专业生产NAYXL输电线路异频参数测试系统

产品名称	专业生产NAYXL输电线路异频参数测试系统
公司名称	南澳电气（武汉）有限公司
价格	10.00/台
规格参数	品牌:南澳电气 型号:NAYXL 生产厂家:南澳电气(武汉)有限公司
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产品详情

产品简介

在传统的输电线路工频参数测试中，采用三相自耦变和大容量隔离变压器提供测试电源，通过电力计量用的CT和PT作电信号变换，用指针式的高精度电压表、电流表、功率表测量各个电参数，计算得到输电线路工频参数测试结果。使整套试验设备体积大，重量大，需要吊车配合工作，十分不利于现场测量，而且由于测试电源为工频电源，极易与耦合的工频干扰信号混频，带来很大的测量误差，需要大幅度提高信噪比，这对电源的容量和体积又进一步提高。

NAYXL输电线路异频参数测试系统能够准确测量各种高压输电线线路(架空、电缆、架空电缆混合、同杆多回架设的工频参数（正序电容、正序阻抗、零序电容、零序阻抗、互感和耦合电容等），完全满足《110千伏及以上送变电基本建设工程启动验收规程》、DL/T559-94《220-500kV电网继电保护装置运行整定规程》、《GB50150-2006》的规定要求。

NAYXL输电线路异频参数测试系统采用一体化结构，内置变频电源模块，可变频调压输出电源。采用数字滤波技术，避开了工频电场对测试的干扰，从根本上解决了强电场干扰下准确测量的难题。

产品别名

输电线路异频参数测试系统

产品特性

1.快速准确的完成线路的正序电容、零序电容、正序阻抗、零序阻抗等参数测量，同时还可以测量线路间的互感电抗和耦合电容测量；

2.抗干扰能力强，能在异频信号与工频信号比为1:10的条件下准确测量；

3.外部接线简单，仅需一次接入被测线路的引线线就可以完成全部的线路参数测量；彻底解决现有测试手段存在的测试接线倒换繁琐、干扰、稳定度、精度等方面的问题。

4仪器以高速单片机为内核，实现测试电源、仪表、计算模型一体化，将一卡车的设备浓缩为一台仪器。

5.仪器采用320 x
240大屏幕点阵液晶显示，美国进口旋转鼠标操作，嵌入式汉字微型打印机打印结果，操作十分简单；

6.仪器测试过程快捷，仪器自动完成测试方式控制、升降压控制和数据测量计算，并打印测量结果，一个序参数的测量为一分钟完成，试验时间缩短，工作量大大减少，20分钟内可完成传统方法两个小时的工作量；

7.测量精度高，仪器本身提供三组接近工频的异频电源（45Hz/57.5Hz 45Hz/55Hz
47.5Hz/55Hz）可供选择，轻松分离工频及杂波干扰，有效地实现小信号的高精度测量；

产品参数

输入供电电源

三相 AC 380V±10%

输出电压

AC 200V 精度：1%

输出电流

10A

输出信号频率

45H/55Hz；47.5H/52.5Hz；干扰电流＜40A

电 容

阻 抗

阻抗角

测量范围

0.1-50μF

0.5-400Ω

0°- 360°

测量分辨率

0.01μF

0.01Ω

0.01°

测量准确度

0.1μF-1μF时±3% ±0.05μF

0Ω-1Ω时±3% ±0.05Ω

±0.2°(电压＞1.0V)

1μF-50μF时±1.5% ±0.03μF

1Ω-400Ω时±1.5% ±0.03Ω

±0.3°(电压0.2V-1.0V)

外型尺寸

535mm×435mm×360mm(不含轮子)

重　量

61Kg

a)仪器供电电源：三相，AC 380V±10%，10A，50Hz

b)异频电源特性：输出电压：三相，AC 200V（有效值）

c)抗干扰参数：

干扰电压：接入仪器测试电源后的纵向感应电压＜350V；

干扰电流：线路首末两端短接接地时＜40A；

能在仪器输出信号与干扰信号比为1:10的条件下稳定准确完成测试。

d)仪器使用环境：

环境温度：-15℃—＋40℃

相对湿度：＜90%

Product introduction

NAYXL series transmission Line Power / Line Pilot tester is designed to test transformer loss parameter, the power frequency parameters and pilot frequency parameters of transmission line (such as overhead line, cables and overhead lines combined with cable).The power frequency parameters includes positive sequence capacitance, positive sequence impedance, zero sequence capacitance, zero sequence impedance, mutual inductance and coupling, capacitance and so on.

Also called name

Transmission line power frequency parameters testing system; Transmission line pilot frequency parameters tester; Transmission line test set; Power line tester.

The Characteristics of the products

NAYXLA Transmission Line Power Frequency Parameters Tester

Product characteristics

1. The instrument have compact design, excellent performance, powerful function, internal is used with advanced multi A / D synchronous AC sampling and digital signal processing technology, which successfully solves the problem of multi-channel signal synchronous measurement and calculation.

2. The instrument uses large-screen LCD, English menu prompt, simple operation, equipped with high-speed thermal printer, and design of storage function, easy to store and print data.

3. The instrument has small volume, light weight, easy to carry, and it is convenient to use, which greatly reduces the labor intensity and improves the working efficiency.

NAYXL Transmission Line Pilot Frequency Parameters Tester

1. Fast and accurately measuring the positive sequence capacitance, zero sequence capacitance, positive sequence impedance, zero sequence impedance and other parameters of transmission lines, it also can measure the mutual inductive reactance and coupling capacitance between the lines.

2 Strong anti-interference ability, can accurately measure under the condition of the ratio between power frequency signal and pilot frequency signal is 1:10.

3. External wiring is simple, only one time to access the lead of the line to complete all the line parameters measurements. Completely solve the problems of the existing test methods which cause cumbersome wiring switching procedure and the interference of stability and accuracy.

4. The instrument with high speed single chip microcomputer as the core, to achieve the integration of test power, meter and calculation model, make a truck of equipment concentrated into a single instrument.

5. The instrument uses 320*240 large screen dot matrix LCD, operated with the rotating mouse imported from United States, embedded mini-printer to print the results, the operation is very simple.

6. Instrument testing process is fast, automatically complete test mode control, boost-buck control, data measurement and calculation, and print measurement results, one minute to complete a parameter measurement, the test time is shortened, the workload is greatly reduced.

7. High accuracy measurement, the instrument itself provides three groups of pilot frequency power supply

(45Hz/57.5Hz 45Hz/55Hz 47.5Hz/55Hz) which is close to power frequency, it can easily separate frequency and clutter, effectively achieve high-precision measurement of small signals.

The parameters of the products

Project parameters

Model

NAYXL Transmission Line Pilot

Frequency Parameters Tester

NAYXLA Transmission Line Power Frequency Parameters Tester

Power supply

Three-phase， AC380V±10%， 15A， 50Hz (Effective value)

AC 220V±10% 50Hz±1Hz

Maximum output voltage

Three-phase， 200V Precision：1%

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Maximum output current

10A

Output frequency

45Hz / 52.5Hz (＜±0.1HZ);47.5Hz / 52.5Hz (＜±0.1HZ);Interference current＜40A

Voltage measurement range

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AC 25V～500V

Current measuring range

AC 0.025A～50A

Measurement accuracy

0.2 level（Voltage、Electric current、Impedance Etc.）

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Power factor＞0.1：0.5 Level

Power factor≤0.1：1 Level

Measurement

range

Capacitance

0.1～50μF

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Impedance

0.5～400Ω

Impedance angle

0°～360°

resolution

0.01μF

0.01Ω

0.01°

Accuracy of

measurement

Capacitance

when 0.1μF～1μF，±3% Reading ± 0.05μF

1μF～50μF，±1.5%reading ± 0.03μF

Impedance

0Ω～1Ω，±3%Reading ± 0.05Ω

1Ω～400Ω，±1.5%Reading ± 0.03Ω

Impedance angle

±0.3°(Voltage:0.2V～1.0V)

±0.2°(Voltage:＞1.0V)

Anti jamming

parameter

Anti interference voltage

The longitudinal induction voltage connectedto the test power supply of instrument is less than 350V.

Anti interference current

When the both ends of the line is short connected to grounding, the current is less than 40A.

Working

environment

Ambient temperature

-15°C～40°C

-10°C～50°C

Relative humidity

≤90%（No condensation）

Weight

61Kg

6kg

Power supply: AC110V/115V/120V/127V/220V/230V/240V optional

Input frequency: 50Hz/60Hz optional