

Measuring current transformer type W...

Measuring current transformer type W...-8000



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Measuring current transformer type W...-8000



Measuring current transformer W60 - W60-8000



W20 - W20-8000 on DIN rail

Device features

Measuring current transformer W...

- for residual current monitoring systems of the RCMS460 / 490 and RCMS470 series
- for residual current monitors of the RCM420, RCM460 and RCM470 series
- for insulation fault location systems of the EDS460 / 490 and EDS470 series

Measuring current transformer W...-8000

- for insulation fault evaluator EDS473(E)-12, EDS474(E)-12, EDS461 and EDS491

Product description

The measuring current transformers of the W... and W...-8000 series are high-sensitive transformers which in combination with residual current monitoring devices and evaluators of the RCM or RCMS series convert AC currents into evaluable measurement signals.

In combination with insulation fault location systems, the current transformers are suitable for insulation fault location in IT systems. The current transformers measure the test current generated by the insulation fault test device PGH or by an A-ISOMETER IRDH. In combination with insulation fault evaluators of the EDS series, the test current is converted into evaluable measurement signals. The connection to the respective devices is via a two-wire cable.

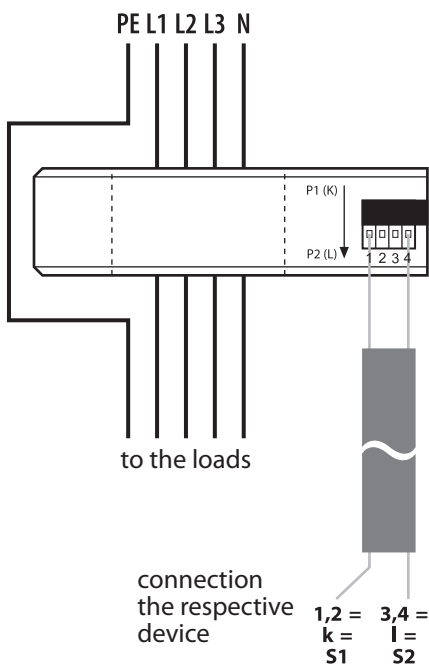
Standards

The measuring current transformers of the W... and W...-8000 series comply with the requirements of IEC 60044-1.

Installation instruction

- Make sure that all current-carrying leads are passed through the measuring current transformer.
- Do not pass shielded conductors through the measuring current transformer.
- Never pass a PE conductor through the measuring current transformer!

Wiring diagram

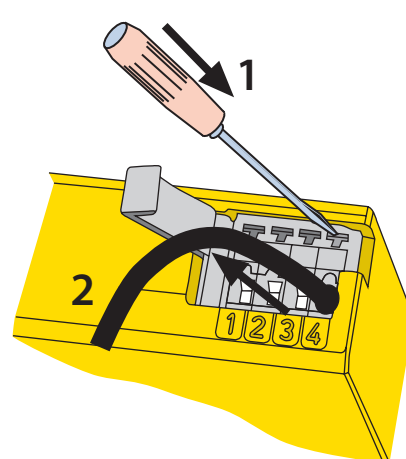
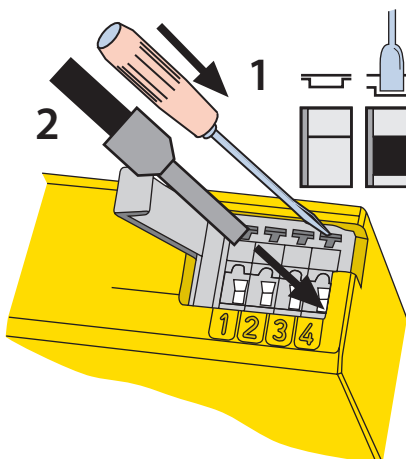
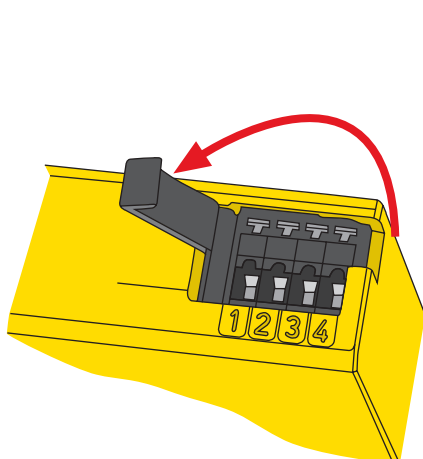


Measuring current transformer W...

Connection to the respective residual current monitoring system of the RCMS series, residual current monitors of the RCM series or insulation fault location systems of the EDS series

Measuring current transformer W...-8000

Connection to the respective insulation fault evaluator EDS473(E)-12, EDS474(E)-12, EDS461 and EDS491



Technical data
Insulation coordination acc. to IEC 60664-1 / IEC 60664-3

Rated voltage	800 V
Rated impulse voltage / pollution degree	8 kV / III

CT circuit W...

Rated primary residual current	10 A
Rated secondary residual current	0.0167 A
Rated transformation ratio K_n	10 / 0.0167 A
Rated burden	180 Ω
Rated output	0.05 VA
Frequency range	42 Hz...3 kHz
Rated continuous thermal current I_{cth}	40 A
Rated short-time thermal current I_{th}	60 x I_{cth} = 2.4 kA / 1 s
Rated dynamic current I_{dyn}	2.5 x I_{th} = 6.0 kA / 40 ms

CT circuit W...-8000

Rated primary residual current	1 A
Rated secondary residual current	0.000125 A
Rated transformation ratio K_n	1 / 0.000125 A
Rated burden	2400 Ω
Rated output	0.0375 VA
Frequency range	42 Hz...3 kHz
Rated continuous thermal current I_{cth}	6 A
Rated short-time thermal current I_{th}	60 x I_{cth} = 0.36 kA / 1 s
Rated dynamic current I_{dyn}	2.5 x I_{th} = 0.9 kA / 40 ms

Environment

Operating temperature	-25 °C...+70 °C
Climatic class acc. to IEC 60721	
Stationary use (IEC 60721-3-3)	3K5 (except condensation and formation of ice)
Transport (IEC 60721-3-2)	2K5 (except condensation and formation of ice)
Long-time storage (IEC 60721-3-1)	1K5 (except condensation and formation of ice)
Classification of mechanical conditions IEC 60721	
Stationary use (IEC 60721-3-3)	3M4
Transport (IEC 60721-3-2)	2M2
Long-time storage (IEC 60721-3-1)	1M3

Connection

Type of connection	cage clamp spring terminal
rigid / flexible / AWG	0.08...2.5 / 0.08...2.5 mm ² / 28...12 AWG
Stripping length	8...9 mm

Connection EDS, RCM(S), CT

Single wire ≥ 0.75 mm ²	0...1 m
Single wire, twisted ≥ 0.75 mm ²	0...10 m
Shielded cable ≥ 0.5 mm ²	0...40 m
Recommended cable (shielded)	J-Y(ST)Y min. 2 x 0.8

Other

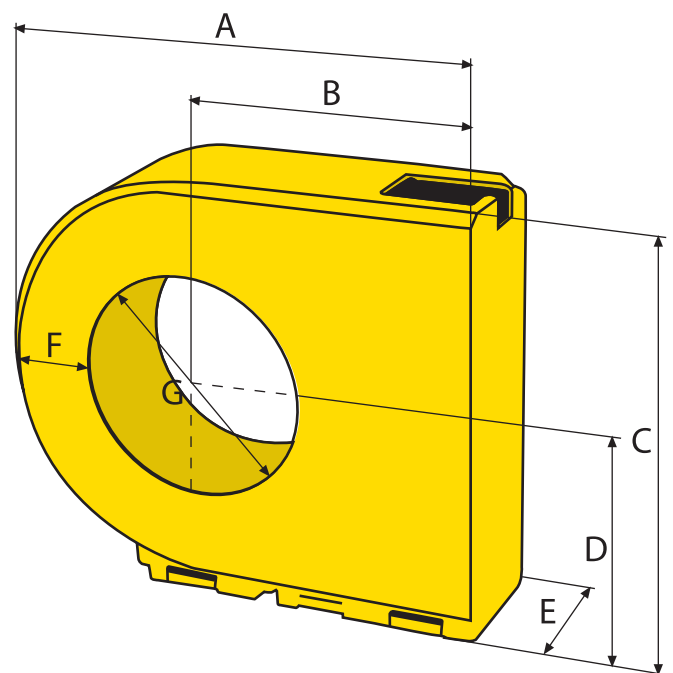
Degree of protection, internal components (DIN EN 60529)	IP40
Degree of protection, terminals (DIN EN 60529)	IP20
Screw fixing	M5 with mounting brackets
Fammability class	UL94V-0
Instruction leaflet	409013
Approval	UL (under consideration)

Ordering details

Type	Inside diameter	Fixing		Art. No.
		DIN rail	Mounting brackets	
W20	20 mm	×	×	B 9808 0003
W35	35 mm	×	×	B 9808 0010
W60	60 mm	×	×	B 9808 0018
W120	120 mm	--	×	B 9808 0028
W210	210 mm	--	×	B 9808 0034
W20-8000*	20 mm	×	×	B 9808 0009
W35-8000*	35 mm	×	×	B 9808 0017
W60-8000*	60 mm	×	×	B 9808 0027

Accessories: snap-on mounting on DIN rail

Type	Width	Art. No.
W20-W35, W20-W35-8000*	43,5 mm	B 9808 0501
W60, W60-8000*	50 mm	B 9808 0502

Dimension diagram

Dimensions

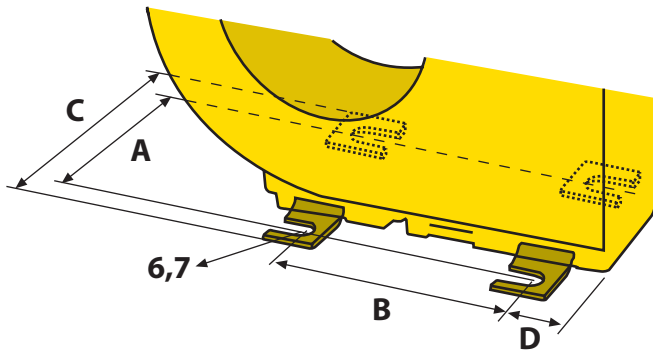
Type	A	B	C	D	E	F	G	Weight
W20	76,4	50	56,3	29,8	30	16,4	ø 20	0,13 kg
W35	99,5	62	79,2	41,7	30	20	ø 35	0,175 kg
W60	135	79	116,4	60,4	37	24	ø 60	0,315 kg
W120	210	116,5	191,5	98	37	33,5	ø 120	0,96 kg
W210	323	173	304,5	154,5	45	45	ø 210	2,9 kg
W20-8000*	76,4	50	59	29,8	30	16,4	ø 20	0,15 kg
W35-8000*	99,5	62	85	41,7	30	20	ø 35	0,205 kg
W60-8000*	135	79	119	60,4	37	24	ø 60	0,355 kg

All dimensions are given in mm

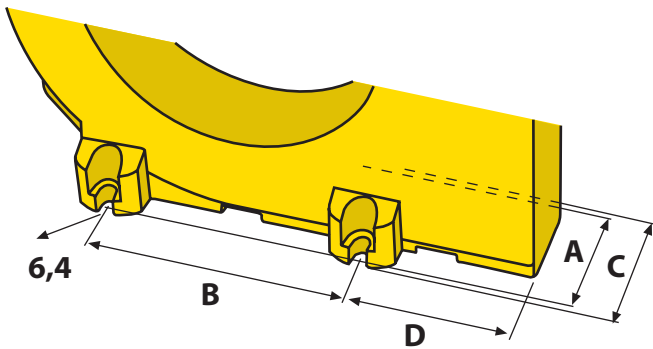
* For insulation fault location systems of the EDS461/491 and EDS473/474 series

Fixing

Screw fixing with mounting brackets for W20, W35, W60 and W20-8000, W35-8000, W60-8000



Screw fixing for W120, W210

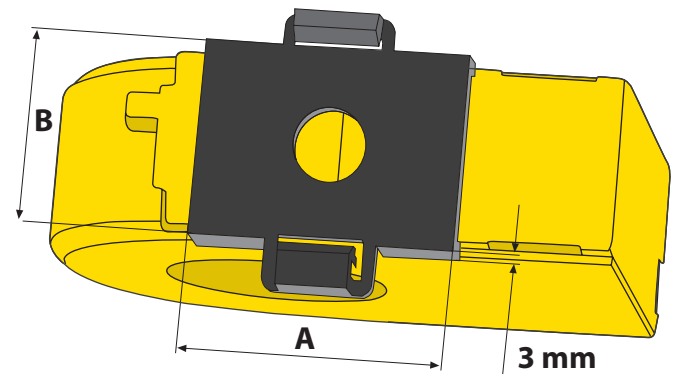
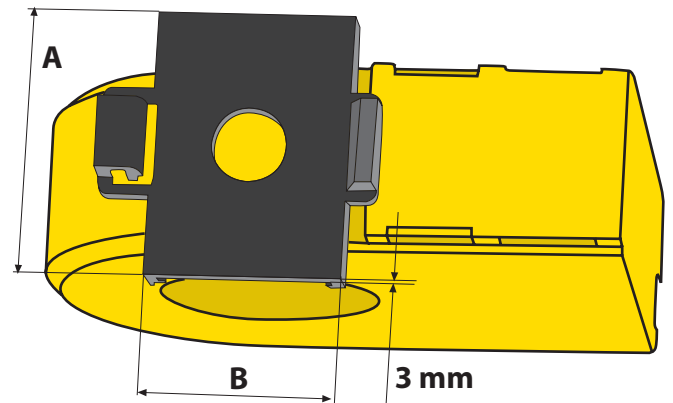


Dimensions screw fixing

Type	A	B	C	D
W20/W20-8000 (fixing with 2 mounting brackets, diagonal)	47	31,4	63	18,6
W35/W35-8000 (fixing with 2 mounting brackets diagonal)	47	49,8	63	12,1
W60/W60-8000 (fixing with 4 mounting brackets)	54	66	70	17,7
W120	51	103	60,6	65
W210	59	180	68,8	83

All dimensions are given in mm

With snap-on mounting on DIN rail, for vertical or horizontal position, for W20, W35, W60 and W20-8000, W35-8000, W60-8000



Dimensions snap-on mounting

Type	A	B
W20/W20-8000	43,5	32
W35/W35-8000	43,5	32
W60/W60-8000	50	39

All dimensions are given in mm



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