

05 **Current Transformers**

CURRENT TRANSFORMERS

Current transformers with analogue output	page 5/1
Busbars	page 5/5
Current transformers - Classic Line	page 5/6
Protective current transformers - Classic Line	page 5/15
Current transformers - AST Line	page 5/19
Certificable current transformers	page 5/37
Summation current transformers	page 5/43
Split core current transformers	page 5/45
Current transformers with fused terminal	page 5/49
Accessories	page 5/50

Flexible current transformers on request

CURRENT TRANSFORMERS

Current transformers are electrical equipment, that convert primary currents to proportional secondary currents that are appropriate to the connected measuring instruments.

Current transformers have a primary winding to which the current to be measured is fed. Measuring instruments are connected to a secondary winding.

Current transformers are used for measuring and protecting applications. It is recommended to apply current transformers for currents of 40 A or higher..



CURRENT TRANSFORMERS WITH ANALOGUE OUTPUT

SMU - SMU/I

Current Transformer and transducer in one housing



SMU



SMU/I

- Up to 600 A
- Standard analogue output 0(4)-20 mA / 0(2)-10 V

Application

The measured quantity (i.e. primary current) is galvanically insulated (5kV/1 min), rectified (mean value principle) and converted into a proportional and load-independent DC signal current (or voltage). The passive type SMU does not require auxiliary supply. The active SMU/I connects to a auxiliary supply of 230 VAC or 24 VDC. These information have to indicated on the order.

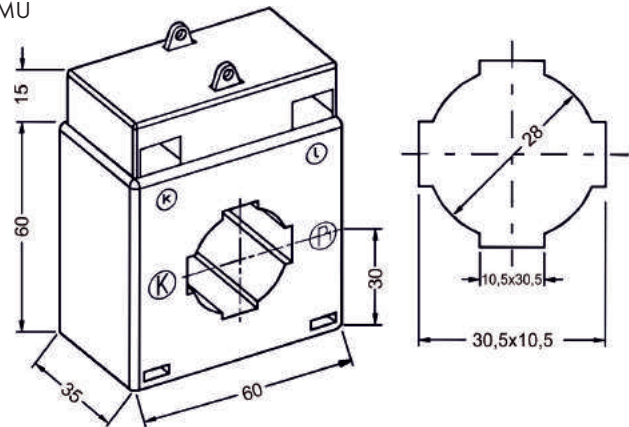
SMU: Design with 0-20 mA or 0-10 V output without auxiliary supply

SMU/I: Design with 4-20 mA output and auxiliary supply 230 VAC or 24 VDC (indication on the order)

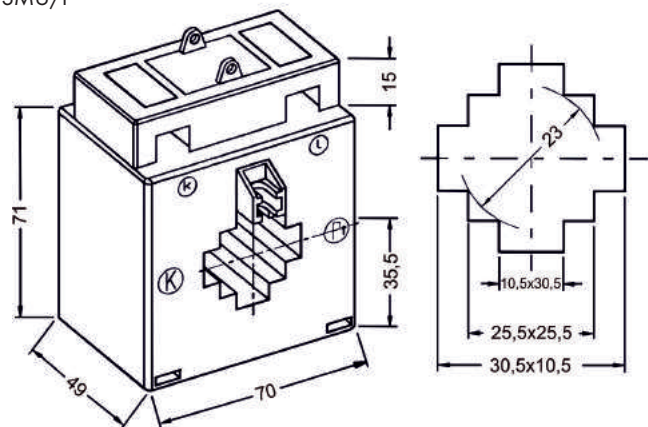
Snap-on mounting for DIN- rail, mounting brackets for mounting plates and screws for the busbar fixing are included in delivery.

Dimensions

SMU



SMU/I

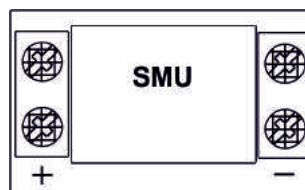


SMU - SMU/I Available metering ranges

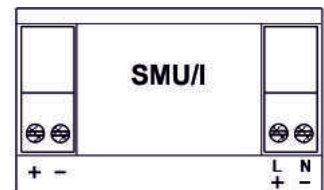
Primary current	SMU		SMU/I	
	Output 0-20mA	Output 0-10V	Output 4-20mA	
	without auxiliary supply		230 VAC	24 VDC
A	Article No.	Article No.	Article No.	Article No.
10	70017 -	70017 -	70017 -	70017 -
15	-	-	- 1575	- 1576
20	-	-	- 1577	- 1578
25	-	-	- 1582	- 1583
30	- 1554	- 1553	- 1584	- 1585
40	- 1554	- 1553	- 1588	- 1589
50	- 1556	- 1555	- 1590	- 1591
60	- 1558	- 1557	- 1592	- 1593
75	- 1574	- 1559	- 1595	- 1596
100	- 1561	- 1560	- 1597	- 1598
150	- 1563	- 1562	- 1600	- 1601
200	- 1567	- 1566	- 1603	- 1604
250	- 1569	- 1568	- 1605	- 1606
300	- 1571	- 1570	- 1607	- 1724
400	- 1573	- 1572	- 1608	- 1609
500	-	- 1797	- 1613	- 1614
600	-	- 1798	- 1616	- 1726
	-	- 1799	- 1619	- 1620

Other primary current on request.

Connection diagrams



K / P1
Output 0-20mA / 0-10V

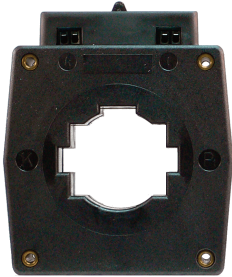


Output 4-20mA **K / P1** Auxiliary supply 230VAC (opt. 24VDC)

CURRENT TRANSFORMERS WITH ANALOGUE OUTPUT

SMK - SMG

Current Transformer and transducer in one housing



- Up to 1500 A
- Standard analogue output 0(4)-20 mA / 0(2)-10 V

SMK / SMG

Application

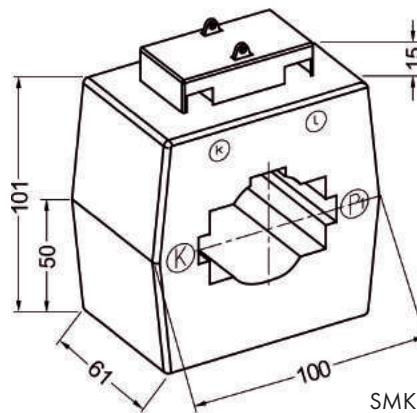
The measured quantity (i.e. primary current) is galvanically insulated (5 kV/1 min), rectified (mean value principle) and converted into a proportional and load-independent DC signal current (or voltage). The passive type SMK/SMG does not require auxiliary supply. The active SMK/I or SMG/I connects to a auxiliary supply of 230 VAC or 24 VDC. These information have to indicated on the order.

SMK - SMG: Design with 0-20 mA or 0-10 V output without auxiliary supply

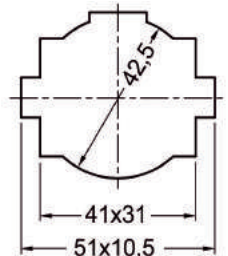
SMK/I - SMG/I: Design with 4-20 mA output and auxiliary supply 230 VAC or 24 VDC (indication on the order)

Screws for the busbar fixing are included in delivery.

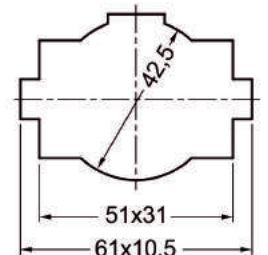
Dimensions



SMK
SMK/I



SMG
SMG/I

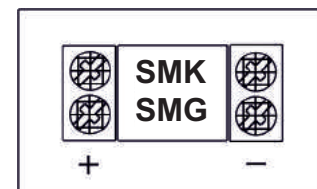


SMK - SMG Available metering ranges

Primary current	SMK		SMK/I		SMG		SMG/I	
	Output 0-20mA	Output 0-10V	Output 4-20mA		Output 0-20mA	Output 0-10V	Output 4-20mA	
	without auxiliary supply		230 VAC	24 VDC	without auxiliary supply		230 VAC	24 VDC
A	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
	70017 -	70017 -	70017 -	70017 -	70017 -	70017 -	70017 -	70017 -
100	- 3599	- 1813	- 3457	- 3456	- 1837	- 1853	- 3632	- 1869
120	- 1800	- 1814	- 1825	- 1824	- 1838	- 1854	- 2631	- 1870
125	- 1801	- 1815	- 1826	- 2623	- 1839	- 1855	- 1871	- 2632
150	- 1802	- 1816	- 1827	- 2624	- 1840	- 1856	- 1872	- 2633
200	- 1803	- 1817	- 3588	- 2625	- 1841	- 1857	- 3556	- 3557
250	- 1804	- 1818	- 1828	- 2626	- 1842	- 1858	- 1873	- 2634
300	- 1805	- 1819	- 1829	- 3379	- 1843	- 1859	- 3637	- 2635
400	- 3365	- 3607	- 3363	- 3364	- 1844	- 1860	- 1875	- 2636
500	- 1806	- 3544	- 1509	- 3635	- 1845	- 1861	- 1876	- 2637
600	- 1807	- 3553	- 1830	- 3584	- 1846	- 1862	- 1877	- 3538
750	- 1808	- 1820	- 1831	- 2627	- 1847	- 1863	- 3639	- 2638
800	- 3629	- 3625	- 1832	- 2628	- 1848	- 1864	- 1879	- 2639
1000	- 1809	- 1821	- 1833	- 1790	- 1849	- 1865	- 3502	- 2640
1200	- 1810	- 3552	- 1834	- 1739	- 1850	- 1866	- 1980	- 2641
1250	- 1811	- 1822	- 1835	- 2629	- 1851	- 1867	- 1981	- 2642
1500	- 1812	- 1823	- 1836	- 2630	- 1852	- 1868	- 1982	- 2643

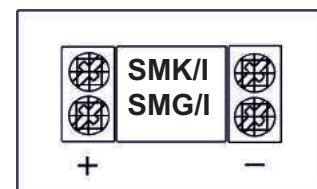
Other primary current on request.

Connection diagrams



K / P1

Output 0-20mA / 0-10V



K / P1

Output 0-20mA / 0-10V

CURRENT TRANSFORMERS WITH ANALOGUE OUTPUT

Technical Data SMU, SMK, SMG according to DIN EN 60688

Current output	0 ...20 mA	4 ...20 mA
current limiting	None	About 22,5 mA
Open-circuit voltage	About 30 V	About 30 V
Output load	0 ...500 ohm	0 ...1000 ohm
(or) voltage output	0 ...10 V	2 ...10 V
Limiting current	None	About 22,5 mA
Limiting voltage	About 18 V	About 18 V
Output resistance	500 ohm	< 30 ohm
Input	30 ...1500 A (metering range according to the table)	10 ...1500 A (metering range according to the table)
Working range	10 ...120 %	5 ...120 %
frequency of input quantity	45 ...55 Hz	45 ...65 Hz
Overcharge lasting	+ 20 %	+ 20 %
Short duration (1 s)	20 times	40 times
Transmission		
Accuracy class index	0.5	0.5
Ripple (peak-to-peak)	100 ohm: < 6 % 500 ohm: < 1 %	< 1 %
Response time	100 ohm: < 0.4 s 500 ohm: < 0.8 s	< 0.15 s
Drift vs. temperature (0 ...45°C)	< 1 %	< 200 ppm/°K
Drift vs. auxiliary	-	< 20 ppm/V
Auxiliary supply AC	-	80 ...120 % de 230 V AC
Auxiliary supply DC	-	85 ...125 % de 24 V DC
Internal consumption measuring input	< 3 VA	< 1 VA
Nominal consumption auxiliary supply	-	< 3 VA
Housing and fixing		
Mounting	Unbreakable black current transformer casing of polyamid	
Insulation class	Busbar, screw-or snpa-on mopingting for cap rail	
Temperature resistance	E (IEC85)	
Burning rate	110°C according to UL 746B oder 148° according to DIN ISO 306B	
Protection class	V-0 UL-94 or level IIb according to DIN VDE 0304	
Schutzart	Housing IP40, clamps IP20 according to DIN EN 61032, DIN VDE 110, DIN 40050, VGB4	
Reference conditions (in accordance with IEC 60688)		
Ambient temperature	15... 30°C	
Frequency of measuring size	50 Hz, +/- 2%	
Wave form of measuring size	Sinusoidal, form factor 1.111, +/- 0.5%	
Output load	0.5 x rated impedance, +/- 1 %	
Auxiliary supply	Nominal voltage +/- 2 %	
EMV	Inspections according to EN 50081 and EN 50082 No radiation according to EN 55011 No harmonics according to EN 60555 Interference resistance according to EN 61000-4-2, ESD (electrostatic discharge), severity level cl.3, test voltage 8kV Interference resistance according to EN 61000-4-3, (high-frequent electro-magnetic panels) Interference resistance according to EN 61000-4-4, burst (fast, transient electrical disturbance variable) severity level cl.3, test voltage 2kV Interference resistance according to EN 61000-4-4, Surge (surge voltage), severity level cl.3, test voltage 2kV	
Environmental conditions (according to IEC 60688)		
Transport and storage temperature	-40°... 70°C	
Working temperature	-10... 55°C	
Relative humidity	Until 93%	
Elevation	Until 2000 n NN	
Safety (according to DIN EN 61010-1 and DIN EN 50178)	Doubled or amplified insulation (protection class II according to DIN VDE 0106)	
Pollution degree	2	
Overvoltage category	III @ 600V (power line to neutral or working voltage) test voltage 5.2 kV/1 min	

NOTES

BUSBARS

CU-cable consumption between the measurement instrument and the current transformer

Copper bars' ampacity according to DIN 43671

For secondary primary rated current of 5 A

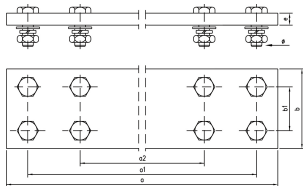
conductor cross-section mm ²	P = consumption in VA (2-wired line)					
	Distance in m					
	1	2	3	4	5	6
1,5	0,58	1,15	2,31	3,46	4,62	5,77
2,5	0,36	0,71	1,43	2,14	2,86	3,57
4	0,22	0,45	0,89	1,34	1,79	2,24
6	0,15	0,30	0,60	0,89	1,19	1,49
10	0,09	0,18	0,36	0,54	0,71	0,89

For secondary rated current of 1 A

conductor cross-section mm ²	P = consumption in VA (2-wired line)					
	Distance in m					
	10	20	40	60	80	100
1	0,36	0,71	1,43	2,14	2,85	3,57
1,5	0,23	0,46	0,92	1,39	1,85	2,31
2,5	0,14	0,29	0,57	0,86	1,14	1,43
4	0,09	0,18	0,36	0,54	0,71	0,89
6	0,06	0,12	0,24	0,36	0,48	0,60
10	0,04	0,07	0,14	0,21	0,29	0,36

$$P = \frac{I^2 \cdot 2 \cdot L}{q_{cu} \cdot 56} \text{ VA}$$

L = Distance in m
q_{cu} = Conductor cross-section in mm²



busbars

To pay attention to the selection of current transformers:

1. the primary and secondary ratio of the current transformer;
2. the burden in VA. The burden is calculated of all connected meters and the wires as well.
3. the class accuracy according to VDE 0414 and IEC-determinations. For calculated measurement class 0.5. For internal measuring or protection relays class 1 and 3.

Ampacity according to DIN 43671

Width x thickness mm	Cross section mm ²	Weight 1) kg/m	Continuous current in A / alternating current up to 60 Hz					
			coated			blank		
			numbers of bars			numbers of bars		
			I	II	III	I	II	III
12 x 2	23,5	0,209	123	202	228	108	182	216
15 x 2	29,5	0,262	148	240	261	128	212	247
15 x 3	44,5	0,396	187	316	381	162	282	361
20 x 2	39,5	0,351	189	302	313	162	264	298
20 x 3	59,5	0,529	237	394	454	204	348	431
20 x 5	99,1	0,882	319	560	728	274	500	690
20 x 10	199	1,77	497	924	1320	427	825	1180
25 x 3	74,5	0,663	287	470	525	245	412	498
25 x 5	124	1,11	384	662	839	327	586	795
30 x 3	89,5	0,796	337	544	593	285	476	564
30 x 5	149	1,33	447	760	944	379	672	896
30 x 10	299	2,66	676	1200	1670	573	1060	1480
40 x 3	119	1,06	435	692	725	366	600	690
40 x 5	199	1,77	573	952	1140	482	836	1090
40 x 10	399	3,55	850	1470	2000	715	1290	1770
50 x 5	249	2,22	697	1140	1330	583	994	1360
50 x 10	499	4,44	1020	1720	2320	852	1510	2040
60 x 5	299	2,66	826	1330	1510	688	1150	1440
60 x 10	599	5,33	1180	1960	2610	985	1720	2300
80 x 5	399	3,55	1070	1680	1830	885	1450	1750
80 x 10	799	7,11	1500	2410	3170	1240	2110	2790
100 x 5	499	4,44	1300	2010	2150	1080	1730	2050
100 x 10	999	8,89	1810	2850	3720	1490	2480	3260
120 x 10	1200	10,7	2110	3280	4270	1740	2860	3740
160 x 10	1600	14,2	2700	4130	5360	2220	3590	4680
200 x 10	2000	17,8	3290	4970	6430	2690	4310	5610

1) Calculated with density of 8,9 kg/dm³

Material: E-Cu or other materials according to DIN 40 500 Part 3

Preferable used material: Flat bar with rounded edge according to DIN 46 433 Part 3

Continuously currents for bus bars of E-Cu with rectangle cross-section for indoor use at 35 °C air temperatur and 65 °C bus bar temperatur, vertical position of the bus bar width; Bus bar packets with distances between bus bars of one time bus bar width. For AC current and bus bar packets the distances between bus bars should be > 0,8 x centre to centre distance of the main primary conductors.

Integrated short bus bars in current transformers to be connected to main bus bars can be higher loaded than mentioned in the table if the rest of the bus bar system is higher designed than mentioned in the table (DIN 43671).

Primary bars

Design: brass-copper bar (electro-Cu) nickel-plated

With steel screws M12 x 35 (40) DIN 933 zinc plated and chromated incl. washer, spring lock washer and hex nut

Width x height x length (mm)	Width x height x length (mm)	Width x height x length (mm)
30x 6x 140 ○	50x 10x 180 ○	2x 50x 10x 220 ○
30x 8x 160 ○	50x 10x 220 ○	2x 60x 10x 220 ○
30x 10x 140 ○	60x 10x 180 ○	2x 80x 10x 240 ○
30x 10x 160 ○	60x 10x 240 ○	2x100x 10x 240 ○
40x 5x 140 ○	80x 10x 240 ○	Copper tube Ø 22.5; length 34 mm Ø 22.5; length 36 mm
40x 5x 160 ○	100x 10x 240 ○	
40x 10x 140 ○		
40x 10x 160 ○		
50x 10x 140 ○		

○ Delivery period on request

CURRENT TRANSFORMERS - CLASSIC LINE

General Characteristics

Application

Current transformers convert an alternating current, usually of high value, into a proportional secondary current of lower value, which is appropriate to be measured by standard instruments of rated currents 5 or 1 A. CELSA transformers are suitable for indoor use in low-voltage networks, and they are built according to IEC 60044-1 and BS 3938. Current transformers are applied for measuring and protection. It is indicated to use current transformers for currents from 40A.

Accuracy (according to IECn 60044-1)

CELSA current transformers fulfil the specifications of the accuracy classes 0.5, 1 and 3 for the rated outputs indicated in the tables, in the same instrument.

Constructive Characteristics

Cases of self-extinguishing polycarbonate V0 according to UL 94. Sealable terminal cover included, made of clear polycarbonate, except for the types IBA and IBP.

Double secondary terminals, for short-circuiting the secondary winding before opening the measuring circuit.

The IBO and IBO-50 are wound primary transformers. Other types are bus type transformers.

Electrical Data (according to IEC 60044-1)

Rated secondary current: 5 or 1 A

Frequency range: 50 - 60 Hz

Highest voltage for equipment: 720 V

Rated insulation level: 3 kV, 50 Hz during 1 minute

Rated continuous thermal current: 1.2 times rated current

Rated short-time thermal current (I_{th}): 60 times rated current

Rated dynamic current (1 dyn): 2.5 times I_{th}

Instrument security factor (FS): less than 5

Thermal class of insulation: according to IEC 60085: E (120 °C)

Accuracy class index

According to IEC 60085, VDE-0414 and UNE-21028 the current and the angle error are as follows:

Accuracy								
Class	Current error in % at I _n				Loss angle in min. at I _n			
	0,05 I _n	0,02 I _n	I _n	1,2 I _n	0,05 I _n	0,02 I _n	I _n	1,2 I _n
0,5	1	0,75	0,5	0,5	60	40	30	30
1	2	1,5	1	1	120	80	60	60
3	in 0,5 I _n = 3				in 0,5 I _n = 120			

The accuracy of the current transformers of class 0.5 and 1 varies in any case between 25 % and 100 % of their rated burden for more than 2.5 VA; and between 50 % and 100 % for equal or less than 2.5 VA; however at least 1 VA.

Class 0.5 is used for counters.

Class 1 is used for measurement and for internal connected counters.

Class 3 is used for protection and for relays.

CURRENT TRANSFORMERS - CLASSIC LINE

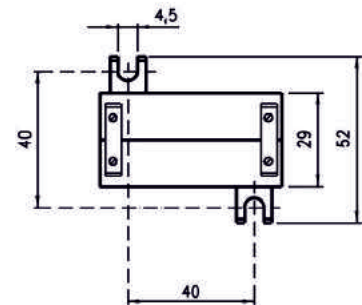
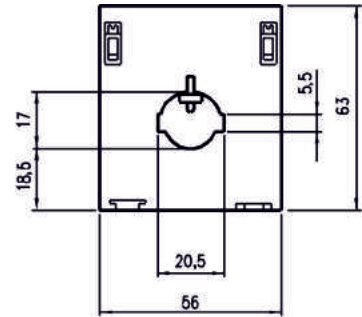
IBA

WINDOW TYPE CURRENT TRANSFORMER



Round conductor \varnothing 16 mm

Primary bar 20 x 5 mm



IBA Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
40	- 1952	-	1,25	- 1951	-	1,25*
50	- 1954	-	1,25	- 1953	-	1,25
60	- 1956	-	1,25	- 1955	-	1,25
75	- 1958	-	1,25	- 1957	-	1,25
100	- 1944	-	2,5	- 1943	-	2,5
125	- 1946	1,25	3,75	- 1945	1,25	3,75
150	- 1948	1,25	5	- 1947	1,25	5
200	- 1950	2,5	5	- 1949	2,5	5

Accessories (see page 5/53): mounting feet / snap on mounting bracket EN 50022-35

*class 3

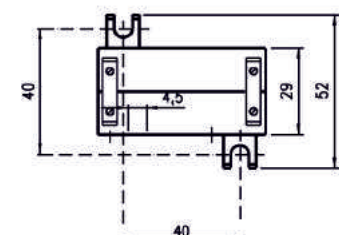
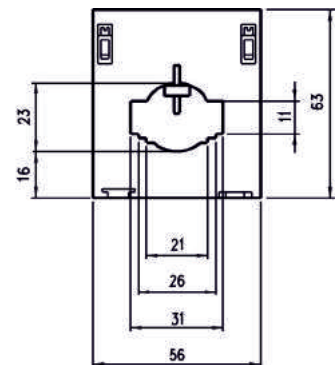
IBP

WINDOW TYPE CURRENT TRANSFORMER



Round conductor \varnothing 22 mm

Primary bar 30 x 10 mm



IBP Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
100	- 3241	-	1,25	- 3492	-	1,25
125	- 3493	-	2,5	- 3494	-	2,5
150	- 2038	-	2,5	- 2037	-	2,5
200	- 2040	-	2,5	- 2039	-	2,5
250	- 2042	1,25	2,5	- 2041	1,25	2,5
300	- 2044	2,5	2,5	- 2043	2,5	2,5
400	- 2046	2,5	3,75	- 2045	2,5	3,75
500	- 2048	3,75	5	- 2047	2,5	2,5
600	- 2050	3,75	5	- 2049	2,5	3,75

Accessories (see page 5/53): mounting feet / snap on mounting bracket EN 50022-35

CURRENT TRANSFORMERS - CLASSIC LINE

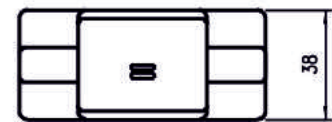
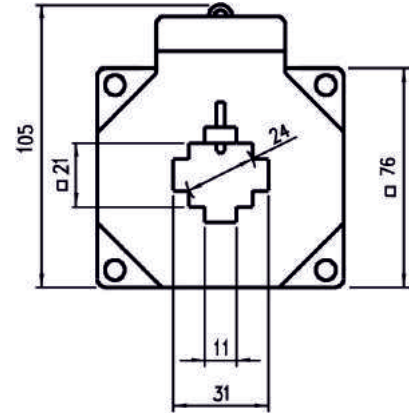
IB



WINDOW TYPE CURRENT TRANSFORMER

Round conductor \varnothing 23 mm

Primary bar 30 x 10 mm



IB Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
50	- 1917	-	1,25	- 1916	-	1,25
60	- 1921	-	1,25	- 1920	-	1,25
75	- 1925	-	2,5	- 1924	-	2,5
100	- 1903	-	2,5	- 1902	-	2,5
125	- 1905	-	3,75	- 1904	-	3,75
150	- 1907	-	3,75	- 1906	-	3,75
200	- 1909	1,25	5	- 1908	1,25	5
250	- 1911	3,75	5	- 1910	3,75	5
300	- 1913	3,75	7,5	- 1912	3,75	7,5
400	- 1915	5	10	- 1914	5	10
500	- 1919	5	15	- 1918	5	15
600	- 1923	7,5	20	- 1922	7,5	20

Included in delivery: Primary fixing device

Accessories (see page 5/53): mounting feet / snap on mounting bracket EN 50022-35

IB-50

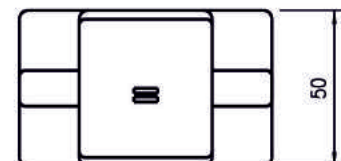
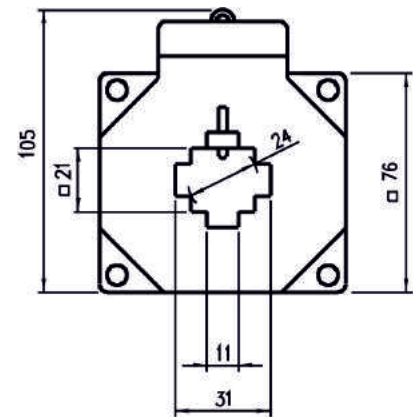
WINDOW TYPE CURRENT TRANSFORMER



The rated burden of this type is higher than the type IB.

Round conductor \varnothing 23 mm

Primary bar 30 x 10 mm



IB-50 Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
100	- 1929	1,25	3,75	- 1928	1,25	3,75
125	- 1930	2,5	5	- 3427	2,5	5
150	- 1932	3,75	7,5	- 1931	3,75	7,5
200	- 1934	7,5	15	- 1933	7,5	15
250	- 1936	10	20	- 1935	10	20
300	- 1938	10	20	- 1937	10	20
400	- 1940	10	20	- 1939	10	20
500	- 1941	10	20	- 3584	10	20
600	- 1942	15	30	- 3495	15	30

Included in delivery: Primary fixing device

Accessories (see page 5/53): mounting feet / snap on mounting bracket EN 50022-35

CURRENT TRANSFORMERS - CLASSIC LINE

IBG



IBG



IBG/1

WINDOW TYPE CURRENT TRANSFORMER



For round conductor \varnothing 40 mm the type IBG/1 is available.

Round conductor IBG: \varnothing 30 mm

IBG/1: \varnothing 40 mm

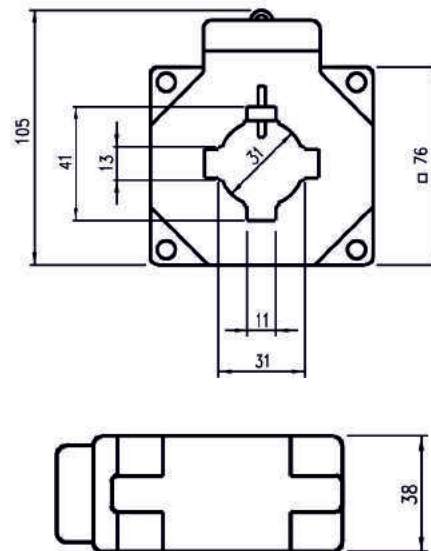
Primary bar 40 x 10 mm

IBG Technical Features, Executions

Primary rated current A	sec. 5A				sec. 1A			
	IBG Article No.	IBG/1 Article No.	Class	Class	IBG Article No.	IBG/1 Article No.	Class	Class
150	- 1969	- 1986	-	2,5	- 1968	- 3496	-	2,5
200	- 1971	- 1988	-	5	- 1970	- 1987	-	5
250	- 1973	- 1990	2,5	5	- 1972	- 1989	2,5	5
300	- 1975	- 1991	3,75	5	- 1974	- 3497	3,75	5
400	- 1977	- 1993	3,75	5	- 1976	- 1992	3,75	5
500	- 1979	- 1994	5	7,5	- 1978	- 3498	5	7,5
600	- 1981	- 3253	5	7,5	- 1980	- 1995	5	7,5
750	- 1983	- 1996	5	7,5	- 1982	- 3499	5	7,5
800	- 1985	- 1997	7,5	7,5	- 1984	- 3500	7,5	7,5
1000	- 1967	- 3692	10	10	- 1001	- 3501	10	10

Included in delivery: Primary fixing device (except IBG/1)

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35



IBG-50



WINDOW TYPE CURRENT TRANSFORMER



The rated burden of this current transformer is higher than the type IBG.

Round conductor \varnothing 30 mm

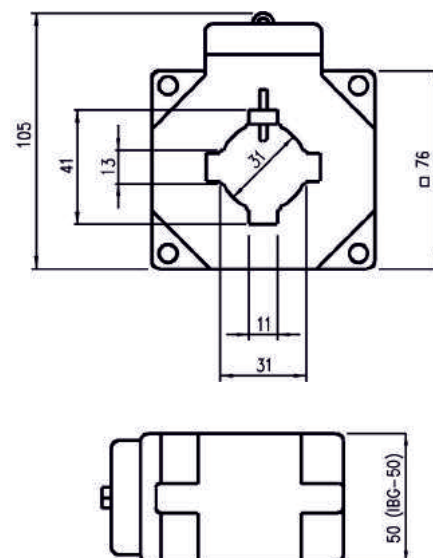
Primary bar 40 x 10 mm

IBG-50 Technical Features, Executions

Primary rated current A	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
150	- 1999	2,5	5	- 3503	2,5	5
200	- 2000	3,75	7,5	- 3504	3,75	7,5
250	- 2001	3,75	7,5	- 3505	3,75	7,5
300	- 2002	5	7,5	- 3506	5	7,5
400	- 2003	10	10	- 3712	10	10
500	- 2004	10	15	- 3713	10	15
600	- 2005	10	15	- 3714	10	15
750	- 2006	10	15	- 3715	10	15
800	- 2007	10	15	- 3716	10	15
1000	- 1998	15	20	- 3357	15	20

Included in delivery: Primary fixing device

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35



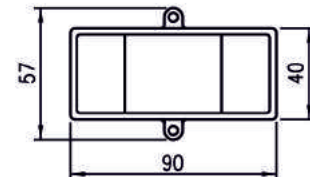
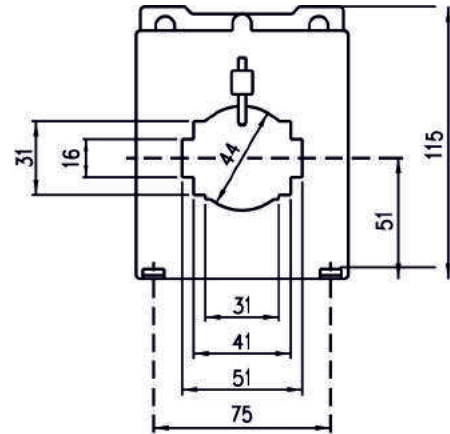
CURRENT TRANSFORMERS - CLASSIC LINE

IBR

WINDOW TYPE CURRENT TRANSFORMER



Round conductor \varnothing 44 mm
 Primary bar 50 x 15 mm
 2 x 40 x 10 mm



IBR Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
400	- 2059	5	5	- 2058	5	5
500	- 2061	7,5	7,5	- 2060	7,5	7,5
600	- 2063	10	10	- 2062	10	10
750	- 2065	10	15	- 2064	10	15
800	- 2067	10	15	- 2066	10	15
1000	- 2052	10	15	- 2051	10	15
1200	- 2054	10	15	- 2053	10	15
1500	- 2056	10	20	- 2055	10	20
1600	- 3717	10	20	- 3718	10	20

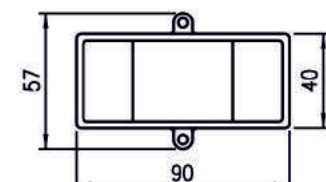
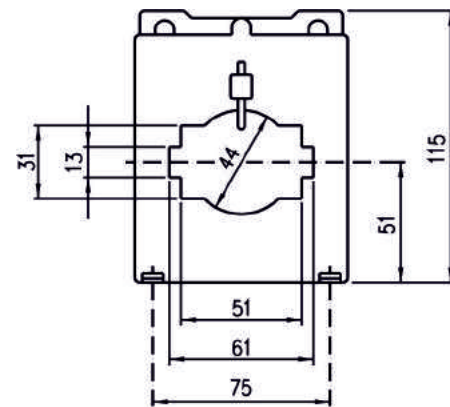
Included in delivery: Primary fixing device
 Accesories (see page 5/53): Mounting feet

IBR/1

WINDOW TYPE CURRENT TRANSFORMER



Round conductor \varnothing 44 mm
 Primary bar 60 x 12 mm
 2 x 50 x 10 mm



IBR/1 Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
400	- 2075	5	5	- 2074	5	5
500	- 2077	7,5	7,5	- 2076	7,5	7,5
600	- 2079	10	10	- 2078	10	10
750	- 2081	10	15	- 2080	10	15
800	- 2083	10	15	- 2082	10	15
1000	- 2069	10	15	- 2068	10	15
1200	- 2071	10	15	- 2070	10	15
1500	- 2073	10	20	- 2072	10	20
1600	- 3719	10	20	- 3720	10	20

Included in delivery: Primary fixing device
 Accesories (see page 5/53): Mounting feet

CURRENT TRANSFORMERS - CLASSIC LINE

IER



WINDOW TYPE CURRENT TRANSFORMER



IER

For round conductors \varnothing 80 mm the type IER/1 is available



IER/1



IER/2



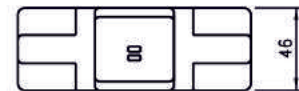
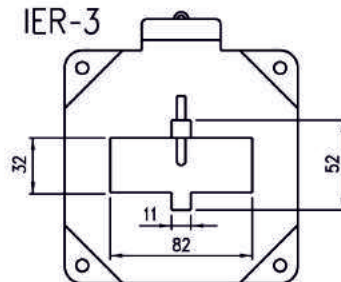
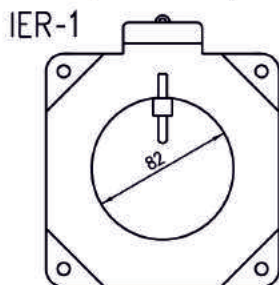
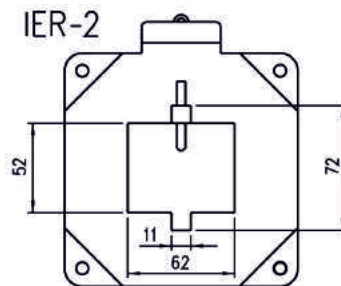
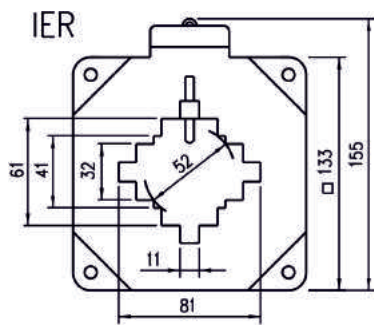
IER/3

Round conductor \varnothing 50 (80) mm
 Primary bar 80 x 10 mm
 2 x 60 x 10 mm

IER Technical Features, Executions

Primary rated current A	sec. 5A						sec. 1A					
	IER	IER/1	IER/2	IER/3	Class	Class	IER	IER/1	IER/2	IER/3	Class	Class
	Article No. 70097 -	Article No. 70097 -	Article No. 70097 -	Article No. 70097 -	0,5	1	Article No. 70097 -	Article No. 70097 -	Article No. 70097 -	Article No. 70097 -	0,5	1
250	- 3326	- 3352	- 3726	- 3734	2,5	5	- 3739	- 3742	- 3752	- 3763	2,5	5
300	- 3465	- 3350	- 3727	- 3735	5	7.5	- 3740	- 3743	- 3753	- 3764	5	7.5
400	- 2122	- 2134	- 3728	- 3736	10	10	- 2121	- 2133	- 3754	- 2147	10	10
500	- 2124	- 2135	- 3729	- 2148	10	15	- 2123	- 3744	- 2140	- 3765	10	15
600	- 2126	- 2137	- 3730	- 3737	10	15	- 2125	- 2136	- 3755	- 3766	10	15
750	- 2128	- 3721	- 3731	- 3738	10	15	- 2127	- 3745	- 3756	- 3767	10	15
800	- 2130	- 3722	- 3105	- 3304	10	15	- 2129	- 3746	- 3757	- 3768	10	15
1000	- 2110	- 2131	- 3637	- 2141	15	20	- 2109	- 3747	- 3758	- 3769	15	20
1200	- 2112	- 2132	- 2138	- 3379	15	20	- 2111	- 3748	- 3759	- 2142	15	20
1500	- 2116	- 3723	- 2139	- 2145	20	30	- 2115	- 3749	- 3760	- 2144	20	30
1600	- 3389	- 3724	- 3732	- 3050	20	30	- 3741	- 3750	- 3761	- 3770	20	30
2000	- 2120	- 3725	- 3733	- 2146	30	45	- 2119	- 3751	- 3762	- 3103	30	45

Included in delivery: Primary fixing device (except IER/1)



CURRENT TRANSFORMERS - CLASSIC LINE

IER/4



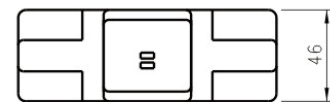
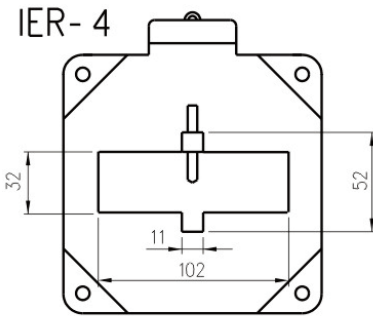
WINDOW TYPE CURRENT TRANSFORMER

Primary bar 2 x 100 x 10 mm



IER/4 Technical Features, Executions

Primary rated current	sec. 5A		sec. 1A	
	Class	Class	Class	Class
A	0,5	1	0,5	1
250	1,25	3,75	1,25	3,75
400	3,75	7,5	3,75	7,5
500	5	10	5	10
600	10	15	10	15
750	10	15	10	15
800	10	15	10	15
1000	15	20	15	20
1200	15	20	15	20
1500	20	30	20	30
1600	20	30	20	30
2000	30	45	30	45
2500	30	45	30	45



Included in delivery: Primary fixing device
On request

IRP



WINDOW TYPE CURRENT TRANSFORMER

On request: Secondary terminals on the long side of the current transformer

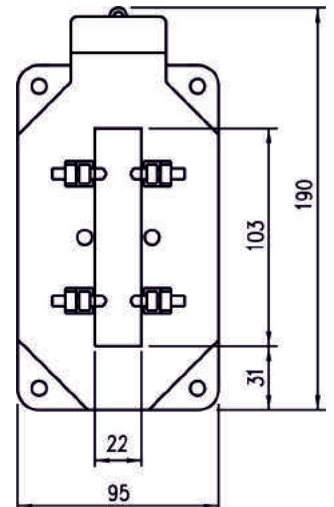
Primary bar 100 x 20 mm



IRP Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
750	- 2170	10	15	- 2169	10	15
800	- 2172	10	15	- 2171	10	15
1000	- 2160	15	20	- 2159	15	20
1200	- 2162	15	20	- 2161	15	20
1500	- 2164	20	35	- 2163	20	35
2000	- 2166	30	45	- 2165	30	45
2500	- 2168	45	60	- 2167	45	60

Included in delivery: Primary fixing device



CURRENT TRANSFORMERS - CLASSIC LINE

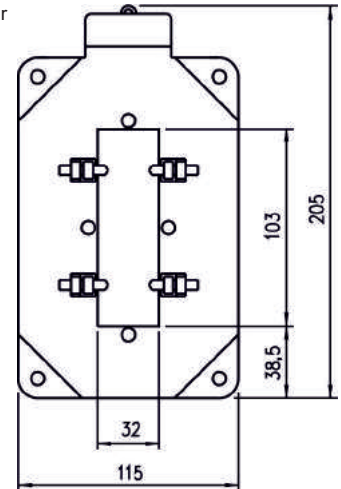
IRM



WINDOW TYPE CURRENT TRANSFORMER

On request: Secondary terminals on the long side of the current transformer

Primary bar 2 x 100 x 10 mm



IRM Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
1500	- 2150	20	30	- 2149	20	30
2000	- 2152	30	45	- 2151	30	45
2500	- 2154	45	60	- 2153	45	60
3000	- 2156	45	60	- 2155	45	60
4000	- 2158	60	60	- 2157	60	60

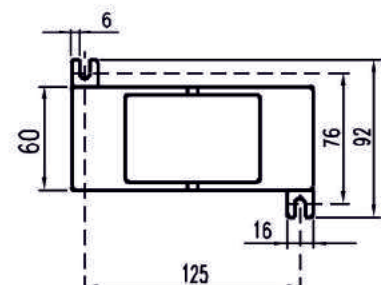
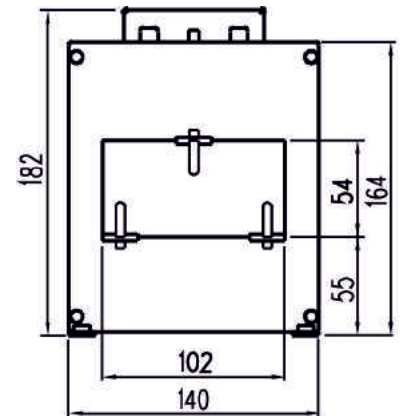
Included in delivery: Primary fixing device

ICM



WINDOW TYPE CURRENT TRANSFORMER

Primary bar 3 x 100 x 10 mm
2 x 100 x 20 mm



ICM Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
750	- 2108	15	20	- 3771	15	20
800	- 3693	15	20	- 3772	15	20
1000	- 2101	20	30	- 3773	20	30
1200	- 3587	30	45	- 3774	30	45
1500	- 2103	30	45	- 3613	30	45
1600	- 2104	30	45	- 3775	30	45
2000	- 2105	45	60	- 3380	45	60
2500	- 3237	60	60	- 3776	60	60
3000	- 2107	60	60	- 2106	60	60

Included in delivery: Primary fixing device

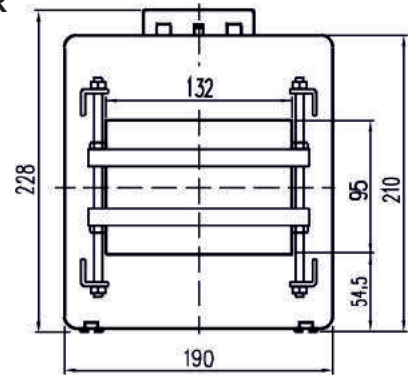
CURRENT TRANSFORMERS - CLASSIC LINE

ICG



WINDOW TYPE CURRENT TRANSFORMER

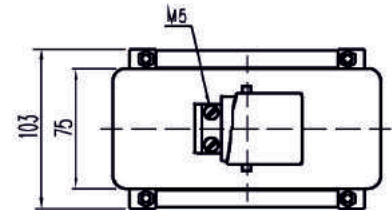
Primary bar 3 x 130 x 20 mm
4 x 130 x 10 mm



ICG Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A		
	Article No.	Class	Class	Article No.	Class	Class
A	70097 -	0,5	1	70097 -	0,5	1
3000	- 2094	60	60	- 2093	60	60
4000	- 2096	60	60	- 2095	60	60
5000	- 2098	60	60	- 2097	60	60
6000	- 2099	60	60	- 2099	60	60

Included in delivery: Primary fixing device



IBO



Form A



Form B



Form C

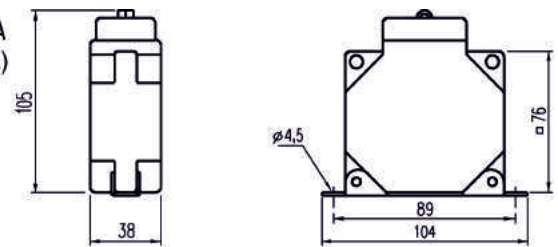
WOUND PRIMARY CURRENT TRANSFORMER

IBO Technical Features, Executions

Primary rated current	sec. 5A			sec. 1A			
	Article No.	Class	Class	Article No.	Class	Class	
A	70097 -	0,5	1	70097 -	0,5	1	
Form A	5	- 2030	10	15	- 2029	10	15
	10	- 2011	10	15	- 2010	10	15
	15	- 2017	10	15	- 2016	10	15
Form B	20	- 2022	10	15	- 2021	10	15
	25	- 2024	10	15	- 2023	10	15
	30	- 2026	10	15	- 2025	10	15
	40	- 2028	10	15	- 2027	10	15
Form C	50	- 2032	10	15	- 2031	10	15
	60	- 2034	10	15	- 2033	10	15
	75	- 2036	10	15	- 2035	10	15
Form C	100	- 2013	10	15	- 2012	10	15
	125	- 2015	10	15	- 2014	10	15
	150	- 2019	10	15	- 2018	10	15

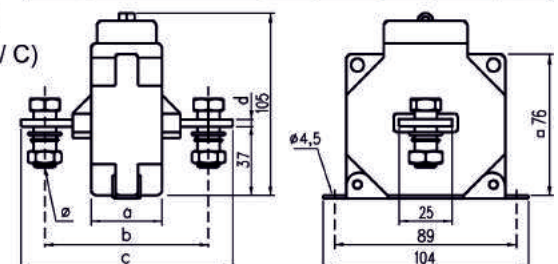
Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35

IBO < 25 A
(Bauform A)



Bauform	Meßbereich	a	b	c	d	∅
A	IBO 1 A ... 20 A	-	-	-	-	-
B	IBO 25 A ... 60 A	38	90	115	3	M6
C	IBO > 75 A ... 150 A	38	90	115	3	M8

IBO > 25 A
(Bauform B / C)



PROTECTIVE CURRENT TRANSFORMERS - CLASSIC LINE

While measurement current transformers are used to go into saturation above the nominal current range (shown in the excess current limiting factor FS) to prevent the increasing of the secondary current in case of system fault (e. g. primary short circuit) and to protect the equipments in the secondary circuit, a protective c.t. is used to have a saturation far away from its nominal current range in order to protect the switchgear etc. by using distance relays, over-current relays etc.

Rated accuracy classes are 5P and 10P. "P" means "protection". The excess current limiting factor (in %) is given behind the precision class. It means e.g. 10P5, if the primary current is five times higher than the nominal current, the negative deviation of the secondary current from the theoretically secondary current calculated by the ratio is not more than 10%.

Application

Protective current transformers convert an alternating current of high value into a lower, proportional one, in order to protect an installation by means of standard relays of rated currents 5 or 1A.

CELSA transformers are suitable for indoor use in low-voltage networks. They are built according to IEC 60044-1 and BS 3938.

Accuracy (according to IEC 60044-1)

CELSA manufactures protective current transformers of accuracy classes 5 P and 10 P, with an accuracy limit factor of 5 or 10, for the rated outputs indicated in the tables.

Constructive Characteristics

Cases of self-extinguishing polycarbonate V0 according to UL94.

Sealable terminal cover included, made of clear polycarbonate.

Double secondary terminals, for short-circuiting the secondary winding before opening the measuring circuit. All are bus type transformers and they include fixing clamps to the primary bar.

Electrical Data (according to IEC 60044-1)

Rated secondary current: 5 or 1 A

Frequency range: 50-60 Hz

Highest voltage for equipment: 720 V

Rated insulation level: 3 kV, 50Hz during 1 minute

Rated continuous thermal current: 1,2 times rated current

Rated short-time thermal current (I_{th}): 60 times rated current

Rated dynamic current (I_{th}): 2,5 times I_{th}

Accuracy limit factor: 5 or 10

Thermal class of insulation, according to IEC-60085: E (120°C)

IB-50 Protective current transformers



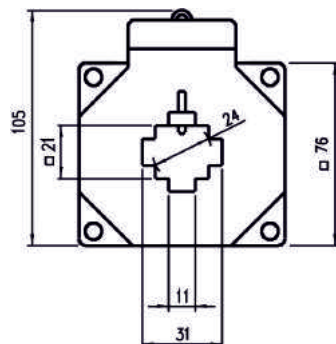
Rated currents: 75 - 600 A

- Secondary: 1 A / 5 A

Round conductor:
Ø 23 mm

Primary bar:
30 x 10 mm

Dimensions:
76 x 105 x 50 mm



IB-50 Technical Features, Executions

Primary rated current A	Rated burdens VA (.../5A, .../1A)			
	Class			
	5P10	10P10	5P5	10P5
75	-	-	1,25	1,25
100	-	-	2,5	2,5
125	1,25	1,25	2,5	2,5
150	1,25	1,25	3,75	3,75
200	1,25	1,25	5	5
250	2,5	2,5	7,5	7,5
300	2,5	3,75	7,5	7,5
400	1,25	1,25	5	5
500	1,25	1,25	5	5
600	1,25	1,25	5	5

Included in delivery: Primary fixing device

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35

PROTECTIVE CURRENT TRANSFORMERS - CLASSIC LINE

IBG-50 Protective current transformers



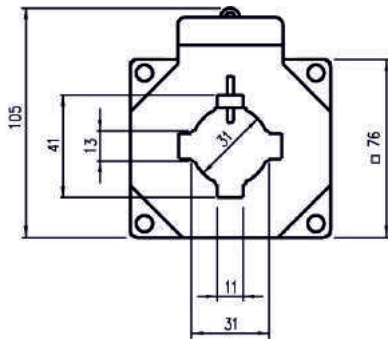
Rated currents: 150 - 1000 A

- Secondary: 1 A / 5 A

Round conductor:
Ø 31 mm

Primary bar:
40 x 10 mm

Dimensions:
76 x 105 x 50 mm



IBG-50 Technical Features, Executions

Primary rated current A	Rated burdens VA (.../5A, .../1A)			
	Class			
	5P10	10P10	5P5	10P5
150	-	-	2,5	2,5
200	1,25	1,25	2,5	2,5
250	-	-	1,25	1,25
300	-	-	1,25	1,25
400	-	-	2,5	2,5
500	-	-	2,5	3,75
600	-	-	2,5	3,75
750	-	-	3,75	5
800	-	-	-	1,25
1000	-	-	-	1,25

Included in delivery: Primary fixing device

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35

IBR Protective current transformers



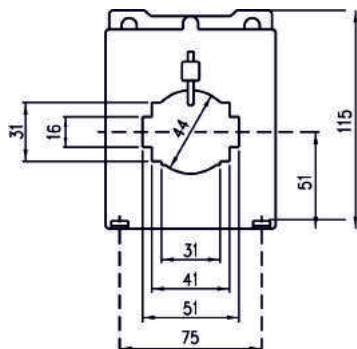
Rated currents: 400 - 1500 A

- Secondary: 1 A / 5 A

Round conductor:
Ø 44 mm

Primary bar:
50 x 15 / 2 x 40 x 10 mm

Dimensions:
90 x 115 x 40 mm



IBR Technical Features, Executions

Primary rated current A	Rated burdens VA			
	.../5A		.../5A	
	Class		Class	
	5P5	10P5	5P5	10P5
400	1,25	1,25	1,25	1,25
500	1,25	1,25	2,5	2,5
600	2,5	2,5	2,5	2,5
750	2,5	2,5	3,75	3,75
800	2,5	2,5	3,75	3,75
1000	2,5	2,5	5	5
1200	1,25	1,25	3,75	3,75
1500	1,25	1,25	5	5

Included in delivery: Primary fixing device

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35

PROTECTIVE CURRENT TRANSFORMERS - CLASSIC LINE

IBR/1 Protective current transformers



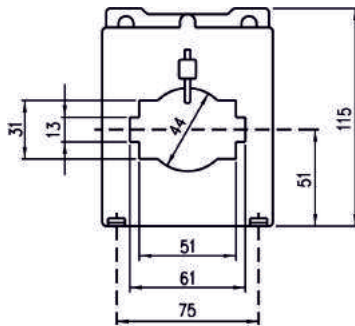
Rated currents: 400 - 1500 A

- Secondary: 1 A / 5 A

Round conductor:
Ø 44 mm

Primary bar:
60 x 10 / 2 x 50 x 10 mm

Dimensions:
90 x 115 x 40 mm



IBR/1 Technical Features, Executions

Primary rated current A	Rated burdens VA			
	.../5A		.../5A	
	Class		Class	
	5P5	10P5	5P5	10P5
400	1,25	1,25	1,25	1,25
500	1,25	1,25	2,5	2,5
600	2,5	2,5	2,5	2,5
750	2,5	2,5	3,75	3,75
800	2,5	2,5	3,75	3,75
1000	2,5	2,5	5	5
1200	1,25	1,25	3,75	3,75
1500	1,25	1,25	5	5

Included in delivery: Primary fixing device

Accessories (see page 5/53): Mounting feet / snap on mounting bracket EN 50022-35

IER Protective current transformers



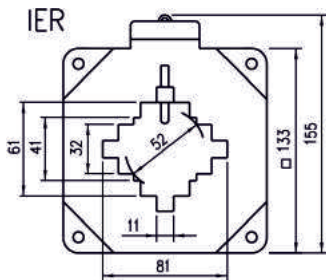
Rated currents: 250 - 2000 A

- Secondary: 1 A / 5 A

Round conductor:
Ø 50 mm

Primary bar:
80 x 10 / 2 x 60 x 10 mm

Dimensions:
133 x 155 x 46 mm



IER-/1-/2-/3 Technical Features, Executions

Primary rated current A	Rated burdens VA (.../5A, .../1A)			
	Class			
	5P10	10P10	5P5	10P5
250	-	1,25	2,5	2,5
300	1,25	1,25	3,75	3,75
400	1,25	1,25	5	5
500	2,5	2,5	7,5	7,5
600	1,25	1,25	5	5
750	2,5	2,5	7,5	7,5
800	1,25	1,25	7,5	7,5
1000	2,5	2,5	10	10
1200	2,5	3,75	10	10
1500	5	5	15	15
1600	5	5	15	15
2000	5	5	20	20

Included in delivery: Primary fixing device (except EIR/1)

IER/1 -/2 -/3 Protective current transformers



IER/3

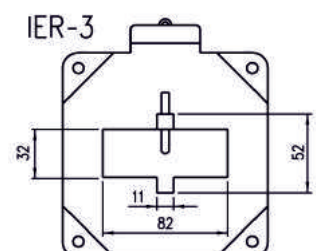
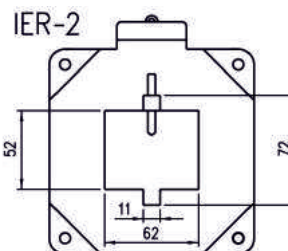
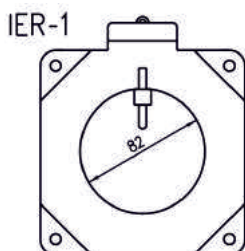
Rated currents: 250 - 2000 A

- Secondary: 1 A / 5 A

Round conductor: Ø 80 mm (IER/1)

Primary bar: 3x 60 x 10 (IER/2) / 2x 80 x 10 mm (IER/3)

Dimensions: 133 x 155 x 46 mm



PROTECTIVE CURRENT TRANSFORMERS - CLASSIC LINE

IRP Protective current transformers

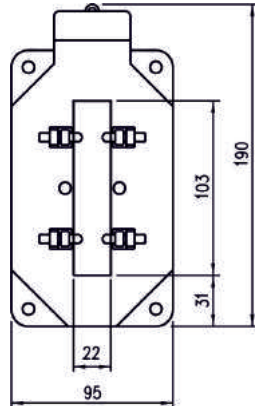


Rated currents: 750 - 2500 A

- Secondary: 1 A / 5 A

Primary bar:
100 X 20 mm

Dimensions:
95 x 190 x 41 mm



IRP Technical Features, Execu

Primary rated current A	Rated burdens VA (.../5A, .../1A)			
	Class			
	5P10	10P10	5P5	10P5
750	1,25	1,25	7,5	7,5
800	1,25	2,5	7,5	7,5
1000	2,5	2,5	10	10
1200	3,75	3,75	10	10
1500	5	5	15	15
1600	5	5	15	15
2000	5	5	20	20
2500	7,5	7,5	20	20

Included in delivery: Primary fixing device

On request: Secondary terminals on the length side of the current transformer.

IRM Protective current transformers

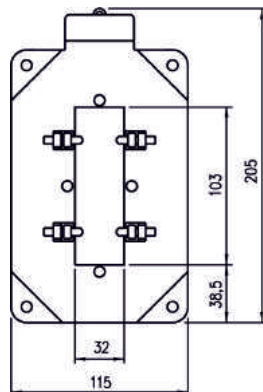


Rated currents: 1500 - 4000 A

- Secondary: 1 A / 5 A

Primary bar:
100 x 30 mm

Dimensions:
115 x 205 x 46 mm



IRM Technical Features, Executions

Primary rated current A	Rated burdens VA (.../5A, .../1A)			
	Class			
	5P10	10P10	5P5	10P5
1500	3,75	3,75	15	15
1600	5	5	15	15
2000	5	7,5	20	20
2500	7,5	7,5	20	30
3000	10	10	30	30
4000	10	10	30	45

Included in delivery: Primary fixing device

On request: Secondary terminals on the length side of the current transformer.

CURRENT TRANSFORMERS SERIE AST

AST - Current transformers line

Technical comments

Modern design, versatility and greater safety are the distinctive features of the new AST-Line. In developing we have moreover retained our reliable CELSA secondary terminal.

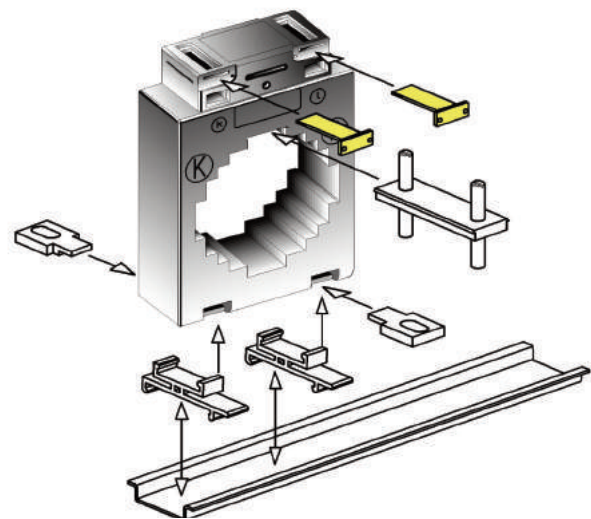
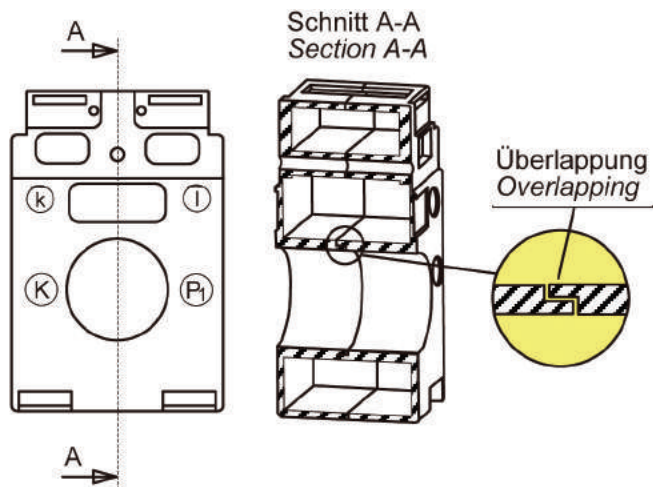
Greater safety

The joining point where the two halves of the housing meet inside the primary bar opening is crucial to safety. Quite in accordance with CELSA's motto - safety is built into our products - the two halves of the housing are not aligned with a butt joint, instead they are made to overlap in the new AST-Line.

Versatility

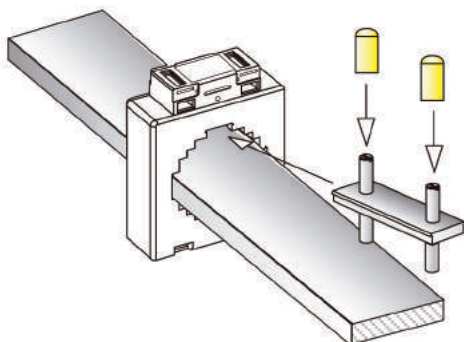
Current transformers are frequently secured with the help of a lug through which a clamping screw fits onto the primary bar. You must have noticed what a nuisance this lug can be, for instance when you want to install the CT behind fuse switch disconnectors, fuse trips or between bar overlaps and exits.

The new current transformer of the CELSA AST-Line have their own solution to this problem. The conventional fixing device has been designed with a form-locking guide so that - if necessary - it can simply be pulled out.



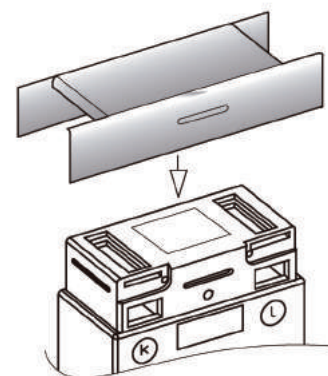
Insulated protective caps for primary fixing bolts

To protect against unintentional contact the bolts of the primary fixing devices can be covered by protective insulation caps. These should be pressed only on the already fastened bolts, not between bolts and bars.



Extended secondary terminal cover

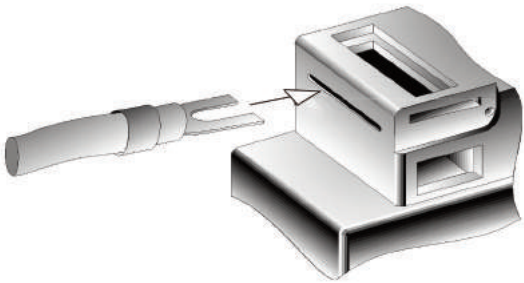
When using the CT as a tube type CT you may wish to increase the air gaps and creepage distances between secondary terminals and primary bars. You can do so by adding protective terminal covers over the CT openings on the front and back as shown.



CURRENT TRANSFORMERS SERIE AST

Secondary terminal openings.

The connection of secondary wire leads to their corresponding terminals is normally done by sliding them into the rectangular openings on the front or the back. If this way of connection is prohibited for instance due to blocking when mounted right behind a line of fuses the secondary wire leads equipped with clamps can also be introduced into the lateral slots for secondary terminal connection as shown



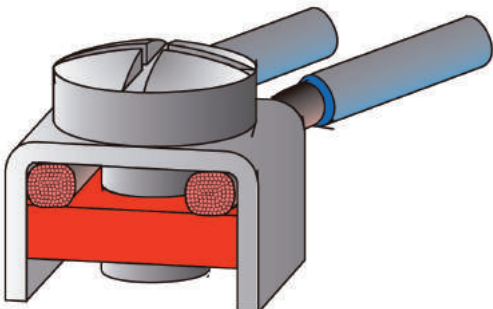
The CELSA Secondary terminal

In this clamping system pressure is transmitted by means of a nut (pad) to the ends of the conductor (lift principle). The conductor is therefore loaded only under pressure and cannot be damaged by rotating components. When opened, there are two clamping spaces of 2.5mm x 4mm each in cross-section.

Thanks to our clamping system the ends of the conductors are clamped over a wide area which ensures lower contact resistance. Pressure forces of several hundred Newtons are reached. In this way conductors even with multiple, fine and extremely fine wires are so well compressed that no harmful gases can penetrate to cause corrosion. It therefore provides an extremely long-lasting connection even in aggressive industrial environment.

The plus-minus slot of the M5 (2 Nm) screws allows easy of handling. At the AST-Line both, screws and nuts are designed in such a way to prevent unintentional loosening.

The secondary terminals are made of brass with nickel as a double terminal construction. This double construction permits a very easy short circuit of the current transformer during operation in order to carry out work on the secondary circuit.



General Features

Of course all AST current transformers comply with EN 60044, DIN VDE 0414, VDE 1000, DIN 42600 as well as the regulations VBG 4, VDE 0106 part 100..

General Mechanical Feature

- unbreakable plastic casing, polyamide
- difficult to inflame, according to UL 94 V0 and selfextinguishing
- nickel-plated secondary terminals with plus minus screws (2 Nm)
- integrated secondary terminal caps

General Electrical Features

- rated frequency 50-60Hz (other frequencies on request)
- class of insulation E (other classes on request)
- rated short-time thermal current $I_{th} = 60 \cdot I_N$
- nominal surge current $I_{dyn} = 2.5 \cdot I_{th}$, minimum 100kA at all window type c.t.'s
- highest voltage for equipment $U_m = 0,72kV$ (other voltages on request)
- rated power-frequency withstand voltage 4kV/1 min (other voltages on request)
- instrument security factor FS5 or FS10

All CELSA current transformers are dimensioned (exceptionell some marked types) in accordance with VDE 0414 for a rated continuous thermal current of $I_D = 1,2 \cdot I_N$.

Included in delivery:

- secondary terminal covers
- primary fixing device
- mounting feet

Accessories:

- cost-effective snap-on mounting brackets out of highly reinforced fibre glass macrolon for snapping on a profile mounting bar according to EN 50022-35 and DIN 46277
- copper tubes in various sizes for using a current transformer as a tube type current transformer
- copper primary bars in various sizes
- insulated protective caps for primary fixing bolts
- protective terminal cover to increase the air gaps and creepage distances if using the CT as tube type CT.

CURRENT TRANSFORMERS SERIE AST

ASTR21



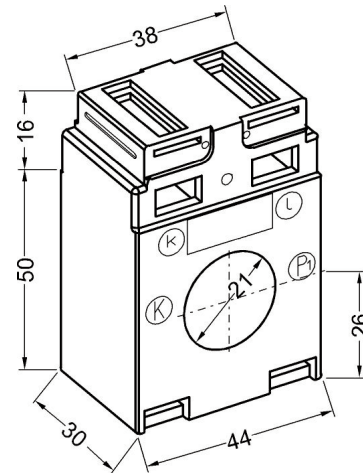
WINDOW OR TUBE TYPE CURRENT TRANSFORMERS

Special designs (on request):

- non-standard primary and secondary rated currents
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/37)

Round conductor \varnothing 21 mm

With ETL-Certification (USA, Canada)
Type: CTR 21



ASTR21 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
50	-	-	-	-	- 1363	1,25	- 1364	1,25
60	-	-	-	-	- 1367	1,25	- 1368	1,5
75	-	-	-	-	- 1369	2,5	- 1370	2,5
80	-	-	-	-	- 1371	2,5	- 1738	2,5
100	- 3489	1,25	- 3823	1,5	- 1352	2,5	- 1353	2,5
125	- 1983	2,5	- 1988	2,0	- 1746	3,75	- 1708	3,75
150	- 1984	3,75	- 3522	2,5	- 1741	5	- 1354	5
200	- 3527	5	- 3521	3,75	- 1355	5	- 1356	7,5
250	- 3501	7,5	- 1763	7,5	- 1748	7,5	- 1357	7,5
300	- 1358	5	- 1359	10	- 3561	5	- 1360	10
400	- 1985	7,5	- 1989	7,5	- 1361	7,5	- 1362	7,5
500	- 1986	10	- 1366	7,5	- 1990	10	- 1365	10

1) other values on request

Included in delivery:

- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- copper tube ($d_o = 21$ mm, $d_i = 8.5$ mm, $L^1 = 32$ mm) for using the CT as tube type current transformer
- protective terminal cover to increase the air gaps and creepage distances if using the CT as tube type CT

CURRENT TRANSFORMERS SERIE AST

AST315



WINDOW TYPE CURRENT TRANSFORMER

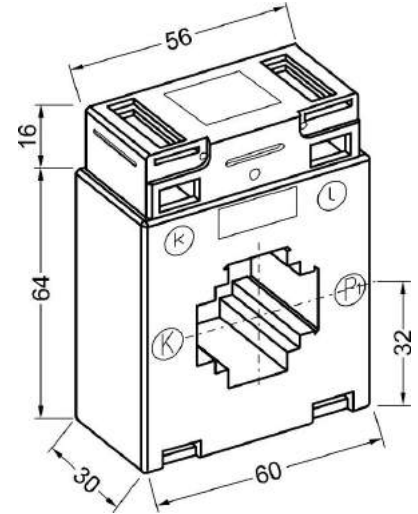
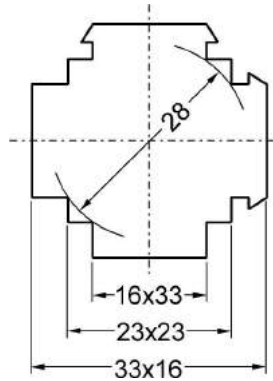


Special designs (on request):

- non-standard primary and secondary rated currents
- Compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/37)

Round conductor	Ø 28 mm
Primary bar	30 x 15 mm 20 x 20 mm

With ETL-Certification (USA, Canada)
Type: CT 3015



AST315 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
50	-	-	-	-	- 1076	1,25	- 1078	1,25 ²⁾
60	-	-	-	-	- 1082	1,25	- 1083	1,25
75	-	-	-	-	- 1090	2,5	- 1091	1,5
80	-	-	-	-	- 1096	2,5	- 1097	2
100	- 1051	1,25	-	-	- 1050	2,5	- 1052	2,5
125	- 1991	1,25	-	-	- 1054	3,75	- 1055	3,75
150	- 1056	2,5	-	-	- 1057	5	- 1058	5
200	- 1059	3,75	- 1061	3,75	- 1060	5	- 1062	7,5
250	- 1063	5	- 1066	5	- 1064	7,5	- 1065	10
300	- 1069	7,5	- 1070	7,5	- 1068	10	- 1071	10
400	- 1072	10	- 1074	10	- 1073	10	- 1075	15
500	- 3518	10	- 1080	10	- 1079	10	- 1081	10
600	- 1084	15	- 1086	10	- 1085	15	- 1087	10
750	- 1092	15	- 1094	10	- 1093	20	- 1095	15

1) other values on request

2) Class 3

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts
- copper tube ($d_o = 28\text{mm}$, $d_i = 12.5\text{mm}$, $L^{(1)} = 32\text{mm}$) for using the CT as tube type current transformer
- protective terminal cover to increase the air gaps and creepage distances if using the CT as tube type CT

CURRENT TRANSFORMERS SERIE AST

AST412.6



WINDOW TYPE CURRENT TRANSFORMER

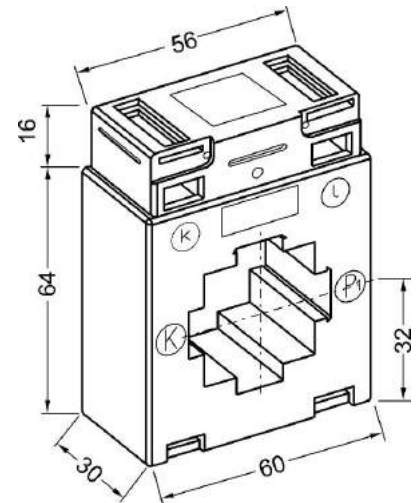
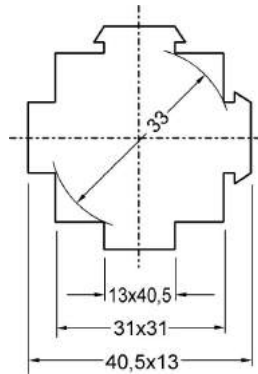


Special designs (on request):

- non-standard primary and secondary rated currents
- compound-filled with cast resin

Round conductor \varnothing 33 mm
 Primary bar 40 x 12 mm
 2 x 30 x 10 mm

With ETL-Certification (USA, Canada)
 Type: **CT 4010.6**



AST412.6 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
100	-	-	-	-	-	-	-	-
125	-	-	-	-	- 3563	1,25	-	-
150	-	-	-	-	- 2000	2,5	-	-
200	- 1992	1,25	- 1151	1,25	- 2001	3,75	- 1152	1,25
250	- 1993	2,5	- 1996	2,5	- 2002	2,5	- 1153	2,5
300	- 1994	3,75	- 1997	2,5	- 2003	3,75	- 1154	2,5
400	- 3447	5	- 3628	3,75	- 1155	5	- 1696	3,75
500	- 1995	2,5	- 1156	5	- 1158	3,75	- 1157	5
600	- 3554	3,75	-	-	- 2004	3,75	- 1159	1,25
750	- 3546	5	- 3545	2,5	- 3424	5	- 1160	3,75
800	-	-	- 1998	2,5	-	-	- 1161	3,75
1000	-	-	- 1999	2,5	-	-	- 1747	5

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST412



WINDOW TYPE CURRENT TRANSFORMER

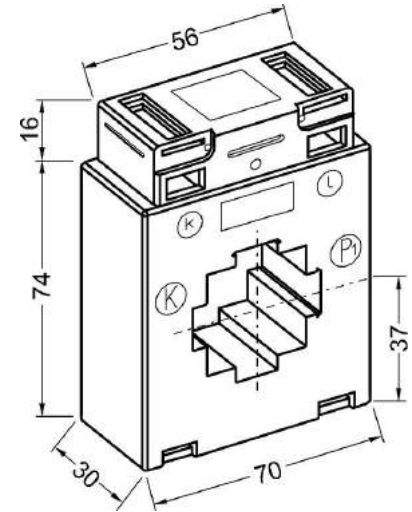
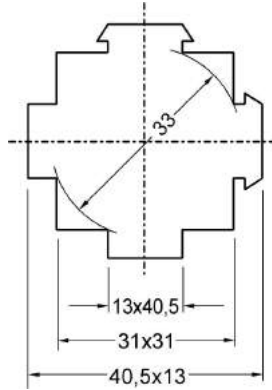


Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/38)

Round conductor \varnothing 33 mm
 Primary bar 40 x 13 mm
 2 x 30 x 10 mm

With ETL-Certification (USA, Canada)
 Type: CT 4010



AST412 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
50	-	-	-	-	- 1124	1,25 ²⁾	- 1125	1,25 ²⁾
60	-	-	-	-	- 2013	1,25 ²⁾	- 1130	1,25 ²⁾
75	-	-	-	-	- 1138	1,25	- 1139	1,25
80	-	-	-	-	- 1144	1,25	- 1145	1,25
100	-	-	-	-	- 1099	2,5	- 1100	2,5
125	- 2005	1,25	- 1750	1,25	- 3508	3,75	- 1105	3,75
150	- 2006	2,5	- 1107	2,5	- 1106	5	- 1108	5
200	- 3443	3,75	- 1110	3,75	- 1109	5	- 1111	5
250	- 1098	5	- 1114	5	- 1112	7,5	- 1113	7,5
300	- 2008	5	- 1117	5	- 1115	7,5	- 1116	7,5
400	- 1118	7,5	- 1121	7,5	- 1119	7,5	- 1123	7,5
500	- 2009	10	- 1127	10	- 1126	10	- 1128	10
600	- 1131	10	- 1134	10	- 1132	10	- 1135	10
750	- 2010	10	- 1141	10	- 1140	15	- 1143	15
800	- 1146	15	- 1148	15	- 1147	15	- 1149	15
1000	- 1102	10	- 1104	10	- 1101	10	- 1103	10

1) other values on request

2) Class 3

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST512.7



WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)

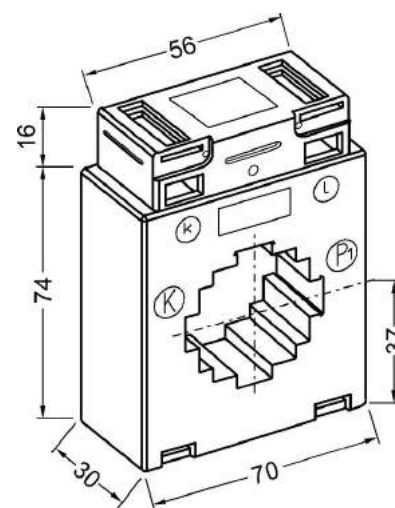
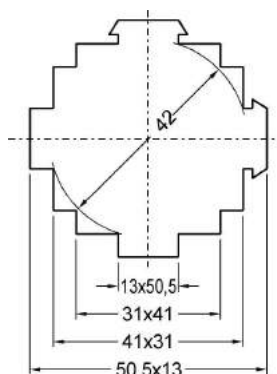
Round conductor \varnothing 42 mm

Primary bar 50 x 12 mm

2 x 40 x 10 mm

With ETL-Certification (USA, Canada)

Type: CT 5010.7



AST512.7 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
150	70017 - - 2031	1,25	70017 - - 1211	1,25	70017 - - 2042	1,25	70017 - - 1210	1,25
200	- 2032	1,25	- 2036	1,25	- 2043	1,25	- 1212	1,25
250	- 3611	1,25	- 1703	1,25	- 2044	2,5	- 1213	2,5
300	- 2033	2,5	- 2037	2,5	- 3388	2,5	- 2047	2,5
400	- 3582	1,25	- 3505	1,25	- 1214	1,25	- 1215	1,25
500	- 3585	2,5	- 3543	2,5	- 2045	2,5	- 1216	2,5
600	- 2034	2,5	- 2038	2,5	- 1217	2,5	- 1218	2,5
750	- 3446	2,5	- 2039	2,5	- 3445	2,5	- 3414	2,5
800	- 3547	3,75	- 2040	3,75	- 1219	3,75	- 1220	3,75
1000	- 2035	5	- 1207	5	- 1206	5	- 1208	5

¹⁾ other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts
- copper tube ($d_o = 43.7\text{mm}$, $d_i = 14.2\text{mm}$, $L^1 = 32\text{mm}$) for using the CT as tube type current transformer
- protective terminal cover to increase the air gaps and creepage distances if using the CT as tube type CT

CURRENT TRANSFORMERS SERIE AST

AST512



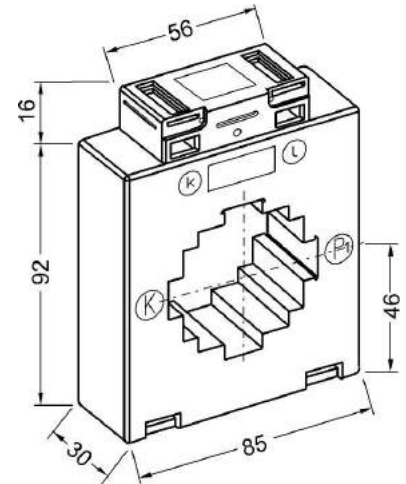
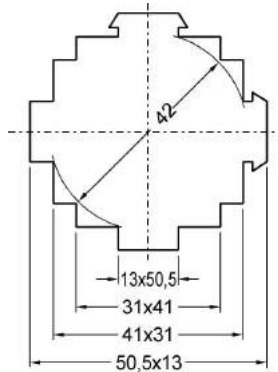
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/38)

Round conductor \varnothing 42 mm
 Primary bar 50 x 12 mm
 2 x 40 x 10 mm

With ETL-Certification (USA, Canada)
 Type: CT 5010



AST512 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
100	-	-	-	-	- 2054	1,25	- 1167	1,25
125	-	-	-	-	- 2055	2,5	- 1174	2,5
150	- 2048	1,25	- 2052	1,25	- 3470	3,75	- 1179	3,75
200	- 3572	5	- 2053	5	- 1182	7,5	- 1183	7,5
250	- 3626	5	- 1185	5	- 3530	10	- 1184	10
300	- 2049	7,5	- 1187	7,5	- 2056	10	- 1186	10
400	- 3378	15	- 1189	15	- 1188	15	- 1190	15
500	- 2050	15	- 1192	15	- 1191	20	- 1193	20
600	- 1194	15	- 1196	15	- 1195	20	- 1197	20
750	- 1199	10	- 1791	10	- 1200	10	- 1201	10
800	- 3574	10	- 1203	10	- 1202	15	- 1204	15
1000	- 1168	15	- 1171	15	- 1169	20	- 1170	20
1250	- 1175	15	- 1177	15	- 1176	20	- 1178	20
1500	- 2051	15	- 1180	15	- 3467	30	- 1181	20

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts
- copper tube ($d_o = 43.7\text{mm}$, $d_i = 14.2\text{mm}$, $L^1 = 32\text{mm}$) for using the CT as tube type current transformer
- protective terminal cover to increase the air gaps and creepage distances if using the CT as tube type CT

CURRENT TRANSFORMERS SERIE AST

AST615.8



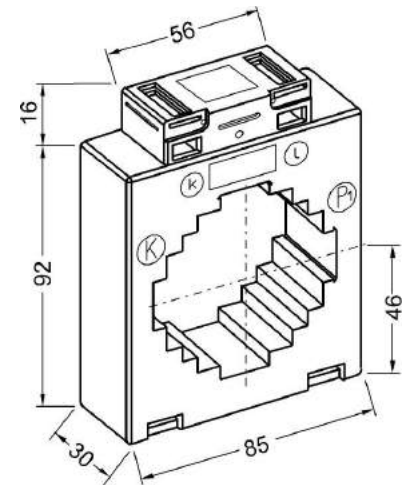
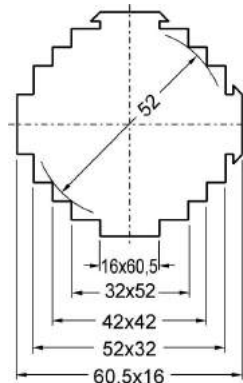
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)

Round conductor	Ø 52 mm
Primary bar	60 x 15 mm
	2 x 50 x 10 mm
	40 x 40 mm

With ETL-Certification (USA, Canada)
Type: **CT 6015.8**



AST615.8 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
100	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-
200	-	-	-	-	- 2067	2,5	- 1271	2,5
250	- 2057	1,25	- 2062	1,25	- 1272	2,5	- 3494	2,5
300	- 1273	1,25	- 1274	1,25	- 3506	2,5	- 2071	2,5
400	- 2058	1,25	- 2063	2,5	- 3627	2,5	- 1275	2,5
500	- 2059	2,5	- 2064	5	- 2068	3,75	- 1276	5
600	- 3393	2,5	- 3391	10	- 1277	2,5	- 1278	10
750	- 2060	5	- 1792	10	- 2069	5	- 1766	10
800	- 3496	2,5	- 2065	15	- 2070	3,75	- 1279	15
1000	- 2061	2,5	- 3575	15	- 1262	3,75	- 1263	15
1250	- 1265	5	- 1267	20	- 1266	5	- 1268	20
1500	-	-	- 2066	20	-	-	- 1269	30
1600	-	-	- 3612	15	-	-	- 1725	15

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST615



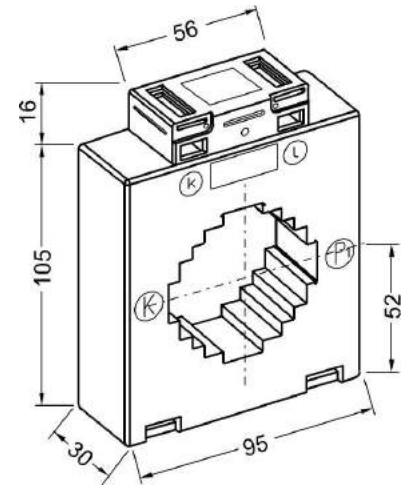
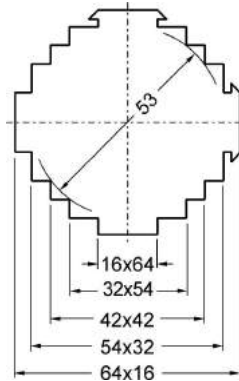
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/39)

Round conductor	Ø 53 mm
Primary bar	63 x 15 mm
	2 x 50 x 10 mm
	40 x 40 mm

With ETL-Certification (USA, Canada)
Type: CT 6015



AST615 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
200	- 2072	2,5	- 1242	2,5	- 2076	3,75	- 1243	3,75
250	- 3597	2,5	- 1225	3,75	- 3551	5	- 1247	5
300	- 3616	5	- 3451	7,5	- 3430	7,5	- 1249	10
400	- 3596	7,5	- 1252	10	- 1250	10	- 1251	15
500	- 3564	10	- 1254	15	- 1768	10	- 1253	20
600	- 3392	10	- 1256	15	- 1255	15	- 1257	20
750	- 2073	15	- 3539	20	- 2077	15	- 1258	30
800	- 3615	15	- 3619	20	- 1259	20	- 1260	30
1000	- 1226	10	- 1228	30	- 1227	10	- 1229	30
1250	- 1730	10	- 1233	20	- 1232	10	- 1234	30
1500	- 1235	15	- 1237	30	- 1236	15	- 1238	30
1600	- 3614	15	- 1240	30	- 1239	15	- 1241	30
2000	- 2074	20	- 1244	30	- 3423	20	- 1245	30
2500	-	-	- 2075	30	-	-	- 1248	30

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST640



WINDOW TYPE CURRENT TRANSFORMER

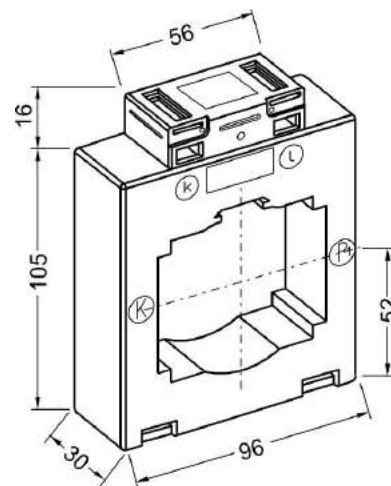
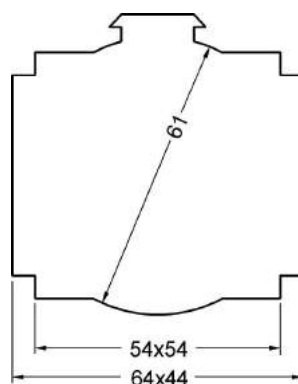


Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/39)

Round conductor	Ø 61 mm
Primary bar	60 x 40 mm 50 x 50 mm

With ETL-Certification (USA, Canada)
Type: **CT 6040**



AST640 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
200	-	-	-	-	- 2093	3,75	- 3362	3,75
250	- 1294	2,5	- 2085	2,5	- 1295	5	- 2098	3,75
300	- 2078	2,5	- 2086	2,5	- 2094	5	- 1296	5
400	- 2079	5	- 2087	5	- 2095	7,5	- 1297	7,5
500	- 2080	7,5	- 1298	7,5	- 2096	7,5	- 1299	7,5
600	- 2081	5	- 2088	7,5	- 1300	5	- 1301	10
750	- 2082	7,5	- 1302	10	- 2097	7,5	- 1303	10
800	- 3448	7,5	- 2089	10	- 1304	7,5	- 1305	10
1000	- 2083	10	- 2090	7,5	- 1283	10	- 1284	10
1250	- 1287	10	- 2091	10	- 1285	10	- 1286	15
1500	- 2084	2,5	- 2092	10	- 1288	5	- 1289	10
1600	-	-	- 3360	15	-	-	- 1291	15
2000	-	-	- 3459	15	-	-	- 1293	15

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST815



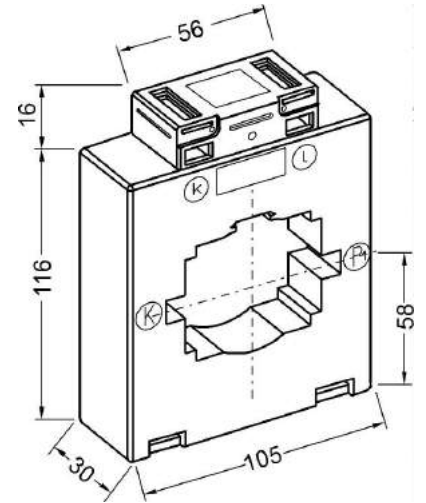
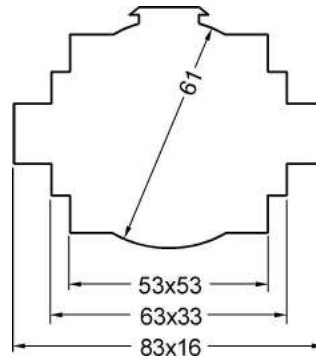
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/40)

Round conductor	Ø 61 mm
Primary bar	80 x 15 mm
	2 x 60 x 10 mm
	3 x 50 x 10 mm

With ETL-Certification (USA, Canada)
Type: **CT 8015**



AST815 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	- 2099	2,5	- 1331	5	- 1330	7,5	- 3398	7,5
500	- 2100	5	- 2102	5	- 2104	10	- 1332	10
600	- 2101	10	- 3415	10	- 2105	10	- 1333	10
750	- 3389	5	- 3390	15	- 1334	10	- 1335	15
800	- 3595	10	- 1306	15	- 1336	10	- 1337	15
1000	- 1308	7,5	- 1309	20	- 1307	15	- 1310	20
1250	- 1313	10	- 1315	10	- 1314	15	- 1316	10
1500	- 1317	15	- 1319	10	- 1318	20	- 1320	15
1600	- 1772	15	- 2103	15	- 1321	20	- 1322	15
2000	- 1323	20	- 1325	15	- 1324	25	- 1326	20
2500	-	-	- 1328	20	-	-	- 1329	30

1) other values on request

Included in delivery:

- 1 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST830



WINDOW TYPE CURRENT TRANSFORMER

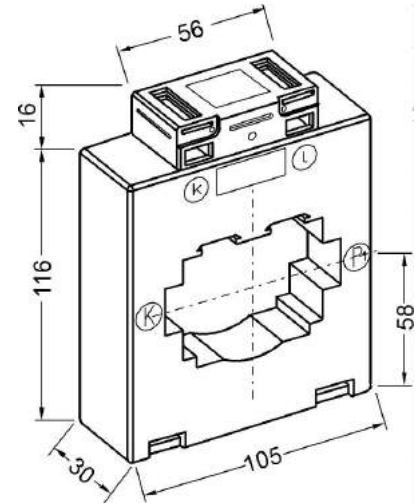
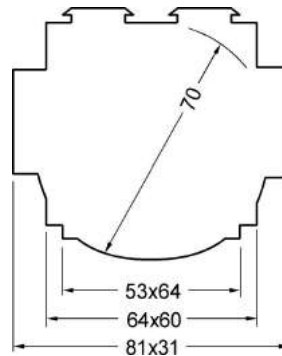


Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certifiable design tariff metering (see page 5/40)

Round conductor \varnothing 70 mm
 Primary bar 2 x 80 x 10 mm
 60 x 60 mm

With ETL-Certification (USA, Canada)
 Type: CT 8030



AST830 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	-	-	-2112	5	-	-	-2120	5
500	-2106	2,5	-1350	5	-2116	5	-1743	5
600	-2107	5	-2113	7,5	-2117	7,5	-2121	7,5
750	-2108	2,5	-2114	7,5	-2118	7,5	-2122	7,5
800	-1774	5	-3600	7,5	-1351	7,5	-3373	10
1000	-2109	10	-2115	10	-1339	15	-1340	10
1250	-2110	2,5	-3560	10	-1342	5	-1343	10
1500	-2111	5	-1759	10	-2119	5	-1344	15
1600	-3466	5	-1346	15	-1345	5	-1347	15
2000	-	-	-1348	10	-	-	-1349	10

1) other values on request

Included in delivery:

- 2 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST1030



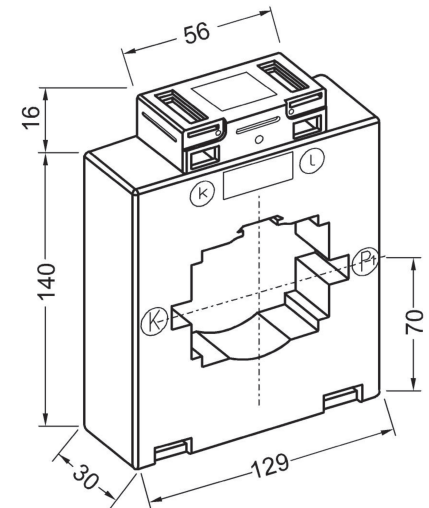
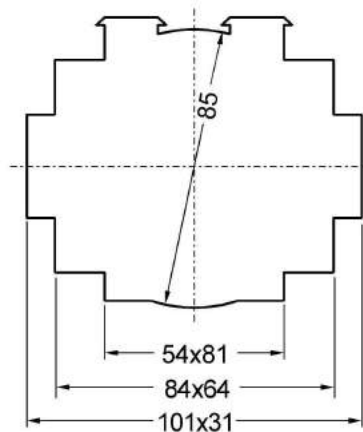
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/41)

Round conductor \varnothing 85 mm
 Primary bar 2 x 100 x 10 mm
 80 x 64 mm

With ETL-Certification (USA, Canada)
 Type: **CT 10030**



AST1030 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	-	-	-	-	- 2135	5	- 2140	5
500	- 2123	5	- 2130	5	- 2136	5	- 2141	5
600	- 2124	10	- 3435	5	- 1758	10	- 3441	10
750	- 2125	10	- 2131	10	- 2137	10	- 2142	10
800	- 2126	10	- 2132	10	- 2138	10	- 1013	10
1000	- 2127	10	- 3417	10	- 1719	10	- 1000	15
1250	- 1002	15	- 3418	15	- 1003	15	- 1004	15
1500	- 3606	15	- 3528	15	- 1005	15	- 1006	15
1600	- 2128	15	- 3601	15	- 1718	15	- 1007	20
2000	- 2129	15	- 3411	20	- 1008	15	- 1009	25
2500	- 3374	20	- 1707	20	- 1010	25	- 1011	30
3000	- 3409	20	- 2133	25	- 2139	30	- 1012	30
4000	-	-	- 2134	25	-	-	- 3507	30

1) other values on request

Included in delivery:

- 2 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST1056



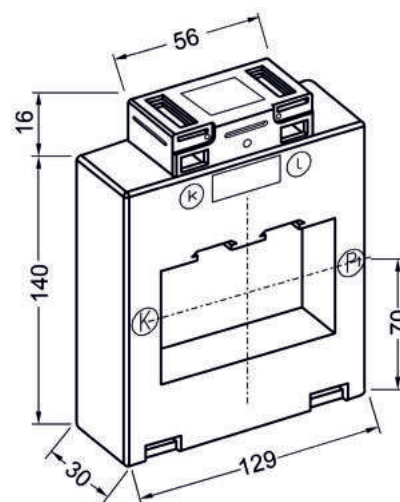
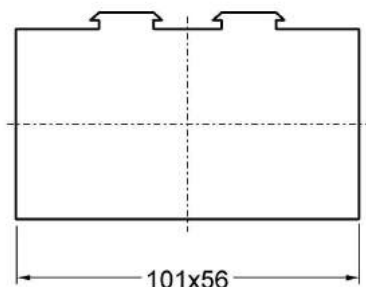
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/41)

Primary bar 3 x 100 x 12 mm

With ETL-Certification (USA, Canada)
Type: **CT 10055**



AST1056 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	-	-	-	-	-2162	5	-2170	5
500	-2143	5	-2152	5	-2163	5	-2171	5
600	-2144	10	-2153	5	-2164	10	-2172	10
750	-2145	10	-2154	10	-2165	10	-2173	10
800	-2146	10	-2155	10	-2166	10	-2174	10
1000	-2147	10	-2156	10	-2167	10	-3421	15
1250	-2148	15	-2157	15	-2168	15	-3431	15
1500	-2149	15	-2158	15	-3427	15	-1014	15
1600	-2150	15	-2159	15	-2169	15	-1015	20
2000	-2151	15	-3444	20	-1720	15	-1017	25
2500	-3428	20	-2160	20	-1018	25	-1019	30
3000	-1711	20	-2161	25	-3468	30	-1020	30
4000	-	-	-3529	25	-	-	-1021	30

1) other values on request

Included in delivery:

- 2 pc. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST1234



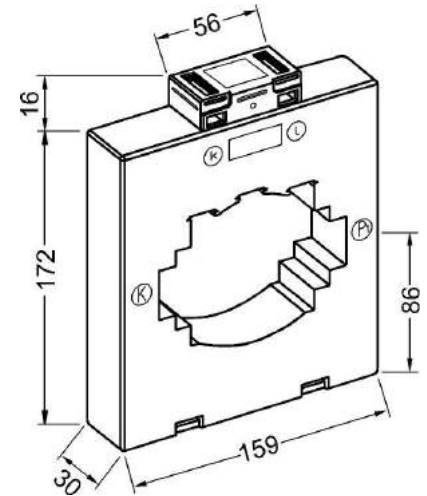
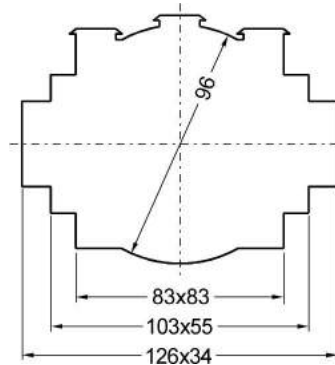
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)
- certificable design tariff metering (see page 5/42)

Round conductor	Ø 96 mm
Primary bar	2 x 120 x 10 mm 3 x 100 x 10 mm 80 x 80 mm

With ETL-Certification (USA, Canada)
Type: **CT 12030**



AST1234 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	- 2175	10	- 2185	10	- 1037	15	- 2198	15
500	- 2176	10	- 2186	10	- 2190	20	- 2199	20
600	- 2177	10	- 2187	10	- 2191	20	- 2200	20
750	- 2178	10	- 2188	15	- 2192	10	- 2201	20
800	- 2179	10	- 3495	15	- 2193	15	- 2202	30
1000	- 2180	15	- 1024	30	- 2194	20	- 1023	30
1250	- 1025	20	- 1027	30	- 2195	30	- 1026	30
1500	- 2181	30	- 1029	45	- 3610	30	- 1028	45
1600	- 2182	30	- 2189	30	- 2196	30	- 1030	30
2000	- 3509	30	- 1033	30	- 2197	30	- 1032	30
2500	- 2184	30	- 3620	30	- 1034	30	- 1035	45
3000	- 2183	30	- 3613	45	- 3609	45	- 1036	45
4000	- 3579	45	- 1038	45	- 3487	45	- 1039	45

1) other values on request

Included in delivery:

- 2 pcs. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

AST1272



WINDOW TYPE CURRENT TRANSFORMER

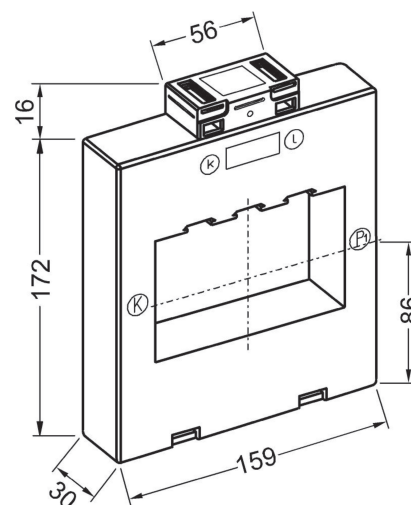
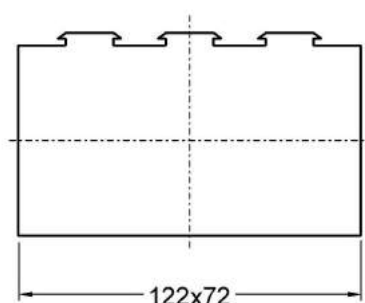


Special designs (on request):

- non-standard primary and secondary rated currents
- secondary tabs (2 or 3 change-over functions)
- compound-filled with cast resin
- max. service voltage (1,2kV)

Primary bar 4 x 120 x 10 mm

With ETL-Certification (USA, Canada)
Type: **CT 12070**



AST1272 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
400	- 2203	5	- 2214	5	- 2226	10	- 2237	10
500	- 2204	5	- 2215	5	- 2227	15	- 2238	15
600	- 2205	5	- 2216	5	- 2228	15	- 2239	15
750	- 2206	5	- 2217	10	- 2229	5	- 2240	15
800	- 2207	5	- 2218	10	- 2230	10	- 2241	15
1000	- 2208	10	- 2219	15	- 2231	15	- 3420	15
1250	- 2209	15	- 2220	15	- 2232	15	- 1745	15
1500	- 2210	15	- 2221	30	- 2233	15	- 2242	30
1600	- 2211	15	- 2222	15	- 2234	15	- 3515	15
2000	- 2212	15	- 2223	15	- 2235	15	- 3516	15
2500	- 2213	15	- 2224	15	- 2236	15	- 3517	30
3000	- 1041	15	- 3377	30	- 1042	30	- 1043	30
4000	- 1044	30	- 3580	30	- 1045	30	- 1046	30
5000	-	-	- 1047	10	-	-	- 1048	10
6000	-	-	- 2225	10	-	-	- 1049	10

1) other values on request

Included in delivery:

- 2 pcs. primary fixing device
- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35
- insulated protective caps for primary fixing bolts

CURRENT TRANSFORMERS SERIE AST

WST40

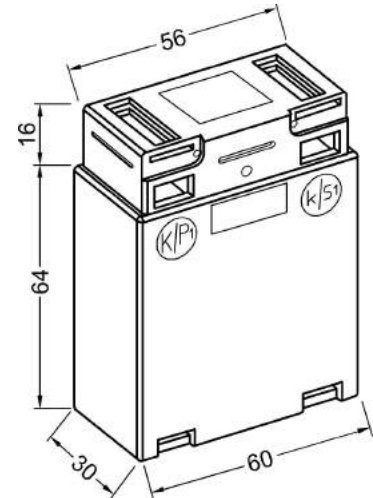


WICKEL-CURRENT TRANSFORMERS



Special designs (on request):

- non-standard primary and secondary rated currents
- compound-filled with cast resin



WST40 Technical Features, Executions

Primary rated current ¹⁾	Class 0.5				Class 1			
	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA	Article No.	sec. 1 A Rated burdens VA	Article No.	sec. 5 A Rated burdens VA
A	70017 -		70017 -		70017 -		70017 -	
1	- 1697	5	- 1751	5	- 1658	5	- 1659	5
2	- 1669	5	- 3426	5	- 1670	5	- 1671	5
2,5	- 2243	5	- 2449	5	- 1667	5	- 1668	5
4	- 3555	5	- 2450	5	- 1683	5	- 1684	5
5	- 1687	5	- 3491	5	- 1688	5	- 1689	5
6	- 2244	5	- 2451	5	- 1690	5	- 1691	5
7,5	- 2245	5	- 2452	5	- 2454	5	- 1692	5
10	- 2246	5	- 1661	5	- 1660	5	- 1662	5
12,5	- 2247	5	- 2453	5	- 2455	5	- 2256	5
15	- 3510	5	- 1665	5	- 1664	5	- 1666	5
20	- 1672	5	- 1674	5	- 1673	5	- 1675	5
25	- 3514	5	- 1677	5	- 1676	5	- 1678	5
30	- 1679	5	- 1681	5	- 1680	5	- 1682	5
40	- 2448	5	- 1656	5	- 1685	5	- 1686	5

1) other values on request

Included in delivery:

- 2 pcs. secondary terminal covers (yellow caps)
- 2 pcs. mounting feet

Accessories (see page 5/53):

- snap on mounting bracket for profile mounting bar to EN 50022-35

CERTIFICABLE CURRENT TRANSFORMERS

E4R21.3



CERTIFICABLE WINDOW OR TUBE TYPE CURRENT TRANSFORMERS



Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Round conductor

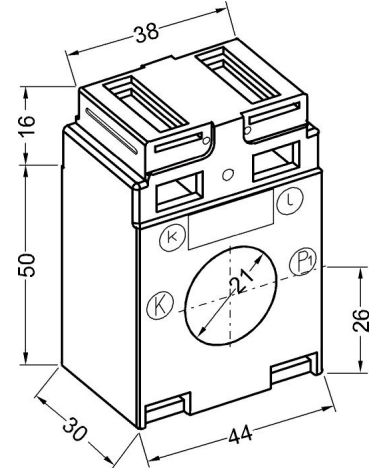
Ø 21 mm

Accessories see ASTR21 (Page 5/20)

E4R21.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
150	-	-	-	-	-	-	- 3358	2,5
200	-	-	-	-	- 2262	2,5	- 3376	5
250	-	-	-	-	- 2263	5	- 1749	5
300	-	-	- 2259	5	- 2264	10	- 2267	10
400	- 2257	2,5	- 2260	5	- 2265	5	- 2268	5
500	- 2258	5	- 2261	5	- 2266	10	- 2269	10

1) other values on request



E6A315.3



WINDOW TYPE CURRENT TRANSFORMER



Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Round conductor

Ø 28 mm

Primary bar

30 x 15 mm

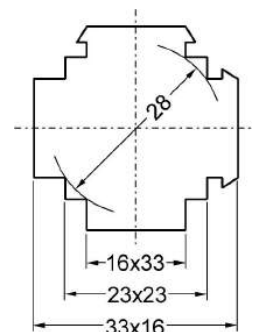
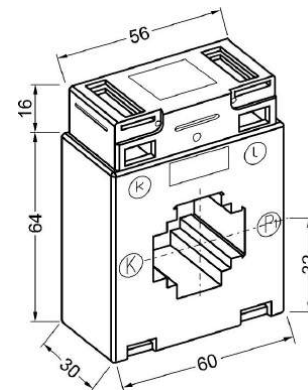
20 x 20 mm

Accessories see AST315 (Page 5/21)

E6A315.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
150	-	-	-	-	-	-	- 3814	1,25
200	-	-	-	-	-	-	- 1463	2,5
250	-	-	-	-	- 3419	2,5	- 1464	5
300	-	-	-	-	- 2275	5	- 3548	5
400	-	-	- 2272	2,5	- 2276	10	- 1466	10
500	-	-	- 3542	5	- 2277	10	- 1773	10
600	- 2270	10	- 2273	10	- 2278	10	- 1764	10
750	- 2271	10	- 2274	10	- 2279	15	- 2280	15

1) other values on request



CERTIFICABLE CURRENT TRANSFORMERS

E7A412.3



WINDOW TYPE CURRENT TRANSFORMER

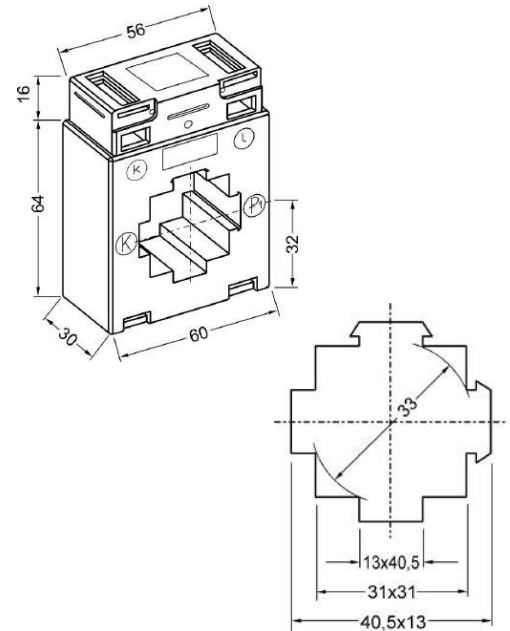
Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see AST412 (Page 5/23)

Round conductor \varnothing 33 mm

Primary bar 40 x 12 mm
2 x 30 x 10 mm



E7A412.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
200	-	-	-	-	-	-	- 3464	2,5
250	-	-	-	-	- 2289	2,5	- 3578	5
300	-	-	-	-	- 2290	5	- 1771	5
400	-	-	- 3490	5	- 2291	10	- 3449	10
500	-	-	- 2285	10	- 2292	10	- 3436	10
600	- 2281	5	- 2286	10	- 2293	10	- 2297	10
750	- 2282	10	- 2287	10	- 2294	10	- 2298	10
800	- 2283	10	- 2288	10	- 2295	10	- 2299	10
1000	- 2284	10	- 3453	10	- 2296	10	- 3503	10

1) other values on request

E8A512.3



WINDOW TYPE CURRENT TRANSFORMER

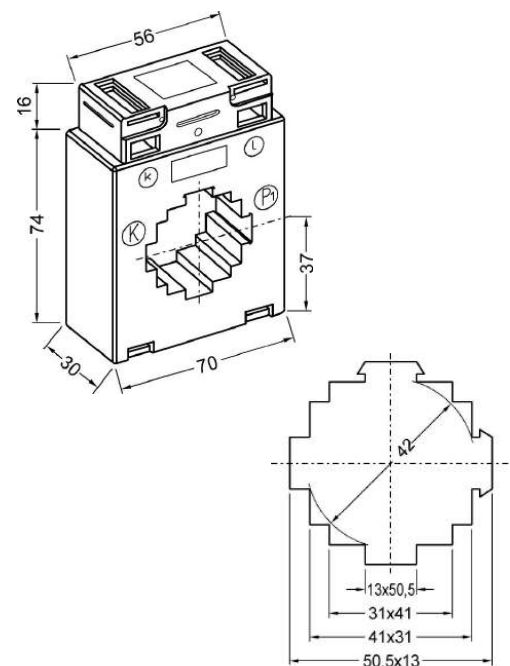
Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see AST512 (Page 5/25)

Round conductor \varnothing 42 mm

Primary bar 50 x 12 mm
2 x 40 x 10 mm



E8A512.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
200	-	-	-	-	- 2312	2,5	- 2322	2,5
250	-	-	-	-	- 2313	2,5	- 2323	5
300	-	-	-	-	- 2314	5	- 2324	5
400	-	-	- 2305	2,5	- 2315	10	- 3541	10
500	-	-	- 2306	5	- 2316	10	- 3484	10
600	- 2300	5	- 2307	10	- 2317	10	- 3402	10
750	- 2301	10	- 2308	10	- 2318	10	- 2325	10
800	- 2302	10	- 2309	10	- 2319	10	- 2326	10
1000	- 2303	20	- 2310	30	- 2320	30	- 2327	30
1200	- 2304	30	- 2311	30	- 2321	30	- 2328	30

1) other values on request

CERTIFICABLE CURRENT TRANSFORMERS

E9A615.3



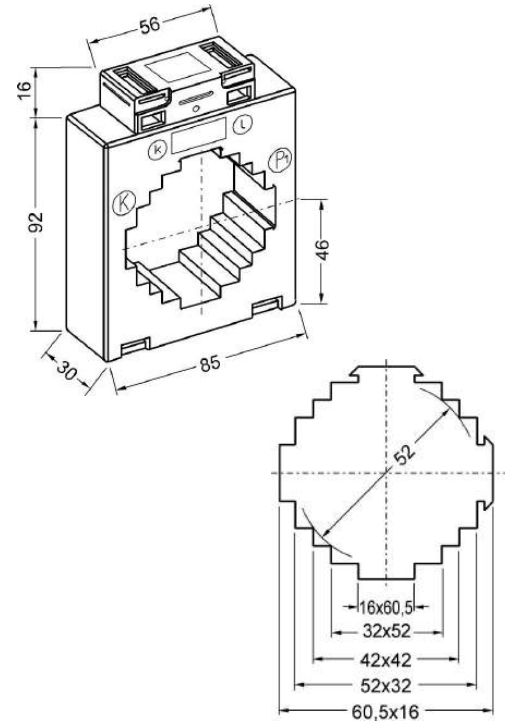
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin
- Intermediate size E8A615.3 on request

Accessories see AST615 (Page 5/27)

Round conductor	Ø 53 mm
Primary bar	60 x 15 mm
	2 x 50 x 10 mm
	40 x 40 mm



E9A615.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
200	-	-	-	-	-	-	- 3525	2,5
250	-	-	-	-	-	-	- 1471	5
300	-	-	-	-	- 2342	2,5	- 3450	5
400	-	-	- 2333	5	- 2343	5	- 2352	15
500	-	-	- 2334	5	- 2344	10	- 2353	15
600	-	-	- 2335	10	- 2345	10	- 2354	15
750	-	-	- 2336	15	- 2346	15	- 3500	10
800	-	-	- 2337	15	- 2347	20	- 2355	30
1000	- 2329	10	- 2338	20	- 2348	20	- 1704	30
1200	- 2330	20	- 2339	20	- 2349	20	- 2356	20
1250	- 2331	20	- 2340	20	- 2350	30	- 3432	30
1500	- 2332	20	- 2341	30	- 2351	30	- 1744	30

1) other values on request

E9A640.3



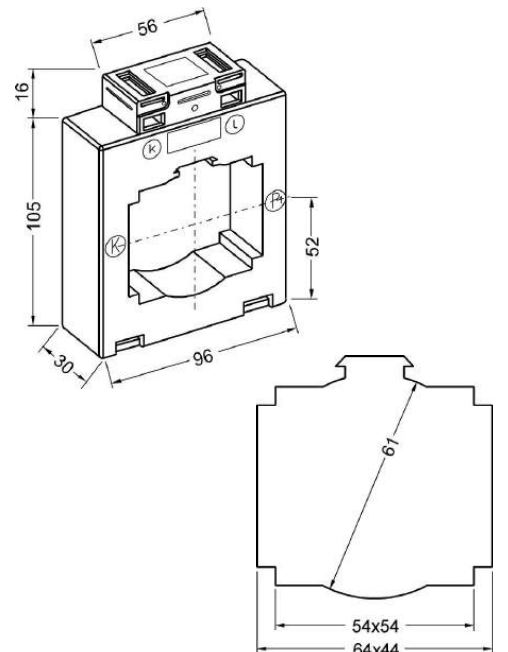
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- Compound-filled with cast resin

Accessories see AST640 (Page 5/29)

Round conductor	Ø 61 mm
Primary bar	60 x 40 mm
	50 x 50 mm



E9A640.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
500	-	-	-	-	- 2366	2,5	- 2374	5
600	-	-	-	-	- 2367	5	- 2375	5
750	-	-	- 2360	5	- 2368	5	- 2376	10
800	-	-	- 2361	5	- 2369	10	- 2377	10
1000	-	-	- 2362	5	- 2370	10	- 2378	10
1200	- 2357	5	- 2363	10	- 2371	15	- 2379	15
1250	- 2358	15	- 2364	15	- 2372	15	- 2380	15
1500	- 2359	5	- 2365	5	- 2373	10	- 2381	10

1) other values on request

CERTIFICABLE CURRENT TRANSFORMERS

E10A815.3



WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

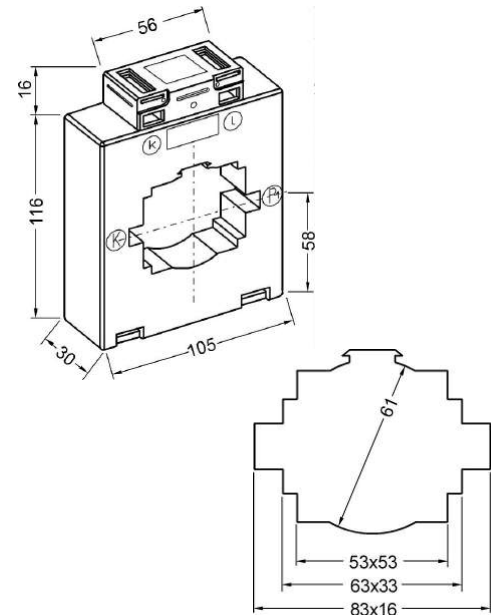
Accessories see AST815 (Page 5/30)

Round conductor \varnothing 61 mm

Primary bar 80 x 15 mm

2 x 60 x 10 mm

2 x 50 x 10 mm



E10A815.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
400	-	-	-	-	-2390	2,5	-2399	5
500	-	-	-	-	-2391	2,5	-3499	5
600	-	-	-2383	5	-2392	5	-2400	10
750	-	-	-2384	10	-2393	10	-2401	15
800	-	-	-2385	10	-2394	15	-2402	15
1000	-	-	-2386	15	-2395	20	-1454	20
1200	-	-	-2387	10	-2396	10	-2403	10
1250	-	-	-2388	10	-2397	10	-2404	10
1500	-2382	5	-2389	15	-2398	15	-2405	15

1) other values on request

E10A830.3



WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

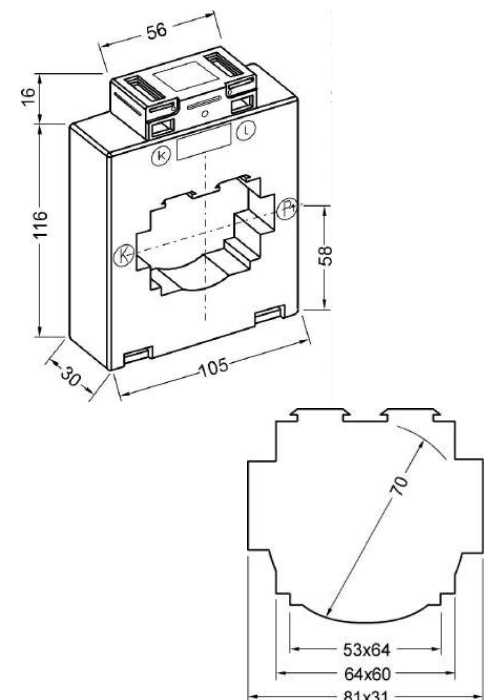
- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see AST830 (Page 5/31)

Round conductor \varnothing 70 mm

Primary bar 2 x 80 x 10 mm

60 x 60 mm



E10A830.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
400	-	-	-	-	-	-	-3498	5
500	-	-	-	-	-2415	2,5	-2423	5
600	-	-	-2408	2,5	-2416	5	-3440	5
750	-	-	-2409	2,5	-2417	10	-2424	5
800	-	-	-2410	2,5	-2418	15	-2425	10
1000	-	-	-1721	5	-1785	20	-1784	10
1200	-	-	-2412	10	-2420	10	-3438	10
1250	-2406	5	-2413	10	-2421	10	-2426	10
1500	-2407	5	-2414	10	-2422	15	-2427	10

1) other values on request

CERTIFICABLE CURRENT TRANSFORMERS

E13A1030.3



WINDOW TYPE CURRENT TRANSFORMER

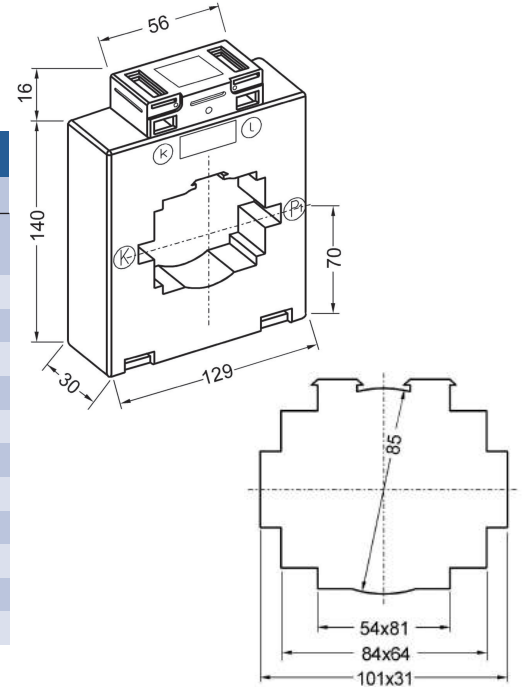
Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see AST1030 (Page 5/32)

Round conductor \varnothing 85 mm

Primary bar 80 x 64 mm
2 x 100 x 10 mm



E13A1030.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
500	-	-	-	-	- 2439	5	- 2450	5
600	-	-	-	-	- 2440	5	- 2451	5
750	-	-	-	-	- 2441	5	- 2452	10
800	-	-	-	-	- 2442	10	- 2453	15
1000	-	-	- 2432	10	- 2443	10	- 3523	15
1200	-	-	- 3645	10	- 2444	15	- 2454	15
1250	-	-	- 2434	15	- 2445	15	- 2455	15
1500	- 2428	5	- 2435	15	- 2446	15	- 2456	15
1600	- 2429	5	- 2436	15	- 2447	15	- 2457	15
2000	- 2430	5	- 2437	15	- 2448	15	- 1457	15
2500	- 2431	10	- 2438	15	- 2449	15	- 3429	15

1) other values on request

E13A1056.3



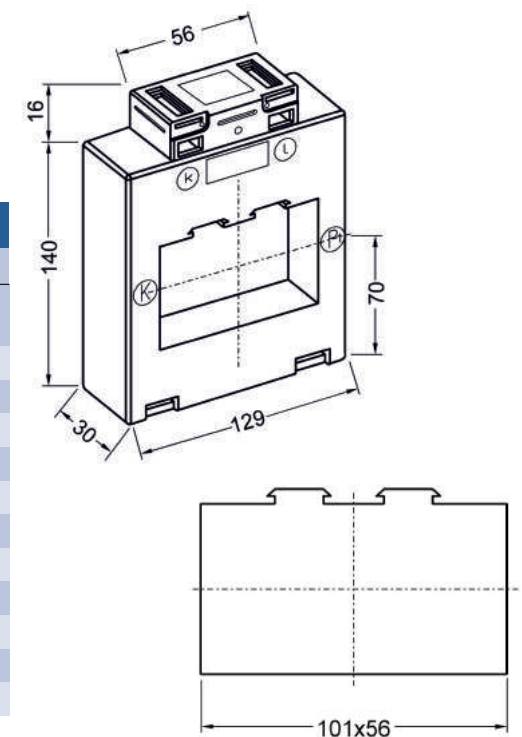
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see AST1056 (Page 5/33)

Primary bar 3 x 100 x 12 mm



E13A1056.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
500	-	-	-	-	-	-	- 2477	5
600	-	-	-	-	-	-	- 2478	5
750	-	-	-	-	- 2468	2,5	- 2479	10
800	-	-	-	-	- 2469	2,5	- 2480	10
1000	-	-	- 2461	10	- 2470	5	- 2481	10
1200	-	-	- 2462	10	- 2471	10	- 2482	10
1250	-	-	- 2463	10	- 2472	15	- 2483	15
1500	- 2458	5	- 2464	15	- 2473	15	- 2484	15
1600	-	-	- 2465	15	- 2474	15	- 2485	15
2000	- 2459	5	- 2466	15	- 2475	15	- 2486	15
2500	- 2460	10	- 2467	15	- 2476	15	- 1775	15

1) other values on request

CERTIFICABLE CURRENT TRANSFORMERS

E16A1234.3



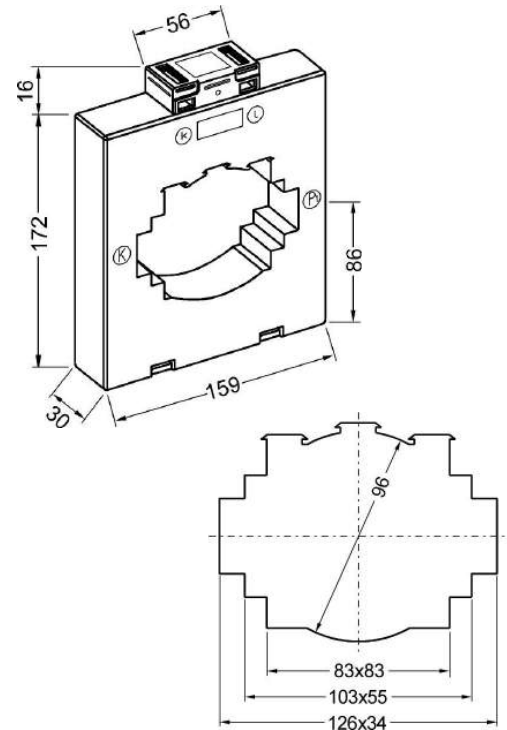
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- Compound-filled with cast resin

Accessories see AST1234 (Page 5/33)

Round conductor	Ø 96 mm
Primary bar	2 x 120 x 10 mm 3 x 100 x 10 mm 80 x 80 mm



E16A1234.3 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
400	-	-	-2499	2,5	-2513	2,5	-2527	5
500	-	-	-2500	5	-2514	2,5	-2528	5
600	-2487	2,5	-2501	5	-2515	5	-2529	5
750	-2488	5	-2502	10	-2516	10	-2530	15
800	-2489	5	-2503	10	-2517	10	-2531	15
1000	-2490	10	-2504	15	-2518	15	-2532	15
1200	-2491	15	-2505	15	-2519	15	-2533	15
1250	-2492	15	-2506	15	-2520	15	-2534	15
1500	-2493	15	-2507	15	-2521	15	-2535	15
1600	-2494	10	-2508	10	-2522	10	-2536	15
2000	-2495	10	-2509	10	-2523	15	-2537	15
2500	-2496	15	-2510	15	-2524	15	-2538	15
3000	-2497	15	-2511	15	-2525	15	-2539	15
4000	-2498	15	-2512	15	-2526	15	-1459	15

1) other values on request

EIPA30.5



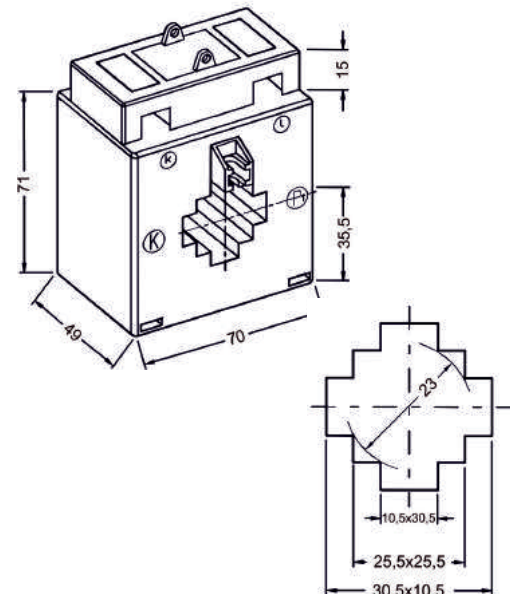
WINDOW TYPE CURRENT TRANSFORMER

Special designs (on request):

- secondary 1A
- secondary tabs
- compound-filled with cast resin

Accessories see SMU/I (Page 5/1)

Round conductor	Ø 23 mm
Primary bar	30 x 10 mm 25 x 25 mm



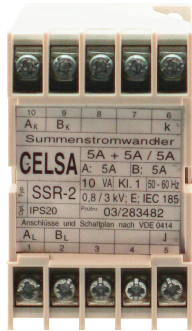
EIPA30.5 Technical Features, Executions

Primary rated current ¹⁾	Rated burdens VA (max.) .../ 5A							
	Article No.	Class	Article No.	Class	Article No.	Class	Article No.	Class
A	70017 -	0,2 S	70017 -	0,2	70017 -	0,5 S	70017 -	0,5
50	-	-	-	-	-2556	1,25	-3524	1,25
60	-	-	-	-	-2557	1,5	-3577	1,5
75	-	-	-	-	-2558	2,5	-3403	2,5
80	-	-	-	-	-2559	2,5	-2569	2,5
100	-	-	-2548	2,5	-2560	2,5	-1476	2,5
125	-2540	2,5	-2549	2,5	-2561	5	-1477	5
150	-2541	5	-2550	5	-2562	5	-3401	5
200	-2542	5	-2551	5	-2563	5	-2570	5
250	-2543	5	-3586	5	-2564	10	-3622	10
300	-2544	10	-2552	10	-2565	10	-2571	10
400	-2545	15	-2553	15	-2566	15	-2572	20
500	-2546	20	-2554	20	-2567	20	-2573	20
600	-2547	20	-2555	20	-2568	20	-2574	20

1) other values on request

SUMMATION - CURRENT TRANSFORMERS

SSR



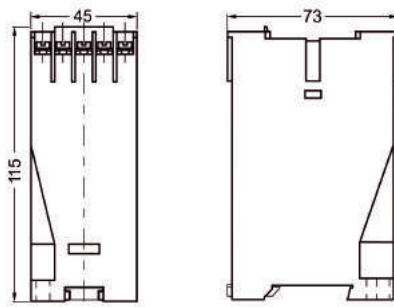
Summation current transformers

Summation current transformers SSR-2 to SSR-9 are used to summarize secondary currents of several main c.t.'s in order to measure with one instrument only. The output current again constitutes a standardized quantity. That means the primary currents are not only added but also divided by the number of inputs.

If using unequal main c.t.'s the ratio of the lowest primary current to the highest one should not exceed 1:10. When ordering in case of unequal main c.t.'s the ratio of each of them has to be specified absolutely. Unused primary connections have to be open circuited as opposed to the short circuiting of secondary connections

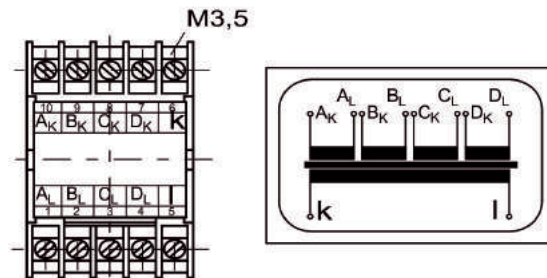
Dimensions

Housing D10 (SSR-2 to SSR-4)

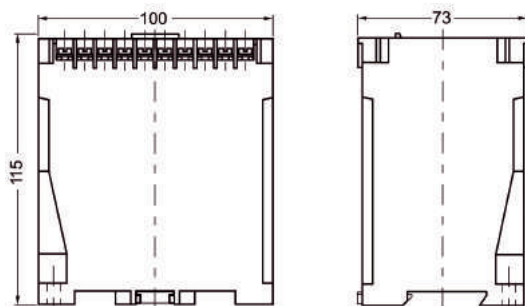


Connections

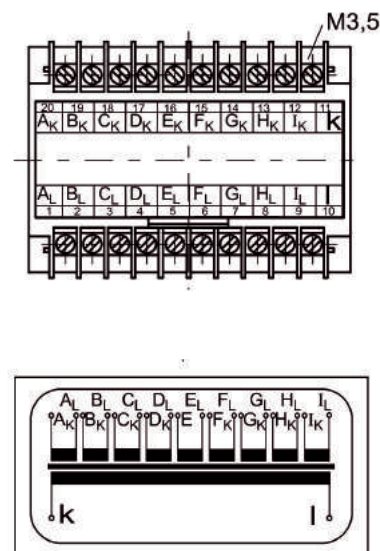
Housing D10 (SSR-2 to SSR-4)



Housing D20 (SSR-5 to SSR-9)



Housing D20 (SSR-5 to SSR-9)



SUMMATION - CURRENT TRANSFORMERS

SSR Technical Features	
Electrical Features	
Highest voltage equipment:	720 V
Rated insulation level:	4 kV, 1 min.
Rated short-time thermal current (I_{th}):	$60 \times I_N$
Rated dynamic current (I_{dyn}):	$2.5 \times I_{th}$
Frequency range:	50 - 60Hz
Internal consumption:	Max. 4 VA
Thermal class of insulation:	E
Accuracy class index and burden	
Class 0,5	15 VA
Class 1	15 VA
Mechanical Features	
Housings	Of self-extinguishing ABS UL94 V-0
Protection degree	IP40
Fixing	DIN-rail DIN EN50022 or screw fastening
Connection	Nickel plated secondary terminals with plus minus screws
Protection degree of connection	IP10, with secondary terminal cover = IP20 (option)
Weight	D10 = 400g, D20 = 600g
Highest proportion for different ratios of main c.t.'s	1:10
Housing size	SSR-2 until SSR-4 = D10 SSR-5 until SSR-9 = D20

SSR Technical Data, Executions											
Article	identical ratios of main c.t.'s	Class 0.5		Class 1		Article	different ratios of main c.t.'s	Class 0.5		Class 1	
		Article Nr.	Article Nr.	Article Nr.	Article Nr.			Article Nr.	Article Nr.		
		70017 -	70017 -					70017 -	70017 -		
SSR-2	5+5/5A	- 1626	- 1628	SSR-21	5+5/5A	- 1627	- 1629				
SSR-3	5+5+5/5A	- 1631	- 1633	SSR-31	5+5+5/5A	- 1632	- 1634				
SSR-4	5+5+5+5/5A	- 1639	- 1640	SSR-41	5+5+5+5/5A	- 1642	- 1641				
SSR-5	5+5+5+5+5/5A	- 1644	- 1645	SSR-51	5+5+5+5+5/5A	- 3408	- 1646				
SSR-6	5+5+5+5+5+5/5A	- 2600	- 1647	SSR-61	5+5+5+5+5+5/5A	- 3356	- 1648				
SSR-7	5+5+5+5+5+5+5/5A	- 2601	- 3437	SSR-71	5+5+5+5+5+5+5/5A	- 3407	- 2605				
SSR-8	5+5+5+5+5+5+5+5/5A	- 2602	- 1650	SSR-81	5+5+5+5+5+5+5+5/5A	- 3357	- 2606				
SSR-9	5+5+5+5+5+5+5+5+5/5A	- 2603	- 1651	SSR-91	5+5+5+5+5+5+5+5+5/5A	- 2604	- 2607				

other values on request

SSR Technical Data, Executions											
Artikel	identical ratios of main c.t.'s	Class 0.5		Class 1		Artikel	different ratios of main c.t.'s	Class 0.5		Class 1	
		Article Nr.	Article Nr.	Article Nr.	Article Nr.			Article Nr.	Article Nr.		
		70017 -	70017 -					70017 -	70017 -		
SSR-2	1+1/1A	- 1623	- 1624	SSR-21	1+1/1A	- 1733	- 1761				
SSR-3	1+1+1/1A	- 2608	- 1630	SSR-31	1+1+1/1A	- 1731	- 1728				
SSR-4	1+1+1+1/1A	- 1635	- 1636	SSR-41	1+1+1+1/1A	- 1732	- 1637				
SSR-5	1+1+1+1+1/1A	- 2609	- 1643	SSR-51	1+1+1+1+1/1A	- 2615	- 3624				
SSR-6	1+1+1+1+1+1/1A	- 2610	- 3608	SSR-61	1+1+1+1+1+1/1A	- 2616	- 3623				
SSR-7	1+1+1+1+1+1+1/1A	- 2611	- 2613	SSR-71	1+1+1+1+1+1+1/1A	- 2617	- 2620				
SSR-8	1+1+1+1+1+1+1+1/1A	- 1649	- 2614	SSR-81	1+1+1+1+1+1+1+1/1A	- 2618	- 2621				
SSR-9	1+1+1+1+1+1+1+1+1/1A	- 2612	- 3540	SSR-91	1+1+1+1+1+1+1+1+1/1A	- 2619	- 2622				

other values on request

SPLIT CORE - CURRENT TRANSFORMERS

IAP - IAM - IAG



IAG



IAM



IAP

Split core current Transformer

Application

Split core current transformers convert an alternating current of high value into a proportional, lower one, which is appropriate to be measured by standard instruments (ammeters, wattmeters, varmeters, power factor meters, relays, measuring transducers...) of rated currents 5 or 1 A. Their split core allows their installation in already existing networks without need to cut the conductors. They are suitable for indoor use in low-voltage networks, and they are built according to IEC and EN 60044-1 standards.

Design features

- The current transformers can be opened
- Cases of self-extinguishing polycarbonate UL 94 - V0
- Double secondary terminals, for short circuiting the secondary winding before opening the measuring circuit
- Mounting brackets for the panel mounting and fixing clamps for the fixing to the primary bus bar are included

Accuracy

Our current transformers fulfil the specifications of the accuracy classes 0.5, 1 and 3, for the rated burden indicated in the table (see next page).

IAP, IAM, IAG Technical Data

Electrical Features (according to IEC-60044-1)

Rated secondary current	5 or 1 A
Frequency range	50 - 60 Hz
Highest voltage for equipment	720 V
Rated insulation level	3kV, 50Hz 1 min.
Rated continuous thermal current	1.2x I _N
Rated short-time thermal current (I _{th})	60x I _N
Rated dynamic current (I _{dyn})	2.5x I _{th}
Thermal class of insulation, according to IEC-6085	E (120°C)

Mechanical Data

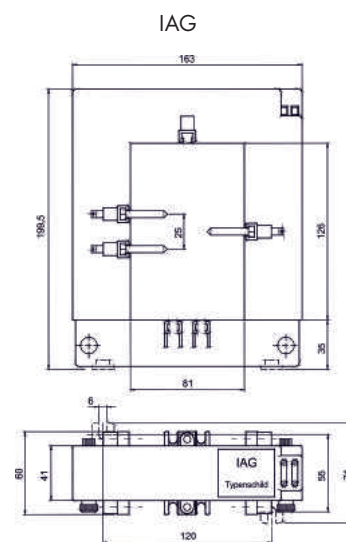
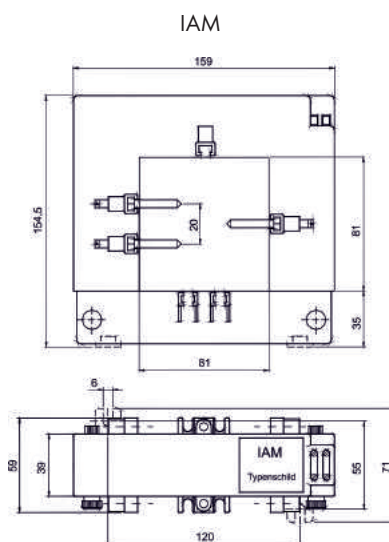
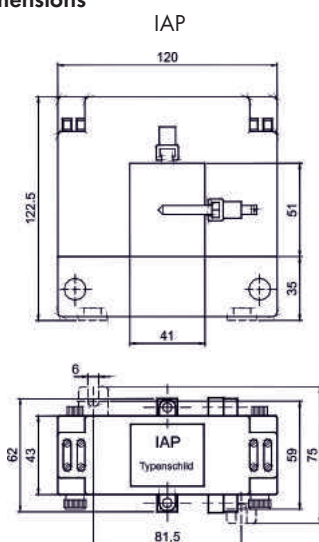
Window:

IAP	busbar 2x 50x10 mm, 3x 40x10 mm or round conductor Ø 40 mm
IAM	busbar 4x 80x10 mm or round conductor Ø 80 mm
IAG	busbar 4x 125x10 mm or round conductor Ø 80 mm

Weight: (depending on primary current)

IAP	1040 g ... 1365 g
IAM	1190 g ... 1640 g
IAG	1640 g ... 2495 g

Dimensions



SPLIT CORE - CURRENT TRANSFORMERS

IAP - IAM - IAG Technical Daten, Executions

Primary rated current A	sec. 1A											
	IAP				IAM				IAG			
	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA
60	- 3064	-	-	1,25	-	-	-	-	-	-	-	-
75	- 3273	-	-	1,25	-	-	-	-	-	-	-	-
100	- 1885	-	1,25*	2,5	- 3280	-	-	1,25	-	-	-	-
125	- 1888	-	1,25*	3,75	- 3281	-	-	2,5	-	-	-	-
150	- 3274	-	2,5*	3,75	- 3282	-	-	3,75	-	-	-	-
200	- 1890	-	3,75*	3,75	- 3283	-	1,25*	3,75	-	-	-	-
250	- 3275	-	3,75*	7,5	- 3284	-	2,5*	3,75	-	-	-	-
300	- 1893	-	5*	10	- 3285	-	3,75*	5	-	-	-	-
400	- 3245	-	7,5	20	- 3286	-	5	10	-	-	-	-
500	- 3139	5	10	30	- 3287	1,25	5	15	- 3297	-	2,5	15
600	- 3276	10	15	30	- 3288	2,5	7,5	20	- 3159	1,25	5	15
750	- 3277	10	20	45	- 3289	7,5	15	30	- 3298	1,25	10	20
800	- 1900	10	30	60	- 3290	10	20	30	- 3299	2,5	10	20
1000	- 3279	10	45	60	- 1872	10	20	45	- 3158	5	15	30
1200	-	-	-	-	- 3291	10	30	60	- 3300	7,5	20	45
1500	-	-	-	-	- 3292	10	45	60	- 3301	10	30	60
1600	-	-	-	-	-	-	-	-	- 3302	15	45	60
2000	-	-	-	-	-	-	-	-	- 1865	15	60	60
2500	-	-	-	-	-	-	-	-	- 3303	20	60	60
3000	-	-	-	-	-	-	-	-	- 1868	20	60	60

Remark: These current transformers meet the demands for the classes 0.5, 1 and 3 in the same instrument. / * only ammeters

IAP - IAM - IAG Technical Daten, Executions

Primary rated current A	sec. 5A											
	IAP				IAM				IAG			
	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA	Article Nr. 70097 -	Cl. 0,5 VA	Cl. 1 VA	Cl. 3 VA
60	- 1897	-	-	1,25	-	-	-	-	-	-	-	-
75	- 3272	-	-	1,25	-	-	-	-	-	-	-	-
100	- 1886	-	1,25*	2,5	- 1871	-	-	1,25	-	-	-	-
125	- 3444	-	1,25*	3,75	- 3691	-	-	2,5	-	-	-	-
150	- 1889	-	2,5*	3,75	- 1875	-	-	3,75	-	-	-	-
200	- 1891	-	3,75*	3,75	- 1877	-	1,25*	3,75	-	-	-	-
250	- 1892	-	3,75*	7,5	- 1878	-	2,5*	3,75	-	-	-	-
300	- 1894	-	5*	10	- 1879	-	3,75*	5	-	-	-	-
400	- 1895	-	7,5	20	- 1880	-	5	10	-	-	-	-
500	- 1896	5	10	30	- 1881	1,25	5	15	- 3293	-	2,5	15
600	- 1898	10	15	30	- 1882	2,5	7,5	20	- 1870	1,25	5	15
750	- 1899	10	20	45	- 1883	7,5	15	30	- 3294	1,25	10	20
800	- 1901	10	30	60	- 1884	10	20	30	- 3690	2,5	10	20
1000	- 1887	10	45	60	- 1873	10	20	45	- 1863	5	15	30
1200	-	-	-	-	- 1874	10	30	60	- 3295	7,5	20	45
1500	-	-	-	-	- 1876	10	45	60	- 1864	10	30	60
1600	-	-	-	-	-	-	-	-	- 3296	15	45	60
2000	-	-	-	-	-	-	-	-	- 1866	15	60	60
2500	-	-	-	-	-	-	-	-	- 1867	20	60	60
3000	-	-	-	-	-	-	-	-	- 1869	20	60	60

Remark: These current transformers meet the demands for the classes 0.5, 1 and 3 in the same instrument. / * only ammeters

SPLIT CORE - CURRENT TRANSFORMERS

TC - TQ



Application

The very compact TQ/ TC are especially designed for connection to digital measurement systems. All TC /TQ are supplied with colour coded leads secondary leads. Correct closing of the current transformer/sensor is guaranteed by a distinct sound of a "click". Two UV-resistant ty-raps are supplied with the current transformer which can be easily mounted around the primary conductor.

TC / TQ Technical Data

Enviromental conditions

Location	Indoor use
Operating temperature	TQ18-B: -10°C to +55°C
	TC18: -5°C to +40°C
	TQ27: -10°C to +55°C
	TQ42: -10°C to +55°C
	TQ84: -10°C to +55°C

Relative humidity 5% - 85%, non condensing

Protection degree IP20

Application conditions

Standard	IEC 61869-2
Rated short-time thermal current	60 x In/1s
Continuous thermal current (Icth)	100% In
Rated insulation level	0,72/3-kV
Rated frequency	50/60Hz
Class of insulation	E (120°C)

Primäre Fenstermasse	TQ18-B: max. Ø 18mm
	TC18: max. Ø 18mm
	TQ 27: max. Ø 28mm
	TQ42: max. Ø 42mm
	TQ84: max. 2 x Ø 42mm

Primary window dimensions	TC18: 0,5mm ² flexibel
	TQ18-B/TQ27/TQ42/ TQ84:
	1A: L= 3m cabel 0,5mm ² flexibel 1A: L= 5m cabel 0,5mm ² flexibel (TQ42) 5A: L= 0,5 m cabel 1,5mm ² flexibel

Split core current transformer / sensor



- Very easy mounting is guaranteed
- Fast fixation with two UV-resistant tie wraps
- Also in class 1 available for high accurate kWh measurements
- All TC/TQ.. split core CT's are supplied with colour coded leads

TC / TQ Technical Features

Type	Article Nr. 70006 -	Primary current A	Rated burden ¹⁾		
			Cl. 0,5 ²⁾ VA	Cl.1 ²⁾ VA	Cl.3 VA
TQ 18-B	- 1025	100/1A	-	0,2	-
	- 1026	125/1A	-	0,2	-
	- 1027	150/1A	-	0,2	-
	- 1128	200/1A	0,2	-	-
	- 1053	150/5A	-	1	-
	- 1030	200/5A	-	1	-
	- 1031	250/5A	-	1	-
TC 18	- 1001	60/1A	-	-	0,2
	- 1002	75/1A	-	-	0,2
	- 1003	100/1A	-	-	0,2
	- 1004	125/1A	-	-	0,2
	- 1005	150/1A	-	-	0,2
	- 1006	200/1A	-	0,2	-
	- 1007	250/1A	-	0,2	-
TQ 27	- 1012	200/1A	-	0,2	-
	- 1013	250/1A	-	0,2	-
	- 1014	300/1A	-	0,2	-
	- 1015	400/1A	-	0,2	-
	- 1016	500/1A	0,2	-	-
	- 1050	250/5A	-	1	-
	- 1044	300/5A	-	1	-
	- 1051	400/5A	-	1	-
	- 1052	500/5A	-	1	-
	TQ 42 TQ 84	TQ42 TQ84			
- 1315 - 1330		250/1A	-	0,5	-
- 1316 - 1331		300/1A	-	0,5	-
- 1317 - 1332		400/1A	0,5	-	-
- 1318 - 1333		500/1A	0,5	-	-
- 1319 - 1334		600/1A	0,5	-	-
- 1320 - 1335		750/1A	0,5	-	-
- 1321 - 1336		800/1A	0,5	-	-
- 1322 - 1337		1000/1A	0,5	-	-
- 1323 - 1339		300/5A	-	0,5	-
- 1324 - 1340		400/5A	-	0,5	-
- 1325 - 1341		500/5A	-	0,5	-
- 1326 - 1342		600/5A	0,5	-	-
- 1327 - 1343		750/5A	0,5	-	-
- 1328 - 1344		800/5A	0,5	-	-
- 1329 - 1345		1000/5A³⁾	0,5	-	-

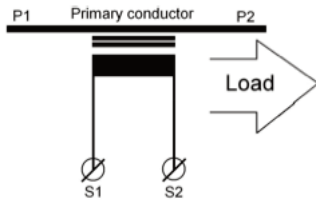
1) Burden specified at the end of the secondary leads
2) Accuracy conform IEC 60044-1, valid from 5- to 20% In
3) Ambient temperature -10°C ... +40°C

SPLIT CORE - CURRENT TRANSFORMERS

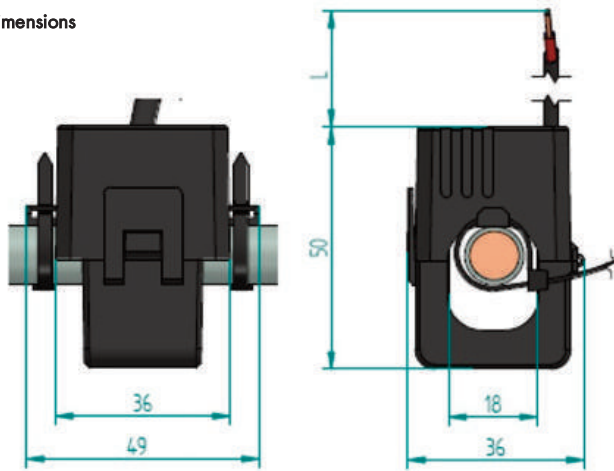
Dimensions / Wiring diagrams

TC18

Wiring diagrams

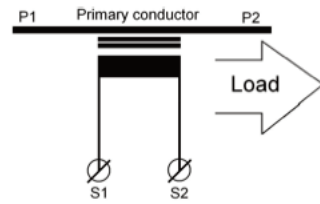


Dimensions

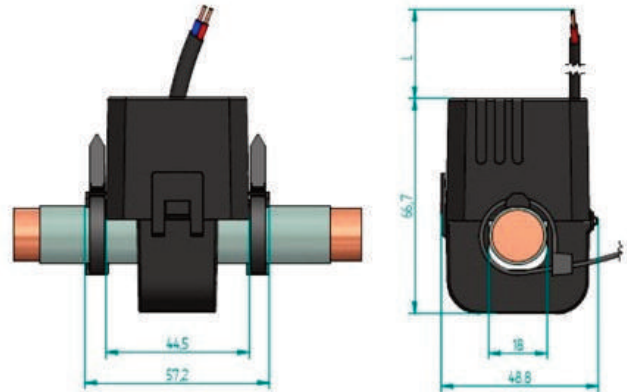


TQ18-B

Wiring diagrams

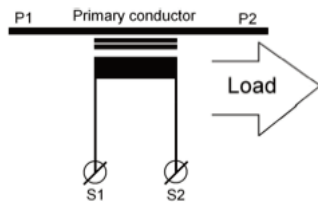


Dimensions

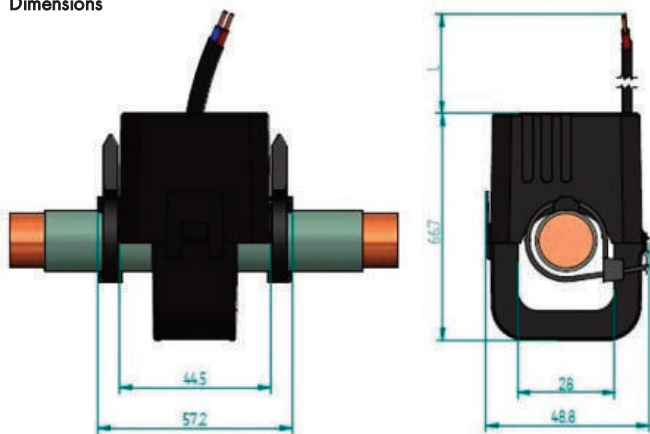


TQ 27

Wiring diagrams

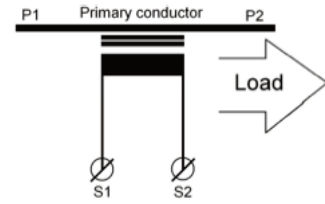


Dimensions

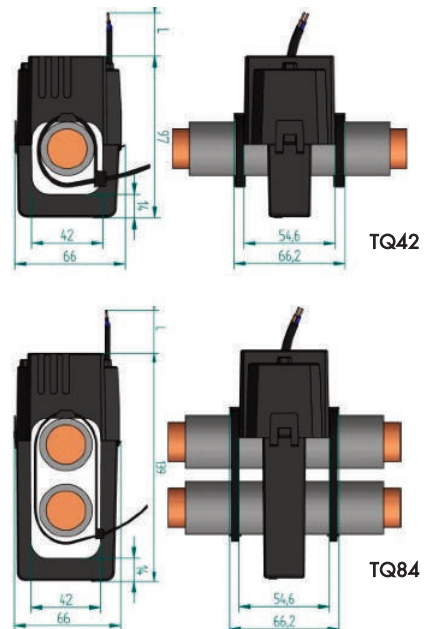


TQ 42 / TQ 84

Wiring diagrams



Dimensions



CURRENT TRANSFORMERS WITH FUSED TERMINAL

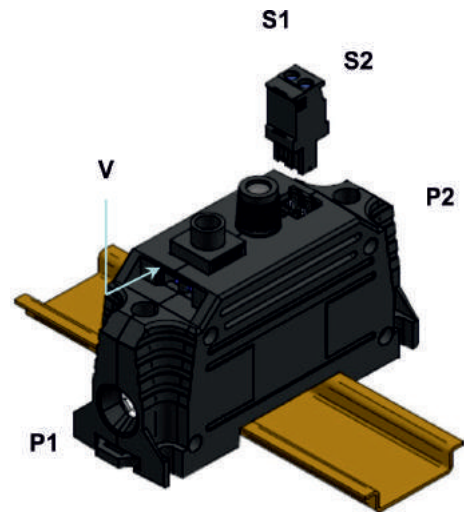
VST



Current Transformer with fused terminal



- Easy mounting on DIN rail
- Three in one - current transformers/V_t
- Available for a three current ranges
- Including two ampere fuse
- Saves space and mounting time



Funktionsprinzip

To measure power, voltage and current values are required from each phase. In common cases there is often less space for measurement transformers and voltage terminals. The new CELSA Power Sensor type VST.. solves this problem by combining three functionalities in one product. This is the busbar terminal, the current transformer and the voltage terminal as well.

The fuse is directly mounted on the primary conductor. As result of the short unprotected part of the terminal the reliability is much higher. The CELSA Power Sensor makes it very easy to wire the terminal because of less connections. This reduces mounting costs. Because of reduction of the number of connections the terminal is more reliable than standard terminals. It also decreases mounting space..

VST General Features

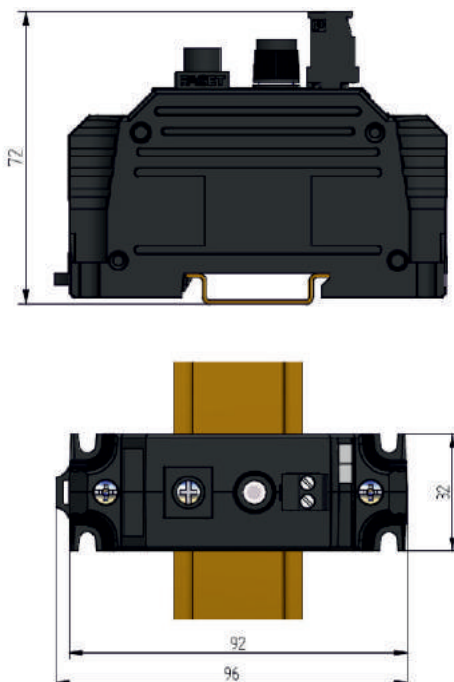
General	
Maximum voltage	690V, U _{imp} 6kV
Insulation voltage	1890V/50Hz 1min.
Rated current	64A
Max. current (AWG 6)	67A
Max. current (16mm ²)	76A
Insulation class	E (max120°)
Protection degree	IP20
Ambient temperature	-10...+55°C
Case	PA 30% glass filled
Suitable for marking	PHOENIX ZBF5
Screw terminal	Philips head DIN 7962-H2
Aprobation	KEMAKEUR
Terminal	
According standard	IEC60947-7-1
Min/Max Wire gauge:	1,5mm ² - 16mm ² /
Solid wire - Stranded wire / AWG	AWG 16 - 6
Voltage terminal	
Fuse type	5x25mm (with message) Max 2A SIBA DIN41576-2
Short circuit capability	70kA@400V/50Hz
Max. wire gauge	1,5mm ² - 4mm ²
Current Transformer	
According standard	IEC60044-1
Frequency	50Hz
I _{th}	60xI _n
Insulation voltage	3kV/50Hz 1min.

VST Technical Data

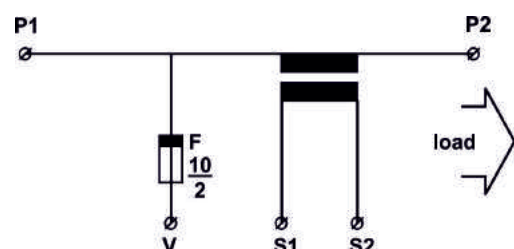
Rated current	Class	Burden ¹⁾	Type	Article Nr.
16/1 A	3	0,1 VA	VST16	70006 - 1032
35/1 A	1	0,2 VA	VST35	70006 - 1033
64/1 A	0,5	0,2 VA	VST64	70006 - 1034

¹⁾ External cabel losses= 0,014 VA/m (2,5 mm²)

Dimensions

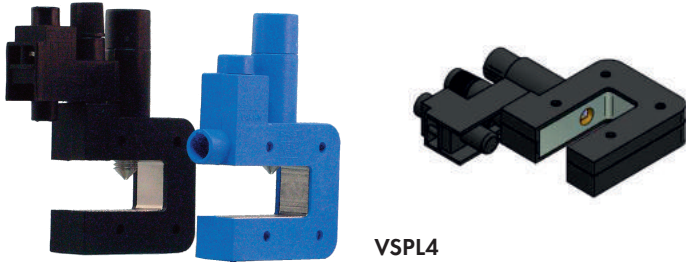


Connection diagrams



ACCESORIES VOLTAGE MEASUREMENT

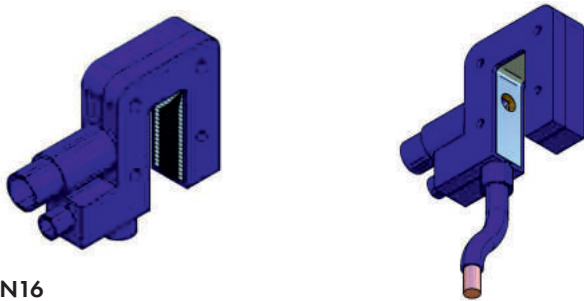
VSP - Voltage taps for bus bars



VSPL4

Terminal voltage tap for bus bar with integrated fuse

The VSP of insulated busbar terminals let you connect your instruments to live busbars. A fuse holder is an integrated part of this terminal, proving you with protection at the source. The terminal can be installed directly onto the busbar using an insulated Allen key driver. This makes the installation of this unique product a one handed exercise. The fuse holder is mounted directly on the metal that makes contact with the busbar, thereby providing a secure connection with a high short circuit rating. For connection to the Neutral bar, the model VSP provides an unfused connection.



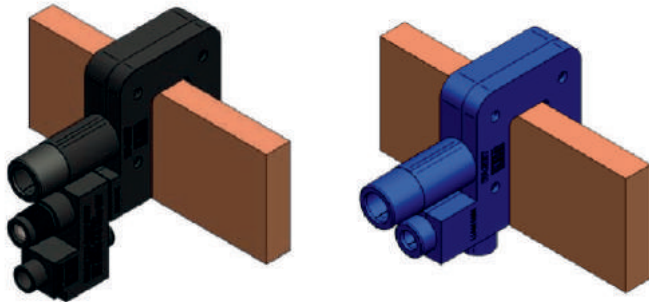
VSPN16

Terminal voltage tap for bus bar without integrated fuse

VSP.. General Features

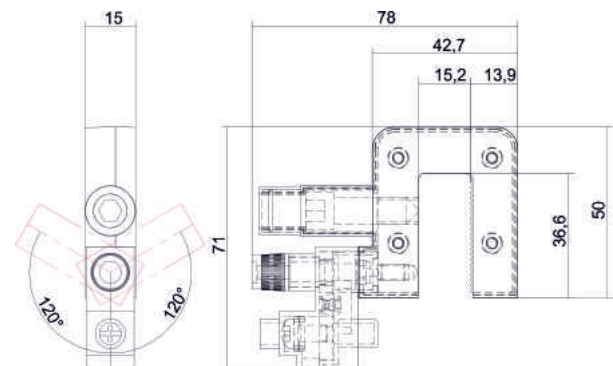
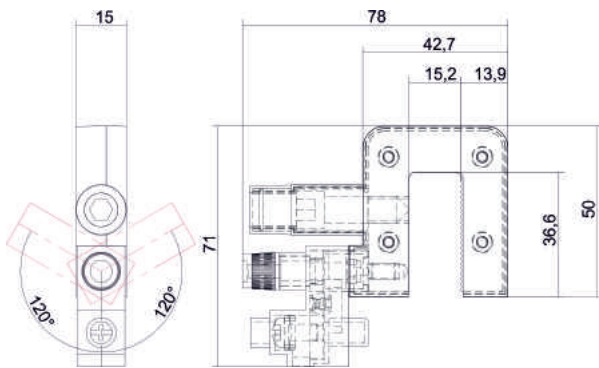
General	
Maximum voltage	690 V
Test voltage / spike	3 kV/50 Hz / 6 kV
Max. current	10 A
Isolation class	E (max 120 °C)
Fuse type	5x25 mm (with indicator) 10 A SIBA DIN 41576-2
Short circuit rating	70 kA @ 400 V/50 Hz
IP rating	IP20
Ambient temperature	-5...+40 °C ¹⁾
Temperature rise busbar	Max. 75 K ¹⁾
Busbar connection	Via Allen key bolt M8
Allen key size	Number 6
Busbar thickness	Max. 15 mm / min. 4 mm
Housing	Polyamide (PA6.6)
Material terminal	Nickel plated brass

¹⁾ Max. temperature of the busbar: 120°
(Sum of the busbar temperature rise and the ambient temperature)



VSPL4

VSPN16



VSP... Variants

Article Nr.	Model	Description	Colour	Connection
70006 - 1038	VSPL4	Fused phase terminal	black	1,5-4mm ²
70006 - 1059	VSPL16	Unfused phase terminal	black	0-16mm ²
70006 - 1039	VSPN16	Neutral terminal	blue	0-16mm ²
70006 - 1040		Set with 3 x VSPL4 and 1 x VSPN16		

ACCESORIES VOLTAGE MEASUREMENT

VSR6 - Voltage taps for round conductors



- One-handed and safe tapping of voltage for measurement purposes
- No tools needed
- Safe mounting
- Including 5x25mm, 2A fuse
- For insulated 2.5 - 6 mm² conductors, stranded, solid (rigid) wire

In existing installations there is rarely a fused terminal available for measurement purposes. This unique tapping clamp allows you to tap a fused voltage from an insulated wire for measurement using one hand and without the need for additional tools. The fuse is mounted directly on the primary conductor, which results in an optimum degree of safety. This unique product is a breakthrough for fast and safe measurement in existing installations

This model is obtainable in a fused and non used version.

VSR6.. Technical specifications

Safety conditions

CE Directive:	Low voltage directive 2006/95/EC
Standard:	IEC 60998 (clamp), IEC 60947 (fuse)

Environmental conditions

Standard	IEC 60721-3-3:1996
Class	3K3
Operating temperature	+5 °C - +55 °C
Relative humidity	5% - 85%, non condensing
Operating height	0..2000m over NN
Protection degree	IP20, basic insulation
Pollution degree	2
Measurement category	CAT III

Application conditions

Only for suitable for conductors with basic insulation (wire)

Insulation material	PVC or XLPE
Wire diameter	3 - 5mm (2,5 - 6mm ²)
VSRL6-R / VSRN6-R	Rigid wire (Solid, Stranded)
Umax	400 V AC
Test voltage	3kV / 50 Hz

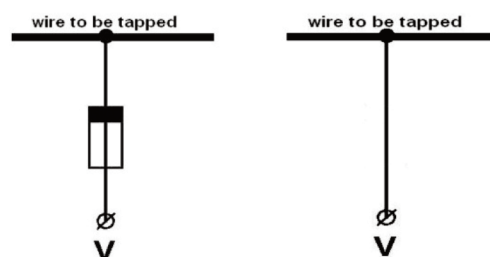
Impulse voltage

I _{max}	2 A
Voltage drop	< 500m V AC
Fuse (VSRL6-R)	2A, 450V, F, 70kA, 5x25mm, ceramic (SIBA Part.no. 7008913.2)
Sec. Lead	1 mm ² flexible, 50cm, end-sleeve
Usability	Multiple use, max. 24 times.
Torque	1.5 - 2.0Nm

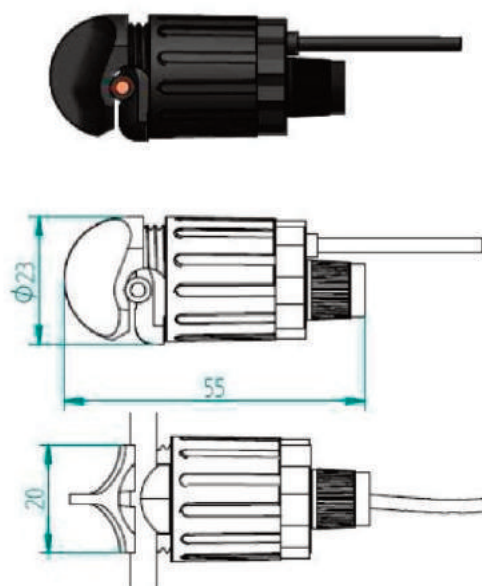
Storage

Temperature	-20 °C - +70 °C
Relative humidity	5% - 85%, non condensing
Weight	28 gr.
Dimensions	diameter 23mm, height 59mm
Material	PA 6.6, UL94 V2

Wiring diagrams:



Dimensions:



VSR6... Variants

Article Nr.	Model	Cabel dimensions
70006 - 1060	VSRL6-R	fused, for 2.5-6mm ² rigid (solid, stranded) wire rigid (solid, stranded) wire
70006 - 1061	VSRN6-R	not fused for 2.5-6mm ² rigid (solid, stranded) wire
70006 - 1062		Set with 3 x VSRN6-R and 1 x VSRL6-R

ACCESORIES VOLTAGE MEASUREMENT

VSR16 - Voltage taps for round conductors



- One-handed and safe tapping of voltage for measurement purposes
- No tools needed
- Safe mounting
- Including 5x25mm, 2A fuse
- For insulated 6 - 16 mm² conductors, stranded and solid

In existing installations there is rarely a fused terminal available for measurement purposes. This unique tapping clamp allows you to tap a fused voltage from an insulated wire for measurement using one hand and without the need for additional tools. The fuse is mounted directly on the primary conductor, which results in an optimum degree of safety. This unique product is a breakthrough for fast and safe measurement in existing installations.

VSR16.. Technical specifications

Max. voltage	400V
Test voltage (casing ground)	3kV / 50Hz
Impulse (casing-conductor)	6KV 1,2/ 50µs
Max. rated current	2A
Voltage drop	< 500m V AC
Fusetype phase terminal	5x25mm, 2A (with indicator) Max 2A SIBA DIN41576-2
Short circuit current	6kA @ 400V/50Hz
Protection degree	IP20
Ambient temperature	-5...+40 °C
Suitable for	PVC and XLPE, stranded and solid conductors
Torque	1.5 Nm multiple use 2.0 Nm single use

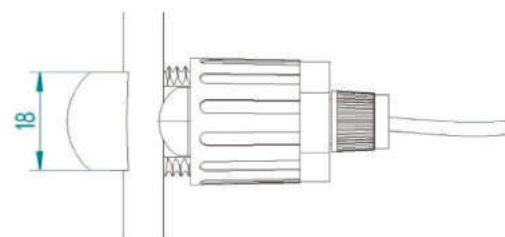
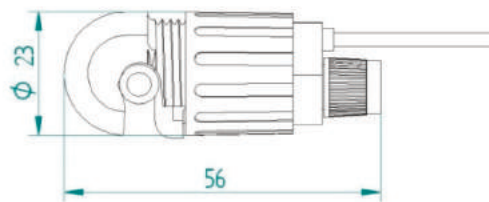
Dimensions:



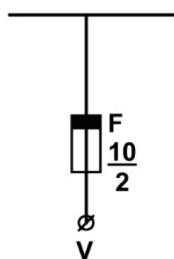
10 mm²



16 mm²



Wiring diagrams:



VSR16... Variants

Article Nr.	Model	Cable dimensions
70006 - 1041	VSRL16	6-16mm ² fused neutral terminal
70006 - 1042	VSRN16	6-16mm ² Unfused neutral terminal
70006 - 1043	Set with 3 x VSRN16 and 1 x VSRL16	

NOTES

