

हिरण्य एवं प्रमाण
SIGN & DATE

सुपरसेड
INVENTORY
NO.

मासिक सूची संख्या की
अवधि का अंक

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रखाबिकार एवं गोपनीय
इस दस्तावेज में दी गई सूचना भारत भारती लिमिटेड की संपत्ति है। इसका उपयोग
एवं प्रसारण अन्य किसी भी प्रकार से बिना भारत भारती लिमिटेड की अनुमति के नहीं किया जा सकता।

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मासिक सूची संख्या
INVENTORY NO.



उत्पाद क्रय विनिर्देश (हीप : हरिद्वार)

PRODUCT PURCHASE SPECIFICATION

(HEEP: HARIDWAR)

EMT-6847

पृष्ठ 2 का 1

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SPECIFICATION FOR MULTI PHASE POWER ANALYZER

Purpose: - This Multi-phase power analyzer is to be used for measurement of total power of 6pulse/12 pulse, 3-phase, dual winding VFD motor during testing of generators at Test Bed, Block-1.

Technical Specification:-

S.No.	Particulars	Requirement
1	Application	Measurement of total power of dual winding VFD motor. VFD motor can be operated by energizing single winding or both the windings simultaneously depending upon power requirement during generator testing. Each winding is 3-phase. <u>Motor Single Winding rating:</u> 7.1 MW, 4.1 kV, 1270 A, 3000 rpm, 6 pulse operation <u>Motor Dual Winding rating:</u> 12.0MW, 2x4.1 kV, 2x1068 A, 3000rpm, 12pulse operation The instrument should have sufficient channels for both voltage & current to give total power when motor is operated by energizing both the windings simultaneously.
2	Voltage Range	Up to 1000 V AC, DC and True rms (Direct Input)
3	Current Range	-Up to 20 Amp. peak (Direct Input) - External current sensor input for all channel up to 4V
4	Measurement Bandwidth Range	DC, 0.1 Hz. To 1MH z
5	Voltage / Current Frequency Range	1 MHz
6	Power Measurement Accuracy	+/- 0.3 % or better (overall accuracy) up to 1KHz
7	Measurement Parameters	Voltage, Current, Active Power, Reactive Power, Apparent Power, Power Factor, Phase Angle, Frequency, Peak Voltage, Peak Current, Crest Factor, Integration, (WH, Ah, VARH, VAH)

महामंत्र विभाग AGREED DEPTT.	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	नाम NAME	दिनांक एवं हस्ताक्षर SIGNATURE & DATE
			अनुवादक TRANSLATED BY	
			निर्माणकर्ता WORKED BY	Pradeep Uniyal
			जांचकर्ता CHECKED BY	Anupam Chand
			पर्यवेक्षणकर्ता SUPERVISED BY	
			स्वीकृति APPROVED : Shahid Ahmed (AGM/ EMT) Nakul Singh Rana (AGM/ Test Bed)	
REV.NO. 00			निर्माण PREPARED : TEST-BED/EMT	दिनांक DATE: 23/3/18
Dr. 13/11/2017				

शहीद अहमद (ई.एम.टी.)
अपर महाप्रबन्धक (ई.एम.टी.)
AGM (EMT)
बी.एच.ई.एल., हीप, हरिद्वार
BHEL, HEEP, HARIDWAR

CHANGE ADVICE
NO.

ISSUED: TSX



उत्पाद क्रय विनिर्देश (हीप : हरिद्वार)
PRODUCT PURCHASE SPECIFICATION
(HEEP: HARIDWAR)

EMT-6847

पृष्ठ 2 का 2

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प्रति नमोनीय

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S.No.	Particulars	Requirement
8	Display	TFT/LCD Color
9	Harmonic Measurement Function	Instrument should have the facility to measure Harmonic Measurements in Voltage, Current, Individual Harmonic Levels, Harmonic Distortion Rate, and Individual Harmonic Content for the specified Input Channels/Element up-to minimum of 100th Order.
10	Display Update Rate	0.5 sec or better
11	Power Supply	220 VAC, 50 Hz.
12	Additional Standard Features in High Performance Power Analyzer	- Standard USB Communication Interface for Data Logging to PC with requisite software. - Ethernet Communication for Remote Connection - Harmonic Data Values in the form of Bar Chart etc. should be available in the Software supplied with the instrument - Instrument should have facility for feeding CT, PT & shunt ratio in order to facilitate direct display of actual value.
13	Warranty Certificate	Warranty Certificate required for minimum of 12 months from the date of dispatch against any manufacturing defects.
14	Calibration Certificate	Calibration Certificate document traceable to International/National accredited Lab is required
15	Standard accessories	- Voltage Lead Set (one per input module) - Suitable power cord - CD containing all relevant documentation and translated user manuals - USB Host - to - Device interface cable

REV.
NO. 00निर्माणकर्ता
WORKED BY

Pradeep Uniyal

जांचकर्ता
CHECKED BY

Anupam Chand

Pradeep Uniyal
23/03/18

Anupam Chand
23/03/18