

EARTH LEAKAGE CLAMP



Detection if an installation is decreasing in quality, is not always easy. Especially factors such as earth leakage or frequent tripping of the RCD are difficult. In most of these cases the access to the installation is influencing the time of the inspection negatively and in many cases it will make an inspection or repair very expensive. For such problems, an earth leakage clamp is most convenient.

The best way to explain a possible 'problem situation' is by a simple example.

Suppose an installation is completely or partially out of order. The installer called to solve the problem finds out that the RCD is causing the trouble. When in a difference between phase and neutral occurs, the RCD trips due to an obvious leakage to earth. Frequently tripping means a continuous leakage.

The most logical reason for such problem is an increased insulation resistance to phase and earth. In order to detect this problem, the installer decides to perform an insulation resistance test. To do so, all cables of the installation will need to be diverted and disconnected. Also all electronic devices will need to be disconnected from the installation. In addition to this case, the installation is equipped with high sensitive appliances and equipment. Performing an insulation resistance test will seriously damage these devices. The customer however, wishes to continue operation or at least keep the time for the inspection as short as possible.

In case of this example, an earth leakage clamp can be used for measuring a leakage current or differential current. The clamp can also be used for locating such currents without



having to disconnect or switch off the installation. This saves a lot of time and money!



NI 333

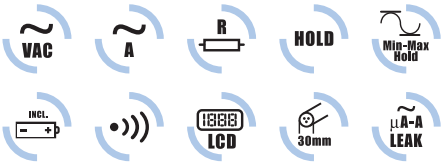


At first, the NI 333 looks like a normal current clamp. Nevertheless, the special integrated technique of the jaw enables the user to measure very low or differential currents. In the range up to 40µA, the clamp can even measure with a resolution of 10µA. For normal use, the clamp can measure up to 60A, voltage up to 400V and resistance up to 400Ω.

The NI 333 is designed with an ergonomic housing with a wide jaw (opening). With this jaw, conductors up to 30 mm. can be measured easily. The clamp is having APO (Auto Power Off), Data Hold, Min/Max Hold and the ability to perform a continuity test and relative measurement.

The jaw of the clamp is very sensitive, yet very well isolated. This enables the user to measure not only within the standard frequency of 50/60 Hz, but also harmonics and higher frequencies. In order to filter the disturbance of high frequencies, a special filter has been developed. This widens the range from 40Hz up to 1kHz.

All measured values are displayed on the LCD screen. The NI 333 is available including carry band/ wristband.



Voltage range	0,1V...400 V AC
Current range	10µA...60 A AC
Resistance range	0,1 Ω...400 Ω
Over voltage category	CATII / 600V CATIII / 300V
Display resolution	3999d
Max. conductor size	30 mm.
Accuracy voltage measuring	± (2,0% + 4d) AC
Accuracy current measuring	± (2,0% + 5d) AC
measuring	
Standard	EN 61010-1
Dimensions	210 x 70 x 40 mm.
Weight	± 230 gram (incl. batteries)
Article number	626 005 024
Packing	per piece in a box
EAN code	-
Including	manual, batteries, test leads, protective/carrying case

