

IN

Passive Current transformer

Instrument transformers

The growing development and spread of electronic devices with high working frequencies requires the use of current transformers with an extended frequency range.

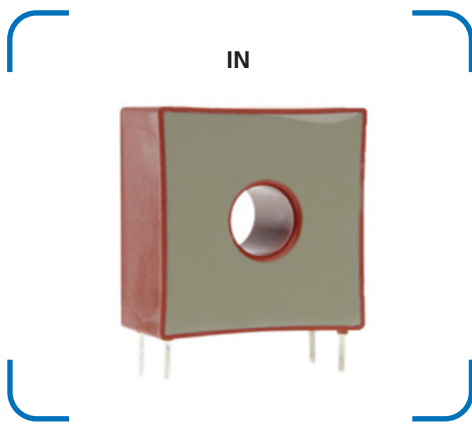
This demand can be met with specially selected materials in conjunction with optimized design.

Advantages (electrical)

- Electrical
- PIN connection according to UL 94 V-0
- Current transformers for precise current measurements
- Higher accuracy classes 1; 0,5; 0,2 than IE standard
- Measurements in the frequency range 16 2/3 to -50kHz
- Pulse measuring (e.g. 8/20 μ s)
- Low phase error for power measurement
- Very low hysteresis and Foucault current losses
- Nano-crystalline toroidal cores with strip thickness of 20 μ m for example
- Safe electrically isolated primary and secondary circuits

Advantages (mechanical)

- Designs for easy installation
- Wide range of housings with various push-through openings



Technical data

IN							
Type		1	3	5	10	25	50
Primary rated current [A]	I_{PN}	1	3	5	10	25	50
Max. primary rated current [A]	I_{maxPN}	1,2	3,6	6	12	30	60
Secondary current [mA]	I_{aN}	20	20	20	20	25	50
Rated power [VA]	P_{sek}	0,05	0,05	0,05	0,05	0,063	0,25
Ratio	K_N	50	150	250	500	1000	1000
Load resistance [Ω]	R_B	125	125	125	125	100	100
Load voltage [V]	U_{RB}	2,5	2,5	2,5	2,5	2,5	5
Measuring accuracy 50 Hz [%]	F_U	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1
Ambient temperature [$^{\circ}C$]	T_A	-25 to +70	-25 to +70	-25 to +70	-25 to +70	-25 to +70	-25 to +70
Frequency [Hz]	f	0,05 to 50	0,05 to 50	0,05 to 50	0,05 to 50	0,05 to 50	0,05 to 50
Insulation test voltage Primary/Secondary / 2sec [kVac]	V_P	3	3	3	3	3	3
PIN Connection		3-4 / 2-1	3-4 / 2-1	3-4 / 2-1	3-4 / 2-1	NC/2-1	NC/2-1
Weight [kg]		0,05	0,05	0,05	0,05	0,05	0,07
Standards		EN/IEC 61869-1/2					



Typical applications: Industry, renewable energy sources, railway engineering, metrology and testing techniques, energy, automation and building technology

Dimensions in mm

IN									
Type	Connection [mm ²]	h [mm]	b [mm]	t [mm]	DL [mm]	s [mm]	l [mm]	a [mm]	c [mm]
IN/1	3-4/2-1	34	33	18	9	1,0	3,5	27,5	10
IN/3	3-4/2-1	34	33	18	9	1,0	3,5	27,5	10
IN/5	3-4/2-1	34	33	18	9	1,0	3,5	27,5	10
IN/10	3-4/2-1	34	33	18	9	1,0	3,5	27,5	10
IN/25	NC/2-1	34	33	18	9	1,0	3,5	27,5	10
IN/50	NC/2-1	38	38	20	13	1,0	6,5	30	10

