

Measuring current transformers of the W...B series



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Measuring current transformer W60B



W35B on DIN rail

Device features

 for AC/DC sensitive residual current monitors of the series RCMA470 (W35B, W60B) RCMA471 (W120B, W210B)

Approvals





Product description

Measuring current transformers of the W...B series are highly sensitive measuring current transformers which measure AC and DC currents and convert them into evaluable measurement signals, in combination with residual current monitors of the RCMA470, RCMA471 series.

Connection to the respective devices is via a four-wire cable.

Standards

Measuring CTs W...B comply with the requirements of IEC 61869-1.

Installation instructions

- Make sure that all live conductors are routed through the measuring current transformer
- · Do not route shielded conductors through the measuring current transformer
- As a general principle, the PE conductor und low-resistance conductor loops must not be passed through the measuring current transformer! Otherwise the applied AC/DC sensitive measurement technique can result in high currents being induced into the conductor loop.

Wiring diagram



Connection the respective residual current monitor of the series: RCMA470: W35B, W60B; RCMA471: W120B, W210B





Technical data

Connection Type of connection

Stripping length

Screw mounting

Flammability class

Documentation number

Other

rigid/flexible/conductor sizes

Single wire \geq 0.75 mm²

Connection RCMA47...– Measuring current transformer

Degree of protection, internal components (IEC 60529)

Degree of protection, terminals (IEC 60529)

Rated insulation voltage	800 \
Rated impulse voltage/pollution degree	8 kV/3
CT circuit	
Rated primary residual current	37
Rated continuous thermal current Icth	40 /
Rated short-time thermal current /th	$60 \text{ x} I_{\text{cth}} = 2.4 \text{ kA}/1$
Rated dynamic current / _{dyn}	$2.5 \text{ x} /_{\text{th}} = 6.0 \text{ kA} / 40 \text{ m}$

Operating temperature	- 25…+ 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 ic	
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	

Ordering information

Befestigung	Inside diameter	Туре	Art. No.
screw fixing,	35 mm	W35B	B 9808 0013
DIN rail	60 mm	W60B	B 9808 0021
screw fixing	120 mm	W120B	B 9808 0031
	210 mm	W210B	B 9808 0037

Accessories

Bezeichnung	nung For device Width		Art. No.	
	W35B	43.5 mm	B 9808 0501	
snap-on mounting	W60B	50 mm	B 9808 0502	

Selection list

cage clamp spring terminal

8...9 mm

0...10 m

IP40

IP20

UL94V-0 D00075

0.08...2.5/0.08...2.5 mm² (AWG 28...12)

fillister head screw M5 acc. to DIN7985

Туре	RCMA470	RCMA471	Response range I∆n
W35B		-	30 mA3 A
W60B		-	30 mA3 A
W120B	-		100 mA3 A
W210B	-		300 mA3 A

Dimension diagram

A A		
B		
F		
dt		- C
	D	
	E	

Dimenstions (mm)								
Туре	A	B	C	D	E	F	G	Weight
W35B	99,5	62	79,2	41,7	30	20	ø 35	0,19 kg
W60B	135	79	116,4	60,4	37	24	ø 60	0,31 kg
W120B	210	116,5	191,5	98	37	33,5	ø 120	0,805 kg
W210B	323	173	304,5	154,5	45	45	ø 210	1,68 kg
Tolerance: \pm 0,5 mm								

Mounting details

Screw mounting with mounting brackets: W35B, W60B



Screw mounting: W120B, W210B



Snap-on mounting on DIN rail, for vertical or horizontal mounting: W35B, W60B



Dimensions (mm)							
Type A B C D							
W35B (fixing with two mounting brackets, diagonally)	49	49.8	65	12.1			
W60B (fixing with two mounting brackets)	56	66	72	17.7			
W120B (fixing with four mounting brackets)	51	103	60.6	65			
W210B (screw mounting)	59	180	68.6	83			

Dimensions (mm)				
Туре	A	B		
W35B	43.5	32		
W60B	50	39		

Tolerance for screw mounting with mounting brackets: \pm 1.5 mm

Installation instructions

- Do not pass shielded cables through the measuring current transformer.
- As a general principle, the PE conductor and low-resistance conductor loops must not be passed through the measuring current transformer!





Never pass a PE conductor through the measuring current transformer



Make sure that all currentcarrying leads are passed through the measuring current transformer



Bending a lead is only permissible with a certain distance to the current transformer



The leads must be aligned with the centre of the measuring current transformer



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