

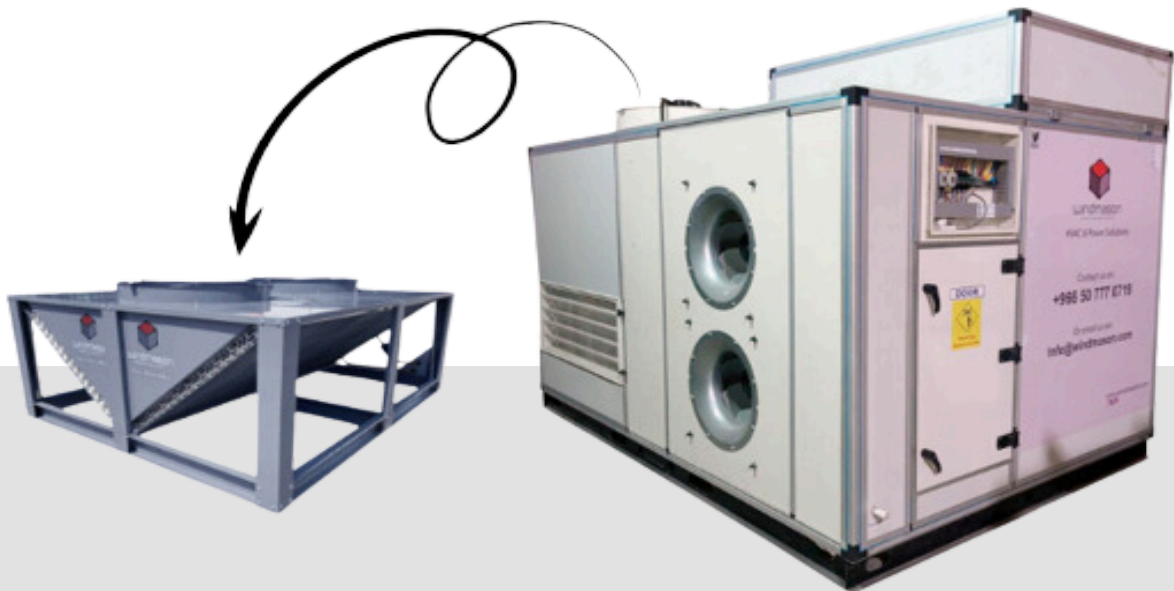


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GREEN AIR CONDITIONING

REVOLUTIONARY COOLING, HEATING, HUMIDIFICATION & REFRIGERATION
SOLUTION FOR HEALTHY FUTURE

3-STAGE HYBRID EVAPORATIVE AIR COOLER



2024
www.windmason.com

OTHER KEY FEATURES:

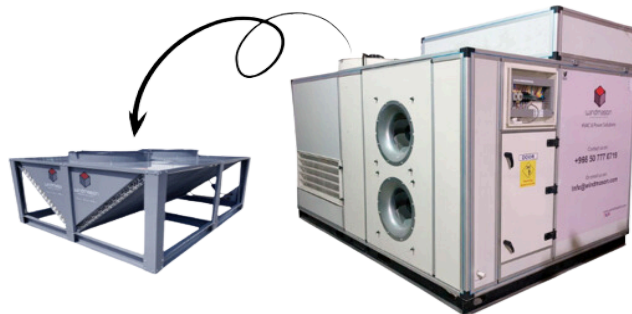
Comfortable maintenance of temperatures below 24 °C in dry weather conditions.

Touch screen smart thermostat, auto water drain, cleaning system, and water softener enhance overall performance and ensure additional cost-savings.

Supercool provides natural 100% fresh air.

Dry running protection: In case of no water, the unit will stop working.

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BASE FRAME

The unit's base frame is made of galvanized steel with a powder-coated finish.



CASING

The body structure is built using aluminium profiles with a 30mm double-skin sandwich panel metal profile.

MAJOR COMPONENTS

SENSIBLE COOLING, HEAT EXCHANGER COIL:

The coil heat exchanger is a tube and fins type air-to-water heat exchanger. The tubes are made of heavy-gauge copper with thick walls. The fins are heavy aluminum, with 13 fins per inch density. The frame is galvanized steel, reinforced with bends. It has heavy-gauge oversized headers with threaded connections to PVC water circulation pipes. The copper tubes are mechanically bonded to aluminum fins, and the coils have been tested for leakages under high-pressure air.



SECONDARY AIR FAN

The fans are axial type top discharge, protected by a metal mesh fan guard. The blades are coated to prevent corrosion, designed with the best air foiling for high performance and low noise. The water-sealed electric motor is directly coupled with the fan, and sturdy round brackets support.



PRIMARY AIR FAN

A direct drive external rotor plug fan with a variable speed inverter. It features an aluminum heavy-gauge impeller, round heavy-gauge brackets, a smooth air inlet cone, and the inverter (VFD) provides electrical protection to the motor.



PRIMARY WATER PUMP

A direct drive external rotor plug fan with a variable speed inverter. It features an aluminum heavy-gauge impeller, round heavy-gauge brackets, a smooth air inlet cone, and the inverter (VFD) provides electrical protection to the motor.



SECONDARY WATER PUMP

A direct drive external rotor plug fan with a variable speed inverter. It features an aluminum heavy-gauge impeller, round heavy-gauge brackets, a smooth air inlet cone, and the inverter (VFD) provides electrical protection to the motor.



AIR FILTERS

Equipped with G4 Aluminum air filters that are washable, easily accessible, removable, and have a 20mm thick filter media.



VARIABLE SPEED DC INVERTERS

The DC inverter receives feedback from the room temperature controller and provides PID functionality to control the room temperature by adjusting the speed of fans. This function not only saves water and power but also ensures smooth indoor comfort.



3 Stage Hybrid Evaporative Air Cooler

Technical Data:

FEATURES	IDEC MODEL				
	IDEC-2.4KCD	IDEC-3.6KCD	IDEC-4.8KCD	IDEC-7KCD	IDEC-10KCD
Supply Air CFM -Rated	2400	3600	4800	7000	10000
Ext. Static Press Pascal	100	150	175	220	250
Cooling Capacity -Nom. TR	5	7.5	10	15	25
Cooling Area -Approx. m2	68	103	140	250	450
Performance- EER(Btu/h/w)	24	28	26	28	27
Achievement of wet bulb	120%				
Electrical Power	380v /3ph				

Important Notes:

Water usage is calculated based on 15 hours of daily operation.

Design weather conditions include a Dry Bulb Temperature (DBT) and a Wet Bulb Temperature (WBT) of 45°C and 20°C, respectively



3 Stage Hybrid Evaporative Air Cooler

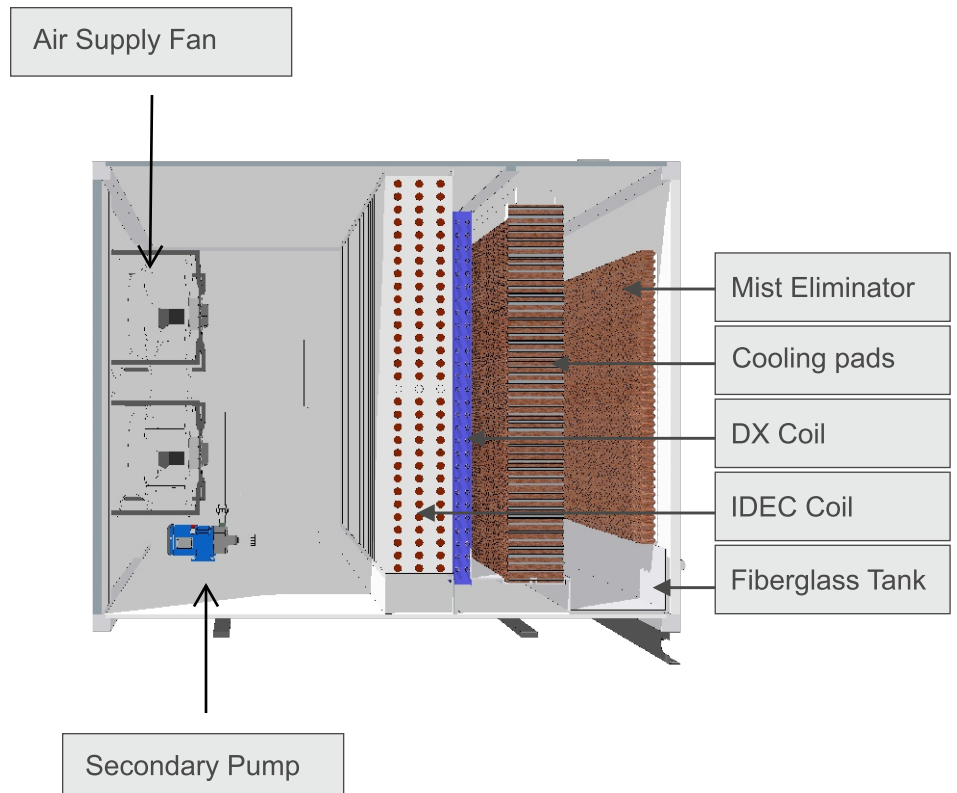
Technical Data:

FEATURES	IDEC MODEL		
	IDEC-4.8KCD	IDEC-7KCD	IDEC-10KCD
Supply Air CFM -Rated	4800	7000	10000
Ext. Static Press Pascal	175	220	250
Cooling Capacity -Nom. TR	10	15	25
Cooling Area -Approx. m2	140	250	450
DX Stage capacity TR	3.0	7.5	10.0
Performance-EER(Btu/h/w)	26	28	27
Achievement of wet bulb	130%		
Electrical Power	380v /3ph		
Input Power-kW Cooling Only	8.74	14.95	18.50
Current Amp cooling only	14.85	25.42	31.45
Water Cons. Max. M3/24 hrs (Peak temp)	1.60	2.40	3.50
Weight - Operating kg	1350	2070	2430

Important Notes:

Water consumption for 15hours per day operation.

Design weather conditions DBT, WBT 45 °C / 20 °C



3 Stage Hybrid Evaporative Air Cooler

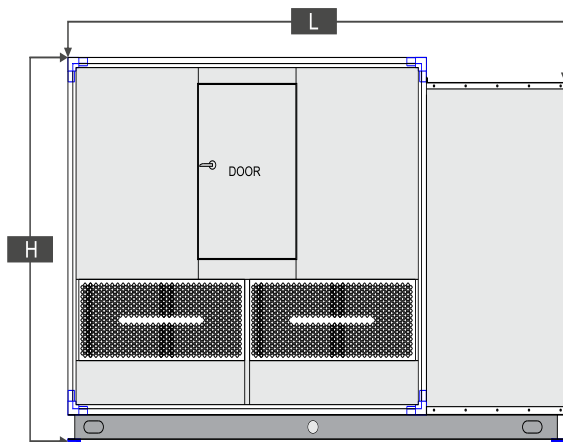
PHYSICAL DIMENSIONS

MODLE No.	CAPACITY	L (mm)	W (mm)	H (mm)	A1 (mm)	A2 (mm)	E (mm)	B (mm)
IDEC-4.8KCD	10 TR	2300	2500	1390	900	900	200	350
IDEC-7KCD	15 TR	2480	2700	1580	1000	1000	230	380
IDEC-10KCD	25 TR	3240	3050	1880	1200	1200	275	380

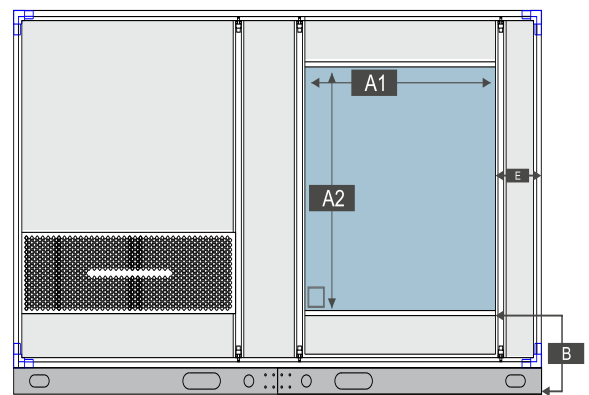
Note:

Due to the continuous development the dimension of the unit may change, please contact [windmason](http://www.windmason.com) for updates before considering the physical dimensions in your project design.

OUTDOOR UNIT

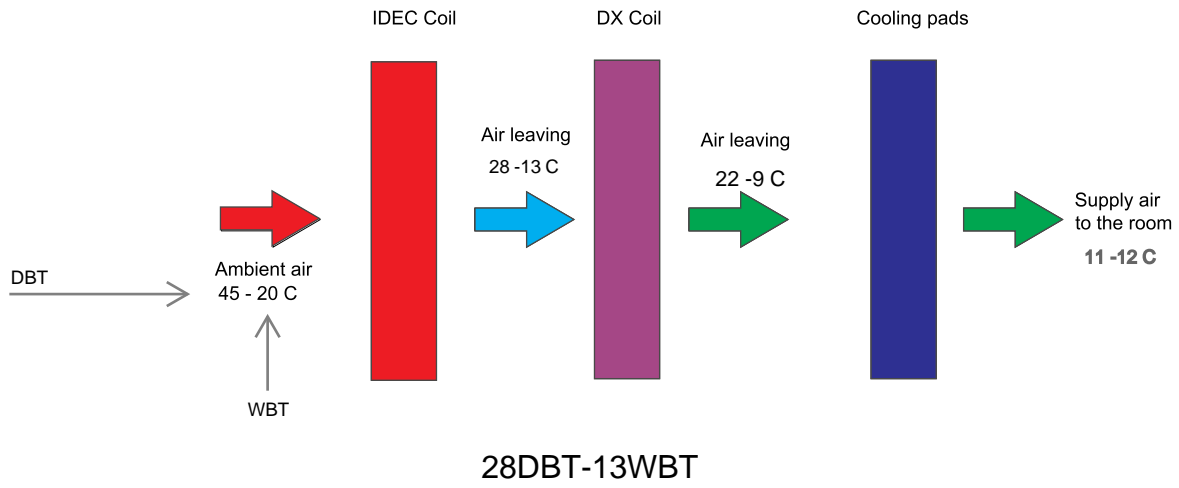


SIDE VIEW



FRONT VIEW

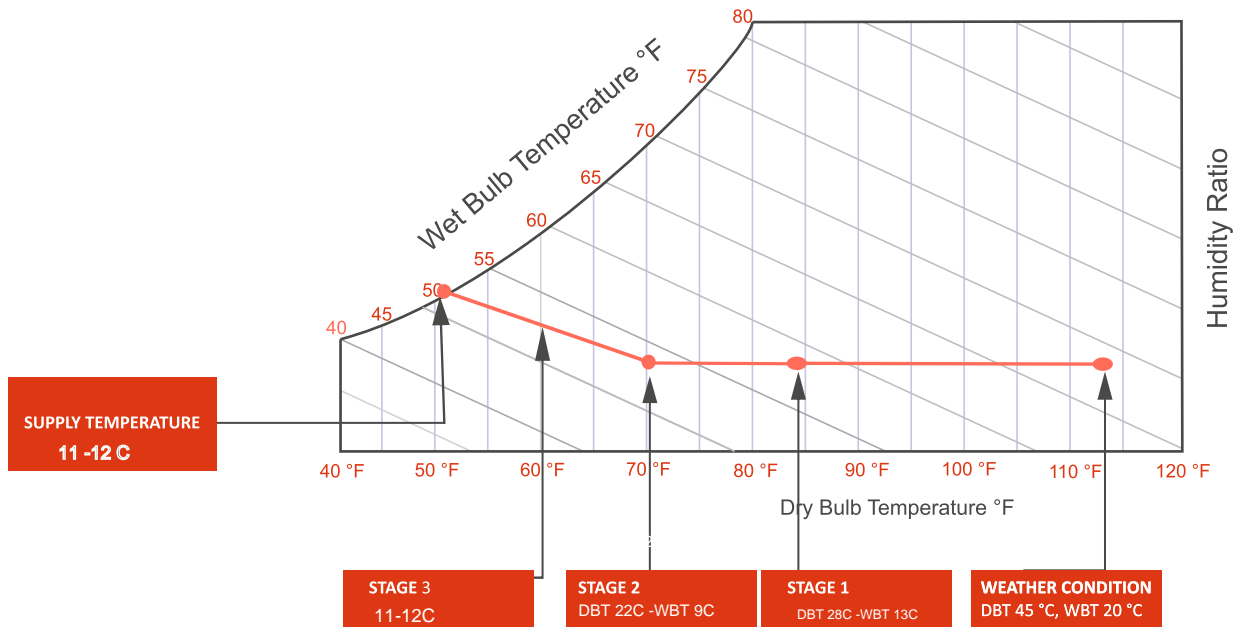
3-STAGE UNIT



3-Stage Hybrid IDEC Cooling at Psychrometric Chart

TEMPERATURE DATA	
Dry Bulb Temperature Ambient	45 C
Wet Bulb Temperature Ambient	21 C
Supply air Temperature	11 C

3-Stage Hybrid IDEC Cooling at Psychrometric Chart



Installation of IDEC Units



Our Key Clients

			
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Gulf Catering Co	Al Romansiah	Imile Logistic	Multi Brands Trading
			
RAQAM Company	ADEX Company	IHCC	Al-Watania Plastic
			
Al-Babain Food	Sahara Mall	Al Jabar Laundry	Al Yasra Fashion
			
Al rashed Food Group	Dar Al Uloom University	White Crystal For Filling	Packing Product Co.
			
Awarid Cosmetics Co.	National Water Company	First Class Aviation	Saudi Eraad Defense
			
Jarir Book Store	Al Karama Food Co	Creation Source Trading	Continental Hotel Riyadh

Our Key Clients

 مستشفى الرياض riyadh hospital	 برودان Brodan	 Medical Elements العناصر الطبية	 التقدّم الطبي Advance Medical
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PANDA Hyper Market	NESTO Hyper Market	OTHAIM Hyper Market	Al Adil Est. Market.
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Arak Plastic Co.	Al Sharq Plastic Co.	Delta Plastic Co.	Fitnessen Time Pro.
 PAKISTAN INTERNATIONAL SCHOOL RIYADH بهرت عليا 1968 DUTY DEVOTION DISCIPLINE	 مدارس رياض نجد Riyadh Najed Schools علم لتكون	 كيان الفنية Kayan Technical	 ADEA MAS-ADEA ARABIA CO. شركة ماس أديا العربية.
Pakistan Inter. School.	Riyadh Najed School	KAYAN Tec. Contr. Co.	Mas Adea Co.
 AL HADAF Al Hadaf Al Dooqun Contracting & General Maintenance L.L.C الهدف الحقيقي للمقاولات والخدمات العامة لدم	 DA DECO ART شركة ديكو آرت للتجارة والاستثمار For Trading & Investment Co.	 خطوة جمل CAMEL STEP	 Restaurant النار Nar Al -Shawaya Rest.
Al Hadaf Serv. Co LTD.	Art Decor Co	Camel Step Company	Nar Al -Shawaya Rest.
 Methaq Contracting Co.	 PREMIER CONSTRUCTION COMPANY	 Deemah	 السعيد ALSAEED مجموعة محمد السعيد للتجارة والصناعة M. ALSAEED GROUP TRD. INDUST.
Methaq contracting Co.	Le Premier Architects	Deemah Food Co.	Al Saeed Indu. Group



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