

**BITES LIMITED**

(A Government of India Enterprise)

**EASTERN REGION** Central Station Building (Metro), 56, C. R. Avenue (3 Fl.), Kolkata - 700 012

Phone : 2234-8665/8730, Fax : 033-2234-8704, E-mail : erinspn@rites.com



बुक सं Rook No.	सेट Set No.	निरीक्षण प्रमाणपत्र Certificate No.	परिष्कारित तिथि Issue Date	परस्तवित किल्ल सं Offered instt No. 1st				
3021	87	E/ELECSERVICE/EI2120633/RKC/07.03.13-27	20.03.2013	किल्ल सं पारित Passed instt No. 1 <sup>st</sup> & Final				
ठेकेदार Contractor RABINDRA ELECTRICAL WORKS Sitaram Chhak, Jatni - 752050, Khurda Road, Orissa		निर्माता Manufacturer ELECTRO SERVICE (INDIA) Building No.2, Behala Industrial Estate, 620 D. H.Road, Kolkata - 700 034						
संविदा संदर्भ Contract Reference KUR/EL/W/05/Replace/PF-PUI/AG		दिनांक Date 19.12.2012	बिल अदायगी अधिकारी Bill Paying Officer Sr. DFM / East Coast Railway / Khurda Road					
प्रेषिती Consignee SSE (Elect) / P / PUI		क्रय अधिकारी Purchasing Authority Sr. Divisional Electrical Engineer (G) East Coast Railway / Khurda Road						
मद सं Item No.	भंडार का विवरण Description of Stores	आदेशित मात्रा Quantity On order	पहले पस्तवित संचयी मात्रा Cumulative Qty. offered previously	पहले पारित मात्रा Quantity previously passed	अब पस्तवित मात्रा Qty now offered	अब पारित मात्रा Qty now passed	अब रद्द मात्रा Qty now rejected	बकाया मात्रा Qty still due
1	2	3	4	5	6	7	8	9
1	Supply of Battery Charger 3 Phase, 415 Volts, 50 Hz as input supply, 110-135 V, 200 A DC Output	02 NOS	NIL	NIL	02 NOS	02 NOS	NIL	NIL
Quantity Now Passed Two Nos Only								
जांच की गयी इकाईयों की संख्या No. of items checked 01 (ONE)		बुलाने की तारीख Date of call 15.03.2013	कितनी बार गये No. of visits 01 (ONE)	निरीक्षण की तारीखें Date(s) of inspection 20.03.2013				
• सील बंदी मोहर बंदी का स्वरूप और सील मोहर का स्थान • Pattern of sealing/stamping and location of seal/stamp/sticker RITES Hologram S1 No. E3890375 to E3890376 affixed on material Body			सील मोहर का प्रतिरूप Facsimile of seal/stamp/sticker 		निरीक्षण अभियंता Inspecting Engineer राजेश कुमार चौधरी (172) RAJESH KR. CHAUDHARY (172) निरीक्षण अभियंता / Inspecting Engineer राइट्स लिमिटेड / RITES LIMITED पूर्वी क्षेत्र / Eastern Region कोलकाता / Kolkata			
• रद्द करने के कारण Reasons for rejection Not Applicable								

\* जो लागू न हो उसे काट दें\* - पमाणित किया जाता है कि :

- उपरोक्त भंडार का निरीक्षण किया गया (कॉलम 6) पारित किया गया (कॉलम 7) एवं रद्द किया गया (कॉलम 8)
- भंडार निर्धारित समय में अथवा यद्यपि अधिकारी द्वारा बढ़ाए गए समय सीमा में परतुत किये गये
- सामग्री को शीघ्र अति शीघ्र भेजा जाना चाहिये सामग्री भेजने के लिये 30 दिवस तक का पमाण पत्र मान्य है

\* Strike off whichever is not applicable. It is certified that:-

- The above stores were inspected (Col.6) passed (Col 7) & rejected (Col 8)
- The stores were tendered within the time stipulated or as extended by the competent authority.
- The material should be dispatched as early as possible. This certificate is valid for a period of 30 days for dispatch of stores







**RITES LTD**  
(QA DIVISION)  
E. Region

## INSPECTION & TEST PLAN

### Battery Charger

DOC. NO :  
ISSUE NO : 01  
PAGE NO : 01  
EFFECTIVE DATE :  
APPROVED BY :

1. Specification / Drawing : SCR Controlled Float cum Boost Battery Charger  
Input : 3 Phase, 415V ( $\pm 10\%$ ), 50Hz ( $\pm 5\%$ )  
Output : 124VDC (Float), 135VDC (Boost), 200A Current
2. Date of Inspection : 20-03-2013
3. Place of Inspection : Electro Service (India), 353/1 Biren Roy Road (E)  
Kolkata 700 008
4. Size of lot : 2 Nos
5. Size of Sample : 2 Nos
6. Document Verification : a) Internal/ External test certificate for raw material.  
b) Internal test and dimensional check report  
c) Calibration record of gauges, measuring instruments & test equipment
7. Tests/Checks ( to be witnessed/ conducted by inspector )

SL	Parameter	Value Specified	Observations	Remarks
(a)	Output Float Voltage	124V DC	124.5V	OK
(b)	Output Boost Voltage	135V DC	135.6V	OK
(c)	Output Current	200A	197A	OK
(d)	Ripple Voltage	$\leq 3\%$ RMS	0.98VAC = 0.8%	OK
(e)	Regulation	$\pm 0.05$ Volt / Cell in Constant mode, $\pm 2$ Amps in Constant mode	CONSTANT VOLTAGE NO VARIATION	OK
(f)	Efficiency	Better than 80% at nominal input and nominal output from 50% to 100% load.	at 50% LOAD Input R-N= 4.45KW, Y-N= 4.39KW, B-N= 4.76KW Output 125V X 100A = 12.5 KW Efficiency=91.9% at 100% LOAD Input R-N= 8.96KW, Y-N= 8.92KW, B-N= 8.74KW Output 125V X 197A = 24.625 KW Efficiency=92.48%	SATISFACTORY RESULT
(d)	Controls	Float Voltage, Boost Voltage & Current setting potentiometer	WORKING SATISFACTORY	OK
(e)		Charger ON/OFF, Float / Boost Auto	WORKING SATISFACTORY	OK
(f)		Fault Reset	WORKING SATISFACTORY	OK

Name & signature of IE

राजेश कुमार चौधरी (172)  
RAJESH KR. CHAUDHARY (172)

Inspecting Engineer  
राजेश लिमिटेड / RITES LIMITED

Eastern Region  
कोलकाता / Kolkata



**Note:**

- i) Sampling shall be done according to IS:2500 - 2000 Pt I single sampling plan (indicated) unless inspecting Engineer mentioned otherwise
- ii) In case a quality plan is mentioned in the Purchase Order, Inspecting Engineer shall also take the same into consideration during inspection, and mention the same in Inspection Records.
- iii) In case purchase order mentions different drawing/specification, then that will be applicable





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E. Region

**INSPECTION & TEST PLAN**  
**BATTERY CHARGER**

**DOC. NO:**  
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DIMENSIONS ( in mm )

S No.	Parameter	Specified	Observed						
1	WIDTH (mm)	1000	1002	1001					
2	DEPTH (mm)	700	702	702					
3	HEIGHT (mm)	1800	1801	1802					
4	MOUNTING DIMENSION (mm)	800 X 670	801 X 670	800 X 671					
5	MOUNTING HOLE DIMENSION (mm)	14	14.5	14.5					
6	BASE PLATE SIZE	600 x 470 470 x 300	600 x 471 471 x 301	601 x 471 471 x 301					
7									
8									
9									
10									

Name & signature of IIE

श्रीधर शर्मा चौधरी (172)

RAJESH KR. CHAUDHARY (172)

श्रीधर शर्मा चौधरी / RAJESH KR. CHAUDHARY

श्रीधर शर्मा चौधरी / RAJESH KR. CHAUDHARY

पूर्व क्षेत्र / Eastern Region

कोलकाता / Kolkata





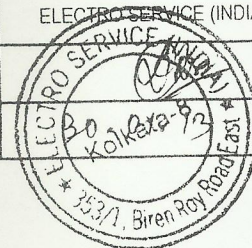


HEAT RUN INSPECTON REPORT FOR BATTERY CHARGER

CLIENT	RABINDRA ELECTRICALS WORKS		
PROJECT	NA		
CHARGER TYPE			
SECTION UNDER TEST	FLOAT + BOOST	DRAWING NO.	D1352002
		INPUT VOLTAGE	415V, ±10%
PANEL SERIAL NO.	1301002	OUTPUT VOLTAGE	135 V DC
DATE OF TESTING	30.01.2013	OUTPUT CURRENT	200A

Time	Ambient Temp. (°C)	Cubicle Temp (°C)	Rise (°C)	Thyristor (4) (°C)	Rise (°C)	Thyristor (6) (°C)	Rise (°C)	Transformer (R) (°C)	Rise (°C)	Blocking Diode (°C)	Rise (°C)	Choke (°C)	Rise (°C)
10.30AM	20	20	0	20	0	20	0	20	0	20	0	20	0
11.30AM	20	42	22	49	29	47	27	51	31	64	44	49	29
12.30PM	21	46	25	59	38	58	37	65	44	84	63	60	39
1.30PM	21	48	27	62	41	61	40	77	56	92	71	65	44
2.30PM	21	48	27	66	45	65	44	94	73	113	92	73	52
3.30PM	21	48	27	68	47	65	44	94	73	118	97	73	52
4.30PM	21	44	23	71	50	70	49	105	84	114	93	73	52
5.30PM	20	43	23	71	51	70	50	106	86	114	94	74	54
6.30PM	20	43	23	71	51	69	49	106	86	114	94	74	54

TESTED BY	Jagadish Das	WITNESSED BY	Chandan Dhar
ORGANIZATION	ELECTRO SERVICE (INDIA)	ORGANIZATION	ELECTRO SERVICE (INDIA)
SIGNATURE		SIGNATURE	
DATE		DATE	



Issue No : 01  
Issue Date : 07-2007



राजेश कुमार चौधरी (172)  
RAJESH KR. CHAUDHARY (172)  
निरीक्षण अभियन्ता / Inspecting Engineer  
राइट्स लिमिटेड / RITES LIMITED  
पूर्वी क्षेत्र / Eastern Region  
Kolkata



*Jagadish*  
8/14