

Sl. No.	Description	Qty.	Unit	Remarks
<b>Supply:</b>				
1	Supply of Inverter type High Wall mount type Split Airconditioner of capacity of 2.0 TR, with 5 Star rating	10	Nos	
<b>Installation:</b>				
1	Installation, testing and commissioning of Inverter type High Wall mount type Split Airconditioners of capacity 2.0 TR including initial charge of R410A/ R32 refrigerant and subsequent charge / tapping of refrigerant during testing / commissioning if any, supports for AC units etc., complete.	10	Nos	
2	Supply and installation of copper pipe from indoor to outdoor units including insulation cable and fixtures etc. for 2.0 TR Inverter type High Wall Split Airconditioners	120	Rmt	
3	Supply and installation of CPVC drain pipe from indoor to outdoor units including fixtures etc. for 2.0 TR Inverter type High Wall Split Airconditioners	120	Rmt	
4	Supply and installation of PVC capping pipe from indoor to outdoor units including fixtures etc. for suitable 2.0 TR Inverter type High Wall Split Airconditioners	100	Rmt	
5	Supply and installation and commissioning of Timers suitable for 2TR HW Split Acs.	10	Nos	
6	Supply and installation of wall mounting stand for ODU	10	Nos	

**TECHNICAL SPECIFICATION FOR SUPPLY OF HW SPLIT AIR CONDITIONERS**

1. Type: Inverter Type high Wall Mounting Energy Efficient Split Air Conditioners, cordless remote control with LCD/LED displays.
2. Capacity: 2.0 TR(1:1) consists of one indoor unit and one Condensing unit and should operate with 220V, 1 ph, 50 Hz having Rotary Compressor.
3. Nominal Cooling Capacity: 2.0 TR - 24000 Btu/Hr (6000 KCal/Hr) or Cooling capacity as mentioned by BEE standards. Noise Level Indoor < 35 dB.
4. The capacity of the Split Air Conditioners shall not be less than the 10% of the rated capacity
5. Air Conditioners shall have Jet Cool, Dehumidification, 3M Micro Protection filter, Auto clean, On Timer, Off Timer, Sleep Mode, Night Glow Remote Button.
6. Split Air Conditioners should be BEE certified and having **5 Star rating, Inverter Type**. The supplier should produce BEE certificate for Star rated Split Air Conditioners.
7. The Condensing unit shall be totally weatherproof.
8. The Split Air Conditioners shall be charged with required amount of **R410a/R32 refrigerant**.
9. The pipe shall be refrigerant graded and soft copper pipe.
10. The air filter shall be nylon, cleanable type and easy to remove.
11. The temperature control shall be thermostatically controlled by automatic temperature control unit.
12. The indoor unit should have auto swing for better air distribution.
13. **The condenser coil should be of copper material.**
14. The supplier should submit the **relevant catalogue and indicate the offered model** at the time of submitting the quotation.
15. The supplier should give one-year warranty for the Split Air Conditioners supplied from the date of commissioning or 18 months from the date of supply.
16. In the event of Major failure of compressor, cooling coil, condenser coil and fan motors etc shall be replaced with new one during the guarantee period.
17. Supplier should give spare parts support for the supplied unit for its lifetime.
18. The refrigerant pipe for suction and liquid line shall be insulated with Vidoflex insulation of not less than 9 mm wall thickness.
19. The drain pipe and PVC Covering pipe should be of PVC rigid type.

## SPECIFICATION FOR INST. TEST & COMM 2 TR HIGH WALL SPLIT AIR CONDITIONERS

### Scope of work:

1. Installation, testing and commissioning of Split Air Conditioners with Refrigerant Gas and all accessories like refrigerant pipe, vidoflex pipe cross section insulation, cables, condensed water Drain pipe and PVC Covering pipe etc.
2. Minor hole to be made on the wall/chajja/windows for refrigerant piping in between indoor and outdoor unit. The PVC pipe shall be placed on the drilled hole and cementing or POP plastering to be made surrounding the outer surface of the PVC pipe and the wall. The lintel & floor hole to be carried out by the contractor by core cutting.
3. The refrigerant pipe for suction and liquid line shall be insulated with Vidoflex insulation of not less than 9 mm wall thickness.
4. Necessary cabling between indoor and outdoor unit shall be done by the contractor.
5. All the refrigerant pipe of suction and liquid line between indoor and outdoor unit should be embedded with PVC rigid pipe. The PVC rigid pipe shall be fixed to the wall by using clamps.
6. The CPVC drain pipe of suitable size shall be provided for the indoor units. The drain pipe shall be fixed to the wall by using clamps.
7. The drain pipe and PVC Covering pipe should be of PVC rigid type.
8. The company will provide stabilized 220 V/440 V, single phase or three-phase power supply at suitable place (within 1 mtr from the unit). The contractor shall provide necessary cabling.

### Note:

1. Refrigerant pipe, PVC covering pipe and Drain pipe will be paid as per actual measurement.
2. The quoted price for copper pipe should be including suction and liquid line Copper Pipe, Cable and vidoflex insulation.
3. Payment for installation and commissioning Split Air Conditioners will be made after satisfactory Installation, Commissioning and Certification of Engineer incharge..



**SUPPLIER COMPLIANCE FOR TECHNO COMMERICAL**

**Annexure-II**

**Sub:** Supply, Installation, Testing and Commissioning of 2.0 TR Inverter Type High Wall Mount Type Split Air Conditioners (BEE 5 STAR) at **Various SBU's, BE-BG Complex.**

<b>PART-A TECHNICAL COMPLIANCE</b>	
<b>BEL Requirement</b>	<b>Supplier Remarks</b>
<b>1. Compliance to Detailed Technical Specification.</b>  <b>Note: Any deviation from tender specification or any other Non-Compliance should be clearly brought out in the Technical Bid/Offer.</b>	
<b>2. Agency should submit the relevant catalogue and indicate the offered model along with technical offer/bid.</b>	

<b>PART-B COMMERCIAL COMPLIANCE</b>	
<b>BEL Requirement</b>	<b>Supplier Remarks</b>
<b>1. Payment Terms:</b>  <b>1.1 :- Supply of 2.0 TR Split Air Conditioner (i.e. Line Item No.1 the BOQ enclosed as Annexure-I):-</b>  <b><u>For MSME Vendors :-</u></b>  90% payment will be made within 30 days from the date of supply & acceptance of the item. Balance 10% will be paid after completion of Installation, Testing, Commissioning and handing over of the Air Conditioning System against submission of Bank guarantee for 5% of total order value towards performance bank guarantee valid for warranty period subject to bank confirmation.  <b><u>For Non – MSME/General Vendors :-</u></b>  80% payment will be made within 30 days from the date of supply & acceptance of the item. Balance 20% will be paid after completion of Installation, Testing, Commissioning and handing over of the Air Conditioning System against submission of Bank guarantee for 5% of total order value towards performance bank guarantee valid for warranty period subject to bank confirmation.	

<p><b>1.2 :- Installation, Testing &amp; Commissioning of 2TR High Wall Split Air Conditioner (i.e. Line Item No.2 to 7 of the BOQ enclosed as Annexure-I) :-</b></p> <p>100% Payment within 30 days after Successful completion of Installation, Testing , Commissioning and Handing over of the Air conditioning System against duly certification by Engineer-in-charge.</p>	
<p>2. <b>Warranty :</b> One year Warrantee for the Split Air Conditioners supplied from the date of commissioning or 18 months from the date of supply.</p>	
<p>3. <b>Delivery Schedule :</b></p> <p><b>3.1. Supply of 2.0 TR Split Air Conditioner:</b></p> <ul style="list-style-type: none"> <li>• Items to be supplied for AC &amp; R - ES/Mechanical, BEL Bangalore, within 30 days from the date of Contract Order.</li> </ul> <p><b>3.2. Installation, Testing &amp; Commissioning of 2TR High Wall Split Air Conditioner:</b></p> <ul style="list-style-type: none"> <li>• As per site condition staggered Installation is required if any.</li> <li>• Installation &amp; Commissioning of Air Conditioning System to be completed within <b>30 days</b> from the date of supply of AC's or site clearance from Engineer-in-charge, whichever is later.</li> </ul>	
<p>4. The Condenser Coil should be of Copper Material.</p>	
<p>5. Agency should submit valid OEM/Manufacturer authorization certificate for the offered make along with technical offer/Bid. If it is not enclosed the offer of those agencies will not be considered for further evaluation.</p>	
<p>6. Agency should mention Make/Model of the quoted items.</p>	
<p>7. Agency should submit duly filled supplier compliance (Annexure-II) for commercial terms and conditions in the technical bid.</p>	
<p>8. Successful tenderer shall furnish the operation &amp; maintenance manuals, Guarantee certificate and test certificates, etc., along with the materials.</p>	
<p>9. Submission of tender by the tenderer implies that he has read the instructions and all contents of tender documents and</p>	

made himself understood/well versed with the scope & specifications called for the tender.	
10. Since the evaluation is a total value evaluation basis, agency requires to quote for all the items mentioned in the BOQ. If agency fails to do so in such case, the offers of those agency bids are not considered for further processing.	
11. BEL reserves the right to reject any or all the tenders without assigning any reasons.	

**SEAL OF THE COMPANY**

**NAME AND SIGN OF SUPPLIER**

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**BHARAT ELECTRONICS LTD.,  
ENGINEERING SERVICES – PURCHASE /DIVISION.**

**Annexure-III**

**Subject:**

Supply, Installation, Testing and Commissioning of 2.0 TR Inverter Type High Wall Mount Type Split Air Conditioners (BEE 5 STAR) at **Various SBU's, BE-BG Complex.**

- 1) **Bill of Quantity (BOQ) attached at Annexure-I**
- 2) **Supplier Compliance attached at Annexure-II**
- 3) **Special Terms and Conditions attached at Annexure-III**
- 4) **Detailed Technical Specifications attached at Annexure-VI**

**Note:** Agency should submit the relevant catalogue and indicate the offered model along with technical offer/bid.

**THE SPECIAL TERMS & CONDITIONS:-**

The following terms and conditions shall be part of this tender:-

**1. Payment Terms:**

**1.1:- Supply of 2.0 TR Split Air Conditioner (i.e. Line Item No.1 the BOQ enclosed as Annexure-I):-**

**For MSME Vendors :-**

90% payment will be made within 30 days from the date of supply & acceptance of the item. Balance 10% will be paid after completion of Installation, Testing, Commissioning and handing over of the Air Conditioning System against submission of Bank guarantee for 5% of total order value towards performance bank guarantee valid for warranty period subject to bank confirmation.

**For Non – MSME/General Vendors :-**

80% payment will be made within 30 days from the date of supply & acceptance of the item. Balance 20% will be paid after completion of Installation, Testing, Commissioning and handing over of the Air Conditioning System against submission of Bank guarantee for 5% of total order value towards performance bank guarantee valid for warranty period subject to bank confirmation.

**1.2 :- Installation, Testing & Commissioning of 2.0 TR High Wall Split Air Conditioner (i.e. Line Item No.2 to 7 of the BOQ enclosed as Annexure-I) :-**

100% Payment within 30 days after Successful completion of Installation, Testing, Commissioning and Handing over of the Air conditioning System against duly certification by Engineer-in-charge.

**2. Warranty :** One year Warrantee for the Split Air Conditioners supplied from the date of commissioning or 18 months from the date of supply.



### 3. Delivery Schedule :

#### 3.1. Supply of 2.0 TR Split Air Conditioner:

- Items to be supplied for AC & R - ES/Mechanical, BEL Bangalore, within 30 days from the date of Contract Order.

#### 3.2. Installation, Testing & Commissioning of 2.0 TR High Wall Split Air Conditioner:

- As per site condition staggered Installation is required if any.
- Installation & Commissioning of Air Conditioning System to be completed within **30 days** from the date of supply of AC's or site clearance from Engineer-in-charge, whichever is later.

4. The Condenser Coil should be of Copper Material.

5. Agency should submit valid OEM/Manufacturer authorization certificate for the offered make along with technical offer/Bid. If it is not enclosed the offer of those agencies will not be considered for further evaluation.

6. Agency should mention Make/Model of the quoted items.

7. Agency should submit duly filled supplier compliance (Annexure-II) for commercial terms and conditions in the technical bid.

8. Successful tenderer shall furnish the operation & maintenance manuals, Guarantee certificate and test certificates, etc., along with the materials.

9. Submission of tender by the tenderer implies that he has read the instructions and all contents of tender documents and made himself understood/well versed with the scope & specifications called for the tender.

10. Since the evaluation is a total value evaluation basis, agency requires to quote for all the items mentioned in the BOQ. If agency fails to do so in such case, the offers of those agency bids are not considered for further processing.

11. BEL reserves the right to reject any or all the tenders without assigning any reasons.

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