



# Current transformer overview

	<b>Moulded case current transformer (feedthrough type) class 1 and 0,5 ... / 5 A*1</b>	<b>Calibratable moulded case current transformer class 0,5 ... / 5 A</b>
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Type	IPA 40	IPA 40.5	6A315.3	7A412.3	8A512.3	9A615.3	EIPA30.5	E6A315.3	E7A412.3	E9A615.3
Round conductor in mm	30	30	28	33	42	53	23	28	33	53
Primary bus bar in mm	40 x 10 30 x 15 25 x 20	40 x 10 30 x 15 25 x 20 20 x 20	30 x 15 20 x 20	40 x 12 2 x 30 x 10	50 x 12 2 x 40 x 10	63 x 15 2 x 50 x 10	30,5 x 10,5 25,5 x 25,5 10,5 x 30,5	33 x 16 23 x 23 16 x 33	40,5 x 13 31 x 31 13 x 40,5	64 x 16 54 x 32 42 x 42 32 x 54 16 x 64
Primary current in A	35									
	50									
	60									
	64									
	75									
	100									
	125									
	150									
	200									
	250									
	300									
	400									
	500									
	600									
750										
800										
1000										
1250										
1500										
1600										
2000										
2500										
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■ = 1 A ■ = 5 A

\*1 Other variants on request



# Summation current transformer overview

## Summation current transformer<sup>\*1</sup> for cable type split core current transformers



Type	STS20	STS30	STS40	STS50	STS60	STS21	STS31	STS41	STS51	STS61
Transformation ratio	1+1	1+1+1	1+1+1+1	1+1+1+1+1	1+1+1+1+1+1	Customer-specific	Customer-specific	Customer-specific	Customer-specific	Customer-specific
Primary in A	1									
	5									
Details: Page	235									

## Summation current transformer for moulded case feedthrough and split core current transformers



Type	IPS20	IPS30	IPS40	IPS21	IPS31	IPS41
Transformation ratio	1+1	1+1+1	1+1+1+1	Customer-specific	Customer-specific	Customer-specific
Primary in A	1					
	5					
Details: Page	234					

	DIN rail current transformer	Current transformer ... / 1 A	Three-phase CTs	Cable type split core current transformers (to be used with isolated cables)
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Type	35 / 1 A	64 / 1 A	CT27-35	CT27-64	ASRD 14	KUW 1 / 30	KUW 1 / 40	KUW 2 / 40	KUW 4 / 60	KUW 4.2 / 60	KBU 58	KBU 812
Round conductor in mm	-	-	7.5	7.5		18	18	28	42	2 x 42	-	-
Primary bus bar in mm	-	-	-	-		-	-	-	-	-	85 x 55	125 x 85
Primary current in A	35											
	50											
	60											
	64											
	75											
	100											
	125											
	150											
	200											
	250											
	300											
	400											
	500											
600												
750												
800												
1000												
1250												
Details: Page	241		242		240	236					239	

■ = 1 A ■ = 5 A

\*1 Other variants on request



# Moulded case CT, class 1 and 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

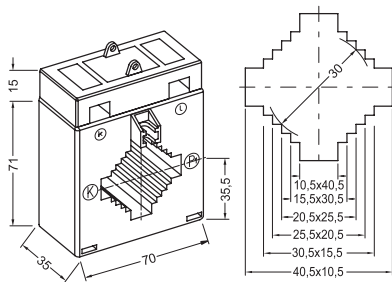
- In addition to the normal terminal covering, extra protective hoods are available
- Locking of the front and rear feed to the secondary terminals



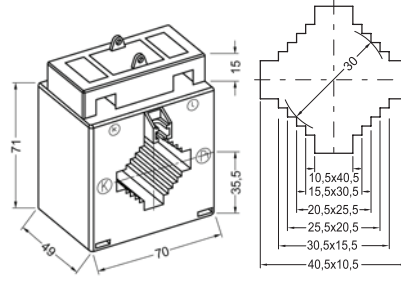
## Dimension diagrams

All dimensions provided in mm

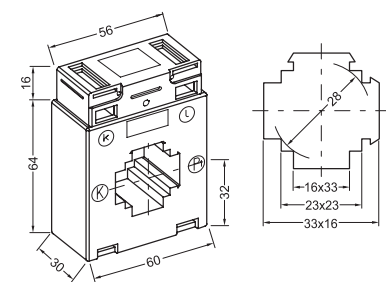
IPA40



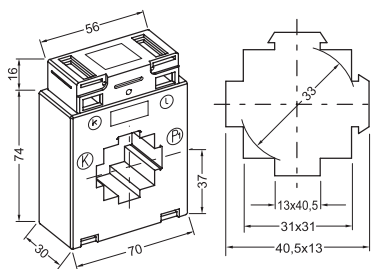
IPA40.5



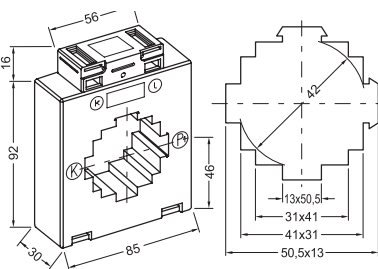
6A315.3



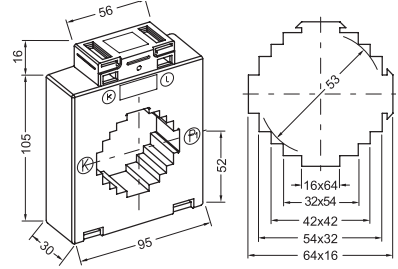
7A412.3



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 1 ... / 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	50	2.5	40 x 10; 30 x 15; 25 x 20	30	70	0.4	09.05.110
IPA40	75	2.5	40 x 10; 30 x 15; 25 x 20	30	70	0.4	09.05.112
6A315.3	100	2.5	30 x 15 ; 20 x 20	28	60	0.3	09.00.404
6A315.3	150	5	30 x 15; 20 x 20	28	60	0.3	09.00.452
6A315.3	200	5	30 x 15; 20 x 20	28	60	0.3	09.00.424
6A315.3	250	5	30 x 15; 20 x 20	28	60	0.3	09.00.425
6A315.3	300	5	30 x 15; 20 x 20	28	60	0.3	09.00.426
6A315.3	400	5	30 x 15; 20 x 20	28	60	0.3	09.00.427
6A315.3	500	5	30 x 15; 20 x 20	28	60	0.3	09.00.428
6A315.3	600	5	30 x 15; 20 x 20	28	60	0.3	09.00.429
7A412.3	800	5	40 x 12; 2 x 30 x 10	33	70	0.4	09.00.981
7A412.3	1,000	5	40 x 12; 2 x 30 x 10	33	70	0.4	09.00.982
8A512.3	1,250	5	50 x 12; 2 x 40 x 10	42	85	0.5	09.01.412
8A512.3	1,500	5	50 x 12; 2 x 40 x 10	42	85	0.5	09.01.413
9A615.3	1,500	5	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.900
9A615.3	1,600	10	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.901
9A615.3	2,000	10	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.902
9A615.3	2,500	10	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.903

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	50	2.5	40 x 10; 30 x 15; 25 x 20	30	70	0.6	09.05.250
IPA40.5	75	2.5	40 x 10; 30 x 15; 25 x 20	30	70	0.6	09.05.252
IPA40.5	100	5	30 x 15 ; 20 x 20	30	70	0.5	09.05.234
IPA40.5	150	10	30 x 15; 20 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	10	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.821
9A615.3	2,000	10	63 x 15; 2 x 50 x 10	53	95	0.5	09.01.822
9A615.3	2,500	10	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 IPA40 style, 1 pair	0.01	09.09.000
Mounting clip	for DIN rail EN 50022-35, suitable for 6A315.3, 7A412.3 and 8A512.3 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 transformer 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

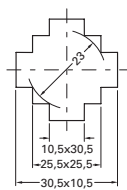
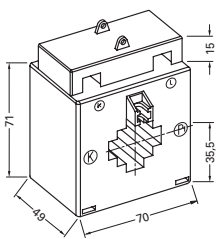
- In addition to the normal terminal covering, extra protective hoods are available
- Locking of the front and rear feed to the secondary terminals



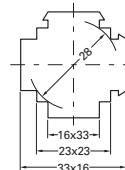
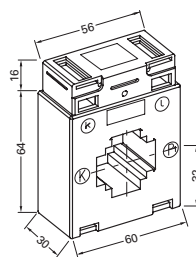
## Dimension diagrams

All dimensions in mm

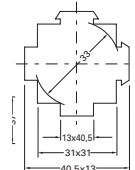
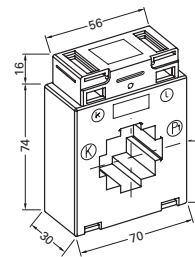
**EIPA30.5**



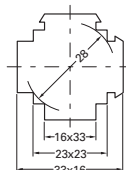
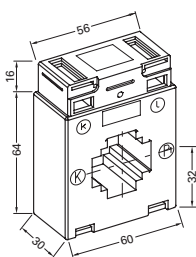
**E6A315.3**



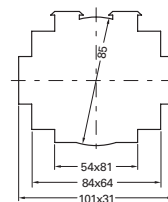
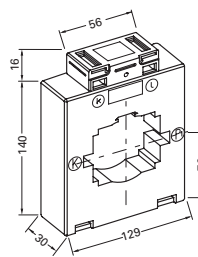
**E7A412.3**



**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  $U_m = 0.72 \text{ kV}$
- 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	Width in mm	Weight (kg)	Item no.
EIPA30.5	50	1.25	30.5 x 10.5; 25.5 x 25.5; 10.5 x 30.5	23	70	0.4	09.14.810
EIPA30.5	75	2.5	30.5 x 10.5; 25.5 x 25.5; 10.5 x 30.5	23	70	0.4	09.14.812
EIPA30.5	100	2.5	30.5 x 10.5; 25.5 x 25.5; 10.5 x 30.5	23	70	0.3	09.14.811
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	800	5	40.5 x 13; 31 x 31, 13 x 40.5	33	70	0.3	09.10.390
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	1.600	5	101 x 31; 84 x 64; 54 x 81	85	129	0.5	09.12.887
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.

# Moulded case current transformer for billing purposes Class 0,2S / 0,5S

## Billing current transformer

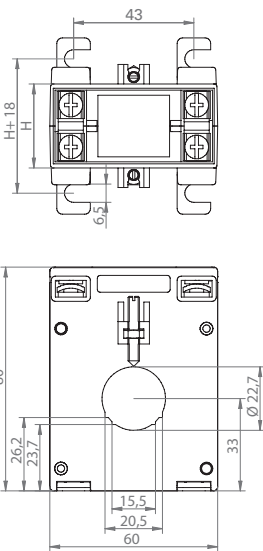
The current transformer for billing with a constantly sufficient load. In short, with which the valid regulations for kWh measurement devices are fulfilled. Each current transformer is individually measured and the test reports can be called up online. Flexibility, the compact design and safety are unique 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.



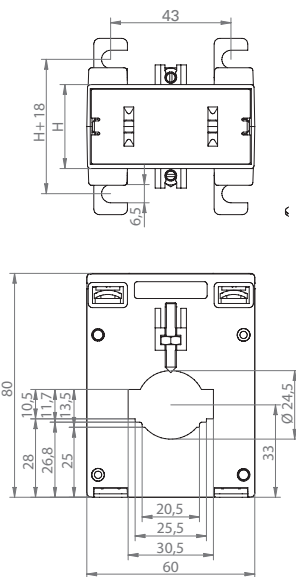
## Dimension diagrams

All dimensions in mm

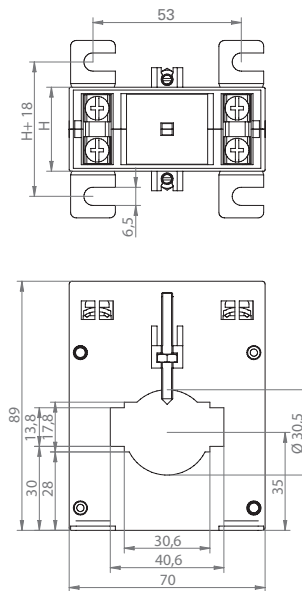
ERM60-E2A



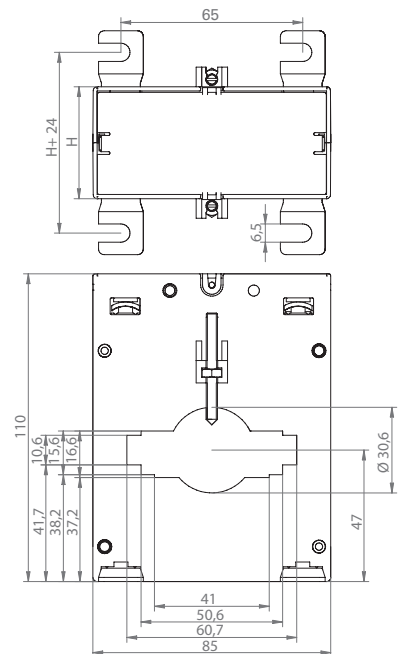
ERM60-E3A



ERM70-E4A



ERM85-E6A



**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  $U_m = 0.72 \text{ kV}$
- 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 / 0,5S									
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-E2A	100	0.5S	0 – 1 VA	100/5 A	20 x 10	22,7	60	0,4	09.06.211
ERM60-E3A	150	0.2S	0 – 1 VA	150/5 A	30 x 10	24,5	60	0,4	09.06.212
ERM60-E3A	200	0.2S	0 – 2 VA	200/5 A	30 x 10	24,5	60	0,4	09.06.213
ERM60-E3A	250	0.2S	0 – 2,5 VA	250/5 A	30 x 10	24,5	60	0,4	09.06.214
ERM70-E4A	300	0.2S	0 – 2,5 VA	300/5 A	40 x 10	30,5	70	0,4	09.06.215
ERM70-E4A	400	0.2S	0 – 5 VA	400/5 A	40 x 10	30,5	70	0,4	09.06.216
ERM70-E4A	500	0.2S	0 – 5 VA	500/5 A	40 x 10	30,5	70	0,4	09.06.217
ERM70-E4B	600	0.2S	0 – 5 VA	600/5 A	40 x 10	30,5	70	0,5	09.06.218
ERM70-E4B	750	0.2S	0 – 5 VA	750/5 A	40 x 10	30,5	70	0,5	09.06.219
ERM85-E6A	1000	0.2S	0 – 5 VA	1000/5 A	60 x 10	30,6	85	0,6	09.06.220

Fees for calibration certificate	
Description	Item no.
Calibration fee for transformer class 0.2S / 0.5S	09.06.209
Calibration certificate for transformer class 0.2S / 0.5S	09.06.210

# 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



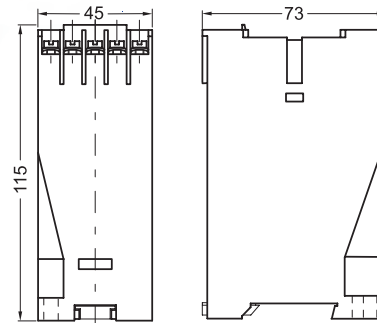
## General mechanical properties

- 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)  $3 \text{ kV} / 1 \text{ min}^{*1}$
- Over-current limit factor FS5 or FS10
- Maximum conductor cross-section:  $2.5 \text{ } \varnothing$  solid,  $1.5 \text{ } \varnothing$  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 (H x W x D)	Weight (kg)	Item no.
IPS20	5+5	5	15	1:1	115 x 45 x 73	0.4	15.02.510
IPS30	5+5+5	5	15	1:1:1	115 x 45 x 73	0.4	15.02.515
IPS40	5+5+5+5	5	15	1:1:1:1	115 x 45 x 73	0.5	15.02.520
IPS20	1+1	1	15	1:1	115 x 45 x 73	0.5	09.05.306
IPS30	1+1+1	1	15	1:1:1	115 x 45 x 73	0.5	09.05.316
IPS40	1+1+1+1	1	15	1:1:1:1	115 x 45 x 73	0.5	09.05.326
IPS21	5+5	5	15	as required	115 x 45 x 73	0.4	15.02.526
IPS31	5+5+5	5	15	as required	115 x 45 x 73	0.4	15.02.521
IPS41	5+5+5+5	5	10	as required	115 x 45 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 (H x W x D)	Weight (kg)	Item no.
IPS20	5+5	5	15	1:1	115 x 45 x 73	0.5	15.02.511
IPS30	5+5+5	5	15	1:1:1	115 x 45 x 73	0.5	15.02.516
IPS40	5+5+5+5	5	15	1:1:1:1	115 x 45 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 (H x W x D)	Weight (kg)	Item no.
STS20	1+1	1	0.2	1:1	80 x 30 x 60	0.2	15.02.560
STS30	1+1+1	1	0.2	1:1:1	80 x 30 x 60	0.2	15.02.561
STS40	1+1+1+1	1	0.2	1:1:1:1	80 x 55 x 60	0.4	15.02.562
STS50	1+1+1+1+1	1	0.2	1:1:1:1:1	80 x 55 x 60	0.4	15.02.563
STS60	1+1+1+1+1+1	1	0.2	1:1:1:1:1:1	80 x 55 x 60	0.4	15.02.564
STS21	1+1	1	0.2	Customer-specific	80 x 30 x 60	0.2	15.02.570
STS31	1+1+1	1	0.2	Customer-specific	80 x 30 x 60	0.2	15.02.571
STS41	1+1+1+1	1	0.2	Customer-specific	80 x 55 x 60	0.4	15.02.572
STS51	1+1+1+1+1	1	0.2	Customer-specific	80 x 55 x 60	0.4	15.02.573
STS61	1+1+1+1+1+1	1	0.2	Customer-specific	80 x 55 x 60	0.4	15.02.574

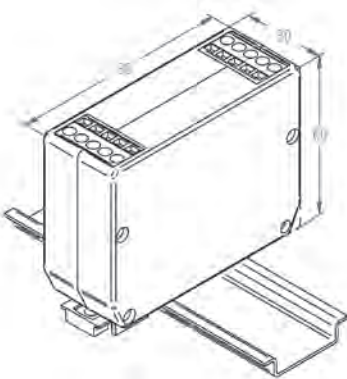
With dissimilar main CTs, the ratio of the largest to the smallest primary current should not be larger than 10/1.



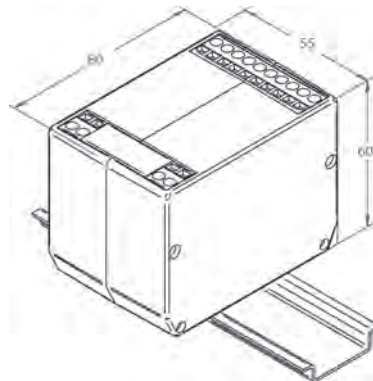
## Dimension diagrams

All dimensions in mm

STS20 / STS30 / STS21 / STS31



STS40 / STS50 / STS60 / STS41 / STS51 / STS61



# 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



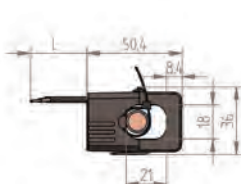
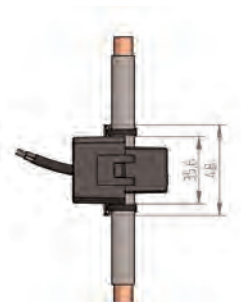
Fig.: Type KUW4.2/60



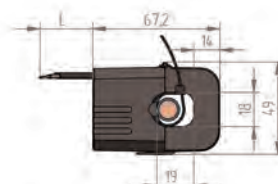
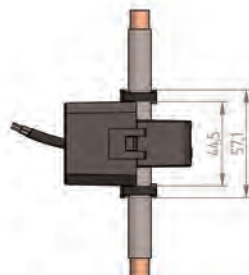
## Dimension diagrams

All dimensions in mm

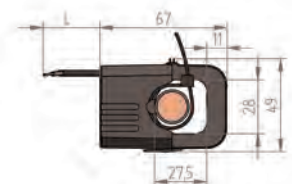
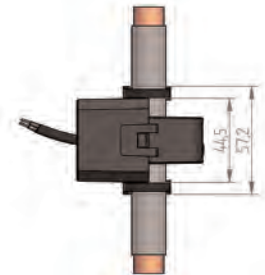
**KUW1/30**



**KUW1/40**



**KUW2/40**

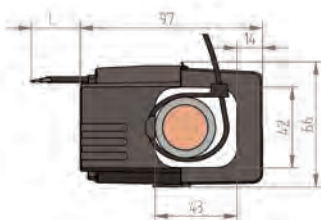
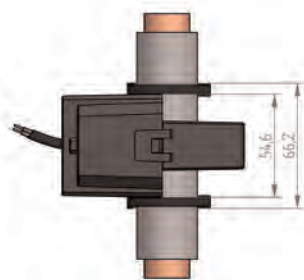




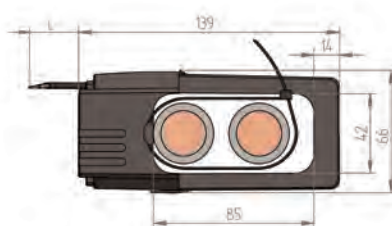
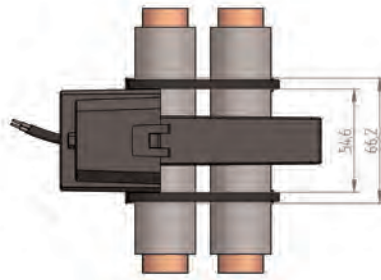
## Technical data

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 x I <sub>n</sub> / 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	For conductors max. Ø 18 / 28 / 42 or 2 x 42 mm
Secondary conductor	... / 1 A: 0.5 mm <sup>2</sup> ... / 5 A: 1.5 mm <sup>2</sup>

KUW4/60



KUW4.2/60



## 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

## 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  $I_{th}: 60 \times I_N, 1 \text{ sec.}$
- Max. supply voltage  $U_m: 0,72 \text{ kV}$
- 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

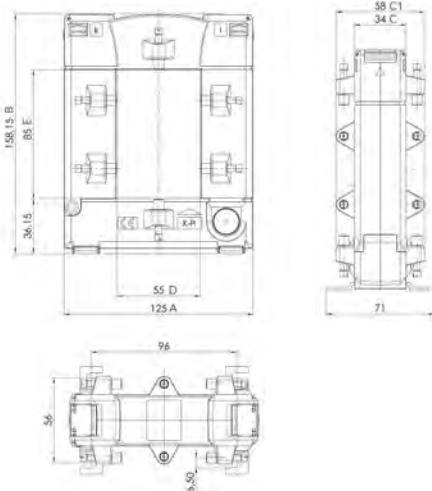
Cable split core current transformer, type KBU												
Type	Primary current in A	Secondary current	Power in VA	Class	Dimensions in mm					Weight (kg)	Item no.	
					A	B	C / C1	D	E			
KBU 58	250	5	1.5	1	125	158	34 / 58	55	85	0.9	15.02.316	
KBU 58	400	5	1	0.5	125	158	34 / 58	55	85	0.9	15.02.868	
KBU 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	1200	5	5	0.5	155	198	34 / 58	85	125	1.3	15.02.872	



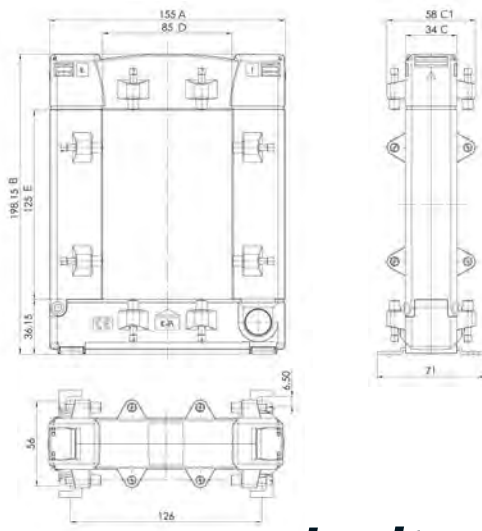
## Dimension diagrams

All dimensions in mm

KBU 58



KBU 812



# Three-phase current transformer type ASRD 14

## Three-phase current transformer with 5 A secondary current

- Primary current 100 A
- Secondary current 5 A
- Conductor feed-through  $\varnothing$  13 mm per phase
- For connection to current measuring systems with 5 A input



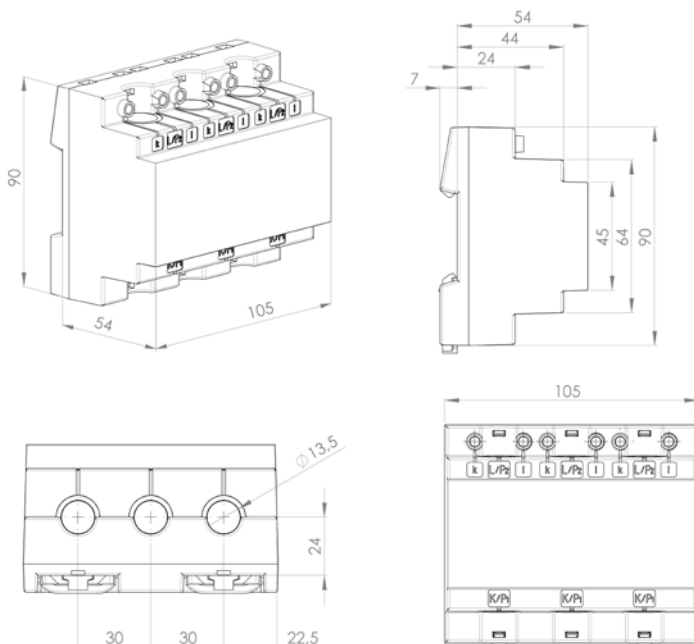
## Technical data

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 (H x W x D)	Weight (kg)	Item no.
ASRD 14	50	5	1	1	13.0	105 x 90 x 54	0.5	15.03.403
ASRD 14	75	5	1.5	1	13.0	105 x 90 x 54	0.5	15.03.404
ASRD 14	100	5	2.5	1	13.0	105 x 90 x 54	0.5	15.03.405
ASRD 14	125	5	2.5	0.5	13.0	105 x 90 x 54	0.5	15.03.406
ASRD 14	150	5	2.5	0.5	13.0	105 x 90 x 54	0.5	15.03.407



## Dimension diagrams

All dimensions in mm



# DIN rail current transformer with voltage tap and fuse

## 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	
<b>General</b>	
Maximum voltage	690 V, Uimp 6 kV
Insulation voltage	1890 V / 50 Hz 1 min
Rated current	35 / 64 A
Max. current (16 mm <sup>2</sup> )	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
<b>Terminal</b>	
Standard	IEC 60947-7-1
Connection cross-section	1.5 mm <sup>2</sup> – 16 mm <sup>2</sup>
<b>Voltage tap-off</b>	
Short-circuit withstand capability	70 kA to 400 V / 50 Hz
Connection cross-section max.	4 mm <sup>2</sup>
Fuse type	5 x 25 mm (with notification) Max. 2 A SIBA DIN 41576-2
<b>Current transformers</b>	
Standard	IEC 61869-2
Maximum short term current	60 x I <sub>n</sub>
Insulation voltage	3 kV / 50 Hz 1 min

### DIN rail current transformer overview

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

# Current transformer CT27 – Class 1

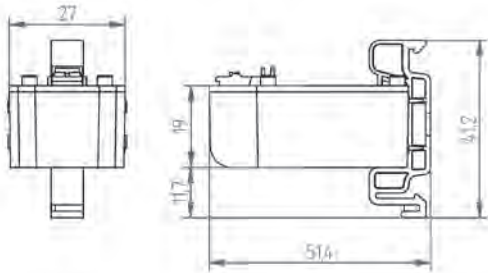
## Compact innovation

- 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	
<b>Environmental conditions</b>	
Position of installation	Indoor usage; only for insulated conductors
Ambient temperature	-10 ... +55 °C
Relative humidity	5 ... 85 % (no condensation)
Protection class	IP20
<b>Application conditions</b>	
Standard	IEC 61869-2
Thermal short time rated current	60 x I <sub>n</sub> / 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 <sup>2</sup> ; rigid, flexible

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

## Split-core current transformer SC-CT-20

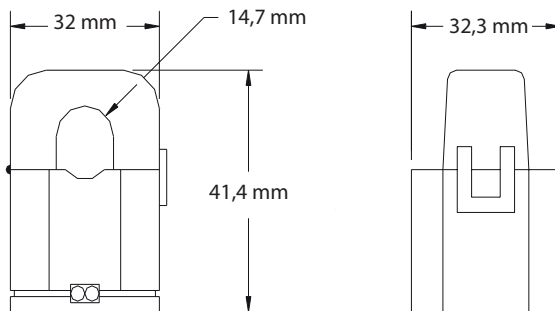
### Innovative and flexible

- 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  $\varnothing$  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 <sup>2</sup> Rigid, flexible

Split-core current transformer SC-CT-20								
Type	Max. operating current (A)	Transformation ratio	Max. primary conductor diameter in mm	Class	Accuracy (%)	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
SC-CT-20*	63	3,000/1	10	1	1	41.4 x 32 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

# Split core operating current CTs up to 600 A

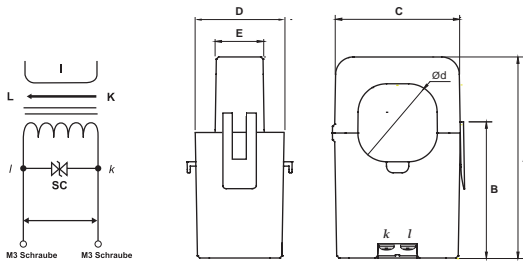
## Fast installation – reliable measurement

- 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	Accuracy (%)	Dimensions in mm (H x W x D)					Weight (kg)	Item no.
						A	B	C	D	E		
SC-CT-20-100	Operating current measurement* <sup>1</sup>	100	3000/1	16	1	55	41	29.5	31	19	ca. 0.075	15.03.093
SC-CT-20-200	Operating current measurement* <sup>1</sup>	200	3000/1	24	1	74.5	52	45	34	22	ca. 0.2	15.03.094
SC-CT-20-300	Operating current measurement* <sup>1</sup>	300	3000/1	24	1	74.5	52	45	34	22	ca. 0.2	15.03.095
SC-CT-20-400	Operating current measurement* <sup>1</sup>	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* <sup>1</sup>	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* <sup>1</sup>	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

\*<sup>1</sup> Incl. ready-made connection cable; 1.5 m with burden and spring type terminal adapter for operating current measurement

# Flexible current transformer

## Main features

- Set comprising 2 components: The 1A measurement transducer and a Rogowski coil with 300 or 600 mm length (depending on model).
- The diameter of the measurement coil is 95 or 190 mm once installed (depending on model).
- The Rogowski coil serves for AC current measurement for conductor rails and heavy current lines.



Description	Item no.	Diameter	Length	Weight
Flex-CT-1A-300mm (with measurement transducer)	15.03.600	95 mm	300 mm	190 g
Flex-CT-1A-600mm (with measurement transducer)	15.03.601	190 mm	600 mm	195 g
Rogowski-Spule 300mm (without measurement transducer)	15.03.602	95 mm	300 mm	190 g
Rogowski-Spule 600mm (without measurement transducer)	15.03.603	190 mm	600 mm	195 g

Technical data	
<b>Measurement transducer supply</b>	
Rated supply voltage	24 V DC -20% ... +25 %
Rated supply voltage range	19,2 V DC ... 30 V DC
Maximum power consumption	190 mA
Power consumption	4 W
<b>Input data for measurement coil</b>	
Frequency measuring range	10 Hz ... 5000 Hz
Position error	< 1 % (the measurement coil is located at a right angle to the live conductor) < 1.5 % (the measurement coil is positioned across the live conductor at an angle)
Linearity error	0,1 %
<b>Input data for measurement transducer</b>	
Metering ranges (current)	100 A, 250 A, 400 A, 630 A, 1000 A, 1500 A, 2000 A, 4000 A
Phase angle	< 1 °
Rated power	1,5 VA
<b>Signal input for measurement transducer</b>	
Input signal (at 50 Hz)	100 mV (1000 A)
<b>Signal output for measurement transducer</b>	
Burden	0 Ω ... 1,5 Ω
<b>General data for measurement coil</b>	
Length of the signal line	3000 mm
Conductor design for signal line	2 x 0.22 mm (signal (tin-plated)) 1 x 0.22 mm (shielding (tin-plated))
Rated insulation voltage	1000 V AC (rms CAT III) 600 V AC (rms CAT IV)

General data for measurement transducer	
Linearity error	< 0.5% (from the range final value)
Maximum transfer error	≤ 0.5% (from the range final value)
Frequency range	45 Hz to 65 Hz
Power consumption	< 190 mA (at 19.2 V)
Housing material	Polyamide
Protection class	IP20
Test voltage	1.5 kV AC (supply / input and output: 50 Hz, 1 min)
General data	
Standards/Regulations	IEC 61010-1, IEC 61010-031, IEC 61010-2-031, IEC 61010-2-032
Overvoltage category	III (1000 V, to the neutral conductor) IV (600 V, to the neutral conductor)
Connection data	
Connection name	Measurement transducer side
Min. conductor cross-section (flexible)	0,2 mm <sup>2</sup>
Max. conductor cross-section (flexible)	2,5 mm <sup>2</sup>
Min. conductor cross-section (rigid)	0,2 mm <sup>2</sup>
Max. conductor cross-section (rigid)	2,5 mm <sup>2</sup>
Dimensions	
Width	22,50 mm
Height	70,40 mm
Depth	85,00 mm
Environmental conditions	
Ambient temperature (during operation)	-30 °C to 80 °C (measurement coil) -20 °C to 70 °C (measurement transducer)
Ambient temperature (storage/transport)	-40 °C to 90 °C (measurement coil) -25 °C to 85 °C (measurement transducer)

## FLEX-CLAMP bracket

### Firm seating of the Rogowski coil

The optional holding fixture provides firm seating for the Rogowski coil on busbars with a thickness of 5 to 15 mm. During installation, the coil housing is pushed onto the flange of the holding fixture and locks into place automatically.



Type	Description	Dimensions in mm (W x H x D)	Weight (kg)	Item no.
FLEX-CLAMP	Holding fixture for Rogowski coil on busbar (15.03.600, 15.03.601, 15.03.602, 15.03.603)	Approx. 37 x 45 x 37	Approx. 0.5	<b>15.03.606</b>





# Split-core residual current transformer

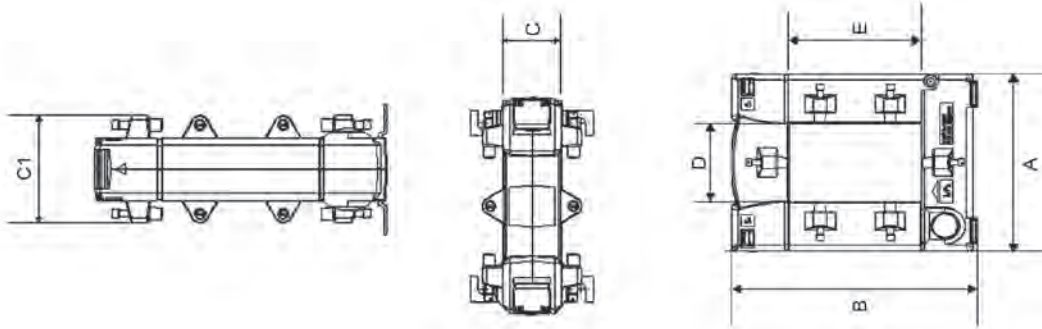
## Handy and compact

- Simple and economical installation, especially for retrofit
- Practical locking system: Separating of primary cable not required
- Available in various different sizes
- No interruption of operations
- Suitable for UMG 96RM-E, UMG 20CM, UMG 509 and UMG 512



## Dimension diagrams

All dimensions in mm



## Technical data

Technical data	
General	
Construction style	Single conductor low voltage residual current transformer
Housing material	Polycarbonate, grey RAL 7035
Max. voltage for electrical equipment	Um <= 0.72 kV
Insulation test voltage	3 kV Ueff.; 50 Hz; 1 min
Rated frequency	50 Hz
Secondary connection	Brass profile, nickel plated, max. 4.0 mm <sup>2</sup>
Nominal ratio I <sub>pn</sub> / I <sub>sn</sub>	10 / 0.0167 A
Working frequency range	30 ... 1000 Hz
Secondary rated apparent power	0.05 VA
Ambient temperature range	-5 ... +45 °C
Max. temperature of the primary conductor	90 °C

Differential current transformer type A									
Type	Transformation ratio	Max. primary residual current in mA*	Dimensions in mm					Weight (kg)	Item no.
			A	B	C / C1	D	E		
KBU 23D	600/1	18000	93	106	34/58	20	30	0.7	15.03.400
KBU 58D	600/1	18000	125	158	34/58	55	85	1.1	15.03.401
KBU 812D	600/1	18000	155	198	34/58	85	125	1.5	15.03.402

\* When using the analogue inputs of the UMG 96RM-E, UMG 509 and UMG 512.

# Split-core residual current transformer

## Main features

- Makes it possible, in conjunction with the residual current relay, to determine the residual current to earth of machines or systems
- Compact construction
- Detection of very small currents
- Designed to increase the sensitivity of residual current breakers (personal protection) and general circuit breakers
- Suitable for the UMG 96 RM-E, UMG 509, UMG 512, UMG 20CM



## Technical data

General data	
Insulation voltage	0,72 kV
Frequency	3 kHz
Operating temperature	-10 to +55 °C
Test voltage	3 kV RMS 50 Hz / 1 min.

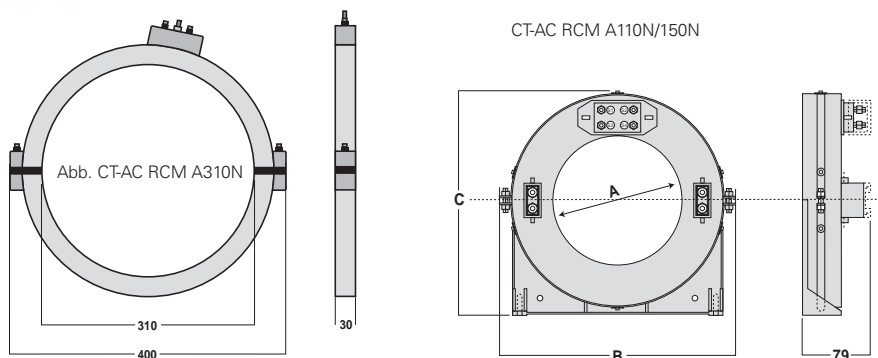
Device overview – Plug-in residual current transformer type A			
Type	Transformation ratio	Max. primary residual current in mA*	Item no.
CT-AC RCM A110N	700/1	21000	15.03.462
CT-AC RCM A150N	700/1	21000	15.03.465
CT-AC RCM A310N	700/1	21000	15.03.461

\* When using the analogue inputs of the UMG 96RM-E, UMG 509 and UMG 512.



## Dimension diagrams

All dimensions in mm



Dimensions - Plug-in residual current transformer type A				
Type	Dimensions in mm			Weight (kg)
	A	B	C	
CT-AC RCM A110N	110	235	219	2,35
CT-AC RCM A150N	150	275	259	2,50
CT-AC RCM A310N	310	400	416	3,80

# Feedthrough residual current transformer

## Main features

- Makes it possible, in conjunction with the residual current relay, to determine the residual current to earth of machines or systems
- Compact construction
- Detection of very small currents
- Designed to increase the sensitivity of residual current breakers (personal protection) and general circuit breakers
- Suitable for the UMG 96 RM-E, UMG 20CM, UMG 509, UMG 512



## Technical data



General data	
Insulation voltage	0,72 kV
Frequency	3 kHz
Operating temperature	-10 to +55 °C
Test voltage	3 kV RMS 50 Hz / 1 min.

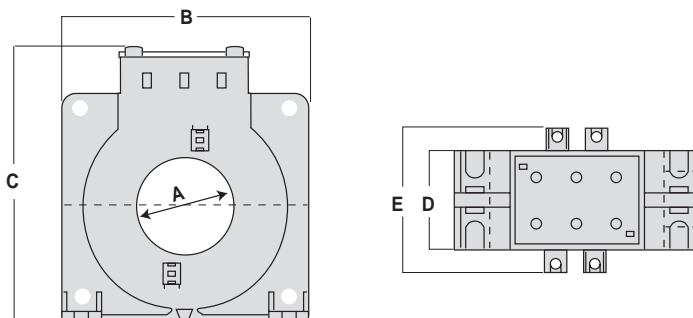
Device overview - Plug-in residual current transformer type A			
Type	Transformation ratio	Max. primary residual current in mA*	Item no.
CT-AC RCM 35N	700/1	21000	15.03.458
CT-AC RCM 80N	700/1	21000	15.03.459
CT-AC RCM 110N	700/1	21000	15.03.463
CT-AC RCM 140N	700/1	21000	15.03.460
CT-AC RCM 210N	700/1	21000	15.03.464

\* Bei Verwendung der Analogeingänge des UMG 96RM-E, UMG 509 und UMG 512



## Dimension diagrams

All dimensions in mm



Dimensions - Plug-in residual current transformer type A						
Type	Dimensions in mm					Weight (kg)
	A	B	C	D	E	
CT-AC RCM 35N	35	92	113	36	56	0,25
CT-AC RCM 80N	80	125	160	36	56	0,35
CT-AC RCM 110N	110	165	198	36	56	0,50
CT-AC RCM 140N	140	200	234	36	56	0,70
CT-AC RCM 210N	210	290	323	44	64	1,20

## Current transformer, class 1, CT20

### Precise and efficient

- Can be used with operational currents up to max. 63 A and for residual currents from 1 mA to 1,000 mA acc. type A
- Compact construction
- Ratio 700/1
- Primary window can be used for insulated cable  $\varnothing$  7.5 mm (max.)
- For use on a 3-phase circuit breaker with a phase spacing of 17.5 mm
- DIN rail mounting (35 mm) via rail clips (optional)
- Special version for the monitoring device UMG 20CM

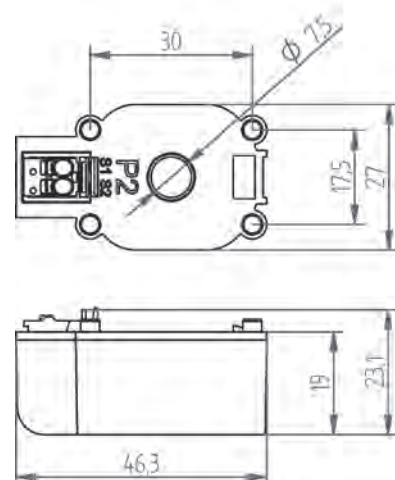


### Technical data



### Dimension diagrams

All dimensions in mm



Current transformer CT-20	
<b>Environmental conditions</b>	
Position of installation	Indoor usage; only for insulated conductors
Ambient temperature	-10 ... +55 °C
Relative humidity	5 ... 85 % (no condensation)
Protection class	IP20
<b>Application conditions</b>	
Measuring accuracy	1 %
Thermal short time rated current	60 x I <sub>n</sub> / 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	$\varnothing$ 7.5 mm
Secondary conductor	Wire cross section: 0.2 ... 1.5 mm <sup>2</sup> Rigid, flexible, spring type terminal

Current transformer CT-20 – operating or differential current transformer type A								
Operating or residual current CT type A	Max. operating current in A	Residual current in mA	Transformation ratio	Max. diameter, primary conductor in mm	Class	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
CT-20	63 (with burden)	10 ... 1000	700/1	7.5	1	46 x 27 x 23	0.05	15.03.082
<b>Accessories</b>								
Mounting clip	For DIN rail EN 50022-35, suitable for type CT-20					14 x 41 x 27	0.001	09.09.010
Ready-made connection cable	1.5 m with burden (0,8 $\Omega$ ) and spring type terminal adapter for operating current measurement							15.03.085

# Split-core current transformer SC-CT-21

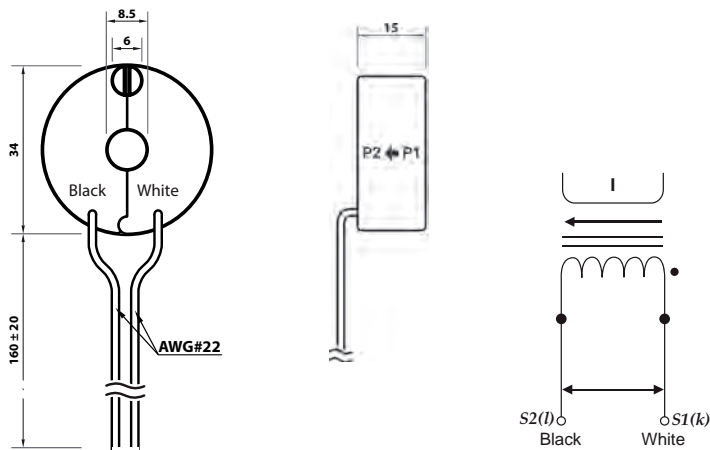
## Micro-fine and high-precision

- Compact, divisible, split-core current transformer
- Suitable for residual current measurement (10 ... 1000 mA)
- High measurement accuracy
- Simple installation thanks to clip technology
- UL and EN 61010-1 certified
- Specially designed for use with the UMG 20CM



## Dimension diagrams

All dimensions in mm



## Technical data

Technical data	
Measuring accuracy	1 %
Current measurement range	0.01 ... 1 A
Max. continuous current	35 A
DC resistance	33 Ohm ±10 %
Insulation category	CAT III
Environmental conditions	
Position of installation	Indoor usage
Ambient temperature	-20 ... +50 °C
Storage temperature	-30 ... +90 °C
Relative humidity	< 85 % (no condensation)
Protection class	IP20

Split-core current transformer SC-CT-21								
Type	Residual current (mA)	Transformation ratio	Max. primary conductor diameter in mm	Class	Accuracy (%)	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
SC-CT-21	10 ... 1,000	700/1	8	1	1	35 x 35 x 16	0.05	15.03.084

## 6-fold DIN rail current transformer CT-6-20

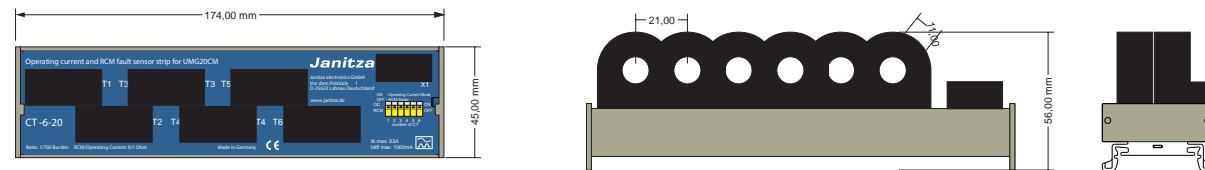
### Monitor, detect and treat

- For operational current – as well as RCM-monitoring suitable
- Residual current acquisition with integrated current transformers (residual currents per IEC 60755 type A)
- 6 measurement channels
- Compact construction
- Parallel acquisition and processing of measured values
- Use in distribution outputs for consumers and systems
- Special version for the monitoring device UMG 20CM



### Dimension diagrams

All dimensions in mm



### Technical data

General data	
Number of measuring channels	6 (current transformers integrated)
Monitoring	Parallel, real effective value measurement ("True RMS")
Evaluation	Residual – or operating – currents (configurable as required in the individual application)
Rated isolation level	4 kV
Transformer rated voltage	max. 720 V AC
Transformer rated frequency	50 ... 60 Hz
Therm. rated short-term current	60 x I <sub>n</sub> / 1 sec.
Therm. Continuous current	100%
Ambient temperature	-10 ... +55 °C
Class	1
Protection class	E
Protection class	IP20

6-fold DIN rail current transformer CT-6-20 (operating and residual current transformer type A)										
Type	Operating mode* <sup>1</sup>	Operating current with load in A	Residual current in mA	Number of measuring channels* <sup>2</sup>	Transformation ratio	Measurement accuracy	Max. primary conductor diameter in mm	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
CT-6-20	Residual or operating currents	0 ... 63	10 ... 1,000	6	700/1	1	11	45 x 174 x 56	0.30	14.01.630

Accessories	
Ready-made connection cable 1.5 m twisted, shielded with connector	08.02.440

\*<sup>1</sup> Pre-configurable as needed via DIP switch      \*<sup>2</sup> Measurement transformer integrated.







# Voltage transformer

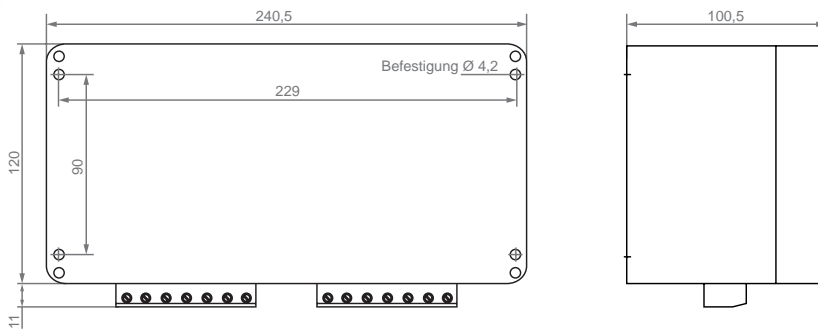
## Powerful and precise

- Input, 3-pole
- Output is 3-pole + N
- Use in IT networks without neutral line
- For reducing the measurement voltage for the UMG measurement input
- Use in IT networks in conjunction with the measurement devices from the series UMG 96...



## Dimension diagram

All dimensions in mm



## Technical data

Voltage transformer	
3-phase voltage transformer	
Protection class	IP20
Transformer class	1
Core section	M65 / 27.8
Specification	EN 61558 + EN 60044-2
Nominal input voltage	see below (0.028 A)
Output voltage	400 V AC, 0.013 A
Frequency	50 / 60 Hz
Protection	primary M 0.032 A, 5 x 3 mm
Nominal power	5 VA

Voltage transformer							
Type	Primary voltage (V AC)	Secondary voltage (V AC)	Primary fuse (A)	Rated power (VA)	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
Voltage transformers BV	525	400	0.032	5	120 x 240.4 x 100.5	5.0	15.04.035
Voltage transformers BV	705	400	0.032	5	120 x 240.4 x 100.5	5.0	15.04.036
Voltage transformers BV	765	400	0.032	5	120 x 240.4 x 100.5	6.0	15.04.037

# Voltage tap

## ZK4S, ZK4B and ZK4R – Compact and secure

- Terminals to tap off the voltage on current-conducting bus bars
- Suitable for tapping off voltage for energy measurement devices
- Fusing directly on the rail
- Primary connection with M8 Allen screw
- Short-circuit resistance 70 kA to 400 V / 50 Hz
- High operational reliability



Fig.: ZK4S and ZK4B



## Dimension diagrams

All dimensions in mm

### ZK4S-ZK4B

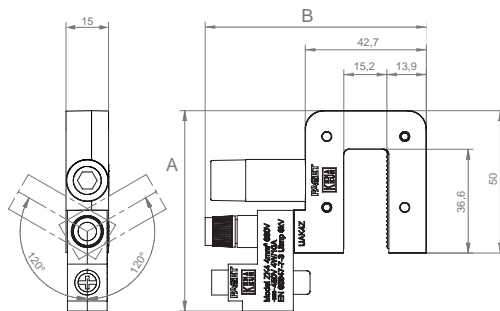


Fig.: Insulated tool ZK4R



## Technical data

Voltage tap	
Max. operating voltage	690 V
Test voltage / pulse	3 kV / 50 Hz 6 kV
In max.	10 A
Insulation class	E (max. 120°)
Fuse type	5 x 25 mm (with notification), 10 A SIBA DIN 41576-2
Ambient temperature	-5 ... +40 °C*1
Temperature increase, bus bar	Max. 75 K*1
Primary connection	M8 Allen screw
Allen size	Number 6
Max. bus bar thickness	4 – 15 mm
Housing	Polyamide (PA6.6)
Terminal material	Nickel plated brass

\*1 Max. temperature of the primary rail 120 °C (total of ambient temperature and temperature increase of the rail)

Device overview – Voltage tap								
Type	Color	Description	Fuse (A)	Cross-section connection line (mm <sup>2</sup> )	Dimensions in mm (H x W x D)		Weight (kg)	Item no.
					A	B		
ZK4S	Black	With fuse	6.3	1.5 – 4	71	78	0.2	10.11.525
ZK4B	Blue	Without fuse	-	0 – 16	58.2	76	0.1	10.11.526
Accessories								
1 x voltage tap set	3 x ZK4S (item no. 10.11.525); 1 x ZK4B (item no. 10.11.526)						0.7	10.11.527
ZK4R	Insulated tool for fixing the tap; 1,000 V, EN / IEC 60900						0.9	10.11.528

# Voltage tap

## ZK4/M6 and ZK4/M8 – fused measurement voltage connection

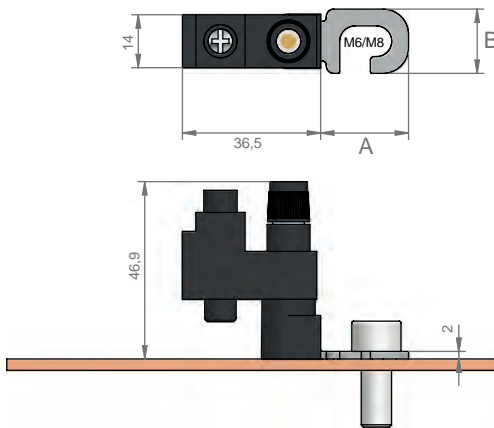
- Fused voltage tap for measurement purposes
- Simple installation underneath existing fastening points, directly on the current bus bar
- Compact housing
- Delivered with a 5 x 25 mm, 2 A, 450 V, F, 70 kA fuse



## Dimension diagrams

All dimensions in mm

### ZK4M6-M8



## Technical data

Environmental conditions	
Installation location	Indoor usage (suitable for copper rails)
Ambient temperature range	-10 ... +55 °C
Relative humidity	5 to 85 % (no thawing)
Protection class	IP20 (basic insulation)
Application conditions	
Standard	IEC 60947-7-3
Maximum operating voltage	400 V ~
Test voltage	3 kV / 50 Hz
Surge voltage	6 kV 1.2 / 50 µs
I <sub>max</sub>	2 A
Voltage drop	< 500 mV ~
Fuse	2 A, 450 V, F, 70 kA, 5 x 25 mm, ceramic (SIBA Part.no. 7008913.2 )
Torque	Max. 2.0 Nm

Device overview – Voltage tap									
Type	Color	Primary connection (mm)	Fuse (A)	Cross-section connection line (mm <sup>2</sup> )	Dimensions in mm (H x W x D)		Weight (kg)	Item no.	
					A	B			
ZK4/M6	Black	6	2	1.5 – 4	18.8	13.5	0.03	10.11.534	
ZK4/M8	Black	8	2	1.5 – 4	23.2	17	0.03	10.11.535	

# Current transformer terminal block

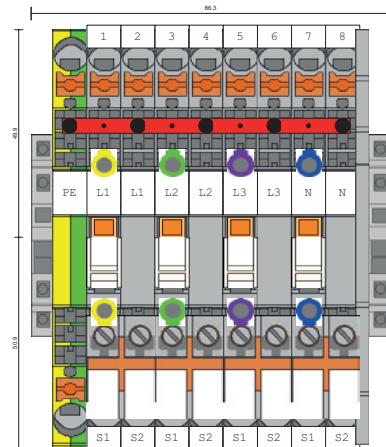
## Modular and reliable

- Application: Short circuiting of current transformers, parallel measurement for cross checking ("quasi calibrating") measurement devices
- For installation on DIN rails
- Completely equipped for 4 conductors
- Insulated bridges for grounding and short circuiting of the CT terminal



## Dimension diagrams

All dimensions in mm



## Technical data

General data	
DIN mounting rail installation	35 mm DIN rail
Connection max.	4 CTs
4 pairs, 2-conductor, disconnecting and measurement terminals with contact protected test sockets	
Test connector (ø)	4 mm (with switching bridge)
Rated voltage EN	500 V
Measurement surge voltage	6 kV
Rated current	30 A
Degree of pollution	3
Connection design	CAGE CLAMP® S
Type of conductor	Single or fine-stranded
Fine stranded diameter	0.5 – 6 mm <sup>2</sup>
"f" + "e" diameter	0.5 ... 10 mm <sup>2</sup>
"f" diameter with AEH	0.5 ... 6 mm <sup>2</sup>
Stripping length	13 – 15 mm

Each terminal is labeled. The terminal position S2 on each transformer is connected to ground potential via a fixed, pre-installed bridge. Each pair of disconnecting and measurement terminals is equipped with a yellow switch lock for the disconnect lever. 2 disconnect levers are coupled together via an interlocking cap.

Current transformer terminal block								
Type	Rated current (A)	Rated voltage EN (V)	Rated voltage surge (kV)	Type of conductor	Cross-section (mm <sup>2</sup> )	Dimensions in mm (H x W x D)	Weight (kg)	Item no.
Current transformer terminal block	30	500	6	Single or fine-stranded	0.5 – 6	190 x 85 x 65	0.3	15.07.001

# Humidity and temperature sensor JFTF-I

## High-precision and reliable measurement

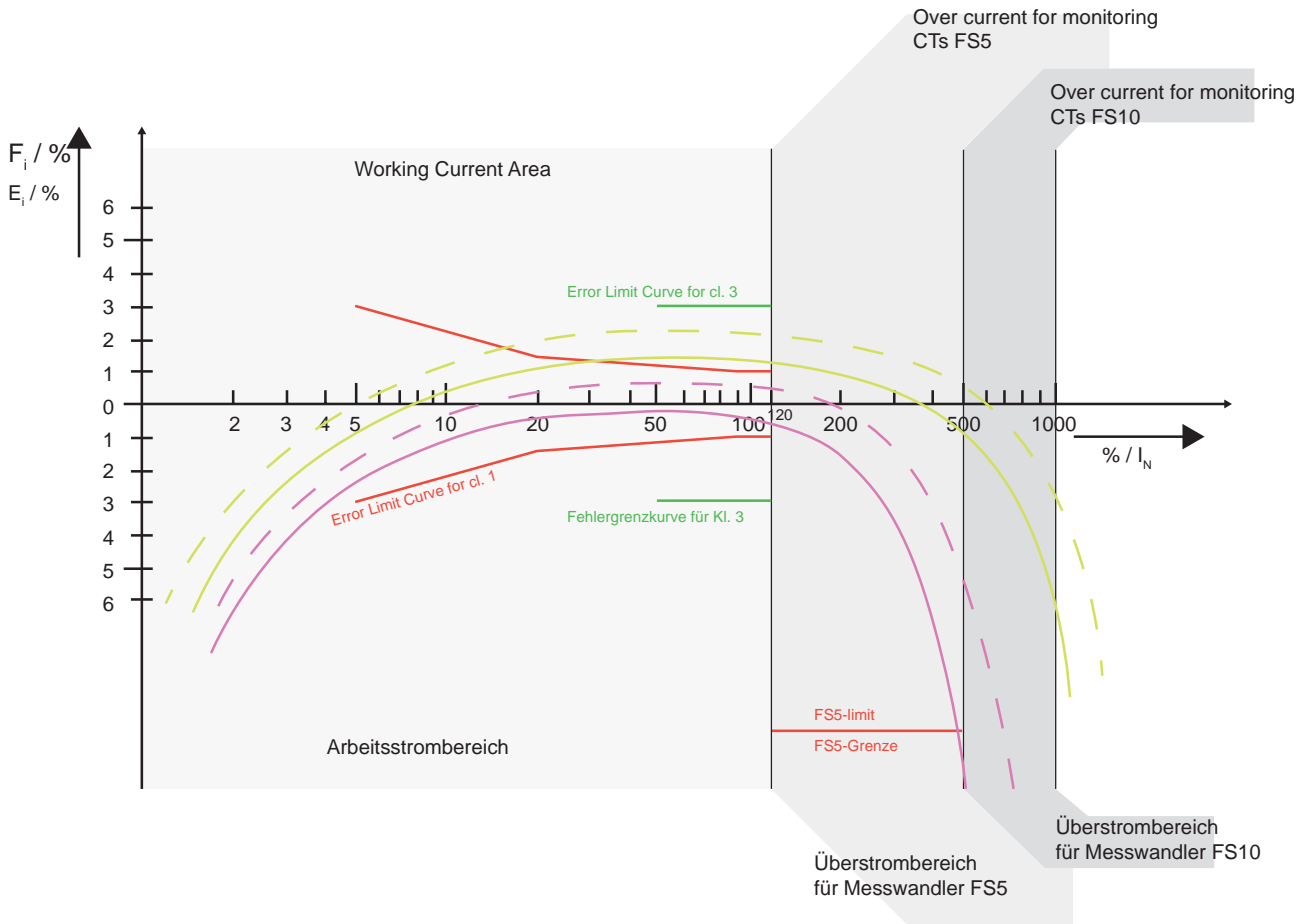
- For the measurement of relative humidity and temperature of the ambient air
- Intended for the measurement of unpolluted, non-condensing air without any positive or negative pressure
- High measurement accuracy
- A sintered filter protects the sensor from external contaminants
- The sensors themselves are fitted in a metal tube so that the warming up of the analogue unit has no detrimental influence on the measurement.
- FBM modul DI8-AI8 required (Item no. 15.06.079)



## Overview of devices

Humidity and temperature sensor		
Designation	Type	Item no.
<ul style="list-style-type: none"><li>• With current output (2-wire system) 4 ... 20 mA</li><li>• Operating voltage 15 ... 36 V DC, depending on total apparent load</li><li>• Relative humidity output 4 ... 20 mA corresponding to 0... 100 %, Load resistance 200 ... 500 Ω</li><li>• Temperature output 4 ... 20 mA corresponding to -20... +80 °C Load resistance 200 ... 500 Ω</li><li>• Current consumption max. 40 mA</li></ul>	JFTF-I	<b>15.06.074</b>

Current transformer error curve



— Example for a measuring c.t. of cl. 1 FS5 and 1/1 burden  
 Beispiel eines Strom-Messwandlers der Kl. 1 FS5 bei 1/1 Bürde

- - - Example for a measuring c.t. of cl. 1 FS5 and 1/4 burden  
 Beispiel eines Strom-Messwandlers der Kl. 1 FS5 bei 1/4 Bürde

— Example for a protection c.t. 10P10 and 1/1 burden  
 Beispiel eines Schutzwandlers 10P10 bei 1/1 Bürde

- - - Example for a protection c.t. 10P10 and 1/4 burden  
 Beispiel eines Schutzwandlers 10P10 bei 1/4 Bürde