

IN-I

Passive current transformer

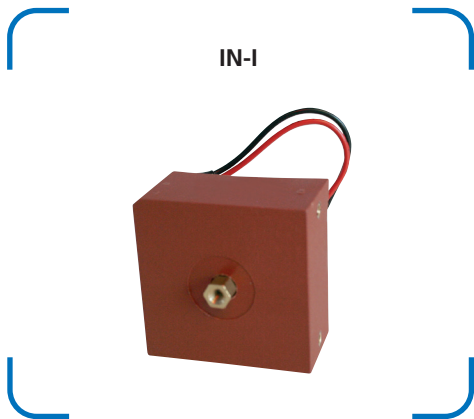
Pulsed current transformers

Because of the materials selected, REO pulsed current transformers in the IN-I series monitor current with high precision and in the appropriate transformation ratio - which makes them particularly suitable for power measurements, current monitoring and analysis, and for use in solar inverters. They are ideal for use in active filters, as they can be designed to measure current surges. The primary current is measured in a conductor fed through the closed toroidal core. The magnetic

field generated by the flow of current through the conductor is detected by the toroidal core, which, in accordance with the transformation ratio of the secondary winding, generates a smaller current for measurement purposes. By this means, a heavy current to be measured is reduced to a substantially smaller current and is in addition isolated from the primary circuit by safe electrical isolation.

Advantages

- High-precision current measurements CI 0.2
- Pulsed current measurement
- Low-loss core (core losses <10W/kg at 20kHz/200mT)
- Housing made of UL-V0 material with inset thread
- Various applications e.g. for:
Active filters, EMC measurements and pulse current measurements



Technical data

			IN-1		
Type			50	100	200
Primary rated current [A]	I_{pN}	r.m.s	0 - 50	0 - 100	0 - 200
Max. primary rated current [A]	I_{maxpN}	r.m.s	± 60	± 120	± 240
Secondary current [mA]	I_{aN}	r.m.s	0 - 50	0 - 100	0 - 200
Rated power [VA]	P_{sek}		0,5	1,0	1,5
Ratio	K_N	1:	1000	1000	1000
Load resistance [Ω]	R_B		200	100	37,5
Load voltage [V]	U_{RB}	r.m.s	10	10	7,5
Measuring accuracy 50 Hz [%]	F_U		± 0,2	± 0,2	± 0,2
Ambient temperature [°C]	T_A		-20 to +70	-20 to +70	-20 to +70
Frequency [Hz]	f		0,050 to 50	0,050 to 50	0,050 to 50
Insulation test voltage Primary/Secondary / 2sec [kVac]	V_p	r.m.s 50 Hz	3	3	3
Connection	A	Strands	150	150	150
Storage temperature	TS		-25 to +85	-25 to +85	-25 to +85
Coil resistance	RS	@ TA=25°C	11,5	11,5	9
Weight	m		0,270	0,270	0,270
Standards	EN/IEC 61869-1/2				
Tracking resistance	CTI		550 / 600M		
Creepage distance	dCp	10	10	10	
Air distance	dCl	9	9	9	



Typical applications: Metrology and testing techniques

