

Voltage transformer

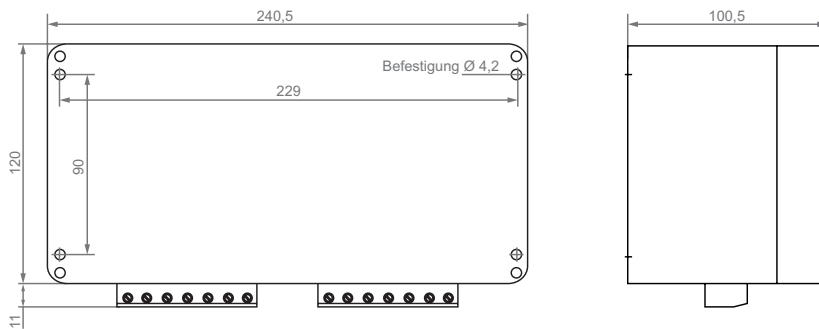
Powerful and precise

- 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

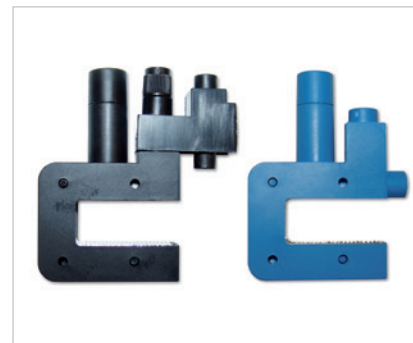


Fig.: ZK4S and ZK4B



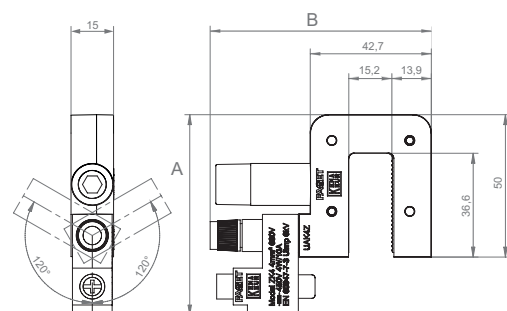
Fig.: Insulated tool ZK4R



Dimension diagrams

All dimensions in mm

ZK4S-ZK4B



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 ²)	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

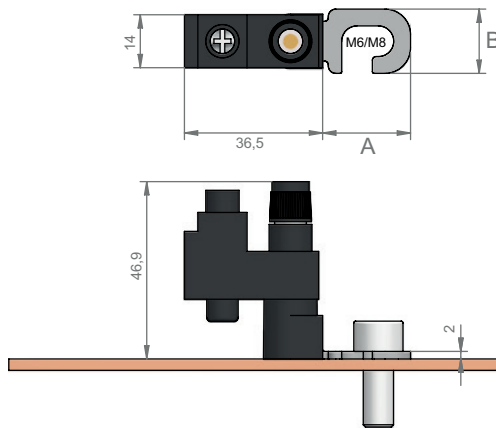
- Fused voltage tap for measurement purposes
- Simple installation underneath existing fastening points, directly on the current bus bar
- Compact housing
- Delivered with a 5 x 25 mm, 2 A, 450 V, F, 70 kA fuse



Dimension diagrams

All dimensions in mm

ZK4M6-M8



Technical data

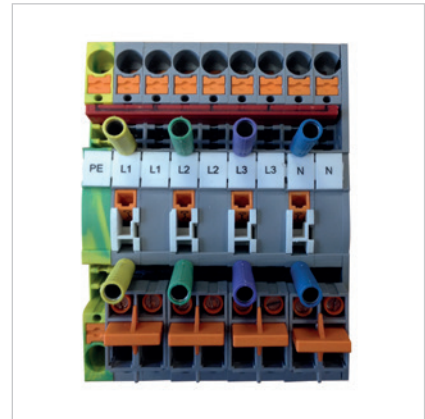
Environmental conditions	
Installation location	Indoor usage (suitable for copper rails)
Ambient temperature range	-10 ... +55 °C
Relative humidity	5 to 85 % (no thawing)
Protection class	IP20 (basic insulation)
Application conditions	
Standard	IEC 60947-7-3
Maximum operating voltage	400 V ~
Test voltage	3 kV / 50 Hz
Surge voltage	6 kV 1.2 / 50 µs
I _{max}	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 ²)	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

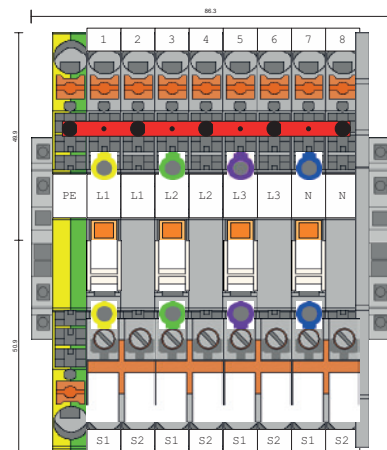
Modular and reliable

- 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 ²
"f" + "e" diameter	0.5 ... 10 mm ²
"f" diameter with AEH	0.5 ... 6 mm ²
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 ²)	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	15.07001

Humidity and temperature sensor JFTF-I

High-precision and reliable measurement

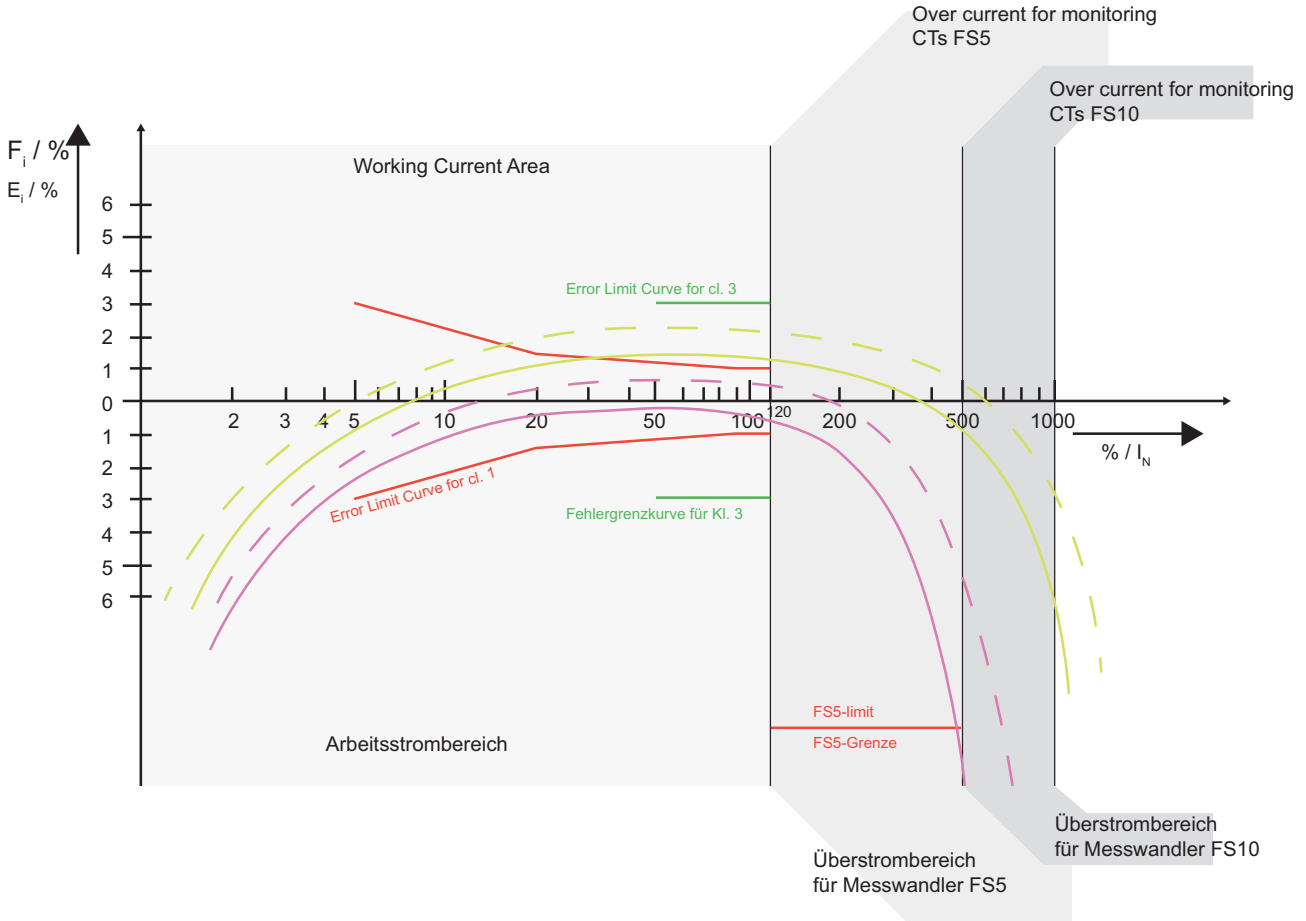
- For the measurement of relative humidity and temperature of the ambient air
- Intended for the measurement of unpolluted, non-condensing air without any positive or negative pressure
- High measurement accuracy
- A sintered filter protects the sensor from external contaminants
- The sensors themselves 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"> • With current output (2-wire system) 4 ... 20 mA • Operating voltage 15 ... 36 V DC, depending on total apparent load • Relative humidity output 4 ... 20 mA corresponding to 0... 100 %, Load resistance 200 ... 500 Ω • Temperature output 4 ... 20 mA corresponding to -20... +80 °C Load resistance 200 ... 500 Ω • Current consumption max. 40 mA 	JFTF-I	15.06.074

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