

中性点接地电阻(NRA) Neutral Grounding Resistor

■ 产品概述(Product Introduction)

中性点接地电阻器是连接于发电机、变压器的中性点与大地之间的一种限流电气保护设备。当电网线路出现故障时，电源中性点电压将产生偏移，尤其是在电缆供电的电网系统中，对地电容电流较大。当该电流大于规定值时会产生弧光接地过电压，从而使非故障相的对地电压极大地增加，使设备绝缘损坏，形成两点或多点接地短路造成停电事故。采用中性点电阻接地方式的目的是给故障点注入阻性电流，使接地故障电流呈阻容性质，减小与电压的相位差，降低故障点电流过零熄弧后的重燃率，使过电压限制在一定水平以内，提高继电保护设备灵敏度以实现跳闸、快速寻找故障线路和备用切换，从而有效保护系统正常运行。

Neutral grounding resistor is a current-limiting electrical protection device connected between the neutral points of generators and transformers and the ground. When the electrical network line fails, the neutral point voltage of the power supply will shift. Especially in the electrical network system powered by cables, the capacitance current to the ground is large. When the current is greater than the specified value, it will cause arc grounding overvoltage, which will greatly increase the ground voltage of the non-faulty phase, make equipment insulation damaged, and power outage due to two-point or multi-point short-circuit to ground. The neutral grounding resistor can inject resistive current into the fault point, make the ground fault current resistive and capacitive, and reduce the phase difference with the voltage and the re-ignition rate after the fault point current reaches zero and arc extinguished, so that the overvoltage is limited to a certain level, and the sensitivity of the relay protection equipment is improved to achieve tripping, rapid searching for fault lines and backup switching, thereby effectively protecting the operation of the system.



■ 产品应用 (Product Application)

该装置可适用于0.4~110kV电压等级配电网的中性点接地系统。在电力系统的变电所或发电厂也已经得到了广泛的应用，对提高系统供电可靠性及安全运行有明显的效果。

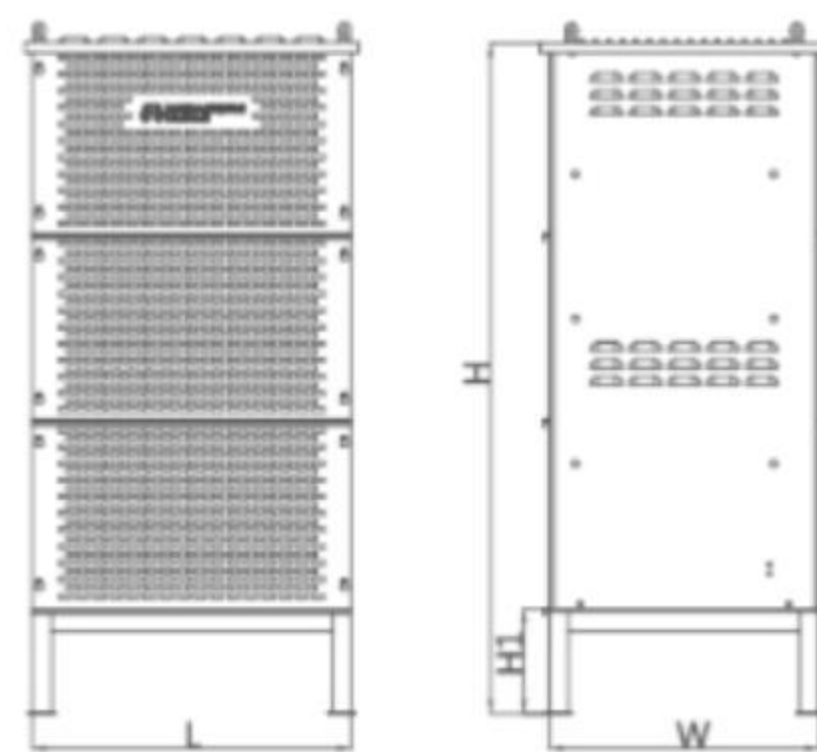
It can be applied in the neutral point grounding system with 0.4-110kV voltage distribution network. It has also been widely used in substations or power plants. It has obvious effects on improving the reliability of system power supply and safe operation.



■ 执行标准 (Applicable Standard)

GB/T5729 Fixed resistors used in electronic equipment

■ 产品尺寸图(Product Size)



规格 Type	电压 (kV) Voltage	电流 (A) Current	阻值范围(Ω) Resistance Range	尺寸 Dimension(±1mm)			
				L	W	H	H1
NRA	6.3	50-1000	3-7	850	1000	1500	定制 Customized
NRA	10.5	50-2000	3-121	1000	1000	2000	定制 Customized
NRA	20	50-2000	5-230	1500	2000	2200	定制 Customized
NRA	35	50-2000	10-404	1600	2500	2500	定制 Customized

备注：其他规格尺寸，可根据用户要求制造。Remark: Customized if necessary.

■ 成品识别码(Product Identification Code)

NRA	6.3kV	100A	100R
中性点电阻 Neutral Grounding Resistor	电压 Voltage	电流 Current	阻值 Resistance