



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
पारेषण व्यापार समूह, नोएडा
Transmission Business Group, Noida
अभियांत्रिकी प्रबंधन / Engineering Management

Doc No- Split AC/01/TBEM/Corrigendum

Corrigendum to TS: TB-4-387-510-051A, Rev. No.-00, for

AIR CONDITIONED KIOSK (AC KIOSK) required for 400kV Switchyard at 5X 800 MW Yadadri TPS, Nalgonda (TELANGANA STATE POWER GENERATION CORPORATION LTD.)

PI No.-81I2000631 dtd 28.02.2020

- **Split AC Specification**- The Split AC required in Kiosk shall be as per given New TS of AC separately (attached with this corrigendum)
- All others parameters shall be as per TS
- This new corrigendum supersedes the previous corrigendum

Vyinehg
24/07/2020

Sanjeev

TECHNICAL SPECIFICATION FOR
AIR CONDITIONING SYSTEM

1.0 GENERAL

- 1.1 This specification covers supply, installation, testing and commissioning and handing over to **TSGENCO Split AC capacity of 3 Ton with all accessories (2 no's each kiosk).**
- 1.2 Controller to be provided between both the air conditioner to switch and controlling and monitoring the AC units for enhancement of life of air conditioner
- 1.3 Controllers shall be provided to control and monitoring of AC units and shall have the following facilities;
- Standby units shall come in to operation automatically when the running main unit fails
 - Main and standby units shall be changed over periodically (cyclic operation)
 - Power Contractor to be provided with A/C for switch off/on from SAS room
 - ♦ 2 Nos Incoming 415V, 3ph supply are coming in Kiosk so automatic changeover to be provided in internal ACDB box
 - ♦ For Split AC kindly follow this technical Specification
 - ♦ Temperature transducer to be provided
- Vijendra*
24/07/2020
- San/er*
- 1.4 Compressor should be Scroll Type Compressor which is Highly Reliable.

2.0 Scope

- 2.1 Required number split AC units of 3TR capacity each complete with air cooled outdoor condensing unit having hermetically sealed compressor and indoor evaporator unit.
- 2.2 Copper refrigerant piping complete with insulation between the indoor and outdoor units as required.
- 2.3 MS Brackets for outdoor condensing units, condensers as required.

3.0 AIR CONDITIONING SYSTEM FOR AC Kiosk Rooms.

- 3.1 Air conditioning system shall be provided in the AC Kiosk rooms used for housing control and protection panels. These Kiosk rooms will be located in the switchyard area and generally unmanned. Therefore, the air-conditioning system shall be rugged, reliable, maintenance free and designed for long life.
- 3.2 Air conditioning system is required for maintaining the temperature below 24°C for sub-station control and protection panels. This shall be achieved using Packaged AC units with free cooling arrangement. The system shall be designed for 24 Hours, 365 Days of the year operation to maintain the inside Switchyard panel rooms temperature for proper operation of the critical equipment.

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- 3.3 Required Features of Various Components:

hermetically sealed Scroll type of reputed make suitable for continuous operation. Compressor should be installed on vibration isolated mountings or manufacturer's recommended approved mounting. Valve shall be provided for charging/topping up of refrigerant. The bidder shall furnish details of their compressor indicating the MTBF, life of compressor and continuous run time of compressor without failure. The contractor shall also furnish details of all accessories i.e. refrigeration system, evaporator coil, condenser coil, evaporator blower, filter, cabinet, indoor supply and return grill etc. during detailed engineering.

4.0

Warranty

All compressors shall have minimum 5 years Warranty from the date of commissioning

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24/02/2020

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General Specification

Rated Cooling Capacity		Btu/hr	36000
Rated Current- Cooling		Amps	6.5(Avg of all phase)
Rated Power Input- Cooling		Watt	3450
Rated EER		Btu/w	10.43
Power Supply		V/Hz/Ph	415 / 50 / 3 Phase
Air Flow Volume - Indoor (H/M/L)		CMH	1380/1200/1000
*Noise Level - Indoor		..dB(A)	52/48/43
Operation			LCD Remote/Automatic changeover
Compressor Type			Highly Reliable Scroll Compressor
Refrigerant Gas			R22
Indoor Unit Dimension (WxHxD)		mm	1260x360x280
Indoor Unit Net / Gross Weight		Kg	21.75/25.5
Outdoor Unit Dimension (WxHxD)		mm	915 X 700 X 360
Outdoor Unit Net / Gross Weight		Kg	67/72
Connecting Pipe		type	Cu-Cu(5/8" & 3/8")
Condenser Coil			Fin & Tube
Moisture Removal		Ltr	3
No of boxes		ODU	1
		Connecting Pipe	
		IDU	
Features	Filter	Anti Dust	Yes
		Cold Catalyst	Yes
	Fin	Hydrophylic Aluminium	Yes
	Copper tubes	Inner Grooved	Yes
	IDU	Self Diagnosis	Yes
		Auto Restart	Yes
	Remote	Sleep Mode	Yes
		Turbo	Yes
		Swing	Yes
		LCD Remote	Yes
		Lock	Yes
		Reset	Yes
		Timer	Yes
	Air Vent	Cross Flow	Yes

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24/07/2020

Sanjay