

PACV-DEXM SERIES

Explosion Proof Packaged Air conditioners



R-134a
REFRIGERANT



Range 7 TR to 90 TR
(24 kW to 316 kW)



Ambient Temperature
(+55°C)



Contents

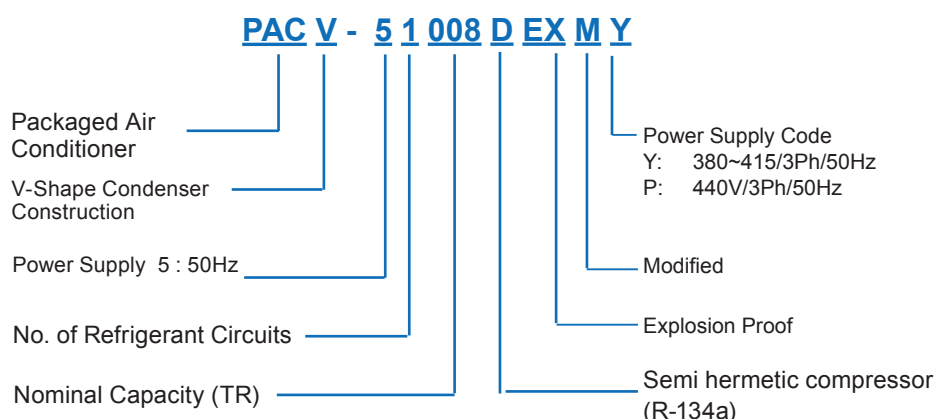
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Legend

The following abbreviations are used throughout this manual:

BPF..... By-pass Factor	Ph Phase
cfm Cubic feet per minute	Pa Pascals
EER Energy Efficiency Ratio	PD Pressure Drop
Hz Hertz	PI Power Input
in.wg Inches of water gauge	RPM Revolutions per Minute
kW Kilowatts	TR Tons of Refrigeration = 3.517kW
kg kilogram	V Volts
lbs Pounds weight (British units)	FPI Fins per Inch
L/S Liters per second	
MBh..... BTUH x 1000	

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 **PACV-DEXM** Explosion Proof Packaged Air Conditioners Series are designed and manufactured to meet the harsh requirements of Hazardous and Marine environments, also are intended for use in Area Gulf's severe climatic conditions up to **55°C** ambient temperature.

The **PACV-DEXM** Explosion Proof Packaged Air conditioners Series are ideal for Offshore platform, Accommodation platform, warehouses, oil/gas rigs, processing refineries, chemical production facilities, flammable liquids storage facilities, fuel transportation, petrol stations, paint production, paper production, or wherever the requirement of Hazardous and Marine environments.

PACV-DEXM Explosion Proof Air cooled package Series (semi hermetic reciprocating) covering nominal capacity ranges from 7 TR -90 TR (**24 kW to 316 kW**).

PACV-DEXM units are designed to operate in a wide ambient temperature range from 50°F (**10°C**) to 131°F (**55°C**).

PACV-DEXM units are designed and rated in accordance with AHRI 340/360 standards And Certified as per ATEX 2014-34-EU and IEC 60079 for Zone1/ Zone2 Hazardous Area.

PACV-DEXM Explosion Proof Series Packaged Air Conditioners are completely assembled, internally wired, charged with R134a refrigerant at factory, tested before dispatch and ready for installation.

SKM provides qualified service and stocks 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.

SKM Air Conditioning LLC



You name it.....We cool it



Hazardous Area Classifications

A hazardous area is defined as an area in which an explosive atmosphere is present or may be expected to be present due to the presence of flammable gases or vapors, flammable liquids, combustible dusts, or easily ignitable fibers or flyings.

Therefore, the use of any electrical apparatus in these areas is strictly controlled through various protection techniques to enable the operators to facilitate the handling or processing of the hazardous materials. This removes the possibility of ignition being caused by the electrical apparatus contained within hazardous area.

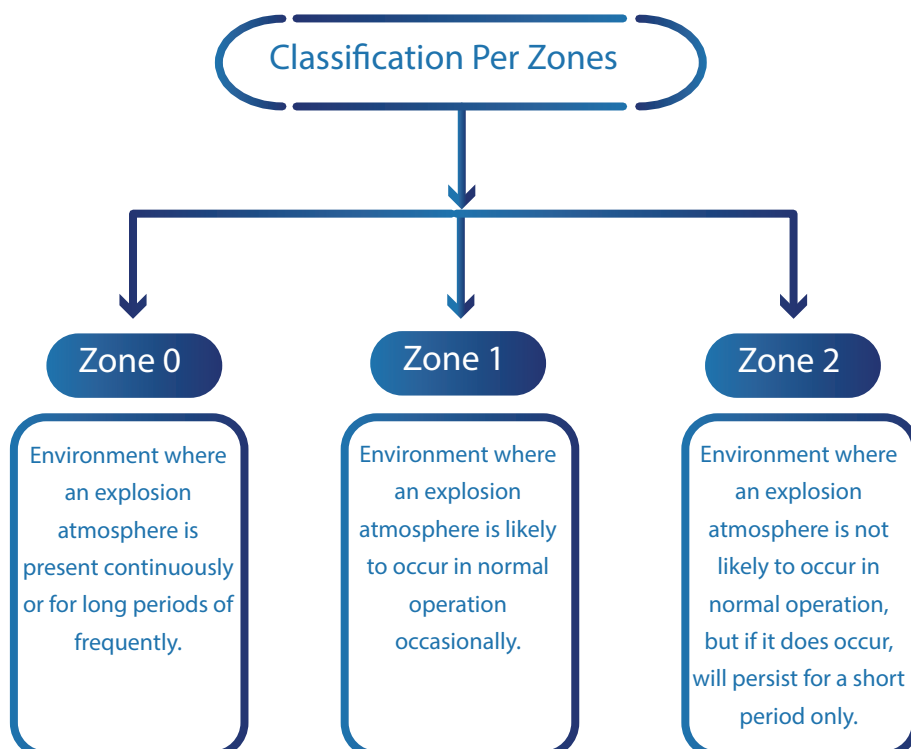
Potentially explosive areas are distinguished according to Groups:

- Areas with a danger of gas explosions.
- Areas with a danger of dust explosions.

Hazardous areas are classified through Zones, Groups and Temperature Classes, the classification according to the (IEC- 60079-10) Standard are shown Below:

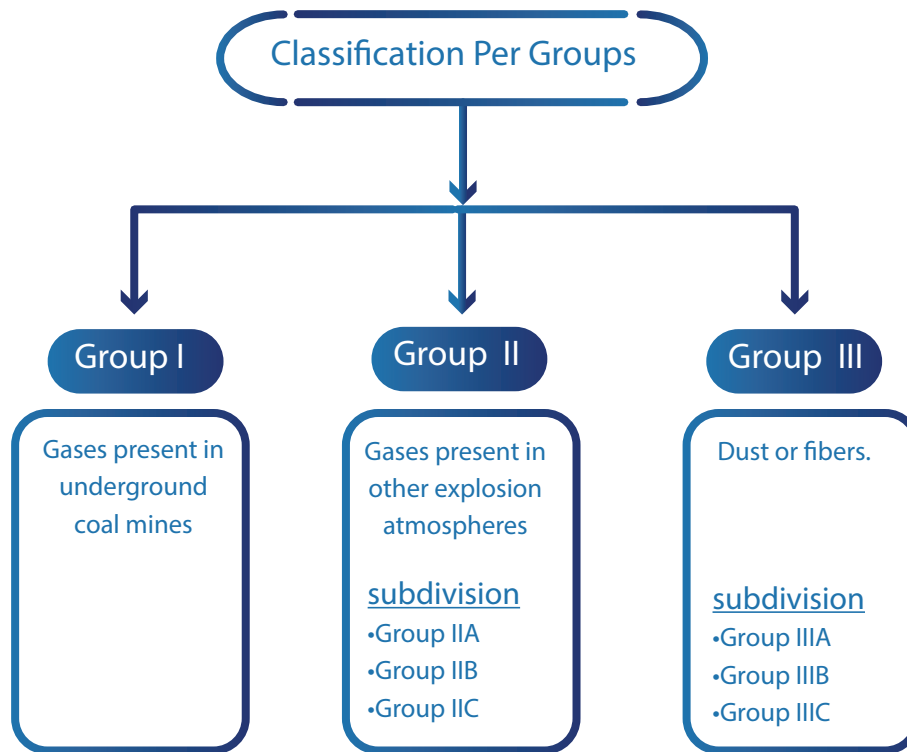
Classification Per Zones

Based upon the frequency of the occurrence and duration of an explosive atmosphere and based on the type of flammable material (gases/vapors or dusts/fibers) :



Classification Per Groups

Subdivision according to the type of flammable material present..



Classification Per Temperature Classes

Related to the ignition temperature of the flammable material present based on electrical equipment surface temperature as Below.

Temperature Class	Maximum Surface Temperature (°C)
IEC	
T1	450
T2	300
T3	200
T4	135
T5	100
T6	85

Table 1



General Features

The **PACV-DEXM** series is a modern, diversified series of packaged air conditioners which use R-134a as the refrigerant.

The complete **PACV- DEXM** package provides an extremely rugged, heavy duty, long-life, energy efficient and self-contained package air conditioner that will provide cooling at higher efficiency over a long and extended life.

- Heavy duty, energy efficient Explosion Proof compressors Certified As per ATEX/IECEX Standards.
- Totally enclosed, Class F insulated, IP56 protected condenser and evaporator fan motors.
- Heavy duty condenser and evaporator coils optimized in design for long-life maintenance free operation.
- Aeris Coated condenser and evaporator coils to ensure the optimum corrosion resistance.
- Cabinet construction specifically designed for the Harsh corrosive marine environments.
- Exd(Flame Proof) Electrical Enclosure.
- High efficiency filters (initial and final) to ensure the air quality to the air-conditioned zones.

The SKM **PACV-DEXM** Explosion Proof packaged air conditioning unit's series are durable, dependable, strong, reliable, versatile, quiet and energy efficient. Where an explosion proof heavy duty packaged air conditioner is required, the **PACV- DEXM** series should be an automatic choice.

Component Features

The common standard features of all **PACV-DEXM** series packaged units include the following.

Compressor

Compressors used in **PACV- DEXM** series are fully accessible, semi hermetic, reciprocating type. They are equipped with an oil sight glass, suction and discharge service valves and crankcase heater, these compressors of the highest quality standard excel in their running comfort, easy maintenance, efficiency and reliability suitable of Explosion-risk Environments.

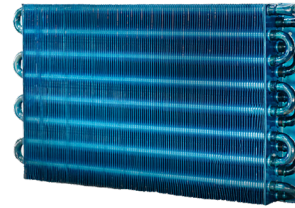
All compressors are refrigerant gas cooled and equipped with an oil pressure lubrication system, special terminal box, special design of the electrical components, and hot gas monitoring of cylinder covers with special thermal protection thermostat.

The compressor motors have inherent thermal protection. This is in addition to other standard safety and protection controls. Compressors conform to EN60079 and/or IEC 60079, SKM **PACV-DEXM** Series uses the semi-hermetic compressors.

All compressors are Suitable and Certified for Hazardous area with ATEX/IECEX Certificate.

Condensers

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



Condenser Coil

All coils are tested against leakage by air pressure of 525 psig (3619 KPa) under water. All standard coils are 2,3 or 4 rows, with 14 FPI or 16 FPI, 3/8" (9.5mm) O.D. tubes.

Aeris Guard Coil Coating is the Standard Coating for **PACV-DEXM**, 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 nonferrous materials.

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

- Copper fins.
- Electro tinned Copper Fins.
- Copper finned coils with electro-tinned after manufacturing.
- Precoated Aluminum fins, the pre-coated is hydrophobic polyurethane resin. This option provides substantial corrosion protection beyond standard coil construction.

All models are suitable for Gulf countries, ensuring the condenser coil design shall provide long life operation with the least possibility Operational blockage on the condenser. Ample condenser surface and sensible air flow across the condenser ensures a low temperature differential between condensing temperature and the High Gulf ambient making the **PACV-DEXM** Explosion Proof packaged unit perform efficiently and durably.

Condenser Fans and Motors

Condenser fans are propeller type, PAGAS anti-static material blades, directly driven by Explosion Proof electric motors. Motors are Totally Enclosed Fan Cooled (TEFC), foot mounted, six poles with class 'F' insulation, suitable for Marine area, and minimum IP56 protection with ATEX/IECEX Certificate.

The motors are factory wired to unit control panel where the motor contactors are located to control the operation of these motors by using wires specially selected for high ambient operation and Hazardous area.

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

Evaporator

Evaporator coils are manufactured of seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All evaporator coils are tested against leakage by air pressure of 350 psig (2413 kPa) under water. The DX evaporator coils are complete with headers of seamless copper tubing. Supply headers incorporate a correctly sized distributor.

Aeris Guard Coil Coating is Standard Coating for **PACV-DEXM**. 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 nonferrous materials.

For different application requirements, other evaporator coil material and/or treatment are available on request.

- Copper fins.
- Electrotinned Copper fins.
- Copper finned coils with electro-tinned after manufacturing.
- Precoated Aluminum fins, the pre-coated is hydrophobic polyurethane resin. This option provides substantial corrosion protection beyond standard coil construction.

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

Evaporator Fan Drive

Fans in the **PACV-DEXM** Explosion Proof units are selected for the best sound characteristics based on maximum fan efficiency. More than one arrangement of evaporator fans are used in the **PACV-DEXM** series packaged units due to the wide range of air flow rates.

Commonly all fans are double inlet, double width, centrifugal type with backward curved impellers provides the combination to efficiency and quietness of operation. All fans are statically and dynamically balanced, Anti-static Conductive Belts are specially selected to comply to explosion proof requirements, Fans are provided with Anti-spark cone and certified to be used in hazardous locations.

For all **PACV-DEXM** Models, use single fan assembly, which has maximum strength, high performance, quietness and reliability. These fans use self-aligned ball or pillow block bearings that are greased for life. Pillow block bearings are provided with re-greasing fittings. The motor is mounted on an adjustable base, so that belt tension can be easily adjusted, the bearings are provided with nipple extended to the unit casing to allow the periodic lubrication.

In order to limit transmission of noise and vibration, the complete fan motor sub-base assembly is mounted on antivibration mounts. Flexible connection is provided between fan discharge and casing panel to avoid transmission of vibration to the connecting duct.

The electric motors are Explosion Proof, foot mounted, 4 poles, totally enclosed fan cooled (TEFC), Class F insulation, suitable for Marine area, and minimum IP56 protection with ATEX/IECEX Certificate.

Drive package is factory selected for the medium air flow rate as shown in the capacity ratings. Alternative drive packages to meet specific job or client requirements can be provided.

Refrigerant Circuit

PACV-DEXM series comes complete, as standard, with correctly sized and piped refrigerant lines including sight glass, filter drier, thermostatic expansion valve, solenoid valve, shut-off valve, and a full operating charge of R-134a in each circuit.

Piping is fabricated from ACR grade copper piping. Suction line is insulated with ½" (12mm) wall thickness closed cell pipe insulation.

Filter

A wide variety of filtration systems are available to meet the different applications, which includes fat filters, V-filters, bag filters, HEPA filters, carbon filters and other. Filters using in **PACV-DEXM** series units are in accordance with ASHRAE 52.2 and EN779 standards.

Casing/Structure

Penta-Post Frame

PACV-DEXM series section casings are constructed of framed modules, for maximum rigidity and strength.

Unit frames shall be constructed of either extruded aluminum profile or hot dip coated galvanized steel profile. (steel penta-post). Both profiles have excellent mechanical characteristics and give the unit its rigidity and design flexibility. The cross-section of profiles is specially designed for this type of application to give extra strength to the unit frame and to prevent any buckling or deformation. Aluminum Profile frames are assembled together using strong nylon corners and steel Penta-Post profiles are connected by means of special corner pieces to produce a very rigid assembly.

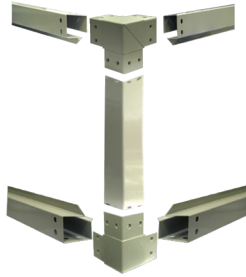


Figure1:Galvanized Penta-Post Frame



Figure2:Thermal Break Aluminum Profile

Electrical Explosion Proof Enclosure

The unit mounted ATEX/IECEX Electrical enclosure (Exd) is made of Copper Free Aluminum, Corrosion resistant, watertight gasket Suitable for Hazardous area.

A hinged access door is provided for easy access and security. The panel is factory wired in accordance with NEC 430 & 440, labelled, tagged and features 220V ~240VAC controls.

The following are the standard components used in all **PACV-DEXM** Explosion Proof Packaged Air Conditioners:

- All compressors are with DOL.
- Individual compressor, condenser fan motors and evaporator fan motor contactors.
- Motor protector circuit breaker for condenser and evaporator fan motors.
- Control circuit breaker.
- Control circuit on/off switch.
- Microprocessor control boards.
- Control Relays.
- Power and control terminal blocks.



Microprocessor Controller



Microprocessor Controller

All **PACV-DEXM** Explosion Proof package unit's series are equipped with a full function microprocessor-based controller as a standard feature. The controller is factory programmed for the control of evaporator fan, compressors and condenser fans. The controller comes with a built-in keypad and display, the controller is accessible by Mod-Bus interface. This controller provides complete operational control for the unit and has built-in auto diagnostic capability that can signal normal operation or alarm conditions as well as shutting down the unit or system if necessary.



Explosion Proof Duct Temperature Sensor

Explosion Proof ATEX/IECEX Certified Duct Temperature Sensor will be provided as loose supplied, to be installed in the conditioned space Return Duct. The Duct Temperature sensor used for measuring the return air temperature. It transmits the return air temperature to the unit controller, Temperature setpoint will be either through Modbus communication or preset temperature value, Control of the compressors is based on the different between the return air temperature and the Temperature set point as standard. **For any specific Control required, please Consult SKM.**

The Main Features of the controller are as follows:

- Built in LCD display with back light.
- Compatible with RTU or TCP/IP Modbus Communication.
- Roll & push knob and 3 function buttons.
- Battery backed up built in real time clock.
- Multiple authorization level to provide tight security for the control system.
- Capacity control based on return air temperature.
- Alarm history.
- Compatible with Explosion Proof ATEX/IECEX Certified Duct Temperature Sensor.

Display Information

SKM **PACV-DEXM** Explosion Proof package unit's series offer Controller which allows the operator to access different parameters of the unit. Operator can view and change the unit parameters through the Controller display or by Communication

Modbus. The display information includes:

- Status.
- Outputs.
- Inputs.
- Alarms.
- Set points.
- Password.

System Control Philosophy

The unit may be enabled or disabled through the control on/off switch Mounted in Control panel fascia, Control is based on Duct Return temperature sensed by Duct Temperature Sensor, Evaporator fan motor starts first. Compressors will be staged based on the set point and actual Return temperature. On an increase in Return temperature, cooling stages will be added and on a decrease in Return temperature, cooling stages will be removed from the system.

System Protection

The intelligent microprocessor-based controller monitors all the safeties related to the unit and makes the necessary protections, by shutting down the entire unit or the effected circuit. The protection includes:

- Low suction pressure.
- High discharge pressure.
- Low oil pressure protection.
- High compressor motor temperature.
- Compressor short cycling.
- Evaporator fan motor overload.

BMS Connectivity (Optional)

Volt free contacts for run status, common fault status, auto mode status and provision for remote on/off shall be provided as option if required.

In addition, the **PACV-DEXM** microprocessor can support the major BMS protocols such as BACnet, Modbus & LON. Extra hardware may be required depending on the protocol.

Bulk Head Light And Switch

All **PACV-DEXM** Module will be provided with ATEX/IECEX Certified Bulk Head Light And Switch for Filter and Fan Section as Standard.

Optional Features

PACV-DEXM series heavy duty packaged air - conditioners are available with a multitude of optional features which makes design and selection extremely easy and capable of matching the most stringent of requirements.

Alternative Condenser Material

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

- Condenser Coil with Copper Fins (**FC**).
- Electro Tinned Copper Fins for Condenser Coil (**CFT**).
- Fully Electro tinned Condenser coils with copper fins (**FCT**).
- Condenser coil with precoated aluminum fins (**FAP**).

Alternative Evaporator Material

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

- Cooling coil with copper fins (**EFC**).
- Electro Tinned Copper Fins for Cooling Coil (**ECFT**).
- Fully Electro tinned Cooling coils with copper fins (**EFCT**).
- Cooling coil with pre-coated aluminum fins (**EFAP**).

Condenser Coil Guard

(CGP)

Galvanized wire mesh guard with painted finish for condenser coils. Recommended on ground level installation where coil needs to be protected against vandalism.

Filter Section

A wide variety of filtration systems are available to meet the different applications, which includes flat filters, V-filters, bag filters, HEPA filters, carbon filters and other.

Filters using in SKM **PACV-DEXM** series units are in accordance with ASHRAE 52.2 and EN779 standards.

In SKM **PACV-DEXM** series units, the following types of flat filters can be provided.

- **[2SMF]** - 2" (50mm) Thick Synthetic flat filter Media used as standard in SKM **PACV-DEXM** series units. EN class: G4
- **[FIMP4-F7]** - 4" (100 mm) Thick extended surface Mini Pleated filters. EN class F7 (including section) used as standard in SKM **PACV-DEXM** series units.

Filters available as Option :-

- **[FIBG0-F7]** - 15" (380 mm) deep high efficiency bag filters with synthetic media (including section). EN Class: F7.
- **[FIBG0-F8]** - 15" (380 mm) deep high efficiency bag filters with synthetic media (including section). EN Class: F8.
- **[FIBG0-F9]** - 15" (380 mm) deep high efficiency bag filters with synthetic media (including section). EN Class: F9.



- **[FIBG1-F7]** - 21" deep high efficiency bag filters with synthetic media (including section). EN Class: F7.
- **[FIBG1-F8]** - 21" deep high efficiency bag filters with synthetic media (including section). EN Class: F8.
- **[FIBG1-F9]** - 21" deep high efficiency bag filters with synthetic media (including section). EN Class: F9.
- **[FIBG2-F7]** - 30" deep high efficiency bag filters with synthetic media (including section). EN Class: F7.
- **[FIBG2-F8]** - 30" deep high efficiency bag filters with synthetic media (including section). EN Class: F8.
- **[FIBG2-F9]** - 30" deep high efficiency bag filters with synthetic media (including section). EN Class: F9.
- **[FIMP4-F8]** - 4" (100 mm) thick extended surface Mini Pleated filters. EN class F8 (including section).
- **[FIMP4-F9]** - 4" (100 mm) thick extended surface Mini Pleated filters. EN class F9 (including section).

HEPA filters **(FIHP)**

Ultra-high Absolute HEPA (High Efficiency Particulate Air filter with efficiency in excess of 99% when measured by using DOP (Di-Octyle Phthalate) method. In accordance with EN1882 standards. Eff: H13 (including section)

Options:

- Carbon Filter **[FICF]**.

Manometers Across The Filter **(MAF)**

Manometers to monitor air pressure drop across filters.

SKM can provide any of the following types of manometers:

- Inclined tube Manometers **[MAF1]**.
- Dial type manometers **[MAF2]**.
- Magnehelic type Manometers **[MAF3]**. (SKM standard)

Pressure Gauges **(SDG)**

Suction, Discharge and Oil pressure indication of each refrigerant circuit.

Stainless Steel Drain Pan **(SSP)**

Heavy gauge stainless steel drain pan (Grade 316L) under the entire cooling coil and moisture eliminator. Insulation under Drain pan as per SKM Standard.

Extra Shut Off Valve / Extra Ball Valve **(CXFV / XFV)**

To fully isolate refrigerant filter drier, additional shut-off or ball valve can be incorporated in the liquid line.

Pressure Relief Valve **(PRV)**

To protect the unit from being over-pressurized.

Evaporator Fans With Polyglycoat Coating **(PGF)**

To provide protection against corrosion for evaporator or condenser fans.

Mixing Box **(BMX)**

Mixing box with fresh air and return air dampers are available to mix the outside fresh air with recirculated return air.

Marine Application **(MA)**

All unit components and Structure shall be customized to be suitable for Marine Harsh corrosive environment.

(Consult SKM Engineering)

Explosion Proof Electric Heating **(EXP-HTR)**

The Explosion Proof Electric Heating Batteries are made up of finned heating elements, constructed from high-quality stainless-steel resistance Suitable for hazardous area with ATEX/IECEX certificate.

Heater batteries comes with stage contactors, primary auto reset thermal safety cut-out, secondary manual reset thermal safety cut-out and air flow switch. Control of the heaters will be from the **PACV-DEXM** microprocessor. for any special requirement of heater, **Please Consult SKM**.

Hot Gas Bypass System (GBP)

With solenoid to enable operation of a large sized unit at very low loads, during low load demand due to application requirements or where unit is selected to work on 100% fresh air applications.

Stainless Steel Enclosure (SSCP-EX)

Stainless Steel unit mounted ATEX/IECEX Electrical enclosure can be provided as option, Suitable for Hazardous area. With Corrosion resistant and watertight gasket

Main Molded Circuit Breaker (MCCB)

For Main power protection against Short Circuit and overload.

Control Transformer (CXT)

This option is necessary and available for PACV-DEXM models rated for 440V/3PH/50Hz or power supplies without neutral.

Voltage Monitoring Module (VMM)

To prevent PACV-DEXM unit operation in the event of Phase loss, Phase reversal, and Under / Over voltage on the incoming line voltage.

Voltage Monitoring Module As Per DEWA (DVM)

Under voltage relay as per DEWA regulations.
This option is available for Dubai, UAE only.

Circuit Breaker For Compressor (CBC)

For those electrical specification calls for additional over load and short circuit protection.

External Overload Protection (EOP)

For those electrical specification requires additional overload protection for the compressors.

Emergency Push Button (EPB-EX)

ATEX/IECEX Certified Emergency push button mounted in the Control Panel Fascia or as separate Device.

Indication Light (IND-EX)

ATEX/IECEX Certified Indication Light mounted in the Control Panel Fascia.

Damper Actuator (ACT-EX)

ATEX/IECEX Certified spring return Damper Actuator for Damper Open/close.

Differential Pressure Transmitter (DPT-EX)

ATEX/IECEX Certified Differential Pressure Transmitter for Filter Dirty Status and Fan Status.

Differential Pressure Switch (DPS-EX)

ATEX/IECEX Certified Differential Pressure Switch for Filter Dirty.

Air Flow Switch (AFS-EX)

ATEX/IECEX Certified Air Flow Switch for Fan Status/Air Flow status.

Selector Switch (SS-LOR-EX)

ATEX/IECEX Certified Selector switch for (Local-Off-Remote) selection mounted in the Control Panel Fascia or as separate Device.

Suction Pressure Read Out Capability (SPC-EX)

Additional transducer in suction line to be used.

BMS Interface Volt Free Contacts (BMVF)

Volt free contacts for run status, common fault status, auto mode status and provision for remote on/off shall be provided as option if required. **For additional requirements, please contact SKM.**

BMS Interface Thru Protocol (BMSP)

For interfacing the units with major BMS protocols such as BACnet, Modbus or LON. Extra hardware may be required depending on the protocol.

Type Two Coordination Motor Starter (TYP2)

Circuit breaker and contactor will be selected from the certified type two Coordination combination.

Options for Field Installations

Anti-vibration Mounts, Spring Type. (Supplied Loose) (CAVM)

Recommended for roof mounted units or other locations in the vicinity of occupied spaces, where noise/vibration may be objectionable.

Hi-Lo And Oil Pressure Gauges (Supplied Loose) (CSDG)

Without piping or isolating pet cocks.



Capacity Control Steps

Capacity Control Step is Standard for **PACV-DEXM** Explosion Proof Package , the Control Step arrangement will be as below:

Capacity Control Steps-ATEX

PACV-DEXM	Standard (W/O CCV)	Number of steps	Standard (CR1)	Number of steps	Option (CR2)	Number of steps
51007	0-100	1	0-50-100	2	-	-
51009	0-100	1	0-50-100	2	-	-
52015	0-50-100	2	0-25-50-75-100	4	-	-
52018	0-50-100	2	0-25-50-75-100	4	-	-
52027	0-50-100	2	0-25-50-75-100	4	-	-
52038	0-50-100	2	0-25-50-75-100	4	-	-
52046	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52050	0-53-100	2	0-33-53-84-100	4	0-17-33-53-68-84-100	6
52055	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52060	0-55-100	2	0-41-55-87-100	4	0-28-41-55-71-87-100	6
52065	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6
52075	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6
52080	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6
52090	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6

Table 2

Capacity Control Steps-IECEX

PACV-DEXM	Standard (W/O CCV)	Number of steps	Standard (CR1)	Number of steps	Option (CR2)	Number of steps
51007	0-100	1	0-50-100	2	-	-
51009	0-100	1	0-50-100	2	-	-
52015	0-50-100	2	0-25-50-75-100	4	-	-
52018	0-50-100	2	0-25-50-75-100	4	-	-
52027	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52038	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52046	0-50-100	2	0-25-50-75-100	4	-	-
52050	0-55-100	2	0-36-55-78-100	3	0-18-36-55-78-100	5
52055	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52060	0-53-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52065	0-50-100	2	0-33-50-84-100	4	0-17-33-50-67-84-100	6
52075	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6
52080	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6
52090	0-50-100	2	0-25-50-75-100	4	0-25-38-50-75-88-100	6

Table 3

Selection Procedure

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

Application Requirements	Example 1: English Units	Example 2: SI Units
Required total cooling capacity.....	280.0 MBH.....	82.1 kW
Sensible cooling capacity	235.0 MBH.....	68.9 kW
Condenser entering air temp db	115°F	46°C
Evaporator entering air temp. db/wb	83/67°F	28.3/19.4°C
Evaporator air flow rate	12,000 cfm.....	5663 l/s
External static pressure.....	1.2 inwg.....	300 Pa
Electric power supply	415V/3PH/50Hz.....	415V/3PH/50Hz

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

Selection Procedure :

Enter package unit capacity rating at given condition and selection unit size PACV-52027 DEXM having total cooling capacity 288.3Mbh (84.5kw), and sensible capacity 240.8Mbh (70.6kw), PI=31.2kw Total sensible capacities & power to be interpolated for un tabulated data.

-For EDB other than 80°F (26.7°C), use following formula:

Actual sensible capacity = Rated sensible capacity + 0.0011 (1 – BPF) (EDB – 80) x cfm - IP units

Actual sensible capacity = Rated sensible capacity + 0.00123 (1 – BPF) (EDB – 26.7) x l/s - SI units

Fan Speed & Motor Power

Refer to fan performance table on page no 19 and adjust fan RPM = 1440, fan absorbed power 7.2Kw. standard motor size for selected model is 11kw .

Motor power = Fw x Fan absorbed power

= 1.2 x 7.2 = 8.64 kW

Standard selected motor size = 11 kW

Motor sizing factor

* Fw= 1.2 if fan absorbed power ≤ 3 kW

= 1.15 if fan absorbed power > 3 kW and ≤ 10 kW

= 1.1 if fan absorbed power > 10 kW

SKM Computer Selections are available for quick, detailed and accurate selections.



GENERAL DATA - ATEX

Model	PACV	51007DEXM	51009DEXM	52015DEXM	52018DEXM	52027DEXM	52038DEXM	52046DEXM
Cooling Capacity (1)	MBh	83.8	109.1	173.5	216.1	325.4	464.4	566.5
	kW	25	32	51	63	95	136	166
Cooling Capacity (2)	MBh	73.6	96.1	151.3	190	288.3	411.3	506.9
	kW	22	28	44	56	84	121	149
Compressor	Type	Semi-Hermetic Reciprocating						
	Quantity	-	1	1	2	2	2	2
	Oil Charge per Circuit (A / B)	lbs	4.4000	5.5000	4.4 / 4.4	5.5 / 5.5	7.7 / 7.7	7.7 / 7.7
		kg	2	2.5	2.0 / 2.0	2.5 / 2.5	3.5 / 3.5	3.5 / 3.5
Condenser Coil	Type	Air cooled 2,3 or 4 rows with 14FPI (1.8mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft²	19.4	19.4	45.5	45.5	65.0	91.0
		m²	1.8	1.8	4.23	4.23	6.04	8.45
Condenser Fan	Type	Propeller Direct Drive						
	Code / Quantity	-	600 / 2	600 / 2	700 / 2	700 / 2	800 / 2	800 / 4
	Air Flow Rate	cfm	9820	9260	15040	15040	21800	41440
		l/s	4632.1	4367.9	7094.3	7094.3	10283	19547.2
Condenser Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 6-pole IP56 Protected						
	Size / Quantity	kW	0.37 / 2	0.37 / 2	0.75 / 2	1.1 / 2	1.1 / 2	1.1 / 4
Evaporator Coil	Type	Direct expansion, 12 FPI (2.1mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft²	6.7	9.2	15.0	18.0	24.0	36.0
		m²	0.62	0.86	1.39	1.67	2.23	3.35
Evaporator Fan	Type	Centrifugal double inlet double width belt drive						
	Code / Qty.	-	315 T1 / 1	315 T1 / 1	400 T1 / 1	450 T1 / 1	560 T1 / 1	630 T1 / 1
	Air Flow Rate	cfm	3100	4000	6400	8000	12000	17000
		l/s	1462.3	1886.8	3018.9	3773.6	5660.4	8018.9
Evaporator Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 4-pole IP56 Protected						
	Size (Option 1 / Option 2)	kW	3 / 4	4 / 5.5	5.5 / 7.5	7.5 / 11	11 / 15	15 / 18.5
Refrigerant Operating Charge per Circuit (A / B)	lbs	20.9500	28.4400	30.2 / 30.2	32 / 32	46.3 / 46.3	62.2 / 62.2	63.5 / 63.5
	kg	9.5	12.9	13.7 / 13.7	14.5 / 14.5	21.0 / 21.0	28.2 / 28.2	28.8 / 28.8
Number of Refrigerant Circuits	-	1	1	2	2	2	2	2
Unit Operating Weight	lbs	4455	4664	6410	7270	8965	12067	13797
	kg	2020	2115	2907	3297	4066	5473	6257

Model	PACV	52050DEXM	52055DEXM	52060DEXM	52065DEXM	52075DEXM	52080DEXM	52090DEXM
Cooling Capacity (1)	MBh	617.4	663.8	734	785.8	882.8	937.1	1072.4
	kW	181	195	215	230	259	275	314
Cooling Capacity (2)	MBh	548.6	583.3	653.7	704	781.9	824	937.3
	kW	161	171	192	206	229	241	275
Compressor	Type	Semi-Hermetic Reciprocating						
	Quantity	-	2	2	2	2	2	2
	Oil Charge per Circuit (A / B)	lbs	7.7 / 7.7	7.7 / 7.7	18.7 / 7.7	18.7 / 18.7	18.7 / 18.7	18.7 / 18.7
		kg	3.5 / 3.5	3.5 / 3.5	8.5 / 3.5	8.5 / 8.5	8.5 / 8.5	8.5 / 8.5
Condenser Coil	Type	Air cooled 2,3 or 4 rows with 14FPI (1.8mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft²	91.0	91.0	130.0	130.0	130.0	130.0
		m²	8.45	8.45	12.08	12.08	12.08	12.08
Condenser Fan	Type	Propeller Direct Drive						
	Code / Quantity	-	800 / 4	800 / 4	800 / 4	800 / 4	800 / 8	800 / 8
	Air Flow Rate	cfm	46360	46360	50680	50680	86960	80720
		l/s	21867.9	21867.9	23905.7	23905.7	41018.9	38075.5
Condenser Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 6-pole IP56 Protected						
	Size / Quantity	kW	1.5 / 4	1.5 / 4	1.5 / 4	1.5 / 4	1.5 / 8	1.5 / 8
Evaporator Coil	Type	Direct expansion, 12 FPI (2.1mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft²	46.5	54.7	54.7	56.4	63.8	80.0
		m²	4.32	5.08	5.08	5.24	5.93	7.44
Evaporator Fan	Type	Centrifugal double inlet double width belt drive						
	Code / Qty.	-	800 T1 / 1	800 T1 / 1	800 T2 / 1	900 T1 / 1	1000 T1 / 1	1000 T1 / 1
	Air Flow Rate	cfm	23000	24500	27000	28000	31000	33500
		l/s	10849.1	11556.6	12735.8	13207.5	14622.6	15801.9
Evaporator Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 4-pole IP56 Protected						
	Size (Option 1 / Option 2)	kW	18.5 / 22	18.5 / 22	22 / 30	22 / 30	30 / 37	37 / 45
Refrigerant Operating Charge per Circuit (A / B)	lbs	103 / 89.7	105 / 105	132.3 / 123	130.1 / 130.1	128.8 / 128.8	132.3 / 132.3	168.5 / 168.5
	kg	46.7 / 40.7	47.6 / 47.6	60.0 / 55.8	59.0 / 59.0	58.4 / 58.4	60.0 / 60.0	76.4 / 76.4
Number of Refrigerant Circuits	-	2	2	2	2	2	2	2
Unit Operating Weight	lbs	14513	15604	16366	16815	18729	20680	20984
	kg	6582	7077	7422	7626	8494	9379	9517

Table 4

Notes:

- Capacity ratings are based on AHRI Standard 340/360. Evaporator entering air conditions of 80°/67°F (27°/19.5°C) dry bulb/ wet bulb and condenser entering air temperature of 95°F (35°C) dry bulb.
- Evaporator entering air conditions of 80°/67°F (27°/19.5°C) dry bulb/wet bulb and condenser entering air temperature of 115°F (46°C) dry bulb.
- Capacity is gross capacity which does not include the effect of evaporator fan motor heat.

GENERAL DATA - IECEx

Model	PACV	51007DEXM	51009DEXM	52015DEXM	52018DEXM	52027DEXM	52038DEXM	52046DEXM
Cooling Capacity (1)	MBh	92.5	115.1	191.9	227.8	336.2	473.9	559.7
	kW	27	34	56	67	99	139	164
Cooling Capacity (2)	MBh	83.3	103.3	172.7	204.1	302.2	424.6	485.1
	kW	24	30	51	60	89	124	142
Compressor	Type	Semi-Hermetic Reciprocating						
	Quantity	-	1	1	2	2	2	2
	Oil Charge per Circuit (A / B)	US Gal	0.6100	0.6100	0.61 / 0.61	0.61 / 0.61	0.71 / 0.71	0.95 / 0.95
	Liter	2.3	2.3	2.3 / 2.3	2.3 / 2.3	2.7 / 2.7	2.7 / 2.7	3.6 / 3.6
Condenser Coil	Type	Air cooled 2,3 or 4 rows with 14FPI (1.8mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft ²	19.4	19.4	45.5	45.5	65.0	91.0
	m ²	1.8	1.8	4.23	4.23	6.04	8.45	8.45
Condenser Fan	Type	Propeller Direct Drive						
	Code / Quantity	-	600 / 2	600 / 2	700 / 2	700 / 2	800 / 2	800 / 4
	Air Flow Rate	cfm	9820	9260	15040	15040	21800	41440
	l/s	4632.1	4367.9	7094.3	7094.3	10283	19547.2	22924.5
Condenser Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 6-pole IP56 Protected						
	Size / Quantity	kW	0.37 / 2	0.37 / 2	0.75 / 2	1.1 / 2	1.1 / 2	1.5 / 4
Evaporator Coil	Type	Direct expansion, 12 FPI (2.1mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft ²	6.7	9.2	15.0	18.0	24.0	36.0
	m ²	0.62	0.86	1.39	1.67	2.23	3.35	3.9
Evaporator Fan	Type	Centrifugal double inlet double width belt drive						
	Code / Qty.	-	315 T1 / 1	315 T1 / 1	400 T1 / 1	450 T1 / 1	560 T1 / 1	630 T1 / 1
	Air Flow Rate	cfm	3100	4000	6400	8000	12000	17000
	l/s	1462.3	1886.8	3018.9	3773.6	5660.4	8018.9	9669.8
Evaporator Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 4-pole IP56 Protected						
	Size (Option 1 / Option 2)	kW	3 / 4	4 / 5.5	5.5 / 7.5	7.5 / 11	11 / 15	15 / 18.5
Refrigerant Operating Charge per Circuit (A / B)	lbs	20.9500	28.4400	30.2 / 30.2	32 / 32	46.3 / 46.3	62.2 / 62.2	63.5 / 63.5
	kg	9.5	12.9	13.7 / 13.7	14.5 / 14.5	21.0 / 21.0	28.2 / 28.2	28.8 / 28.8
Number of Refrigerant Circuits	-	1	1	2	2	2	2	2
Unit Operating Weight	lbs	4630	4825	6771	7484	9097	12147	13682
	kg	2100	2188	3071	3394	4126	5509	6205

Model	PACV	52050DEXM	52055DEXM	52060DEXM	52065DEXM	52075DEXM	52080DEXM	52090DEXM
Cooling Capacity (1)	MBh	626.1	688.6	740.3	775.2	910.6	1002.8	1150.3
	kW	183	202	217	227	267	294	337
Cooling Capacity (2)	MBh	554.8	617.3	670.3	703.4	818.2	907.8	1039.7
	kW	163	181	196	206	240	266	305
Compressor	Type	Semi-Hermetic Reciprocating						
	Quantity	-	2	2	2	2	2	2
	Oil Charge per Circuit (A / B)	US Gal	1.19 / 0.95	1.19 / 1.19	1.19 / 1.19	1.19 / 1.19	2.38 / 2.38	2.38 / 2.38
	Liter	4.5 / 3.6	4.5 / 4.5	4.5 / 4.5	4.5 / 4.5	9.0 / 9.0	9.0 / 9.0	9.0 / 9.0
Condenser Coil	Type	Air cooled 2,3 or 4 rows with 14FPI (1.8mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft ²	91.0	91.0	130.0	130.0	130.0	130.0
	m ²	8.45	8.45	12.08	12.08	12.08	12.08	12.08
Condenser Fan	Type	Propeller Direct Drive						
	Code / Quantity	-	800 / 4	800 / 4	800 / 4	800 / 8	800 / 8	800 / 8
	Air Flow Rate	cfm	46360	46360	50680	50680	86960	86960
	l/s	21867.9	21867.9	23905.7	23905.7	41018.9	41018.9	38075.5
Condenser Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 6-pole IP56 Protected						
	Size / Quantity	kW	1.5 / 4	1.5 / 4	1.5 / 4	1.5 / 4	1.5 / 8	1.5 / 8
Evaporator Coil	Type	Direct expansion, 12 FPI (2.1mm) fin spacing, Aluminum Fins, Copper Tubes						
	Face Area	ft ²	46.5	54.7	54.7	56.4	63.8	67.5
	m ²	4.32	5.08	5.08	5.24	5.93	6.27	7.44
Evaporator Fan	Type	Centrifugal double inlet double width belt drive						
	Code / Qty.	-	800 T1 / 1	800 T1 / 1	800 T2 / 1	900 T1 / 1	900 T1 / 1	1000 T1 / 1
	Air Flow Rate	cfm	23000	24500	27000	28000	31000	33500
	l/s	10849.1	11556.6	12735.8	13207.5	14622.6	15801.9	18396.2
Evaporator Motor	Type	Totally Enclosed Fan Cooled, Class F insulation, 4-pole IP56 Protected						
	Size (Option 1 / Option 2)	kW	18.5 / 22	18.5 / 22	22 / 30	22 / 30	30 / 37	37 / 45
Refrigerant Operating Charge per Circuit (A / B)	lbs	103 / 89.7	105 / 105	132.3 / 123	130.1 / 130.1	128.8 / 128.8	132.3 / 132.3	168.5 / 168.5
	kg	46.7 / 40.7	47.6 / 47.6	60.0 / 55.8	59.0 / 59.0	58.4 / 58.4	60.0 / 60.0	76.4 / 76.4
Number of Refrigerant Circuits	-	2	2	2	2	2	2	2
Unit Operating Weight	lbs	14353	15285	16059	16521	19108	21147	21373
	kg	6509	6932	7283	7493	8666	9590	9693

Table 5

Notes:

- Capacity ratings are based on AHRI Standard 340/360. Evaporator entering air conditions of 80°/67°F (27°/19.5°C) dry bulb/ wet bulb and condenser entering air temperature of 95°F (35°C) dry bulb.
- Evaporator entering air conditions of 80°/67°F (27°/19.5°C) dry bulb/wet bulb and condenser entering air temperature of 115°F (46°C) dry bulb.
- Capacity is gross capacity which does not include the effect of evaporator fan motor heat.



GROSS CAPACITY RATINGS - ATEX

Model PACVDEX	AFR cfm l/s (BPF)	EWB °F °C	Condenser Entering Air Temperature																													
			95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						120°F (48.9°C)						131°F (55°C)					
			Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI					
			MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW					
51007	2000	62	16.7	70	20.5	62.8	18.4	5.9	65.6	19.2	60.9	17.9	6.3	61.1	17.9	59	17.3	6.7	58.9	17.3	58.1	17	6.9	54.2	15.9	54.2	15.9	7.4				
	944	67	19.4	76.4	22.4	52.3	15.3	6.2	72.6	21.3	50.8	14.9	6.6	68.7	20.1	49.3	14.4	7.1	66.6	19.5	48.5	14.2	7.4	61.9	18.1	46.7	13.7	8				
	0.09	72	22.2	83.1	24.4	41.6	12.2	6.4	78.9	23.1	40.1	11.8	6.9	74.5	21.8	38.6	11.3	7.4	72.1	21.1	37.8	11.1	7.7	66.8	19.6	35.9	10.5	8.3				
	3100	62	16.7	73.9	21.7	73.9	21.7	6.1	69.5	20.4	69.5	20.4	6.5	65.3	19.1	65.3	19.1	6.9	63.1	18.5	63.1	18.5	7.1	58.2	17.1	58.2	17.1	7.7				
	1463	67	19.4	83.8	24.6	65.9	19.3	6.5	79.3	23.2	64.3	18.8	7	73.6	21.6	62.3	18.3	7.4	70.8	20.8	61.3	18	7.6	64.7	19	59.1	17.3	8.2				
	0.13	72	22.2	90.5	26.5	50.2	14.7	6.7	85.5	25.1	48.6	14.3	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	3667	62	16.7	75.5	22.1	75.5	22.1	6.1	71.1	20.8	71.1	20.8	6.6	66.8	19.6	66.8	19.6	7	64.6	18.9	64.6	18.9	7.2	59.5	17.4	59.5	17.4	7.8				
	1731	67	19.4	85.9	25.2	72.2	21.2	6.6	80.2	23.5	70.2	20.6	7	74.6	21.9	68.2	20	7.4	71.9	21.1	67.3	19.7	7.7	65.7	19.3	65.1	19.1	8.2				
	0.14	72	22.2	92.7	27.2	54.2	15.9	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	2750	62	16.7	91.6	26.8	84.3	24.7	7.6	85.9	25.2	81.9	24	8	80.5	23.6	79.6	23.3	8.5	77.9	22.8	77.9	22.8	8.8	72	21.1	72	21.1	9.4				
51009	1298	67	19.4	101	29.6	70.3	20.6	8	96.1	28.2	68.4	20	8.6	91.1	26.7	66.5	19.5	9.2	88.5	25.9	65.5	19.2	9.5	82.1	24.1	63.1	18.5	10.2				
	0.09	72	22.2	109.7	32.1	55.5	16.3	8.3	104.2	30.6	53.7	15.7	8.9	98.6	28.9	51.7	15.2	9.6	95.6	28	50.7	14.9	9.9	89	26.1	48.5	14.2	10.8				
	4000	62	16.7	96	28.1	96	28.1	7.8	90.7	26.6	90.7	26.6	8.3	85.4	25	85.4	25	8.8	82.7	24.2	82.7	24.2	9.1	76.7	22.5	76.7	22.5	9.8				
	1888	67	19.4	109.1	32	85.8	25.2	8.3	103.1	30.2	83.6	24.5	8.9	96.1	28.2	81.2	23.8	9.5	92.7	27.2	80	23.4	9.8	85.2	25	77.4	22.7	10.5				
	0.12	72	22.2	117.7	34.5	65.4	19.2	8.6	111.6	32.7	63.4	18.6	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5042	62	16.7	99	29	99	29	7.9	93.6	27.4	93.6	27.4	8.4	88.2	25.8	88.2	25.8	9	85.4	25	85.4	25	9.3	79.2	23.2	79.2	23.2	10				
	2380	67	19.4	111.8	32.8	97	28.4	8.4	104.9	30.7	94.6	27.7	9	98.1	28.7	92.2	27	9.6	94.7	27.8	91.1	26.7	9.9	87.3	25.6	87.3	25.6	10.6				
	0.14	72	22.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	52015	4500	62	16.7	145.1	42.5	136	39.9	11.8	135.9	39.8	132.1	38.7	12.6	127.2	37.3	127.2	37.3	13.4	122.9	36	122.9	36	13.8	113.4	33.2	113.4	33.2	14.8			
		2124	67	19.4	161.3	47.3	113.5	33.3	12.4	153.2	44.9	110.4	32.3	13.4	144.7	42.4	107.2	31.4	14.3	140.3	41.1	105.5	30.9	14.8	128.4	37.6	101	29.6	15.9			
0.09		72	22.2	175.2	51.3	89.4	26.2	12.9	166	48.7	86.2	25.3	13.9	156.5	45.9	83	24.3	14.9	151.6	44.4	81.3	23.8	15.4	-	-	-	-	-				
6400		62	16.7	152.2	44.6	152.2	44.6	12.1	143.4	42	143.4	42	12.9	134.7	39.5	134.7	39.5	13.8	130.3	38.2	130.3	38.2	14.3	120.3	35.3	120.3	35.3	15.3				
3020		67	19.4	173.5	50.9	137.2	40.2	12.9	162.6	47.7	133.2	39.1	13.8	151.3	44.3	129.2	37.9	14.7	145.7	42.7	127.3	37.3	15.1	133.4	39.1	123	36	16.2				
0.12		72	22.2	187.2	54.9	104.4	30.6	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
8250		62	16.7	157.6	46.2	157.6	46.2	12.3	148.7	43.6	148.7	43.6	13.2	139.6	40.9	139.6	40.9	14.1	135	39.6	135	39.6	14.5	124.6	36.5	124.6	36.5	15.6				
3894		67	19.4	177.4	52	156.8	46	13	166.1	48.7	152.8	44.8	13.9	155	45.4	149	43.7	14.8	149.5	43.8	147.1	43.1	15.3	137.1	40.2	137.1	40.2	16.5				
0.14		72	22.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
52018		5400	62	16.7	181.1	53.1	166.2	48.7	15.2	169.8	49.8	161.3	47.3	16.2	159	46.6	156.8	46	17.2	153.7	45	153.7	45	17.7	142.1	41.7	142.1	41.7	19			
	2549	67	19.4	199.2	58.4	138.4	40.6	16	189.7	55.6	134.7	39.5	17.2	179.7	52.7	130.9	38.4	18.4	174.5	51.1	128.9	37.8	19.1	161.9	47.5	124.2	36.4	20.6				
	0.09	72	22.2	216.4	63.4	109.4	32.1	16.8	205.6	60.3	105.7	31	18	194.3	57	101.8	29.8	19.3	188.5	55.3	99.8	29.3	20	175.3	51.4	95.4	28	21.7				
	8000	62	16.7	190.2	55.7	190.2	55.7	15.6	179.6	52.6	179.6	52.6	16.7	169	49.5	169	49.5	17.8	163.6	48	163.6	48	18.4	151.6	44.4	151.6	44.4	19.8				
	3776	67	19.4	216.1	63.3	170.6	50	16.8	203.8	59.7	166.2	48.7	17.9	190	55.7	161.3	47.3	19.1	183.2	53.7	158.9	46.6	19.7	168.4	49.4	153.7	45.1	21.1				
	0.12	72	22.2	232.9	68.3	129.8	38	17.5	220.6	64.7	125.9	36.9	18.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9900	62	16.7	195.6	57.3	195.6	57.3	15.9	184.9	54.2	184.9	54.2	17	174	51	174	51	18.1	168.5	49.4	168.5	49.4	18.7	156.1	45.8	156.1	45.8	20.1				
	4672	67	19.4	220.8	64.7	190.9	56	17	207	60.7	186.1	54.5	18.1	193.6	56.7	181.4	53.2	19.3	186.8	54.8	179.1	52.5	19.9	172.1	50.4	172.1	50.4	21.5				
	0.14	72	22.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	52027	7200	62	16.7	269	78.8	233.6	68.5	24.6	255	74.7	227.5	66.7	26.1	238.6	69.9	220.3	64.6	27.4	229.4	67.2	216.4	63.4	28.1	209.6	61.4	208	61	29.9			
3398		67	19.4	292.5	85.7	195.1	57.2	25.9	278.1	81.5	189.4	55.5	27.5	263	77.1	183.5	53.8	29.3	255.2	74.8	180.4	52.9	30.3	236.7	69.4	173.4	50.8	32.8				
0.09		72	22.2	317.8	93.1	156.2	45.8	27.2	301.9	88.5	150.6	44.1	29.1	283.3	83.6	144.8	42.4	31	276.4	81	141.7	41.5	32	255.4	74.9	134.5	39.4	34.8				
12000		62	16.7	289.4	84.8	289.4	84.8	25.7	271.9	79.7	271.9	79.7	27.1	254.8	74.7	254.8	74.7	28.7	246.1	72.1	246.1	72.1	29.5	226.3	66.3	226.3	66.3	31.7				
5663		67	19.4	325.4	95.4	254	74.5	27.6	308.2	90.3	247.8	72.6	29.5	288.3	84.5	240.8	70.6	31.2	276.9	81.2	236.7	69.4	32.1	251.7	73.8	227.9	66.8	34.4				
0.14		72	22.2	351.2	102.9	193.8	56.8	29	331.9	97.3	187.6	55	30.9	311.9	91.4	181.2	53.1	33	-	-	-	-	-	-	-	-	-	-				
13200		62	16.7	292.4	85.7	292.4	85.7	25.9	275.1	80.6	275.1	80.6	27.3	257.9	75.6	257.9	75.6	28.9	249.1	73	249.1	73	29.8	229.1	67.2	229.1	67.2	32				
6230		67	19.4	330.3	96.8	267.2	78.3	27.9	312.5	91.6	260.9	76.5	29.7	290.1	85	253	74.2	31.4	278.8	81.7	249.1	73	32.3	253.8	74.4	240.4	70.5	34.6				
0.14		72	22.2	356	100.3	202.1	59.2	29.3	336.2	96.6	195.4	57.4	31.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10800		62	16.7	387.3	113.5	343.3	100.6	33.3	366.2	103.3	334.1	97.9	35.5	341.1	100	323.3	94.8	37.3	328.													

GROSS CAPACITY RATINGS - ATEX

Model PACVDEX	AFR cfm (BPF)	EWB °F °C	Condenser Entering Air Temperature																													
			95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						120°F (48.9°C)						131°F (55°C)					
			Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI					
			MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW					
13950	62	16.7	509.2	149.2	457.8	134.2	45.3	483.6	141.7	446.6	130.9	48.2	452.4	132.6	433.1	126.9	50.7	435.9	127.8	426	124.9	52	400.8	117.5	400.8	117.5	55.6					
6584	67	19.4	554.4	162.5	380.7	111.6	47.3	528.1	154.8	370.2	108.5	50.6	500.8	146.8	359.6	105.4	53.9	486.6	142.6	354.1	103.8	55.8	454.1	133.1	341.9	100.2	60.9					
0.05	72	22.2	602.6	176.6	302.6	88.7	49.3	573.8	168.2	292.5	85.7	53	543.6	159.3	281.9	82.6	56.7	527.5	154.6	276.4	81	58.8	491	143.9	263.9	77.3	64.6					
23000	62	16.7	547.2	160.4	547.2	160.4	47	515.7	151.1	515.7	151.1	49.9	484.6	142	484.6	142	52.9	468.9	137.4	468.9	137.4	54.5	434	127.2	434	127.2	58.9					
10855	67	19.4	617.4	181	503.5	147.6	49.9	586.1	171.8	492.3	144.3	53.6	548.6	160.8	479	140.4	57.1	528.2	154.8	471.8	138.3	58.9	484	141.9	456.3	133.8	63.9					
0.09	72	22.2	666.5	195.4	381.1	111.7	51.8	631.5	185.1	369.8	108.4	55.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
25575	62	16.7	554.4	162.5	554.4	162.5	47.3	523.1	153.3	523.1	153.3	50.3	491.8	144.1	491.8	144.1	53.3	476	139.5	476	139.5	55	440.6	129.2	440.6	129.2	59.6					
12070	67	19.4	628.7	184.3	536	157.1	50.4	593.8	174.1	523.7	153.5	54	553	162.1	509.4	149.3	57.3	532.8	156.2	502.4	147.2	59.2	489.2	143.4	487.3	142.8	64.4					
0.1	72	22.2	677.6	198.6	401.3	117.6	52.3	641.5	188	389.9	114.3	56.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
16400	62	16.7	559	163.8	520.8	152.7	49.5	522.9	153.3	505.3	148.1	52.3	488.1	143.1	488.1	143.1	55.1	471.1	138.1	471.1	138.1	56.7	434.3	127.3	434.3	127.3	61.1					
7740	67	19.4	610.3	178.9	431.1	126.4	51.8	580.3	170.1	419.5	123	55.5	549	160.9	407.6	119.5	59.3	532.7	156.1	401.5	117.7	61.5	494.9	145.1	387.2	113.5	67.4					
0.05	72	22.2	662.2	194.1	339.5	95.5	54.1	628.9	184.3	327.9	96.1	58.1	593.7	174	315.8	92.6	62.3	575.3	168.6	309.6	90.7	64.8	533.3	156.3	295.5	86.6	71.4					
24500	62	16.7	586.2	171.8	586.2	171.8	50.8	552.6	162	552.6	162	54	519	152.1	519	152.1	57.2	502	147.1	502	147.1	59.1	463.9	136	463.9	136	64.1					
11563	67	19.4	663.8	194.6	541.3	158.6	54.1	627.2	183.8	528.1	154.8	58	583.3	171	512.5	150.2	61.6	561.7	164.6	504.9	148	63.7	514.5	150.8	488.4	143.1	69.4					
0.08	72	22.2	715.2	209.6	409.2	119.9	56.2	676.6	198.3	396.8	116.3	60.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
30067	62	16.7	602.8	176.7	602.8	176.7	51.5	568.9	166.8	568.9	166.8	54.9	534.6	156.7	534.6	156.7	58.3	517.1	151.5	517.1	151.5	60.3	477.7	140	477.7	140	65.6					
14190	67	19.4	680.7	199.5	609.6	178.7	54.8	637.1	186.7	594.3	174.2	58.5	594.2	174.2	579.4	169.8	62.4	572.9	167.9	572.1	167.7	64.6	525.8	154.1	525.8	154.1	70.6					
0.1	72	22.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
16400	62	16.7	605.5	177.5	541.3	158.7	55.2	574.9	168.5	527.8	154.7	58.8	538.9	158	512.2	150.1	62	518.8	152.1	503.6	147.6	63.5	476.2	139.6	476.2	139.6	68					
7740	67	19.4	658.9	193.1	450.4	132	57.7	627.5	183.9	437.9	128.3	61.7	594.6	174.3	425	124.6	65.8	577.7	169.3	418.4	122.6	68	538.9	158	403.8	118.4	74.2					
0.05	72	22.2	716.3	210	358.5	105.1	60.2	681.8	199.8	346.4	101.5	64.6	645.8	189.3	333.8	97.8	69.2	626.7	183.7	327.2	95.9	71.7	583.1	170.9	312.2	91.5	78.6					
27000	62	16.7	652	191.1	652	191.1	57.3	613.8	179.9	613.8	179.9	61	576.1	168.9	576.1	168.9	64.5	557.3	163.3	557.3	163.3	66.5	515.4	151.1	515.4	151.1	71.9					
12743	67	19.4	734	215.1	594.5	174.2	60.9	696.5	204.2	581	170.3	65.4	653.7	191.6	565.7	165.8	69.7	629.1	184.4	557	163.3	71.9	575.9	168.8	538.4	157.8	77.9					
0.09	72	22.2	792.5	232.3	450.6	132.1	63.3	750.8	220.1	437.2	128.1	68.2	707.5	207.4	423.3	124.1	73.2	-	-	-	-	-	-	-	-	-	-					
30067	62	16.7	660.6	193.6	660.6	193.6	57.7	622.8	182.5	622.8	182.5	61.4	584.9	171.4	584.9	171.4	65.1	565.9	165.9	565.9	165.9	67.1	523.4	153.4	523.4	153.4	72.7					
14190	67	19.4	747.8	219.2	633.3	185.6	61.5	708.3	207.6	619.3	181.5	66	658.8	193.1	601.9	176.4	70	634.6	186	593.5	173.9	72.3	581.9	170.6	575.2	168.6	78.5					
0.1	72	22.2	805.8	236.2	474.8	139.2	63.9	762.9	223.6	461.2	135.2	68.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
16913	62	16.7	647.8	189.9	568.6	166.7	62.2	615.2	180.3	554.1	162.4	66	581.1	170.3	539.1	158	69.9	559.7	164	529.9	155.3	71.7	512.1	150.1	509.6	149.4	76.6					
7982	67	19.4	703.3	206.1	474.1	139	65	669.8	196.3	460.6	135	69.4	634.6	186	446.6	130.9	73.8	616.3	180.6	439.5	128.8	76.4	575.5	168.7	423.9	124.2	83.4					
0.05	72	22.2	764.5	224.1	378.9	111.1	68	727.7	213.3	365.8	107.2	72.8	689.2	202	352.3	103.3	77.8	669.4	196.2	345.4	101.2	80.8	623.6	182.8	329.6	96.6	88.6					
28000	62	16.7	703.4	206.2	703.4	206.2	65	660.7	193.7	660.7	193.7	68.8	618.9	181.4	618.9	181.4	72.7	598.1	175.3	598.1	175.3	74.9	553.1	162.1	553.1	162.1	81					
13215	67	19.4	785.8	230.3	625.3	183.3	69	745.7	218.6	610.7	179	73.8	704	206.3	595.8	174.6	78.9	679.1	199	587	172	81.6	620.8	182	566.4	166	88.3					
0.09	72	22.2	849.1	248.9	476	139.5	72	804.2	235.7	461.5	135.3	77.2	758.2	222.2	446.7	130.9	82.8	734.5	215.3	439.1	128.7	86.1	-	-	-	-	-					
31007	62	16.7	711.3	208.5	711.3	208.5	65.4	669.2	196.1	669.2	196.1	69.3	627.6	183.9	627.6	183.9	73.3	606.7	177.8	606.7	177.8	75.6	561.1	164.5	561.1	164.5	81.9					
14634	67	19.4	800	234.5	663.3	194.4	69.7	758.5	222.3	648.6	190.1	74.6	711	208.4	631.8	185.2	79.4	684	200.5	622.3	182.4	82	626.4	183.6	602.2	176.5	88.9					
0.1	72	22.2	862.9	252.9	499.9	146.5	72.6	816.9	239.4	485.1	142.2	77.9	769.7	225.6	470.2	137.8	83.6	-	-	-	-	-	-	-	-	-	-					
19125	62	16.7	731.2	214.3	651.2	190.9	65.3	694.4	203.5	634.7	186	69.3	646.4	189.5	613.7	179.9	72.5	623	182.6	603.7	176.9	74.2	573.2	168	573.2	168	79					
9026	67	19.4	796.5	233.5	542.9	159.1	68.4	758.3	222.3	527.5	154.6	72.9	718.5	210.6	511.7	150	77.4	697.9	204.6	503.7	147.6	79.8	650.9	190.8	485.6	142.3	86.3					
0.02	72	22.2	865.5	253.7	432.7	126.8	71.6	823.5	241.4	417.8	122.5	76.4	779.4	228.5	402.3	117.9	81.4	756.2	221.6	394.2	115.5	84.1	703.5	206.2	376	110.2	91.2					
31000	62	16.7	781.6	229.1	781.6	229.1	67.7	736.6	215.9	736.6	215.9	71.6	692	202.8	692	202.8	75.6	669.5	196.2	669.5	196.2	77.7	619.5	181.6	619.5	181.6	83.4					
14630	67	19.4	882.8	258.8	713.6	209.1	72.4	837.7	245.5	697.1	204.3	77.2	781.9	229.2	677	198.4	81.5	752.8	220.6	666.7	195.4	83.8	690.2	202.3	644.7	189	90					
0.04	72	22.2	952.6	279.2	541.3	158.7	75.5	902.1	264.4	524.9	153.8	80.6	-	-	-	-	-	-	-	-	-	-	-									



GROSS CAPACITY RATINGS - IECEX

Model PACVDEX	AFR cfm l/s (BPF)	EWB		Condenser Entering Air Temperature																													
				95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						120°F (48.9°C)						131°F (55°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI					
		°F	°C	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW					
51007	2000	62	16.7	77.1	22.6	65.9	19.3	6.1	73.2	21.5	64.2	18.8	6.6	69.3	20.3	62.5	18.3	7	66.8	19.6	61.4	18	7.3	61.2	17.9	59	17.3	7.8					
	944	67	19.4	83.8	24.6	55.2	16.2	6.4	79.9	23.4	53.7	15.7	6.9	75.9	22.2	52.1	15.3	7.4	73.8	21.6	51.2	15	7.6	69	20.2	49.4	14.5	8.3					
	0.09	72	22.2	91.3	26.8	44.5	13	6.6	87	25.5	42.9	12.6	7.1	82.6	24.2	41.4	12.1	7.7	80.3	23.5	40.6	11.9	8	75	22	38.7	11.4	8.7					
	3100	62	16.7	83.1	24.4	83.1	24.4	6.4	78	22.9	78	22.9	6.8	73.1	21.4	73.1	21.4	7.2	70.7	20.7	70.7	20.7	7.5	65.5	19.2	65.5	19.2	8.1					
	1463	67	19.4	92.5	27.1	69.1	20.3	6.7	88	25.8	67.4	19.8	7.2	83.3	24.4	65.7	19.3	7.7	80.8	23.7	64.8	19	8	74.3	21.8	62.5	18.3	8.6					
	0.13	72	22.2	100.3	29.4	53.4	15.7	6.9	95.2	27.9	51.8	15.2	7.4	90	26.4	50.1	14.7	8	87.3	25.6	49.2	14.4	8.3	0	0	0	0	0					
	3667	62	16.7	84.5	24.8	84.5	24.8	6.4	79.6	23.3	79.6	23.3	6.8	74.8	21.9	74.8	21.9	7.3	72.4	21.2	72.4	21.2	7.5	67	19.6	67	19.6	8.2					
	1731	67	19.4	95.2	27.9	75.5	22.1	6.7	90.5	26.5	73.8	21.6	7.3	85.3	25	71.9	21.1	7.8	82.1	24.1	70.8	20.8	8	75.3	22.1	68.5	20.1	8.7					
	0.14	72	22.2	102.9	30.2	57.4	16.8	7	97.7	28.6	55.7	16.3	7.5	92.3	27	54	15.8	8.1	-	-	-	-	-	-	-	-	-	-	-				
	2750	62	16.7	97.2	28.5	86.8	25.4	7.4	91.8	26.9	84.4	24.7	8	85.7	25.1	81.8	24	8.4	82.8	24.3	80.6	23.6	8.7	76.5	22.4	76.5	22.4	9.4					
51009	1298	67	19.4	106.1	31.1	72.3	21.2	7.7	101.2	29.7	70.4	20.6	8.3	96.1	28.2	68.4	20	8.9	93.5	27.4	67.4	19.8	9.2	87.5	25.7	65.2	19.1	10					
	0.09	72	22.2	115.4	33.8	57.5	16.9	8	110	32.3	55.7	16.3	8.6	104.4	30.6	53.7	15.7	9.3	101.6	29.8	52.7	15.5	9.6	95	27.9	50.5	14.8	10.5					
	4000	62	16.7	102	29.9	102	29.9	7.6	96.2	28.2	96.2	28.2	8.1	90.6	26.5	90.6	26.5	8.7	87.7	25.7	87.7	25.7	9	81.5	23.9	81.5	23.9	9.7					
	1888	67	19.4	115.1	33.7	88	25.8	8	109.5	32.1	86	25.2	8.6	103.3	30.3	83.7	24.5	9.2	99.6	29.2	82.4	24.2	9.5	91.7	26.9	79.6	23.3	10.3					
	0.12	72	22.2	124.5	36.5	67.6	19.8	8.3	118.4	34.7	65.6	19.2	8.9	112.2	32.9	63.6	18.6	9.6	-	-	-	-	-	-	-	-	-	-	-				
	5042	62	16.7	104.9	30.8	104.9	30.8	7.7	99.2	29.1	99.2	29.1	8.2	93.5	27.4	93.5	27.4	8.8	90.7	26.6	90.7	26.6	9.1	84.2	24.7	84.2	24.7	9.8					
	2380	67	19.4	119.6	35.1	99.7	29.2	8.1	112.4	32.9	97.2	28.5	8.7	105.2	30.8	94.7	27.8	9.3	101.6	29.8	93.5	27.4	9.6	94	27.5	90.8	26.6	10.4					
	0.14	72	22.2	129.1	37.8	75	22	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	4500	62	16.7	162.5	47.6	143.5	42.1	12.3	154.2	45.2	139.9	41	13.2	143.7	42.1	135.4	39.7	14.1	138.6	40.6	133.2	39	14.5	127.7	37.4	127.7	37.4	15.6					
	2124	67	19.4	177.4	52	119.8	35.1	12.8	169.1	49.6	116.5	34.1	13.8	160.4	47	113.1	33.2	14.8	156	45.7	111.4	32.7	15.3	145.8	42.7	107.6	31.5	16.6					
52015	0.09	72	22.2	193.1	56.6	95.6	28	13.2	184	53.9	92.4	27.1	14.3	174.4	51.1	89.1	26.1	15.4	169.4	49.7	87.4	25.6	15.9	158.2	46.4	83.6	24.5	17.3					
	6400	62	16.7	170.8	50.1	170.8	50.1	12.6	160.8	47.1	160.8	47.1	13.5	151	44.3	151	44.3	14.4	146.2	42.8	146.2	42.8	14.9	135.5	39.7	135.5	39.7	16					
	3020	67	19.4	191.9	56.2	143.9	42.2	13.2	182.5	53.5	140.4	41.2	14.2	172.7	50.6	136.9	40.1	15.3	166.9	48.9	134.8	39.5	15.8	153.1	44.9	129.9	38.1	17.1					
	0.12	72	22.2	207.8	60.9	111.1	32.6	13.6	197.3	57.8	107.7	31.6	14.7	186.6	54.7	104.2	30.5	15.8	181.1	53.1	102.4	30	16.4	-	-	-	-	-	-				
	8250	62	16.7	176.2	51.6	176.2	51.6	12.7	166.4	48.8	166.4	48.8	13.7	156.6	45.9	156.6	45.9	14.6	151.6	44.4	151.6	44.4	15.1	140.6	41.2	140.6	41.2	16.3					
	3894	67	19.4	200.5	58.8	164.9	48.3	13.4	189.2	55.4	160.9	47.2	14.4	176.5	51.7	156.5	45.9	15.4	170.3	49.9	154.3	45.2	16	156.9	46	149.7	43.9	17.3					
	0.14	72	22.2	216.2	63.4	124.3	36.4	13.8	205	60.1	120.7	35.4	14.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	5400	62	16.7	191.9	56.3	170.9	50.1	15	181.4	53.2	166.3	48.7	16	169.3	49.6	161.1	47.2	17	163.5	47.9	158.7	46.5	17.5	151	44.3	151	44.3	18.8					
	2549	67	19.4	209.4	61.4	142.4	41.7	15.6	199.6	58.5	138.5	40.6	16.7	189.4	55.5	134.6	39.4	17.9	184.2	54	132.6	38.9	18.6	172.5	50.6	128.2	37.6	20.2					
	0.09	72	22.2	227.6	66.7	113.3	33.2	16.1	217	63.6	109.6	32.1	17.4	205.9	60.3	105.8	31	18.7	200.1	58.7	103.8	30.4	19.4	187.2	54.9	99.4	29.1	21.1					
52018	8000	62	16.7	201.9	59.2	201.9	59.2	15.3	190.4	55.8	190.4	55.8	16.4	179.2	52.5	179.2	52.5	17.5	173.6	50.9	173.6	50.9	18	161.1	47.2	161.1	47.2	19.5					
	3776	67	19.4	227.8	66.8	174.9	51.3	16.1	216.7	63.5	170.9	50.1	17.4	204.1	59.8	166.3	48.7	18.6	196.8	57.7	163.7	48	19.2	181.2	53.1	158.2	46.4	20.8					
	0.12	72	22.2	246.4	72.2	134.2	39.3	16.7	234.2	68.7	130.2	38.2	18	221.8	65	126.2	37	19.4	-	-	-	-	-	-	-	-	-	-	-				
	9900	62	16.7	207.3	60.7	207.3	60.7	15.5	195.9	57.4	195.9	57.4	16.6	184.5	54.1	184.5	54.1	17.7	178.8	52.4	178.8	52.4	18.3	166.1	48.7	166.1	48.7	19.8					
	4672	67	19.4	235.9	69.2	196.2	57.5	16.4	221.8	65	191.3	56.1	17.6	207.5	60.8	186.3	54.6	18.8	200.5	58.8	183.8	53.9	19.4	185.3	54.3	178.6	52.3	21					
	0.14	72	22.2	254.5	74.6	147.6	43.3	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	7200	62	16.7	277.5	81.3	237.4	69.6	22.7	263.6	77.2	231.2	67.8	24.3	249.2	73	224.9	65.9	25.9	240	70.3	220.9	64.8	26.7	219.6	64.4	212.2	62.2	28.6					
	3398	67	19.4	301.2	88.3	198.7	58.2	23.7	287.1	84.2	193	56.6	25.4	272.4	79.8	187.1	54.8	27.2	264.8	77.6	184.2	54	28.2	247.1	72.4	177.4	52	30.7					
	0.09	72	22.2	327.6	96	159.7	46.8	24.7	312.3	91.5	154.2	45.2	26.5	296.2	86.8	148.6	43.5	28.5	287.8	84.4	145.6	42.7	29.6	268	78.5	138.8	40.7	32.3					
	12000	62	16.7	300.7	88.1	300.7	88.1	23.7	282.7	82.9	282.7	82.9	25.2	265.3	77.7	265.3	77.7	26.8	256.6	75.2	256.6	75.2	27.7	237.1	69.5	237.1	69.5	29.9					
52027	5663	67	19.4	336.2	98.5	258	75.6	24.9	319.6	93.7	251.9	73.8	26.8	302.2	88.6	245.7	72	28.8	291.8	85.5	242	70.9	29.8	266.5	78.1	233.1	68.3	32.2					
	0.14	72	22.2	362.9	106.7	198	58	25.9	345.3	101.2	191.9	56.3	27.9	325.7	95.5	185.7	54.4	30.1	315.6	92.5	182.4	53.5	31.3	-	-	-	-	-					
	13200	62	16.7	303.5	89	303.5	89	23.8	285.9	83.8	285.9	83.8	25.4	268.5	78.7	268.5	78.7	27	259.7	76.1	259.7	76.1	27.9	240.1	70.4	240.1	70.4	30.2					
	6230	67	19.4	341.5	100.1	271.2	79.5	25	324.5	95.1	265.1	77.7	27	305.1	89.4	258.3	75.7	29	293.6	86.1	254.3	74.5	29.9	268.6	78.7	245.5	72	32.3					
	0.14	72	22.2	369.2	108.2	206.3	60.5	26	350	102.6	200.1	58.7	28.1																				

GROSS CAPACITY RATINGS - IECEx

Model PACVDEX	AFR		EWB	Condenser Entering Air Temperature																													
	l/s	(BPF)		95°F (35°C)						105°F (40.6°C)						115°F (46.1°C)						120°F (48.9°C)						131°F (55°C)					
				Total Capacity		Sensible		PI	Total Capacity		Sensible		PI	Total Capacity		Sensible		PI	Total Capacity		Sensible		PI	Total Capacity		Sensible		PI					
				MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW	
52050	13950	62	16.7	515.7	151.1	460.7	135	44.7	488.9	143.3	44.8	131.6	47.9	456.2	133.7	434.7	127.4	50.9	438.3	128.5	427.1	125.2	52.4	402	117.8	402	117.8	56					
	6584	67	19.4	561	164.4	383.3	112.4	46.6	533.5	156.4	372.4	109.1	50.1	504.1	147.8	360.9	105.8	53.8	489.2	143.4	355.1	104.1	55.7	456.9	133.9	342.9	100.5	60.2					
	0.05	72	22.2	610.4	178.9	305.4	89.5	48.7	580.3	170.1	294.7	86.4	52.4	548	160.6	283.5	83.1	56.2	531.5	155.8	277.7	81.4	58.3	496	145.4	265.6	77.8	63					
	23000	62	16.7	555.4	162.8	555.4	162.8	46.4	522	153	522	153	49.5	488.2	143.1	488.2	143.1	52.8	471.6	138.2	471.6	138.2	54.5	436.2	127.9	436.2	127.9	58.7					
	10855	67	19.4	626.1	183.5	506.7	148.5	49.3	593.2	173.9	494.8	145	53	554.8	162.6	481.2	141	56.6	533.2	156.3	473.5	138.8	58.4	489.7	143.5	458.3	134.3	62.6					
	0.09	72	22.2	677.6	198.6	384.6	112.7	51.3	640.7	187.8	372.7	109.3	55.2	601.6	176.3	360.2	105.6	59.2	-	-	-	-	-	-	-	-	-	-	-				
	25575	62	16.7	562.6	164.9	562.6	164.9	46.7	529.5	155.2	529.5	155.2	49.9	495.5	145.2	495.5	145.2	53.2	478.8	140.3	478.8	140.3	55	443.2	129.9	443.2	129.9	59.2					
	12070	67	19.4	637.9	187	539.3	158.1	49.7	603.6	176.9	527.2	154.5	53.5	559.1	163.9	511.6	149.9	56.9	537.9	157.7	504.1	147.8	58.6	495.2	145.1	489.3	143.4	62.9					
	0.1	72	22.2	689.4	202.1	605.1	118.7	51.7	651.2	190.9	393	115.2	55.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	16400	62	16.7	577	169.1	528.7	155	50.9	546.1	160.1	515.3	151	54.5	510.6	149.7	500.1	146.6	57.9	493.5	144.6	492.9	144.5	59.7	457.2	134	457.2	134	64.3					
52055	7740	67	19.4	629.8	184.6	438.8	128.6	52.9	601.2	176.2	427.6	125.3	57	571.5	167.5	416.1	122	61.2	556.3	163.1	410.3	120.3	63.5	522.6	153.2	397.7	116.6	69.1					
	0.05	72	22.2	685.8	201	347.7	101.9	54.9	654.4	191.8	336.8	98.7	59.2	621.1	182	325.2	95.3	63.7	604	177	319.3	93.6	66.1	567.6	166.4	307	90	71.9					
	24500	62	16.7	608.5	178.3	608.5	178.3	52.1	575.1	168.6	575.1	168.6	55.8	542	158.8	542	158.8	59.6	525.5	154	525.5	154	61.7	489.6	143.5	489.6	143.5	66.8					
	11563	67	19.4	688.6	201.8	550.3	161.3	55	655.7	192.2	538.3	157.8	59.3	617.3	180.9	524.6	153.7	63.5	595.6	174.6	516.9	151.5	65.7	551.5	161.6	501.3	146.9	70.9					
	0.08	72	22.2	746.6	218.8	419.5	122.9	56.8	709.2	207.9	407.3	119.4	61.3	670	196.4	394.7	115.7	65.9	-	-	-	-	-	-	-	-	-	-					
	30067	62	16.7	625.4	183.3	625.4	183.3	52.7	592.2	173.6	592.2	173.6	56.6	558.7	163.8	558.7	163.8	60.6	541.9	158.8	541.9	158.8	62.7	505.2	148.1	505.2	148.1	67.9					
	14190	67	19.4	714.5	209.4	621.5	182.2	55.8	671.5	196.8	606.4	177.7	59.9	627.8	184	591.1	173.3	64	606.8	177.8	583.7	171.1	66.2	563.9	165.3	563.9	165.3	71.7					
	0.1	72	22.2	772.7	226.5	464.2	136.1	57.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	16400	62	16.7	608.6	178.4	542.7	159.1	53	579.4	169.8	529.8	155.3	57	546.7	160.2	515.5	151.1	60.8	527.3	154.6	507.2	148.7	62.7	486.6	142.6	486.6	142.6	67.3					
	7740	67	19.4	662.4	194.2	451.8	132.4	55	633	185.5	440.1	129	59.3	602.6	176.6	428.1	125.5	63.7	587	172.1	422.1	123.7	66.1	552.1	161.8	408.8	119.8	71.8					
52060	0.05	72	22.2	721.5	211.5	360.4	105.6	57	689.8	202.2	349.2	102.3	61.6	657.2	192.6	337.7	99	66.3	640.3	187.7	331.9	97.3	68.8	602.6	176.6	318.8	93.5	74.9					
	27000	62	16.7	656.5	192.4	656.5	192.4	54.8	620.1	181.8	620.1	181.8	58.8	584.6	171.3	584.6	171.3	62.8	566.8	166.1	566.8	166.1	64.9	528	154.8	528	154.8	70.2					
	12743	67	19.4	740.3	217	596.8	174.9	57.6	706.1	207	584.3	171.3	62.2	670.3	196.5	571.6	167.5	66.9	647.5	189.8	563.6	165.2	69.2	599.1	175.6	546.5	160.2	74.7					
	0.09	72	22.2	802.9	235.3	454	133.1	59.4	765.1	224.2	441.8	129.5	64.3	726.1	212.8	429.2	125.8	69.3	706.4	207.1	422.9	124	72	-	-	-	-	-					
	30067	62	16.7	665.1	194.9	665.1	194.9	55.1	629.2	184.4	629.2	184.4	59.2	593.7	174	593.7	174	63.3	575.8	168.8	575.8	168.8	65.4	536.8	157.3	536.8	157.3	70.8					
	14190	67	19.4	754.9	221.3	635.8	186.4	58	719.6	210.9	623.3	182.7	62.7	675.9	198.1	607.9	178.2	67.1	653.2	191.4	600	175.9	69.5	605.7	177.5	583.4	171	75.1					
	0.1	72	22.2	817.5	239.6	478.5	140.3	59.8	778.6	228.2	466.1	136.6	64.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	16913	62	16.7	637.4	186.8	564	165.3	56.6	606.7	177.8	550.4	161.3	60.8	574.8	168.5	536.4	157.2	65	554.1	162.4	527.5	154.6	66.9	510.1	149.5	508.8	149.1	71.8					
	7982	67	19.4	693	203.1	469.9	137.7	58.8	662	194.7	457.5	134.1	63.3	630.2	184.7	444.9	130.4	68	614	180	438.6	128.6	70.4	577.5	169.3	424.6	124.5	76.6					
	0.05	72	22.2	754.3	221.1	375.3	110	61	721.2	211.4	363.5	106.6	65.8	687.7	201.6	351.8	103.1	70.8	670.5	196.5	345.8	101.4	73.5	631.6	185.1	332.3	97.4	80.1					
52065	28000	62	16.7	690.1	202.3	690.1	202.3	58.7	651.1	190.8	651.1	190.8	62.8	613.4	179.8	613.4	179.8	67.1	594.7	174.3	594.7	174.3	69.3	553.6	162.2	553.6	162.2	75					
	13215	67	19.4	775.2	227.2	621.4	182.1	61.7	739.6	216.8	608.5	178.3	66.6	703.4	206.2	595.6	174.6	71.6	682.6	200.1	588.2	172.4	74.2	631.3	185	570.1	167.1	80.1					
	0.09	72	22.2	840.1	246.2	473.1	138.7	63.8	801.8	235	460.7	135	68.9	763	223.6	448.3	131.4	74.4	743.7	218	442	129.6	77.3	-	-	-	-	-					
	31007	62	16.7	698.3	204.7	698.3	204.7	59	660	193.4	630	193.4	63.2	622.4	182.4	622.4	182.4	67.5	603.6	176.9	603.6	176.9	69.8	562.3	164.8	562.3	164.8	75.6					
	14634	67	19.4	789.6	231.4	659.6	193.3	62.2	753.2	220.8	646.7	189.5	67.1	711.5	208.5	632	185.2	72	687.9	201.6	623.7	182.8	74.5	637.9	187	606.2	177.7	80.5					
	0.1	72	22.2	854.4	250.4	497.2	145.7	64.2	815.4	239	484.6	142	69.4	776	227.4	472.2	138.4	75	-	-	-	-	-	-	-	-	-	-	-				
	19125	62	16.7	748.5	219.4	658.9	193.1	68	712.6	208.9	642.9	188.4	72.5	668.8	196	623.5	182.7	76.8	644.3	188.8	612.8	179.6	78.9	594.1	174.1	591.3	173.3	83.8					
	9026	67	19.4	817.4	239.6	551.4	161.6	71.3	780.2	228.7	536.3	157.2	76.2	740.2	217	520.3	152.5	81.4	720	211	512.3	150.2	84.2	676.5	198.3	495.4	145.2	90.5					
	0.02	72	22.2	890.8	261.1	441.9	129.5	74.8	849.6	249	427.1	125.2	80	806.4	236.4	411.7	120.7	85.6	784.6	230	404.1	118.4	88.5	736.2	215.8	387.3	113.5	95.2					
	31000	62	16.7	807.2	236.6	807.2	236.6	70.9	761.5	223.2	761.5	223.2	75.2	715.1	209.6	715.1	209.6	79.8	692.3	202.9	692.3	202.9	82.3	644.4	188.9	644.4	188.9	87.9					
52075	14630	67	19.4	910.6	266.9	723.8	212.1	75.7	866.2	253.9	707.5	207.4	80.9	818.2	239.8	690	202.2	86.4	789.1	231.3	679.6	199.2	88.8	728.3	213.5	658	192.9	94.6					
	0.04	72	22.2	983.8	288.4	551.5	161.6	79.1	935.1	271	535.6	157	84.7	886.1	259.7	519.8																	



FAN PERFORMANCE

Model PACVDEX	AirFlowRate		External Static Pressure - in.wg(Pa)													
			0.5(125)		1(250)		1.5(375)		2(500)		2.5(625)		3(750)		3.5(875)	
	cfm	l/s	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW
51007	2000	944	1827	0.77	2000	0.96	2165	1.17	2324	1.39	2476	1.61	2620	1.84	2758	2.06
	3100	1463	2214	1.53	2339	1.75	2460	1.99	2579	2.24	2696	2.5	2810	2.77	2923	3.05
	3667	1730	2457	2.14	2566	2.39	2673	2.65	2777	2.92	2880	3.19	2981	3.48	3081	3.77
51009	2750	1298	1958	1.06	2098	1.26	2233	1.48	2366	1.7	2495	1.94	2622	2.2	2747	2.47
	4000	1888	2421	2.11	2530	2.38	2634	2.64	2736	2.92	2836	3.2	2933	3.48	3029	3.77
	5042	2379	2853	3.47	2945	3.8	3034	4.13	3121	4.46	3206	4.79	3289	5.12	3371	5.46
52015	4500	2124	1570	1.69	1677	2	1780	2.33	1880	2.68	1977	3.03	2072	3.4	2164	3.78
	6400	3020	1929	3.22	2013	3.63	2094	4.05	2173	4.47	2251	4.9	2326	5.34	2400	5.79
	8250	3893	2318	5.59	2388	6.09	2455	6.6	2521	7.12	2586	7.63	2650	8.16	2712	8.69
52018	5400	2548	1365	2	1467	2.41	1565	2.83	1661	3.27	1754	3.73	1845	4.21	1934	4.69
	8000	3775	1695	4.02	1773	4.54	1848	5.08	1921	5.62	1993	6.19	2063	6.77	2132	7.36
	9900	4672	1966	6.35	2033	6.96	2098	7.58	2161	8.22	2223	8.86	2284	9.52	2343	10.18
52027	7200	3398	1059	2.62	1157	3.21	1250	3.82	1339	4.44	1422	5.07	1502	5.72	1578	6.37
	12000	5663	1349	6.04	1414	6.86	1479	7.71	1543	8.59	1607	9.49	1669	10.42	1730	11.35
	13200	6229	1437	7.35	1496	8.21	1556	9.11	1615	10.04	1674	10.99	1731	11.97	1789	12.96
52038	10800	5097	970	3.88	1045	4.68	1119	5.52	1191	6.39	1262	7.29	1332	8.21	1400	9.14
	17000	8022	1250	8.77	1303	9.83	1355	10.92	1405	12.04	1455	13.18	1504	14.35	1552	15.54
	19800	9344	1395	12.21	1441	13.39	1487	14.58	1532	15.81	1576	17.05	1619	18.32	-	-
52046	12600	5946	853	4.45	926	5.39	998	6.38	1066	7.39	1131	8.44	1194	9.52	1254	10.61
	20500	9674	1101	10.47	1148	11.75	1196	13.07	1243	14.43	1290	15.83	1337	17.26	1383	18.73
	23100	10901	1197	13.51	1240	14.91	1282	16.35	1325	17.82	1367	19.33	1409	20.87	-	-
52050	13950	6583	751	5.04	818	6.15	881	7.3	942	8.47	999	9.67	1054	10.88	1106	12.12
	23000	10854	945	11.37	991	12.88	1036	14.45	1081	16.06	1125	17.73	1168	19.44	-	-
	25575	12069	1010	14.02	1052	15.64	1093	17.31	1134	19.04	1175	20.81	-	-	-	-
52055	16400	7739	772	5.9	833	7.12	893	8.37	950	9.67	1005	11.01	1058	12.36	1109	13.74
	24500	11562	950	11.75	994	13.29	1038	14.88	1081	16.52	1123	18.22	1165	19.96	-	-
	30067	14189	1091	17.92	1128	19.69	1164	21.5	-	-	-	-	-	-	-	-
52060	16400	7739	772	5.96	833	7.18	892	8.46	950	9.77	1005	11.11	1058	12.48	1109	13.87
	27000	12741	1012	14.42	1052	16.06	1092	17.76	1132	19.52	1171	21.33	1210	23.17	1248	25.07
	30067	14189	1091	18.1	1128	19.88	1164	21.71	1200	23.58	1236	25.5	1271	27.46	1306	29.47
52065	16913	7981	660	6.15	720	7.51	776	8.92	830	10.37	881	11.84	929	13.33	975	14.85
	28000	13213	827	13.79	869	15.67	910	17.62	950	19.62	990	21.67	1028	23.77	1066	25.92
	31007	14632	880	16.82	919	18.83	956	20.9	994	23.04	1030	25.22	1066	27.46	1102	29.74
52075	19125	9025	680	7.08	735	8.55	789	10.07	840	11.64	889	13.24	937	14.87	982	16.53
	31000	14629	868	16.18	906	18.17	944	20.23	982	22.35	1019	24.52	1055	26.74	1090	29.01
	35063	16546	942	20.82	976	23	1011	25.22	1044	27.51	1078	29.86	1111	32.25	-	-
52080	20250	9556	616	7.73	677	9.5	-	-	-	-	-	-	-	-	-	-
	33500	15809	757	17.03	797	19.38	837	21.82	876	24.34	915	26.95	953	29.63	991	32.38
	37125	17519	805	20.75	841	23.26	877	25.85	913	28.53	949	31.28	984	34.11	-	-
52090	24000	11326	624	8.93	678	10.83	731	12.82	782	14.9	832	17.03	-	-	-	-
	39000	18404	795	20.39	831	22.92	866	25.52	900	28.2	934	30.96	968	33.79	-	-
	44000	20764	861	26.06	893	28.83	925	31.66	956	34.55	-	-	-	-	-	-

Table 10

Notes :

- Dark shaded Area is for Motor Option 1 ,Light shades Area is for Motor Option 2.
- For external static pressure more than 3.5 in.wg. (875 Pa) and for the data corresponding to the blank boxes, please consult SKM.

Field Connections

PACV-DEXM series self-contained heavy-duty Explosion Proof air cooled packaged units are designed for minimum field interaction.

Power hook-ups and control wiring of Duct Temperature Sensor as per Electrical hook-up diagram is all that is required to electrically connect any model of **PACV-DEXM** series.

Every **PACV-DEXM** series Explosion Proof packaged air conditioning unit requires, at most, field installed fused disconnect switches or circuit breakers.

Refer below for a schematic representation of required field electrical hook-ups for a standard **PACV-DEXM** series Explosion Proof packaged air conditioning unit.

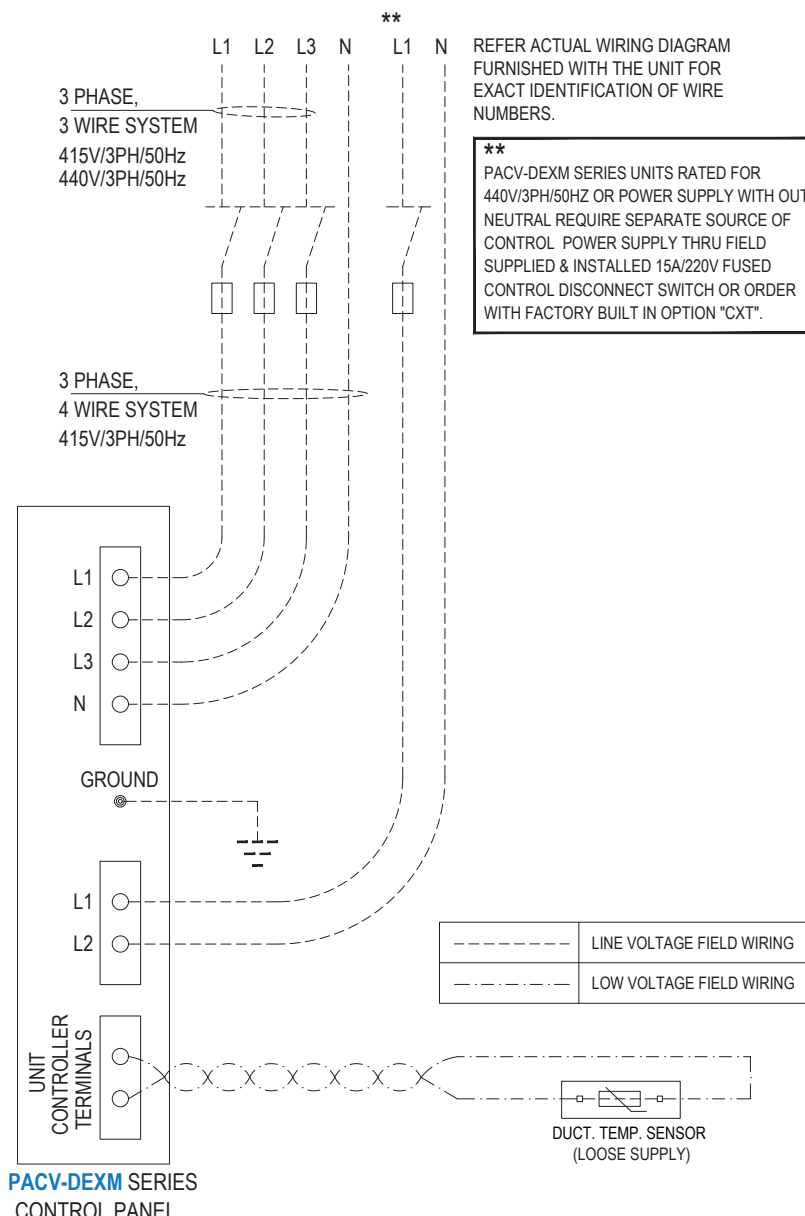
All field wiring must be done in accordance with applicable local and national codes. For maximum recommended for fuse sizing and minimum circuit amps for cable sizing, see Page 23 to 24 of this bulletin.

Duct work should be connected with flexible connections to the **PACV-DEXM** series. One or two drains suitably trapped, are required to be connected to the drain outlet of all models of **PACV-DEXM** series.

The **PACV-DEXM** series is then ready to provide cooling, on demand.

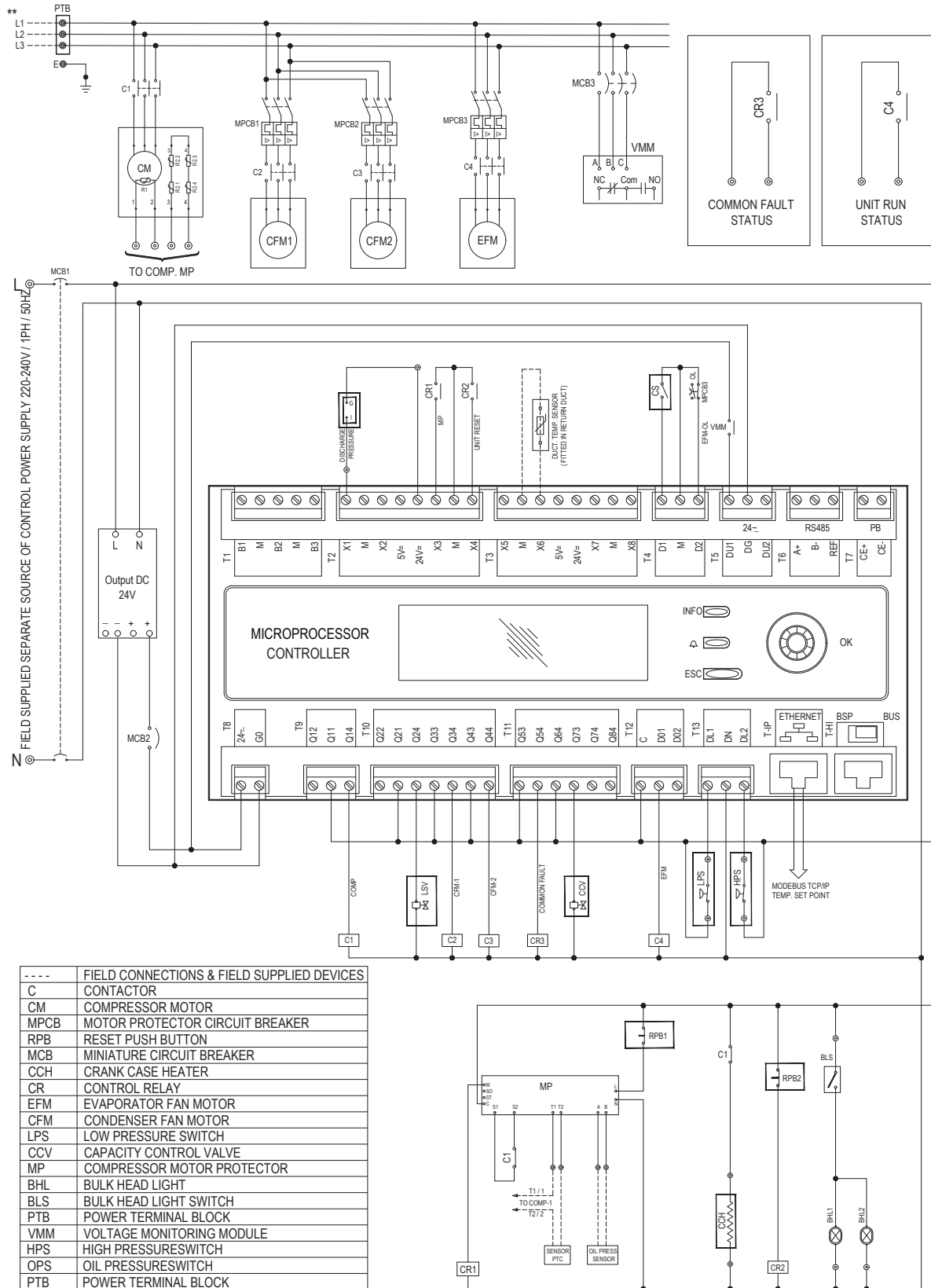
*Please Consult SKM for Filed Connections of Module **PACV-DEXM** series incase Special Control required.

Field Wiring Schematic

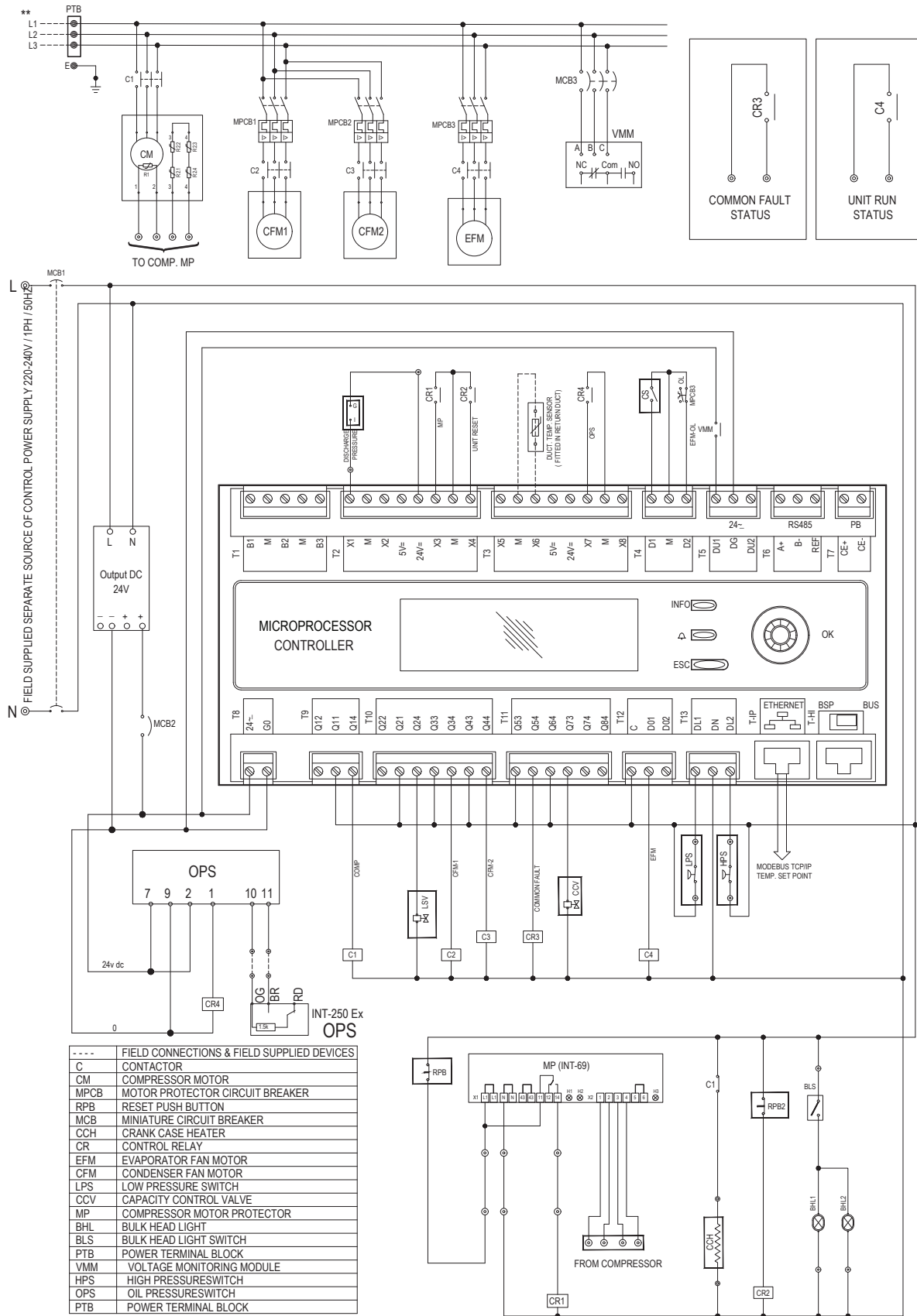




Typical Wiring Diagram - ATEX



Typical Wiring Diagram - IECEX





ELECTRICAL DATA - ATEX

Power Supply: 415V/3PH/50Hz

Model PACV-DEXM	Unit Characteristic			Compressor			Condenser Fan Motor			Evaporator Fan Motor		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA	QTY	FLA	LRA
51007	45	29	105	1	15.8	92	2	1.1	4.95	1	6.28	41.4
51009	63	40	185	1	23.1	170.5	2	1.1	4.95	1	8.16	61.2
52015	78	62	130	1+1	15.8 + 15.8	92 + 92	2	1.98	9.31	1	10.4	75.9
52018	113	90	226	1+1	23.1 + 23.1	170.5 + 170.5	2	2.83	14.2	1	14.5	88.4
52027	168	134	276	1+1	34.5 + 34.5	203 + 203	2	2.83	14.2	1	20.9	125
52038	321	274	358	1+1	46.7 + 46.7	260 + 260	4	2.83	14.2	1	28.2	186
52046	231	176	426	1+1	54.7 + 54.7	290 + 290	4	4.48	32.3	1	34.7	229
52050	249	186	494	1+1	62.8 + 54.7	358 + 290	4	4.48	32.3	1	34.7	229
52055	257	194	502	1+1	62.8 + 62.8	358 + 358	4	4.48	32.3	1	34.7	229
52060	316	229	693	1+1	86.7 + 62.8	544 + 358	4	4.48	32.3	1	39.9	271
52065	340	253	717	1+1	86.7 + 86.7	544 + 544	4	4.48	32.3	1	39.9	271
52075	384	294	792	1+1	90.3 + 90.3	584 + 584	8	4.48	32.3	1	54	400
52080	413	318	811	1+1	95 + 95	584 + 584	8	4.48	32.3	1	68	510
52090	448	342	822	1+1	105.7 + 105.7	584 + 584	8	4.48	32.3	1	68	510

Power Supply: 440V/3PH/50Hz

Model PACV-DEXM	Unit Characteristic			Compressor			Condenser Fan Motor			Evaporator Fan Motor		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA	QTY	FLA	LRA
51007	44	28	104	1	15.8	92	2	1.01	4.55	1	5.8	38.3
51009	62	39	184	1	23.1	170.5	2	1.01	4.55	1	7.53	56.5
52015	77	61	128	1+1	15.8 + 15.8	92 + 92	2	1.79	8.41	1	9.55	69.7
52018	112	89	223	1+1	23.1 + 23.1	170.5 + 170.5	2	2.56	12.8	1	13.4	81.5
52027	166	132	273	1+1	34.5 + 34.5	203 + 203	2	2.56	12.8	1	19.3	123
52038	318	272	354	1+1	46.7 + 46.7	260 + 260	4	2.56	12.8	1	26	172
52046	224	170	408	1+1	54.7 + 54.7	290 + 290	4	3.51	20.7	1	31.9	211
52050	242	180	476	1+1	62.8 + 54.7	358 + 290	4	3.51	20.7	1	31.9	211
52055	251	188	484	1+1	62.8 + 62.8	358 + 358	4	3.51	20.7	1	31.9	211
52060	309	223	675	1+1	86.7 + 62.8	544 + 358	4	3.51	20.7	1	36.8	250
52065	333	246	699	1+1	86.7 + 86.7	544 + 544	4	3.51	20.7	1	36.8	250
52075	372	282	770	1+1	90.3 + 90.3	584 + 584	8	3.51	20.7	1	50.4	353
52080	399	304	786	1+1	95 + 95	584 + 584	8	3.51	20.7	1	61.3	429
52090	433	328	797	1+1	105.7 + 105.7	584 + 584	8	3.51	20.7	1	61.3	429

Table 11

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.

ELECTRICAL DATA - IECEX

Power Supply: 415V/3PH/50Hz

Model PACV-DEXM	Unit Characteristic			Compressor			Condenser Fan Motor			Evaporator Fan Motor		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA	QTY	FLA	LRA
51007	48	31	162	1	17.5	149	2	1.1	4.95	1	6.28	41.4
51009	56	36	189	1	20.1	174	2	1.1	4.95	1	8.16	61.2
52015	72	54	189	1+1	17.5 + 17.5	149 + 149	2	1.98	9.31	1	10.4	75.9
52018	86	66	226	1+1	20.1 + 20.1	174 + 174	2	2.83	14.2	1	14.5	88.4
52027	125	95	278	1+1	30.2 + 30.2	209 + 209	2	2.83	14.2	1	20.9	125
52038	192	145	433	1+1	46.7 + 46.7	335 + 335	4	2.83	14.2	1	28.2	186
52046	244	185	390	1+1	58.8 + 58.8	250 + 250	4	4.48	32.3	1	34.7	229
52050	276	203	552	1+1	72.8 + 58.8	412 + 250	4	4.48	32.3	1	34.7	229
52055	290	217	566	1+1	72.8 + 72.8	412 + 412	4	4.48	32.3	1	34.7	229
52060	327	240	660	1+1	86.9 + 72.8	501 + 412	4	4.48	32.3	1	39.9	271
52065	341	254	674	1+1	86.9 + 86.9	501 + 501	4	4.48	32.3	1	39.9	271
52075	415	315	875	1+1	100 + 100	657 + 657	8	4.48	32.3	1	54	400
52080	465	354	900	1+1	111 + 111	657 + 657	8	4.48	32.3	1	68	510
52090	527	397	1053	1+1	130 + 130	791 + 791	8	4.48	32.3	1	68	510

Power Supply: 440V/3PH/50Hz

Model PACV-DEXM	Unit Characteristic			Compressor			Condenser Fan Motor			Evaporator Fan Motor		
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA	QTY	FLA	LRA
51007	48	30	161	1	17.5	149	2	1.01	4.55	1	5.8	38.3
51009	55	35	188	1	20.1	174	2	1.01	4.55	1	7.53	56.5
52015	71	53	187	1+1	17.5 + 17.5	149 + 149	2	1.79	8.41	1	9.55	69.7
52018	84	64	223	1+1	20.1 + 20.1	174 + 174	2	2.56	12.8	1	13.4	81.5
52027	123	93	274	1+1	30.2 + 30.2	209 + 209	2	2.56	12.8	1	19.3	123
52038	189	142	429	1+1	46.7 + 46.7	335 + 335	4	2.56	12.8	1	26	172
52046	238	179	372	1+1	58.8 + 58.8	250 + 250	4	3.51	20.7	1	31.9	211
52050	269	196	534	1+1	72.8 + 58.8	412 + 250	4	3.51	20.7	1	31.9	211
52055	283	210	548	1+1	72.8 + 72.8	412 + 412	4	3.51	20.7	1	31.9	211
52060	320	233	642	1+1	86.9 + 72.8	501 + 412	4	3.51	20.7	1	36.8	250
52065	334	247	656	1+1	86.9 + 86.9	501 + 501	4	3.51	20.7	1	36.8	250
52075	404	304	853	1+1	100 + 100	657 + 657	8	3.51	20.7	1	50.4	353
52080	451	340	875	1+1	111 + 111	657 + 657	8	3.51	20.7	1	61.3	429
52090	512	382	1028	1+1	130 + 130	791 + 791	8	3.51	20.7	1	61.3	429

Table 12

Legend

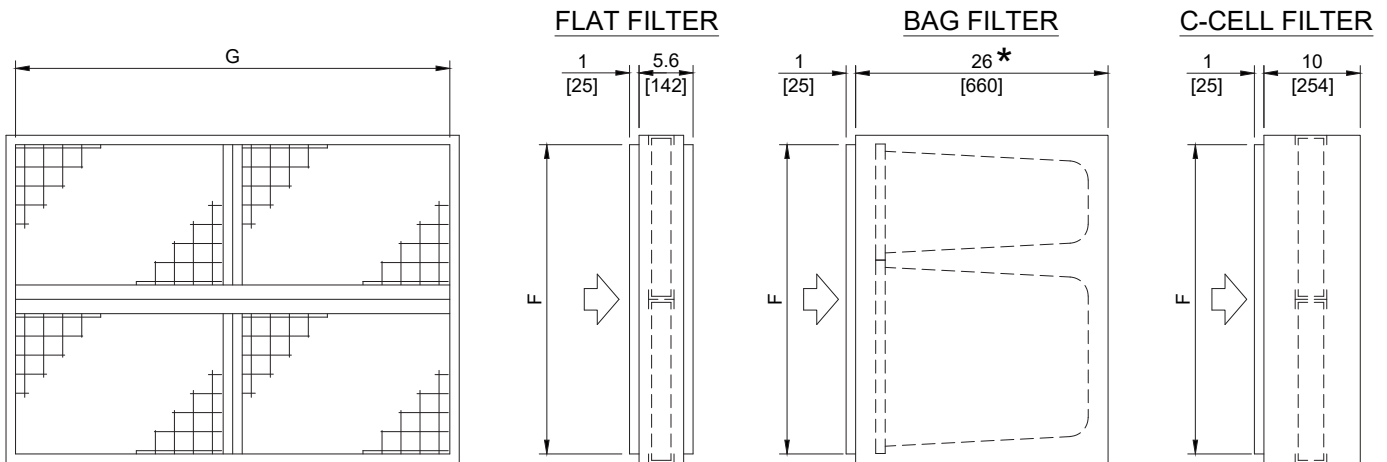
- MFA** Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.
- MCA** Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.
- ICF** Maximum Instantaneous Current Flow.

- 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.



Filter Dimensions & Sizes



MODEL PACV-	F	G	FLAT FILTER				BAG FILTER				C-CELL FILTER			
			H x L	QTY	H x L	QTY	H x L	QTY	H x L	QTY	H x L	QTY	H x L	QTY
51007DEXM	24 [610]	40 [1016]	24x20 [610x508]	2	-	-	24x20 [610x508]	2	-	-	24x20 [610x508]	2	-	-
51009DEXM	30 [762]	44 [1118]	12x24 [305x610]	1	20x24 [508x610]	1	12x24 [305x610]	1	20x24 [508x610]	1	12x24 [305x610]	1	20x24 [508x610]	1
			12x20 [305x508]	1	20x20 [508x508]	1	12x20 [305x508]	1	20x20 [508x508]	1	12x20 [305x508]	1	20x20 [508x508]	1
52015DEXM	36 [914]	60 [1524]	12x20 [305x508]	3	-	-	12x20 [305x508]	3	-	-	12x20 [305x508]	3	-	-
			24x20 [610x508]	3	-	-	24x20 [610x508]	3	-	-	24x20 [610x508]	3	-	-
52018DEXM	36 [914]	72 [1829]	12x24 [305x610]	3	-	-	12x24 [305x610]	3	-	-	12x24 [305x610]	3	-	-
			24x24 [610x610]	3	-	-	24x24 [610x610]	3	-	-	24x24 [610x610]	3	-	-
52027DEXM	48 [1219]	72 [1829]	24x24 [610x610]	6	-	-	24x24 [610x610]	6	-	-	24x24 [610x610]	6	-	-
52038DEXM	72 [1829]	72 [1829]	24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-
52046DEXM	84 [2134]	72 [1829]	12x24 [305x610]	3	-	-	12x24 [305x610]	3	-	-	12x24 [305x610]	3	-	-
			24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-
52050DEXM	93 [2362]	72 [1829]	20x24 [508x610]	3	-	-	20x24 [508x610]	3	-	-	20x24 [508x610]	3	-	-
			24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-	24x24 [610x610]	9	-	-
52055DEXM	96 [2438]	82 [2083]	24x24 [610x610]	12	-	-	24x24 [610x610]	12	-	-	24x24 [610x610]	12	-	-
			24x12 [610x305]	4	-	-	24x12 [610x305]	4	-	-	24x12 [610x305]	4	-	-
52060DEXM	96 [2438]	82 [2083]	24x24 [610x610]	12	-	-	24x24 [610x610]	12	-	-	24x24 [610x610]	12	-	-
			24x12 [610x305]	4	-	-	24x12 [610x305]	4	-	-	24x12 [610x305]	4	-	-
52065DEXM	99 [2515]	82 [2083]	20x24 [508x610]	15	-	-	20x24 [508x610]	15	-	-	20x24 [508x610]	15	-	-
			20x12 [508x305]	5	-	-	20x12 [508x305]	5	-	-	20x12 [508x305]	5	-	-
52075DEXM	90 [2286]	102 [2591]	24x24 [610x610]	3	20x24 [508x610]	1	24x24 [610x610]	3	20x24 [508x610]	1	24x24 [610x610]	3	20x24 [508x610]	1
			24x20 [610x508]	12	20x20 [508x508]	4	24x20 [610x508]	12	20x20 [508x508]	4	24x20 [610x508]	12	20x20 [508x508]	4
52080DEXM	90 [2286]	108 [2743]	24x24 [610x610]	6	20x24 [508x610]	2	24x24 [610x610]	6	20x24 [508x610]	2	24x24 [610x610]	6	20x24 [508x610]	2
			24x20 [610x508]	9	20x20 [508x508]	3	24x20 [610x508]	9	20x20 [508x508]	3	24x20 [610x508]	9	20x20 [508x508]	3
52090DEXM	90 [2286]	128 [3251]	24x24 [610x610]	6	20x24 [508x610]	2	24x24 [610x610]	6	20x24 [508x610]	2	24x24 [610x610]	6	20x24 [508x610]	2
			24x20 [610x508]	12	20x20 [508x508]	4	24x20 [610x508]	12	20x20 [508x508]	4	24x20 [610x508]	12	20x20 [508x508]	4

* Bag Filter is applicable for 21" depth. Table 13 All dimensions are in inches [mm]

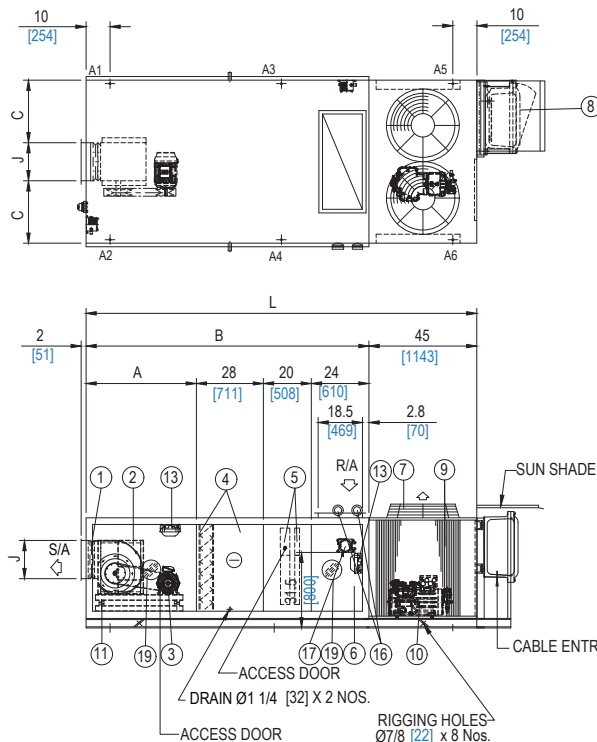
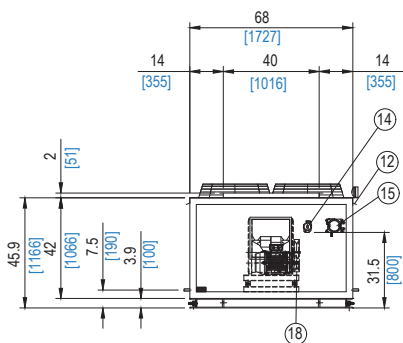
Table 13

Dimensional Data

PACV Models: 51007 DEXM, 51009 DEXM

LEGEND

- ① FLEXIBLE CONNECTION
- ② EVAPORATOR FAN
- ③ EVAP. FAN MOTOR
- ④ EVAP. COIL + ELIMINATOR
- ⑤ 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- ⑥ R/A BOX
- ⑦ CONDENSER FAN
- ⑧ CONTROL PANEL
- ⑨ CONDENSER COIL
- ⑩ COMPRESSOR
- ⑪ SPRING ANTI VIBRATION MOUNTS
- ⑫ WEATHER PROOF CANOPY
- ⑬ BULK HEAD LIGHT
- ⑭ BULK HEAD LIGHT SWITCH
- ⑮ AIR FLOW SWITCH
- ⑯ DIFF. PRESSURE GAUGE
- ⑰ DIFF. PRESSURE SWITCH
- ⑱ FAN BELT GUARD
- ⑲ INSPECTION WINDOW



MODEL PACV	DIMENSIONS				
	A	B	C	J	L
51007 DEXM	46 [1169]	118 [2998]	26 [662]	15.9 [404]	163 [4141]
51009 DEXM	46 [1169]	118 [2998]	26 [662]	15.9 [404]	163 [4141]

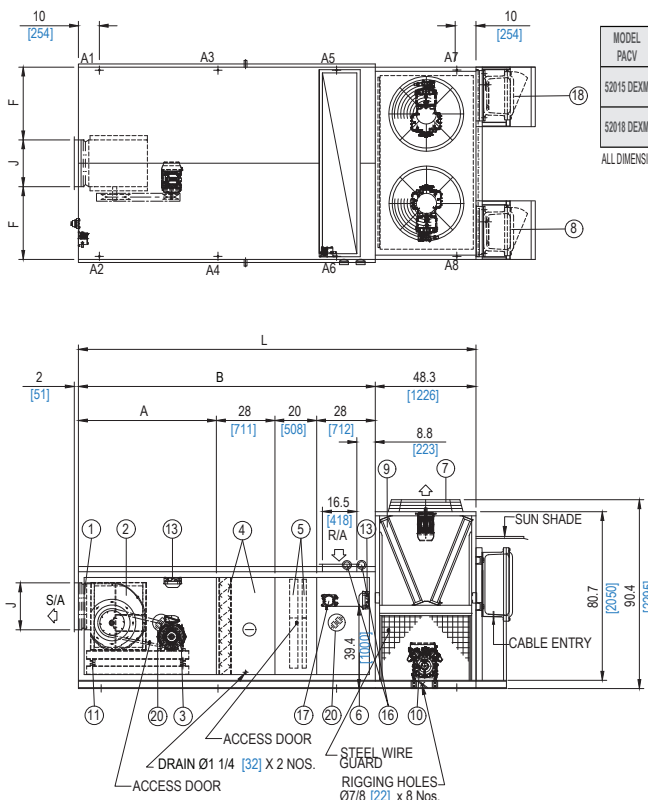
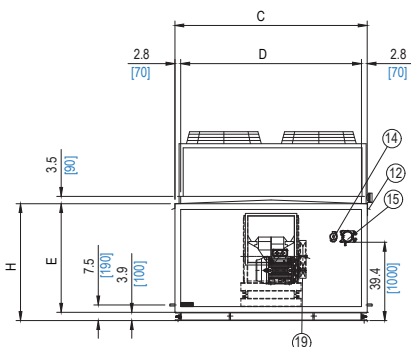
ALL DIMENSIONS ARE IN INCHES [MM]

Table 14

PACV Models: 52015 DEXM, 52018 DEXM

LEGEND

- ① FLEXIBLE CONNECTION
- ② EVAPORATOR FAN
- ③ EVAP. FAN MOTOR
- ④ EVAP. COIL + ELIMINATOR
- ⑤ 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- ⑥ R/A BOX
- ⑦ CONDENSER FAN
- ⑧ CONTROL PANEL
- ⑨ CONDENSER COIL
- ⑩ COMPRESSOR
- ⑪ SPRING ANTI VIBRATION MOUNTS
- ⑫ WEATHER PROOF CANOPY
- ⑬ BULK HEAD LIGHT
- ⑭ BULK HEAD LIGHT SWITCH
- ⑮ AIR FLOW SWITCH
- ⑯ DIFF. PRESSURE GAUGE
- ⑰ DIFF. PRESSURE SWITCH
- ⑱ POWER PANEL
- ⑲ FAN BELT GUARD
- ⑳ INSPECTION WINDOW



MODEL PACV	DIMENSIONS								
	A	B	C	D	E	F	J	H	L
52015 DEXM	52 [1321]	128 [3252]	88 [2235]	82.5 [2089]	48 [1219]	34 [864]	20 [507]	51.9 [1319]	176.3 [4478]
52018 DEXM	66 [1677]	142 [3608]	92 [2337]	86.5 [2197]	52 [1320]	34.8 [884]	22.4 [569]	55.9 [1420]	190.3 [4834]

ALL DIMENSIONS ARE IN INCHES [MM]

Table 15

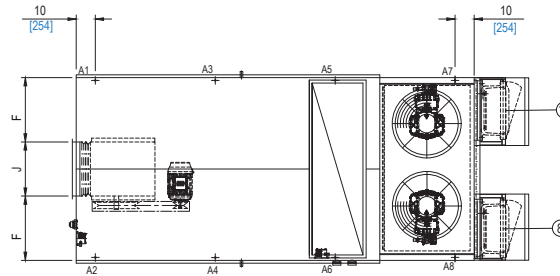


Dimensional Data

PACV Models: 52027 DEXM

LEGEND

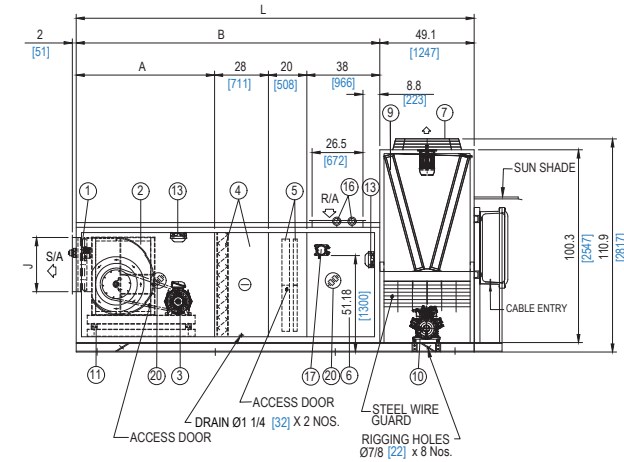
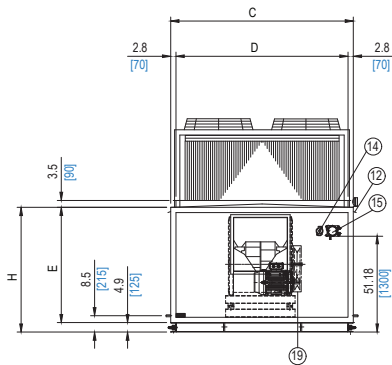
- 1 FLEXIBLE CONNECTION
- 2 EVAPORATOR FAN
- 3 EVAP. FAN MOTOR
- 4 EVAP. COIL + ELIMINATOR
- 5 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- 6 R/A BOX
- 7 CONDENSER FAN
- 8 CONTROL PANEL
- 9 CONDENSER COIL
- 10 COMPRESSOR
- 11 SPRING ANTI VIBRATION MOUNTS
- 12 WEATHER PROOF CANOPY
- 13 BULK HEAD LIGHT
- 14 BULK HEAD LIGHT SWITCH
- 15 AIR FLOW SWITCH
- 16 DIFF. PRESSURE GAUGE
- 17 DIFF. PRESSURE SWITCH
- 18 POWER PANEL
- 19 FAN BELT GUARD
- 20 INSPECTION WINDOW



MODEL PACV	DIMENSIONS								
	A	B	C	D	E	F	J	H	L
52027 DEXM	72 [1829]	158 [4014]	95 [2413]	89.5 [2273]	60 [1524]	33.4 [849]	28.1 [715]	64.9 [1648]	207.1 [5261]

ALL DIMENSIONS ARE IN INCHES [MM]

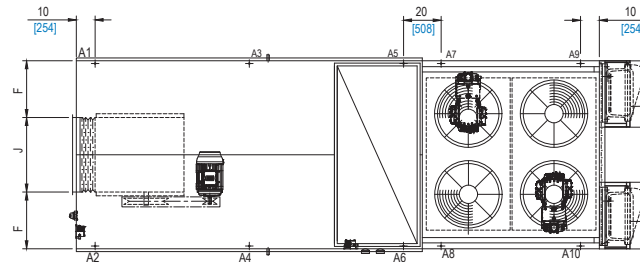
Table 16



PACV Models: 52038 DEXM, 52046 DEXM, 52050 DEXM, 52055 DEXM

LEGEND

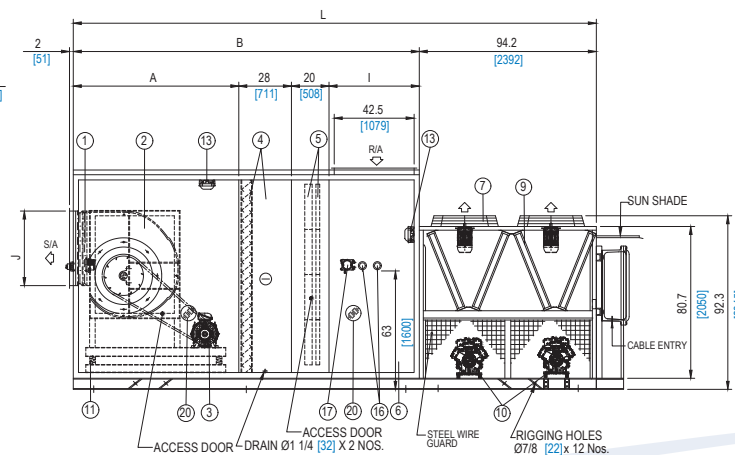
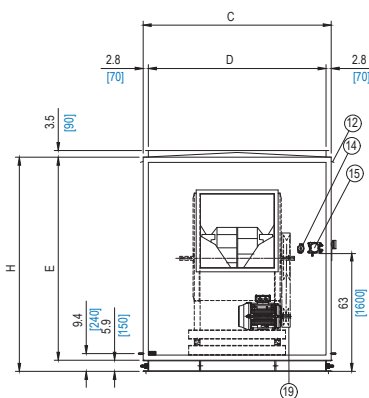
- 1 FLEXIBLE CONNECTION
- 2 EVAPORATOR FAN
- 3 EVAP. FAN MOTOR
- 4 EVAP. COIL + ELIMINATOR
- 5 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- 6 R/A BOX
- 7 CONDENSER FAN
- 8 CONTROL PANEL
- 9 CONDENSER COIL
- 10 COMPRESSOR
- 11 SPRING ANTI VIBRATION MOUNTS
- 12 WEATHER PROOF CANOPY
- 13 BULK HEAD LIGHT
- 14 BULK HEAD LIGHT SWITCH
- 15 AIR FLOW SWITCH
- 16 DIFF. PRESSURE GAUGE
- 17 DIFF. PRESSURE SWITCH
- 18 POWER PANEL
- 19 FAN BELT GUARD
- 20 INSPECTION WINDOW



MODEL PACV	DIMENSIONS									
	A	B	C	D	E	F	J	H	I	L
52038 DEXM	76 [1931]	168 [4268]	92 [2337]	86.5 [2197]	84 [2134]	30.2 [768]	31.5 [801]	89.92 [2284]	44 [1118]	262.2 [6660]
52046 DEXM	82 [2083]	178 [4522]	92 [2337]	86.5 [2197]	96 [2438]	28.3 [720]	35.4 [899]	101.9 [2588]	48 [1219]	272.2 [6914]
52050 DEXM	88 [2235]	184 [4674]	92 [2337]	86.5 [2197]	105 [2667]	28.2 [716]	36.6 [930]	110.9 [2817]	48 [1219]	278.2 [7066]
52055 DEXM	88 [2235]	184 [4674]	100 [2540]	94.5 [2400]	100 [2540]	30.2 [767]	36.6 [930]	113.9 [2893]	48 [1219]	278.2 [7066]

ALL DIMENSIONS ARE IN INCHES [MM]

Table 17

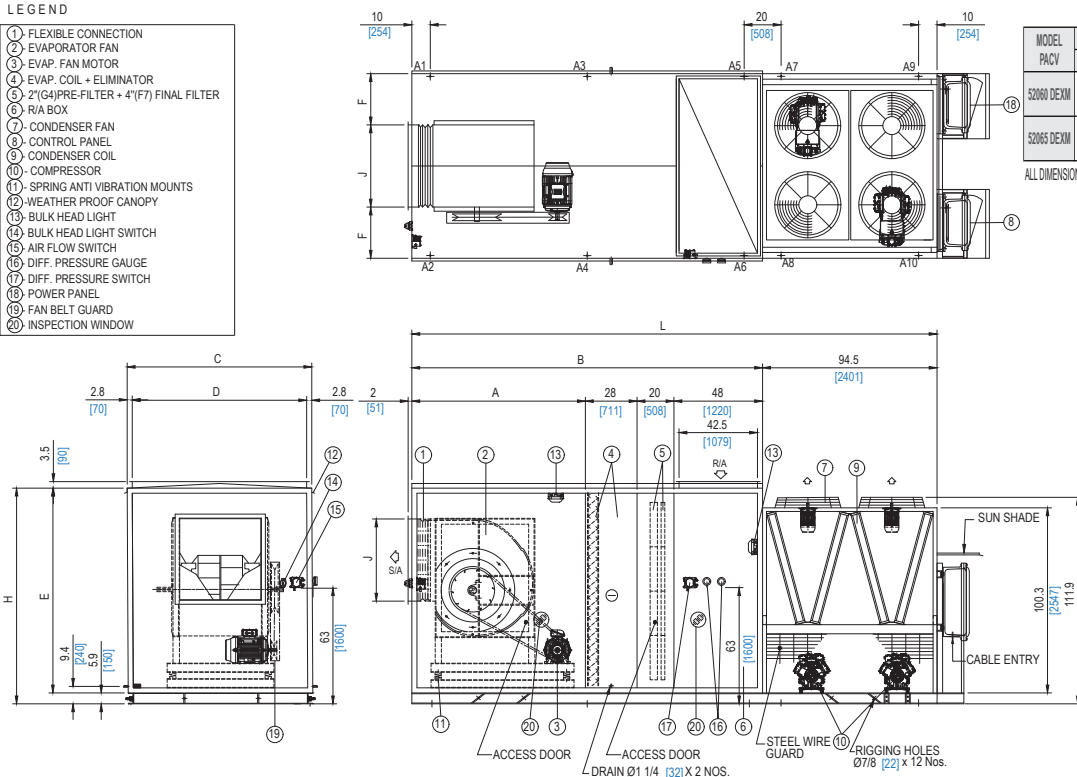


Dimensional Data

PACV Models: 52060 DEXM, 52065 DEXM

LEGEND

- 1 FLEXIBLE CONNECTION
- 2 EVAPORATOR FAN
- 3 EVAP. FAN MOTOR
- 4 EVAP. COIL + ELIMINATOR
- 5 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- 6 R/A BOX
- 7 CONDENSER FAN
- 8 CONTROL PANEL
- 9 CONDENSER COIL
- 10 COMPRESSOR
- 11 SPRING ANTI VIBRATION MOUNTS
- 12 WEATHER PROOF CANOPY
- 13 BULK HEAD LIGHT
- 14 BULK HEAD LIGHT SWITCH
- 15 AIR FLOW SWITCH
- 16 DIFF. PRESSURE GAUGE
- 17 DIFF. PRESSURE SWITCH
- 18 POWER PANEL
- 19 FAN BELT GUARD
- 20 INSPECTION WINDOW



MODEL PACV	DIMENSIONS							
	A	B	C	D	E	F	J	L
52060 DEXM	88 [2235]	184 [4674]	100 [2540]	94.5 [2400]	108 [2743]	30.2 [767]	39.6 [1007]	113.9 [2893]
52065 DEXM	94 [2388]	190 [4827]	100 [2540]	94.5 [2400]	111 [2818]	27.8 [706]	44.5 [1130]	116.9 [2968]

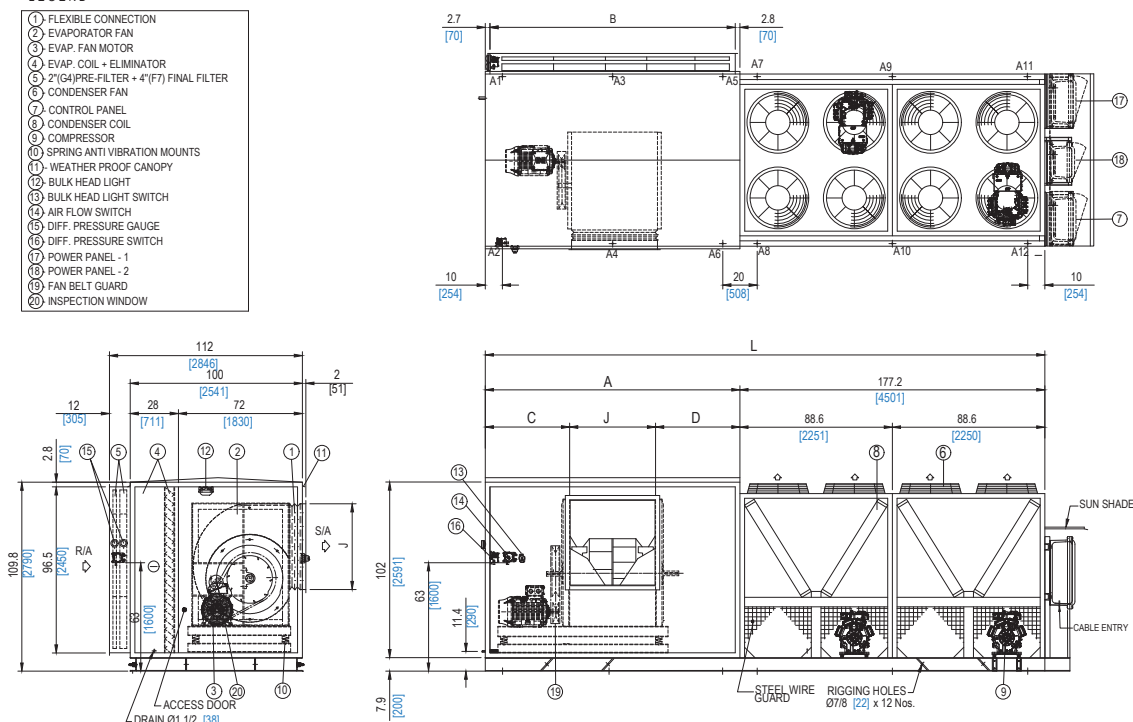
ALL DIMENSIONS ARE IN INCHES [MM]

Table 18

PACV Models: 52075 DEXM, 52080 DEXM, 52090 DEXM

LEGEND

- 1 FLEXIBLE CONNECTION
- 2 EVAPORATOR FAN
- 3 EVAP. FAN MOTOR
- 4 EVAP. COIL + ELIMINATOR
- 5 2"(G4)PRE-FILTER + 4"(F7) FINAL FILTER
- 6 CONDENSER FAN
- 7 CONTROL PANEL
- 8 CONDENSER COIL
- 9 COMPRESSOR
- 10 SPRING ANTI VIBRATION MOUNTS
- 11 WEATHER PROOF CANOPY
- 12 BULK HEAD LIGHT
- 13 BULK HEAD LIGHT SWITCH
- 14 AIR FLOW SWITCH
- 15 DIFF. PRESSURE GAUGE
- 16 DIFF. PRESSURE SWITCH
- 17 POWER PANEL - 1
- 18 POWER PANEL - 2
- 19 FAN BELT GUARD
- 20 INSPECTION WINDOW



MODEL PACV	DIMENSIONS				
	A	B	C	D	L
52075 DEXM	122 [3098]	116.5 [2960]	47.3 [1200]	30.2 [767]	299.2 [7599]
52080 DEXM	128 [3250]	122.5 [3111]	47.3 [1200]	30.9 [784]	306.2 [7751]
52090 DEXM	148 [3750]	142.5 [3620]	49 [1246]	49 [1246]	325.2 [8299]

ALL DIMENSIONS ARE IN INCHES [MM]

Table 19



LOADING POINTS

ATEX

MODEL PACV	UNIT	LOAD AT EACH POINTS lbs [Kg]												TOTAL WEIGHT
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	
51007-DEXM	lb.	756	765	811	810	763	731							4636
	Kg.	343	347	368	367	346	331							2102
51009-DEXM	lb.	756	765	811	810	763	731							4636
	Kg.	343	347	368	367	346	332							2102
52015-DEXM	lb.	641	665	809	772	773	754	1206	1150					6770
	Kg.	291	302	367	350	351	342	547	522					3070
52018-DEXM	lb.	641	665	809	772	773	754	1206	1150					6770
	Kg.	291	302	367	350	351	342	547	522					3070
52027-DEXM	lb.	641	665	809	772	773	754	1206	1150					6770
	Kg.	291	302	367	350	351	342	547	522					3070
52038-DEXM	lb.	1114	1158	1469	1486	810	805	914	1088	1706	1516			12067
	Kg.	505	525	666	674	367	365	415	494	774	688			5473
52046-DEXM	lb.	1338	1401	1727	1665	917	906	1044	1257	1873	1669			13797
	Kg.	607	635	783	755	416	411	473	570	849	757			6257
52050-DEXM	lb.	1296	1365	1905	1866	1018	1001	1068	1242	2049	1703			14513
	Kg.	588	619	864	846	462	454	484	563	929	772			6582
52055-DEXM	lb.	1510	1566	2023	1948	1078	1063	1139	1446	2067	1763			15604
	Kg.	685	710	917	883	489	482	517	656	937	800			7077
52060-DEXM	lb.	1402	1561	2045	2061	1102	1083	1513	1257	1891	2144			16059
	Kg.	636	708	927	935	500	491	686	570	858	972			7283
52065-DEXM	lb.	1490	1604	2146	2145	1164	1139	1337	1650	2222	1918			16815
	Kg.	676	727	973	973	528	516	607	748	1008	870			7626
52075-DEXM	lb.	2429	1805	2457	1573	1381	1582	1475	1852	2247	1929			18729
	Kg.	1101	819	1114	714	626	717	669	840	1019	875			8494
52080-DEXM	lb.	2122	1473	2893	1928	1535	1303	928	1037	1561	1778	2221	1901	20680
	Kg.	962	668	1312	875	696	591	421	471	708	806	1007	862	9379
52090-DEXM	lb.	2207	1412	2848	1880	1522	1105	968	1080	1723	1946	2311	1982	20984
	Kg.	1001	640	1292	853	690	501	439	490	782	882	1048	899	9517

Table 20

IECEX

MODEL PACV	UNIT	LOAD AT EACH POINTS lbs [Kg]												TOTAL WEIGHT
		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	
51007-DEXM	lb.	749	758	814	850	763	731							4630
	Kg.	340	344	369	370	346	331							2100
51009-DEXM	lb.	784	792	856	859	785	750							4825
	Kg.	335	359	388	390	356	340							2188
52015-DEXM	lb.	641	665	809	772	773	754	1206	1150					6771
	Kg.	291	302	367	350	351	342	547	522					3071
52018-DEXM	lb.	760	823	900	922	874	873	1163	1170					7484
	Kg.	345	373	408	418	396	396	527	530					3394
52027-DEXM	lb.	909	1031	1090	1100	1043	1028	1441	1454					9097
	Kg.	412	467	494	499	473	466	654	659					4125
52038-DEXM	lb.	1114	1158	1469	1486	810	805	1115	927	1529	1734			12147
	Kg.	505	525	666	674	367	365	506	420	693	784			5509
52046-DEXM	lb.	1338	1401	1727	1665	917	906	1218	1025	1650	1834			13682
	Kg.	607	635	783	755	416	411	553	465	748	832			6205
52050-DEXM	lb.	1296	1365	1905	1866	1018	1001	1235	1044	1676	1947			14353
	Kg.	588	619	864	846	462	454	560	473	760	883			6905
52055-DEXM	lb.	1510	1566	2023	1948	1078	1063	1340	1087	1711	1959			15285
	Kg.	685	710	917	883	489	482	607	493	766	888			6932
52060-DEXM	lb.	1402	1561	2045	2061	1102	1083	1513	1257	1891	2144			16059
	Kg.	636	708	927	935	500	491	686	570	858	972			7283
52065-DEXM	lb.	1490	1604	2146	2145	1164	1139	1551	1290	1870	2122			16521
	Kg.	676	727	973	973	528	516	703	585	848	962			7492
52075-DEXM	lb.	2421	1805	2457	1573	1620	1396	1958	1535	1974	2362			19108
	Kg.	1101	819	1114	714	735	633	888	696	895	1071			8666
52080-DEXM	lb.	2122	1473	2893	1928	1535	1303	1635	947	1908	1085	1957	2063	21147
	Kg.	962	668	1312	875	696	591	742	430	865	492	887	1072	9591
52090-DEXM	lb.	2207	1412	2484	1880	1522	1105	1119	984	2054	1785	2028	2429	21373
	Kg.	1001	640	1292	853	779	690	508	446	931	809	920	1102	9693

*Loading point based on Motor1 Option , for Motor 2 Option Please Consult SKM.

Table 21

Location And Space Requirements

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

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

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

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

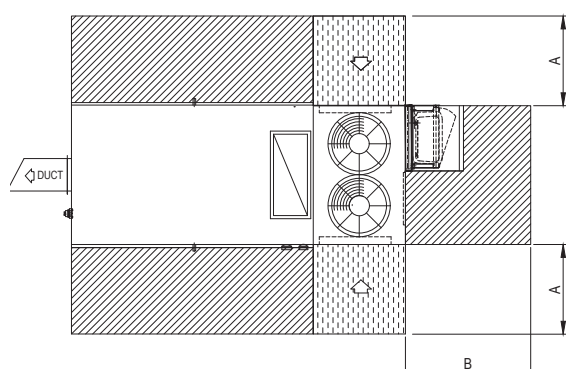
Under certain critical conditions it is recommended that vibration isolators of rubber-in-shear or spring type be installed under the base.

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

MODEL PACV	A	B	C
51007-DEXM	50	32	50
51009-DEXM	50		
52015-DEXM	66	42	66
52018-DEXM	66		
52027-DEXM	72		72
52038-DEXM	78		
52046-DEXM			
52050-DEXM			
52055-DEXM			
52060-DEXM			
52065-DEXM			
52075-DEXM	84	128	42
52080-DEXM	84	134	42
52090-DEXM	84	154	42

Table 22

Single Unit Installation



PACV- 51007-DEXM TO 52027-DEXM

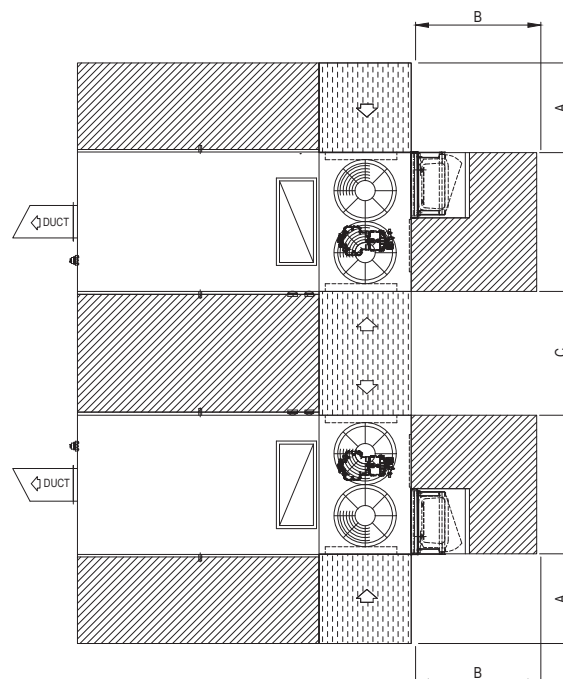


SPACING FOR SERVICE



SPACING FOR AIR FLOW

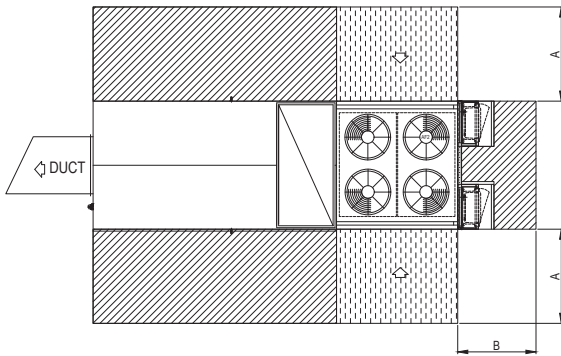
Multiple Unit Installation





Location And Space Requirements

Single Unit Installation



PACV- 52038-DEXM TO 52065-DEXM

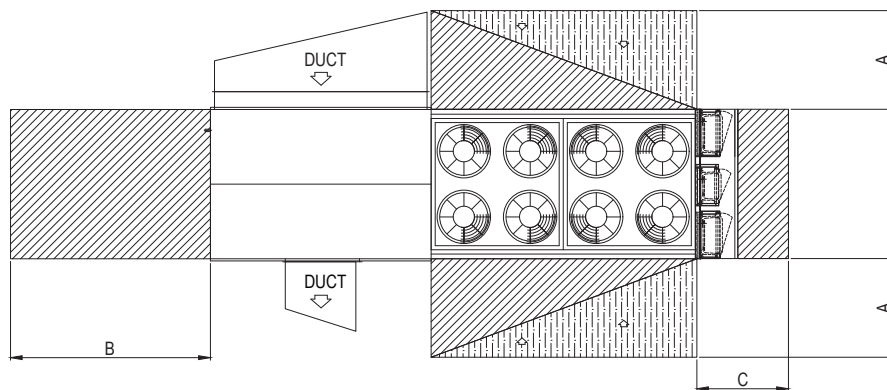
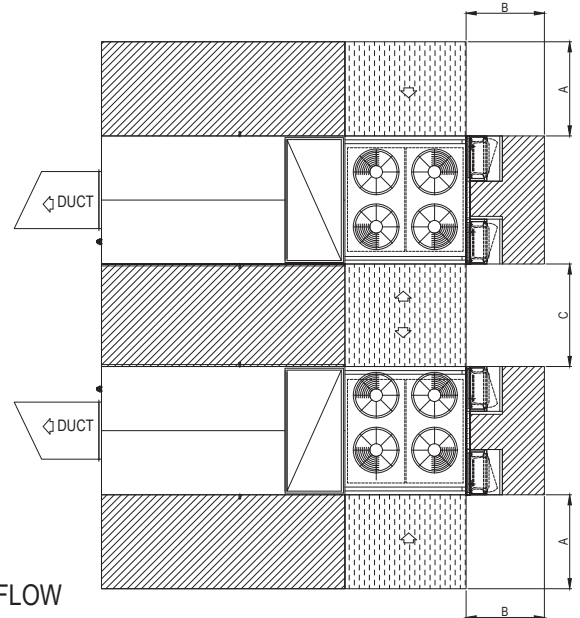


SPACING FOR SERVICE

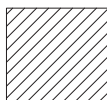


SPACING FOR AIR FLOW

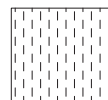
Multiple Unit Installation



PACV- 52075-DEXM TO 52090-DEXM



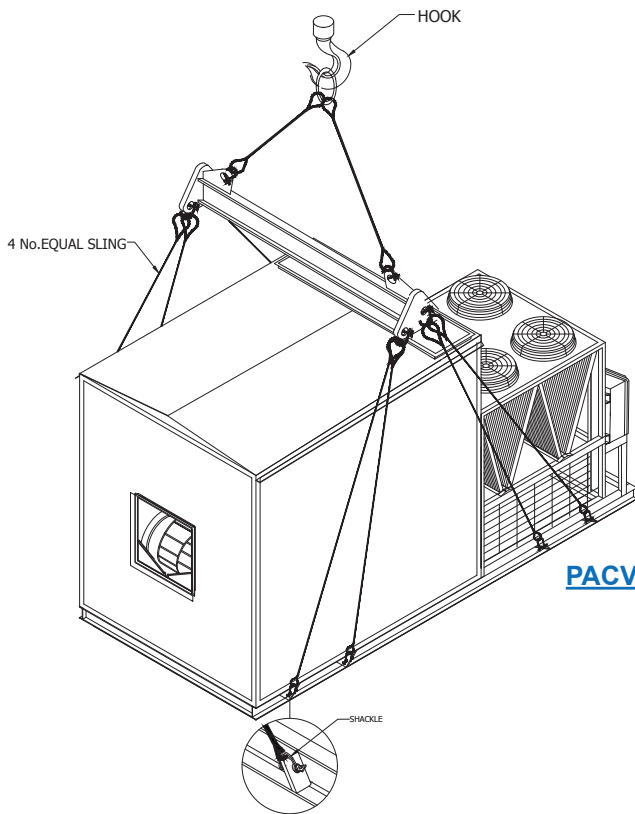
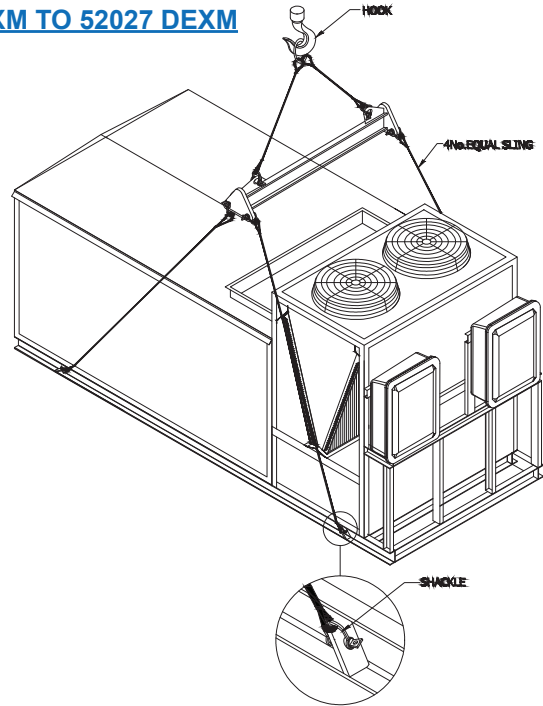
SPACING FOR SERVICE



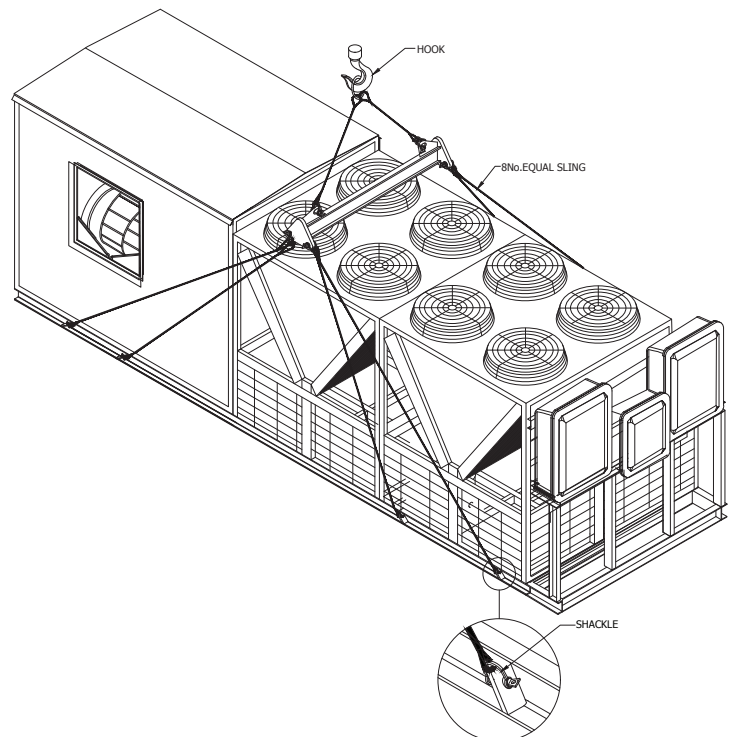
SPACING FOR AIR FLOW

Lifting Arrangements

PACV-52015 DEXM TO 52027 DEXM



PACV-52038 DEXM TO 52065 DEXM



PACV-52075 DEXM TO 52090 DEXM



Example Certificate

ATEX SKM Self Certificate





DECLARATION OF CONFORMITY

Directive 2014/34/EU

Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres

Certificate No. : **SKM 17 ATEX 0315 X**

Equipment : Air Cooled Packaged Unit, PACV 52XXXDEXM OSCAXXXX

Manufacturer : SKM AIR CONDITIONING LLC.

Address : Industrial Area 13, Sharjah, U.A.E.

SKM AIRCONDITIONING LLC certifies in accordance with Annex IX of the Council Directive 2014/34/EU of 26th February 2014 that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number SKM170315.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

IEC 60079-0:2011	IEC60079-7:2015	IEC 60079-1:2014
IEC 60079-15:2010		IEC 60079-18:2014

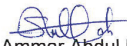
If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

This Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU.

The marking of the equipment shall include the following:



II 3G Ex d e mb nA nC IIB T3 Gc



Ammar Abdul Lateef
QHSE Director

Sharjah, 15th March 2017

Head Office, Sharjah, UAE

 P.O Box: 6004
 Tel: +971 6 514 3333 | Fax: +971 6 514 3300
 Email: info@skmaircon.com  www.skmaircon.com



S.K.M Air Conditioning LLC

Example Certificate

ATEX Third Party Certificate



ATEX Engineering GmbH
Remigiusstrasse. 6, D - 44359 Dortmund / Germany
Phonel: +49 (0) 2 31-33 28 23 Fax: +49 (0) 2 31 - 33 28 48
WEB: www.atex-engineering.de



Expertise and Risk Assessment Directive 94/9/EC

Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres

SKM 15 ATEX 1001X

Equipment: Air Cooled Package Unit

Type: **PACV-520XXD EXM**

Serial No.:

Manufacturer: SKM Air Conditioning LLC.

Address: Postbox 6004
Sharjah U.A.E

This equipment and any acceptable variation thereto are specified in the documents! Atex Engineering GmbH Dortmund Germany certifies in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, that this equipment has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive.

The examination is recorded in the confidential inspection report **SKM_824_151001**. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1 :2001, EN 13463-5 :2003, EN 61241-0 :2006; EN61241-1:2004; EN 60079-0:2012, EN 60079-1: 2007, EN 60079-15 :2010; EN 60079-31:2009 , EN 1127-1 :2007

If sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule of this certificate!

This Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC.
Further requirements of this Directive apply to the manufacture and supply.

The marking of the equipment shall include the following:



II (1) 3G
Ex d e [ia] mb nA IIB T3 Gc



Example Certificate

IECEX Certificate

		IECEX Certificate of Conformity	
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEX Scheme visit www.iecex.com			
Certificate No.:	IECEX EPS 17.0031X	Issue No: 1	<u>Certificate history:</u> Issue No. 1 (2018-07-19) Issue No. 0 (2017-06-23)
Status:	Current	Page 1 of 4	
Date of Issue:	2018-07-19		
Applicant:	S.K.M AIR CONDITIONING LLC. Industrial Area 13 Sharjah United Arab Emirates		
Equipment:	Packaged Air Conditioner PACV-xxxxx DEXM		
Optional accessory:			
Type of Protection:	flameproof enclosure "d", increased safety "e", intrinsic safety "I", encapsulation "m", non sparking "nA", hermetically-sealed "nC"		
Marking:	Ex d e ia mb nA nC IIB T3 Gc		
Approved for issue on behalf of the IECEX Certification Body:	Holger Schaffer		
Position:	Head of certification		
Signature: (for printed version)			
Date:			
1. This certificate and schedule may only be reproduced in full. 2. This certificate is not transferable and remains the property of the issuing body. 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEX Website.			
Certificate issued by: Bureau Veritas Consumer Products Services Germany GmbH Businesspark A96 86842 Türkheim Germany			
			

Product Request Form/Gas Group



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ATEX/IECEX Product Quotation Request Form

All information received is treated in strict confidence

ATEX/IECEX Data Information sheet

In order to be able to manufacture your product according to your requirements, we kindly ask you to send us this written confirmation including the importance of ATEX/IECEX certification, Our attached quotation for the specified for use in a hazardous atmosphere has been prepared from information given in your enquiry, in the event of an order you will be asked to complete and return this document to us.

EXPLOSIVE GAS ATMOSPHERE

(Includes flammable gases, flammable liquid-produced vapors, and combustible liquid-produced vapors)

Customer		Model	
Project Name		Quantity of Unit	
Sales Area		Power Supply	

Hazardous Area Details (please fill appropriate sections)

Information that MUST be provided to ensure that we can supply you with a unit that is compliant with the ATEX /IECEX Standard -(Design of unit working in potentially explosive atmospheres).

INDOOR (EVAPORATOR SIDE)											
Hazardous Locations								Temperature Classifications			
Gas Category								T1	T2	T3	T4
ZONE 1				ZONE 2				ATEX			
IIC	IIB+H2	IIB	IIA	IIC	IIB+H2	IIB	IIA	≤450°C	≤300°C	≤200°C	≤135°C

OUTDOOR (CONDENSER SIDE)											
Hazardous Locations								Temperature Classifications			
Gas Category								T1	T2	T3	T4
ZONE 1				ZONE 2				ATEX			
IIC	IIB+H2	IIB	IIA	IIC	IIB+H2	IIB	IIA	≤450°C	≤300°C	≤200°C	≤135°C

INSTRUMENTS											
Hazardous Locations								Temperature Classifications			
Gas Category								T1	T2	T3	T4
ZONE 1				ZONE 2				ATEX			
IIC	IIB+H2	IIB	IIA	IIC	IIB+H2	IIB	IIA	≤450°C	≤300°C	≤200°C	≤135°C

Please note:

- Zone1 and 2 general requirements are contained in IEC/EN 60079-0 (IECEX System & Europe)
- IIC - Acetylene & Hydrogen
IIB+H2- Hydrogen
IIB - Ethylene
IIA- Propane
- Major Explosion Proof Components list in the Evaporator side (indoor side) - [Evaporator Fan, Evaporator Fan Motor,Electric Heater]
- Major Explosion Proof Components list in the Condenser side (outdoor side) - [Compressor, Condenser Fan ,Condenser Fan Motor]
- Major Explosion Proof Instruments list - [Bulk headlight, Bulk headlight switch,Solnoid Valve, Hot Gas Bypass Valve, Pressure Transmitter,High Pressure Switch, Low Pressure Switch, Small Junction Box,Cables,Cable Glands,Dead Plug,Reducer & Adaptor]

Date:

Signature



Product Request Form/Dust Group



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All information received is treated in strict confidence

ATEX/IECEX Data Information sheet

In order to be able to manufacture your product according to your requirements, we kindly ask you to send us this written confirmation including the importance of ATEX/IECEX certification, Our attached quotation for the specified for use in a hazardous atmosphere has been prepared from information given in your enquiry, in the event of an order you will be asked to complete and return this document to us.

EXPLOSIVE DUST ATMOSPHERE (Includes combustible dusts and ignitable fibers/flyings)

Customer		Model	
Project Name		Quantity of Unit	
Sales Area		Power Supply	

Hazardous Area Details (please fill appropriate sections)

Information that MUST be provided to ensure that we can supply you with a unit that is compliant with the ATEX /IECEX Standard -(Design of unit working in potentially explosive atmospheres).

INDOOR (EVAPORATOR SIDE)							
Hazardous Locations						Temperature (T)	
Dust Category						Certification	
ZONE 21			ZONE 22			(Please Specify the maximum surface temperature)	Third Party
IIIC	IIIB	IIIA	IIIC	IIIB	IIIA		

OUTDOOR (CONDENSER SIDE)							
Hazardous Locations						Temperature (T)	
Dust Category						Certification	
ZONE 21			ZONE 22			(Please Specify the maximum surface temperature)	Third Party
IIIC	IIIB	IIIA	IIIC	IIIB	IIIA		

INSTRUMENTS							
Hazardous Locations						Temperature (T)	
Dust Category						Certification	
ZONE 21			ZONE 22			(Please Specify the maximum surface temperature)	Third Party
IIIC	IIIB	IIIA	IIIC	IIIB	IIIA		

Please note:

- Zone 21 and 22 general requirements are contained in IEC/EN 60079-0 (IECEX System & Europe).
- IIIC - Conductive dust
IIIB - Non-conductive dust
IIIA- Combustible flyings
- Major Explosion Proof Components list in the Evaporator side (indoor side) - [Evaporator Fan, Evaporator Fan Motor, Electric Heater]
- Major Explosion Proof Components list in the Condenser side (outdoor side) - [Compressor, Condenser Fan ,Condenser Fan Motor]
- Major Explosion Proof Instruments list - [Bulk headlight, Bulk headlight switch, Solinoid Valve, Hot Gas Bypass Valve, Pressure Transmitter, High Pressure Switch, Low Pressure Switch, Small Junction Box, Cables, Cable Glands, Dead Plug, Reducer & Adaptor]

Date:

Signature

GUIDE SPECIFICATIONS

GENERAL FEATURES

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

Unit shall be factory assembled, internally wired, fully refrigerant charged with R-134a and thoroughly tested before delivery. Units should be capable to operate from 50°F (10°C) to 131°F (55°C) ambient temperature, and shall be designed for explosion proof area in accordance with ATEX or IECEx standards.

CONDENSER COIL(S)

Coil shall be air cooled with integral sub-cooling circuit, constructed of seamless copper tubes 3/8" OD mechanically bonded to wavy Aluminium (Copper) fins with maximum 14FPI (1.8mm) or 16FPI (1.6mm) spacing. Coil shall be tested against leakage by pressurizing air at 525 psig (3619 kpa) in coil, under water, cleaned and dehydrated at the factory.

COMPRESSOR(S)

Compressor shall be of high energy efficiency ratio, fully accessible, semi hermetic reciprocating type, equipped with crankcase heater, oil pump, refrigerant gas cooled electric motor, preset internal relief valve, inherent thermistor motor protection, suction and discharge service valves, oil sight glass and shall be mounted on spring anti vibration mounts to minimize vibration transmissions. Compressors shall conform to EN 12900 standards.

CONDENSER FAN(S) & MOTOR(S)

The machine shall be furnished with direct driven propeller type discharging air upward condenser fans with PAGAS anti-static material blades. The condenser fans are individually statically and dynamically balanced at the factory. Complete fan assembly is provided with suitable acrylic coated fan guard.

Motors shall be Totally Enclosed Air Over (TEFC), 6 poles, class F insulation, minimum IP56 protection, factory wired to unit control panel and certified to ATEX/IECEx standard.

EVAPORATOR COIL

Evaporator coil shall be constructed of seamless copper tubes mechanically bonded to aluminum fins to ensure optimum heat transfer.

All evaporator coils are tested against leakage by air pressure of 350 psig (2413) under water, cleaned & dehydrated at the factory. Coil shall conform to AHRI410.

EVAPORATOR FAN MOTOR

Commonly all Evaporator fans are double inlet, double width, centrifugal type with backward curved impellers provides the combination to efficiency and quietness of operation, all fans are statically and dynamically balanced, Anti-static Conductive Belts are specially selected to comply to explosion proof requirements, Fans are provided with Anti-spark cone and certified to be used in hazardous locations.

Motor shall be totally enclosed fan cooled (TEFC) 4 poles, class F insulated, minimum IP56 protected, factory wired to unit control panel and certified to ATEX/IECEx standard.

REFRIGERANT PIPING

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

Suction line shall be insulated with 1/2" (12mm) wall thickness enclosed cell pipe insulation with maximum K factor 0.28 Btu.in /ft² .h.°F. (0.040 W/mK).

Discharge line shall be fabricated with hot gas muffler to minimize compressor noise and dampen discharge gas pulsations.

CASING

Unit casings are constructed of framed modules, for maximum rigidity and strength. Unit frames shall be constructed of either extruded aluminum profile or hot dip coated galvanized steel profile. (steel penta-post). Both profiles have excellent mechanical characteristics and give the unit its rigidity and design flexibility. The cross-section of profiles is specially designed for this type of application to give extra strength to the unit frame and to prevent any buckling or deformation. Aluminum Profile frames are assembled together using strong nylon corners and steel Penta-Post profiles are connected by means of special corner pieces to produce a very rigid assembly. Both constructions give the possibility of completely dismantling the unit sections and re-assembly at site in case of difficult access.



GUIDE SPECIFICATIONS

FILTERS

Units shall be supplied with A wide variety of filtration systems are available to meet the different applications, which includes fat filters, V- filters, bag filters, HEPA filters, carbon filters and other.

EXPLOSION PROOF ENCLOSURE

The unit mounted ATEX/IECEX Electrical enclosure is made of Copper Free Aluminum, Corrosion resistant and watertight gasket, Suitable for hazardous area.

A hinged access door is provided for easy access and security. The panel is factory wired in accordance with NEC 430 & 440, labelled, tagged and features 220V ~240VAC controls.

The following are the standard components used in all **PACV-DEXM** Explosion Proof Packaged Air Conditioners:

- All compressors are with DOL.
- Individual compressor, condenser fan motors and evaporator fan motor contactors.
- Motor protector circuit breaker for condenser and evaporator fan motors.
- Control circuit breaker.
- Control circuit on/off switch.
- Microprocessor control boards.
- Control Relays.
- Power and control terminal blocks.

MICROPROCESSOR CONTROL

Package units shall be equipped with a full function microprocessor-based controller as a standard feature. The controller shall be factory programmed for the control of evaporator fan, compressors and condenser fans. The controller shall come with a built-in keypad and display for simple but meaningful man machine interface. This controller shall provide complete operational control for the unit and shall have built-in auto diagnostic capability that can signal normal operation or alarm conditions as well as shutting down the unit or system if necessary. The controller shall come with a loose supplied duct temperature sensor installed in the conditioned space Return Duct. Communication between unit controller and the duct temperature sensor shall be through wire interface.

The Duct Temperature sensor used for measuring the return air temperature. It transmits the return air temperature to the unit controller, Temperature setpoint will be either through Modbus communication or preset temperature value, Control of the compressors is based on the Different between return air temperature and the Temperature set point as standard. For any specific Control required, please Consult SKM.

The Main Features of the controller shall be as follows:

- Built in LCD display with back light.
- Roll & push knob and 3 function buttons.
- Compatible with RTU or TCP/IP Modbus Communication.
- Battery backed up built in real time clock.
- Multiple authorization level to provide tight security for the control system.
- Capacity control based on return air temperature.
- Alarm history.
- Compatible with Explosion Proof ATEX/IECEX Certified Duct Temperature Sensor.

DISPLAY INFORMATION

The package units shall offer Controller which allows the operator to access different parameters of the unit. Operator can view and change the unit parameters through the Controller display or by Communication Modbus.

The display information includes:

- Status
- Outputs
- Inputs
- Alarms
- Set points
- Password

The intelligent microprocessor based controller shall monitor all the safeties related to the unit and makes the necessary protections, by shutting down the entire unit or the effected circuit. The protections shall include:

- Low suction pressure
- High discharge pressure
- Low oil pressure protection
- High compressor motor temperature
- Compressor short cycling
- Evaporator fan motor overload

Volt free contacts for run status, common fault status, auto mode status and provision for remote on/off shall be available as option.

In addition, the unit microprocessor shall be able to support the major BMS protocols such as BACnet , RS485 & LON as option.

Contact us

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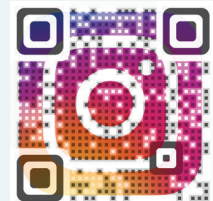
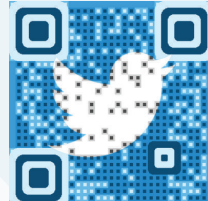
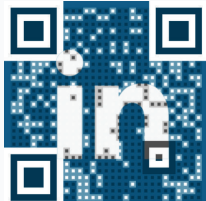
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