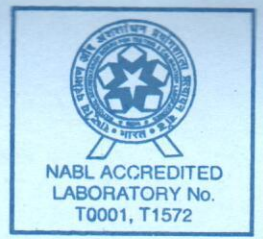




सत्यमेव जयते



NABL ACCREDITED
LABORATORY No.
T0001, T1572

फार्म स. : टी आर एफ-२००८

Form No. : TRF-2008

प्रमाणपत्र स.

ई.क्ष.प.प्र. (उ.) ६०(४)-२०००

ERTL(N)/90(4)-2K 12-13/00958

दिनांक : / /

Date : 04/01/2013

परीक्षण रिपोर्ट TEST REPORT



॥ गुणोत्कर्ष समृद्धिः ॥



भारत सरकार

Government of India

संचार व सूचना प्रौद्योगिकी मंत्रालय

Ministry of Communications & Information Technology

सूचना प्रौद्योगिकी विभाग

Department of Information Technology

मानकीकरण परीक्षण एवं गुणवत्ता प्रमाणन निदेशालय

Standardisation Testing and Quality Certification Directorate

इलेक्ट्रानिकी क्षेत्रीय परीक्षण प्रयोगशाला (उत्तर)

ELECTRONICS REGIONAL TEST LABORATORY (NORTH)

(एन एस आई प्रयोगशाला आई ई सी क्यू के तहत, आई ई सी ई ई - सी वी तथा एन ए बी एल द्वारा प्रत्यापित प्रयोगशाला)

[NSI Laboratory under IECQ, IECCE-CB & NABI Accredited Laboratory]

एस-ब्लाक, ओखला औद्योगिक क्षेत्र फेज-II, नई दिल्ली ११००२०

भारत

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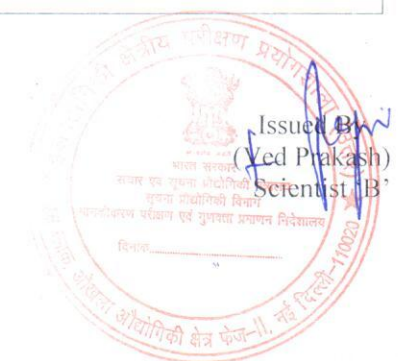


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TEST REPORT		DATE OF RECEIPT OF ITEM	DATE OF COMPLETION OF TESTING	PAGE NO.
NUMBER	DATE			1 of 4
ERTL(N)/90(4)-(2012-13)/C0954	04/01/2013	18/12/2012	04/01/2013	
1. Service Request Form	Number	12LC0878		
	Date	18/12/2012		
2. Customer	Name	M/s. Enersol Systems Pvt Ltd		
	Address	Plot No. 467 , Sector 37, Pace city-II ,Gurgaon.		
3. Manufacturer (As declared by customer)	Name	M/s. Enersol Systems Pvt Ltd		
	Address	Plot No. 467 , Sector 37, Pace city-II ,Gurgaon.		
4. Description of Item	Nomenclature	AC Static 3 Phase, 4 wire, Multifunctional meter, I/p 80 to 600V(Ref. V - 240V), 50mA to 6A(Basic Current 5A), CI 1, CT/PT Ratio :Programmable, Meter constant 1600 pulse/Kwh, Polycarbonate Case		
	Make /Trade Mark	Enersol		
	Model No./Type No.	MFR 4210		
	Number of sample/ Serial No.	0No. 22501		
	Year of Manufacture	12/2012		
	Condition	Good		
5. Name & address where testing carried out (In-house/Subcontracting/Single window service/On-site/Using Customer Facilities)	ELECTRONICS REGIONAL TEST LABORATORY(N) Okhla Industrial Area Phase-II, New Delhi-110020.			
6. Applicable standard/ specification	IS:13779:1999(Limits of error, CL 11.1)			
7. Test Method/ Operating Procedure	IS:13779:1999			
8. Environmental Conditions	Temperature	27±2°C		
	Relative Humidity	45-75%		
9. No. of Annexures (If any)	Nil			


Tested By
(H.Lal)
Scientist 'D'


Approved By:
Ashok Kumar
Scientist 'D'
(Authorized Signatory)





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S.P. Issue No. : 02, Jan. 2010



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LABORATORY Nos.
T0001, T1572
C0001, C0177, C0178

TEST REPORT		PAGE NO.
NUMBER	DATE	2 of 4
ERTL(N)/90(4)-(2012-13)/C0954	04/01/2013	

10. Details of Major Equipment used:

Sl. No.	Nomenclature	Make	Model/ Type No.	Calibration Valid up to
1	Test Bench	ZERA	COM 3003	15/03/2013

Tested By
(H.Lal)
Scientist 'D'



Issued By
(Ved Prakash)
Scientist 'B'



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नई दिल्ली / New Delhi-110020

S.P. Issue No. : 02, Jan. 2010



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LABORATORY Nos.
T0001, T1572
C0001, C0177, C0178

TEST REPORT		PAGE NO.
NUMBER	DATE	3 of 4
ERTL(N)/90(4)-(2012-13)/C0954	04/01/2013	

11. Test Results:

Sl. No.	Clause No.	Parameter	Nominal Value/ Requirements	Measured Values/ Observations	Remarks
1.	---	Functional Test At rated voltage & rated current	Shall operate satisfactorily & register the energy supplied.	In-compliance	Satisfactory
3.	---	Test of accuracy requirements			
3.1	11.1	Limit of error due to variation of current at rated voltage Table 15 a) Single Phase Meters and Poly Phase meters with Balance Load -At unity PF: i) $0.05 I_b \leq I_b \leq 0.1 I_b$ ii) $0.1 I_b \leq I_b \leq I_{max}$ - At 0.5 P.F. (lag): i) $0.1 I_b \leq I_b \leq 0.2 I_b$ ii) $0.2 I_b \leq I_b \leq I_{max}$ Table 16 b) Unbalance Load Polyphase Meters Carrying a Single phase load, but with balanced Polyphase voltages applied to voltage circuits) -At unity PF i) $0.1 I_b \leq I_b \leq I_{max}$ -At 0.5 PF Lag i) $0.2 I_b \leq I_b \leq I_{max}$	Shall not exceed		Satisfactory
			$\pm 1.5\%$	0.20% to 0.25%	
			$\pm 1.0\%$	0.18% to 0.25%	
			$\pm 1.5\%$	0.31% to 0.39%	
			$\pm 1.0\%$	-0.16% to 0.31%	
			$\pm 1.5\%$	0.23% to 0.27%	
			$\pm 1.0\%$	0.27% to 0.40%	
					Satisfactory
			$\pm 2.0\%$	0.11 to 0.34%	
			$\pm 2.0\%$	-0.22 to 0.27%	

Tested By
(H.Lal)
Scientist 'D'

Issued By
(Ved Prakash)
Scientist 'B'



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S.P. Issue No. : 02, Jan. 2010




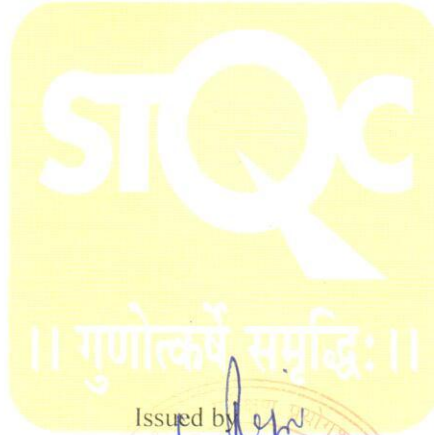
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TEST REPORT		PAGE NO.
NUMBER	DATE	4 of 4
ERTL(N)/90(4)-(2012-13)/C0954	04/01/2013	

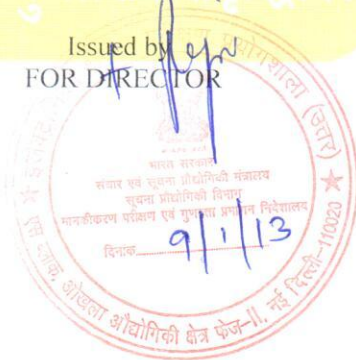
12. Remarks:


- This Test Report pertains to item tested for the parameter(s) mentioned in the test results at Sl. No.11.
- The item meets the requirements of the applicable standard / specification IS: 13779/1999 (Limits of error test, CL 11.1) .
- Uncertainty has been taken into consideration while declaring the results of the parameters in the test report.


02/01/13
Tested By
(H.Lal)
Scientist 'D'



Issued by
FOR DIRECTOR




7/1/13
Approved By
(Ashok Kumar)
Scientist 'D'
(Authorized Signatory)