



校准证书

CALIBRATION CERTIFICATE

证书编号:
Certificate No.



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委托单位 Applicant

名称: SGS Belgium N.V.
Name
地址: Riverside Business Park, Bld Internationelelaan 55 Building A, BE-1070 Brussels
Address

计量器具 Measuring instruments

名称: Test for switches intended for self ballasted loads
Name
型号规格: SBLL-3P20A
Model/Type
编号: 0219FZ01
Serial No.
制造商: LISUN GROUP
Manufacturer

接收日期 2019 年 03 月 27 日
Date of receipt Year Month Day
校准日期 2019 年 03 月 27 日
Date of calibration Year Month Day



发证单位 (专用章)
Issued by (stamp)

批准
Approved by

万西文

核验
Inspected by

汤子健

校准
Calibrated by

万西文





说明

DIRECTIONS



中国认可
国际互认
校准
CALIBRATION
CNAS L1093

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1. 本中心是中国机械工业联合会广州设立的计量校准机构，证书号为：机量(2018) 03 号。也是经中国合格评定国家认可委员会认可的校准实验室，证书号为：CNAS L1093。

This laboratory is the metrology and calibration institution set up by the China Machinery Industry Federation in Guangzhou. The certificate number is (2018) 03. This laboratory is also accredited by China National Accreditation Service for Conformity Assessment (CNAS). The certificate number is CNAS L1093.

2. 本中心所出具的数据均可溯源到国家计量基(标)准。

All data issued by this laboratory are traceable to national primary standards(national standards).

3. 本次校准的环境条件：

Environmental conditions in the calibration

地点：委托方实验室 (Laboratory of the client)
place

温度：20 °C 相对湿度：60 %
Temperature R.H.

4. 本次校准参考的技术文件：

Reference documents for the calibration

JJF1491-2014 数字式交流电参数测量仪校准规范
C.S. for Digital AC Electrical Parameters Meter

JJG (军工) 68-2015交流数字电流表检定规程
V. R. of AC Digital Current Meter

5. 本次校准所使用的主要工作标准：

Main working standards used in the calibration

仪器名称/型号 Name of working standards / Model	机身号 Serial No.	技术特征 Technical characteristics	证书号/有效期 Certificate No./ Due date
数字荧光示波器 Digital phosphor oscilloscope DP04102B	C022755	±1.5%	WWM201801093 2019-12-24
三相多功能标准表 Multi-purpose standard meter of three- phase CL3112	2011103	±0.02%	DBN201813265 2019-07-11

注： 1 证书无校准单位公章无效。

Note: The certificate is invalid without the official stamp of our laboratory.

2 本证书的校准结果仅对所校准样品有效，并且只与受校准的项目有关。

The results of the certificate is valid to the calibrated sample, and relate only to the items calibrated.

3 未经本中心书面批准，不得部分复制此证书。

This certificate shall not be reproduced except in full, without the written approval of our laboratory.

4 带“★”项为未经CNAS认可的项目。

“★” item cannot be accredited by CNAS.




校准结果

RESULTS OF CALIBRATION



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1 外观及工作正常性检查: 符合要求
Appearance and Functions checked: Pass

2 电压(Voltage):

标称值 Nominal Value	实际值 Actual Value	误差 Error	允许误差 MPE	结论 Conclusion
(V)	(V)	(V)	(V)	Pass/Fail
250.0	250.11	-0.11	±12.5	Pass

3 功率(Power):

工位 Station	标称值 Nominal Value	实际值 Actual Value	误差 Error	允许误差 MPE	结论 Conclusion
	(W)	(W)	(W)	(W)	Pass/Fail
1#	100.0	100.15	-0.15	±5.0	Pass
	150.0	150.20	-0.20	±7.5	Pass
	200.0	200.23	-0.23	±10.0	Pass
	250.0	250.25	-0.25	±12.5	Pass
	350.0	350.28	-0.28	±17.5	Pass
2#	100.0	100.11	-0.11	±5.0	Pass
	150.0	150.17	-0.17	±7.5	Pass
	200.0	200.23	-0.23	±10.0	Pass
	250.0	250.28	-0.28	±12.5	Pass
	350.0	350.35	-0.35	±17.5	Pass
3#	100.0	100.18	-0.18	±5.0	Pass
	150.0	150.24	-0.24	±7.5	Pass
	200.0	200.28	-0.28	±10.0	Pass
	250.0	250.31	-0.31	±12.5	Pass
	350.0	350.39	-0.39	±17.5	Pass

4 峰值电流(I_{peak}):

工位 Station	标称值 Nominal Value	实际值 Actual Value	误差 Error	允许误差 MPE	结论 Conclusion
	(A)	(A)	(A)	(A)	Pass/Fail
1#	108	106.6	+1.4	±5.4	Pass
	142	142.9	-0.9	±7.1	Pass
	170	171.6	-1.6	±8.5	Pass
	192	192.3	-0.3	±9.6	Pass
	223	221.3	+1.7	±11.2	Pass



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工位 Station	标称值 Nominal Value	实际值 Actual Value	误差 Error	允许误差 MPE	结论 Conclusion
	(A)	(A)	(A)	(A)	Pass/Fail
2#	108	106.9	+1.1	±5.4	Pass
	142	143.0	-1.0	±7.1	Pass
	170	172.3	-2.3	±8.5	Pass
	192	192.9	-0.9	±9.6	Pass
	223	222.4	+0.6	±11.2	Pass
3#	108	107.2	+0.8	±5.4	Pass
	142	142.7	-0.7	±7.1	Pass
	170	171.9	-1.9	±8.5	Pass
	192	193.2	-1.2	±9.6	Pass
	223	222.3	+0.7	±11.2	Pass

5 I²t:

工位 Station	标称值 Nominal Value	实际值 Actual Value	误差 Error	允许误差 MPE	结论 Conclusion
	(A ² t)	(A ² t)	(A ² t)	(A ² t)	Pass/Fail
1#	2.8	2.75	+0.05	±0.140	Pass
	5.5	5.38	+0.12	±0.275	Pass
	9	8.71	+0.29	±0.450	Pass
	13	12.65	+0.35	±0.650	Pass
	20	19.49	+0.51	±1.000	Pass
2#	2.8	2.74	+0.06	±0.140	Pass
	5.5	5.35	+0.15	±0.275	Pass
	9	8.75	+0.25	±0.450	Pass
	13	12.68	+0.32	±0.650	Pass
	20	19.53	+0.47	±1.000	Pass
3#	2.8	2.73	+0.07	±0.140	Pass
	5.5	5.33	+0.17	±0.275	Pass
	9	8.72	+0.28	±0.450	Pass
	13	12.66	+0.34	±0.650	Pass
	20	19.55	+0.45	±1.000	Pass

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6 合闸角度(Trigger angle):

工位 Station	标称值 Nominal Value	实际值 Actual Value	误差 Error
1#	90°	89.9°	+0.1°
2#	90°	89.7°	+0.3°
3#	90°	89.9°	+0.1°

说明(Note):

1 测量结果的扩展不确定度:

The expanded uncertainty related to measurd result:

1. 电压(Voltage): $U_{rel}=1.0\%$;
 2. 功率(Power): $U_{rel}=1.5\%$;
 3. 峰值电流(I_{peak}): $U_{rel}=1.6\%$
 4. I^2t : $U_{rel}=1.7\%$;
 5. 合闸角度(Closed Angle): $U=0.5^\circ$;
- 包含因子(Coverage factor): $k=2$

2 复校时间间隔, 建议不超过壹年。

The interval of calibration is advised to be within one year.

