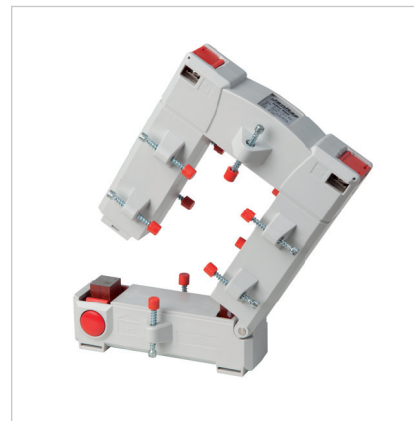


# Differential current transformer, class 1

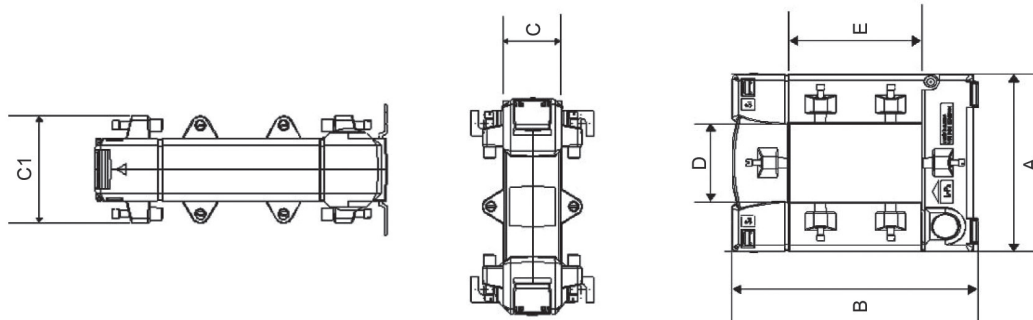
## Handy and compact

- 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



## 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
Accuracy class	1
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					Item no.
			A	B	C / C1	D	E	
KBU 23D	600:1	18000	93	106	34/58	20	30	0.7
KBU 58D	600:1	18000	125	152	34/58	50	80	1.1
KBU 812D	600:1	18000	155	198	34/58	80	120	1.5

\* When using the analogue inputs of the UMG 96RM-E

# Feedthrough residual current transformer

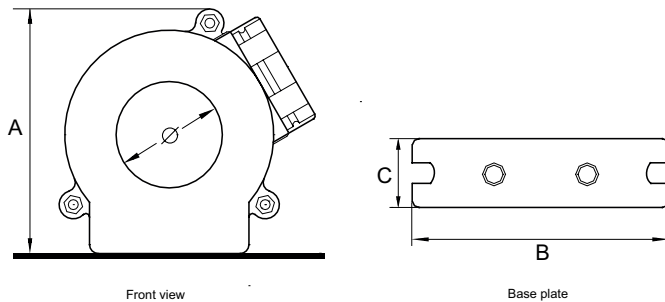
## High power at all levels

- Residual current transformer
- Compact construction
- Designed to increase the sensitivity of residual current monitoring devices
- Capturing of very small currents
- Nano-crystalline core
- Low weight
- Suitable for all UMGs with RCM input



## Dimension diagrams

All dimensions in mm



## Technical data

General data	
Nominal voltage	600 V
Frequency	50 / 60 Hz
Zero phase (primary / secondary)	200 mA / 1.575 mA
Ambient temperature	-25 ... +85 °C
Power-frequency Test voltage	Secondary to ground : 2 kV / 1 min.
Insulation resistance	Secondary to ground: ≥ 100 MΩ at 500 V DC
Precision class	L

Feedthrough residual current transformer type A									
Type	Transformation ratio	Max. primary residual current in mA*	Rated load impedance	Dimensions in mm (H x W x D)				Weight (kg)	Item no.
				Ø	A	B	C		
JZ30N	127/1	3,800	10 Ω	30	73	90	30	0.2	15.03.450
JZ50N	127/1	3,800	10 Ω	50	100	110	30	0.3	15.03.451
JZ65N	127/1	3,800	10 Ω	60	125	110	30	0.3	15.03.452
JZ80N	127/1	3,800	10 Ω	80	132	130	30	0.4	15.03.453
JZ100N	127/1	3,800	10 Ω	100	152	180	47	0.7	15.03.454
JZ120N	127/1	3,800	10 Ω	120	167	180	47	0.9	15.03.455
JZ150N	127/1	3,800	10 Ω	150	217	257	70	1.3	15.03.456
JZ200N	127/1	3,800	10 Ω	200	218	268	70	1.7	15.03.457

\* When using the analogue inputs of the UMG 96RM-E

## 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 Ø 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 clamps (optional)
- Special version for the monitoring device UMG 20CM



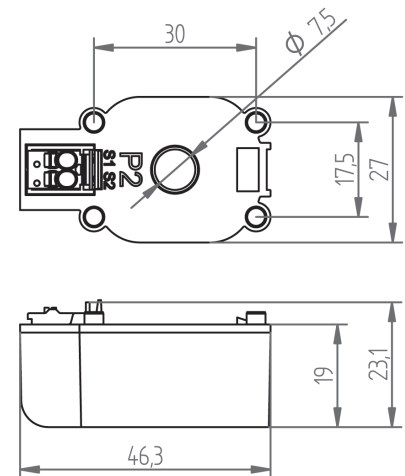
### Technical data

Current transformer CT-20	
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	
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	Ø 7.5 mm
Secondary conductor	Wire cross section: 0.2 ... 1.5 mm <sup>2</sup> Rigid, flexible, spring type terminal



### Dimension diagrams

All dimensions in mm



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
Accessories								
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 Ω) and spring type terminal adapter for operating current measurement							15.03.085

# Split-core current transformer SC-CT-20

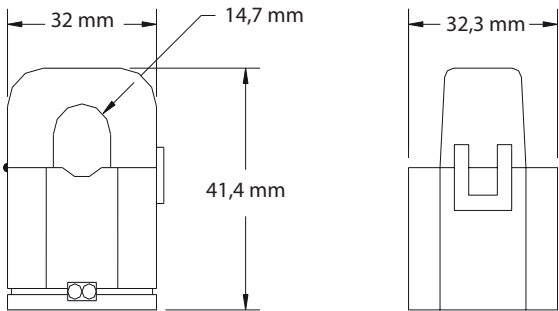
## Innovative and flexible

- Compact, divisible, split-core current transformer
- Special version for the UMG 20CM branch circuit monitoring device
- 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



## 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 mm² Rigid, flexible

Split-core current transformer SC-CT-20								Item no.
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)	
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)								15.03.086
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								

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

## Split-core current transformer SC-CT-21

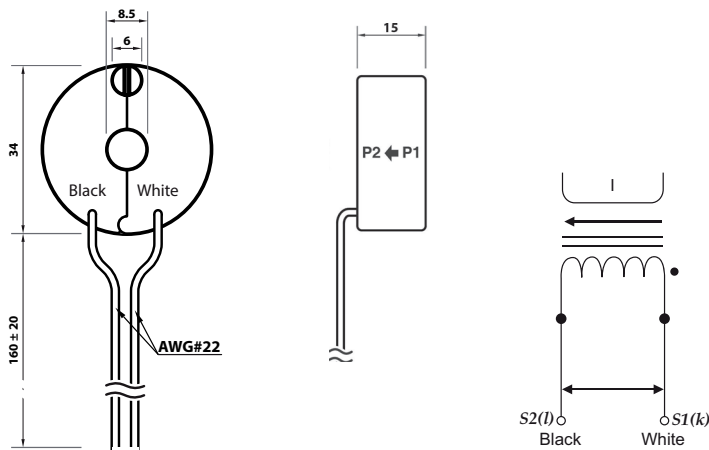
### Micro-fine and high-precision

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



### Dimension diagrams

All dimensions in mm



### Technical data

Technical data	
Measuring accuracy	1 %
Current measurement range	0.01 ... 10 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

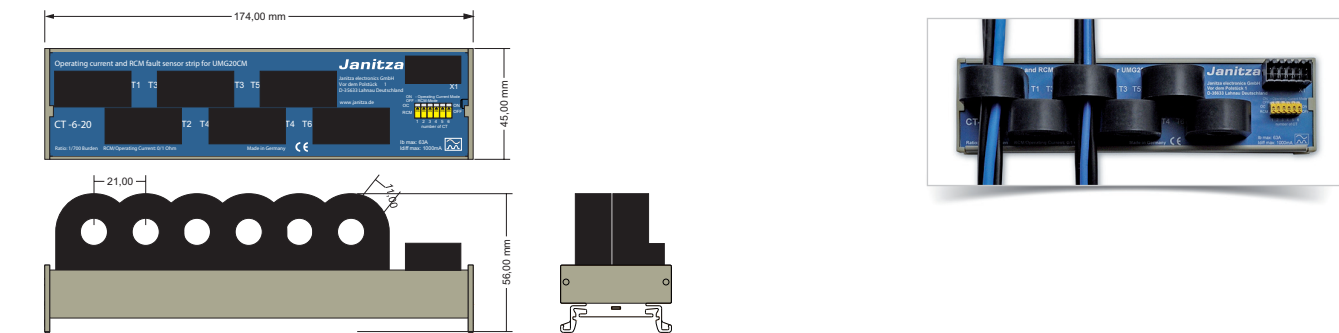
# 6-fold DIN rail current transformer CT-6-20

## 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

## 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*1	Operating current with load in A	Residual current in mA	Number of measuring channels*2	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	

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

## Split core operating current CTs up to 300 A

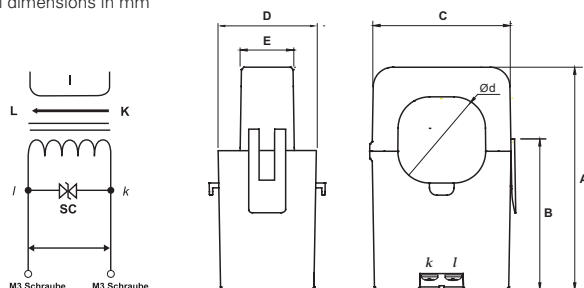
### Fast installation – reliable measurement

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



### Dimension diagrams

All dimensions in mm



### Technical data

Technical data			
Type	SC-CT-20-100	SC-CT-20-200	SC-CT-20-300
Current ratio	120 A / 40 mA	200 A / 66.6 mA	300 A / 100 mA
Current range (50/60 Hz)	0.01 ... 120 A (RL = 10 Ohm)	0.01 ... 200 A (RL = 10 Ohm)	0.1 ... 320 A (RL = 10 Ohm)
Max. continuous current	200 A	360 A	380 A
Output voltage	0.4 V / 10 Ohm	0.4 V / 6 Ohm	3 V / 3 Ohm
DC resistance	280 ±20 Ohm	260 ±20 Ohm	117 ±10 Ohm
Protection level	7.5 Vs	7.5 Vs	3.0 Vs
Insulation resistance	at 500 V DC > 100 MOhm (between core and output connections)		
Position of installation	Indoor usage (any mounting position)		
Ambient temperature	-20 ... +50 °C		
Storage temperature	-30 ... +90 °C, rel. humidity <85 % (no condensation)		

Split core operating current transformer up to 300 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	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	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	0.2	15.03.095
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 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



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