

# **CHILLED WATER LOW PROFILE AIR HANDLING UNITS AC Fan Series**

# Chilled Water Low Profile Air Handling Units

## 2/4 Pipe 4 & 6 Row

### UNIT FEATURES

#### 1. Casing, Frame & Coil

The Low Profile AHU unit's casing and frame is fabricated from a tough, heavy gage galvanized steel and contains a standard corrosion resistant coated 4-row coil (with the option of a 6-row coil). The water coil has a large heat transfer surface utilizing the latest technology in fin profile. This is combined with security in tube thickness of traditional design.

Additionally the unit also comes equipped with a Air Vent Valve, Water Purge Screw, return air plenum and a extended, positive slope stainless steel drain pan for easy cleaning to help prevent microbial growth and to fight corrosion. The drain pan is insulated with a form fitted closed cell insulation to prevent condensation build up on the outside of the drain pan.

Units can be ordered with left hand or right hand piping connections (left or right hand is determined by facing the air stream).

#### 2. Fan & Motor

Incorporating only specially designed and tested high power-factor permanent split capacitor type direct drive blower motors, the enlarged forward curved centrifugal fan provides the optimum in lower rpm air-flow-efficiency that deliver low noise, high air speed and smooth operation for quiet, comfortable cooling in any environment

#### 3. Unit Application Scope

It is important to know that in cooling, the water inlet temperature should not be less than 5°C to prevent condensate to accumulate on the coil and in heating, the hot water inlet temperature should not be higher than 80°C to prevent corrosion in the copper pipes of the coil.

Recommended ambient temperatures are as follows:

Cooling : 16°C to 36°C

Heating : 10°C to 30°C

Humidity : ≤ 85%

The unit can only be used for common air conditioning purposes and not in special scenarios and make sure that the unit does not get installed in a damp, corrosive, explosive area or outside.

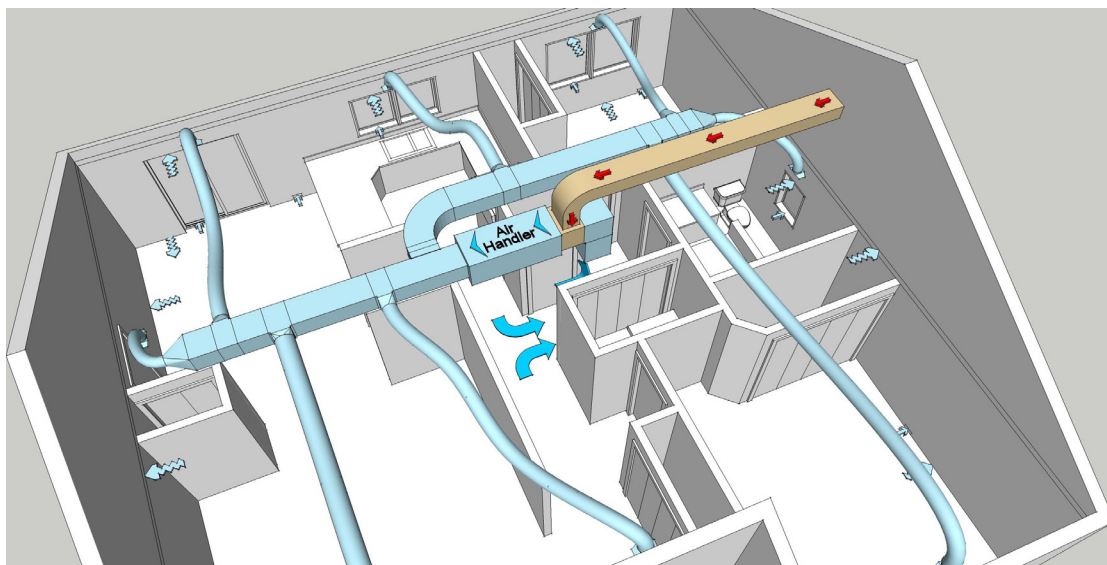
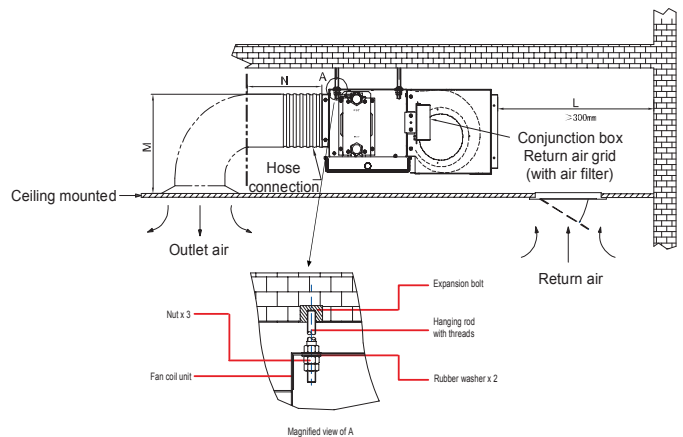
#### 4. Optional Extras

Electric Heating

Electric Controllers

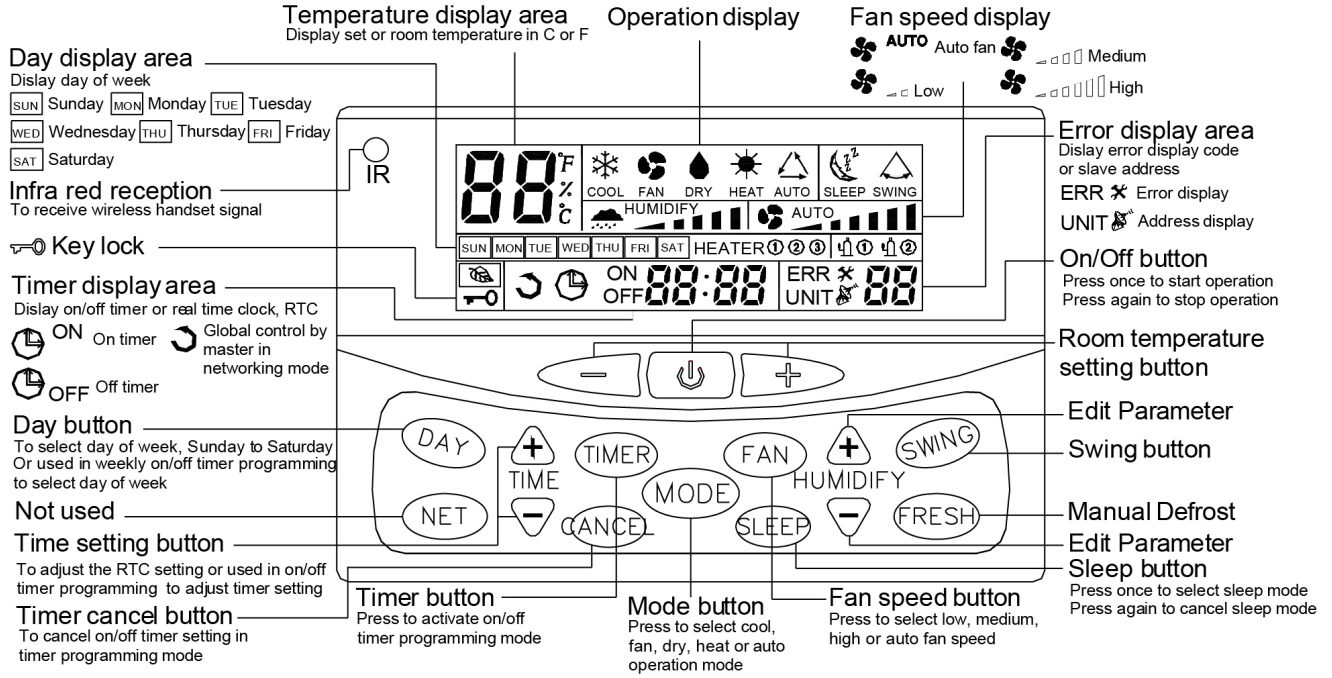
BMS (ModBus)

Unit Selection Software

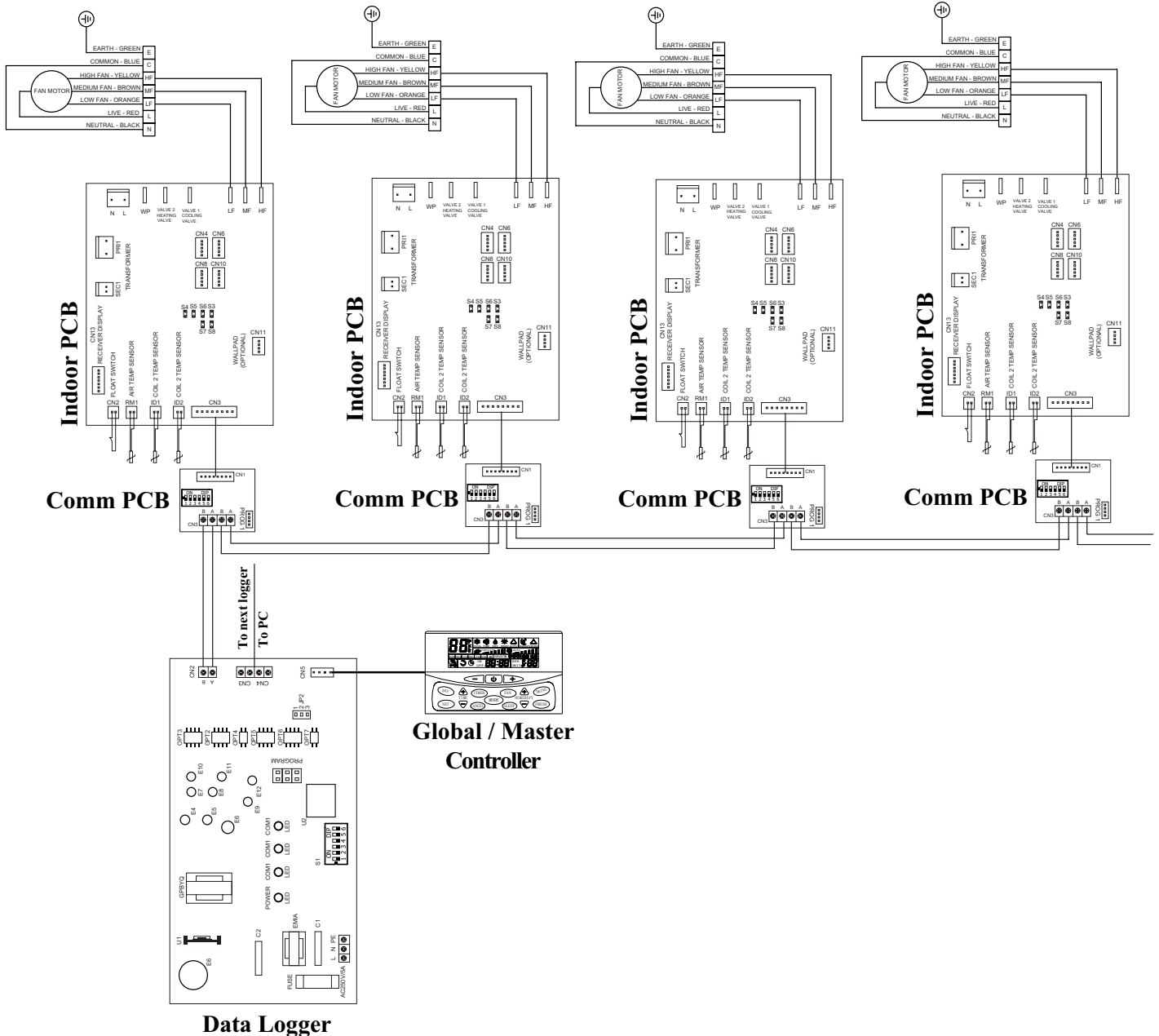


# FOR ALL YOUR COMMERCIAL APPLICATIONS:

> Shopping Centers > Restaurants > Warehouses



## Master / Slave Connection for Multiple Indoor Units (Optional)





# SPECIFICATIONS

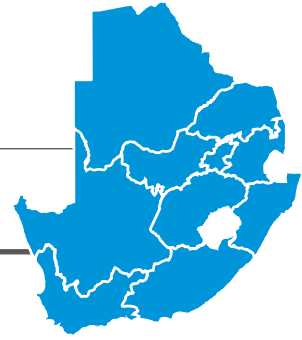


## CHILLED WATER LOW PROFILE AIR HANDLING UNITS FWU- 4 PIPE - 4 & 6 ROW

Model No. / Indoor	FWU 15 A	FWU 20 A	FWU 25 A	FWU 30 A	FWU 40 A	FWU 50 A 380V / 3PH / 50Hz	FWU 60 A	FWU 80 A	FWU 100 A	FWU 120 A	FWU 150 A	4 ROW	
												Capacity	Water Pressure Drop
Power supply	8820	12500	16400	19100	24700	32600	38300	52300	73100	86900	112000		
Capacity	2090	3210	4420	5600	7850	10500	13000	16600	23100	27600	35500		
Noise Level	58	59	61	62	61	61	62	63	63	67	68		
External Static Pressure	300	300	300	300	300	300	300	400	400	400	400		
Air Flow	375	511	658	794	1022	1316	1588	2104	2978	3522	4567		
Water Flow	0.42	0.60	0.78	0.91	1.18	1.56	1.83	2.49	3.49	4.15	5.36		
Rate	0.05	0.08	0.11	0.13	0.19	0.25	0.31	0.40	0.55	0.66	0.85		
Water Pressure	10.10	21.80	40.30	19.60	17.30	33.30	18.90	51.90	79.70	84.30	96.40		
Drop	0.05	0.08	0.26	0.45	0.99	1.93	3.27	2.61	4.51	4.80	5.45		
Capacity	9580	13300	17600	21700	26700	35300	43400	55000	78000	94300	116000		
Noise Level	1900	2900	4140	5280	7110	9820	12200	14200	19700	23900	29800		
External Static Pressure	58	59	61	62	61	61	62	63	65	67	68		
Air Flow	300	300	300	300	300	300	300	400	400	400	400		
Water Flow	322	439	599	727	887	1200	1453	1857	2658	3209	3939		
Rate	0.46	0.64	0.84	1.04	1.27	1.69	2.07	2.62	3.72	4.50	5.54		
Water Pressure	0.05	0.07	0.10	0.13	0.17	0.24	0.29	0.34	0.47	0.57	0.71		
Drop	17.40	36.50	22.60	36.70	29.70	21.20	35.20	32.10	47.40	51.10	53.10		
Fan Type	0.04	0.08	0.24	0.40	0.83	1.73	2.93	0.86	1.13	1.23	1.40		
Scroll	1	1	1	1	2	2	2	2	2	2	2		
Power	0.45	0.55	0.55	0.55	0.55 x 2 (1.1)	0.55 x 2 (1.1)	0.55 x 2 (1.1)	1.0 x 2 (2)	1.8 x 2 (3.6)	1.8 x 2 (3.6)	3 x 2 (6)		
Running Current	1.35	1.6	1.6	1.6	1.6 x 2 (3.2)	1.6 x 2 (3.2)	1.6 x 2 (3.2)	3 x 2 (6)	4.99 x 2 (9.98)	4.99 x 2 (9.98)	7.9 x 2 (15.8)		
Motor	1	1	1	1	2	2	2	2	2	2	2		
Drive Type	Direct Drive Type												
Test Pressure	1.57												
Water Coil Type	127												
Rows	4												
Internal Volume	3.2	4.1	5.1	6	7.9	6.6	7.8	9.7	12.1	14.5	18		
Water In	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	2"	2"	2"	2 1/2"		
Water Out	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	2"	2"	2"	2 1/2"		
Drain	1	1	1	1	1	1	1	1 1/4"	1 1/4"	1 1/4"	1 1/4"		
W x H x D	760 x 495 x 1120	910 x 495 x 1120	1055 x 495 x 1120	1200 x 495 x 1120	1500 x 495 x 1120	1795 x 495 x 1120	2090 x 495 x 1120	1965 x 667 x 1360	2115 x 743 x 1410	2165 x 845 x 1530	2240 x 997 x 1600		
Weight	98	112	125	137	185	208	231	312	363	421	466		

Unit Selection Software Available - Contact ECO AIRE for more information

# ECOAIRE REFERENCES



## SHOPPING MALLS



V & A Marina Waterfront  
Mall of the North  
Soshanguve Crossing  
The Grove  
Mall @ Middelburg  
Northgate Mall  
Cradlestone  
Mall of the South  
Watercrest Mall  
Thaba Mall  
Canary Walk – Nelspruit  
Waterstone – Cape Town  
Zevenwacht Mall

## HOTELS & ENTERTAINMENT



Westcliff  
– Johannesburg  
Gold Reef City Casino  
– Johannesburg  
Grand West Casino  
– Cape Town  
Emperor's Palace  
One & Only  
– Cape Town  
Tusk Casino  
– Empangeni  
Radisson Hotel  
– Port Elizabeth

## EDUCATIONAL



Westville University  
UNISA Florida  
University of Pretoria  
Engineering Department -  
Thuto Building -  
Mangosuthu Technikon  
University of Johannesburg:  
Bunting Road

## HOSPITALS



3 Military Hospital  
Panorama Mediclinic  
Civitas Pretoria  
Natalspuit Hospital  
Netcare Pinehaven  
Highveld Eye Hospital  
Military Health Base  
Mokopane Hopital  
Albert Luthuli Academic  
Hospital  
Addington Hospital  
Vryburg Hospital  
N1 City Hospital

## PUBLIC BUILDINGS



Alice Lane Offices  
Choose Life Church  
FNB van der Bijl Park  
Toyota Midrand  
CTM & Italtile  
Porche Head Office  
– Pretoria  
CSIR  
BMW  
Anglo American

## SPECIAL PHARMACEUTICAL SITES



Middelburg Pharmacy  
Plascon Test Laboratory  
Lea Glen Pharmacy  
Phokeng Pathology  
Covidien Pharmaceuticals



Eco Aire (Pty) Ltd.

[www.ecoaire.com](http://www.ecoaire.com)

JHB

**t:** 011 397 2162 / **e:** [sales@ecoaire.com](mailto:sales@ecoaire.com)

CAPE TOWN

**t:** 079 522 0724 / **e:** [bradley@ecoaire.com](mailto:bradley@ecoaire.com)

GARDEN ROUTE

**t:** 072 533 6747 / **e:** [heine@ecoaire.com](mailto:heine@ecoaire.com)

KZN

**t:** 031 701 6114 / **e:** [rowland@ecoairekzn.co.za](mailto:rowland@ecoairekzn.co.za)

PORT ELIZABETH

**t:** 083 625 0462 / **e:** [simon@solencosa.co.za](mailto:simon@solencosa.co.za)