IDS-6000

Electric Fence Perimeter Intrusion Detection System

An electric fence is based on vertical or overhang electrified wires. The system makes use of wires fitted on insulators and powered by an energizer which is capable of delivering a substantial and most uncomfortable shock.
The energizer in simple terms is a transformer that can convert low power to a huge quantity of power to the intruder touching the wires. The energizer used for this purpose will not allow anyone to be killed as the unit is designed to allow the power to pulsate on/off on a continuous basis. Therefore, the electric fence power switches on and off momentarily and therefore is termed a non-lethal electric fence.

Principle of Operation

The dual loop energizer applies the detection and pulse voltages by using the fence configuration shown below. An AC voltage is applied to each fence loop (Loop A and Loop B) simultaneously, with the voltage applied to Loop A being 180 out of phase with the voltage applied to Loop

B. This ensures that there is always a potential difference between the two loops and between any loop and ground. An end of line resistor is connected between the end of each loop and earth to provide a ground return. This facilitates the detection of an open circuit (cut) of a fence loop.
Generates a continuous alternating voltage that is applied to the feed terminals of the fence by means of isolation.

Dual Loop Enegizer

The system contains Dual Loop energizer
The purpose of the dual loop energizer is to ensure that detection and pulse voltages are applied to the fence in such a way that there is always a potential difference present between adjacent fence wires and between any fence wire and earth.

Advantages Of An Electric Fence

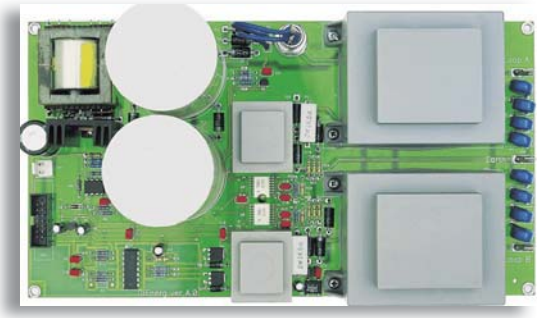
There are three main advantages of an electric fence installation:

The visual appearance
The shock capacity
The alarm given

Alarm

The electric fence will go to an alarm when the wire is cut or shorted.

The electric fence will have served its purpose as an early warning device should the above occur.



SPECIFICATIONS	
Power supply voltage	220VAC or 110VAC or 50VAC or 24VDC
Power supply current	105mA (for node) + what is required by attached devices
Relay output type	Potential free contacts
Relay output rating	I<3A, V<48VAC/DC, 60Watt Load
Physical dimensions	297x164x62mm' excluding packaging
Weight	1.4kg excluding packaging
Operating temperature	From -20˚ up to +70˚ Celsius
STANDARDS	
IEC 60950-2:2001	Information technology equipment – Safety requirements
IEC 61000-4-2	Electrostatic discharge
IEC 61000-4-3	Radiated radio frequency electromagnetic field
IEC 61000-4-4	Electrical fast transient/burst 5ns/50ns-300ms bursts
IEC 61000-4-5	Surges
IEC 61000-4-6	Conducted disuturbances induced by radio frequency field
	0.15MHz to 80MHz
IEC 61000-4-8	Power frequency magnetic field
IEC 61000-4-11	Voltage dips and interrupts
CISPR Publication 22	Electromagnetic interference
CISPR 22 class A	Radiated and conducted interference field strength 0.15MHz
	to 1000MHz

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