



STANDARDS

GANZ current transformers meet the highest international quality standards with more than 50 years experience in industry. GANZ products have built up a reputation for quality reliability and modern design at competitive prices. GANZ current transformers are made according to the EN 60044-1, BS 3938, DIN 42600 standars

INSULATION

20% glass fibre reinforced thermoplastic case. Flame retardant grades classified UL94V-0 .

INSULATION CLASS

E (120°C max.)

AMBIENT TEMPERATURE

-20C ... +45°C (+65°C)

STORAGE TEMPERATURE

-50°C ... +80°C

RATED VOLTAGE

720 V

TEST VOLTAGE

4 kV_{eff} 50 Hz 1 min.

OPERATING FREQUENCY

50 ... 60 Hz

RATED PRIMARY CURRENT

1, 2.5, 5, 7.5, 10, 12.5, 15, 20, 25, 30, 40, 50, 60, 75, 80 A and their decade multiply.

RATED SECONDARY CURRENT

5 or 1 A

RATED BURDEN

1 , 1.5 , 2.5 , 3.75 , 5 , 7.5 , 10 , 12.5 , 15 , 20 , 30 , 45 , 60 VA

CLASS OF ACCURACY

- 0.2, 0.2S for laboratory and kWh measuring
- 0.5, 0.5S for accurate measuring, kWh
 - 1 for general measuring with switchboard instruments
 - 3 for other not so accurate measuring

THERMAL SHORT CIRCUIT CURRENT (I_{th})

Current transformer with primary winding: 40x I_n ,
Busbar type: 60xI_n

DYNAMIC SHORT CIRCUIT CURRENT (I_{dyn})

2.5 x I_{th}

INSTRUMENT SECURITY FACTOR (FS)

5, 10

CONTINUOUS OVERCURRENT

1.2 x I_n

CONNECTION

The secondary terminals have two connections on each side. Connection with M4 (M5) screws easy to handle and securing low contact resistance.

ACCESSORIES

- The terminal cover is fitted for a lead seal.
- This execution complies with the VGB4 protection of DIN 57106 standard.
- Mounting support
- Screw and nut for busbar mounting.
- Clip, for DIN EN 50022 rail on request.

WHATEVER YOU MEASURE.

ORDER SPECIFICATION !

MAK 62/R 100 / 5 A Cl. 1 5 VA

ACCURACY CLASS

Class	Current deviation (± %) at % I _n						Phase angle deviation (± crad) at % I _n				
	1	5	20	50	100	120	1	5	20	100	120
0,2S	0,75	0,35	0,2	–	0,2	0,2	0,9	0,45	0,3	0,3	0,3
0,2	–	0,75	0,35	–	0,2	0,2	–	0,9	0,45	0,3	0,3
0,5S	1,5	0,75	0,5	–	0,5	0,5	2,7	1,35	0,9	0,9	0,9
0,5	–	1,5	0,75	–	0,5	0,5	–	2,7	1,35	0,9	0,9
1	–	3	1,5	–	1	1	–	5,4	2,7	1,8	1,8
3	–	–	–	3	–	3	–	–	–	–	–

CONNECTION WIRE CONSUMPTION IN [VA]

q = wire cross- section (mm ²)	Connection-wire consumption in [VA] (P _{wire})																		
	for secondary current I _{sec} =5A									for secondary current I _{sec} =1A									
	L = distance from CT. to measuring point									L = distance from CT. to measuring point									
	1m	2m	4m	6m	8m	10m	15m	20m	1m	2m	4m	6m	8m	10m	15m	20m	30m	40m	50m
2 × 0,5	1.837	3.67	7.35	11.02	---	---	---	---	0.074	0.15	0.30	0.44	0.59	0.74	1.11	1.48	2.22	2.96	3.70
2 × 0,75	1.235	2.47	4.94	7.41	9.88	---	---	---	0.049	0.10	0.20	0.29	0.39	0.49	0.74	0.98	1.47	1.96	2.45
2 × 1	0.918	1.84	3.67	5.51	7.34	9.18	---	---	0.037	0.07	0.15	0.22	0.30	0.37	0.56	0.74	1.11	1.48	1.85
2 × 1,5	0.613	1.23	2.45	3.68	4.90	6.13	9.20	---	0.025	0.05	0.10	0.15	0.20	0.25	0.38	0.50	0.75	1.00	1.25
2 × 2,5	0.368	0.74	1.47	2.21	2.94	3.68	5.52	7.36	0.015	0.03	0.06	0.09	0.12	0.15	0.23	0.30	0.45	0.60	0.75
2 × 4	0.233	0.47	0.93	1.40	1.86	2.33	3.50	4.66	0.009	0.02	0.04	0.05	0.07	0.09	0.14	0.18	0.27	0.36	0.45
2 × 6	0.149	0.30	0.60	0.89	1.19	1.49	2.23	2.98	0.003	0.006	0.012	0.018	0.024	0.03	0.045	0.06	0.09	0.12	0.15

$$P_{\text{curr. transf}} > P_{\text{total}} = P_{\text{wire}} + P_{\text{consumer}}$$

$$P_{\text{wire}} = \frac{I^2 \cdot 2L}{q_{\text{wire}} \cdot 56} \quad (\text{or see table}).$$

REQUESTED BURDEN FOR DIFFERENT MEASURING INSTRUMENTS

For defining the rated burden of current transformers herebelow one rated burden values of instruments produced by **GANZ INSTRUMENTS Ltd.**

- Moving-iron ammeter (frame dimensions of 48, 72, 96 mm) 0.5 VA
- Bimetal instruments (... /5 A) 3 VA
- Bimetal and moving-iron instruments (... /5 A) 3.5 VA
- Wattmeter's 3,5..5,5 VA
- Power factor meters 12 VA
- Current transducer 0.5 VA
- Power transducer 0.5 VA
- kWh-meter 0.5 VA



PRIMARY CONDUCTORS

Durable loadability of vertically mounted plate rails, made of copper (Cu-E) indoors, at 35°C ambient temperature calibrated for 55°C overheat.

Dimension in mm.	mm ²	Weight kg/m	CURRENT IN A FOR BARE COPPER BARS DIN 4367					
			Painted rails			Rough rails		
			I bar	II bars	III bars	I bar	II bars	III bars
12x2	23,5	0,209	150	232	262	125	198	234
15x2	29,5	0,262	180	275	300	148	230	268
15x3	44,5	0,369	228	364	440	186	305	390
20x2	39,5	0,351	230	348	360	186	285	390
20x3	59,5	0,529	290	453	520	235	375	465
20x5	99,1	0,882	390	645	840	315	540	750
20x10	199	1,77	600	1060	1520	490	895	1280
25x3	74,5	0,663	350	540	600	280	450	540
25x5	124	1,11	470	760	965	375	635	860
30x3	89,5	0,796	410	625	680	325	515	610
30x5	149	1,33	545	875	1085	435	730	970
30x10	299	2,66	825	1380	1920	660	1150	1600
40x3	119	1,06	530	800	835	420	650	750
40x5	199	1,77	700	195	1310	550	905	1180
40x10	399	3,55	1035	1690	2300	820	1400	1920
50x5	249	2,22	850	1310	1530	670	1080	1365
50x10	499	4,44	1240	1980	2670	980	1635	2210
60x5	299	2,66	1000	1530	1740	790	1250	1560
60x10	599	5,33	1440	2250	3000	1130	1860	2500
80x5	399	3,55	1300	1930	2100	1020	1570	1900
80x10	799	7,11	1830	2770	3650	1425	2285	3020
100x5	499	4,44	1585	2310	2330	1240	1875	2080
100x10	999	8,89	2200	3280	4000	1710	2690	3300
120x10	1200	10,7	2570	3780	4600	2000	3100	3800
160x10	1600	1402	3290	4750	5800	2250	3900	4750
200x10	2000	17,8	4000	5700	6950	3100	4660	5700

The distance between parallel rails to the same phase is equal to the thickness of the rail.

Modifying factor respective loadability of horizontal position plate rails

N°. of rail per phase	Width of rails	Modifying factor if the rail	
		Painted	rough
1	50...200	1,11	1,18
2	50...200	1,18	1,25
3	50...80	1,18	1,25
4	100...120	1,25	1,33
	160	1,33	1,43
	200	1,43	1,55

The distance between the rail to the same phases is equal to the thickness of the rail, except the middle width of the version with 4 rail, per phase, which is min. 50mm.