

REF-UNICORPS/CHILLIS/2022-23/NP/S-0159-A1
06/07/2022

BEST DISCOUNTED OFFER

M/S UNICORP ENGINEERING PVT LTD

KIND ATTN: - MR. VAIBHAV/MR.TANVEER

SUB: OFFER FOR DOUBLE SKIN FLOOR MOUNTED AIR HANDLING UNIT/ FLOOR MOUNTED AIR WASHER UNIT / AIR SCRUBBER UNIT / EXHAUST AIR UNIT / CEILING SUSPENDED FRESH AIR UNIT FOR YOUR CHILL'S PROJECT AT CHANDIGARH.

Dear Sir,

With reference to your valued enquiry, we are hereby submitting our offer for supply of **ZECO make** units having following constructional features: -

DOUBLE SKIN CASING:

Outer Skin	0.6/0.8 mm Pre- Coated GI
Inner Skin	0.6/0.8 mm Plain GI /(0.6mm AL-FMU AHU ONLY)
Frame Work	Hollow Extruded AL Profile
Thickness of Insulated Panels	25mm / 45 mm / 50mm thick, CFC Free PUF injected (Density: 40 kg / Cu. m.)
Material of Drain Pan	20 G SS-304 Tray duly insulated with 13 mm closed cell Nitrile insulation.
Material of Sump	18 G SS-304
WET SECTION	18 G SS-304 (FOR AIR WASHER & AIR SCRUBBER UNIT)
Unit Base	G.S.S Base Channel (Applicable for floor mounted units only)

DX COIL: (IGT)

Make Of Coil	ZECO
Coil Casing / Blank offs	GI
Material Of Tube	Copper
Tube Dia (mm / inch)	9.52 mm / 3/8" O.D.
Thickness of tube (SWG / mm)	25 SWG / 0.5 mm
Header Material	Copper
Thickness & Material of fins	0.15 mm Plain Aluminum
No. of Fins per inch (FPI)	11 / 12

FILTERS:

Make Of Filters	Thermadyne/spectrum/ZECO
Media of Filters	Synthetic (non-woven type)
Efficiency of Pre-filters (EU-4)	90 % down to 10 micron.

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FAN & MOTOR:

Fan make	Kruger
Motor make	ABB / BHARAT BIJLEE / CROMPTON

CELLULOSE PAD & ELIMINATOR:

Cellulose pad make	Munter / E-flow / Eq.
Eliminator material	PVC
Pump	Crompton Greaves

1] DOUBLE SKIN FLOOR MOUNTED HORIZONTAL AIR HANDLING UNIT SHALL HAVE: (0.6/0.6 mm Inner & outer skin with 45 mm thick hollow extruded Al profile) with weather proof canopy.

- 50 mm thick (EU-4) **box type pre filter, mounted on AL filter frame.**
- Coil section with **6 row deep DX coil with single distributor.**
- Fan section with **SISW Backward curved plug fan & Motor (IE-2).**
- Manually operated **Supply Air Damper** in **Al** constructions.

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OPERATING PARAMETERS:

TAG NO	1	2
Air Qty (CFM)	1500	8000
TSP (mmwg)	50	65
Unit Model	ZDS-16	ZDS-80
Fan Type	PLUG FAN-450	PLUG FAN-630
FAN MODEL	BNC -P 450	BNC -P 630
Fan Qty	1	1
Fan Dia	450	630
Fan RPM	1358	1339
Motor RPM	1440	1440
FREQUENCY	47	46
Shaft Absorbing Power	0.627	3.55
Motor Rating (kw)	0.75	5.5
Motor Qty	1	1
Motor pole	4	4
Coil area (Sq.Ft.) @ 420FPM	3.6	19.0
DX Coil RD	6	6
Filter area (Sq.Ft.)	4.0	20.0
Total Length (mm)	1310	1970
Width (mm)	1106	1546
Height (mm)	1065	1400
Price Rs.(each)	196000	360000
Qty. (Nos)	1	2
Amount(Rs.)	196000	720000

2] DOUBLE SKIN FLOOR MOUNTED AIR WASHER UNIT SHALL HAVE: (0.8/0.8 mm Inner & outer skin with 50 mm thick hollow extruded Al profile) with weather proof canopy.

- 50 mm thick (EU-4) **box type pre filter.**
- Humidification section with 200 mm deep cellulose pad, stainless steel sump, and single phase pump (**2 No.**) & PVC internal piping.
- Eliminator section with **2 bends** PVC eliminator.
- Fan section with DIDW **backward curved** centrifugal fan, **with spring isolator**, Drive set with V belt & **Motor (IE-3).**

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- Manually operated **Supply Air Damper** in **AI** constructions.

OPERATING PARAMETERS:

Air Qty (CFM)	7500
TSP (mm wg)	50
Unit Model	ZDSAW-75
Fan Type	BC-500
Fan Qty	1
Fan Type	500
Outlet Vel (M/s)	8.7
Fan RPM	1259
Shaft Absorbing Power	2.53
Motor Rating (kw)	3.7
Motor Qty	1
Motor pole	4
Pad area (Sq.Ft.) @500fpm	15.0
Filter area (Sq.Ft.) @500 fpm	15.0
Total Length (mm)	2060
Width (mm)	1500
Height (mm)	1400
Price Rs.(each)	345000
Qty. (Nos)	1
Amount(Rs.)	345000

3] DOUBLE SKIN FLOOR MOUNTED AIR SCRUBBER UNIT SHALL HAVE: *(0.8/0.8 mm Inner & outer skin with 25 mm thick hollow extruded Al profile) with weather proof canopy.*

- Return air intake section with flange opening for return air duct.
- Filter section with 50 mm thick **metallic** Pre Filter.
- Double bank spray-nozzles arrangement with Stainless steel sump, three phase **pumps (2 No.)** & GI internal piping.
- Eliminator section with **4 bends PVC** eliminator.
- Fan section with **DIDW centrifugal backward curved fan, with spring isolator**, Drive set, V-Belt & **Motor (IE-3)**.
- Manually operated **Exhaust Air Damper** in **AI** constructions.

OPERATING PARAMETERS:

Air Qty (CFM)	10000
TSP (mm wg)	65

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Unit Model	ZDSAS-100
Fan Type	BC-560
Fan Qty	1
Fan Type	560
Outlet Vel (M/s)	9.6
Fan RPM	1244
Shaft Absorbing Power	4.16
Motor Rating (kw)	5.5
Motor Qty	1
Motor pole	4
Filter area (Sq.Ft.) @500 fpm	20.0
Total Length (mm)	3350
Width (mm)	1720
Height (mm)	1400
Price Rs.(each)	472000
Qty. (Nos)	1
Amount(Rs.)	472000

5] DOUBLE SKIN FLOOR MOUNTED EXHAUST AIR UNIT SHALL HAVE: (0.6/0.6 mm Inner & outer skin with 25 mm thick hollow extruded Al profile)

- Flanged type opening for return air duct connection.
- Fan section with DIDW centrifugal **forward curved** fan, Drive set with V belt & **Motor (IE-2)**.
- Manually operated **Exhaust Air Damper** in **Al** constructions.

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OPERATING PARAMETERS:

Air Qty (CFM)	3000
TSP (mm wg)	35
Unit Model	ZDFS-30
Fan Type	FC-15X15-S1
Fan Qty	1
Fan Type	15X15-S1
Outlet Vel (M/s)	7.5
Fan RPM	789
Shaft Absorbing Power	0.777
15% Margin rate	0.9
Motor Rating (kw)	1.1
Motor Qty	1
Motor pole	4
Total Length (mm)	1150
Width (mm)	930
Height (mm)	820
Price Rs.(each)	88000
Qty. (Nos)	1
Amount(Rs.)	88000

5] DOUBLE SKIN CEILING SUSPENDED FRESH AIR UNIT SHALL HAVE: (0.6/0.6 mm Inner & outer skin with 25 mm thick hollow extruded Al profile)

- 50 mm thick (EU-4) **box type pre filter**.
- Fan section with DIDW centrifugal **forward curved** fan, Drive set with V belt & **Motor (IE-3)**.
- Fan manually operated **supply Air Damper** in **AI** constructions.

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OPERATING PARAMETERS:

Air Qty (CFM)	2600
TSP (mm wg)	35
Unit Model	ZDFFS-30
Fan Type	FC-12X12-S1
Fan Qty	1
Fan Type	12X12-S1
Outlet Vel (M/s)	9.1
Fan RPM	925
Shaft Absorbing Power	0.788
Motor Rating (kw)	1.1
Motor Qty	1
Motor pole	4
Filter area (Sq.Ft.) @500 fpm	4.0
Total Length (mm)	820
Width (mm)	1200
Height (mm)	750
Price Rs.(each)	85000
Qty. (Nos)	1
Amount(Rs.)	85000

❖ Dimensions indicated above are tentative and may change during detailed engineering.

TOTAL VALUE OF QUOTATION

Total Quantity (Nos)	07 Nos
Total Discounted Value ₹	19,06,000/-

NOTES:

- (1) The face velocity across filter has been considered **500 FPM**.
- (2) The face velocity across coil has been considered **420 FPM**.
- (3) We have considered fan outlet velocity up to **10 M/S**.
- (4) Dampers suitable for motorized operation shall be additional provided with extended shaft to mount actuator however actuators are not in our scope of supply.
- (5) It's is recommended to run direct driven fan with VFDs. Our all motors are VFD compatible.
- (6) We do not provide canvass connection, limit switch & light in ceiling suspended units, the same shall be provided on chargeable basis **(if required)**.

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- (7) Suitable provision for pressure measuring sensors across filters / coils (if required) in floor mounted units shall be provided however sensors are not in our scope of supply.
- (8) We provide DX type coils having suitable number of distributors for connecting expansion valve with condensing units however expansion valve along with condensing units are not in our scope of supply.
- (9) We have quoted this enquiry as per BOQ as we have not received any specification, drawing and technical details.
- (10) We have considered single number of distributor however extra distributor can be provided on chargeable basis.
- (11) We have considered IGT profile for DX cooling coil. Kindly check.
- (12) In case of Direct Expansion (DX) type coil: We provide DX type coils having suitable number of distributors for connecting expansion valve with condensing units however expansion valve along with condensing units are not in our scope of supply.
- (13) Please confirm the make of condensing unit at the time of finalization.
- (14) We have considered kindly check.
- (15) We provide float valve but over flow and quick fill valve are not in our scope of supply. we provide only connection for quick fill and over flow.
- (16) Please note units are designed based on CFM and Static pressure provided by you, any modification due to changed CFM or Static Pressure will be done on chargeable basis.

DEVIATIONS:

- We have considered our standard Humidification section with 200 mm deep cellulose pad instead of 300mm in air washer unit.
- We have considered fan section with DIDW centrifugal normal forward / backward curved fan instead of aerofoil curved.

EXCLUSIONS:

Bird Screen, junction box, flanges for coil header, Belt guard, Magnehelic gauges, Electrical control panels, Accessories, all types of Controls & Instrumentation, actuators, Sound attenuators, 3/2 way mixing valves, Flow measuring devices, temperature & pressure measuring device and sensors, grills, speed regulator switch, duct-connection, and any type of Electrical cabling, electrical work, **Unloading, Lifting, shifting of units to respective location, Storage of units at site, installation, testing & commissioning** or any other which is not specifically mentioned in our offer are not in our scope of supply.

TERMS & CONDITIONS

Prices	Ex-Works, Bahadurgarh (Haryana)
GST (Goods & Service Taxes)	GST shall be charged extra @ 28% on AHUs/FCU unit & @18% on Ventilation, Air scrubber & Air washer as applicable at the time of dispatch.
STD Packing	All units are dispatched with packing of corrugated paper and polyethene wrap. These basic packing charges are Included.
Special packing	Special Crate Packing shall be charged extra as per your specifications.
Assembly	Included. However any kind of dismantling / re-assembly Work shall be on Chargeable basis.
Freight	Shall be charged extra at actual.
Insurance	Transit Insurance included

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State Entry Tax & Octroi	Shall be arranged by you and shall be to your account.
Warranty (*) manufacturing	Our all units are warranted against any kind of manufacturing defects or Poor Workmanship for a period of 12 months from the date of dispatch. During this period the faulty part, if any, partially / fully will be replaced Or repaired free of charge. However, all consumable like belts, filters Etc. Are not covered under above warranty. Also, motor burn-out due to Voltage / frequency fluctuation / single phasing or any other electrical Disorder at your end will not be covered under the above warranty Clause.
Payment	50% Advance along with the order and balance against Proforma Invoice Prior to dispatch to Unicorps Engineers Pvt.Ltd.
Dispatch	To be confirm at the time of finalization
Validity	30 Days
PO address and other details required.	1.) UNICORPS ENGINEERS PVT.LTD. 2.) Billing & Delivery address shall be mention in your Purchase Order 3.) Site Person name & contact number 4.) GST no.

Special Comments / Certifications

AHUs

- AHUs are CE certified for electrical and mechanical safety.
- We can also supply EUROVENT certified AHU's, if required.

Coils

- All Coils are AHRI certified as per test standard ARI-410.
- All coils are UL certified for safety.

(Optional)

- We also offer Anticorrosive Hydrophilic Coated Blue Aluminum fins, duly Lab-Tested & certified by Fin's Manufacturer.
- **In case of Direct Expansion (DX) type coil:** We provide DX type coils having suitable number of distributors for connecting expansion valve with condensing units however expansion valve along with condensing units are not in our scope of supply.

For further discussions you may please contact our Sales Team, details given below

Service Sales:

Mr. Neeraj Kumar (Engineer –Retrofit Sales)
E-mail- retrofitsupport@zecoaircon.com

Our works & Branch office:

Bahadurgarh | Delhi | Mumbai | Bangalore | Chennai | Kolkata | Dubai

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Telephone # 0124-6683566/6683502;

Email: sales@zecoaircon.com Visit us at: <http://www.zecoaircon.com>

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Our Works:

Zeco Aircon Ltd

O-1 & O-5, and O-3/A, Old Industrial Area
Bahadurgarh-124507
Distt. Jhajjar (Haryana)
India

Branch Office

Zeco Aircon Ltd.

Sector 74 A, DLF Corporate Green
Tower No:-4, 12th Floor
Gurugram – 122004 (Haryana)
Mail : salesdelhi@zecoaircon.com

We hope our offer is in line with your requirement. For any further clarification please feel free to contact undersigned.

Thanking You
Yours faithfully
For Unicorps Engineers Pvt.Ltd.

ROHIT SACHDEVA
Contact No.:- 97177-47795