



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

No: AAI /ER /DBR/ SM (E-E)/ VRF/2022-23 / WO-6

Date: 01.06.2022

To,
The M/s Cool Care Refrigeration
49, Lower Range,
Kolkata-700019
Tender ID No.2022_AAI_112694_1

Subject:- Provision of VRF ACs, Split ACs & Air Curtains in Terminal building at Darbhanga Airport.

Reference: (i) Your E-tender Opened in CPP portal on 27.05.2022

Dear Sir,

1. Your e-bid for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, New Delhi, at the item rate quoted by you totalling to Rs. 41,68,786/- (Excluding GST) which is 46.53% below the Justified Cost of Rs. 77,96,905/- (Excluding GST).
2. Senior Manager (E-E), AAI, Darbhanga Airport shall be the Engineer-In-Charge of the work. You are requested to attend the office of Senior Mgr. (E-E), AAI Darbhanga, Airport within ten days to sign and complete the Contract Agreement. The Contract Agreement shall be executed on a non-judicial stamp paper of value Rs. 100/ (Rupees One Hundred Only) and the cost of the stamp paper shall be borne by you.
3. Please deposit Rs. 4,16,879/- towards Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted from the running bills.
4. You are requested to comply with the provision of Contract Labor (Regulation and Abolition) Act 1970 and Contract Labor (Regulation and Abolition) Central rules 1971 and minimum wages act and rules thereof Central and State Governments.
5. You are also directed to contact Asst. Mgr. (E-E), AAI, Darbhanga Airport, immediately who will arrange to hand over the site to you. Please note that the time allowed for carrying out the work shall be **Three Months** and same shall be reckoned from **10.06.2022**

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6. Any further correspondence in connection with the contract should normally be addressed to Senior Manager(E-E), Airports Authority of India, Darbhanga Airport, Pin. -846005.
7. The rates are inclusive of all taxes excluding GST (as applicable). In case the GST rates are lower the prevailing GST rates in subsequent year i.e.2021-22, then the difference between previous year rate and existing rates will be deducted as per actual. The agency has to submit the bill, Tax invoices along with all necessary documents for preparing bill to this office.
8. All the letters referred above shall form part of contract.
9. the Defects Liability Period is **one year** from the date of completion of the work.

Thanking you.

Yours Faithfully

Subhash
01/06/2022
(Subhash Kumar Paswan)
Senior Manager(E-E)
AAI. Darbhanga Airport

Enclosure: Schedule of Work/Quantities.

Copy To:

1. Jt.GM(F&A), AAI, JPNI Airport, Patna
2. Jt.GM(E-E), AAI, JPNI Airport, Patna.
3. Airport Director. AAI, Darbhanga Airport.
4. AM(E-E), AAI, Darbhanga Airport



**AIRPORTS AUTHORITY OF INDIA
ENGINEERING WING (ELECTRICAL)
DARBHANGA AIRPORT
SCHEDULE OF QUANTITY**

Name of Work: Provision of VRF ACs, Split ACs & Air Curtains in Terminal Building at Darbhanga Airport.

SN	DESCRIPTION	QTY	UNIT	Rate (Rs) (Without GST)	Amount(without GST)
	SH:A:-SITC of VRF System ACs				
1	Supply, Installation, Testing & Commissioning of top discharge type Full Inverter VRF/VRV air conditioning System comprising of modular type high efficiency all inverter technology based hermetically sealed scroll compressors suitable for R-410A refrigerant(pre Charged) suitable for operation on 415V,3phase,50Hz Ac supply ,with air cooled condenser having propeller type fan with BLDC motor & protective coated fins , interconnecting piping,suction line insulation etc, microprocessor control panel suitable for automatic operation, high speed inverter control mechanism incorporating all safety function including unit mounted starter panel complete with IP-55 protection consisting of power disconnecting switches,starters for compressor motors, under voltage/over voltage trip, single phase priventers,communication card etc. having minimum COP not less than 3.0 at 100% load including necessary pressure test with N2 to direct any league of the refrigerant piping system, toping up of refrigerant, minor machinery work etc. complete as required as follow. (all components should be mounted on welded steel based frame, structure steel profile / panels whose cost shall be deemed to be included in the item rate. outdoor coolling capacity at ari condition : which indivisual unit above 16 HP shall have minimum 2 nos compressor and all compressor shall be of digital inverter scroll type.				
	(i) Nominal Capacity : 64 HP	1.00	Job	850000.00	850000.00
	(ii) Nominal Capacity : 34 HP	1.00	Job	525501.00	525501.00
2	Supply Installation, Testing & Commissioning of following VRF INDOOR UNITS including pressure testing & vaccum as per following capacities.				
	(i) 4 way Cassette IDU - 4.0 TR with Panel & Cordless Remote.	16.00	Job	40500.00	648000.00
	(ii) Floor Standing IDU - 8.0 TR with Panel & Cordless Remote .	4.00	Job	135500.00	542000.00
3	Supply Installation, Testing & Commissioning of Refnet joints of minimum thickness as that of refrigerant piping including Pressure testing & Vaccum				
	(i) Indoor Unit - Y Joints	22.00	Job	4800.00	105600.00
	(ii) Outdoor Unit - Y Joints	5.00	Job	6500.00	32500.00

	Supply, Installation, Testing & Commissioning of refrigerant piping connecting indoor unit & outdoor units including thermal insulation. Refrigerant piping shall be made of hard drawn copper pipe suitable for variable refrigerant flow system including all fittings, i.e. bends, elbows, tees with an internal joint type fitting etc. Pipeline must be tested for requisite pressure. Max. support distance shall be 8 ft. All refrigerant piping shall be insulated with min. 13 & 19 mm thk. nitrile rubber based insulating material as per the following :				
	(i) 22.7 mm dia with 19mm thick nitrile rubber insulation	400.00	RMT	400.00	160000.00
	(ii) 44.5 mm dia with 19mm thick nitrile rubber insulation	300.00	RMT	360.00	108000.00
	(iii) 19.5 mm dia with 19mm thick nitrile rubber insulation	200.00	RMT	400.00	80000.00
4	(iv) 34.9 mm dia with 19mm thick nitrile rubber insulation	200.00	RMT	550.00	110000.00
	(v) 41.3 mm dia with 19mm thick nitrile rubber insulation	60.00	RMT	1850.00	111000.00
	(vi) 38.1 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	1560.00	46800.00
	(vii) 31.8 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	500.00	15000.00
	(viii) 28.6 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	890.00	26700.00
	(ix) 25.4 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	100.00	3000.00
	(x) 15.9 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	650.00	19500.00
	(xi) 12.7 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	300.00	9000.00
	(xii) 9.5 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	350.00	10500.00
	(xiii) 6.4 mm dia with 19mm thick nitrile rubber insulation	30.00	RMT	1.00	30.00
5	Supply, Installation, Testing & Commissioning of drain piping from hard drawn CPVC material of 25mm size and duly insulated with 10 mm nitrile rubber insulation	600.00	RMT	80.00	48000.00
6	Supply, Installation, Testing & Commissioning of drain piping from hard drawn CPVC material of 30mm size and duly insulated with 10 mm nitrile rubber insulation	400.00	RMT	110.00	44000.00
7	Supply & Charging of extra refrigerant R-410A in VRF system	50.00	Kg.	800.00	40000.00
8	Supply & fixing of control cum transmission wiring of copper between indoor and outdoor unit in PVC Conduit.				
	(i) 3C x 2.5 mm ² Cu (Control cable from ODU to IDU for VRF units)	700.00	RMT	150.00	105000.00
	(ii) 2CX1.5 mm ² Cu (Control cable from ODU to IDU for VRF units)	200.00	RMT	130.00	26000.00
	Total amount for SH A:-				3666131.00

	SUB HEAD B:-SITC of Split ACs				
9	SITC of 1 Phase, 1.5 TR split type of 5 star rating Inverter Air-conditioners along with high wall type indoor unit suitable to operate from 230±10%, 50 Hz, 1 phase power supply (along with necessary wiring from nearest power source to the required outdoor and indoor units) having high EER Compressor and cooling capacity of 5200Watts (Nominal) with Indoor & Outdoor Copper coil refrigeration with ecofriendly refrigeration Gas to maintain room temperature 20±2°C. The indoor unit should have real time clock, operating facility from cordless remote, along with time and temperature display. Outdoor unit to be installed as Directed by Engineer-in-Charge.	2.00	job	56140.00	112280.00
10	Supply, fabrication and erection of metallic structure fabricated from suitable size of MS angle frame with two coats of primer to be used for suspension of outdoor compressor units (as per Item No.9) as direction of Engineer-in-Charge.	2.00	job	950.00	1900.00
11	Supply and fixing of extra copper refrigerant piping complete with suction / liquid line, insulation (i.e. cunifoam with neoprene / rubber lining), and all the accessories as per site requirement as directed by Engineer-in-Charge.	20.00	mtrs.	1386.00	27720.00
12	Supply & Laying of Extra 2 core x 2.5 sqmm unarmoured PVC insulated & Sheathed copper conductor cable of 1.1 KV grade as directed by Engineer-in-Charge.	10.00	mtrs.	120.00	1200.00
13	Supply and laying of 25 mm dia PVC pipe to be used for drainage of condensate from indoor units to the nearest drain-port as directed by Engineer-in-Charge.	20.00	mtrs.	105.00	2100.00
	Total amount for SH B:-				145200.00
	Total amount for SH (A+B)				3811331.00
	SH:C-SITC of Air Curtains				
14	SITC of Industrial Automatic Air Curtains with ultra high speed wind, optimized motor power, stainless steel impeller, metal suction impeller, air speed ranging to 12m/sec. to 25m/sec., model with high speed volume and for suitable gate sizes.	5	Job	71491	357455
	Total amount for SH C:-				357455.00
	Total amount for SH (A+B+C)				4168786.00
	Total amount for SH (A+B+C)(Without GST)				4168786.00

Subhash
SM(E-E)
01/06/2022