



SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

SIDBI Head Office, SIDBI Tower, 15, Ashok Marg, Lucknow-226001 [TEL:- 0522 4259700](tel:05224259700) Web: - www.sidbi.in

**TENDER IDENTIFICATION NO. 314/2022/1655/HO1/PREMISES
TENDER DOCUMENT**

HVAC Works including supply, installation, testing and commissioning etc. in SIDBI Head Office at SIDBI Tower, 15, Ashok Marg, Lucknow-226001

Volume – II

COMMERCIAL BID

LAST DATE OF SUBMISSION September 22, 2021 UPTO 1500 Hrs

Prepared & Issued By

MEP CONSULTANT



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Issued To: -

**HVAC PROJECT COSTING FOR BRAND NEW ITEMS****BRAND/ MAKE OFFERED: _____**

Sr.No.		Unit	Qty	Rate	Total
A)	SUPPLY OF EQUIPMENTS				
1	AIR COOLED VRV/VRF OUTDOOR UNITS:				
	Supply of Variable Refrigerant Flow type multi unit air-conditioning system with R410A Refrigerant complete with indoor and outdoor units with individual controller for cooling & heating type operations.				
	'Supply of Modular type outdoor units equipped with highly efficient scroll compressors, with All variable speed Inverter Scroll Compressors , 100% inverter compressor, special heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, and deliver (278 HP total capacity) in summer at high ambient temperature i.e. at 40Deg.C and above and keep working at 55 Deg.C. Heating and cooling with capacities as mentioned below:				
1.1	ODU 18 HP Heat Pump Type	Nos.	2		
1.2	ODU 20 HP Heat Pump Type	Nos.	3		
1.3	ODU 22 HP Heat Pump Type	Nos.	4		
1.4	ODU 24 HP Heat Pump Type	Nos.	1		
1.5	ODU 26 HP Heat Pump Type	Nos.	3		
1.6	ODU 28HP Heat Pump Type	Nos.	0		
2	CASSETTE INDOOR UNITS:				
	Supply of 1-way type VRV indoor cassette AC with drain pump, Evaporator Grill panel etc. complete in all respect.				
2.1	One Way Cassette				
2.1.1	One way cassette 0.8 TR	Nos.	1		
2.1.2	One way cassette 1.0 TR	Nos.	8		
2.1.3	One way cassette 1.3 TR	Nos.	23		
2.1.4	One way cassette 1.6 TR	Nos.	16		
2.1.5	One way cassette 2.0 TR	Nos.	14		

[Signature of Authorized Signatory _____]



2.2	Four Way Cassette				
	Supply of 4 way type cassette AC with drain pump, Evaporator, Grill Panel etc. complete in all respect.				
2.2.1	Four way cassette 2.3 TR	Nos.	4		
2.2.2	Four way cassette 2.8 TR	Nos.	13		
2.2.3	Four way cassette 3.2 TR	Nos.	7		
2.2.4	Four way cassette 4.0TR	Nos.	8		
2.2.5	Four way cassette 5.0 TR	Nos.	4		
3	Supply of REFNET joints for indoor units and Multiple Outdoor Units.	Nos.	103		
4	Supply of CORDLESS REMOTE for indoor units.	Nos.	98		
5	Supply of Central controller for VRF system at each floor	Nos.	8		
6	Supply of Energy recovery ventilator (ERV) for fresh air supply to the office building occupants.				
6.1	Capacity 800 CMH	Nos.	13		
					TOTAL A
B)	LOW SIDE WORKS				
	EQUIPMENT INSTALLATION				
7	Installation, testing and commissioning of Variable Refrigerant Flow type multi-unit air-conditioning system with R410A Refrigerant complete with individual controller for cooling & heating type operations.				
7.1	ODU 18 HP Heat Pump Type	Nos.	2		
7.2	ODU 20 HP Heat Pump Type	Nos.	3		
7.3	ODU 22 HP Heat Pump Type	Nos.	4		



7.4	ODU 24 HP Heat Pump Type	Nos.	1		
7.5	ODU 26 HP Heat Pump Type	Nos.	3		
7.6	ODU 28HP Heat Pump Type	Nos.	0		
8	Installation, testing and commissioning of 1 way type VRV indoor cassette AC with drain pump , Evaporator Grill panel etc. complete in all respect.				
8.1	One Way Cassette				
8.1.1	One way cassette 0.8 TR	Nos.	1		
8.1.2	One way cassette 1.0 TR	Nos.	8		
8.1.3	One way cassette 1.3 TR	Nos.	23		
8.1.4	One way cassette 1.6 TR	Nos.	16		
8.1.5	One way cassette 2.0 TR	Nos.	14		
8.2	Four Way Cassette				
8.2.1	Four way cassette 2.3 TR	Nos.	4		
8.2.2	Four way cassette 2.8 TR	Nos.	13		
8.2.3	Four way cassette 3.2 TR	Nos.	7		
8.2.4	Four way cassette 4.0TR	Nos.	8		
8.2.5	Four way cassette 5.0 TR	Nos.	4		
9	PIPING				
	Supply, installation and testing of hard/soft Refrigerant piping for circuit of liquid & suction pipe with suction lines insulated with 19 mm thick tubular Nitrile rubber insulation and liquid lines insulated with 13 mm thick tubular nitrile rubber insulation , outside exposed piping must have UV protected coating with interconnecting cabling upto starter / indoor / outdoor units as per site in charge,				



	insulation, gas charging, support, complete in all respects for Cassette Split AC of below capacities: (Make - Totaline / Mandev / Equivalent).				
9.1	6.35 mm dia (1/4")	Rmt	194		
9.2	9.5 mm dia (3/8")	Rmt	780		
9.3	12.7 mm dia (1/2")	Rmt	350		
9.4	15.8 mm dia (5/8")	Rmt	620		
9.5	19.05 mm dia (3/4")	Rmt	145		
9.6	22.22 mm dia (7/8")	Rmt	130		
9.7	34.9 mm dia (1 1/8")	Rmt	360		
9.8	41.27 mm dia (1 3/8")	Rmt	25		
9.9	47.6 mm dia (1 5/8")	Rmt	75		
10	DRAIN PIPE				
	Supply, installation, testing & commissioning of Rigid PVC Drain Piping complete with fittings, supports as per specifications and duly insulated with 6 MM thick closed cell nitrile rubber insulation for condensate from room unit to nearest suitable drain system as per site conditions as per instructed at site engineer complete with all required fittings and providing clean out plug at suitable location for roding the pipe when required complete.				
10.1	25 MM	Rmt	900		
10.2	32 MM	Rmt	500		
10.3	40 MM	Rmt	300		
	Control & Transmission Wiring - Make - Havells/ Polycab/RR,				
11	Providing and fixing of Control cum Transmission Wiring with suitable 2 core X 1.5 sq.mm Copper wire including	Rmt	2900		



	supply and fixing of PVC conduits. Make - Havells / RR Cable / National				
12	Gas charging of Outdoor unit with refrigerant as per the equipment schedule.	Kg	260		
13	Installation testing and commissioning of Energy Recovery Ventilator (ERV) as per the manufacturer's recommendations.				
	ERV - - 800i, 800 CMH	Nos.	13		
14	Supply and Installation of Canvas connection for ERV	Nos	50		
15	Supply and installation of uPVC duct with fittings support and solvent				
	150 MM	Rmt	40		
	100 MM	Rmt	160		
16	Supply and installation of powder coated Al. Disc Valve for toilet exhaust and fresh air to each floor	Nos.	50		
17	Supply and installation of powder coated Al. Louvers with bird screen for toilet exhaust and fresh air to each floor	Nos.	26		
18	Supply, fabrication and installation of MS Frame Stand for Outdoor Unit installation made of MS C channel including VI Pads and Painting of MS Stand.	Nos.	13		
				TOTAL PART B	
C	BUYBACK				



	Buy Back of Existing Central AC Plant with Dismantling, storing, Lifting, shifting etc.	Lot	1		
	Water cooled chillers capacity 120 TR - 3 Nos.				
	CHW Pump 15 HP - 3 Nos.				
	Condenser water Pump 10 HP - 3 Nos.				
	Hot water Generator 250 KW - 1 No.				
	Cooling tower 150 TR - 3 Nos.				
	Air Handling Units 33000 CFM- 9 Nos.				
	Air Handling Units 28000 CFM- 5 Nos.				
	All MS Piping, G.I Duct, Grills, Diffusers, Cable, Panels, supports and other associated items.				
	TOTAL PART C				
	GRAND TOTAL AMOUNT X=(A+B-C)				
D	COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT				
	Comprehensive Annul Maintenance Contract (CAMC) after the defect liability period (warranty period of 1 yr). Since this is comprehensive AMC so all materials, consumables, labours, tools and equipment are included in this MAINTENANCE CONTRACT. During the CAMC the contractor shall keep all the system in healthy condition and proper cleanliness is maintained all the time.				
	The CAMC includes but not limited to this				
	1. Log sheet of each and every unit.				
	2. Periodic Service Schedule on daily, weekly, monthly and yearly basis.				
	3. Breakdown and preventive maintenance.				
	4. Repair/ replacement of defective part free of cost.				
	5. Cleanliness of High Side Installations on daily basis.				
	6. Show the log sheet to incharge on daily basis.				



a.	Year 1 st after completion of warranty period.	Job	1		
b.	Year 2 nd after completion of warranty period.	Job	1		
c.	Year 3 rd after completion of warranty period.	Job	1		
d.	Year 4 th after completion of warranty period.	Job	1		
				TOTAL PART D	
				GRAND TOTAL INCLUDING CAMC (E) = (X) + (D)	
GRAND TOTAL INCLUDING CAMC IN WORDS:					

Note Lowest Bidder L1 shall be arrived on GRAND TOTAL COST INCLUDING CAMC i.e. (E)

GST as applicable shall be paid over and above the quoted rates. The price quoted shall be deemed to be including all other taxes, transportation, excise etc. however excluding only GST.