

AIRCONDITIONING BOQ FOR SBI KANNUR ROAD BRANCH AND WEALTH BRANCH

SL.NO	ITEM DESCRIPTION	UNIT	Qty	RATE	AMOUNT
I	Supply of 1.5 TR capacity Single Phase, minimum 5 - Star rated Inverter Hi-wall Split AC with all copper condenser & evaporator coils, MS out door stand , stabilizer and with cordless remote control,MS Stand,stabilizer including cost of copper piping upto 3 metre. Piping to be laid through insulating sleeve with white taping and to be clamped neatly. Wall openings are to be sealed and finished using cement plastering.(E-corner – 2)	2	nos		
2	HIGH SIDE				
	INDOOR UNIT				
a	Supply of Indoor units of following capacities of VRV/VRF air conditioners complete with filters of 10 micron filtering capacity, coil section with refrigerant cooling coil and fan section, insulated drain pan of adequate size.				
b	4.1 TR Fourway Cassette unit with wireless remote.	5.00	Nos		
c	1.5 TR Oneway Cassette Unit with wireless remote.	4.00	Nos		
d	1.0 TR Oneway Cassette Unit with wireless remote.	4.00	Nos		
2.00	CONDENSING UNIT (R410)				
	Supply, Freight, Loading, unloading of direct expansion type VRV/VRF outdoor units (VRT/PET Technology with Automatic Phase Sequence Controller) of said capacity complete with condenser, fans, hermetically sealed scroll compressor, controls,control wiring and remote control unit with rubber pads.				
a	8HP Side Discharge ODU	1.00	Nos		
b	24HP ODU (12+12) Two separate 12HP units giving 24HP out door capacity	1.00	Nos		
3.00	Indoor unit accessories				
a	Refnet	11.00	Nos		
b	Twinning Kit	1	Nos		
4.00	Total for High Side exclusive of GST				

	LOW SIDE				
5	Installation, Lifting, Shifting, Erection, Pressure testing, Commissioning and Gas charging of additional required Refrigerant and oil required for commissioning of VRV/VRF Air Conditioning system with 100% inverter type of the following Top discharge 3 phase supply Outdoor unit capacities comprising of inner grooved copper tubes for higher heat transfer, hydrophilic blue fins, powder coated GI sheet metal parts with high efficiency DC motor, delivering 100% capacity at 43 deg C, with wide operating range 320Volts to 460 Volts, oil separators, electronic expansion valves, IDU oil recovery system, quiet mode operations, Demand control mode, IDU isolation function, Automatic Gas Filling System, Automatic Phase Sequence Correction and filter clean reminders.				
	Air cooled condenser with top discharge, R410-A CFC free refrigerant				
a	8HP Side Discharge ODU	1.00	Nos		
b	24HP ODU (12+12)	1.00	Nos		
c	Refrigeration Gas (R410) as additional Required	14.50	Kg		
6	Installation, testing and commissioning of VRV air conditioners complete with filters of 10 micron filtering capacity, coil section with refrigerant cooling coil and fan section, insulated drain pan of adequate size.				
a	4.1 TR Fourway Cassette unit with wireless remote.	5.00	Nos		
b	1.5 TR Oneway Cassette Unit with wireless remote.	4.00	Nos		
7	1.0 TR Oneway Cassette Unit with wireless remote.	4.00	Nos		
8	Installation of wireless Remote with Signal Receiver	13.00	Nos		
9	Installation of Outdoor Twinningt Kit	1	Nos		
10	Installation, Testing and Commissioning of Branch distribution referent joints, Y-shape branching joints, branch headers/ T-shape branching joints etc for VRV units as required.	11.00	Nos		
	REFRIGERANT PIPING, COMMUNICATION AND DRAIN WATER ARRANGEMENT.				

11	Supply & installation of 18G, hard drawn copper Refrigerant piping, duly insulated with closed cell elastomeric nitrile rubber insulation, complete with elbows, T joints, sleeves etc., with GSS slotted rail supporting arrangement and GI clamp for individual pipes. The piping to be duly insulated with minimum 19mm thick closed cell elastomeric nitrile rubber insulation for suction and minimum 13mm thick for discharge.				
a	6.4 mm with 13mm / 19mm Thick Insulation	32.00	Rmt		
b	9.5 mm with 13mm / 19mm Thick Insulation	70.00	Rmt		
c	12.7 mm with 13mm / 19mm Thick Insulation	45.00	Rmt		
d	15.9 mm with 13mm / 19mm Thick Insulation	70.00	Rmt		
e	19.10 mm with 13mm / 19mm Thick Insulation	18.00	Rmt		
f	22.2 mm with 13mm / 19mm Thick Insulation	4.00	Rmt		
g	28.60 mm with 13mm / 19mm Thick Insulation	8	Rmt		
h	34.90 mm with 13mm / 19mm Thick Insulation	14	Rmt		
12	Ladder type tray support for exposed copper pipes outside the building , all copper pipes shall be neatly clamped and fixed properly with supports, hangers, railing, brackets etc. and tray shall be coated with two coat of epoxy primer and two coat of epoxy paint of black	12	Rmt		

	color. The outdoor units shall be provided with vibration isolation pads.				
13	Supply, installation, testing and commissioning of Protective layer for copper piping with woven fiber glass cloth wrapped around copper piping tubular insulation and finished with PVAC based high strength glue with anti fungal property of approved colors.	261	Rmt		
14	Supply & Installation of insulated PVC drain pipe of following dia with insulations neatly clamped or hanged on walls / ceiling and connecting with nearest drain point with proper supports				
a	25mm	25.00	Rmt		
b	32mm	30.00	Rmt		
c	40mm	25.00	Rmt		
15	Supply & Installation of Communication cable between indoor and outdoor units with shielded cable with PVC conduit and accessories as required.	205.00	Rmt		
16	Installation, Testing & Commissioning of 1.5 TR capacity Single Phase, minimum 5 -Star rated Inverter Hi-wall Split AC with all copper condenser & evaporator coils, MS out door stand and with cordless remote control, MS Stand, stabilizer including cost of copper piping upto 3 metre. Piping to be laid through insulating sleeve with white taping and to be clamped neatly. Wall openings are to be sealed and finished using cement plastering.(E-corner – 2)	2.00	nos		
17	Additional electrical wiring between indoor and out door units with all necessary fittings and leak proof arrangements as required for Split AC's of 1.5 TR	25	mtr		

18	Supply & erection of copper refrigeration pipe (as specified by the manufacturer) complete with elbows, bends, supports, Insulation etc. interconnecting indoor and outdoor units(both suction and discharge lines) along with necessary Insulation using 4mm thick nitrile rubber sleeve with teflon taping for single phase split AC 1.5Tr	20	mtr		
19	Supply and laying of 32mm dia Rigid PVC drain piping insulated with 6mm thick nitrile rubber foam sleeve insulation and necessary rigid support & all accessories elbow, bends, tees etc.	40	mtr		
20	Air Conditioner related civil works like making opening in wall for copper piping etc and finishing it neatly with brick work , plastering , finishing , removal of debris /waste material , making opening in partitions , civil work for condenser supports and any other work as required by site conditions etc	1	Ls		
21	Charges for core cutting the floor for dia 6" to take cu, drain, electrical cabling for e-corner	1	nos		
22	Supply and installation of Legrand timer for E-corner AC	1	nos		
23	Supply and installation of Factory / Site fabricated, sheet metal 22G GSS ducts of grade 120 GSM Cowl for ODUs with wire mesh.	3	nos		
24	MS frame work for out door units for VRV system of length and width with hand rail arrangement for keeping 12HP(2 nos),8HP	3	nos		
25	Total for Low Side : Sum(5 to 24) exclusive of GST				
26	Grand Total for Supply & Low side works exclusive of GST (4) + (25)				
27	CAMC for five years				

A	First year CAMC exclusive of GST				
B	Second YEAR CAMC exclusive of GST				
C	Third YEAR CAMC exclusive of GST				
D	Fourth YEAR CAMC exclusive of GST				
E	Fifth YEAR CAMC exclusive of GST				
28	Total CAMC charges exclusive of GST Sum from (27.A to 27.E)				
29	Grand Total in Rs exclusive of GST (26) + (28)				

Contractors seal & signature