**表12.1 同步发电机试验报告**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 设备名称 |  | | | | | | | | |
| 1、设备参数 | | | | | | | | | |
| 型号 |  | | | 型号 | |  | | | |
| 额定电压(KV) |  | | | 额定电压(KVA) | |  | | | |
| 额定转速 |  | | | 额定电流 (A) | |  | | | |
| 绝缘等级 |  | | | 额定频率(Hz) | |  | | | |
| 空载励磁电压 |  | | | 冷却方式 | |  | | | |
| 额定励磁电压 |  | | | 空载励磁电流 | |  | | | |
| 接法 |  | | | 产品编号 | |  | | | |
| 出厂日期 |  | | | 制造厂 | |  | | | |
| 2、试验依据 | | | | | | | | | |
| 试验采用标准、设计技术参数及合同要求 | | | | | | | | | |
| 3、定子绕组绝缘电阻和吸收比或极化指数 | | | | | | | | | |
| 绕组绝缘(MO) | A相 | | B相 | | | | | C相 | |
| R15s |  | |  | | | | |  | |
| R60s |  | |  | | | | |  | |
| R10m |  | |  | | | | |  | |
| 吸收比 |  | |  | | | | |  | |
| 吸化指数 |  | |  | | | | |  | |
| 绕组对汇水管 |  | |  | | | | |  | |
| 水平衡系数 |  | |  | | | | |  | |
| 汇水管对地 | 环境温度 ℃ 温度：%水的导电度：μS/cm | | | | | | | | |
| 试验环境 | 试验仪器及仪表名称、规格、编号，仪表使用有效期 | | | | | | | | |
| 试验人员 |  | | | | 试验日期 | | | 年 月 日 | |
| 4、定子绕组直流电阻 |  | | | | | | | | |
| 直流电阻(Ω) | 出厂值(\_℃) | 实测值 | 折算至出厂温度值 | | | 变化误差(%) | | | 相间误差 (%) |
| A相 |  |  |  | | |  | | |  |
| B相 |  |  | | |  | | |
| C相 |  |  | | |  | | |
| 试验环境 | 环境温度：℃ | | | | | | | | | |
| 试验设备 | 试验仪器及仪表名称、规格、编号 | | | | | | | | | |
| 试验人员 |  | | | | 试验日期 | | 年 月 日 | | | |

**续表12.1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5、定子绕组直流耐压试验和漏电流测量 | | | | | | | | | | | | | | | | |
| 试验电压  漏电电流 | | | | 0.5Un | 1Un | | | 1.5Un | | 2Un | | | 2.5Un | | | 3Un |
| 定子(μA) | | A | |  |  | | |  | |  | | |  | | |  |
| B | |  |  | | |  | |  | | |  | | |  |
| C | |  |  | | |  | |  | | |  | | |  |
| 汇水管(mA) | | A | |  |  | | |  | |  | | |  | | |  |
| B | |  |  | | |  | |  | | |  | | |  |
| C | |  |  | | |  | |  | | |  | | |  |
| 试验依据 | | | | 试验采用标准、设计技术参数及合同要求 | | | | | | | | | | | | |
| 试验环境 | | | | 环境温度 ℃ 温度：%水的导电度：μS/cm | | | | | | | | | | | | |
| 试验设备 | | | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | | |
| 试验人员 | | | |  | | | | | | 试验日期 | | | 年 月 日 | | | |
| 6、定子绕组交流耐压试验 | | | | | | | | | | | | | | | | |
| 相别 | 试前绝缘(MΩ) | | | 试后绝缘(MΩ) | | 额定电压(V) | | | 试验电压(KV) | | 电容电流(mA) | | | | 试验时间(min) | |
| A |  | | |  | |  | | |  | |  | | | |  | |
| B |  | | |  | |  | | |  | |  | | | |  | |
| C |  | | |  | |  | | |  | |  | | | |  | |
| 试验环境 | | | | 环境温度 ℃ 温度: % | | | | | | | | | | | | |
| 试验设备 | | | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | | |
| 备注 | | | |  | | | | | | | | | | | | |
| 试验人员 | | | |  | | | | | | 试验日期 | | | 年 月 日 | | | |
| 7、转子绕组的绝缘电阻 | | | | | | | | | | | | | | | | |
| 停止时(MΩ) | | | | 超速试验前(MΩ) | | | | | | | | 超速试验后(MΩ) | | | | |
|  | | | |  | | | | | | | |  | | | | |
| 测温元件( ) (MΩ) | | | |  | | | 测温元件( )(MΩ) | | | | |  | | | | |
| 试验环境 | | | | 环境温度 ℃ 温度: % | | | | | | | | | | | | |
| 试验设备 | | | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | | |
| 试验人员 | | | |  | | | | | | 试验日期 | | | 年 月 日 | | | |
| 8、转子绕组的直流电阻 | | | | | | | | | | | | | | | | |
| 直流电阻(Ω) | | | 出厂值 (\_\_℃) | | | 实测值 | | | | 折算实测值 | | | | 变化误差(%) | | |
|  | | |  | | | |  | | | |  | | |
| 试验环境 | | | 环境温度 ℃ | | | | | | | | | | | | | |
| 试验设备 | | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | | | |
| 试验人员 | | |  | | | | | | | 试验日期 | | | 年 月 日 | | | |

**续表12.1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9、转子绕组的交流耐压试验 | | | | | | | | | | | | | |
| 试前绝缘(MΩ) | 试后绝缘(MΩ) | | 额定电压(V) | | | 试验电压(KV) | | | 试验时间(min) | | | | 备注 |
|  |  | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| 试验环境 | | 环境温度 ℃ 温度: % | | | | | | | | | | | |
| 试验设备 | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | |
| 试验人员 | |  | | | | | | 试验日期 | | 年 月 日 | | | |
| 10、励磁回路连同所连接设备的绝缘电阻，交流耐压试验 | | | | | | | | | | | | | |
| 试前绝缘(MΩ) | | 试后绝缘(MΩ) | | 试验电压(KV) | | | | 试验时间(min) | | | | 备注 | |
|  | |  | |  | | | |  | | | |  | |
| 试验环境 | | 环境温度℃温度: % | | | | | | | | | | | |
| 试验设备 | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | |
| 试验人员 | |  | | | | | | 试验日期 | | 年 月 日 | | | |
| 11、绝缘轴承和转子进水支座的绝缘电阻 | | | | | | | | | | | | | |
| 绝缘电阻(MΩ) | | 发电机轴承 | 励磁机轴承 | | 转子进水支座 | | 氢冷发电机内档油盖 | | | | 氢冷发电机外档油盖 | | |
|  |  | |  | |  | | | |  | | |
| 试验环境 | | 环境温度℃ 温度: % | | | | | | | | | | | |
| 试验设备 | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | |
| 试验人员 | |  | | | | | | 试验日期 | | 年 月 日 | | | |
| 12、灭磁电阻器、自同期电阻器的直流电阻 | | | | | | | | | | | | | |
| 直流电阻(Ω) | | 出厂值 (\_\_℃) | | 实测值 | | | | 折算实测值 | | | | 变化误差(%) | |
| 灭磁电阻器 | |  | |  | | | |  | | | |  | |
| 自同期电阻器 | |  | |  | | | |  | | | |  | |
| 试验环境 | | 环境温度℃ | | | | | | | | | | | |
| 试验设备 | | 试验仪器及仪表名称、规格、编号 | | | | | | | | | | | |
| 试验人员 | |  | | | | | | 试验日期 | | 年 月 日 | | | |
| 13、测试结论 | | | | | | | | | | | | | |
| 结论 | |  | | | | | | | | | | | |
| 审核人员 | |  | | | | | | 审核日期 | | 年 月 日 | | | |