

REGIONAL BUSINESS OFFICE, SIVASAGAR (NEW PREMISES)
BOQ FOR VRF/VRV AIR CONDITIONING INSTALLATION WORK AT RBO, SIVASAGAR

SI No.	Description	Qty	Unit	Rate	Amount
	PART - A (SUPPLY PART)				
1	Variable Refrigerant Volume / Flow System (VRF/VRV)				
	Supply of modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor Units suitable for cooling, having all hermetically sealed OEM manufactured inverter type Scroll/Twin Rotary Compressor(s), microprocessor-based controller, Top discharge type condensing units with R410 A refrigerant, vibration isolators with suitable foundation etc. complete as required. The Compressor and VRF System should be of same make. The unit shall deliver the rated capacity at AHRI conditions and work even at 50 Deg C ambient temperature without tripping. The unit shall be suitable to work on 400 V+/-10% 3 phase, 50 Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5. (The system should have feature of "uninterrupted communication when main power supply of the any indoor unit cut-off").				
	Outdoor Unit				
a.	28 HP	1	No		
b.	16 HP	2	Nos		
2	Indoor Units				
2.1	Ductable Units: Supply of ductable type unit of following Capacities. The unit is having inbuilt drain pump.				
a.	Capacity 8.0 TR	3	Nos		
2.2	Cassette Units: Supply of ceiling mounted cassette type unit/ Hi-Wall of nominal capacity suitable for heating and cooling mode on R 410A refrigerant with electronic expansion valve, multi speed motor, insulated drain pump & pan, cordless remote with decorative panel of suitable size complete as per specifications etc. as required.				
a.	Capacity 1.3 TR	1	No.		
b.	Capacity 2.0 TR	3	Nos.		
c.	Capacity 2.6 TR	1	Nos.		
d.	Capacity 3.2 TR	5	Nos.		
3	Supply of Refnet Joints (Y-Branch)	10	Nos.		
4	Supply installation and commissioning of centralise remote controller having touch scren based user freindly controller systems can be controlled , parameters for individual indoor units can be set,remote sheilding of machines can be performed,parameters like on/off status ,mode of peration temp setting can be viewed and set.	1	Nos.		
				Sub Total Part A	

SI No.	Description	Qty	Unit	Rate	Amount
	PART - B (INSTALLATION PART)				
5	VRF/VRV System				
	Installation, testing and commissioning (Including Lifting at roop level) of variable refrigerant volume type airconditioning system complete with indoor and out door units with individual controller and with refrigerant piping, control cabling, MS channel for mounting of outdoor units with rubber pads as required including pressure testing & flushing of pipeline system with nitrogen, etc. as per as per detail given in specifications and having following items:				
	Outdoor Unit				
a.	28 HP	1	No		
b.	16 HP	2	Nos		
6	Installation, testing and commissioning of Ductable type unit of following Capacities.				
a.	Capacity 8.0 TR	3	Nos		
	Installation, testing and commissioning of Cassette type units of following Capacities.				
a.	Capacity 1.3 TR	1	No.		
b.	Capacity 2.0 TR	3	Nos.		
c.	Capacity 2.6 TR	1	Nos.		
d.	Capacity 3.2 TR	5	Nos.		
6	Installation, Testing & Commissioning of Refnet Joints (Y-Branch)	10	Nos.		
7	Refrigerant Pipe				
	Supply, installation, testing & commissioning of interconnecting refrigerant copper pipe (Hard/ Soft) work with 19mm/ 13mm thick closed cell tubular nital rubber insulation between each set of indoor & outdoor unit for suction and liquid line as per specifications, all piping inside the room shall be properly supported on with MS/GI Studs/ Clamps/ Hanger as per specification and drawings.				
a.	34.90 mm O.D.(insulation : 19 mm)	27	Rm		
b.	28.58 mm O.D.(insulation : 19 mm)	51	Rm		
c.	25.4 mm O.D.(insulation : 19 mm)	24	Rm		
d.	22.22 mm O.D.(insulation : 19 mm)	63	Rm		
e.	19.05 mm O.D.(insulation : 19 mm)	45	Rm		
f.	15.88 mm O.D.(insulation : 13 mm)	135	Rm		
g.	12.7 mm O.D.(insulation : 13 mm)	30	Rm		
h.	09.52 mm O.D.(insulation : 13 mm)	150	Rm		
i.	06.35 mm O.D.(insulation : 13 mm)	10	Rm		
8	Drain Piping				
	Supply & installation of CPVC piping complete with fittings, supports and duly insulated with 9 mm thick closed cell nital rubber insulation.				
a.	25 mm dia	120	Rm		
b.	32 mm dia	65	Rm		
9	Control & Transmission Wiring				
	Providing & fixing control cum transmission wiring of 2 core X 1.5 sqmm shielded copper cable in suitable conduits between indoor and out door unit and between corded remote and indoor unit.				
a.	2 core X 1.5 sqmm shielded	450	Rm		
10	Duct work				

