



CURRENT/VOLTAGE TRANSFORMERS AND SENSORS



Moulded case current transformers, class 0.5 ... / 5 A

Increased reliability

- Both halves of the housing overlap rather than butting up against one another
- Break-proof plastic housing made from polyamide
- Non-combustible per UL 94 VO and self-extinguishing

Protective caps for primary bus bar fastening screws

- Fixing screws pins for the primary rail can be insulated by means of protective caps, available as an option
- Safeguard to prevent accidental contact

Secondary connections

- Feeding of the secondary connections to the connection terminals through the rectangular opening in the front and rear sides
- Secondary connection by means of cable lugs through the side slots

Expanded secondary terminal covering

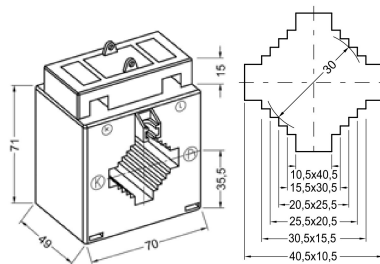
- In addition to the normal terminal covering, extra protective hoods are available
- Locking of the front and rear feed to the secondary terminals



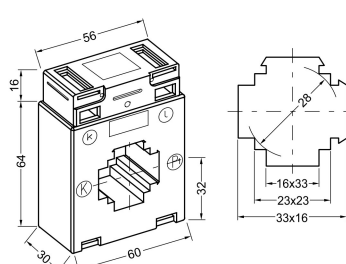
Dimension diagrams

All dimensions provided in mm

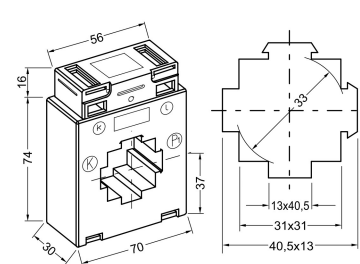
IPA40.5



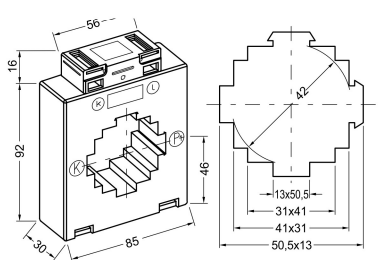
6A315.3



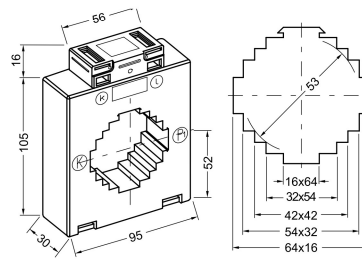
7A412.3



8A512.3



9A615.3



General mechanical properties

- Nominal frequency 50 – 60 Hz
- Insulation class E (other classes on request)
- Thermal rated short-term current $I_{th} = 60 \times I_N / 1s$
- Rated surge current $I_{dyn} = 2.5 \times I_{th}$, min., however 100 kA
- Highest voltage for operating equipment $U_m = 0.72$ kV
- Rated insulation level (test voltage) 4 kV / 1 min (per EN 61869-2)
- Over-current limit factor FS5 or FS10
- Harmonics currents up to 50th harmonic



Technical data

Device overview, moulded case current transformer, class 0.5 ... / 5 A Secondary current*							
Type	Primary current in A	Power in VA	Primary conductor (bus bars)	Round conductor in mm	Width in mm	Weight (kg)	Item no.
IPA40.5	60	2	40 x 10; 30 x 15; 25 x 20	30	70	0.6	09.05.349
IPA40.5	75	2	40 x 10; 30 x 15; 25 x 20	30	70	0.6	09.05.350
IPA40.5	100	2.5	40 x 10; 30 x 15; 25 x 20	30	70	0.5	09.05.351
IPA40.5	150	5	40 x 10; 30 x 15; 25 x 20	30	70	0.6	09.05.236
6A315.3	200	3.75	30 x 15; 20 x 20	28	60	0.3	09.00.360
6A315.3	250	5	30 x 15; 20 x 20	28	60	0.3	09.00.361
6A315.3	300	5	30 x 15; 20 x 20	28	60	0.3	09.00.362
6A315.3	400	5	30 x 15; 20 x 20	28	60	0.3	09.00.363
6A315.3	500	5	30 x 15; 20 x 20	28	60	0.3	09.00.364
6A315.3	600	5	30 x 15; 20 x 20	28	60	0.3	09.00.365
7A412.3	800	5	40 x 12; 2 x 30 x 10	33	70	0.4	09.00.887
7A412.3	1,000	5	40 x 12; 2 x 30 x 10	33	70	0.4	09.00.888
8A512.3	1,250	5	50 x 12; 2 x 40 x 10	42	85	0.4	09.01.339
9A615.3	1,500	5	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.820
9A615.3	1,600	5	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.821
9A615.3	2,000	5	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.822
9A615.3	2,500	5	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.823

Accessories			
Mounting clip	for DIN rail EN 50022-35, suitable for 9A615.3, IPA40 style, 1 pair	0.01	09.09.000
Mounting clip	for DIN rail EN 50022-35, suitable for 6A315.3, 7A412.3, 8A512.3 and 9A615.3 style, 1 pair	0.01	09.09.001
Mounting clip	for DIN rail EN 50022-35, suitable for IPA40.5 style, 1 pair	0.01	09.09.002

* Secondary current transformer ... / 1 A as well as other types on request.

Moulded case current transformers class 1 ... / 5 A

General properties, type ASK

- Unbreakable plastic housing
- Polycarbonate black
- Flame retardant
- Self-extinguishing
- Transformer housing ultrasonically welded
- Nickel-plated secondary terminals with plus/minus M 5 x 8 mm screw, tightening torque max. 2 Nm
- Integrated secondary closure flap
- Connection cross section: max 4 mm² with wire end ferrule, 6 mm² solid

General properties, type CTB

- UL certified
- World's first current transformer with screwless connection technology – spring-loaded terminal block
- Innovative, time-saving connection option (front or top) for solid and flexible conductors (max. 4 mm² – wire end ferrules are not necessary)
- Shock and vibration resistant, high mechanical holding forces
- Maintenance-free, gas-tight connection
- High current resistance
- Therm. rated continuous current I_{cth}: 1.2 x I_N
- Low-voltage current transformer for max. operating voltages up to 1.2 kV; use in 690 V networks possible



Technical data

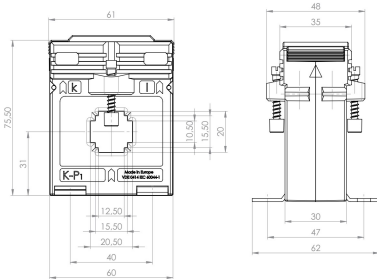
Device overview, moulded case current transformers class 1 ... / 5 A secondary current*							
Type	Primary current in A	Power in VA	Primary conductor	Round conductor in mm	Overall width in mm	Weight (kg)	Item no.
ASK 21.3	75	2.5	20 x 10	19.2	61	0.31	15.03.206
ASK 21.3	80	2.5	20 x 10	19.2	61	0.32	15.03.207
ASK 21.3	100	3.75	20 x 10	19.2	61	0.26	15.03.208
ASK 31.5	75	1.5	30 x 10; 20 x 10	28	61	0.45	15.03.270
CTB 31.35	100	2.5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.272
CTB 31.35	150	2.5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.273
CTB 31.35	200	2.5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.274
CTB 31.35	250	5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.275
CTB 31.35	300	5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.276
CTB 31.35	400	5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.277
CTB 31.35	500	5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.23	15.03.278
ASK 31.3	600	5	30 x 10; 20 x 20	26	61	0.25	15.03.279
CTB 41.35	800	5	40 x 10; 30 x 15	31.8	70	0.30	15.03.280
CTB 41.35	1000	5	40 x 10; 30 x 15	31.8	70	0.30	15.03.281
CTB 51.35	1250	5	50 x 12; 40 x 30	43.7	85	0.35	15.03.282
CTB 61.35	1500	5	63 x 10; 50 x 30	43.7	95	0.35	15.03.283
CTB 81.35	1500	10	80 x 10; 60 x 30	54.7	120	0.35	15.03.284
CTB 81.35	1600	10	80 x 10; 60 x 30	54.7	120	0.35	15.03.285
CTB 81.35	2000	10	80 x 10; 60 x 30	54.7	120	0.38	15.03.286
CTB 101.35	2500	10	100 x 10; 80 x 30	70	130	0.40	15.03.287
Accessories							
Mounting clip for CTB design							15.02.140
Mounting clip for ASK 31.5 design							15.02.141
Mounting clip for ASK 31.3 design							15.02.151



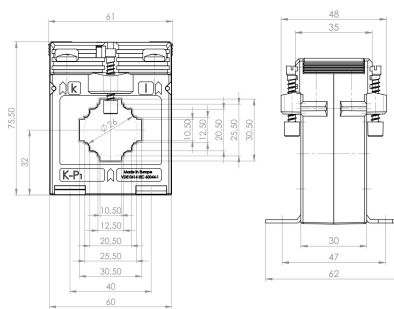
Dimensional drawings

All specifications in mm

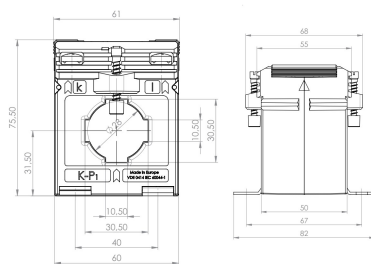
ASK 21.3



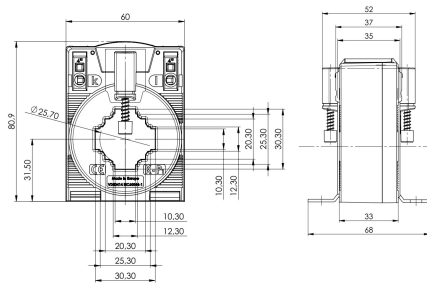
ASK 31.3



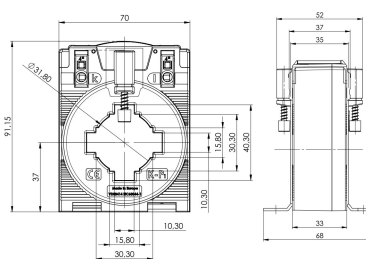
ASK 31.5



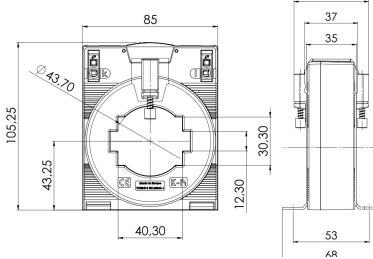
CTB 31.35



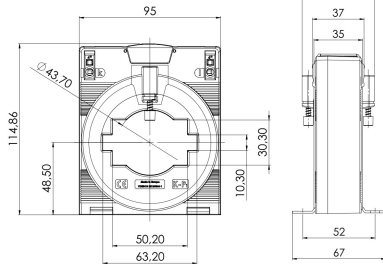
CTB 41.35



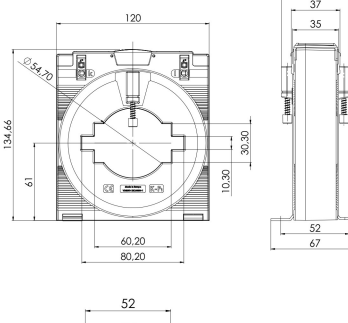
CTB 51.35



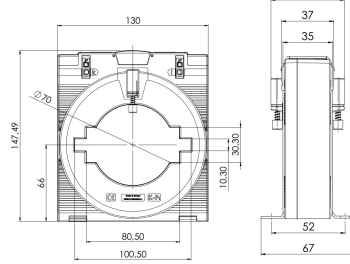
CTB 61.35



CTB 81.35



CTB 101.35



Basic information on the use of current transformers can be found in chapter 10.

Moulded case current transformers for billing purposes class 0.5 ... / 5 A

Increased safety

- Both halves of the housing overlap rather than butting up against one another
- Burst-resistant plastic housing made from polyamide
- Non-combustible per UL 94 VO and self-extinguishing

Protective caps for primary rail fastening screws

- Screw-in pins for the primary rail terminals can be insulated by means of protective caps, available as an option
- Safeguard to prevent accidental contact

Secondary connection feed

- Feeding of the secondary connection to the connection terminals through the rectangular opening in the front and rear sides
- During installation, e.g. behind the safety strip, the secondary connection is implemented by means of cable lugs through the side slots

Expanded secondary terminal covering

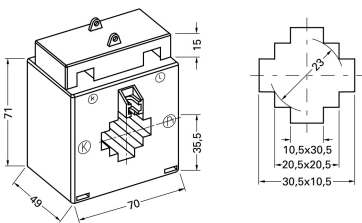
- In addition to the normal terminal covering, extra protective hoods are available
- Locking of the front and rear feed to the secondary terminals



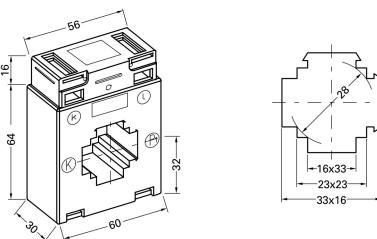
Dimension diagrams

All dimensions in mm

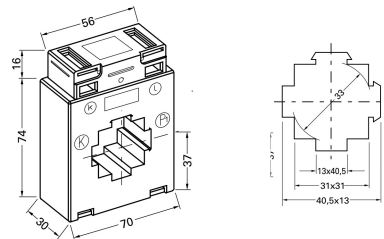
EIPA30.5



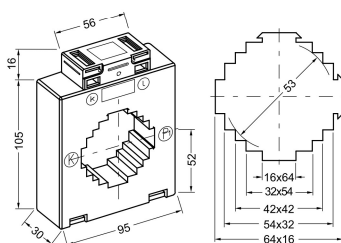
E6A315.3



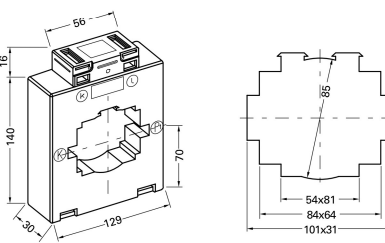
E7A412.3



E9A615.3



E13A1030.3



General mechanical properties

- Nominal frequency 50 – 60 Hz
- Insulation class E (other classes on request)
- Thermal rated short-term current $I_{th} = 60 \times I_N / 1s$
- Rated surge current $I_{dyn} = 2.5 \times I_{th}$, however min. 100 kA with all plug-in current transformers
- Highest voltage for operating equipment $U_m = 0.72$ kV
- Rated insulation level (test voltage) 4 kV / 1 min (per EN 61869-2)
- Over-current limit factor FS5 or FS10
- Harmonics current up to 50th harmonic



Technical Data

Device overview, calibratable plug-in current transformer, class 0.5 ... / 5 A Secondary current*							
Type	Primary current in A	Power in VA	Primary conductor (bus bars)	Round conductor in mm	Width in mm	Weight (kg)	Item no.
EIPA30.5	50	2.5	30.5 x 10.5; 20.5 x 20.5; 10.5 x 30.5	23	70	0.4	09.14.813
EIPA30.5	75	2.5	30.5 x 10.5; 20.5 x 20.5; 10.5 x 30.5	23	70	0.4	09.14.812
EIPA30.5	100	2.5	30.5 x 10.5; 20.5 x 20.5; 10.5 x 30.5	23	70	0.3	09.14.811
E6A315.3	150	2.5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.10.339
E6A315.3	200	2.5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.10.340
E6A315.3	250	5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.10.367
E6A315.3	300	5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.10.366
E6A315.3	400	5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	15.02.907
E6A315.3	500	5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.10.364
E6A315.3	600	5	33 x 16; 23 x 23, 16 x 33	28	60	0.3	09.11.365
E7A412.3	750	5	40.5 x 13; 31 x 31, 13 x 40.5	33	70	0.3	09.10.391
E7A412.3	1.000	5	40.5 x 13; 31 x 31, 13 x 40.5	33	70	0.4	09.10.888
E9A615.3	1.500	5	64 x 16; 54 x 32; 42 x 42; 32 x 54; 16 x 64	53	95	0.4	09.10.387
E13A1030.3	2.000	5	101 x 31; 84 x 64; 54 x 81	85	129	0.5	09.12.888
E13A1030.3	2.500	5	101 x 31; 84 x 64; 54 x 81	85	129	0.5	09.12.889

Description	Item no.
Conformity declaration with corrigendum	09.50.011

*These transformers are not on stock and will be ordered to customer order, products are excluded from return.
Transformers with other primary or secondary currents on request.

Basic Information for the use of current transformer can be found in chapter 10.

Moulded case current transformers for billing purposes

Class 0,2S ... / 5 A

Billing current transformer

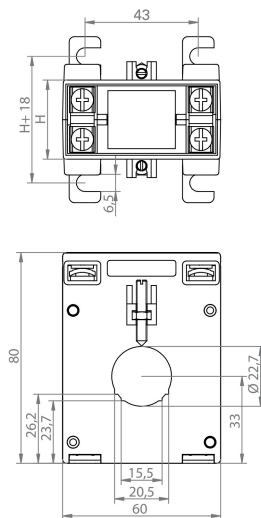
The current transformer for billing with a constantly sufficient load. In short, with which the valid regulations for kWh measurement devices are fulfilled. Each current transformer is individually measured and the test reports can be called up online. Flexibility, the compact design and safety are unique selling features of the line. All transformers are equipped with an integrated lockable terminal cover, produced from polycarbonate. The current transformers are supplied with a fastening tool, for mounting on rails, cables or assembly plates. The transformers can be optionally ordered with clips, which enable mounting on a DIN rail.



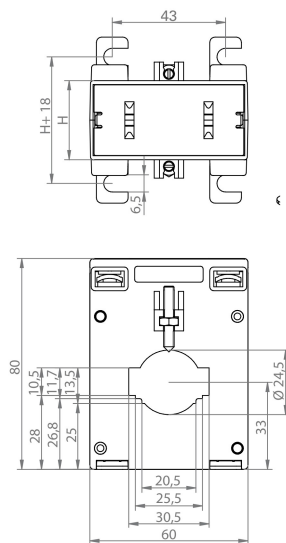
Dimension diagrams

All dimensions in mm

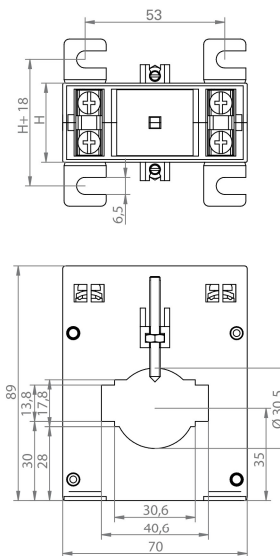
ERM60-E2A



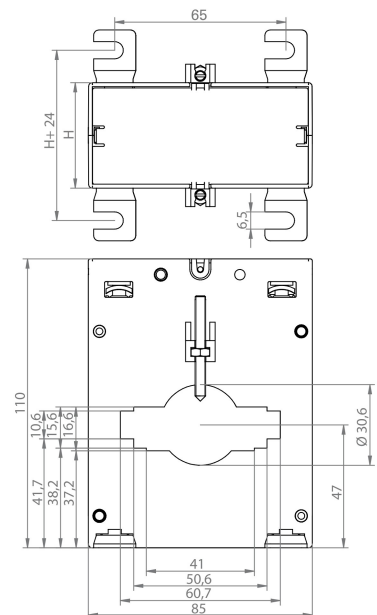
ERM60-E3A



ERM70-E4A



ERM85-E6A



Dimensions

Type	H = Height in mm
ERM60..A, ERM70..A	30
ERM85..A	40
ERM70..B	50

General properties

- Nominal frequency 50 – 60 Hz
- Insulation class E
- Thermal rated short-term current $I_{th} = 60 \times I_N / 1s$
- Thermal continuous current $1.2 \times I_N$
- Rated surge current $I_{dyn} = 2.5 \times I_{th}$, however min. 100 kA with all plug-in current transformers
- Highest voltage for operating equipment $U_m = 0.72$ kV
- Rated insulation level (test voltage) 3 kV / 1 min (per IEC 61869-2)
- Over-current limit factor FS5 with max. power or FS10 with min. power
- Harmonics current up to 50th harmonic
- Test report available
- Temperature range -25 to 55°C
- Other current transformer requirements on request



Technical data

Device overview calibratable moulded case current transformer, class 0,2S / 5 A secondary current

Type	Primary current in A	Class	Power in VA	Transformation ratio	Primary conductor	Round conductor in mm	Width in mm	Weight (kg)	Item no.
ERM60-E3A	150	0.2S	1 VA	150/5 A	30 x 10	24,5	60	0,4	09.06.212
ERM60-E3A	200	0.2S	2 VA	200/5 A	30 x 10	24,5	60	0,4	09.06.213
ERM60-E3A	250	0.2S	2,5 VA	250/5 A	30 x 10	24,5	60	0,4	09.06.214
ERM70-E4A	300	0.2S	2,5 VA	300/5 A	40 x 10	30,5	70	0,4	09.06.215
ERM70-E4A	400	0.2S	5 VA	400/5 A	40 x 10	30,5	70	0,4	09.06.216
ERM70-E4A	500	0.2S	5 VA	500/5 A	40 x 10	30,5	70	0,4	09.06.217
ERM70-E4B	600	0.2S	5 VA	600/5 A	40 x 10	30,5	70	0,5	09.06.218
ERM70-E4B	750	0.2S	5 VA	750/5 A	40 x 10	30,5	70	0,5	09.06.219
ERM85-E6A	1000	0.2S	5 VA	1000/5 A	60 x 10	30,6	85	0,6	09.06.220

Accessories

Mounting clips ERM60/ERM70	09.09.012
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These transformers are not on stock and will be ordered to customer order, products are excluded from return.

Basic Information for the use of current transformer can be found in chapter 10.

Low-power current transformers, class 0.5... / 0.1 A

General properties, type ASK

- Unbreakable plastic housing
- Polycarbonate black
- Flame retardant
- Self-extinguishing
- Transformer housing ultrasonically welded
- Nickel-plated secondary terminals with plus/minus M 5 x 8 mm screw, tightening torque max. 2 Nm
- Integrated secondary closure flap
- Connection cross section: max 4 mm² with wire end ferrule, 6 mm² solid



General properties, type CTB

- UL certified
- World's first current transformer with screwless connection technology - spring-loaded terminal block
- Innovative, time-saving connection option (front or top) for solid and flexible conductors (max. 4 mm² - wire end ferrules are not necessary)
- Shock and vibration resistant, high mechanical holding forces
- Maintenance-free, gas-tight connection
- High current resistance
- Therm. rated continuous current I_{cth}: 1.2 x I_N
- Low-voltage current transformer for max. operating voltages up to 1.2 kV; use in 690 V networks possible



Technical data

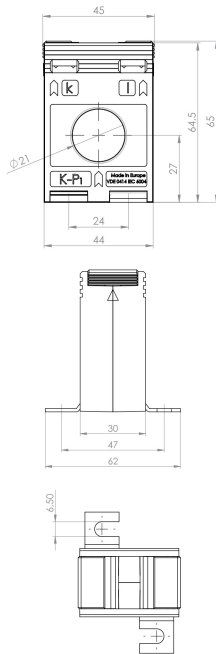
Device overview, low-power current transformers / class 0.5, 0.1 A secondary current								
Type	Primary current in A	Class	Power in VA	Primary conductor	Round conductor in mm	Overall width in mm	Weight (kg)	Item no.
ASR 20.3	150	0.5	1.5	-	21	45	0.30	15.03.200
ASK 41.4	250	0.5	1.5	40 x 10; 2 x 30 x 5	32	71	0.36	15.03.210
ASK 41.4	400	0.5	1.5	40 x 10; 2 x 30 x 5	32	71	0.40	15.03.215
CTB 31.35	150	0.5	1.5	30 x 10; 25 x 12; 20 x 20	25.7	60	0.40	15.03.220
CTB 41.35	250	0.5	1.5	40 x 10; 30 x 15	31.8	70	0.40	15.03.225
CTB 41.35	400	0.5	1.5	40 x 10; 30 x 15	31.8	70	0.40	15.03.230
Accessories								
Mounting clip for ASR 20.3								15.02.143
Mounting clip for ASK 41.4								15.02.142
Mounting clip for CTB								15.02.140
Individual accessory (load is included the scope of the transformer delivery)								
Load (0.8 Ω) for operating current transformers with 1.5 m connection cable and spring-loaded terminal block								15.03.085



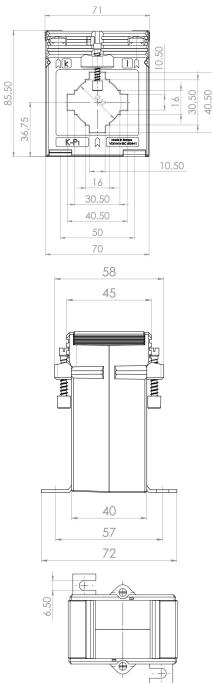
Dimensional drawings

All specifications in mm

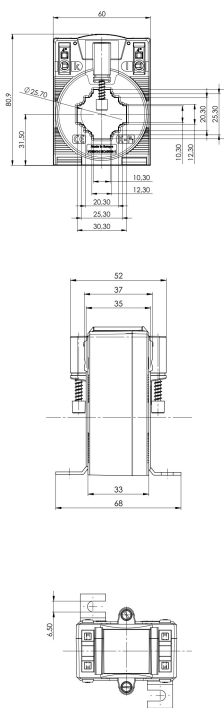
ASR 20.3



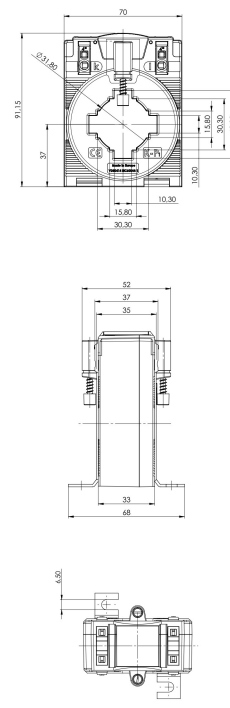
ASK 41.4



CTB 31.35



CTB 41.35



Basic information on the use of current transformers can be found in chapter 10.

Summation current transformer, class 1 and 0.5 for feedthrough and split core

Potential-free measurement

- Summation of the secondary currents from multiple main CTs
- Thus measuring of multiple feeders by just one meter
- Standardised measurement signal available at the output
- Alongside the addition of the input currents, the total is also divided by the number of inputs
- Distinction for similar and dissimilar main transformers



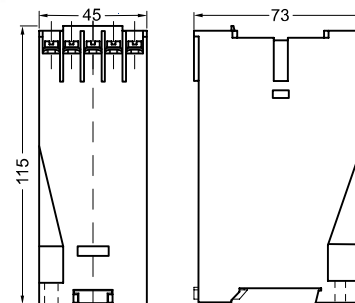
General mechanical properties

- Break-proof plastic housing made from ABS, IP40
- Non-combustible per UL 94 VO, self-extinguishing
- Nickel-plated terminals with Plus-Minus screws
- Integrated electric shock protection, IP10
- Nominal frequency 50 – 60 Hz
- Insulation class E (other classes on request)
- Thermal rated short-term current $I_{th} = 60 \times I_N / 1s$
- Rated surge current $I_{dyn} = 2.5 \times I_N$
- Maximum operating voltage $U_m = 0.72 \text{ kV}^{*1}$
- Rated insulation level (test voltage) 3 kV / 1 min^{*1}
- Over-current limit factor FS5 or FS10
- Maximum conductor cross-section: 2,5 Ø solid, 1,5 Ø flexible



Dimension diagrams

All dimensions in mm



Technical data

Summation current transformer, class 1							
Type	Primary current in A	Secondary current in A	Power in VA	Transformation ratio	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
IPS20	5+5	5	15	1:1	45 x 115 x 73	0,4	15.02.510
IPS30	5+5+5	5	15	1:1:1	45 x 115 x 73	0,4	15.02.515
IPS40	5+5+5+5	5	15	1:1:1:1	45 x 115 x 73	0,5	15.02.520
IPS20	1+1	1	15	1:1	45 x 115 x 73	0,5	09.05.306
IPS30	1+1+1	1	15	1:1:1	45 x 115 x 73	0,5	09.05.316
IPS40	1+1+1+1	1	15	1:1:1:1	45 x 115 x 73	0,5	09.05.326
IPS21	5+5	5	15	as required	45 x 115 x 73	0,4	15.02.526
IPS31	5+5+5	5	15	as required	45 x 115 x 73	0,4	15.02.521
IPS41	5+5+5+5	5	10	as required	45 x 115 x 73	0,5	15.02.525

Summation current transformer, class 0.5							
Type	Primary current in A	Secondary current in A	Power in VA	Transformation ratio	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
IPS20	5+5	5	15	1:1	45 x 115 x 73	0,5	15.02.511
IPS30	5+5+5	5	15	1:1:1	45 x 115 x 73	0,5	15.02.516
IPS40	5+5+5+5	5	15	1:1:1:1	45 x 115 x 73	0,5	15.02.519

Not useable in combination with cable split core.
*1 Other currents on request.

Summation current transformer, class 1 for cable type split core current transformers

No-compromise, individual measurement

- High measurement accuracy
- User friendly spring-clamp technology
- Designed for use with the series KUW split core CTs



Technical data

Summation current transformer, class 1							
Type	Primary current in A	Secondary current in A	Power in VA	Transformer ratio	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
STS20	1+1	1	0,2	1:1	30 x 80 x 60	0,2	15.02.560
STS30	1+1+1	1	0,2	1:1:1	30 x 80 x 60	0,2	15.02.561
STS40	1+1+1+1	1	0,2	1:1:1:1	55 x 80 x 60	0,4	15.02.562
STS50	1+1+1+1+1	1	0,2	1:1:1:1:1	55 x 80 x 60	0,4	15.02.563
STS60	1+1+1+1+1+1	1	0,2	1:1:1:1:1:1	55 x 80 x 60	0,4	15.02.564
STS21	1+1	1	0,2	Customer-specific	30 x 80 x 60	0,2	15.02.570
STS31	1+1+1	1	0,2	Customer-specific	30 x 80 x 60	0,2	15.02.571
STS41	1+1+1+1	1	0,2	Customer-specific	55 x 80 x 60	0,4	15.02.572
STS51	1+1+1+1+1	1	0,2	Customer-specific	55 x 80 x 60	0,4	15.02.573
STS61	1+1+1+1+1+1	1	0,2	Customer-specific	55 x 80 x 60	0,4	15.02.574

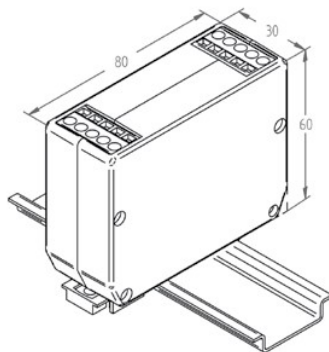
With dissimilar main CTs, the ratio of the largest to the smallest primary current should not be larger than 10/1.



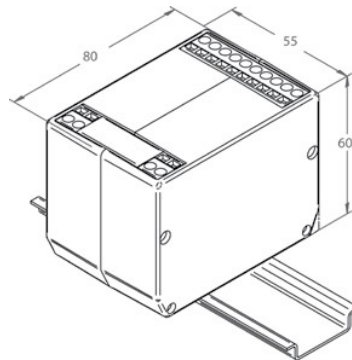
Dimension diagrams

All dimensions in mm

STS20 / STS30 / STS21 / STS31



STS40 / STS50 / STS60 / STS41 / STS51 / STS61



Basic Information for the use of current transformer can be found in chapter 10.

Cable split core current transformers

Innovative and reliable

- Particularly well suited to digital measurement devices
- Especially fast installation
- For applications with insulated cable up to 2 x 42 mm max.
- Transformation ratio of 60 ... 1000 / 1 A or 150 ... 1,000 / 5 A
- Including color-coded secondary cables
- Additional fastening of the transformer with the two UV-resistant cable ties provided
- Especially suited for retrofitting, primary circuit must not be disconnected
- Ideal for use in very compact installation spaces



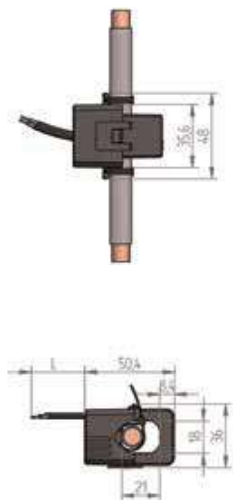
Fig.: Type KUW4.2/60



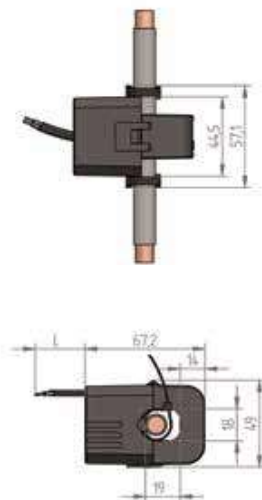
Dimension diagrams

All dimensions in mm

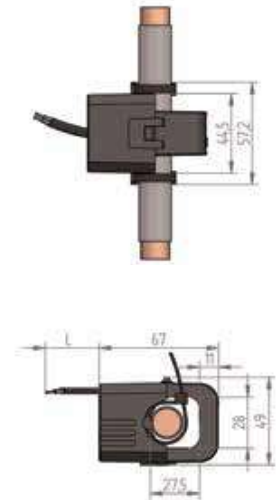
KUW1/30



KUW1/40



KUW2/40

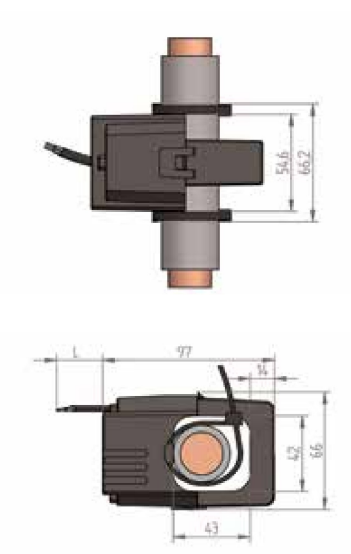




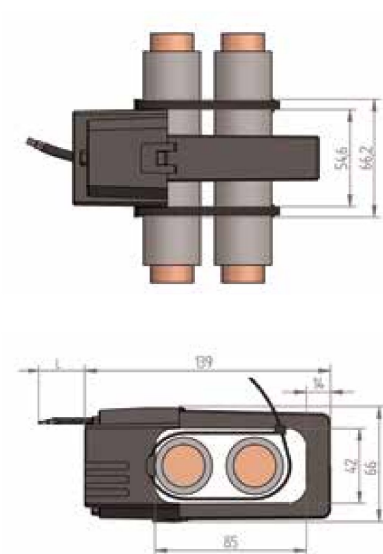
Technical data

Environmental conditions	
Position of installation	For indoor usage, only for insulated cables
Ambient temperature	-10 ... +55 °C
Relative humidity	5 ... 85 % (no condensation)
Protection class	IP20
Application conditions	
Standard	IEC 61869-2
Thermal short time rated current	$60 \times I_n / 1 \text{ s}$
Thermal continuous current	100 %
Rated isolation level	0.72 / 3 / kV
Rated frequency	50 / 60 Hz
Insulation class	E (120 °C)
Cable feed through window	For conductors max. $\varnothing 18 / 28 / 42$ or $2 \times 42 \text{ mm}$
Secondary conductor	... / 1 A: 0.5 mm ² ... / 5 A: 1.5 mm ²

KUW4/60



KUW4.2/60



Basic Information for the use of current transformer can be found in chapter 10.

Chapter 06

Cable split core current transformers

Series KUW1 for insulated cable up to max. 18 mm diameter

Type	Primary current in A	Secondary current in A	Power in VA (at the end of the wire)	Class	Cable length in m	Diameter Primary conductor in mm	Weight (kg)	Item no.
KUW1/30-60	60	1	0.2	3	3	18	0.3	15.03.510
KUW1/30-75	75	1	0.2	3	3	18	0.3	15.03.511
KUW1/30-100	100	1	0.2	3	3	18	0.3	15.03.512
KUW1/30-125	125	1	0.2	3	3	18	0.3	15.03.513
KUW1/30-150	150	1	0.2	3	3	18	0.3	15.03.514
KUW1/30-200	200	1	0.2	1	3	18	0.3	15.03.515
KUW1/30-250	250	1	0.2	1	3	18	0.3	15.03.317
KUW1/40-100	100	1	0.2	1	3	18	0.4	15.03.320
KUW1/40-125	125	1	0.2	1	3	18	0.4	15.03.321
KUW1/40-150	150	1	0.2	1	3	18	0.4	15.03.322
KUW1/40-200	200	1	0.2	0.5	3	18	0.4	15.03.325
KUW1/40-250	250	1	0.2	0.5	3	18	0.4	15.03.326
KUW1/40-150	150	5	1	1	0.5	18	0.4	15.03.329
KUW1/40-200	200	5	1	1	0.5	18	0.4	15.03.330
KUW1/40-250	250	5	1	0.5	0.5	18	0.4	15.03.331

Series KUW2 for insulated cable max. 28 mm diameter

Type	Primary current in A	Secondary current in A	Power in VA (at the end of the wire)	Class	Cable length in m	Diameter Primary conductor in mm	Weight (kg)	Item no.
KUW2/40-200	200	1	0.2	1	3	28	0.3	15.03.351
KUW2/40-250	250	1	0.2	1	3	28	0.3	15.03.352
KUW2/40-300	300	1	0.2	1	3	28	0.3	15.03.354
KUW2/40-400	400	1	0.2	1	3	28	0.4	15.03.356
KUW2/40-500	500	1	0.2	0.5	3	28	0.4	15.03.358
KUW2/40-250	250	5	1	1	0.5	28	0.3	15.03.353
KUW2/40-300	300	5	1	1	0.5	28	0.3	15.03.355
KUW2/40-400	400	5	1	1	0.5	28	0.3	15.03.357
KUW2/40-500	500	5	1	1	0.5	28	0.3	15.03.359

Series KUW4/60 for insulated cable up to max. 42 mm diameter

Type	Primary current in A	Secondary current in A	Power in VA (at the end of the wire)	Class	Cable length in m	Diameter Primary conductor in mm	Weight (kg)	Item no.
KUW4/60-250	250	1	0.5	1	5	42	0.6	15.03.565
KUW4/60-300	300	1	0.5	1	5	42	0.6	15.03.566
KUW4/60-400	400	1	0.5	0.5	5	42	0.6	15.03.568
KUW4/60-500	500	1	0.5	0.5	5	42	0.6	15.03.570
KUW4/60-600	600	1	0.5	0.5	5	42	0.6	15.03.572
KUW4/60-750	750	1	0.5	0.5	5	42	0.6	15.03.574
KUW4/60-800	800	1	0.5	0.5	5	42	0.6	15.03.576
KUW4/60-1000	1,000	1	0.5	0.5	5	42	0.6	15.03.578
KUW4/60-300	300	5	0.5	1	3	42	0.6	15.03.367
KUW4/60-400	400	5	0.5	1	3	42	0.5	15.03.369
KUW4/60-500	500	5	0.5	1	3	42	0.6	15.03.371
KUW4/60-600	600	5	0.5	0.5	3	42	0.5	15.03.373
KUW4/60-750	750	5	0.5	0.5	3	42	0.6	15.03.375
KUW4/60-800	800	5	0.5	0.5	3	42	0.6	15.03.377
KUW4/60-1000	1,000	5	0.5	0.5	3	42	0.6	15.03.379

Series KUW4.2/60 for insulated cable up to max. 2 x 42 mm diameter

Type	Primary current in A	Secondary current in A	Power in VA (at the end of the wire)	Class	Cable length in m	Diameter Primary conductor in mm	Weight (kg)	Item no.
KUW4.2/60-250	250	1	0.5	1	5	42 x 84	0.7	15.03.580
KUW4.2/60-300	300	1	0.5	1	5	42 x 84	0.8	15.03.581
KUW4.2/60-400	400	1	0.5	0.5	5	42 x 84	0.7	15.03.583
KUW4.2/60-500	500	1	0.5	0.5	5	42 x 84	0.8	15.03.585
KUW4.2/60-600	600	1	0.5	0.5	5	42 x 84	0.7	15.03.587
KUW4.2/60-750	750	1	0.5	0.5	5	42 x 84	0.8	15.03.589
KUW4.2/60-800	800	1	0.5	0.5	5	42 x 84	0.8	15.03.591
KUW4.2/60-1000	1,000	1	0.5	0.5	5	42 x 84	0.8	15.03.593
KUW4.2/60-300	300	5	0.5	1	3	42 x 84	0.7	15.03.382
KUW4.2/60-400	400	5	0.5	1	3	42 x 84	0.8	15.03.384
KUW4.2/60-500	500	5	0.5	1	3	42 x 84	0.6	15.03.386
KUW4.2/60-600	600	5	0.5	0.5	3	42 x 84	0.7	15.03.388
KUW4.2/60-750	750	5	0.5	0.5	3	42 x 84	0.8	15.03.390
KUW4.2/60-800	800	5	0.5	0.5	3	42 x 84	0.8	15.03.392
KUW4.2/60-1000	1,000	5	0.5	0.5	3	42 x 84	0.8	15.03.394

Cable split core current transformer, type KBU, class 0,5 and 1

Features / benefits

- Ideal for retrospective installation in existing systems
- Simple and secure attachment - current transformer audibly latches
- Available with secondary current 5 A / 1 A
- Also available in accuracy class 0.5
- Four different configurations
- Working temperature range: $-5^{\circ}\text{C} < T < +50^{\circ}\text{C}$
- Storage temperature range $-25^{\circ}\text{C} < T < +70^{\circ}\text{C}$
- Therm. nominal continuous current I_{cth} : $1,0 \times I_N$
- Therm. nominal short-time current I_{th} : $60 \times I_N$, 1 sec.
- Max. supply voltage U_m : 0,72 kV
- Insulation test voltage: 3 kV, U_{eff} 50 Hz, 1 min.
- Nominal frequency: 50 Hz
- Insulation class: E
- Applied technical standards: DIN EN 61869, part 1 + 2



Technical data

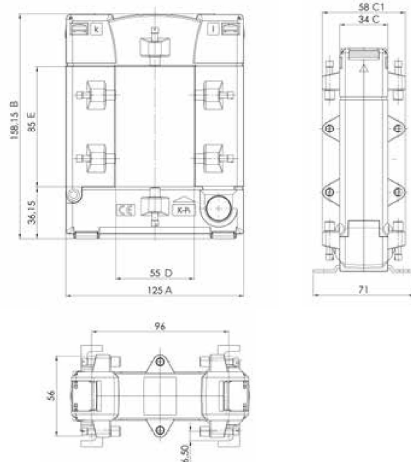
Cable split core current transformer, type KBU											
Type	Primary current in A	Secondary current in A	Power in VA	Class	Dimensions in mm					Weight (kg)	Item no.
					A	B	C / C1	D	E		
KBU 58	250	5	1.5	1	125	158	34 / 58	55	85	0.9	15.02.316
KBU 58	400	5	1	0.5	125	158	34 / 58	55	85	0.9	15.02.868
KBU 58	500	5	2.5	0.5	125	158	34 / 58	55	85	0.9	15.02.819
KBU 58	600	5	2.5	0.5	125	158	34 / 58	55	85	1.0	15.02.315
KBU 58	1000	5	5	0.5	125	158	34 / 58	55	85	1.0	15.02.320
KBU 812	600	5	2.5	0.5	155	198	34 / 58	85	125	1.3	15.02.869
KBU 812	800	5	2.5	0.5	155	198	34 / 58	85	125	1.3	15.02.870
KBU 812	1000	5	5	0.5	155	198	34 / 58	85	125	1.3	15.02.871
KBU 812	1250	5	7,5	0.5	155	198	34 / 58	85	125	1.3	15.02.328



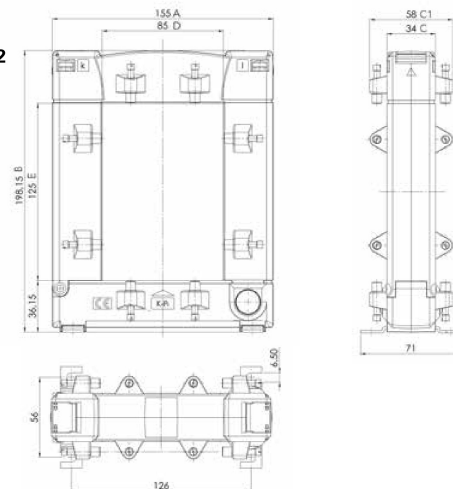
Dimension diagrams

All dimensions in mm

KBU 58



KBU 812



Three-phase current transformers type ASRD 14, class 0,5 and 1

Three-phase current transformer with 5 A secondary current

- Primary current 100 A
- Secondary current 5 A
- Conductor feed-through $\varnothing$ 13.5 mm per phase
- For connection to current measuring systems with 5 A input



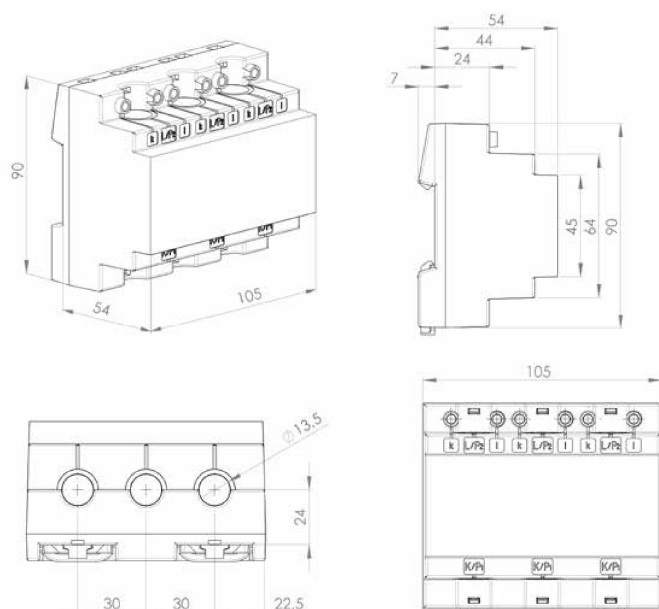
Technical data

Three-phase current transformer type ASRD 14								
Type	Primary current in A	Secondary current in A	Power in VA	Class	Round conductor in mm	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
ASRD 14	50	5	1	1	13.5	90 x 105 x 54	0.5	15.03.403
ASRD 14	75	5	1.5	1	13.5	90 x 105 x 54	0.5	15.03.404
ASRD 14	100	5	2.5	1	13.5	90 x 105 x 54	0.5	15.03.405
ASRD 14	125	5	2.5	0.5	13.5	90 x 105 x 54	0.5	15.03.406
ASRD 14	150	5	2.5	0.5	13.5	90 x 105 x 54	0.5	15.03.407



Dimension diagrams

All dimensions in mm



DIN rail current transformers with voltage tap and fuse, class 0,5 and 1

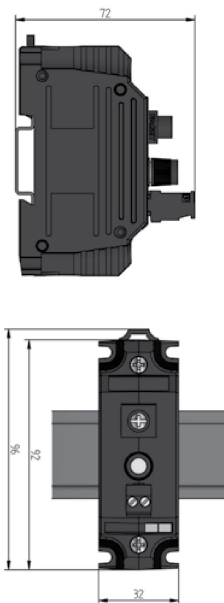
Save time and space

- For precise current and voltage measurement
- Integrated current transformer and fuse protected voltage tap
- Prevention of connection errors
- Specially developed for energy measurement up to 64 A
- Transformation ratios 35/1 and 64/1 A
- With test mark from KEMA-KEUR



Dimension diagrams

All dimensions in mm



Technical data

Technical data	
General	
Maximum voltage	690 V, Uimp 6 kV
Insulation voltage	1890 V / 50 Hz 1 min
Rated current	35 / 64 A
Max. current (16 mm ²)	42 / 76 A
Protection class	E (max. 120 °)
Protection class	IP20
Ambient temperature	-5 ... +40 °C
Housing	PA, 30 % glass proportion
Screw connection	cross head DIN 7962-H2
Terminal	
Standard	IEC 60947-7-1
Connection cross-section	1.5 mm ² – 16 mm ²
Voltage tap-off	
Short-circuit withstand capability	70 kA to 400 V / 50 Hz
Connection cross-section max.	4 mm ²
Fuse type	5 x 25 mm (with notification) Max. 2 A SIBA DIN 41576-2
Current transformers	
Standard	IEC 61869-2
Maximum short term current	60 x In
Insulation voltage	3 kV / 50 Hz 1 min

DIN rail current transformer overview						
Type	Transformation ratio	Power in VA	Class	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
CT 35/1A	35/1 A	0.2	1	32 x 72 x 96	0.2	15.03.002
CT 64/1A	64/1 A	0.2	0.5	32 x 72 x 96	0.2	15.03.003

Basic Information for the use of current transformer can be found in chapter 10.

Compact current transformers CT27, class 1

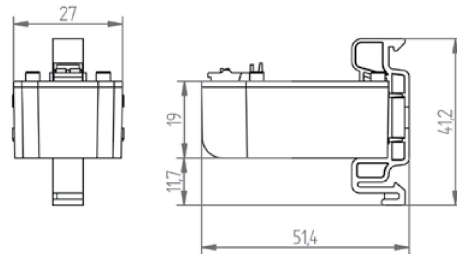
Compact innovation

- Compact current transformer
- Particularly well suited to digital measurement devices
- Current transformer per IEC 61869-2
- Transformation ratios 35/1, 64/1 A, class 1
- Primary conductor feed-through window for insulated cable up to Ø 7.5 mm
- For use on a 3-phase circuit breaker with phase spacing of 17.5 mm
- DIN rail mounting (35 mm) via rail clamps (optional)
- Plug-in type CTs (Lego concept)



Dimension diagrams

All dimensions in mm



Technical data

Technical data	
Environmental conditions	
Position of installation	Indoor usage; only for insulated conductors
Ambient temperature	-10 ... +55 °C
Relative humidity	5 ... 85 % (no condensation)
Protection class	IP20
Application conditions	
Standard	IEC 61869-2
Thermal short time rated current	60 x I _n / 1 s
Thermal continuous current	100 %
Rated isolation level	0.72 / 3 / kV
Rated frequency	50 / 60 Hz
Insulation class	E (120 °C)
Cable feed through window	Ø 7.5 mm
Secondary conductor (spring clamps)	Wire cross section: 0.2 ... 1.5 mm ² ; rigid, flexible

Current transformer CT27 – Class 1							Item no.
Type	Primary current in A	Secondary current in A	Power in VA (at the terminal)	Max. diameter, primary conductor in mm	Dimensions in mm (W x H x D)	Weight (kg)	
CT27-35	35	1	0.2	7.5	27 x 46 x 23	0.05	15.03.080
CT27-64	64	1	0.2	7.5	27 x 46 x 23	0.04	15.03.081
Accessories							
Mounting clip	For DIN rail EN 50022-35, suitable for CT27-35 and CT27-64				41 x 14 x 27	0.001	09.09.010

Split-core current transformer SC-CT-20, class 1

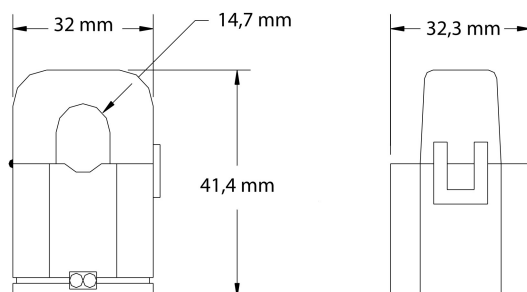
Innovative and flexible

- Compact, divisible, split-core current transformer
- Separable current transformer up to max. 63 A especially for retrofitting
- Transformation ratio 3,000/1
- Primary window can be used for insulated cable up to Ø 10 mm
- Special version for the UMG 20CM branch circuit monitoring device



Dimension diagrams

All dimensions in mm



Technical data

Environmental conditions	
Position of installation	Indoor usage; only for insulated conductors
Ambient temperature	-10 ... +55 °C
Protection class	IP20
Application conditions	
Measuring accuracy	1 %
Thermal continuous current	100 %
Insulation resistance	100 MOhm
Rated frequency	50 / 60 Hz
Max. frequency	20 – 1000 Hz
Secondary conductor	Wire cross section: 0.75 mm ² Rigid, flexible

Split-core current transformer SC-CT-20								
Type	Max. operating current (A)	Transformation ratio	Max. primary conductor diameter in mm	Class	Class	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
SC-CT-20*	63	3,000/1	10	1	1	32 x 41.4 x 32.3	0.04	15.03.092
Individual accessory (load is included the scope of the SC-CT-20 delivery)								
Burden (3.9 Ω) for operating current monitoring with the SC-CT-20 with 1.5 m ready-made connection cable and spring type terminal adapter								15.03.086

* Incl. ready-made connection cable; 1.5 m with burden and spring type terminal adapter for operating current measurement

Basic Information for the use of current transformer can be found in chapter 10.

Split-core operating current transformers up to 600 A

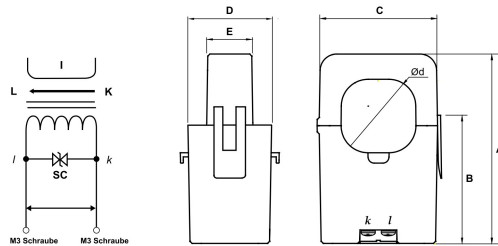
Fast installation – reliable measurement

- Snap-in technology make installation in existing equipment easier
- Secure latching in place
- High number of secondary windings
- Small size, low weight
- Suitable for UMG 20CM



Dimension diagrams

All dimensions in mm



Technical data

Technical data						
Type	SC-CT-20-100	SC-CT-20-200	SC-CT-20-300	SC-CT-20-400	SC-CT-20-500	SC-CT-20-600
Current ratio	120 A / 40 mA	200 A / 66,6 mA	300 A / 100 mA	400 A / 100 mA	500 A / 100 mA	600 A / 100 mA
Current range (50/60 Hz)	0,01 ... 100 A (RL = 10 Ohm)	0,01 ... 200 A (RL = 10 Ohm)	0,1 ... 300 A (RL = 10 Ohm)	0,01 ... 400 A (RL = 5 Ohm)	0,01 ... 500 A (RL = 5 Ohm)	0,01 ... 600 A (RL = 5 Ohm)
Position of installation	Indoor usage (any mounting position)					
Ambient temperature	-20 ... +50 °C			-20 ... +55 °C		
Storage temperature	-30 ... +90 °C, rel. humidity <85 % (no condensation)					

Split core operating current transformer up to 600 A												
Type	Operating mode	Max. operating current in A	Transformation ratio	Max. primary conductor diameter in mm	Class	Dimensions in mm					Weight (kg)	Item no.
						A	B	C	D	E		
SC-CT-20-100	Operating current measurement*1	100	3000/1	16	1	55	41	29,5	31	19	ca. 0,075	15.03.093
SC-CT-20-200	Operating current measurement*1	200	3000/1	24	1	74,5	52	45	34	22	ca. 0,2	15.03.094
SC-CT-20-300	Operating current measurement*1	300	3000/1	24	1	74,5	52	45	34	22	ca. 0,2	15.03.095
SC-CT-20-400	Operating current measurement*1	400	4000/1	36	0,5	91,4	57,0	57,1	40,2	21,1	ca. 0,3	15.03.097
SC-CT-20-500	Operating current measurement*1	500	5000/1	36	0,5	91,4	57,0	57,1	40,2	21,1	ca. 0,3	15.03.099
SC-CT-20-600	Operating current measurement*1	600	6000/1	36	0,5	91,4	57,0	57,1	40,2	21,1	ca. 0,3	15.03.101

Single accessory (burden is included the scope of the transformer delivery)												
Burden (2,2 Ω) for operating current transformer SC-CT-20-100 with 1,5 m ready-made connection cable and spring type terminal adapter												15.03.087
Burden (1,1 Ω) for operating current transformer SC-CT-20-200 with 1,5 m ready-made connection cable and spring type terminal adapter												15.03.088
Burden (0,8 Ω) for operating current transformer SC-CT-20-300/400/500/600 with 1,5 m ready-made connection cable and spring type terminal adapter												15.03.085

*1 Incl. ready-made connection cable; 1,5 m with burden and spring type terminal adapter for operating current measurement

Flexible current transformers

Rogowski coil – thinner, lighter flex converter for simple installation

The Rogowski coil is used for current measurement of AC currents and is primarily employed for retrospective installation in existing systems - optionally on power rails or power cables.



- Frequency bandwidth 50/60 Hz, up to 700 kHz without load (no-load operation)
- Accuracy per class 0.5, in accordance with IEC 61869
- Operating temperature -40°C bis $+80^{\circ}\text{C}$
- Rated insulation voltage 1 kV CAT III
- Rogowski coil from 10 to 10000 A_{RMS} – in combination with Janitza measurement transducer RogoTrans up to 4000 A_{RMS}
- Sealing possible
- CE certified (2014/30/EU), in accordance with the European Directive 2014/35/EU and tested in accordance with the standard IEC 61010-1
- Retrospective clip-on system without disconnecting the phase conductor
- Device for fixing to the primary conductor with a cable tie
- Internal screening
- High linearity, no saturation, no current upper limit of the Rogowski coil

Description	Item no.	Diameter	Length	Weight
Rogowski current transformer Ø 70 mm	15.03.609	70 mm	3 m	192 g
Rogowski current transformer Ø 175 mm	15.03.610	175 mm	3 m	206 g
Rogowski current transformer Ø 300 mm	15.03.611	300 mm	3 m	222 g

Note: in order to ensure smooth operation of the Rogowski coils, a combination of the coil and the Janitza measurement transducer "RogoTrans" (15.03.613) is always necessary! Additionally a 24 V DC power supply is needed.

Technical data			
Item no.	15.03.609	15.03.610	15.03.611
Max. output voltage	30 V	30 V	30 V
Primary current ^{*1}	up to 10000 A ^{*1}	up to 10000 A ^{*1}	up to 10000 A ^{*1}
Rated transformation ratio (@ 50 Hz)	44,44 kA/V	44,44 kA/V	44,44 kA/V
Rated frequency	50/60 Hz	50/60 Hz	50/60 Hz
Secondary voltage	22,5 mV (at 1000 A / 50 Hz)	22,5 mV (at 1000 A / 50 Hz)	22,5 mV (at 1000 A / 50 Hz)
Mutual inductance	71,98 nH	72,314 nH	72,84 nH
Temperature coefficient of M	±30 ppm/K	±30 ppm/K	±30 ppm/K
Frequency bandwidth (cable length 1,5 m) ^{*2}	420 kHz ^{*2}	350 kHz ^{*2}	300 kHz ^{*2}
Phase displacement	0,004 [°] *3	0,004 [°] *3	0,004 [°] *3
Coil inductance	180 µH	343 µH	566 µH
Coil resistance	56 Ω	105 Ω	170 Ω
Ratio error (cenred)	– 0,5 ... 0,5 % class 0,5 Accuracy per IEC 61869-2	– 0,5 ... 0,5 % class 0,5 Accuracy per IEC 61869-2	– 0,5 ... 0,5 % class 0,5 Accuracy per IEC 61869-2
Ration error (all positions) ^{*4}	– 0,75 ... 0,75 ^{*4} incl. positioning errors	– 0,75 ... 0,75 ^{*4} incl. positioning errors	– 0,75 ... 0,75 ^{*4} incl. positioning errors
Linearity error	none	none	none
Influence of external current ^{*5}	±0,2 ^{*5}	±0,2 ^{*5}	±0,2 ^{*5}

*1 In combination with Janitza measurement transducer RogoTrans up to 4000 A.

*2 On request, the frequency bandwidth and phase shifting model can be made available.

*3 With installation at a right angle to the phase conductor.

*4 Under consideration that the Janitza Rogowski current transformer is installed perpendicular to a primary conductor of min. Ø 15 mm.

*5 Under consideration that a further phase conductor of min. Ø 15 mm is installed at the same height and at a right angle to the Janitza Rogowski current transformer.

Basic Information for the use of current transformer can be found in chapter 10.

Measurement transducer

Measurement transducer for Rogowski current transformer

The measurement transducer "RogoTrans" for the Rogowski current transformer measures alternating currents and possesses a standardised output signal of 0 to 1 A.

- Compact construction in a plast housing
- Assembly on DIN rail possible
- Metering range up to 4000 A
- Voltage supply 24 V DC



Technical data	
Item no.	15.03.613
Dimesions	22,5 x 100 x 110 mm (W x H x D)
Weight	approx. 0,2 kg
Power supply	24 V DC (18 to 36 V) / 1 A
Current draw	< 300 mA (with 1 A output current) < 80 mA (without output current)
Input	Janitza Rogowski coil max. 90 mV (4000 A range)
Current metering ranges	1 to 4000 A 1 to 2000 A 1 to 1000 A 1 to 500 A 1 to 250 A
Metering range setting (button) LED (yellow)	Wear-free metering range selection via micro-controller and PGA
Operating and metering range display	via 6 LED (green)
Phase angle	< 1°
Linearity error at 50 Hz	< 0,2% in all metering ranges
Measuring error at 50 Hz	< 0,2% in all metering ranges
Input impedance	10 k Ω in all metering ranges
Signal output	0 to 1 A
Measurement range exceeding	110%
Burden	0 to 1,5 Ohm
Linearity error burden 0 to 1,5 Ohm	< 0,02%
Alarm output	24 V DC / 200 mA (floating potential optical output, open with fault)
Alarm messages (via red LED)	Overload (range exceeding) Burden too great (output circuit) Undervoltage (24 V)
Alarm delay	60 seconds
Protection type	IP30
Ambient temperature	-20°C to +70°C
Installation position	Vertical; if multiple devices are used next to each other then a minimum distance of 5 mm must be maintained between the devices (heat development)
Storage temperature	-25°C to +85°C

The combination of the coil and the measurement transducer is not compatible with the UMG 20CM.

Basic Information for the use of current transformer can be found in chapter 10.