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CURRENT TRANSFORMERS

TO-100 ÷ TO-1000 transformers with open core

Purpose

The current transformer is used for proportional change of high current strength to lower values, adapted to the measuring range of control and measuring devices.

Functioning

The cable with the measured current passes through the main opening of the transformer (P1 / P2), which is equivalent to one coil of the primary winding. The S1 and S2 terminals of the secondary windings are connected to the terminals of the measuring circuit of the control or measuring device.
The ratio of the strength of the currents in both windings is a constant value and is called the current ratio: IPn/ISn=N, where the IPn is rated primary current; ISn - rated secondary current; N - the value of the transmission. The value of the current flowing through the primary winding can be determined from the value of the current flowing through the secondary winding: ISm*N=IPm, wherein ISm - measured primary current; IPm - measured secondary current.

Please note!

It is recommended to connect the secondary circuit by a wire with diameter of not less than 2.5 mm2
It is recommended to ground the S2 terminal.
It is prohibited to disconnect the secondary circuit during operation of the transformer (the high voltage that may appear pose a risk of electric shock to the people or damage to the device).

Technical data

Type	IP/IS transformer	Class	Power [VA]	Dimensions [mm] A	B	C	D	E	F	G	H	I	Weight [kg]
TO-100	100/5	1,0	1,5	21	32	51	89	105	34	42	40	32	0,78
TO-150	150/5	1,0	3,0	21	32	51	89	105	34	42	40	32	0,78
TO-200	200/5	0,5	1,5	21	32	51	89	105	34	42	40	32	0,78
TO-250	250/5	0,5	1,5	21	32	51	89	105	34	42	40	32	0,78
TO-300	300/5	0,5	1,5	21	32	51	89	105	34	42	40	32	0,78
TO-400	400/5	0,5	2,5	21	32	51	89	105	34	42	40	32	0,78
TO-600	600/5	0,5	2,5	50	80	78	114	145	32	32	32	33	0,9
TO-750	750/5	0,5	5,0	50	80	78	114	145	32	32	32	33	0,9
TO-1000	1000/5	0,5	5,0	50	80	78	114	145	32	32	32	33	0,9

norm number	IEC 60044-1
nominal secondary current Is	5A
rated voltage	0.66kV AC
insulation breakdown voltage	3kV/1min.
frequency	50/60Hz
safety factor	FS<5
working temperature	-15÷50°C
S1/S2 terminal	4mm² screw terminals
mounting	table
position	vertical/horizontal
ingress protection	IP20