Certificate No.: 2013F15-10-000578

SHANGHAI INSTITUTE OF MEASUREMENT AND TESTING TECHNOLOGY
NATIONAL CENTER OF MEASUREMENT AND TESTING FOR EAST CHINA

CALIBRATION CERTIFICATE

Customer	Shanghai Standardel Co.Ltd.
Address of Customer	/
Name of Instrument	DIN Rail Three Phase Energy Analyzer
Manufacturer	Shanghai Standardel Co.Ltd.
Model/Specification	SDT670V 3×220/380V 3×1.5(6)A
No. of Instrument	6404125600327
Instrument Accuracy	Active Energy Class: 0.5

Approved by / Functions 朱剑平 室主任

(Calibration Official Seal) Checked by 范宜锋

Calibrated by 周碧红

Date for calibrated 2013 Year 11 Month 06 Day

Address: No.1500 Zhangheng Road,Shanghai(Headquarters) Tel:021-38839800 Fax:021-50798390 Post Code: 201203

Inquire line: 800-820-5172 Tel. for complaint: 021-50798262

Partly using this certificate will not be admitted unless allowed by SIMT.

Results of calibration and additional explanation（continued page）:

Active Energy Error(%):

Input state				Percentage of Error at Specified Load Current (%)						
U_n(V)	I_n(A)	phase	cosΦ	I_{max}	0.5 I_{max}	I_n	0.1 I_n	0.05 I_n	0.02 I_n	0.01 I_n
3×220	3×1.5	ABC	1.0	-0.00	+0.00	+0.00	----	+0.00	----	-0.10
			0.5L	-0.25	-0.10	-0.05	-0.00	----	-0.10	----
			0.8C	+0.10	+0.05	+0.05	+0.05	----	-0.05	----
3×220	1.5	A	1.0	+0.05	----	+0.05	----	-0.10	----	----
			0.5L	-0.25	----	-0.10	-0.20	----	----	----
3×220	1.5	B	1.0	+0.00	----	+0.05	----	+0.35	----	----
			0.5L	-0.20	----	+0.00	+0.35	----	----	----
3×220	1.5	C	1.0	+0.10	----	+0.10	----	-0.10	----	----
			0.5L	-0.10	----	+0.00	-0.10	----	----	----

End of the calibration

The number of the Certificate of Metrological Authorization to the Legal Metrological Verification Institution is No.（2012）01039/ No.（2012）01019

The number of the certificate accredited by CNAS is No.L0134

JJG 596-2012 Verification Regulation of Electrical Energy Meters With Electronics

Main measurement standards used in this calibration:

Name/Model	Number	Certificate No./Due date	Measurement range/accuracy class or maximum permissible errors or uncertainty of measurement
Verification Equipment for Energy Meter	QF66	[2010] No.189 2014.12.30	Single /Three-phase: (57.7~380)V,(0.005~100)A Active energy: class 0.05; reactive energy: class 0.1
Verification Equipment for Energy Meter YC-1893R	0311016	DLdr2013-0045 2014.01.09	3×(57.7~380)V 3×(0.05~100)A class 0.01 3×(0.05~0.005)A/ class 0.02
/	/	/	/

Quantity values of above measurement standards used in this calibration are traced to those of the national primary standards in the P.R. China.

Location and environmental condition for the calibration:

Location: Room 209#, Electro-build of SIMT

Ambient temperature: 20 ℃; humidity: 51 %RH; Others: /

Expanded uncertainty:

U_{rel}=0.06% (k=2)

Results of calibration and additional explanation:

According to the customer's request, this calibration just measures the percentage error of active energy.

The data are valid only for the instrument(s).