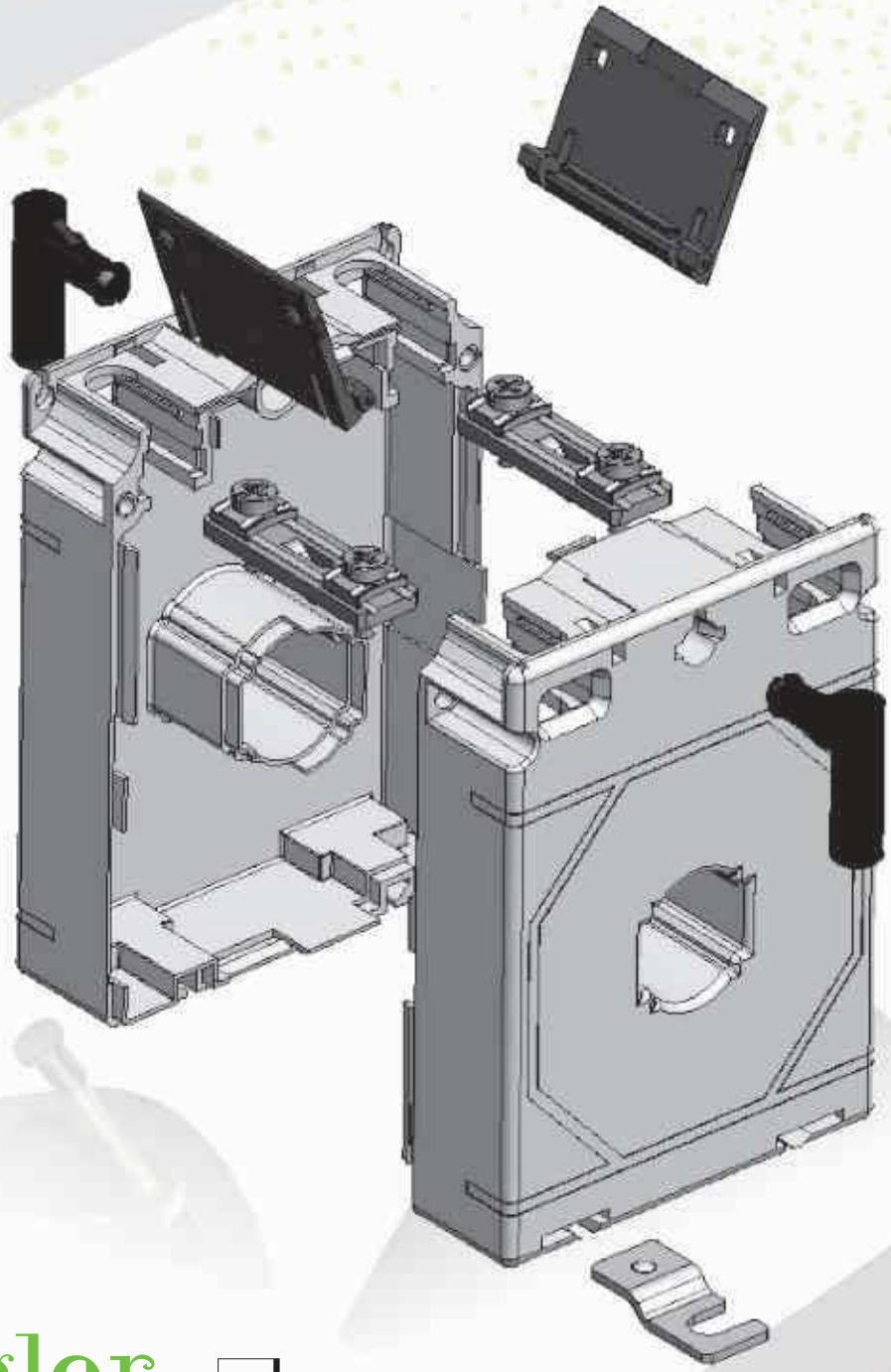
Current Transformers



Ziegler

Redefine Innovative Metering

ZIEGLER CURRENT TRANSFORMER SERIES

Ziegler Instruments, leader in measuring instruments unveils its world class plastic cased Square and Round Current Transformers. Ziegler Current Transformers or Ziegler CT's as they are better known are encased with polycarbonate housing conforming to UL 94-V0. These are available for different ratings, VA burdens & Accuracy classes. The catalog describes the different possible combinations.

GENERAL SPECIFICATION

- **APPLICABLE STANDARD:** IEC/EN 60044 -1, BS 3938,
- **CASE:** 10% glass filled polycarbonate, flame retardant grades classified UL 94V-0.
- **CONNECTION:** Two connection on each side. M4 screws with self lifting clamp strap assembly for Ziegler series and 1 connection on each side M4 screws with self lifting clamp strap for Ziegler CT series.
- **INSULATION CLASS:** E (120˚C max)
- **SYSTEM VOLTAGE:** 720V maximum
- **TEST VOLTAGE:** 4kV 50 Hz 1 min
- **OPERATING FREQUENCY:** 50Hz or 60Hz
- **RATED PRIMARY RATING:** 30A to 4000A
- **RATED SECONDARY OUTPUT:** 5A standard (1A optional)
- **RATED BURDEN:** 1, 1.25, 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 power measurement
  0.5, 0.5S for accurate measuring, kWh
  1 for general measurement
  3 for indicating instruments
- **AMBIENT TEMPERATURE :** -20˚C...+45˚C
- **STORAGE TEMPERATURE :** -50˚C...+80˚C
- **THERMAL SHORT CIRCUIT CURRENT (I_{TH}) :** $60xI_n$
- **DYNAMIC SHORT CIRCUIT CURRENT (I_{DYN}) :** $2.5xI_{th}$
- **INSTRUMENT SECURITY FACTOR:** 2.5, 5, 10

CONNECTION- WIRE CONSUMPTION IN [VA]

Cross	For secondary current Isec=1A								For secondary current Isec=5A										
section	L= distance from CT to measuring point								L= distance from CT to measuring point										
(mm2)"	1m	2m	4m	6m	8m	10m	15m	20m	1m	2m	4m	6m	8m	10m	15m	20m	30m	40m	50m
2x0.5	1.837	3.670	7.350	11.02	---	---	---	---	0.074	0.150	0.300	0.440	0.590	0.740	1.110	1.480	2.220	2.960	3.700
2x0.75	1.235	2.470	4.940	7.410	9.880	---	---	---	0.049	0.100	0.200	0.290	0.390	0.490	0.740	0.980	1.470	1.960	2.450
2x1	0.918	1.840	3.670	5.510	7.340	9.180	---	---	0.037	0.070	0.150	0.220	0.300	0.370	0.560	0.740	1.110	1.480	1.850
2x1.5	0.613	1.230	2.450	3.680	4.940	6.130	9.200	---	0.025	0.050	0.100	0.150	0.200	0.250	0.380	0.500	0.750	1.000	1.250
2x2.5	0.368	0.740	1.470	2.210	2.940	3.680	5.520	7.360	0.015	0.030	0.060	0.090	0.120	0.150	0.230	0.300	0.450	0.600	0.750
2x4	0.233	0.470	0.930	1.400	1.860	2.330	3.500	4.660	0.009	0.020	0.040	0.050	0.070	0.090	0.140	0.180	0.270	0.360	0.450
2x6	0.149	0.300	0.600	0.890	1.190	1.490	2.230	2.980	0.003	0.006	0.012	0.018	0.024	0.030	0.045	0.060	0.090	0.120	0.150

TABLE NO. 1

VA BURDEN GUIDE

- Moving iron ammeter (frame dimension of 48, 72, 96, 144) 1.0 VA
- Bimetal instruments (.../5A) 3.0 VA
- Bimetal and Moving iron instruments (.../5A) 3.5 VA
- Wattmeter 5.5 VA
- Power factor meter 4.0 VA
- Current transducer 0.5 VA
- Power transducer 0.5 VA
- kWh-meter 2.5 VA
- Trivector meter 5.0 VA

FEATURES

- Comprehensive measurement of class accuracy
- Cost effective moulded case current transformer
- Wide range of system current ratings bus bar sizes, case widths and apertures
- Various mounting options like wall mounting, cable mounting, bas bar mounting, DIN rail mounting
- Wire sealable terminal covers

INDEX

Current Range	Primary Conduction upto		CT Width	Type	Page
	FOR BUSBAR	FOR RING			
SQUARE TYPE CT's					
40...300	-	14 mm	40 mm	ZiS 4.14B	
50...400	-	21 mm	40 mm	ZiS 4.21B	
50...300	-	14 mm	31 mm	ZiS 5.14A	
50...400	10.5 mm x 20.5 mm	21 mm	31 mm	ZiS 5.21A	
75...600	10.5 mm x 30.5 mm	25 mm	31 mm	ZiS 5.30A	
50...300	-	14 mm	51 mm	ZiS 5.14D	
50...400	10.5 mm x 20.5 mm	21 mm	51 mm	ZiS 5.21D	
50...600	10.5 mm x 30.5 mm	25 mm	51 mm	ZiS 5.30D	
50...600	-	22 mm	40 mm	ZiS 6.20B	
50..400	20.5 mm X 12.5 mm	-	40 mm	ZiS 6.22B	
50...800	31 mm X 11 mm	30 mm	40 mm	ZiS 6.30B	
100...800	40.5 mm X 11 mm	31 mm	40 mm	ZiS 6.40B	
30...400	21 mm X 11 mm	20.4 mm	45 mm	ZiS 7.20C	
30...800	31 mm X 15 mm	26 mm	45 mm	ZiS 7.30C	
40...1000	41 mm X 12.5 mm	35 mm	45 mm	ZiS 7.40C	
100...1000	51 mm X 12.5 mm	41 mm	45 mm	ZiS 7.50C	
50...1000	41 mm X 11 mm	36 mm	45 mm	ZiS 8.40C	
100...1250	51 mm X 12.5 mm	46 mm	45 mm	ZiS 8.50C	
100...1600	61 mm X 21 mm	51 mm	45 mm	ZiS 8.60C	
100...1600	61 mm X 12.5 mm	54 mm	45 mm	ZiS 10.60C	
200...2000	81 mm X 12.5 mm	65 mm	45 mm	ZiS 10.80C	
200...2000	81 mm X 31 mm	73 mm	45 mm	ZiS 14.80C	
200...3000	101 mm X 31 mm	86 mm	45 mm	ZiS 14.10HC	
200...4000	101 mm X 31 mm	86 mm	45 mm	ZiS 14.10VC	
ROUND TYPE CT's					
Current Range	**Primary Conduction upto**		**CT Width**	**Type**	**Page**
	FOR BUSBAR	**FOR RING**			
50...150	-	30 mm	40 mm	ZiR 7.30B	
50...200	-	40 mm	50 mm	ZiR 7.30D	
400...600	-	43 mm	41 mm	ZiR 8.43B	
400...600	-	58 mm	41 mm	ZiR 10.58B	
800...1000	-	72 mm	41 mm	ZiR 11.72B	
1200...3200	-	113 mm	40 mm	ZiR 15.113B	

▶ ALLOWABLE LOAD CAPACITY OF PAINTED COPPER AND ALUMINUM BARS

Allowable load capacity of painted copper and aluminum bars Bar section vertical. Bars are separated the thickness of one bar Maximum current in A						
Dimensions	1 bars		2 bars		3 bars	
(mm)	Copper	Aluminum	Copper	Aluminum	Copper	Aluminum
12 X 2	150	80	232	140	262	
15 X 2	180	95	275	170	300	
15 X 3	282	115	364	210	440	
20 X 2	230	120	348	270	360	
20 X 3	290	145	453	350	520	
20 X 5	319	254	560	446	728	570
20 X 10	497	393	924	730	1320	1060
25 X 3	350	180	540	330	600	
25 X 5	470	230	760	430	965	
30 X 3	410	205	625	385	680	
30 X 5	447	356	760	606	944	739
30 X 10	676	536	1200	956	1670	1340
40 X 3	530	280	800	500	835	
40 X 5	573	456	952	762	1140	898
40 X 10	850	677	1470	1180	2000	1650
50 X 5	697	556	1140	916	1330	1050
50 X 10	1020	815	1720	1400	2320	1940
60 X 5	826	655	1330	1070	1510	1190
60 X 10	1180	951	1960	1610	2610	2200
80 X 5	1070	851	1680	1360	1830	1460
80 X 10	1500	1220	2410	2000	3170	2660
100 X 5	1300	1050	2010	1650	2150	1730
100 X 10	1810	1480	2850	2390	3720	3110
120 X 10	2570	1350	3780	2400	4600	3250
160 X 10	3290	1750	4750	3000	5800	4150
200 X 10	4000	2150	5700	3650	6950	4950
200 x 15		2550		4200		5600

TABLE NO. 1

▶ LIMITS OF CURRENT ERROR AND PHASE DISPLACEMENTS (CLASSES FROM 0.1 TO 1)

Limits of current error and phase displacements for measuring current transformers (Classes from 0.1 to 1)												
Accuracy class	+/- percentage current (ratio) error at percentage of rated current shown below				+/- phase displacements at percentage of rated current shown below							
					Minutes				Centiradians			
	5	20	100	120	5	20	100	120	5	20	100	120
0.1	0.4	0.2	0.1	0.1	15	8	5	5	0.45	0.24	0.15	0.15
0.2	0.75	0.35	0.2	0.2	30	15	10	10	0.9	0.45	0.3	0.3
0.5	1.5	0.75	0.5	0.5	90	45	30	30	2.7	1.35	0.9	0.9
1	3	1.5	1	1	180	90	60	60	5.4	2.7	1.8	1.8

TABLE NO. 2

▶ LIMITS OF CURRENT ERROR AND PHASE DISPLACEMENTS (FOR SPECIAL APPLICATION)

Limits of current error and phase displacements for measuring current transformers (For special application)															
Accuracy class	+/- percentage current (ratio) error at percentage of rated current shown below					+/- phase displacements at percentage of rated current shown below									
						Minutes					Centiradians				
	1	5	20	100	120	1	5	20	100	120	1	5	20	100	120
0.2S	0.75	0.35	0.2	0.2	0.2	30	15	10	10	10	0.9	0.45	0.3	0.3	0.3
0.5S	1.5	0.75	0.5	0.5	0.5	90	45	30	30	30	2.7	1.35	0.9	0.9	0.9

TABLE NO. 3

▶ LIMITS OF CURRENT ERROR (CLASSES 3 AND 5)

Class	+/- percentage current (ratio) error at percentage of rated current shown below	
	50	120
3	3	3
5	5	5

TABLE NO. 4

▶ CHARACTERISTIC PARAMETERS :

Current transformers convert an alternating current usually high in to a proportional lower one, depending on their use. Measurement type CTs are required to transform the primary current, at various classes of accuracy, as specified by the class designation, over a current range from 1 to 120 percent of its rated primary ratio. The design of this type of transformer requires the inclusion of a core and winding which will when connected to its rated burden; perform within the limits of error as indicated by the standard's specification. It is an advantage for a measurement type transformer to saturate above this range, which provides a protection against damage to instruments by limiting the secondary current when surge currents or faults appear in the primary circuit.

▶ MEASURING TRANSFORMER:

A current transformer intended to supply indicating instruments integrated meter, relay and similar apparatus.

▶ CURRENT TRANSFORMER:

An instruments transformer in which the secondary current, in normal condition of use, is substantially proportional to the primary current and differs in phase it by an angle which is approximately zero for an appropriate direction of connections.

▶ RATED PRIMARY CURRENT:

The value of primary current which appears in the designation of the transformer and on which the performance of the currant transformer is based.

▶ RATED SECONDARY CURRENT:

The value of secondary current which appears in the designation of the transformer and on which the performance of the currant transformer is based.

▶ RATED TRANSFORMATION RATIO:

The ratio of the rated primary current to the rated secondary current.

▶ CURRENT ERROR (RATIO ERROR):

The error with a transformer introduces into the measurement of a current and which arises from the fact that actual transformation ratio is not equal to the rated transformer ratio.

THE CURRENT ERROR EXPRESSED IN PERCENTAGE IS GIVEN BY THE FORMULA:

$$\text{Current error, percent} = (Ka.Is-Ip) \times 100 / Ip$$

Where Ka= rated transformation ratio
Ip= actual primary current
Is= actual secondary current when Ip is flowing under the conditions of measurement

- **PHASE DISPLACEMENT:**

  The difference in phase between the primary and secondary current vectors, the direction of the vectors being so chosen that the angle is zero for the perfect transformer. The phase displacement is said to be positive when the secondary current vector leads the primary current vector. It is usually express in minutes.

- **ACCURACY CLASS:**

  A designation assigned to a current transformer the errors of which remain within specified limit under prescribed conditions of use.

- **BURDEN:**

  The impedance of the secondary circuit in ohms and power factor.

- **RATED BURDEN:**

  The impedance of the secondary circuit on which the accuracy requirements are based. It is usually expressed as apparent power (in VA), at the rated secondary current and at a specified power factor.

- **RATED OUTPUT:**

  The value of the apparent power (in volt-amperes at a specified power factor) which the current transformer is intended to supply to the secondary circuit at the rated secondary current and with rated burden connected to it.

- **HIGHEST SYSTEM VOLTAGE:**

  The highest RMS line to line voltage which can be sustained under normal operating conditions at any time and at any point on the system. It excludes temporary voltage variations due to fault condition and the sudden disconnection of large loads.

- **RATED INSULATION LEVEL:**

  That combination of voltage values (power frequency and lightning impulse, or where applicable, lightning and switching impulse) which characterizes the insulation of a transformer with regard to its capability to withstand by dielectric stresses. For low voltage transformer the test voltage 4kV, at power-frequency, applied during 1 minute.

- **RATED SHORT-TIME THERMAL CURRENT (I_{TH}):**

  The RMS value of the primary current which the current transformer will withstand for a rated time, with their secondary winding short circuited without suffering harmful effects.

- **RATED DYNAMIC CURRENT (I_{DYN}):**

  The peak value of the primary current which a current transformer will withstand, without being damaged electrically for mechanically by the resulting electromagnetic forces, the secondary winding being short-circuited.

- **RATED CONTINUOUS THERMAL CURRENT:**

  The value of current which can be permitted to flow continuously in the primary winding, the secondary windings being connected to the rated burdens, without the temperature rise exceeding the specified values.

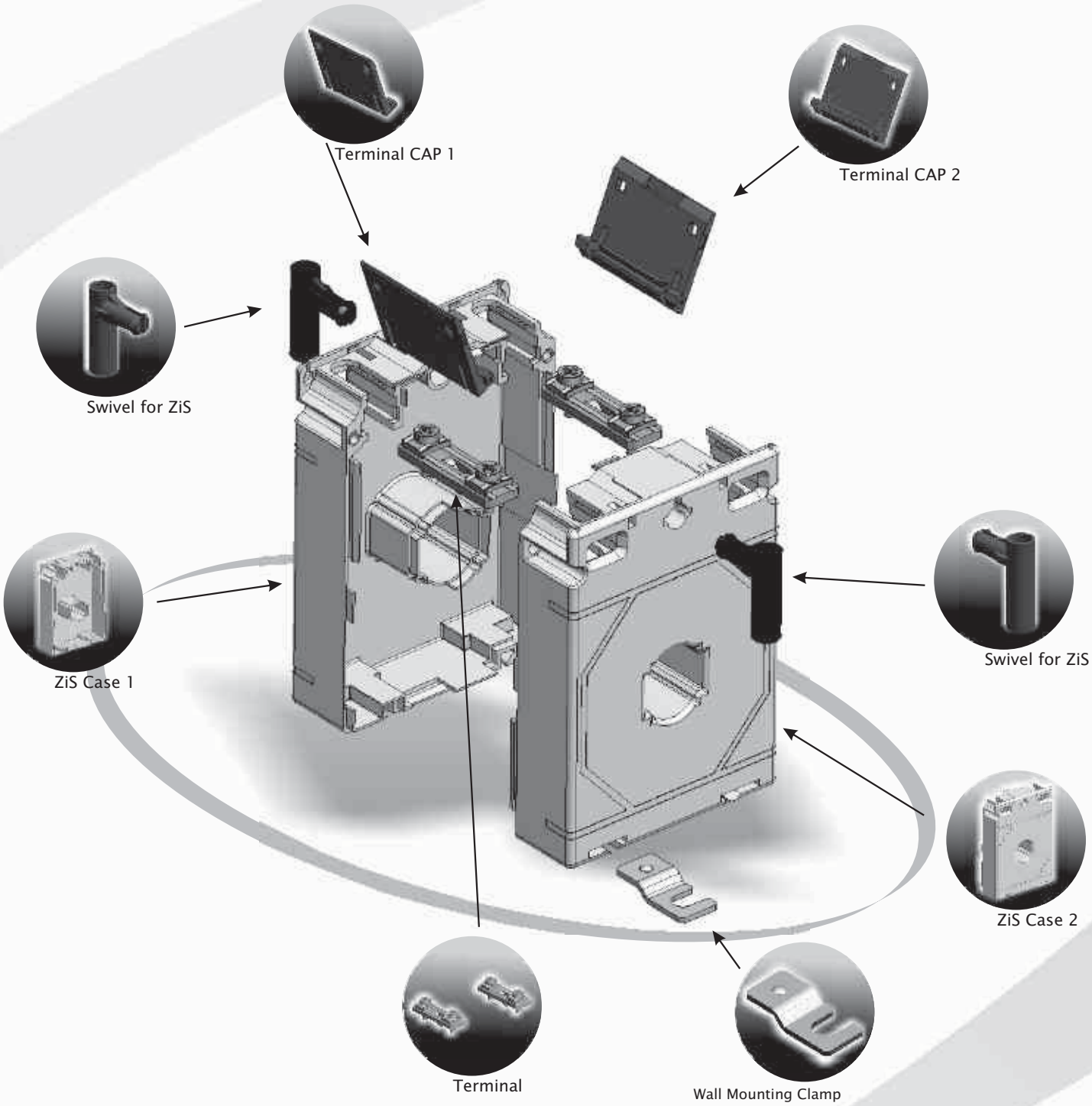
- **INSTRUMENT SECURITY FACTOR (I_{SF}):**

  The ratio of rated instrument limit primary current to the rated primary current. The times that the primary current must be higher then the rated value, for the composite error of a measuring current transformer to be equal to or greater than 10%, the secondary burden being equal to the rated burden. The lower this number is, the more protected the connected instrument are against.

WE ALSO MANUFACTURE FOLLOWING CT'S AS PER CUSTOMERS SPECIFICATION :

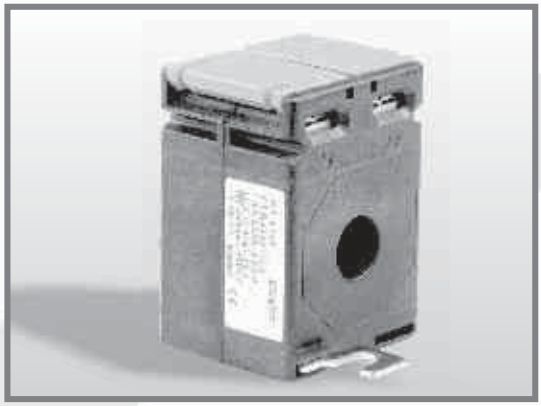
1) Wound Primary CT
2) Busbar CT
3) Protection CT (P Class)
4) Protection Special (PS Class)
5) Summation CT
6) Core Balance CT
7) Resin Cast

COMPONENTS OF ZIEGLER SQUARE TYPE CURRENT TRANSFORMER

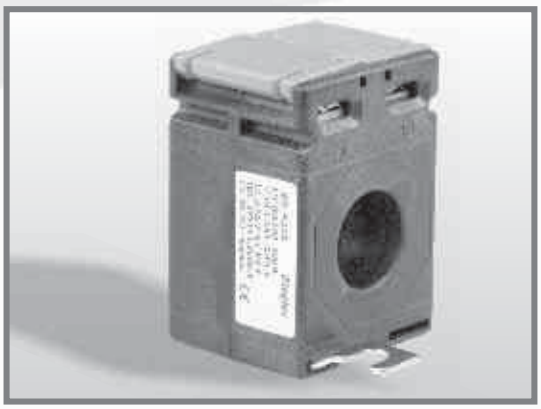


▶ ZIEGLER ZiS 4 Series Current Transformer :

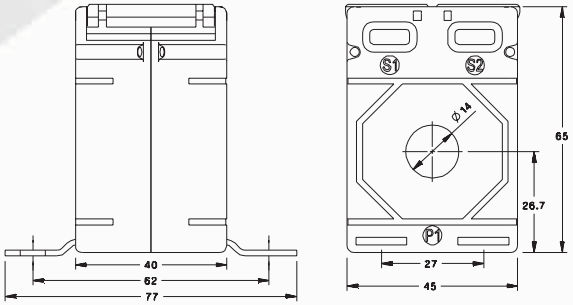
ZiS 4.14B



ZiS 4.21B

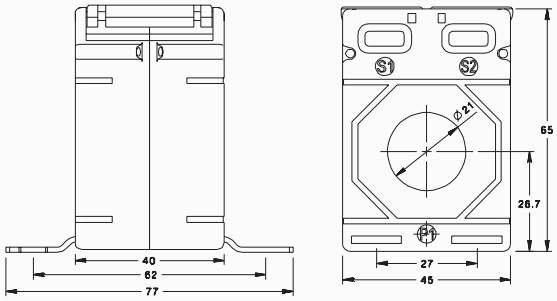


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 4 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated PRIMARY CURRENT	Type : ZiS 4.14B			Type : ZiS 4.21B		
	Accuracy Class			Accuracy Class		
	0.5	1	3	0.5	1	3
40A	-	–	1VA	–	–	–
50A	–	1VA	1.5VA	–	1VA	1.5VA
60A	–	1.5VA	1.5VA	–	1VA	1.5VA
75A	–	1.5VA	2.5VA	–	1.5VA	1.5VA
80A	–	1.5VA	2.5VA	1VA	1.5VA	2.5VA
100A	1.5VA	2.5VA	3.75VA	1.5VA	2.5VA	2.5VA
120A	1.5VA	3.75VA	3.75VA	1.5VA	2.5VA	3.75VA
125A	1.5VA	3.75VA	5VA	2.5VA	3.75VA	3.75VA
150A	2.5VA	5VA	5VA	2.5VA	3.75VA	5VA
200A	3.75VA	5VA	7.5VA	3.75VA	3.75VA	5VA
250A	5VA	7.5VA	10VA	3.75VA	5VA	5VA
300A	5VA	10VA	10VA	5VA	5VA	7.5VA
400A	--	–	–	3.75VA	5VA	7.5VA

ORDER EXAMPLE : ZiS 4.14B :

Rated primary current : 100A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 2.5VA

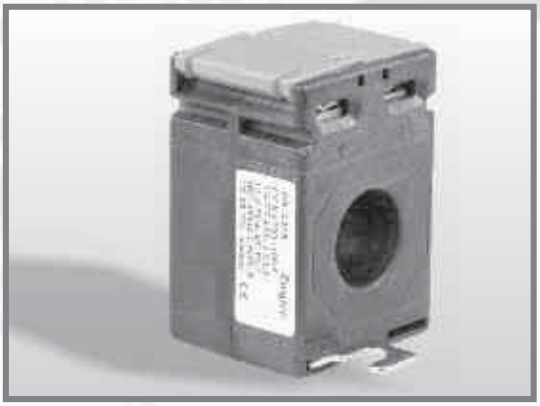
ORDER EXAMPLE : ZiS 4.21B

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 3.75V A

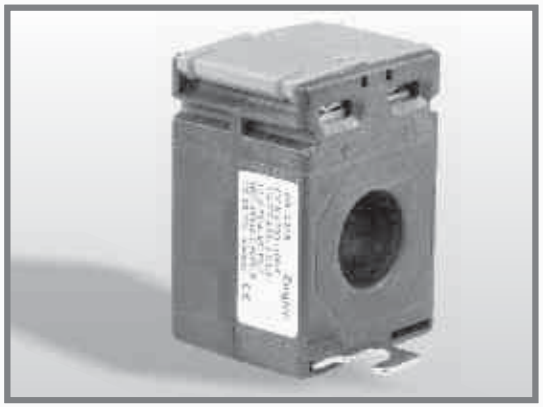
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 5 Series Current Transformer :

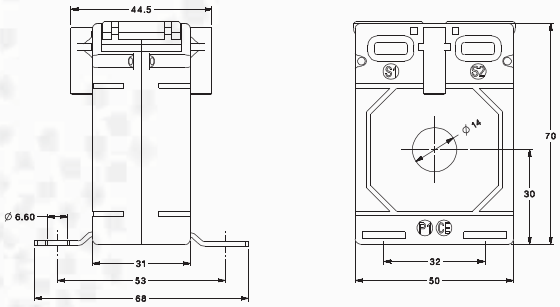
ZiS 5.14A



ZiS 5.21A

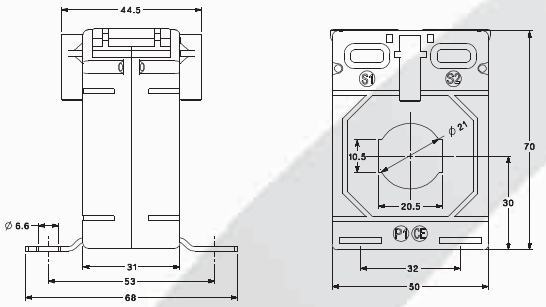


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 5 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary Current	ZiS 5.14A Accuracy Class		ZiS 5.21A Accuracy Class	
	0.5	1	0.5	1
50A	–	1.0VA	–	1.0VA
60A	–	1.5VA	–	1.0VA
75A	–	1.5VA	–	1.5VA
80A	–	1.5VA	–	1.5VA
100A	1.5VA	2.5VA	1.5VA	2.5VA
120A	1.5VA	3.75VA	1.5VA	2.5VA
125A	1.5VA	3.75VA	1.5VA	3.75VA
150A	2.5VA	5.0VA	2.5VA	3.75VA
200A	3.75VA	5.0VA	3.75VA	3.75VA
250A	5.0VA	7.5VA	3.75VA	5.0VA
300A	5.0VA	10VA	3.75VA	5.0VA
400A	–	–	5.0VA	5.0VA
500A	–	–	–	–
600A	–	–	–	–

ORDER EXAMPLE : ZiS 5.14A :

Rated primary current : 100A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 2.5VA

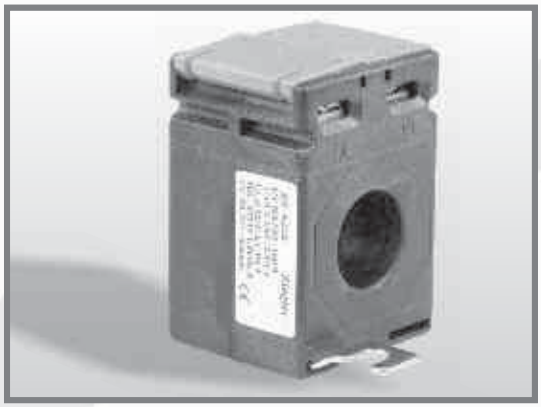
ORDER EXAMPLE : ZiS 5.21A :

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 3.75VA

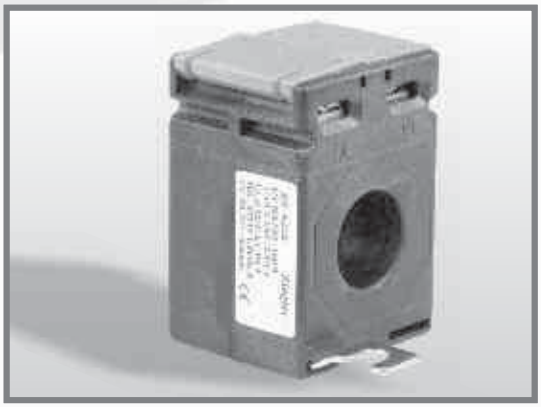
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 5 Series Current Transformer :

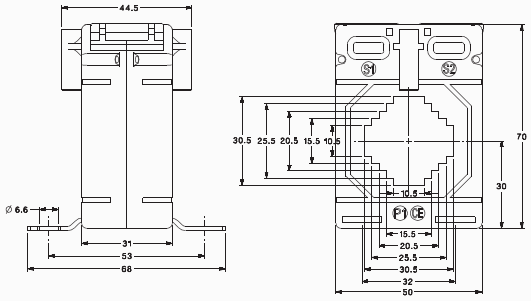
ZiS 5.30A



ZiS 5.14D

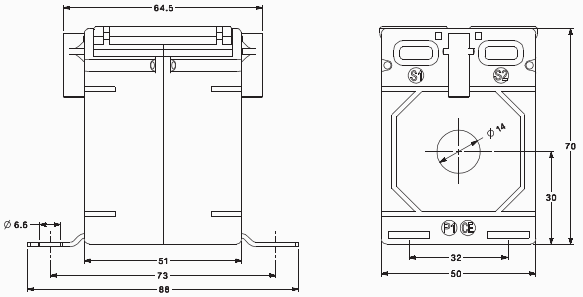


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 5 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary Current	ZiS 5.30A Accuracy Class		ZiS 5.14D Accuracy Class	
	0.5	1	0.5	1
50A	–	–	–	1.5VA
60A	–	–	–	1.5VA
75A	–	1.5VA	–	3.75VA
80A	–	1.0VA	1.5VA	3.75VA
100A	–	2.5VA	2.5VA	5.0VA
120A	–	2.5VA	3.75VA	5.0VA
125A	–	2.5VA	3.75VA	5.0VA
150A	–	2.5VA	3.75VA	7.5VA
200A	–	3.75VA	7.5VA	10VA
250A	–	5.0VA	10VA	12.5VA
300A	–	5.0VA	10VA	12.5VA
400A	2.5VA	5.0VA	–	–
500A	2.5VA	5.0VA	–	–
600A	2.5VA	5.0VA	–	–

ORDER EXAMPLE : ZiS 5.30A :

Rated primary current : 400A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 5VA

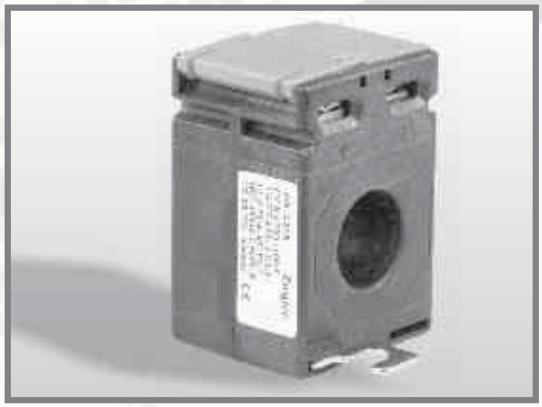
ORDER EXAMPLE : ZiS 5.14D :

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 10VA

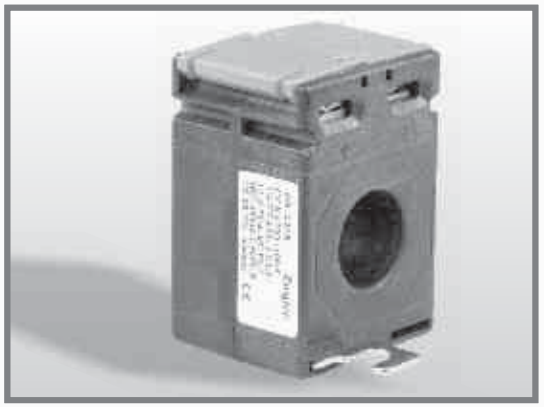
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 5 Series Current Transformer :

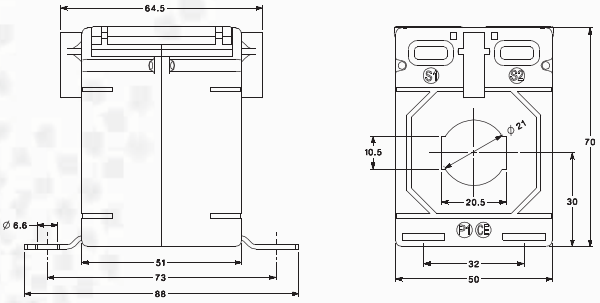
ZiS 5.21D



ZiS 5.30D

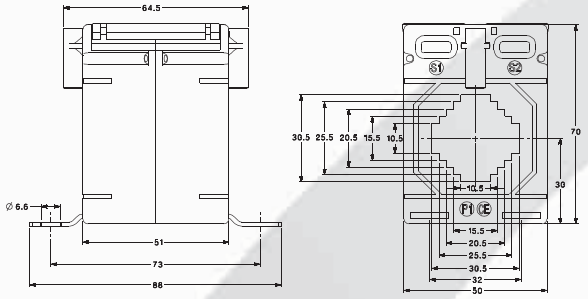


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 5 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary Current	ZiS 5.21D Accuracy Class		ZiS 5.30D Accuracy Class	
	0.5	1	0.5	1
50A	–	1.0VA	–	1.0VA
60A	–	1.0VA	–	1.0VA
75A	–	2.5VA	–	2.5VA
80A	–	2.5VA	–	2.5VA
100A	2.5VA	5.0VA	–	5.0VA
120A	3.75VA	5.0VA	–	5.0VA
125A	3.75VA	5.0VA	–	5.0VA
150A	3.75VA	7.5VA	–	5.0VA
200A	5.0VA	10VA	3.75VA	10VA
250A	7.5VA	12.5VA	3.75VA	10VA
300A	7.5VA	12.5VA	5.0VA	10VA
400A	10VA	15VA	5.0VA	10VA
500A	–	–	7.5VA	10VA
600A	–	–	7.5VA	10VA

ORDER EXAMPLE : ZiS 5.21D :

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 5VA

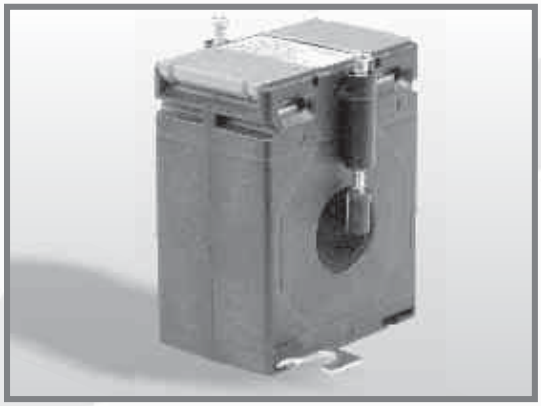
ORDER EXAMPLE : ZiS 5.30D :

Rated primary current : 500
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 7.5VA

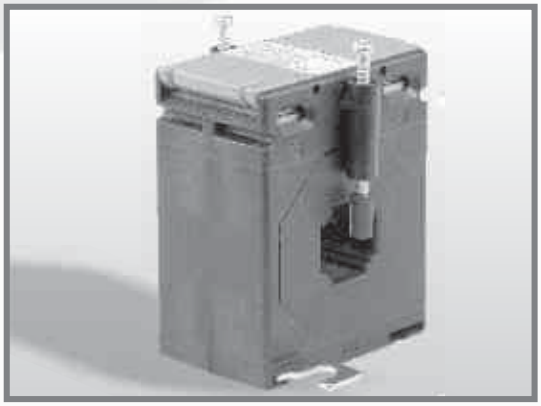
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

ZIEGLER ZiS 6 Series Current Transformer :

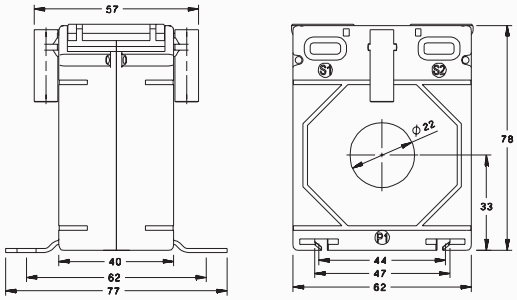
ZiS 6.22B:



ZiS 6.20B:

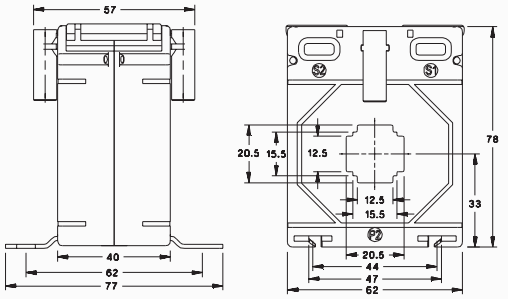


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 6 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiS 6.22B				ZiS 6.20B				
	Accuracy Class				Accuracy Class				
	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
50A	--	–	1.5	2.5VA	–	–	–	1.5VA	2.5VA
60A	--	–	1.5VA	2.5VA	–	–	–	1.5VA	2.5VA
75A	--	–	1.5VA	5.0VA	–	–	–	3.75VA	5.0VA
80A	--	1.5VA	3.75VA	5.0VA	–	–	1.5VA	3.75VA	5.0VA
100A	--	2.5VA	5.0VA	5.0VA	1.5VA	–	2.5VA	5.0VA	5.0VA
120A	--	3.75VA	5.0VA	7.5VA	1.5VA	–	3.75VA	5.0VA	7.5VA
125A	--	3.75VA	5.0VA	7.5VA	1.5VA	–	3.75VA	5.0VA	7.5VA
150A	1.5VA	3.75VA	7.5VA	–	1.5VA	–	3.75VA	7.5VA	–
200A	1.5VA	7.5VA	10VA	–	3.75VA	5.0VA	7.5VA	10VA	–
250A	1.5VBA	10VA	12.5VA	–	2.5VA	2.5VA	10VA	12.5VA	–
300A	2.5VA	15VA	12.5VA	–	3.75VA	5.0VA	10VA	12.5VA	–
400A	7.5VA	15VA	15VA	–	3.75VA	7.5VA	15VA	15VA	–
500A	10VA	15VA	15VA	–	–	–	–	–	–
600A	10VA	15VA	15VA	–	–	–	–	–	–

ORDER EXAMPLE : ZiS 6.22B :

Rated primary current : 300A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 15VA

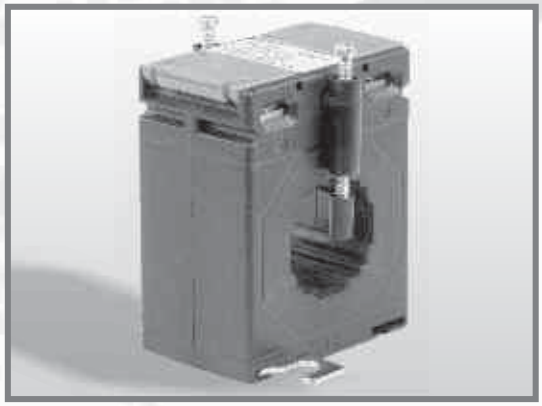
ORDER EXAMPLE : ZiS 6.20B :

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 10VA

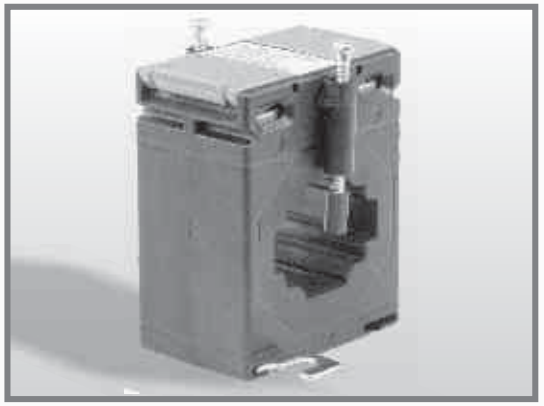
NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 6 Series Current Transformer :

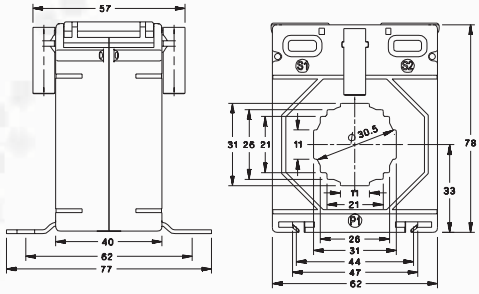
ZiS 6.30B



ZiS 6.40B

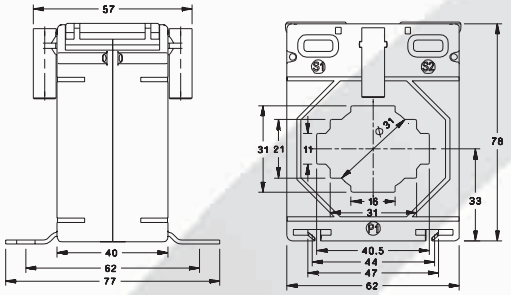


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 6 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiS 6.30B Accuracy Class					ZiS 62.40B Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
50A	–	–	–	1.5VA	2.5VA	–	–	–	–	–
60A	–	–	–	1.5VA	2.5VA	–	–	–	–	–
75A	–	–	–	1.5VA	3.75VA	–	–	–	–	–
80A	–	–	–	1.5VA	3.75VA	–	–	–	–	–
100A	1.0VA	1.0VA	1.5VA	2.5VA	5.0VA	–	–	–	1VA	1.5VA
120A	–	–	2.5VA	3.75VA	5.0VA	–	–	–	1.5VA	2.5VA
125A	1.0VA	1.0VA	2.5VA	3.75VA	5.0VA	–	–	–	1.5VA	2.5VA
150A	1.5VA	1.5VA	3.75VA	5.0VA	7.5VA	–	–	–	2.5VA	3.75VA
200A	2.5VA	2.5VA	5.0VA	7.5VA	–	1.0VA	1.0VA	1.5VA	3.75VA	5.0VA
250A	2.5VA	3.75VA	5.0VA	7.5VA	–	1.5VA	1.5VA	2.5VA	5.0VA	5.0VA
300A	2.5VA	3.75VA	7.5VA	10VA	–	1.5VA	1.5VA	5.0VA	5.0VA	7.5VA
400A	3.75VA	5.0VA	7.5VA	10VA	–	2.5VA	2.5VA	5.0VA	5.0VA	7.5VA
500A	5.0VA	5.0VA	10VA	10VA	–	3.75VA	5.0VA	5.0VA	7.5VA	–
600A	5.0VA	7.5VA	15VA	15VA	–	5.0VA	7.5VA	7.5VA	10VA	–
750A	5.0VA	10VA	15VA	15VA	–	5.0VA	10VA	10VA	10VA	–
800A	5.0VA	10VA	15VA	15VA	–	5.0VA	10VA	10VA	10VA	–

ORDER EXAMPLE : ZiS 6.30B :

Rated primary current : 600A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 15VA

ORDER EXAMPLE : ZiS 6.40B :

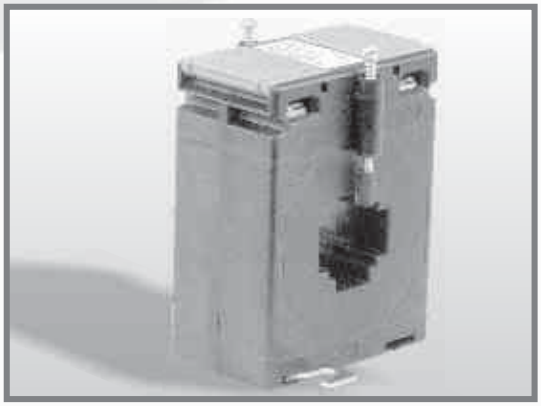
Rated primary current : 800A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 10VA

NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

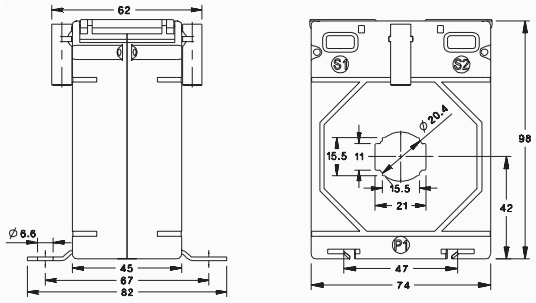
▶ ZIEGLER ZiS 7 Series Current Transformer :

ZiS 7.20C:

ZiS 7.30C:

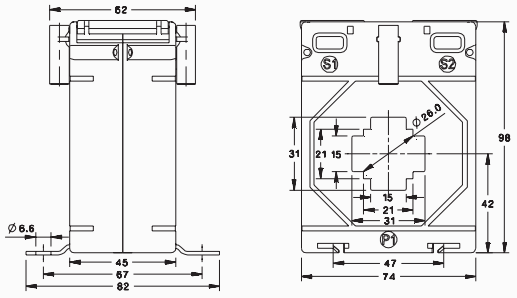


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 7 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiS 7.20C Accuracy Class					ZiS 7.30C Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
30A	–	–	–	1.5VA	2.5VA	–	–	–	1.0VA	1.5VA
40A	–	–	–	1.5VA	2.5VA	–	–	–	1.5VA	2.5VA
50A	–	–	–	2.5VA	3.75VA	–	–	–	1.5VA	2.5VA
60A	–	–	–	3.75VA	5.0VA	–	–	–	2.5VA	3.75VA
75A	–	–	1.5VA	5.0VA	7.5VA	–	–	1.5VA	2.5VA	3.75VA
80A	–	–	1.5VA	5.0VA	7.5VA	–	–	1.5VA	3.75VA	5.0VA
100A	1.5VA	1.5VA	3.75VA	5.0VA	10VA	1.5VA	1.5VA	2.5VA	5.0VA	7.5VA
120A	1.5VA	1.5VA	5.0VA	10VA	–	1.5VA	1.5VA	2.5VA	5.0VA	7.5VA
125A	1.5VA	1.5VA	5.0VA	10VA	–	1.5VA	1.5VA	2.5VA	5.0VA	7.5VA
150A	2.5VA	2.5VA	7.5VA	12.5VA	–	1.5VA	]1.5VA	3.75VA	5.0VA	7.5VA
200A	5.0VA	5.0VA	10VA	15VA	–	2.5VA	2.5VA	5.0VA	10VA	12.5VA
250A	3.75VA	5.0VA	10VA	15VA	–	2.5VA	2.5VA	7.5VA	10VA	15VA
300A	5.0VA	7.5VA	15VA	15VA	–	2.5VA	5.0VA	10VA	15VA	20VA
400A	5.0VA	10VA	15VA	20VA	–	5.0VA	7.5VA	15VA	20VA	–
500A	–	–	–	–	–	5.0VA	10VA	15VA	20VA	–
600A	–	–	–	–	–	5.0VA	15VA	15VA	20VA	–
750A	–	–	–	–	–	7.5VA	20VA	20VA	30VA	–
800A	–	–	–	–	–	10VA	30VA	30VA	30VA	–

ORDER EXAMPLE : ZiS 7.20C :

Rated primary current : 400A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 15VA

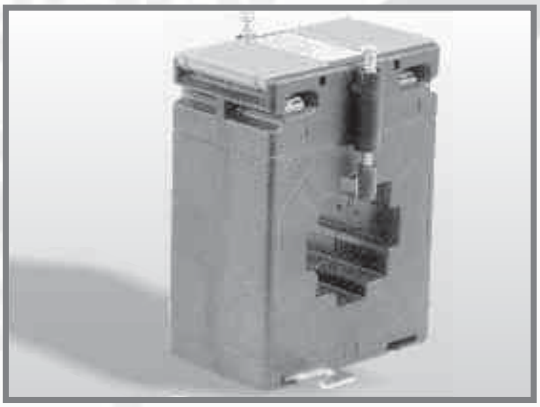
ORDER EXAMPLE : ZiS 7.30C

Rated primary current : 800A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 30VA

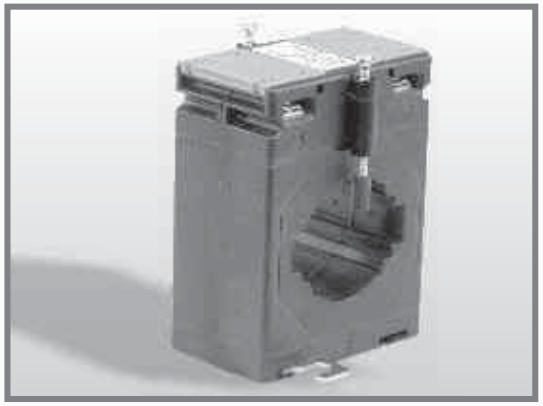
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 7 Series Current Transformer :

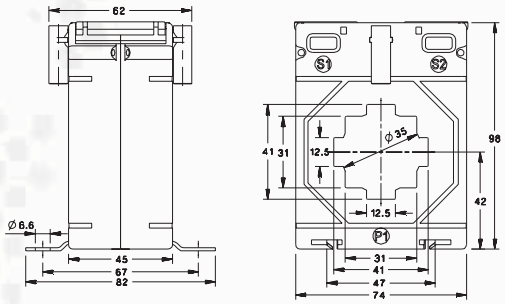
ZiS 7.40C:



ZiS 7.50C :

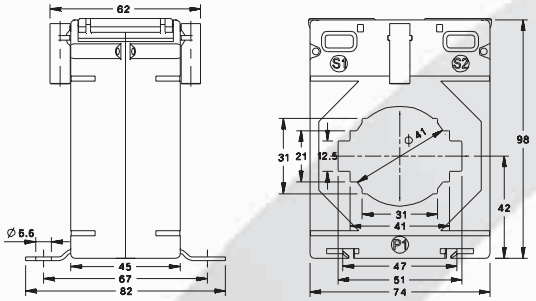


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

Rated Primary current	ZiS 7.40C					ZiS7.50C				
	Accuracy Class					Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
40A	–	--	--	1.0VA	--	--	--	--	--	--
50A	--	--	--	1.0VA	1.5VA	--	--	--	--	--
60A	--	--	--	1.0VA	1.5VA	--	--	--	--	--
75A	--	--	--	1.5VA	2.5VA	--	--	--	--	--
80A	--	--	--	1.5VA	2.5VA	--	--	--	–	--
100A	--	--	1.5VA	2.5VA	3.75VA	--	--	--	1.5VA	--
120A	--	--	1.5VA	2.5VA	3.75VA	--	--	--	1.5VA	2.5VA
125A	--	--	1.5VA	2.5VA	3.75VA	--	--	--	1.5VA	2.5VA
150A	–	–	2.5VA	3.75VA	5.0VA	--	–	–	2.5VA	3.75VA
200A	2.5VA	2.5VA	3.75VA	5.0VA	7.5VA	--	–	1.5VA	3.75VA	5.0VA
250A	2.5VA	2.5VA	5.0VA	7.5VA	10VA	1.5VA	1.5VA	2.5VA	5.0VA	7.5VA
300A	2.5VA	2.5VA	5.0VA	7.5VA	10VA	1.5VA	1.5VA	5.0VA	7.5VA	10VA
400A	5.0VA	5.0VA	7.5VA	12.5VA	15VA	2.5VA	2.5VA	5.0VA	7.5VA	10VA
500A	5.0VA	7.5VA	10VA	15VA	–	5.0VA	5.0VA	7.5VA	10VA	12.5VA
600A	5.0VA	10VA	15VA	20VA	–	5.0VA	7.5VA	10VA	12.5VA	15VA
750A	5.0VA	10VA	15VA	20VA	–	5.0VA	10VA	12.5VA	15VA	–
800A	7.5VA	15VA	15VA	20VA	–	5.0VA	10VA	12.5VA	15VA	–
1000A	10VA	15VA	15VA	20VA	–	5.0VA	10VA	12.5VA	15VA	–

ORDER EXAMPLE : ZiS 7.40C:

Rated primary current : 600A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 10VA

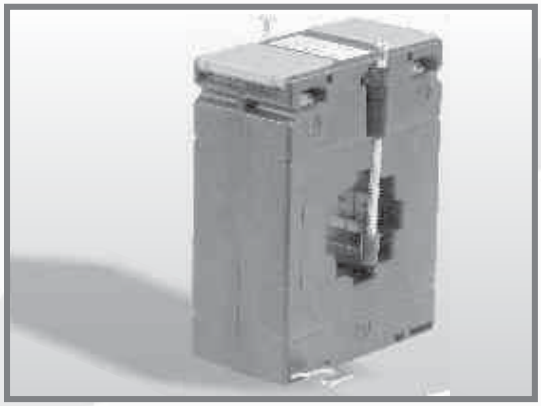
ORDER EXAMPLE : ZiS 7.50C :

Rated primary current : 1000A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 10VA

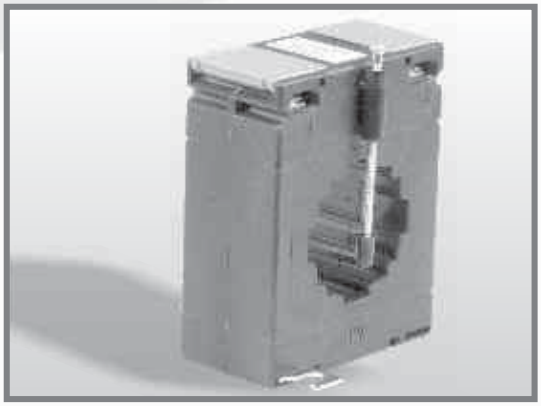
NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 8 Series Current Transformer :

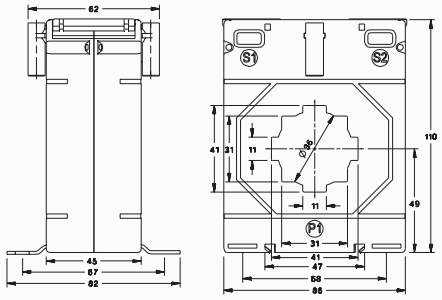
ZiS 8.40C:



ZiS 8.50C:

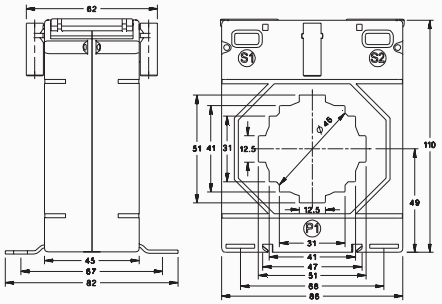


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

Rated Primary current	ZiS 8.40C					ZiS 8.50C				
	Accuracy Class					Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
50A	--	–	–	1.5VA	2.5VA	–	--	–	–	–
60A	–	–	–	1.5VA	2.5VA	–	–	–	–	–
75A	--	–	–	2.5VA	3.75VA	–	–	–	–	–
80A	--	–	–	2.5VA	3.75VA	–	–	–	–	–
100A	1.5A	1.5VA	1.5VA	3.75VA	5.0VA	–	–		1.5VA	2.5VA
120A			2.5VA	5.0VA	7.5VA	–	–	1.5VA	2.5VA	3.75VA
125A	1.5VA	1.5VA	2.5VA	5.0VA	7.5VA	–	–	1.5VA	2.5VA	3.75VA
150A	2.5VA	2.5VA	3.75VA	5.0VA	10VA	–	–	2.5VA	5.0VA	7.5VA
200A	2.5VA	2.5VA	5.0VA	7.5VA	12VA	–	–	5.0VA	7.5VA	10VA
250A	3.75VA	3.75VA	7.5VA	12.5VA	15VA	–	--	7.5VA	10VA	12.5VA
300A	3.75VA	5.0VA	10VA	15VA	–	1.5VA	1.5VA	7.5VA	10VA	12.5VA
400A	3.75VA	7.5VA	15VA	20VA	–	2.5VA	2.5VA	10VA	12.5VA	15VA
500A	5.0VA	10VA	20VA	30VA	–	2.5VA	5.0VA	12.5VA	15VA	20VA
600A	7.5VA	15VA	30VA	30VA	–	5.0VA	7.5VA	15VA	20VA	–
750A	7.5VA	15VA	30VA	30VA	–	5.0VA	10VA	15VA	20VA	–
800A	10VA	15VA	30VA	30VA	–	7.5VA	12.5VA	20VA	30VA	–
1000A	10VA	15VA	30VA	30VA	–	10VA	20VA	30VA	30VA	–
1200A	–	–	–	–	–	10VA	20VA	30VA	30VA	–
						10VA	20VA	30VA	30VA	–

ORDER EXAMPLE : ZiS 8.40C :

Rated primary current : 400A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 15VA

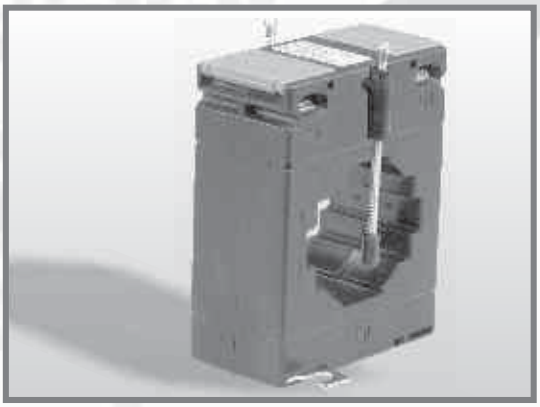
ORDER EXAMPLE : ZiS 8.50C

Rated primary current : 1200A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 20VA

NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 8 Series Current Transformer :

ZiS 8.60C:

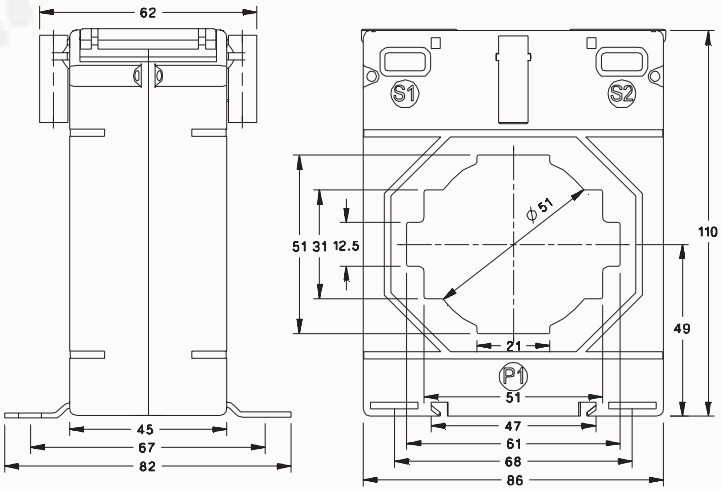


ORDER EXAMPLE : ZiS 8.60C :

Rated primary current :	1500A
Rated Secondary Current:	5A
Class of accuracy :	0.2
Rated Burden :	15VA

NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

MOUNTING WITH COPPER BUS BAR DRAWING :



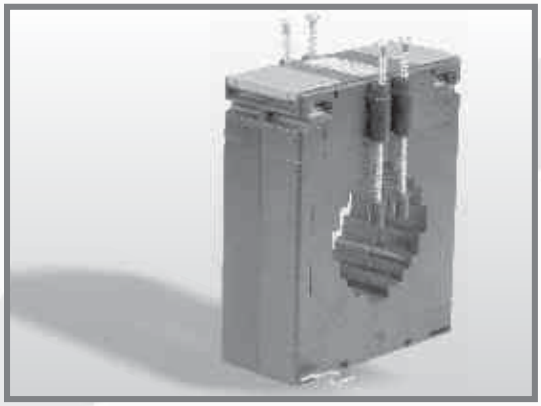
ALL DIMENSIONS ARE IN MM

ZiS 8 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

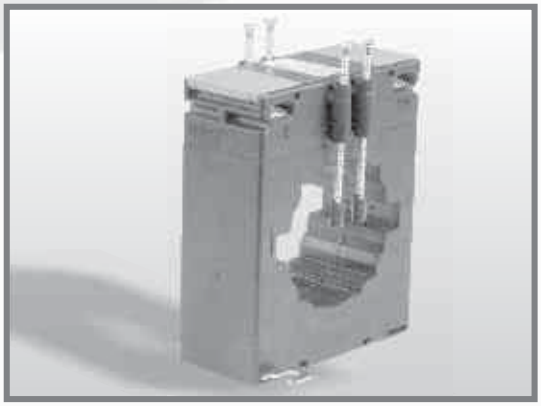
Rated Primary current	ZiS 8.60C Accuracy Class				
	0.2S	0.2	0.5	1	3
100A	–	–	–	–	1.5VA
120A	–	–	–	1.5VA	2.5VA
125A	–	–	–	2.5VA	3.75VA
150A	–	–	–	2.5VA	3.75VA
200A	–	–	1.5VA	3.75VA	5.0VA
250A	–	–	2.5VA	5.0VA	7.5VA
300A	1.5VA	1.5VA	5.0VA	7.5VA	10VA
400A	2.5VA	2.5VA	10VA	12.5VA	15VA
500A	2.5VA	3.75VA	10VA	12.5VA	15VA
600A	5.0VA	5.0VA	15VA	15VA	20VA
750A	5.0VA	10VA	15VA	15VA	–
800A	7.5VA	12.5VA	20VA	20VA	–
1000A	10VA	15VA	20VA	20VA	–
1200A	10VA	15VA	20VA	20VA	–
1250A	10VA	15VA	20VA	20VA	–
1500A	10VA	15VA	20VA	20VA	–
1600A	10VA	15VA	20VA	20VA	–

▶ ZIEGLER ZiS 10 Series Current Transformer :

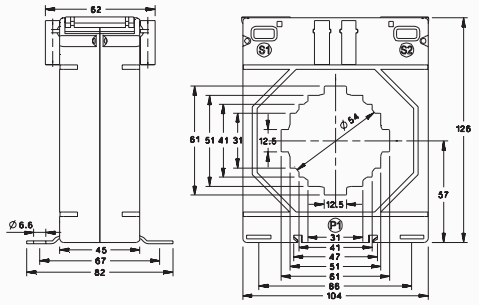
ZiS 10.60C :



ZiS 10.80C :

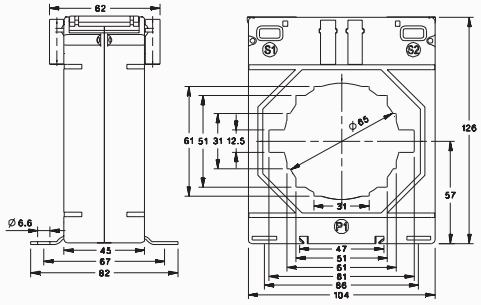


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

Primary current	ZiS 10.60C Accuracy Class					ZiS 10.80C Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
100A	–	–	–	1.5VA	3.75VA	–	–	–	–	–
120A	–	–	–	2.5VA	5VA	–	–	–	–	–
125A	–	–	–	2.5VA	5VA	–	–	–	–	–
150A	–	–	2.5VA	5VA	10VA	–	–	–	–	–
200A	–	–	3.75VA	10VA	15VA	–	–	–	1.5VA	–
250A	–	1.5VA	7.5VA	12.5VA	15VA	–	–	1.5VA	2.5VA	7.5VA
300A	1.5VA	2.5VA	10VA	15VA	20VA	–	–	2.5VA	7.5VA	–
400A	2.5VA	3.75VA	10VA	15VA	20VA	–	1.5VA	5VA	10VA	12.5VA
500A	3.75VA	7.5VA	15VA	20VA	30VA	–	1.5VA	5VA	10VA	12.5VA
600A	5VA	10VA	15VA	30VA	–	–	2.5VA	7.5VA	12.5VA	15VA
750A	5VA	15VA	20VA	30VA	–	5VA	5VA	10VA	15VA	–
800A	7.5VA	15VA	30VA	30VA	–	5VA	7.5VA	10VA	15VA	–
1000A	10VA	20VA	30VA	45VA	–	7.5VA	12.5VA	20VA	20VA	–
1200A	10VA	30VA	30VA	45VA	–	5VA	15VA	20VA	30VA	–
1250A	10VA	30VA	30VA	45VA	–	10VA	15VA	20VA	30VA	–
1500A	10VA	30VA	30VA	45VA	–	10VA	15VA	20VA	30VA	–
1600A	10VA	30VA	30VA	45VA	–	10VA	15VA	20VA	30VA	–
2000A	–	–	–	–	–	10VA	15VA	20VA	30VA	–

ORDER EXAMPLE : ZiS 10.60C

Rated primary current : 1500A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 30VA

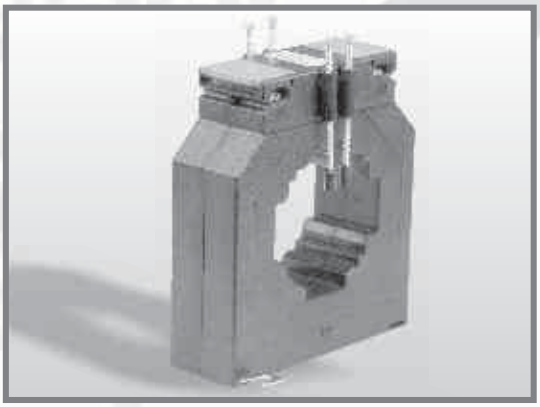
ORDER EXAMPLE : ZiS 10.80C

Rated primary current : 2000A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 20VA

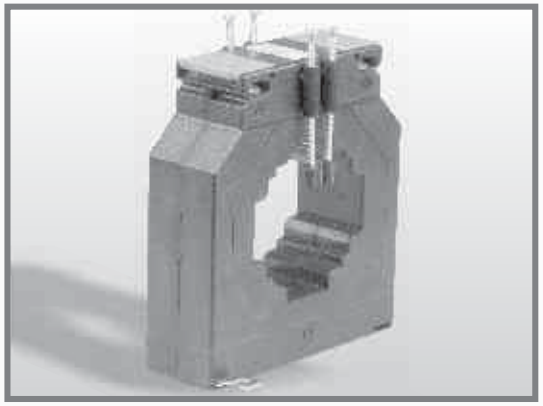
NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiS 14 Series Current Transformer :

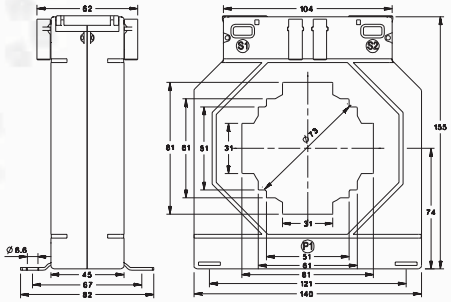
ZiS 14.80C:



ZiS 14.10VC:

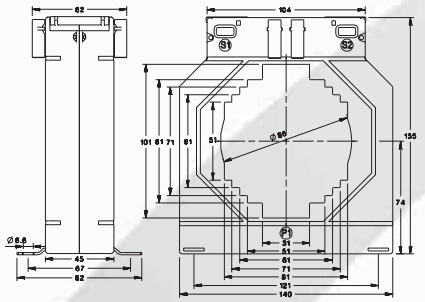


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 14 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiS 14.80C Accuracy Class					ZiS 14.10VC Accuracy Class				
	0.2S	0.2	0.5	1	3	0.2S	0.2	0.5	1	3
200A	–	–	2.5VA	5.0VA	7.5VA	–	–	1.5VA	3.75VA	5.0VA
250A	–	--	5.0VA	10VA	15VA	–	–	2.5VA	5.0VA	–
300A	–	1.5VA	7.5VA	15VA	–	–	–	–	7.5VA	10VA
400A	–	2.5VA	10VA	15VA	20VA	–	–	7.5VA	10VA	12.5VA
500A	2.5VA	5.0VA	15VA	30VA	45VA	–	2.5VA	10VA	12.5VA	12.5VA
600A	3.75VA	7.5VA	15VA	30VA	45VA	–	3.75VA	10VA	15VA	20VA
750A	5.0VA	10VA	15VA	45VA	60VA	–	5VA	15VA	20VA	30VA
800A	5.0VA	10VA	15VA	45VA	60VA	–	5VA	15VA	20VA	30VA
1000A	10VA	15VA	30VA	60VA	60VA	–	10VA	15VA	20VA	30VA
1200A	10VA	15VA	30VA	60VA	–	–	15VA	15VA	30VA	–
1250A	10VA	30VA	60VA	60VA	–	–	15VA	15VA	30VA	–
1500A	10VA	30VA	60VA	60VA	–	–	20VA	15VA	30VA	–
1600A	10VA	30VA	60VA	60VA	–	–	20VA	30VA	45VA	–
2000A	10VA	30VA	60VA	60VA	–	–	30VA	45VA	45VA	–
2500A	–	–	–	–	–	–	30VA	45VA	45VA	–
3000A	–	–	–	–	–	–	30VA	60VA	60VA	–

ORDER EXAMPLE : ZiS 14.80C

Rated primary current : 2000A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 30VA

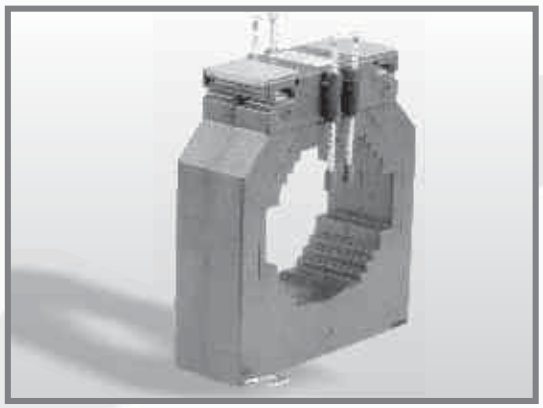
ORDER EXAMPLE : ZiS 14.10VC:

Rated primary current : 3000A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 30VA

NOTE: On request orders for types different from table are accepted. | On request order for clip for DIN EN 50022 rail are accepted.

ZIEGLER ZiS 14 Series Current Transformer :

ZiS 14.10HC:

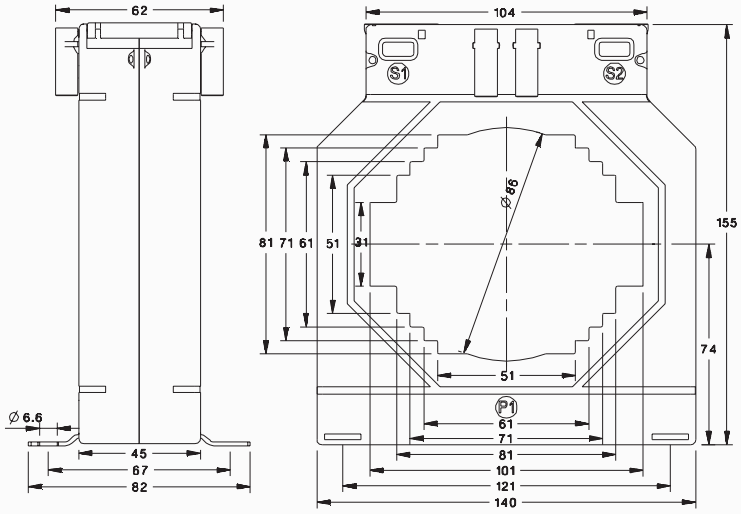


ORDER EXAMPLE : ZiS 14.10HC:

Rated primary current :	4000A
Rated Secondary Current:	5A
Class of accuracy :	0.5
Rated Burden :	60VA

NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiS 14 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

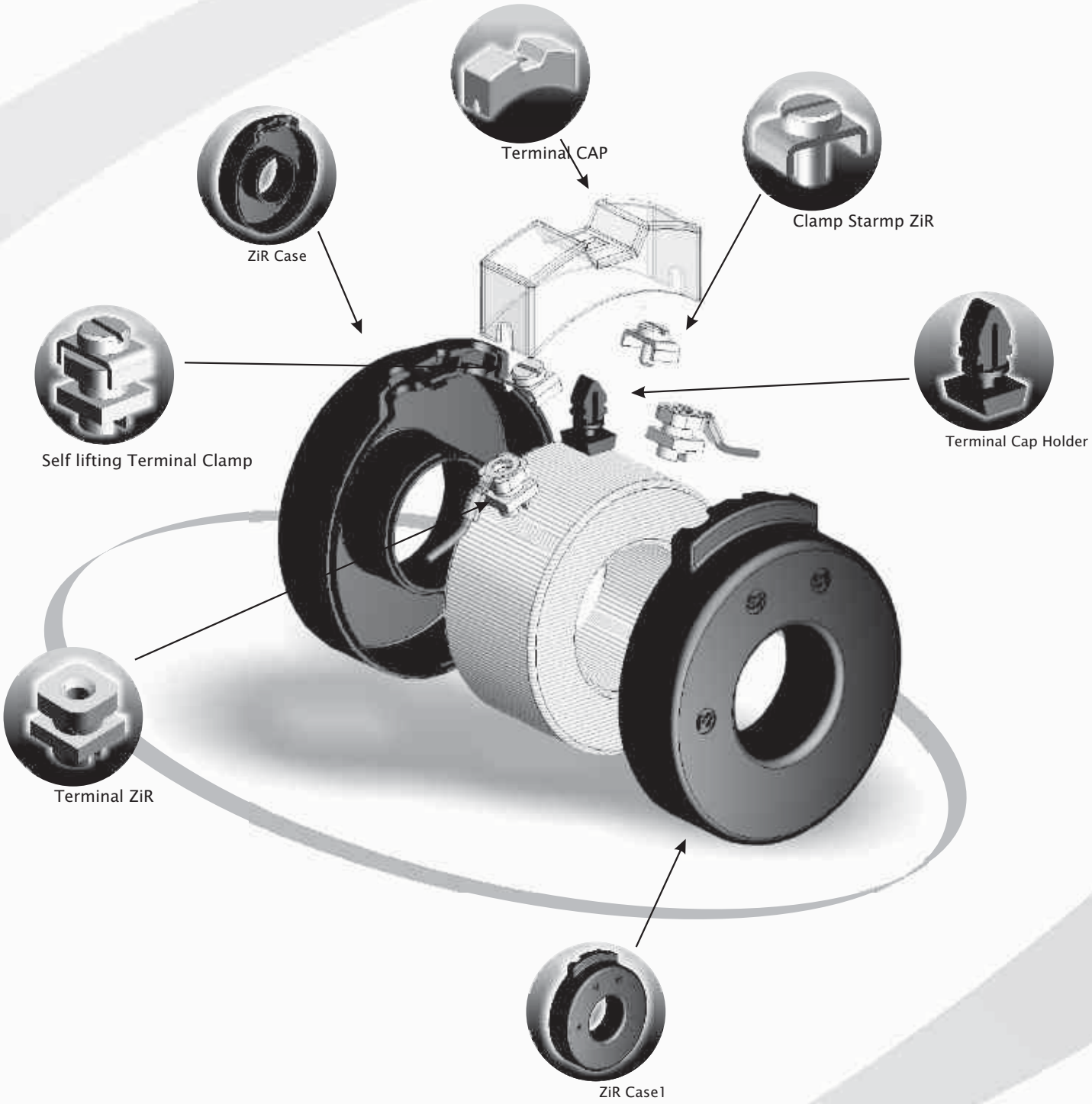
Rated Primary current	ZiS 14.10HC Accuracy Class				
	0.2S	0.2	0.5	1	3
200A	–	–	1.5VA	3.75VA	5.0VA
250A	–	–	2.5VA	5.0VA	–
300A	–	–	–	7.5VA	10VA
400A	–	1.5VA	7.5VA	10VA	12.5VA
500A	–	2.5VA	10VA	12.5VA	–
600A	2.5VA	3.75VA	10VA	15VA	20VA
750A	5.0VA	5VA	15VA	20VA	30VA
800A	5.0VA	5VA	15VA	20VA	30VA
1000A	5.0VA	7.5VA	15VA	20VA	30VA
1200A	10VA	15VA	15VA	20VA	–
1250A	10VA	15VA	15VA	30VA	–
1500A	10VA	20VA	20VA	30VA	--
1600A	10VA	20VA	20VA	45VA	–
2000A	10VA	30VA	45VA	45VA	–
2500A	10VA	30VA	45VA	45VA	–
3000A	10VA	30VA	60VA	60VA	–
4000A	10VA	30VA	60VA	60VA	–

ZiR SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiR 7.30B			PRIMARY	ZiR 7.30D				PRIMARY	ZiR 8.43B			
	Dimension of busbar hole. ∅ 30mm			CURRENT	Dimension of busbar hole. ∅ 30 mm				CURRENT	Dimension of busbar hole. ∅ 43 mm			
	Accuracy Class				Accuracy Class					Accuracy Class			
	0.5	1	3		0.2	0.5	1	3		0.2	0.5S	0.5	1
50A	–	1.5VA	2.5VA	50A	–	–	1.5VA	3.75VA	50A	–	–	–	–
60A	–	1.5VA	2.5VA	60A	–	–	1.5VA	5VA	60A	–	–	–	–
75A	–	1.5VA	3.75VA	75A	–	1.5VA	2.5VA	5VA	75A	–	–	–	–
100A	1.5VA	2.5VA	5VA	100A	–	2.5VA	5VA	7.5VA	100A	–	–	–	–
125A	2.5VA	3.75VA	5VA	125A	–	2.5VA	5VA	7.5VA	125A	–	–	–	–
150A	2.5VA	5VA	7.5VA	150A	–	3.75VA	7.5VA	10VA	150A	–	–	–	–
200A	–	–	–	200A	3.75VA	7.5VA	15VA	–	200A	2.5VA	5VA	5VA	10VA
250A	–	–	–	250A	–	–	–	–	250A	3.75VA	7.5VA	7.5VA	15VA
300A	–	–	–	300A	–	–	–	–	300A	5VA	10VA	10VA	20VA

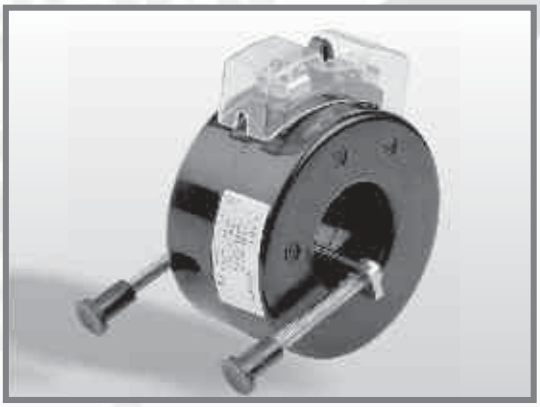
Rated Primary current	ZiR 10.58B				ZiR 11.72B					ZiR 15.11B				
	Dimension of busbar hole. ∅ 58mm				Dimension of busbar hole. ∅ 72 mm					Dimension of busbar hole. ∅ 113 mm				
	Accuracy Class				Accuracy Class					Accuracy Class				
	0.2S	0.2	0.5	1	0.2S	0.2	0.5S	0.5	1	0.2S	0.2	0.5S	0.5	1
400A	3.75VA	5VA	10VA	20VA	–	–	–	–	–	–	–	–	–	–
500A	5VA	7.5VA	15VA	25VA	–	–	–	–	–	–	–	–	–	–
600A	7.5VA	10VA	15VA	25VA	–	–	–	–	–	–	–	–	–	–
800A	–	–	–	–	10VA	10VA	15VA	15VA	30VA	–	–	–	–	–
1000A	–	–	–	–	10VA	10VA	15VA	15VA	30VA	–	–	–	–	--
1200A	–	–	–	–	–	–	–	–	–	10VA	15VA	15VA	20VA	30VA
1250A	–	–	–	–	–	–	–	–	–	10VA	15VA	15VA	20VA	30VA
1500A	–	–	–	–	–	–	–	–	–	15VA	15VA	15VA	20VA	30VA
1600A	–	–	–	–	–	–	–	–	–	15V	15VA	20VA	20VA	30VA
2000A	–	–	–	–	–	--	–	–	–	15VA	20VA	20VA	25VA	45VA
2500A	–	–	–	–	–	–	–	–	–	15VA	20VA	20VA	25VA	45VA
3000A	–	–	–	–	–	–	–	–	–	15VA	20VA	20VA	30VA	45VA
3200A	–	–	–	–	–	–	–	–	–	15VA	20VA	20VA	30VA	45VA

COMPONENTS OF ZIEGLER ROUND TYPE CURRENT TRANSFORMER

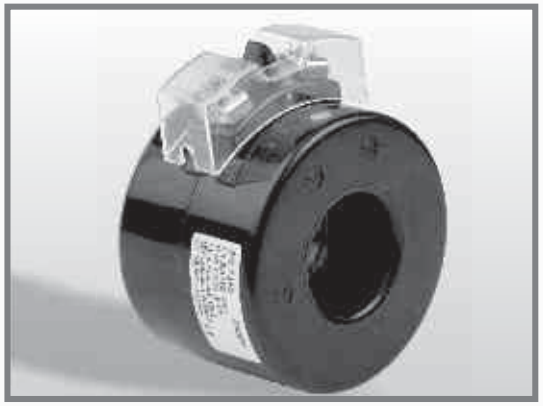


▶ ZIEGLER ZiR Series Current Transformer :

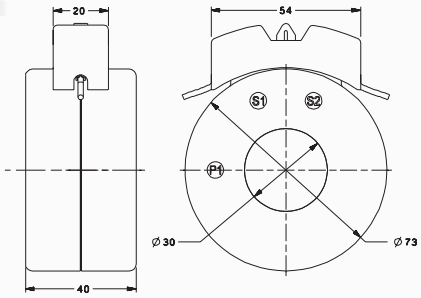
ZiR 7.30B



ZiR 7.30D

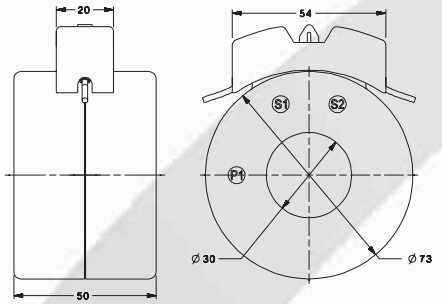


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiR 7 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiR 7.30B		
	Dimensions of busbar hole.Dia 30 mm		
	Accuracy Class		
	0.5	1	3
50A	–	1.5VA	2.5VA
60A	–	1.5VA	2.5VA
75A	–	1.5VA	3.75VA
100A	1.5VA	2.5VA	5VA
125A	2.5VA	3.75VA	5VA
150A	2.5VA	5VA	7.5VA

Rated Primary current	ZiR 7.30D		
	Dimensions of busbar hole.Dia 30 mm		
	Accuracy Class		
	0.2	0.5	3
50A	–	–	3.75VA
60A	–	–	5VA
75A	–	1.5VA	5VA
100A	–	2.5VA	7.5VA
125A	–	2.5VA	7.5VA
150A	–	3.75VA	10VA
200A	3.75VA	7.5VA	

ORDER EXAMPLE : ZiR 7.30B :

Rated primary current : 150A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 5VA

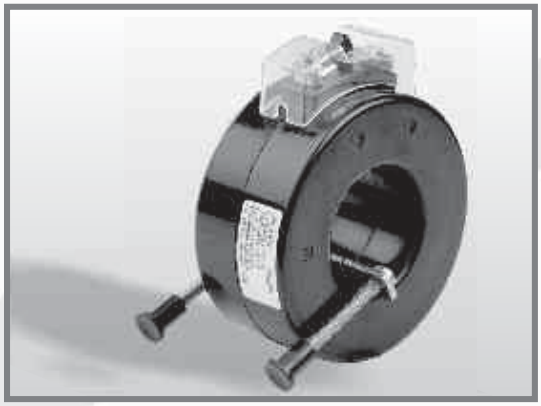
ORDER EXAMPLE : ZiR 7.40D :

Rated primary current : 200A
Rated Secondary Current: 5A
Class of accuracy : 1
Rated Burden : 15VA

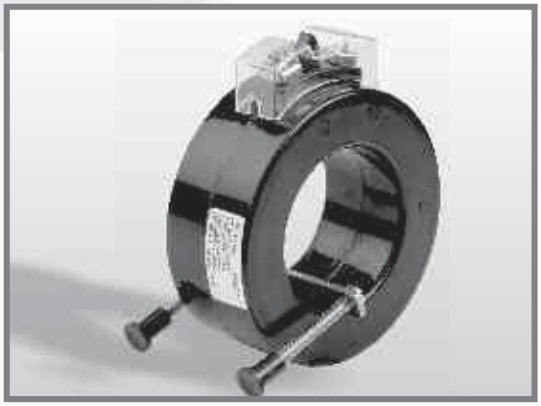
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiR Series Current Transformer :

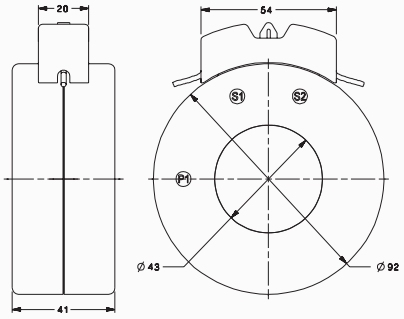
ZiR 8.43B



ZiR 10.58B

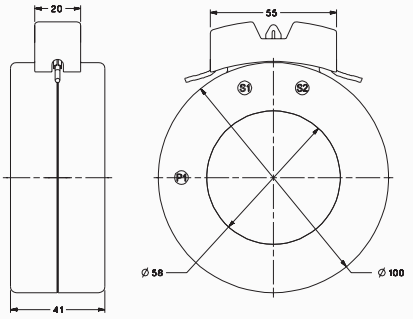


MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiR 8 & 10 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiR 8.43B			
	Dimensions of busbar hole.Dia 43 mm			
	Accuracy Class			
	0.2S	0.5S	0.5	1
200A	2.5VA	5VA	5VA	20VA
250A	3.75VA	7.5VA	7.5VA	15VA
300A	5VA	10VA	10VA	20VA

Rated Primary current	ZiR 10.58B			
	Dimensions of busbar hole.Dia 58 mm			
	Accuracy Class			
	0.2S	0.2	0.5	1
400A	3.75VA	5VA	10VA	20VA
500A	5VA	7.5VA	15VA	25VA
600A	7.5VA	10VA	15VA	25VA

ORDER EXAMPLE : ZiR 8.43B :

Rated primary current : 300A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 10VA

ORDER EXAMPLE : ZiR 10.58B

Rated primary current : 600A
Rated Secondary Current: 5A
Class of accuracy : 0.5
Rated Burden : 15VA

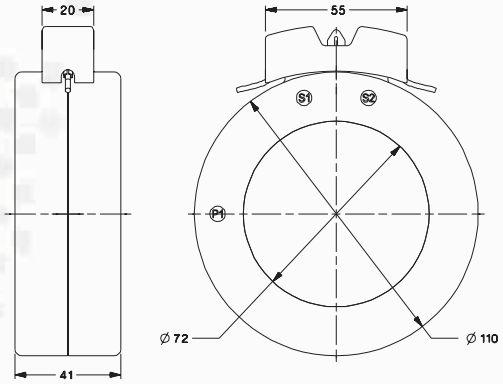
NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

▶ ZIEGLER ZiR Series Current Transformer :

ZiR 11.72B

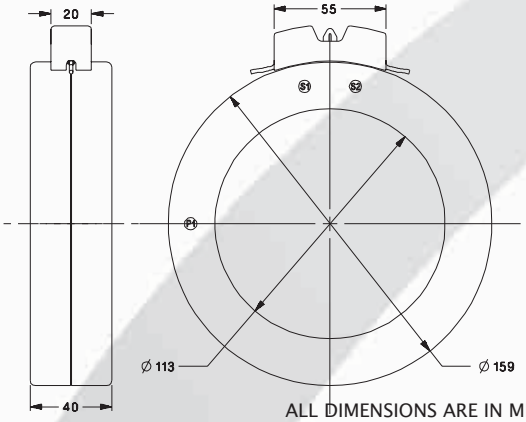
ZiR 15.113B

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

MOUNTING WITH COPPER BUS BAR DRAWING :



ALL DIMENSIONS ARE IN MM

ZiR 11 & 15 SERIES CURRENT TRANSFORMER POSSIBLE COMBINATIONS :

Rated Primary current	ZiR 11.72B				
	Dimensions of busbar hole.Dia 72 mm				
	Accuracy Class				
	0.2S	0.2	0.5S	0.5	1
800A	10VA	10VA	15VA	15VA	30VA
1000A	10VA	10VA	15VA	15VA	30VA

Rated Primary current	ZiR 15.11B				
	Dimensions of busbar hole.Dia 113 mm				
	Accuracy Class				
	0.2S	0.2	0.5S	0.5	1
1200A	10VA	15VA	15VA	20VA	30VA
1250A	10VA	15VA	15VA	20VA	30VA
1500A	15VA	15VA	15VA	20VA	30VA
1600A	15VA	15VA	20VA	20VA	30VA
2000A	15VA	20VA	20VA	25VA	45VA
2500A	15VA	20VA	20VA	25VA	45VA
3000A	15VA	20VA	20VA	30VA	45VA
3200A	15VA	20VA	20VA	30VA	45VA

ORDER EXAMPLE : ZiR 11.72B :

Rated primary current : 1000A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 10VA

ORDER EXAMPLE : ZiR 15.11B :

Rated primary current : 3000A
Rated Secondary Current: 5A
Class of accuracy : 0.2
Rated Burden : 20VA

NOTE: On request orders for types different from table are accepted.
On request order for clip for DIN EN 50022 rail are accepted.

ROUTINE TEST:

Tests carried out on each current transformer to check requirements likely to vary during production.

The following tests apply to each individual transformer:

A. Verification of terminal markings
B. Power-frequency withstands test primary winding.
C. Partial discharge measurement.
D. Power-frequency withstand test on secondary windings.
E. Power-frequency withstand test, between sections.
F. Inter-turn over voltage test
G. Determination of errors.

The order of the tests is not standardized, but determination of error shall be performed after the other test.

SPECIAL TESTS / OPTIONAL TESTS:

Test which may be in the nature of type tests or routine tests, and are carried out only by agreement between manufacturer and purchaser.

TYPE TEST:

Tests carried out to prove the general qualities and design of a given type of current transformer in accordance with the requirements of the applicable standers.

Tests may be carried out on a prototype which may incorporate special arrangements for the measurements required by applicable standard.

The following tests are type test:

A. Short time current test
B. Temperature rise test
C. Lightning impulse test
D. Switching impulse test
E. Wet test for outdoor type transformer
F. Determination of errors
G. Radio interference voltage measurement (RIV) (As specified in IEC 60044-1)

All the dielectric type test should be carried out on the same transformer, unless otherwise specified.

SHORT TIME CURRENT TEST:

For the thermal short time current Ith test the transformer shall be at a temperature 10˚C to 40˚C. The test shall be made with the secondary winding short circuited and at the current I for a time t, so that (I^2t) is not less then (I^2th) and provided t has a value between 0,5 s and 5 s.

The dynamic test shall be made with the secondary winding (s) short-circuited, and with a primary current the peak value of which is not less than the rated dynamic current (Idyn) for at least one peak.

The dynamic test may be combined with the thermal test above, provided the first major peak current of that test is not less than the rated dynamic current (Idyn).

The transformer shall be deemed to have passed these tests if, after cooling to ambient temperature (between 10˚C and 40˚C), it satisfies the following requirements:

A. It is not visibly damaged; **B.** Its errors after demagnetization do not differ from those recorded before the tests by more than half the limits of error appropriate to its accuracy class **C.** It withstands the dielectric tests specified in 8.2, 8.3 and 8.4 but with the test voltage or currents reduced to 90% of those given. **D.** On examination, the insulation next to the surface of the conductor dose not show significant deterioration (e.g. carbonization).

TEMPERATURE-RISE TEST:

A test shall be made to prove compliance with the requirement of 4.6. for the purpose of this test, current transformers shall be deemed to have attained steady temperature when the rate of temperature rise dose not exceed 1 K per hour.

The test-site ambient temperature shall be between 10˚C and 30˚C. For the test the transformer shall be mounted in a manner representative of the mounting in service.

The temperature rise of winding shall, when practicable, be measured by the increase in resistance method, but for winding of very low resistance, thermocouples may be employed.

The temperature rise of parts other than windings may be measured by thermometer or thermocouples.

VERIFICATION OF TERMINAL MARKINGS:

It shall be verified that the terminal markings are correct.

POWER-FREQUENCY TEST:

The power frequency withstand test shall be performed in accordance with IEC 60060-1.

The test voltage shall have the appropriate value given in table 3 or 5 (in IEC 60044-1 standard) depending on the highest voltage for equipment. The duration shall be 60 s.

The test voltage shall be applied between the short-circuited primary winding and earth. The short-circuited secondary winding (s), the frame, case (if any) and core (if there is a special earth terminal) shall be connected to earth.

INTER-TURN OVER VOLTAGE TEST:

The inter-turn over voltage test shall be performed in accordance with one of the following procedures.

Procedure B: with the primary winding open-circuited, the prescribed test voltage (at same suitable frequency) shall be applied for 60 s to the terminals of each secondary winding, providing that the r m s value of the secondary current dose not exceed the rated secondary current (or rated extended current).

The value of the test frequency shall be not greater than 400 Hz. At this frequency if the voltage value achieved at the rated secondary current (or rated extended current) is lower than 4.5 kV peak the obtained voltage is to be regarded as the best voltage. When the frequency exceeds twice the rated frequency, the duration of the test may be reduced from 60 s.

(**Note:** The tests which are applicable to ring type/ window type, low tension, [LT] C.T. are given here. For remaining test procedure, please refer applicable standard.)

Ziegler

Redefine Innovative Metering

ZIEGLER INSTRUMENTS

D- 92318, NEUMARKT, EBERHARD - FABER - STR -2,
NUERNBERG, GERMANY.
Ph.: +49918130483 / 42218 Fax: +49918130420
| Website: www.ziegler-instruments.com