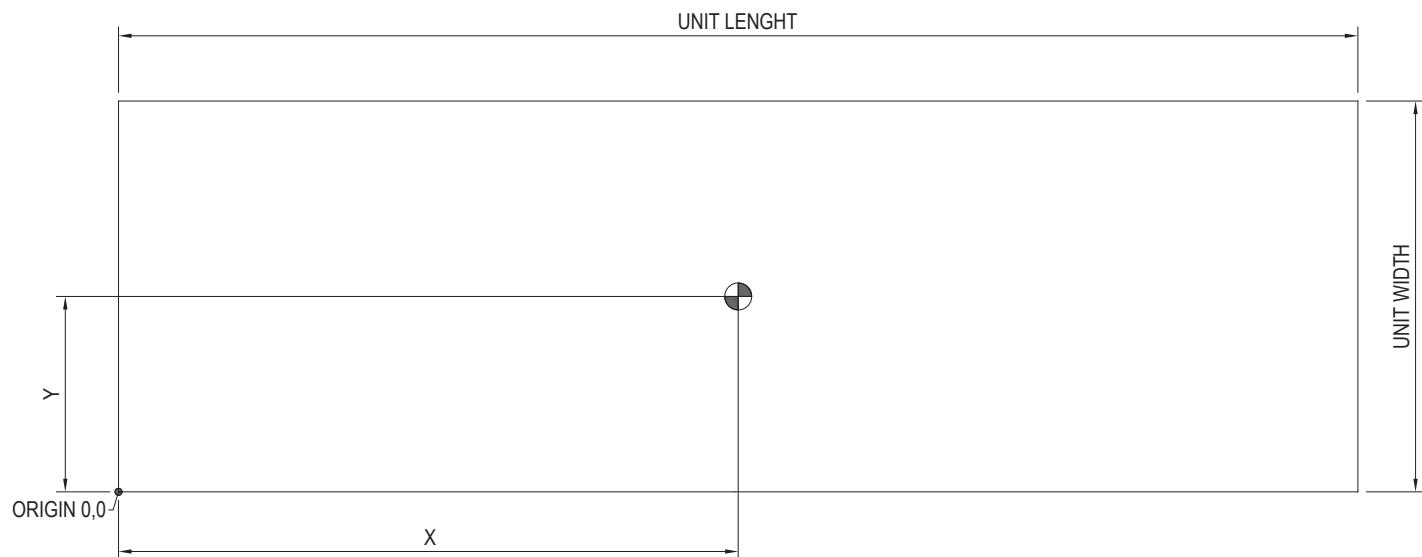
NOTE:

Evaporator Dimensions are subject to change without notice. Certified drawings will be provided upon request or at time of order.

SKM Compact Screw Chillers

APCY-S Series - R-134a

CENTER OF GRAVITY



CENTER OF GRAVITY					
MODEL	X	Y	MODEL	X	Y
5050 S	62.54 [1588]	47.21 [1199]	5230 S	162.21 [4120]	45.67 [1160]
5060 S	62.56 [1589]	47.30 [1201]	5240 S	156.79 [3983]	45.84 [1164]
5070 S	72.48 [1841]	45.82 [1164]	5255 S	174.06 [4421]	45.88 [1165]
5085 S	65.72 [1669]	45.61 [1158]	5265 S	173.60 [4409]	46.15 [1172]
5100 S	65.75 [1670]	45.84 [1164]	5280 S	188.82 [4796]	45.63 [1159]
5110 S	69.74 [1771]	45.58 [1158]	5295 S	188.34 [4784]	45.71 [1161]
5120 S	83.95 [2132]	45.67 [1160]	5305 S	198.12 [5032]	46.37 [1178]
5135 S	93.31 [2370]	46.70 [1186]	5310 S	197.86 [5026]	46.49 [1181]
5145 S	94.64 [2404]	45.69 [1160]	5320 S	201.97 [5130]	46.44 [1180]
5155 S	100.42 [2551]	45.80 [1163]	5330 S	202.93 [5154]	46.55 [1182]
5165 S	101.07 [2567]	46.03 [1169]	5345 S	227.83 [5787]	46.69 [1186]
5185 S	121.88 [3096]	46.01 [1169]	5355 S	228.05 [5792]	46.75 [1187]
5195 S	122.27 [3106]	46.13 [1172]	5365 S	227.15 [5770]	46.02 [1169]
5210 S	142.13 [3610]	46.60 [1184]	5380 S	240.02 [6097]	46.00 [1168]
5220 S	149.78 [3804]	46.89 [1191]	5395 S	240.59 [6111]	46.06 [1170]

Table 41

CENTER OF GRAVITY					
MODEL	X	Y	MODEL	X	Y
6060 S	62.53 [1588]	47.16 [1198]	6270 S	162.21 [4120]	45.65 [1160]
6070 S	62.24 [1581]	44.87 [1140]	6285 S	156.82 [3983]	45.81 [1164]
6085 S	72.10 [1831]	45.71 [1161]	6295 S	175.27 [4452]	45.96 [1167]
6100 S	65.72 [1669]	45.61 [1158]	6310 S	173.60 [4409]	46.15 [1172]
6115 S	65.25 [1657]	44.44 [1129]	6320 S	165.01 [4191]	45.63 [1159]
6130 S	94.37 [2397]	46.08 [1170]	6335 S	188.82 [4796]	45.63 [1159]
6145 S	94.41 [2398]	46.24 [1174]	6350 S	188.34 [4784]	45.71 [1161]
6160 S	93.45 [2374]	45.24 [1149]	6365 S	193.83 [4923]	45.55 [1157]
6170 S	94.65 [2404]	45.69 [1160]	6375 S	195.60 [4968]	45.67 [1160]
6185 S	99.98 [2540]	45.60 [1158]	6385 S	199.76 [5074]	45.68 [1160]
6200 S	100.64 [2556]	45.83 [1164]	6395 S	200.70 [5098]	45.79 [1163]
6215 S	121.88 [3096]	46.01 [1169]	6410 S	226.93 [5764]	45.96 [1167]
6230 S	122.27 [3106]	46.13 [1172]	6435 S	227.16 [5770]	46.02 [1169]
6245 S	142.91 [3630]	45.39 [1153]	6450 S	240.02 [6097]	46.00 [1168]
6260 S	150.81 [3831]	45.68 [1160]	6475 S	240.59 [6111]	46.06 [1170]

Table 42

SKM Compact Screw Chillers

APCY-S Series - R-134a

LOAD DISTRIBUTION ON MOUNTING POINTS

Models APCY	Units	Mounting Loads															Operating Weight	
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	
5050 S	lbs	1523	1326	1573	1349	-	-	-	-	-	-	-	-	-	-	-	5771	
	kg	691	601	713	612	-	-	-	-	-	-	-	-	-	-	-	2617	
5060 S	lbs	1557	1350	1610	1376	-	-	-	-	-	-	-	-	-	-	-	5893	
	kg	706	612	730	624	-	-	-	-	-	-	-	-	-	-	-	2673	
5070 S	lbs	860	875	2049	1593	693	848	-	-	-	-	-	-	-	-	-	6918	
	kg	390	397	929	722	314	385	-	-	-	-	-	-	-	-	-	3137	
5085 S	lbs	1147	1275	2463	1874	969	1107	-	-	-	-	-	-	-	-	-	8835	
	kg	520	578	1117	850	439	502	-	-	-	-	-	-	-	-	-	4007	
5100 S	lbs	1151	1276	2528	1894	973	1108	-	-	-	-	-	-	-	-	-	8930	
	kg	522	579	1146	859	441	502	-	-	-	-	-	-	-	-	-	4050	
5110 S	lbs	1523	1391	1280	1238	1276	1216	1260	1125	-	-	-	-	-	-	-	10309	
	kg	691	631	580	561	579	551	571	510	-	-	-	-	-	-	-	4675	
5120 S	lbs	1584	1304	1397	1481	1353	1225	1361	1271	-	-	-	-	-	-	-	10976	
	kg	718	591	634	672	614	556	617	576	-	-	-	-	-	-	-	4978	
5135 S	lbs	1779	1556	1533	1342	1417	1268	1417	1270	-	-	-	-	-	-	-	11582	
	kg	807	706	695	609	643	575	643	576	-	-	-	-	-	-	-	5253	
5145 S	lbs	1859	1772	1572	1425	1569	1416	1594	1493	-	-	-	-	-	-	-	12700	
	kg	843	804	713	646	712	642	723	677	-	-	-	-	-	-	-	5760	
5155 S	lbs	2020	1844	1781	1643	1698	1556	1712	1600	-	-	-	-	-	-	-	13854	
	kg	916	836	808	745	770	706	776	726	-	-	-	-	-	-	-	6283	
5165 S	lbs	2023	1847	1784	1647	1763	1580	1777	1625	-	-	-	-	-	-	-	14046	
	kg	917	838	809	747	800	717	806	737	-	-	-	-	-	-	-	6370	
5185 S	lbs	2122	1762	2036	2035	1865	1604	1955	1881	-	-	-	-	-	-	-	15260	
	kg	962	799	923	923	846	727	887	853	-	-	-	-	-	-	-	6921	
5195 S	lbs	2122	1762	2036	2035	1901	1616	1990	1892	-	-	-	-	-	-	-	15354	
	kg	962	799	923	923	862	733	902	858	-	-	-	-	-	-	-	6963	
5210 S	lbs	1770	1444	1251	893	1612	1712	1449	1180	1671	1907	1389	986	-	-	-	17264	
	kg	803	655	567	405	731	776	657	535	758	865	630	447	-	-	-	7829	
5220 S	lbs	1902	1506	1383	955	1614	1714	1451	1182	1673	1909	1392	988	-	-	-	17669	
	kg	863	683	627	433	732	777	658	536	759	866	631	448	-	-	-	8013	
5230 S	lbs	2143	1707	1993	2223	1810	1872	1881	2079	1551	1124	1551	1124	-	-	-	21058	
	kg	972	774	904	1008	821	849	853	943	703	510	703	510	-	-	-	9550	
5240 S	lbs	2033	1638	1514	1086	1951	2099	1930	2038	1954	2107	1626	1158	-	-	-	21134	
	kg	922	743	687	493	885	952	875	924	886	956	737	525	-	-	-	9585	
5255 S	lbs	2262	1826	1743	1275	1991	2142	1969	2080	1993	2149	1664	1196	-	-	-	22290	
	kg	1026	828	790	578	903	971	893	943	904	975	755	542	-	-	-	10109	
5265 S	lbs	2305	1830	1786	1279	1998	2134	1977	2073	2001	2142	1671	1188	-	-	-	22384	
	kg	1045	830	810	580	906	968	897	940	907	971	758	539	-	-	-	10151	
5280 S	lbs	2310	1859	1791	1308	2213	2441	2151	2261	2203	2412	1825	1318	-	-	-	24092	
	kg	1048	843	812	593	1004	1107	976	1025	999	1094	828	598	-	-	-	10926	
5295 S	lbs	2345	1871	1827	1319	2213	2441	2151	2261	2203	2412	1825	1318	-	-	-	24186	
	kg	1063	849	829	598	1004	1107	976	1025	999	1094	828	598	-	-	-	10969	
5305 S	lbs	2139	1692	1561	1093	1514	1114	2031	2610	1613	1438	1871	2245	1448	1020	1448	1020	25857
	kg	970	767	708	496	687	505	921	1184	732	652	849	1018	657	463	657	463	11727
5310 S	lbs	2141	1694	1563	1095	1577	1137	2094	2632	1614	1440	1873	2247	1449	1022	1449	1022	26049
	kg	971	768	709	497	715	516	950	1194	732	653	849	1019	657	463	657	463	11814
5320 S	lbs	2229	1782	1651	1183	1698	1319	2150	2627	1888	1810	2002	2200	1590	1162	1590	1162	28043
	kg	1011	808	749	537	770	598	975	1191	856	821	908	998	721	527	721	527	12718
5330 S	lbs	2230	1784	1653	1185	1700	1320	2152	2628	1890	1811	2004	2201	1653	1185	1653	1185	28234
	kg	1011	809	750	537	771	599	976	1192	857	821	909	998	750	537	750	537	12805
5345 S	lbs	2388	1902	1810	1303	1862	1544	2233	2617	2001	2035	1980	2035	1696	1213	1696	1213	29528
	kg	1083	863	821	591	844	700	1013	1187	907	923	898	923	769	550	769	550	13391
5355 S	lbs	2388	1902	1810	1303	1862	1544	2233	2617	2036	2047	2016	2046	1696	1213	1696	1213	29622
	kg	1083	863	821	591	844	700	1013	1187	923	928	914	928	769	550	769	550	13434
5365 S	lbs	2448	2088	2052	2051	1881	1621	1970	1895	1933	1778	1876	1670	1826	1612	1870	1749	30320
	kg	1110	947	931	930	853	735	893	859	877	806	851	757	828	731	848	793	13751
5380 S	lbs	2487	2127	2091	2089	1956	1671	2044	1946	1952	1592	2091	2089	1920	1659	2009	1935	31658
	kg	1128	965	948	947	887	758	927	883	885	722	948	947	871	752	911	878	14357
5395 S	lbs	2487	2127	2091	2089	1956	1671	2044	1946	1952	1592	2091	2089	1955	1670	2045	1947	31752
	kg	1128	965	948	947	887	758	927	883	885	722	948	947	887	757	927	883	14400

Table 43

SKM Compact Screw Chillers

APCY-S Series - R-134a

LOAD DISTRIBUTION ON MOUNTING POINTS

Models APCY	Units	Mounting Loads															Operating Weight
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16
6060 S	lbs	1523	1329	1573	1352	-	-	-	-	-	-	-	-	-	-	-	5777
	kg	691	603	713	613	-	-	-	-	-	-	-	-	-	-	-	2620
6070 S	lbs	1601	1566	1648	1556	-	-	-	-	-	-	-	-	-	-	-	6371
	kg	726	710	747	706	-	-	-	-	-	-	-	-	-	-	-	2889
6085 S	lbs	924	1031	2086	1502	752	948	-	-	-	-	-	-	-	-	-	7243
	kg	419	468	946	681	341	430	-	-	-	-	-	-	-	-	-	3285
6100 S	lbs	1147	1275	2463	1874	969	1107	-	-	-	-	-	-	-	-	-	8835
	kg	520	578	1117	850	439	502	-	-	-	-	-	-	-	-	-	4007
6115 S	lbs	1177	1412	2557	2052	985	1162	-	-	-	-	-	-	-	-	-	9345
	kg	534	640	1160	931	447	527	-	-	-	-	-	-	-	-	-	4238
6130 S	lbs	1646	1503	1400	1290	1389	1250	1390	1254	-	-	-	-	-	-	-	11122
	kg	746	682	635	585	630	567	630	569	-	-	-	-	-	-	-	5044
6145 S	lbs	1669	1515	1424	1302	1412	1262	1413	1266	-	-	-	-	-	-	-	11263
	kg	757	687	646	590	640	572	641	574	-	-	-	-	-	-	-	5108
6160 S	lbs	1856	1769	1571	1425	1462	1378	1487	1455	-	-	-	-	-	-	-	12403
	kg	842	802	712	646	663	625	674	660	-	-	-	-	-	-	-	5625
6170 S	lbs	1858	1771	1573	1427	1569	1416	1594	1493	-	-	-	-	-	-	-	12701
	kg	843	803	713	647	712	642	723	677	-	-	-	-	-	-	-	5760
6185 S	lbs	2059	1962	1758	1571	1700	1560	1726	1642	-	-	-	-	-	-	-	13978
	kg	934	890	797	712	771	707	783	745	-	-	-	-	-	-	-	6339
6200 S	lbs	2062	1965	1761	1574	1765	1585	1791	1666	-	-	-	-	-	-	-	14169
	kg	935	891	799	714	800	719	812	756	-	-	-	-	-	-	-	6426
6215 S	lbs	2122	1762	2036	2035	1865	1604	1955	1881	-	-	-	-	-	-	-	15260
	kg	962	799	923	923	846	727	887	853	-	-	-	-	-	-	-	6921
6230 S	lbs	2123	1763	2037	2036	1902	1617	1991	1893	-	-	-	-	-	-	-	15362
	kg	963	800	924	923	863	733	903	859	-	-	-	-	-	-	-	6967
6245 S	lbs	1771	1445	1252	894	1723	1945	1644	1718	1729	1963	1380	952	-	-	-	18416
	kg	803	655	568	405	781	882	746	779	784	890	626	432	-	-	-	8352
6260 S	lbs	1902	1507	1383	956	1725	1948	1646	1720	1731	1965	1382	954	-	-	-	18819
	kg	863	683	627	434	782	883	746	780	785	891	627	433	-	-	-	8535
6270 S	lbs	2144	1708	1995	2229	1812	1877	1884	2085	1552	1124	1552	1124	-	-	-	21086
	kg	972	775	905	1011	822	851	854	946	704	510	704	510	-	-	-	9563
6285 S	lbs	2034	1638	1515	1087	1954	2105	1932	2043	1956	2113	1627	1159	-	-	-	21163
	kg	922	743	687	493	886	955	876	927	887	958	738	526	-	-	-	9598
6295 S	lbs	2155	1719	1636	1168	1924	2075	1902	2013	1953	2109	1623	1155	-	-	-	21432
	kg	977	780	742	530	873	941	863	913	886	956	736	524	-	-	-	9720
6310 S	lbs	2305	1830	1786	1279	1998	2134	1977	2072	2001	2142	1671	1188	-	-	-	22383
	kg	1045	830	810	580	906	968	897	940	907	971	758	539	-	-	-	10151
6320 S	lbs	2306	1831	2301	2766	1833	1654	2090	2399	1672	1189	1672	1189	-	-	-	22902
	kg	1046	830	1044	1254	831	750	948	1088	758	539	758	539	-	-	-	10386
6335 S	lbs	2311	1860	1792	1309	2214	2442	2152	2262	2204	2413	1826	1319	-	-	-	24104
	kg	1048	844	813	594	1004	1107	976	1026	1000	1094	828	598	-	-	-	10932
6350 S	lbs	2347	1872	1828	1321	2214	2442	2152	2262	2204	2413	1826	1319	-	-	-	24200
	kg	1064	849	829	599	1004	1107	976	1026	1000	1094	828	598	-	-	-	10975
6365 S	lbs	2320	2251	1683	1468	1652	1541	1651	1538	1687	1690	1554	1349	1580	1428	1618	1547
	kg	1052	1021	763	666	749	699	749	698	765	766	705	612	717	648	734	702
6375 S	lbs	2299	2183	1707	1540	1631	1472	1675	1609	1697	1550	1670	1534	1530	1268	1672	1709
	kg	1043	990	774	698	740	668	760	730	770	703	757	696	694	575	758	775
6385 S	lbs	2387	2271	1795	1628	1780	1581	1825	1718	1852	1736	1795	1628	1719	1560	1763	1697
	kg	1083	1030	814	738	807	717	828	779	840	787	814	738	780	707	800	770
6395 S	lbs	2389	2273	1797	1630	1782	1583	1826	1720	1854	1738	1797	1630	1782	1583	1826	1720
	kg	1083	1031	815	739	808	718	828	780	841	788	815	739	808	718	828	780
6410 S	lbs	2448	2088	2052	2051	1881	1621	1970	1895	1898	1766	1841	1658	1826	1612	1870	1749
	kg	1110	947	931	930	853	735	893	859	861	801	835	752	828	731	848	793
6435 S	lbs	2449	2089	2053	2052	1882	1622	1971	1896	1934	1779	1877	1671	1827	1613	1871	1750
	kg	1111	947	931	931	854	736	894	860	877	807	851	758	829	732	849	794
6450 S	lbs	2488	2128	2092	2090	1957	1672	2045	1947	1953	1593	2092	2090	1921	1660	2010	1936
	kg	1128	965	949	948	888	758	927	883	886	722	949	948	871	753	912	878
6475 S	lbs	2489	2129	2093	2091	1957	1673	2046	1947	1954	1594	2093	2091	1957	1672	2047	1949
	kg	1129	966	949	948	888	759	928	883	886	723	949	948	888	758	928	884

Table 44

SKM Compact Screw Chillers

APCY-S Series - R-134a

Sound Data - 50Hz

MODELS	Sound power level in dB re 10^{-12} W								Overall
	Spectrum per octave band								
APCY	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dBA
5050 S	94.5	86.3	86.4	78.7	77.9	78.8	75.1	71.6	85.2
5060 S	95.1	86.9	87.2	79.4	78.5	79.5	75.7	71.7	85.8
5070 S	97.3	89.3	89.8	81.8	81.0	82.2	78.1	73.5	88.3
5085 S	98.2	90.2	90.9	82.6	82.0	83.2	79.0	73.6	89.3
5100 S	100.0	91.9	92.8	84.3	83.8	85.1	80.8	73.8	91.1
5110 S	97.4	89.3	89.4	81.5	80.7	81.7	77.9	73.5	88.0
5120 S	98.2	89.9	90.2	82.4	81.5	82.6	78.7	74.7	88.8
5135 S	99.4	91.2	91.7	83.6	82.8	84.0	79.9	74.8	90.2
5145 S	100.3	92.3	92.8	84.6	83.8	85.1	80.9	75.0	91.2
5155 S	100.8	92.7	93.4	85.1	84.4	85.7	81.5	75.9	91.8
5165 S	101.2	93.2	93.9	85.6	84.9	86.1	82.0	75.9	92.2
5185 S	102.2	94.1	95.0	86.6	86.0	87.2	83.0	76.7	93.3
5195 S	103.0	94.9	95.9	87.4	86.8	88.1	83.8	76.8	94.1
5210 S	101.5	93.4	93.8	85.7	84.9	86.1	82.0	76.7	92.3
5220 S	102.1	94.0	94.5	86.3	85.6	86.8	82.7	76.7	92.9
5230 S	102.4	94.3	94.9	86.7	86.0	87.2	83.1	77.4	93.3
5240 S	102.7	94.6	95.3	87.0	86.3	87.6	83.4	77.4	93.7
5255 S	103.0	94.9	95.6	87.3	86.7	87.9	83.8	77.9	94.0
5265 S	103.6	95.6	96.4	88.0	87.4	88.7	84.4	78.0	94.7
5280 S	104.2	96.2	97.1	88.6	88.0	89.3	85.1	78.5	95.4
5295 S	104.7	96.7	97.6	89.1	88.6	89.9	85.6	78.6	95.9
5305 S	103.6	95.5	96.1	87.9	87.1	88.4	84.2	78.5	94.5
5310 S	103.8	95.7	96.4	88.1	87.4	88.6	84.5	78.5	94.7
5320 S	104.0	96.0	96.6	88.4	87.7	88.9	84.8	78.9	95.0
5330 S	104.2	96.2	96.9	88.6	87.9	89.2	85.0	78.9	95.2
5345 S	104.7	96.7	97.5	89.1	88.5	89.7	85.5	79.4	95.8
5355 S	105.2	97.2	98.0	89.6	89.0	90.2	86.0	79.4	96.3
5365 S	105.2	97.2	98.0	89.6	89.0	90.2	86.0	79.4	96.3
5380 S	105.6	97.6	98.4	90.0	89.4	90.7	86.4	79.8	96.7
5395 S	106.0	98.0	98.9	90.4	89.8	91.1	86.8	79.9	97.1

MODELS	Sound pressure level in dB ref 2×10^{-5} Pa @ 1meter in free field								Overall
	Spectrum per octave band								
APCY	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dBA
5050 S	78.1	69.9	70.0	62.3	61.5	62.4	58.7	55.2	68.8
5060 S	78.8	70.5	70.8	63.0	62.1	63.1	59.3	55.3	69.4
5070 S	80.6	72.5	73.1	65.0	64.3	65.4	61.3	56.7	71.6
5085 S	81.5	73.5	74.2	65.9	65.3	66.5	62.3	56.9	72.6
5100 S	83.2	75.2	76.1	67.6	67.0	68.3	64.0	57.1	74.4
5110 S	80.6	72.4	72.6	64.7	63.9	64.9	61.1	56.7	71.2
5120 S	81.0	72.7	73.0	65.2	64.3	65.4	61.5	57.5	71.6
5135 S	81.9	73.8	74.2	66.1	65.3	66.5	62.4	57.4	72.7
5145 S	82.8	74.8	75.3	67.1	66.3	67.6	63.4	57.5	73.7
5155 S	83.2	75.1	75.8	67.5	66.8	68.1	63.9	58.3	74.2
5165 S	83.6	75.6	76.3	67.9	67.3	68.5	64.4	58.3	74.6
5185 S	84.1	76.1	76.9	68.5	67.9	69.2	65.0	58.7	75.3
5195 S	84.9	76.9	77.8	69.3	68.8	70.0	65.8	58.8	76.1
5210 S	83.0	74.9	75.4	67.2	66.5	67.7	63.6	58.2	73.8
5220 S	83.5	75.4	75.9	67.7	67.0	68.2	64.1	58.2	74.3
5230 S	83.6	75.5	76.1	67.9	67.2	68.4	64.3	58.6	74.5
5240 S	84.0	76.0	76.6	68.3	67.6	68.9	64.7	58.7	75.0
5255 S	84.1	76.0	76.7	68.4	67.8	69.0	64.9	59.0	75.1
5265 S	84.7	76.7	77.5	69.1	68.5	69.7	65.5	59.1	75.8
5280 S	85.0	76.9	77.8	69.4	68.8	70.1	65.8	59.3	76.1
5295 S	85.5	77.5	78.4	69.9	69.3	70.6	66.3	59.4	76.6
5305 S	84.1	76.1	76.6	68.4	67.7	68.9	64.8	59.0	75.0
5310 S	84.3	76.3	76.9	68.6	67.9	69.2	65.0	59.0	75.3
5320 S	84.5	76.4	77.1	68.8	68.1	69.4	65.2	59.4	75.5
5330 S	84.7	76.6	77.3	69.0	68.4	69.6	65.5	59.4	75.7
5345 S	84.9	76.9	77.6	69.3	68.6	69.9	65.7	59.5	76.0
5355 S	85.4	77.3	78.1	69.7	69.1	70.4	66.2	59.6	76.5
5365 S	85.4	77.3	78.1	69.7	69.1	70.4	66.2	59.6	76.5
5380 S	85.5	77.5	78.4	69.9	69.3	70.6	66.3	59.7	76.7
5395 S	85.9	77.9	78.8	70.3	69.7	71.0	66.7	59.8	77.0

Table 45

Sound Data - 60Hz

MODELS	Sound power level in dB re 10^{-12} W								Overall
	Spectrum per octave band								
APCY	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dBA
6060 S	96.3	88.8	88.6	81.6	80.5	81.1	77.6	67.8	87.5
6070 S	97.0	89.3	89.3	82.2	81.0	81.8	78.1	68.0	88.1
6085 S	99.2	91.7	91.9	84.5	83.4	84.4	80.5	69.9	90.5
6100 S	100.1	92.5	92.9	85.2	84.3	85.3	81.4	70.3	91.5
6115 S	101.9	94.2	94.9	86.8	86.0	87.2	83.0	71.1	93.2
6130 S	99.3	91.8	91.6	84.6	83.5	84.1	80.6	70.8	90.5
6145 S	100.0	92.3	92.3	85.2	84.0	84.8	81.1	71.0	91.1
6160 S	101.3	93.6	93.8	86.2	85.2	86.2	82.3	71.5	92.4
6170 S	102.2	94.5	94.8	87.1	86.1	87.2	83.2	72.0	93.3
6185 S	102.7	95.0	95.4	87.7	86.8	87.8	83.8	72.7	93.9
6200 S	103.1	95.4	95.9	88.1	87.2	88.3	84.3	72.9	94.4
6215 S	104.1	96.4	97.0	89.1	88.3	89.4	85.3	73.7	95.5
6230 S	104.9	97.2	97.9	89.8	89.0	90.2	86.0	74.1	96.3
6245 S	103.4	95.7	95.9	88.3	87.3	88.3	84.4	73.5	94.5
6260 S	104.0	96.3	96.6	88.8	87.9	89.0	84.9	73.8	95.1
6270 S	104.3	96.6	97.0	89.3	88.3	89.4	85.4	74.2	95.5
6285 S	104.6	96.9	97.4	89.5	88.6	89.7	85.7	74.4	95.8
6295 S	104.9	97.2	97.7	89.9	89.0	90.1	86.1	74.8	96.2
6310 S	105.6	97.8	98.4	90.5	89.7	90.8	86.7	75.1	96.9
6320 S	105.6	97.8	98.4	90.5	89.7	90.8	86.7	75.1	96.9
6335 S	106.2	98.4	99.1	91.1	90.3	91.4	87.3	75.6	97.5
6350 S	106.7	98.9	99.7	91.5	90.8	92.0	87.8	75.8	98.0
6365 S	105.5	97.8	98.1	90.4	89.5	90.5	86.5	75.4	96.7
6375 S	105.7	98.0	98.4	90.6	89.7	90.8	86.8	75.5	96.9
6385 S	105.9	98.2	98.7	90.9	90.0	91.1	87.1	75.8	97.2
6395 S	106.1	98.4	98.9	91.1	90.2	91.3	87.3	75.9	97.4
6410 S	106.7	99.0	99.5	91.6	90.8	91.9	87.8	76.3	98.0
6435 S	107.1	99.4	100.0	92.0	91.2	92.4	88.2	76.5	98.4
6450 S	107.5	99.8	100.5	92.4	91.7	92.8	88.7	76.9	98.9
6475 S	107.9	100.2	100.9	92.8	92.1	93.2	89.0	77.1	99.3

MODELS	Sound pressure level in dB ref 2×10^{-5} Pa @ 1meter in free field								Overall
Spectrum per octave band									
APCY	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dBA

<tbl_r cells="3" ix="1" maxcspan="8" maxrspan="2

SKM Compact Screw Chillers

APCY-S Series - R-134a

Location And Space Requirements

To enhance system performance and operating economy, certain precautions should be followed before installation.

1. There should be no obstruction on the air discharge.
2. Unit must not be installed in a pit or near a parapet wall that is taller than the unit height.
3. Orient the unit so that prevailing winds blow parallel to unit length. If it is not practical to orient in this manner, a wind deflecting shield should be considered.
4. Provide adequate clearance on all sides of the unit for service access and avoid coil starvation. Refer to figure below for recommended clearances.

Recommended Clearances

It is a necessity that the units are installed with adequate free space around them to ensure proper circulation of air that is rejected by the condensers and to provide adequate space for unit access for servicing and maintenance. There is a possibility of recycling of air if the rejected air from condenser encounters any obstacles leading to an increase in the ambient air temperature surrounding the units.

Air distribution across the entire heat exchange area will be impaired if the air outlet is obstructed. These conditions lead to a reduction in the heat exchange capacity of the coils causing an increase in discharge pressure of the compressors. This leads to a loss of capacity & increase in compressor power input.

Units should not be completely shrouded with higher uninterrupted wind shield in order to prevent reversing of airflow. In case, such a configuration cannot be avoided , a properly designed exhaust duct or hood that does not influence any additional pressure on the fans and which is of the same height as surrounding shield to be installed. For installation involving more than 3 chillers, consult SKM for acceptable clearance.

MULTIPLE UNIT INSTALLATION

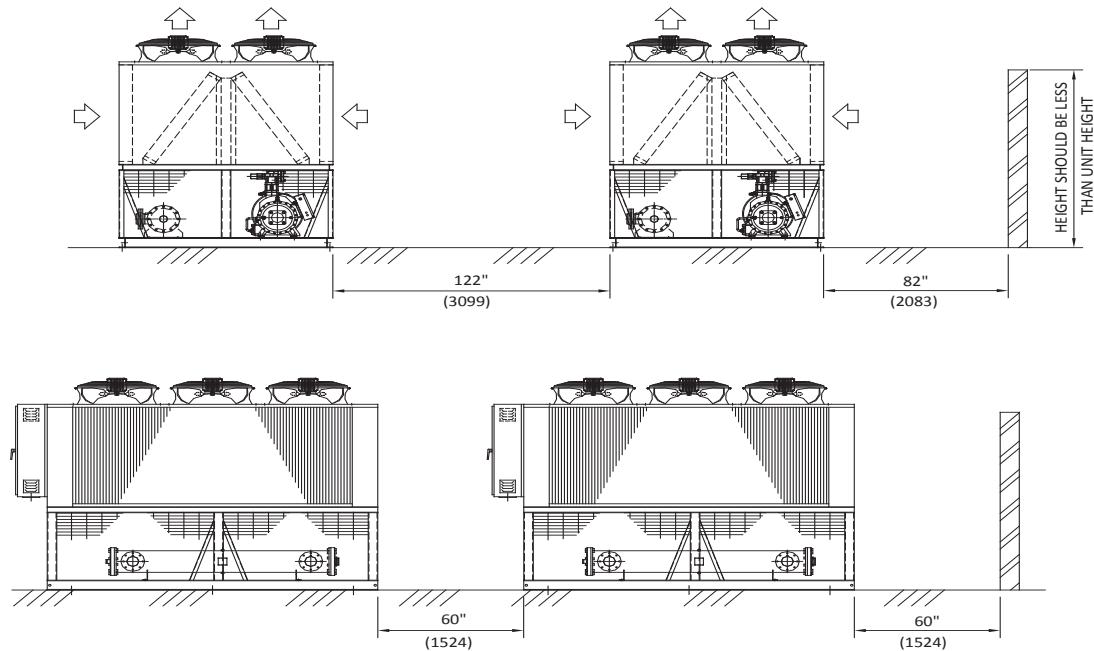


Figure A

Foundation

Provide a level and rigid concrete foundation or a steel platform that is strong enough to carry the operating weight of the unit. SKM Air Conditioning is not liable for any damages and problems in the equipment caused by erroneous design in the foundation.

SKM Compact Screw Chillers

APCY-S Series - R-134a

Water Piping Practices

SKM suggests abiding by the local authorities' chilled water piping recommendations and practices as they can provide the installer the building and safety codes required for the installation.

Water piping should be designed to have a minimum number of bends and horizontal piping levels. Below are the following components it should have:

1. Temperature and pressure gauges in entering and leaving chiller water piping for unit servicing and commissioning. Pressure gauges must be installed on the same level.
2. Vibration eliminators in entering and leaving chilled water piping to lessen the sound and vibration transmitted to the building.
3. Pipe strainer in the evaporator entering piping to protect the evaporator from water debris and maintain chiller efficiency.
4. Water flow switch in the leaving chilled water piping, wired to the terminals provided in the control panel, to make sure that it has sufficient flow of water in the evaporator. This will prevent the evaporator from freezing up when the water flow is interrupted and avoid compressor slugging on start-up.
5. To isolate the unit from the piping system when servicing or during maintenance, install a shut off valve on the entering and leaving chilled water piping.
6. Expansion Tank provides additional space in the chilled water piping system as temperature rises and furthermore, it maintains a positive pressure within the working limitations of the system.
7. Air Vents at high points in the chilled water system to bleed air from the system.
8. Vapor barrier on the outside of the insulation to avoid condensation in the cold surface of the pipe that may cause damage on the building structure. A thorough leak test should be made before insulating the pipe.

Flush all chilled water piping before making the final connection to the unit. SKM recommends hiring services of water treatment specialist to determine the type of necessary treatment. Improper or untreated chilled water leads to scaling, erosion, corrosion or algae that can cause inefficient operation and tube damage. SKM will not be liable for damages caused by improper or untreated chilled water.

Run the pumps 2 to 3 minutes before starting the chiller to ensure no freezing occurs that may damage the evaporator.

TYPICAL CHILLED WATER PIPING

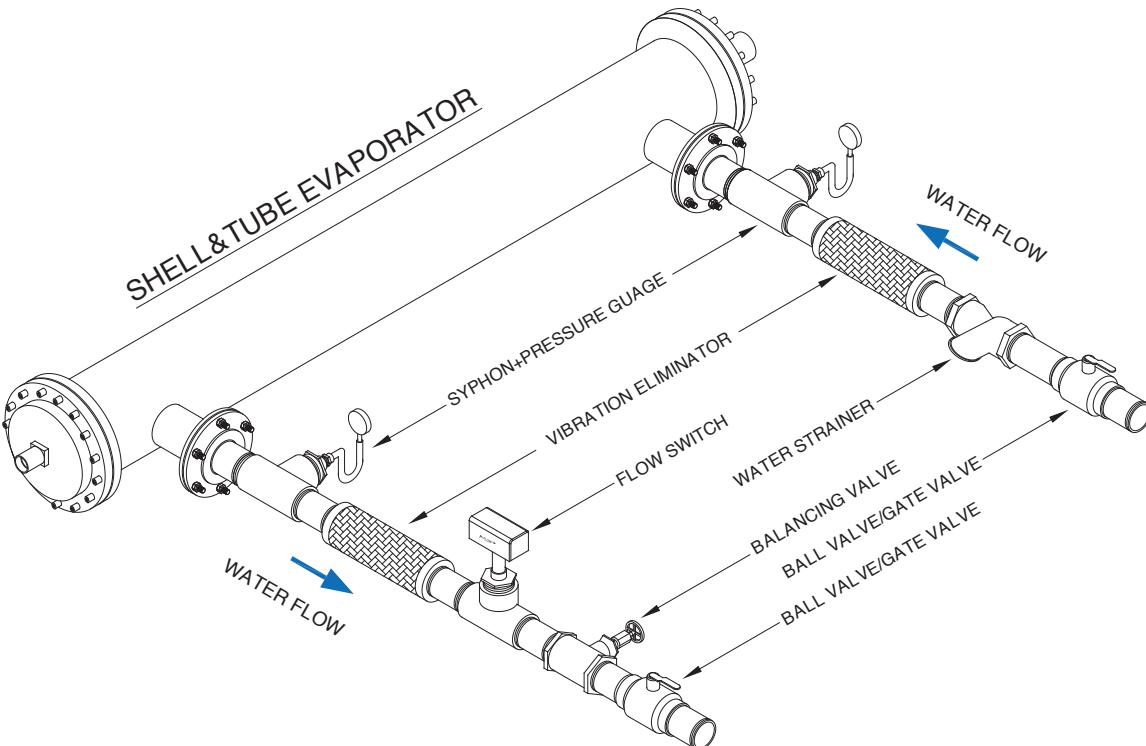


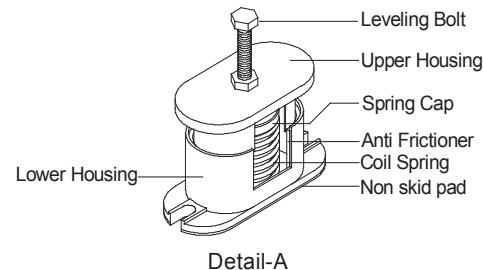
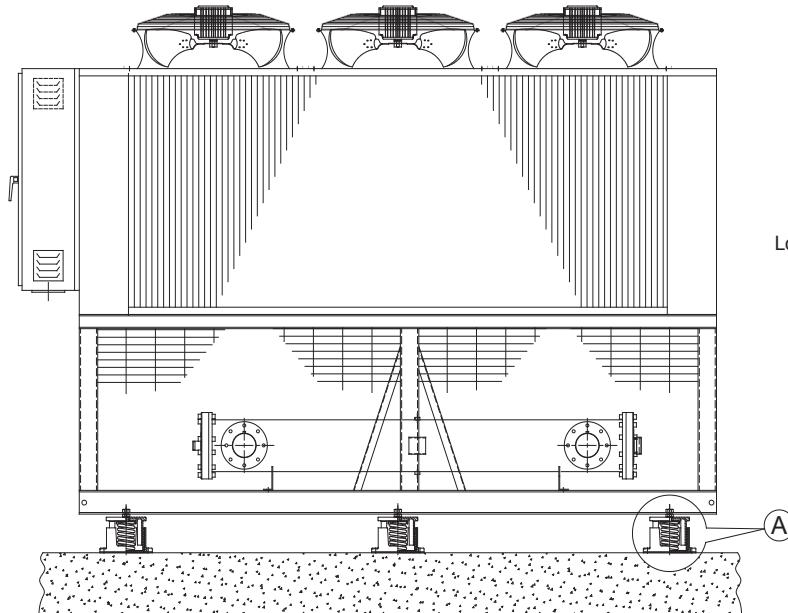
Figure B

SKM Compact Screw Chillers

APCY-S Series - R-134a

Vibration Isolation

It is recommended to install under the base of the unit a vibration isolation of rubber-in-shear or spring type for further reduction of sound and vibration transmission to building structures . Vibration isolators must be correctly designed for each mounting loads of the unit. Refer to unit certified drawing for operating weight at each mounting points.



Note :

SKM can supply CAVM Spring type Anti-vibration mounts (optional). The CAVM has a deflection of 25mm and each rated load can be distinguished easily as it is represented by different colours.

Water Loop Volume

In chilled water system, presence of sufficient volume of water in the piping system is crucial to achieve proper operation, unfortunately, some systems will run with less water volume than needed, this will result in inconsistency system operation, and uncontrolled compressor cycling, this condition is called "short water loop".

If our building for example didn't provide enough water volume to achieve stable controls, a storage tank should be installed to increase the water volume.

In a standard air conditioning application, the tank should be sized to attain at least 2 minute water loop and 2.5-4 minute water loop for process cooling systems.

Having enough water loop time, hence enough water volume in the evaporator loop will prevent irregular compressor cycling, which means smoother operation.

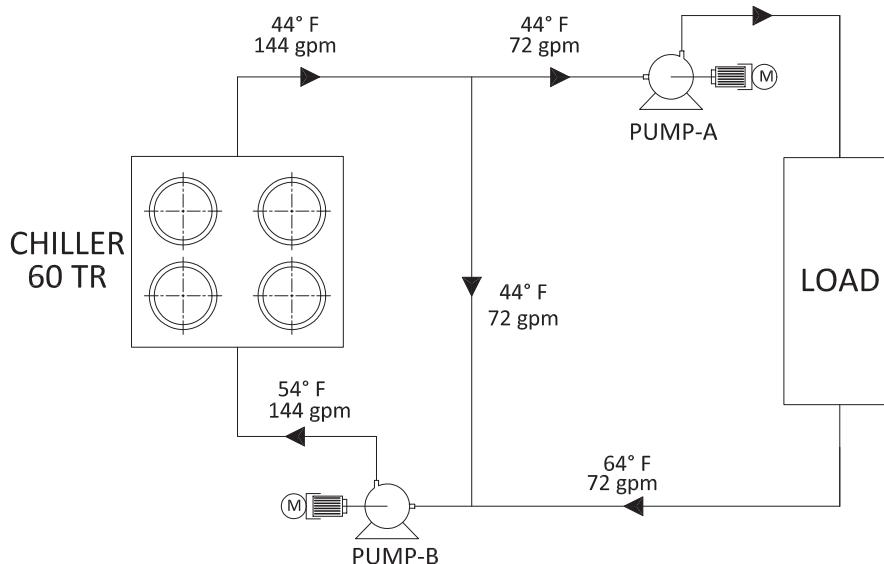
SKM Compact Screw Chillers APCY-S Series - R-134a

Evaporator Water Flow Rate and Temperature Range

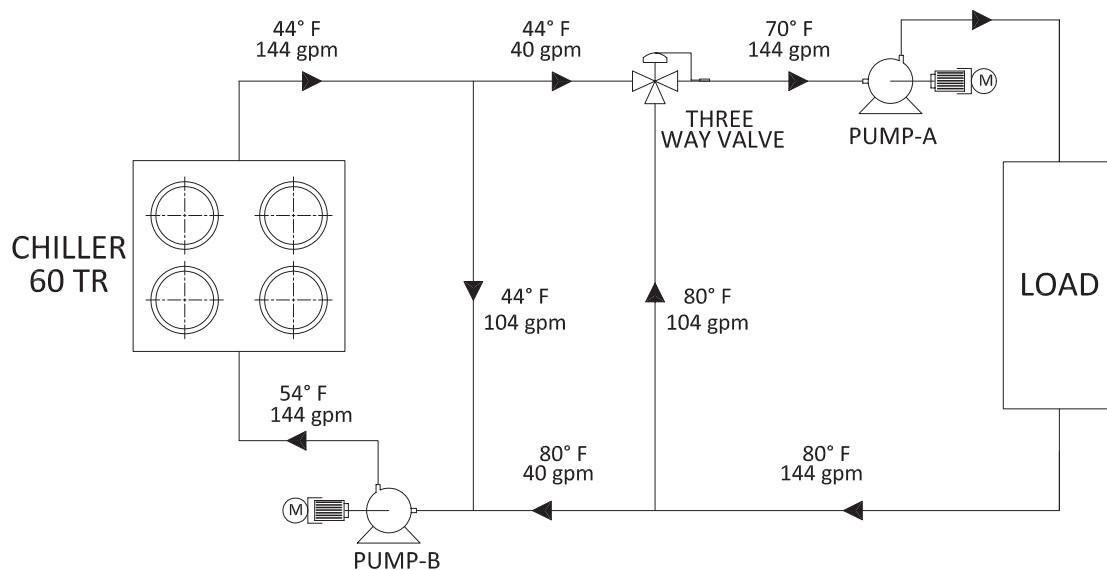
APCY-S Series can operate at wide evaporator temperature range, 8°F (4.4°C) - 16°F (8.9°C), within the water flow rate limits, and is flexible enough to permit leaving water temperatures ranging from 41°F (5°C) - 48°F (8.9°C). The minimum and maximum water flow rates of each evaporator are shown in the Evaporator Water Pressure Drop table.

Although in a lot of process cooling applications, it could be found that the flow rates or leaving temperatures are outside the specified limits, however this can be solved by making changes in the chilled water piping arrangement.

EVAPORATOR WATER FLOW RATE OUTSIDE OF SPECIFIED LIMITS



EVAPORATOR WATER TEMPERATURE OUTSIDE OF SPECIFIED LIMITS



SKM Compact Screw Chillers

APCY-S Series - R-134a

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 $< 16^{\circ}\text{F}$ (8.9°C) or in series if range $> 16^{\circ}\text{F}$ (8.9°C).

Chilled Water Piping for Typical Multiple Chiller Installation

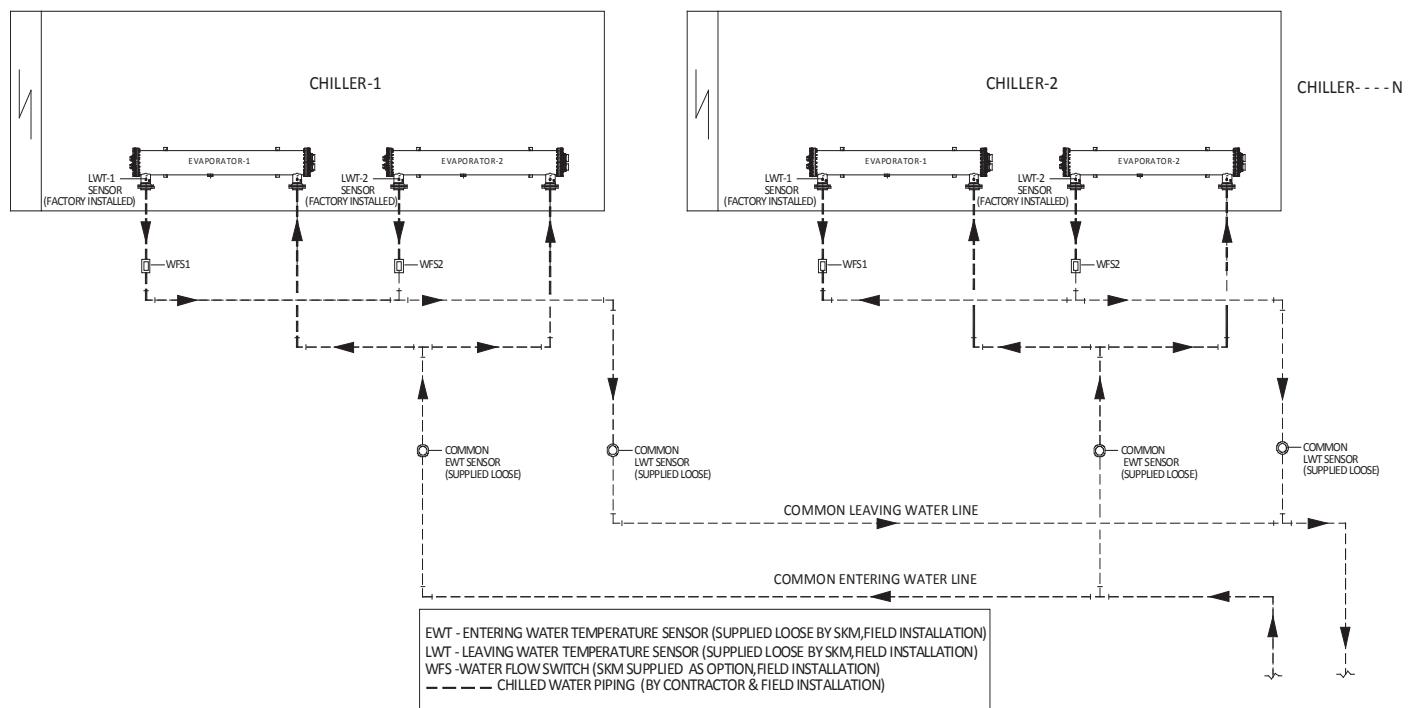


Figure C

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 Compact Screw Chillers

APCY-S Series - R-134a

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 semi hermetic compact screw 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-134a. 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 AHRI-550/590. Each machine shall be capable of operating satisfactorily in a wide range of ambient air temperatures ranging from 25°F (-4°C) to 127.4°F (53 °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.

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

COMPRESSOR

Compressor shall be high performance and high efficiency screw type. The compressor shall be driven by an electric motor in a single housing. For stability and additional sound attenuation, the rotors shall be mounted in a double wall housing.

The compressor motor shall be refrigerant gas cooled. Each compressor shall be mounted on anti-vibration mounts to minimize vibration transmission.

Compressor shall have discharge stop off valves, built in three-stage oil separator, oil heater, oil sight glass, oil drain service valves and discharge check valve.

Compressor shall have automatic start unloading and shall have infinite capacity control. Each compressor shall be provided with safety devices including check valve in discharge gas outlet, motor winding temperature protection by integrated PTC sensors in each winding, phase sequence protection for direction of rotation, discharge temperature protection, oil pressure and oil level protection.

All compressors shall be provided with an individual 3 pole MCCB for short circuit protection & Isolation. 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 start or star-delta start depending on the models.

EVAPORATOR

Evaporator shall be of direct expansion, shell & tube type with removable head and 1, 2, or 3 refrigeration circuits. The bundle shall be made of copper tubes, expanded into steel tube sheets, with brass baffles located into a steel shell.

The evaporator shall be provided with water drain, air vent and fittings for temperature sensors. The shell shall be insulated with 1" (25mm) thick flexible closed cell insulation with a maximum K factor of 0.28 Btu.in/ft².hr.°F (0.04 W/m.°K).

The evaporator shall be designed for 239.3 psig (1650 kPa) refrigerant side working pressure and 145 psig (1000 kPa) waterside working pressure.

CONDENSER COIL

Condenser coil shall be air cooled and shall be constructed of seamless Hi-X copper tubes, maximum 3 rows deep, 3/8" (9.52 mm) O.D. and mechanically bonded to the wavy type aluminum fins .

Fins spacing shall be maximum 16 FPI (1.59 mm). Slit fins shall not be accepted. Precoated fins shall be used for saline and corrosive environment.

The coils shall be tested against leakage by air pressure of 450 psig (3102 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 motor protector circuit breakers and contactor rated for AC3 duty operation.

REFRIGERATION CIRCUITS

Refrigeration circuits piping shall be fabricated from ACR grade copper pipes and each refrigeration circuit shall include a removable core filter drier, electronic expansion valve, and shut off valve.

SKM Compact Screw Chillers

APCY-S Series - R-134a

GUIDE SPECIFICATIONS

Suction line shall be insulated with $\frac{1}{2}$ " (13mm) wall thickness closed cell pipe insulation with maximum k factor 0.26 Btu.in/ft².hr. $^{\circ}$ F (0.038 W/m. $^{\circ}$ K).

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 degreased 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 as per (ASTM B 117).

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

Control panel enclosure shall be fabricated out of heavy gauge steel in phosphatized, powder coated baked finish. The enclosure shall be conformed to IP54 as per guidelines in IEC 529. A hinged access door and key fastener shall be provided for easy access and security.

The control panel shall be ventilated using louvers and filters. The panel shall be factory wired in accordance with NEC 430 & 440, labeled, tagged and have 1 phase, 220 / 240 V for controls.

Control Panel should include the following components as minimum :

- Individual compressor and condenser fan motor contactors.
- Thermal magnetic circuit breakers for compressors and condenser fan motors.
- Voltage monitoring module for protection against under voltage, over voltage, phase loss, phase reversal and phase unbalance of the incoming voltage.
- Circuit breaker for control circuit.
- Remote/Off/Local selector switch.
- Microprocessor master board with graphical display.
- Microprocessor expansion boards as required.

- Electronic expansion valve control boards.
- Control Relays.
- Control circuit on/off switch and pump down switches.
- Volt free contacts for run, common fault and auto mode indications.
- Provision for accepting volt free contact for remote start/stop.
- Control terminal blocks and power terminal blocks/bus bars.

A Microprocessor must be provided to control the chiller as a standard. The controller shall provide the flexibility with set points and control options that can be selected prior to the commissioning. The microprocessor shall provide a complete operational control for the chiller and shall have built-in auto diagnostic capability that can signal off normal operation or alarm conditions as well as shutting down the chiller.

The Master Micro Controller board shall have sensor inputs, digital inputs, relay outputs 0-10 Vdc analog outputs, keypad, graphics LCD with 2.8" diagonal viewing area, real time clock, RS-232, RS-485 and ethernet communication ports.

The main features of the Controller shall be as follows :

- A large graphical display with backlit that can be seen in bright or dim lighting.
- A user friendly nine button generic keypad.
- Battery backed up built-in real time clock to program two start/step daily and provide the information of running hours of the compressors.
- A multiple level passwords for security.
- Automatic lead/lag changeover of 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 through Volt Free Contact.
- Volt Free Contacts for common Run, Fault and Remote mode operation status.



SKM Compact Screw Chillers

APCY-S Series - R-134a

GUIDE SPECIFICATIONS

EASY ACCESSIBLE MEASUREMENTS SHALL INCLUDE THE FOLLOWING :

- Status of the chiller.
- Status of each circuit/compressor.
- Status of condenser fans.
- Leaving and Entering chilled water temperature.
- Suction pressure and temperature for each refrigerant circuit.
- Discharge pressure and temperature for each refrigerant circuit.
- Suction and discharge superheat for each refrigerant circuit.
- Oil pressure for each compressor.
- Winding temperature for each compressor.
- Ampere draw for each compressor.
- Expansion valve opening percentage.
- Ambient temperature.
- All active set points.
- Run time for each compressor.
- Number of compressor starts.
- Lockout and alarm status.
- Status of water flow switch, voltage monitor, compressor internal motor protector, oil level switch, run/stop input and pump down switches.
- Log of last 100 alarms.
- Lead compressor identification.
- Date and time.
- Graphs of all inputs and outputs.

THE FOLLOWING SYSTEM PROTECTION CONTROLS SHALL AUTOMATICALLY ACT TO ENSURE SYSTEM RELIABILITY AND PROTECTION OF THE UNIT THROUGH THE MICROPROCESSOR:

- Low suction pressure protection.
- High discharge pressure protection.
- High discharge temperature protection.
- Low discharge pressure protection.
- Low oil pressure protection.
- Low oil level protection.
- High compressor motor winding temperature protection.
- Low superheat protection.
- High compressor ampere protection.
- Compressor internal thermal protection.
- Freeze protection.
- Under voltage, over voltage, phase loss, phase reversal and phase unbalance protection.
- Chilled water flow loss protection.
- Sensor error protection.
- Pump down.
- Anti-recycle.
- Time delay between stages.
- 4-Levels of passwords to restrict the intentional mishandling.

SKM Compact Screw Chillers

APCY-S Series - R-134a

NOTES





*you name it
we cool it*

HEAD OFFICE

P.O Box: 6004
Sharjah, United Arab Emirates
Tel: +971 6 514 3333
Fax: +971 6 514 3300
Email: sales@skmaircon.com
Email: info@skmaircon.com

Spare Parts Division

Email: spareparts.skm@skmaircon.com

Service Centre

Email: aftersales.skm@skmaircon.com

REGIONAL OFFICES

United Arab Emirates

Abu Dhabi

P.O Box: 27788
Tel: +971 2 6445223
Fax: +971 2 6445145
Email: abudhabisales.skm@skmaircon.com

Dubai

P.O Box: 98822
Tel: +971 4 2940900
Fax: +971 4 2940029
Email: dubaisales.skm@skmaircon.com

Kuwait

Dasman

P.O Box: 1215-PC 15463
Tel: +965 2 2492200
Fax: +965 2 2494400
Email: kuwaitsales.skm@skmaircon.com

Saudi Arabia

(Production Facility)

SKM Air Conditioning Factory
Eastern province
AD Dammam
2nd industrial city
Abqiq main road Hail Street
Tel: +966 3 8123332 / 4 / 5
Fax: +966 3 8123337 / +966 3 8123092
Email: saudifactory.skm@skmaircon.com

Algeria

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

For SKM Distributors visit:

www.skmaircon.com