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CHPTL

XIHARI

No. 231346G

检 验 报 告

TEST REPORT

试品型号: HXGN□-PT
TYPE
试品名称: 环保气体全绝缘全密封金属封闭环网开关设备
DESIGNATION ENVIRONMENT-FRIENDLY GAS FULLY INSULATED FULLY SEALED METAL-ENCLOSED RING SWITCHGEAR
委托单位: 厦门宏发电气有限公司
APPLICANT XIAMEN HONGFA ELECTRIC CO., LTD.
制造单位: 厦门宏发电气有限公司
MANUFACTURER XIAMEN HONGFA ELECTRIC CO., LTD.
检验类别: 型式试验 (绝缘及短路性能)
CLASSIFICATION TYPE TEST (DIELECTRIC AND SHORT-CIRCUIT PERFORMANCE)

西安高压电器研究院股份有限公司

XI'AN HIGH VOLTAGE APPARATUS RESEARCH INSTITUTE CO., LTD.



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注: 对高压开关类型式试验报告包含 6 种基本形式:

note: The six basic type test reports for high-voltage switchgear and controlgear are as follows:

——完整型式试验报告 Type Test Report of Complete Type Test

——绝缘性能型式试验报告 Type Test Report of Dielectric Performance



——温升性能型式试验报告 Type Test Report of Temperature Rise Performance

——短路/开断和关合性能型式试验报告 Type Test Report of Short-Circuit / Making and Breaking Performance

——开合性能型式试验报告 Type Test Report of Switching Performance

——内部电弧性能型式试验报告 Type Test Report of Internal Arc Performance

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中国电力科学研究院(CEPRI)

China Electrical Power Research Institute (CEPRI)

辽宁高压电器产品质量检测有限公司(AQTC)

Liaoning High Voltage Apparatus Quality Test Co., Ltd. (AQTC)

沈阳变压器研究院股份有限公司变压器实验室(STRI)

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电力工业无功补偿成套装置质量检验测试中心(PRCIQTC)

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试品基本信息

Description of the test object

型号名称: HXGN□-PT 环保气体全绝缘全密封金属封闭环网开关设备
Type and Designation: Environment-Friendly Gas Fully Insulated Fully Sealed Metal-Enclosed Ring Switchgear
委托单位: 厦门宏发电气有限公司
Applicant: Xiamen Hongfa Electric Co., Ltd.
地址: 厦门市海沧区东孚西二路 15 号 (361028)
Address: No.15, Dongfuxier Road, Haicang District, Xiamen (361028)
电话 Tel: 0592-5996731 传真 Fax: 0592-5996732
制造单位: 厦门宏发电气有限公司
Manufacturer: Xiamen Hongfa Electric Co., Ltd.
地址: 厦门市海沧区东孚西二路 15 号 (361028)
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制造单位规定的试品主要技术数据 Main technical data assigned by the manufacturer:

额定电压 Rated voltage kV	12	
额定频率 Rated frequency Hz	50	
额定电流 Rated current A	630	
额定短时耐受电流(主回路) Rated short-time withstand current(main circuit) kA	20	✓
额定峰值耐受电流(主回路) Rated peak withstand current(main circuit) kA	50	✓
额定短路持续时间(主回路) Rated duration of short-circuit(main circuit) s	4	✓
额定短时耐受电流(接地回路) Rated short-time withstand current(earthing circuit) kA	17.4	✓
额定峰值耐受电流(接地回路) Rated peak withstand current(earthing circuit) kA	43.5	✓
额定短路持续时间(接地回路) Rated duration of short-circuit(earthing circuit) s	2	✓
额定短时工频耐受电压 Rated short-duration power-frequency withstand voltage kV	42	✓
额定雷电冲击耐受电压 Rated lightning impulse withstand voltage kV	75	✓
额定短时工频耐受电压(断口) Rated power-frequency withstand voltage(across the open switching device) kV	48	✓
额定雷电冲击耐受电压(断口) Rated lightning impulse withstand voltage(across the open switching device) kV	85	✓



防护等级 Degree of protection	外壳 Enclosure: IP41、IK10	✓
干燥空气气体的最低功能压力(20℃表压) Min. function pressure of dry air (meter pressure at 20℃) MPa	0	
干燥空气气体的额定压力(20℃表压) Rated pressure of dry air (meter pressure at 20℃) MPa	0.02	
出厂日期及编号 Manufacture date and serial number	2023-07、G202307001	
注 1: 以上信息和数据由委托单位/制造单位提供, 本实验室不对其准确性负责。 Note1: The above information and data are provided by Applicant/Manufacturer and the laboratory is not responsible for its accuracy. 注 2: “✓” 表示该额定值在本检验报告中已得到验证。 Note2: “✓” This rating has been proved by the tests in this report.		



检验结论

Conclusions

型号名称: HXGN□-PT 环保气体全绝缘全密封金属封闭环网开关设备
Type and Designation: Environment-Friendly Gas Fully Insulated Fully Sealed Metal-Enclosed Ring Switchgear
委托单位: 厦门宏发电气有限公司
Applicant: Xiamen Hongfa Electric Co., Ltd.
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依据标准 Standards for Test Performance: GB/T 3906-2020, DL/T 404-2018

实施的项目 Test have been performed:

序号 Serial	项目 Items	参数 Parameters	判定标准 Standards for Verdict	结果 Result
1	工频耐受电压试验 Power frequency withstand voltage tests	相间及对地 Between phases and to earth: 42kV 1min 断口 Across the opening device: 48kV 1min	GB/T 3906-2020 7.2 DL/T 404-2018 6.2	符合 Satisfied
2	雷电冲击耐受电压试验 Lightning impulse withstand voltage tests	相间及对地 Between phases and to earth: 75kV 断口 Across the opening device: 85kV	GB/T 3906-2020 7.2 DL/T 404-2018 6.2	符合 Satisfied
3	辅助和控制回路的绝缘试验 Dielectric tests on auxiliary and control circuits	2kV 1min	GB/T 3906-2020 7.2 DL/T 404-2018 6.2	符合 Satisfied
4	局部放电测量 Partial discharge measurement	13.2kV, $\leq 10\text{pC}$	GB/T 3906-2020 7.2 DL/T 404-2018 6.2	符合 Satisfied
5	防护等级验证 Verification of the protection	外壳(Enclosure): IP41, IK10	GB/T 3906-2020 7.7 DL/T 404-2018 6.7	符合 Satisfied



序号 Serial	项目 Items	参数 Parameters	判定标准 Standards for Verdict	结果 Result
6	短时耐受电流和峰值 耐受电流试验 Short-time withstand current and peak withstand current tests	主回路及接地开关 Main circuit and ES: 20kA 4s 峰值(peak): 50kA 接地连接 Earthing circuit: 17.4kA 2s 峰值(peak): 43.5kA	GB/T 3906-2020 7.6 DL/T 404-2018 6.6	符合 Satisfied
7	接地开关短路关合能 力试验 Earthing switch short-circuit making capacity tests	12kV 50kA E1 级 2 次 Times	GB/T 3906-2020 7.101 DL/T 404-2018 6.101	符合 Satisfied
8	机械试验 Mechanical tests	联锁检查 Interlocks check	GB/T 3906-2020 7.102 DL/T 404-2018 6.102	符合 Satisfied
9	密封试验 Tightness test	年泄露率 Leakage rate: ≤0.01%/ Y	GB/T 3906-2020 7.8 DL/T 404-2018 6.8	
10	回路电阻测量 Measurement of the resistance of circuits	/	GB/T 3906-2020 7.4 DL/T 404-2018 6.4	符合 Satisfied

注 Note:

- 1) 序号 1~9 项对应的分包试验为有能力分包。1~9 (test items) are within the authorized testing scope of the laboratory.
- 2) 序号 1~9 试验在分包实验室海检检测有限公司实施(CNAS L10793 CMA 180008344069; 地址: 山东省青岛市即墨区鳌山卫街道齐云山一路 118 号)。No. 1~9 tests are performed in Marine Inspection&testing Co., Ltd. (CNAS L10793 CMA 180008344069; Address: No.118,Qiyunshan 1st Road,Aoshanwei Street,Jimo district,Qingdao,Shandong).

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