



windmason
BREATHE THE FINEST

DX Rooftop Package Air Conditioner Units



شركة ويندماسون العربية

Windmason Arabia Co.

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General Description

Thank you very much for your special patronage of Windmason Arabia Co. air conditioners.

Windmason “DX Package Air Conditioner Units “is an ideal choice when discussing high-load applications. As the name suggests, this unit is generally installed on the rooftop. The Single Package combines both the condenser and evaporator in a single body and is used with ducts. It offers flexible airflows based on installation conditions, which can be either horizontal or vertical, allowing greater versatility in the field.

In addition to its standard features, the unit offers unique benefits such as:

- High & Low static driver kits.
- Oversized motor options.
- Manual hood for fresh air intake.
- Compact design.

This unit is particularly suited for single-story and double-story buildings due to its ability to manage high static pressure. With its simple installation and user-friendly control system, it is ideal for factories, shopping malls, multiplexes, hotels, and more.

Comprehensive information about the design and installation of this system is included in this publication. The specifications section provides critical data on the same page for ease of reference.

To ensure effective project execution:

Make sure the specifications, dimensions, or other technical details align with the data in the engineering book before starting your project.

Features / Benefits

Each compact one-piece unit comes fully assembled, pre-charged, tested, and ready for operation.

Durable-Dependable Construction

Built for long-lasting performance in any climate, the weather-resistant cabinets are made from galvanized steel, bonder-ized, and coated with a pre-painted baked enamel finish on all exterior panels. The internal cabinet panels are primed for extended durability and enhanced aesthetics. The unit features a totally enclosed condenser fan motor with permanently lubricated bearings, ensuring greater reliability.

Indoor-Air Quality

Non corrosive sloped condensate pans minimize biological growth in rooftop 1"inch filters provide for greater particle reduction in the return air.

Simple, Electrical Connections

Terminal boards, located within the unit control box, provide easy connections for the room thermostat, outdoor thermostats, and electric heaters. The service panels can be quickly removed, allowing for hassle-free maintenance. Both power and control connections are positioned on the same side of the unit, simplifying the installation process. Additionally, color-coded wiring ensures easy tracing and quick diagnostics.

Easy Installation

Durable packaging protects all units during shipment and storage. Convenient side by side openings permit installation very close to face of buildings or on roof top. The non-corrosive sloped condensate pan minimizes residual condensate in off cycle.

Installation Features

- Single point electrical service entry
- Side discharge application
- No roof curb needed
- Side by side supply and return air
- Separate panel for control box

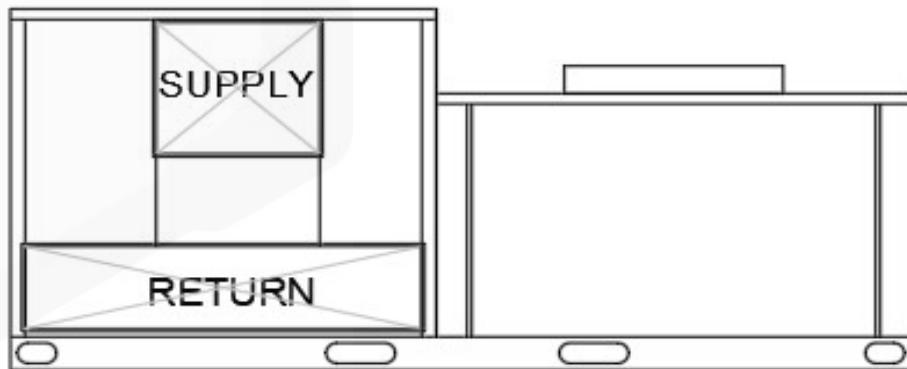
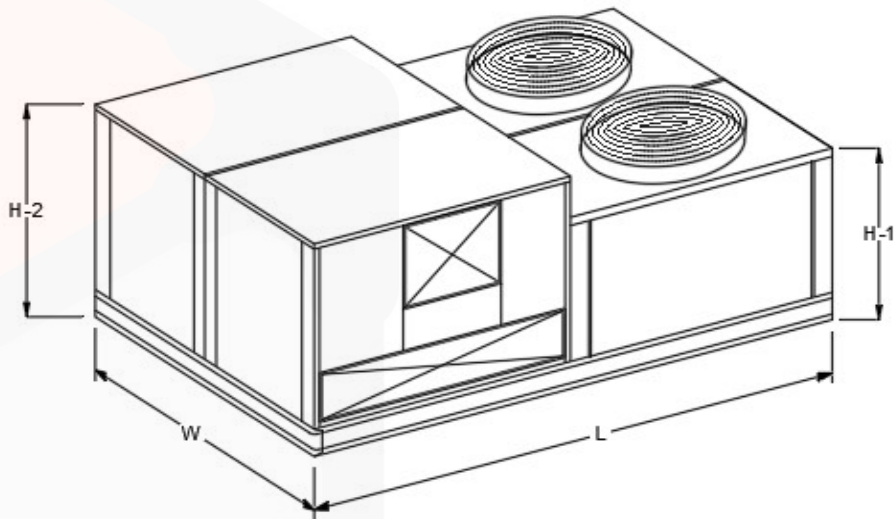
Superior Reliability, Efficiency and Safety

- Exceptional endurance tests
- Compressor Protection:
- Low vibration design:
- Control circuit protected by circuit breaker
- Thermally protected and permanently lubricated condenser and evaporator fan motors - Angle type return air section with washable type filters
- Transformer for safe 24v control circuit supply included
- High Efficiency, High Static Blower
- State-of-art scroll compressor technology
- Dual, electrically and mechanically independent refrigerant circuit
- Double skin construction, Insulated cabinet

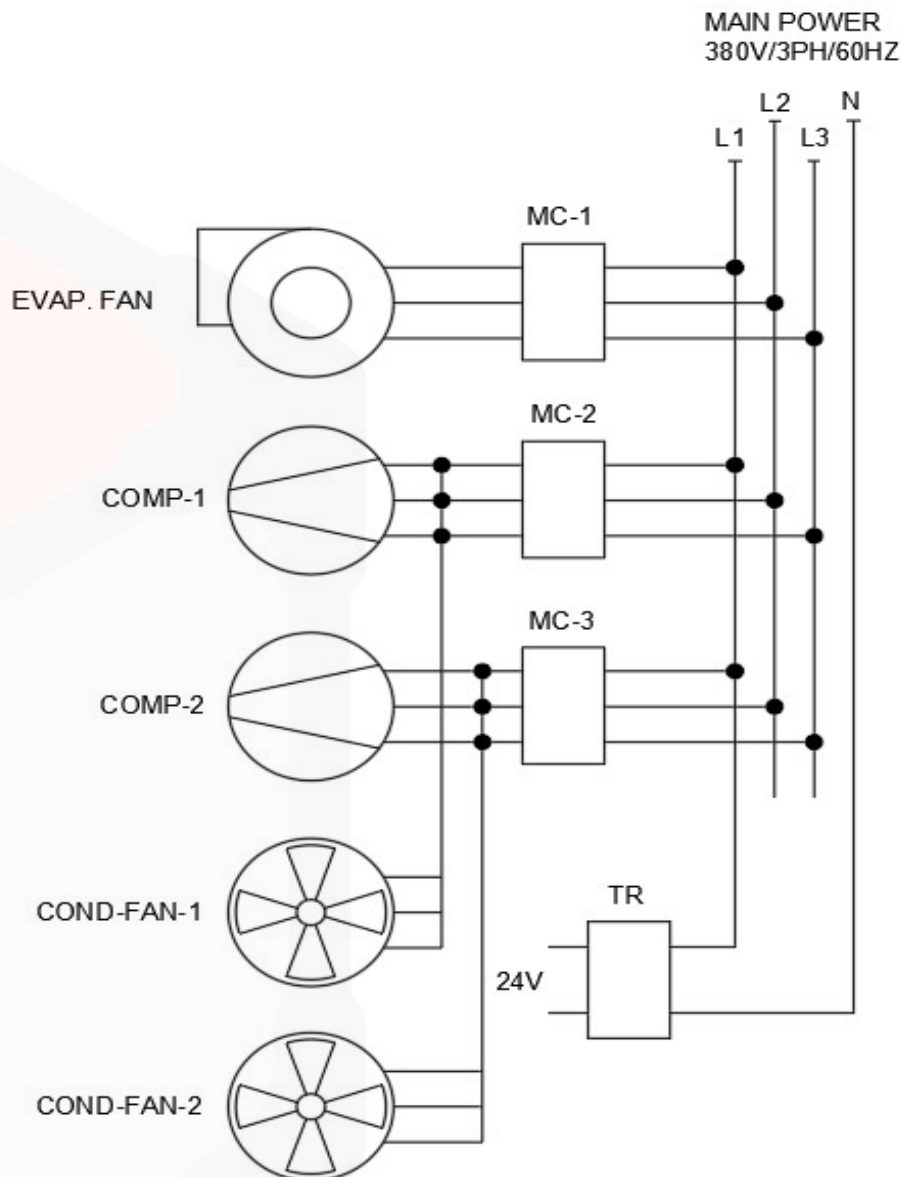
Physical diminsions

L (Length)	3100 mm
W (Width)	2000 mm
H-1 (Hieght-1)	1010 mm
H-2 (Hieght-2)	1320 mm

Model No. : WM-CP-S-300-2-R1



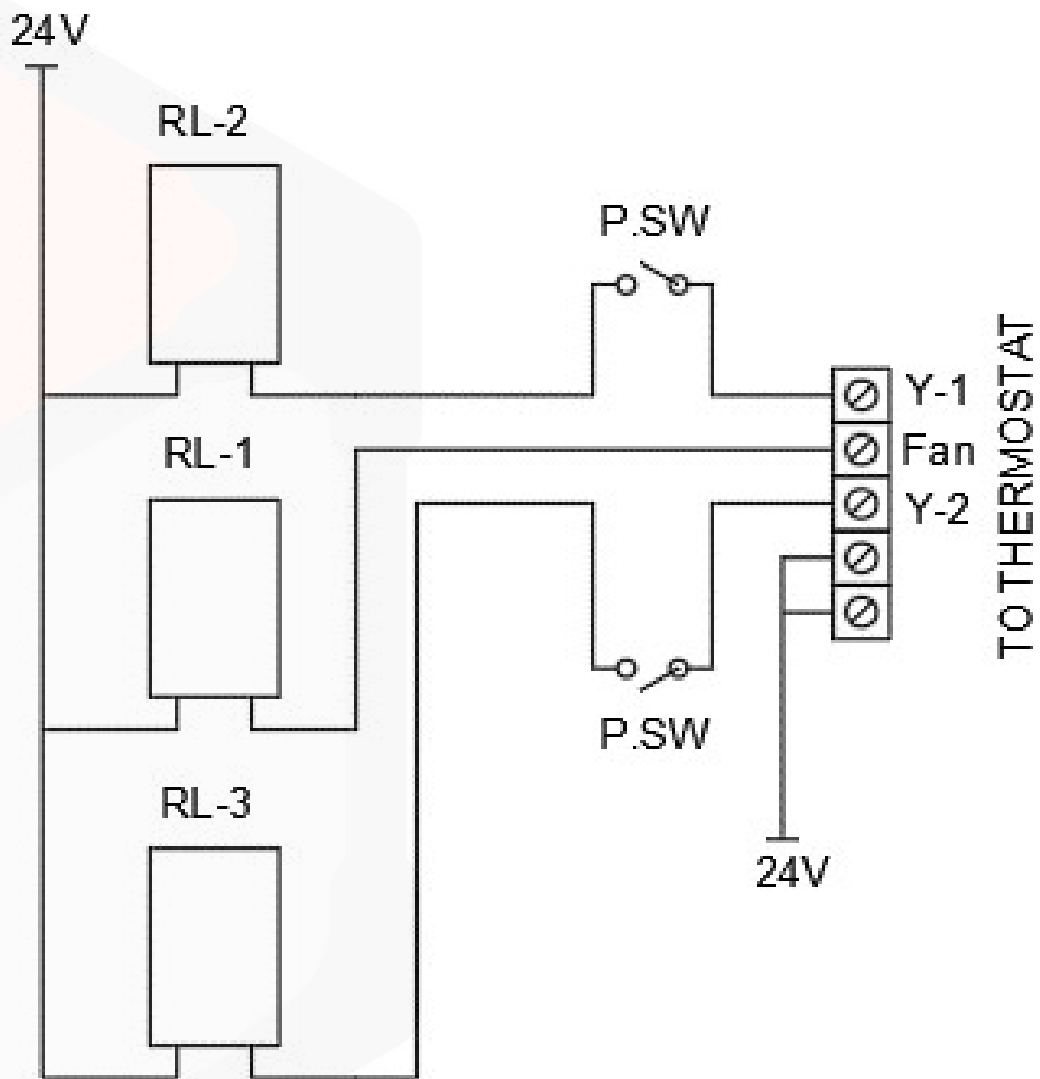
Model No. : WM-CP-S-300-2-R1



MC-1 : Magnetic Contactor No. 1
 COMP-1 : Compressor circuit No.1
 EVAP. : Evaporator
 COND : Condenser
 TR : Transformer

Model No. : WM-CP-S-300-2-R1

2-Stage thermostat



RL-1 : Relay No.1
P.S.W : Pressure switch

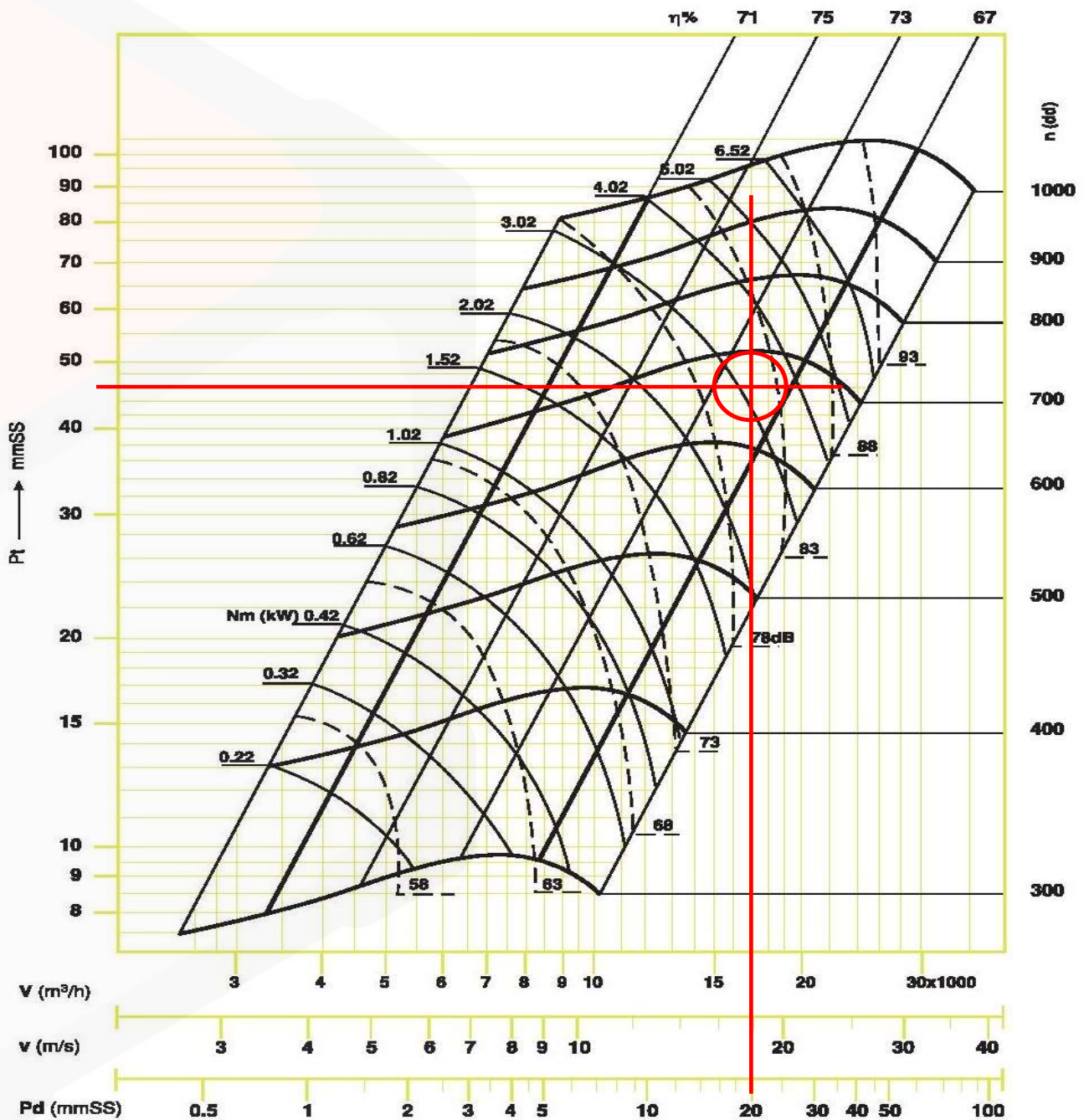
Evaporator Fan Performance

DX Package Air Conditioner Units

Blower size :	18"x18"
Design air flow	10000 CFM / 16990 m ³ /h
Total static pressure	50 mm (2" - 500 pas.)
External static pressure	40 mm (1.6" - 400 pas.)

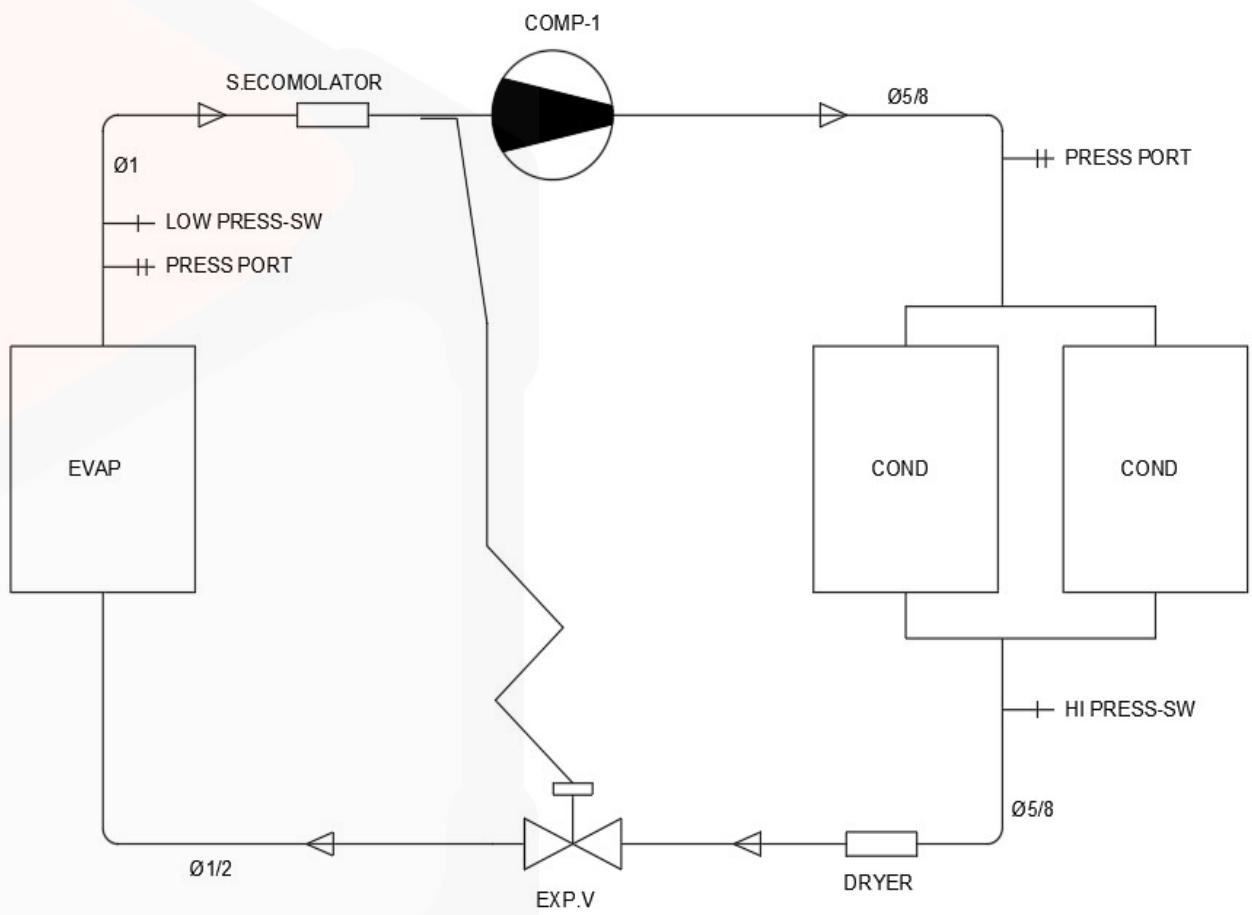
Fan speed	680 RPM
Fan efficiency	70%
Power input	5.0 Kw
Drive type	Belt drive

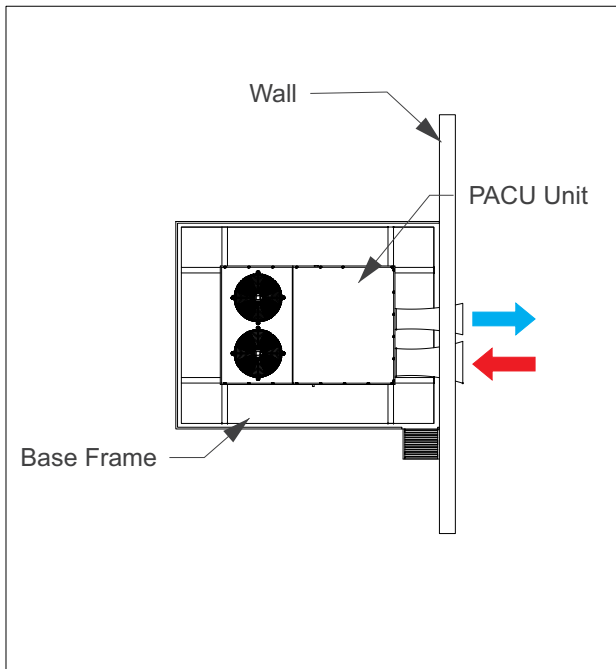
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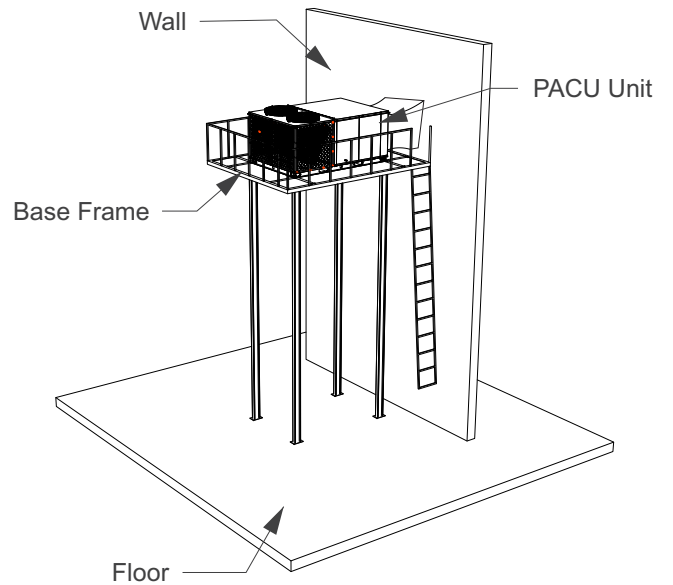
Refrigerant circuit

Model No. : WM-CP-S-300-2-R1



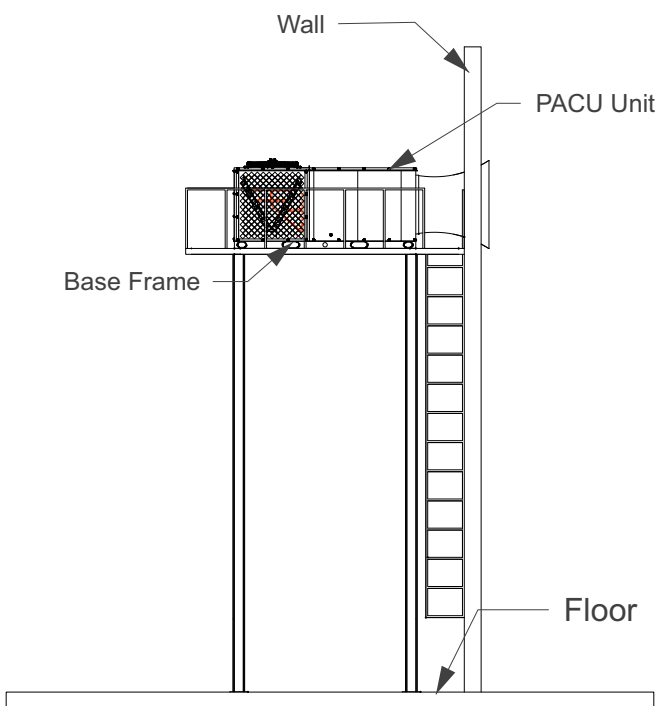


Top View

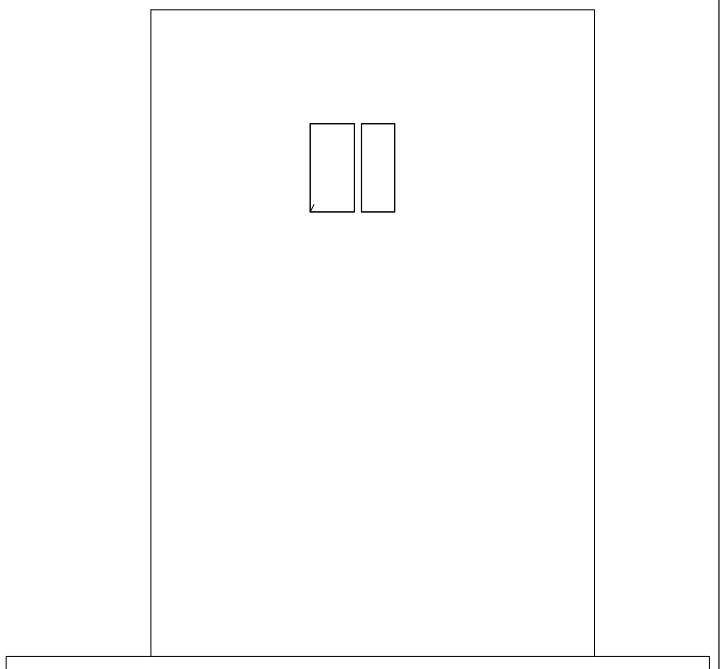


Perspective View

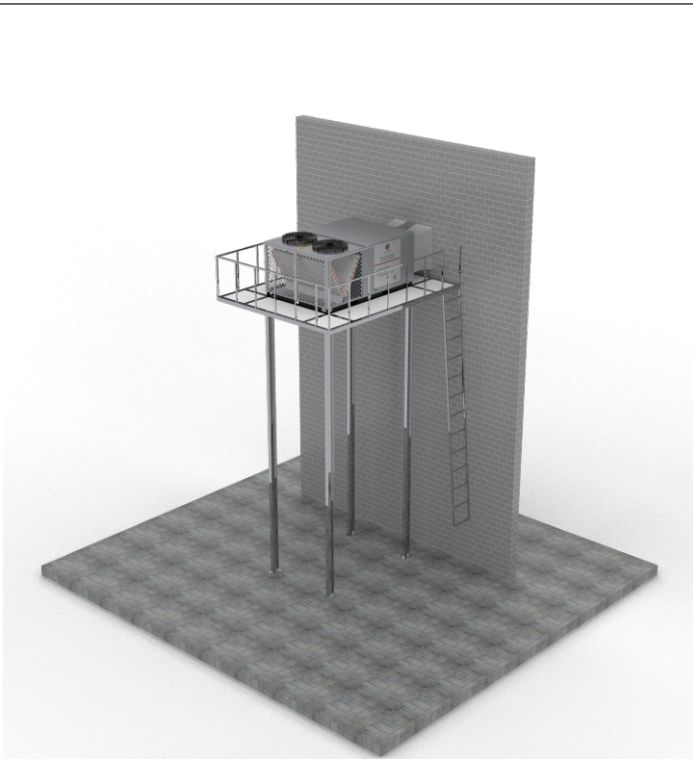
Base Frame Installation



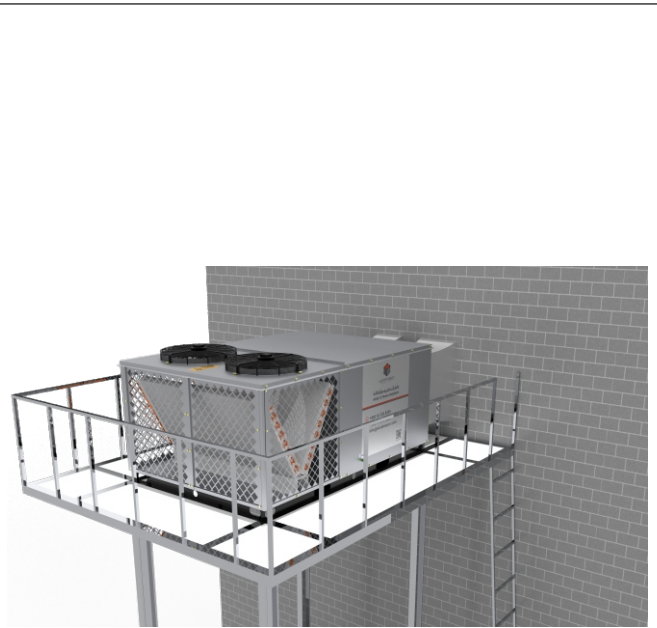
Side View



Front View



3D View 01

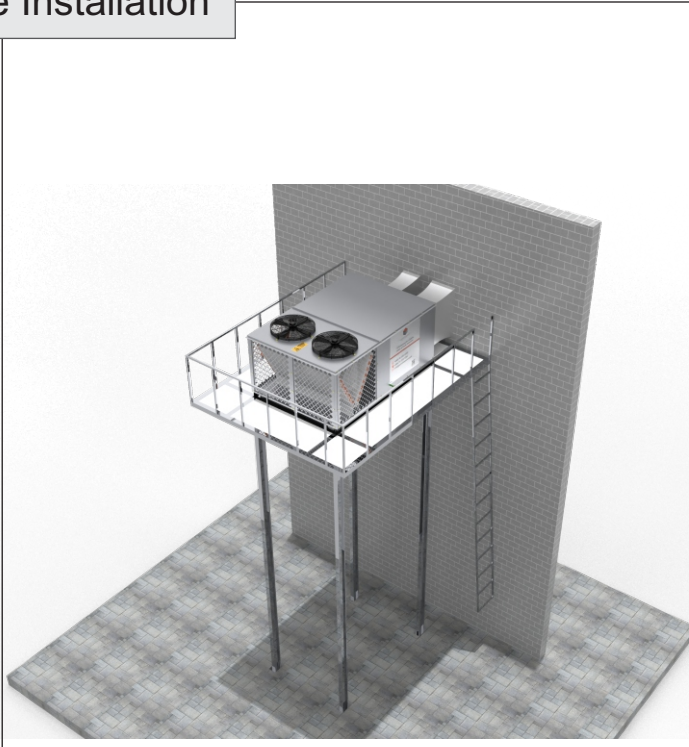


3D View 02

Base Frame Installation



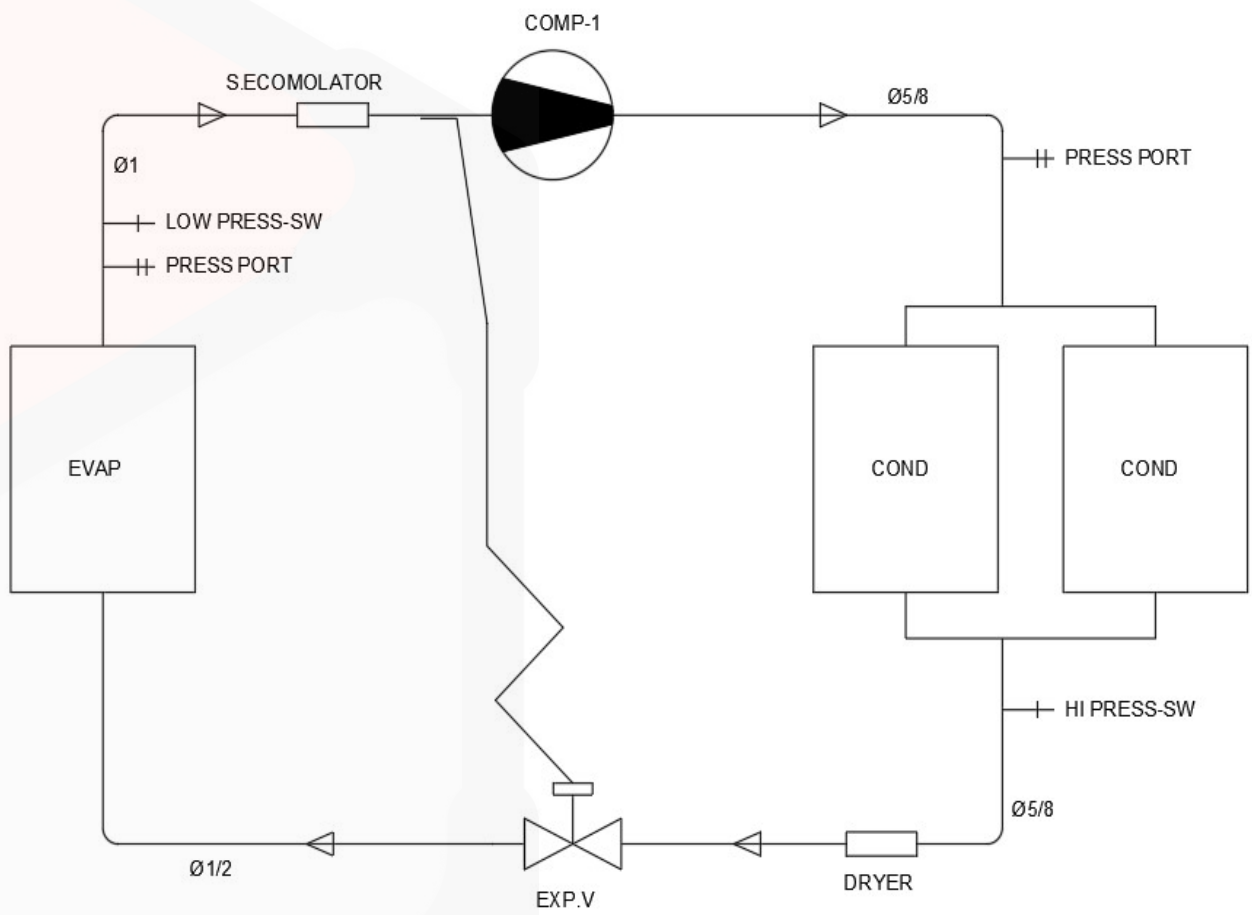
3D View 03



3D View 04

Refrigerant circuit

Model No. : WM-CP-S-300-2-R1



Technical Data

DX Package Air Conditioner Units

Type of the Air Conditioning Unit		Air cooled, Direct expansion refrigeration circuit, Package type air conditioning unit
Nominal Cooling capacity	TR	25.0
Model No.		WM-CP-S-300-2-R1
Refrigerant		R410A - R134A - Windmason option
Electrical Data		
Power supply		380v/3ph/60hz
Max. Circuit Current	Amps	60
Max. Power input	kW	32
COP	btu/h/w	10.77
Sound rating	db	75
Evaporator		
Type		Alu fins, Cu tubes
Air flow	CFM	10000
Fan type		Centrifugal Forward curve blower
Motor capacity	HP	7.5
Condenser		
Type		Air cooled, Alu fins, Cu tubes
Air flow	CFM	16000 / 8000
Fan type		Axial Fan - 2 or 4 nos.
Motor capacity	hp	1 x 2
Compressor		
Type		Scroll type / Copland
Capacity	HP	12.5 - 15
Quantity		2
Dimensions		
Outdoor	mm	3100 x 2000 x 1320 - approx.
Weight		
Net	kg	915
Operation	kg	1006

Weather Conditions - Ambient - 45 C / 20 C, Indoor set point Temp. 26 C



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