



- Extending range up to 1000A
- Coil ZW 10 for small clamps
- Coil ZW 100 for clamps up to 1000A
- It is possible to design coil for individual requirements

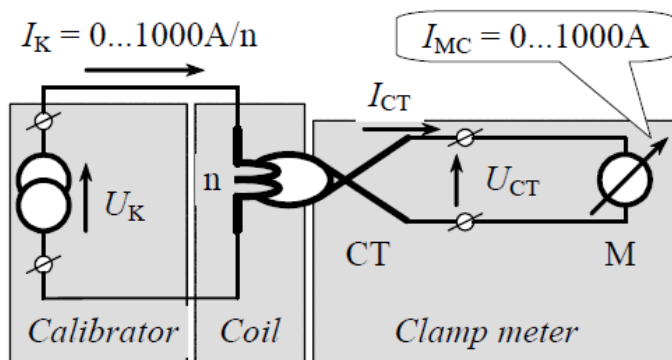
The Current Coils ZW's series are wound by means of insulated cooper wire. Connected to the output of the current calibrator enables of clamps, clamps meters, power clamps meters and power quality analysers testing.

Idea of clamp meter testing On the drawing below is presented system for testing clamp meters compound of current calibrator and clamp meter. Tested clamp meter consists of current clamp CT and meter M. Indication of tested clamp meter I_{MC} in range 0...1000A are referenced to the set current I_K of current calibrator, which is treated as a standard source.

To the output terminals of calibrator is connected coil with n number of turns, on which are closed clamps. Required range of calibrator's settings is described by equation:

$$I_K = \frac{I_{MC}}{n}$$

I_{MC} – indication range of (upper limit where: of measurements) tested meter,
 n – number of coil's turns.



As it can be seen from equation, by applying coil with number of turns $n=100$ and calibrator with settings range $I_K=0...10A$, it is possible to check clamp meter with measurement range $I_{MC}=0...1000A$, of course under condition, that calibrator has enough load power at the output terminals

In the presented circuit, it is also possible to test current clamps CT. In the case of current clamps with current output, the output clamp's current I_{CT} should be measured by means of reference ammeter M, in case of clamps with voltage output, the voltage U_{CT} should be measured by means of reference voltmeter M.

TECHNICAL PARAMETRS OF CURRENT COILS ZW

Parameter / coil type	ZW10/20A	ZW100/10A
Number of turns	10	10
Nominal Current [A]	20	10
Wire diameter	1,8	2,0
Coil crossec. axb [mm]	10x7	23x24
Coil diameter D [mm]	48	63
Leads length [mm]	190	230
Coil resistance [Ω]	0,012	0,120
Coil inductance [μH]	5	560
Coil weight [kg]	0,07	0,63

