

Measuring current transformers of the W...B series



Measuring current transformer W60B



W35B on DIN rail

Device features

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

Approvals



Product description

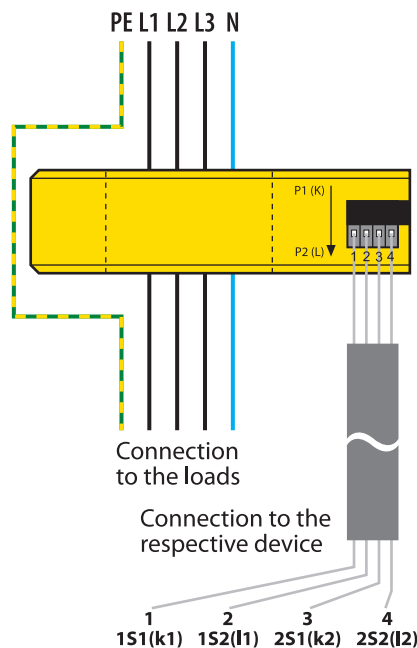
Measuring current transformers of the W...B series are highly sensitive measuring current transformers which measure AC and DC currents and convert them into evaluable measurement signals, in combination with residual current monitors of the RCMA470, RCMA471 series.

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

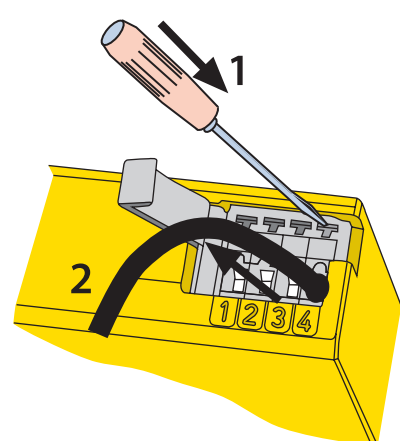
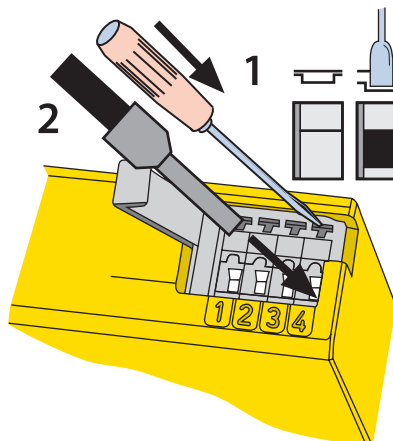
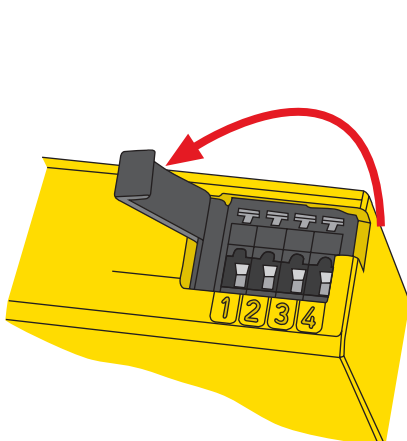
Installation instructions

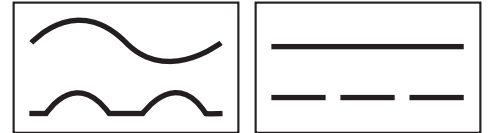
- Make sure that all live conductors are routed through the measuring current transformer.
- Do not route shielded conductors through the measuring current transformer.
- Never route a PE conductor through the measuring current transformer!

Wiring diagram



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





Technical data

| | |
|--|---|
| Insulation coordination acc. to IEC 60664-1 / IEC 60664-3 | |
| Rated insulation voltage | 800 V |
| Rated impulse voltage / pollution degree | 8 kV / III |
| CT circuit | |
| Rated primary residual current | 30 mA...3 A |
| Rated continuous thermal residual current I_{cth} | 40 A |
| Rated short-time thermal residual current I_{th} | $60 \times I_{cth} = 2.4 \text{ kA} / 1 \text{ s}$ |
| Rated dynamic current I_{dyn} | $2.5 \times I_{th} = 6.0 \text{ kA} / 40 \text{ ms}$ |
| Environmental conditions | |
| 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 / conductor sizes | 0.08...2.5 / 0.08...2.5 mm ² / 28...12 AWG |
| Stripping length | 8...9 mm |
| Connection RCMA47... – Measuring current transformer | |
| Single wire $\geq 0.75 \text{ mm}^2$ | 0...10 mm |
| Other | |
| Degree of protection, internal components (IEC 60529) | IP40 |
| Degree of protection, terminals (IEC 60529) | IP20 |
| Screw mounting | M5 with mounting brackets |
| Flammability class | UL94V-0 |
| Standards | IEC 60044-1 |
| Instruction leaflet | BP409016 |
| Approval | UL under consideration, GOST |

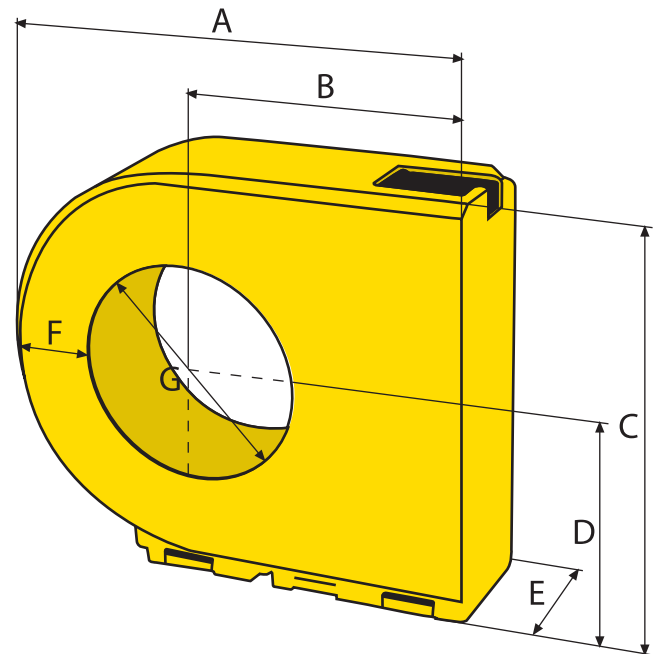
Ordering information

| Type | Inside diameter | Fixing | | Art. No. |
|-------|-----------------|----------|------------------|-------------|
| | | DIN rail | Mounting bracket | |
| W35B | 35 mm | × | × | B 9808 0013 |
| W60B | 60 mm | × | × | B 9808 0021 |
| W120B | 120 mm | -- | × | B 9808 0031 |
| W210B | 210 mm | -- | × | B 9808 0037 |

Accessories

| Type | Width | Art. No. |
|---------------------------|---------|-------------|
| Snap-on mounting for W35B | 43.5 mm | B 9808 0501 |
| Snap-on mounting for W60B | 50 mm | B 9808 0502 |

Dimension diagram



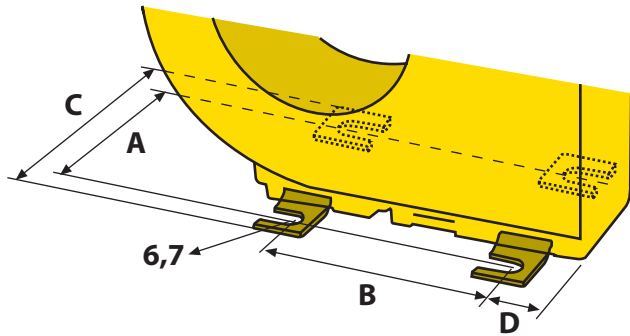
Dimensions

| Type | 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 |

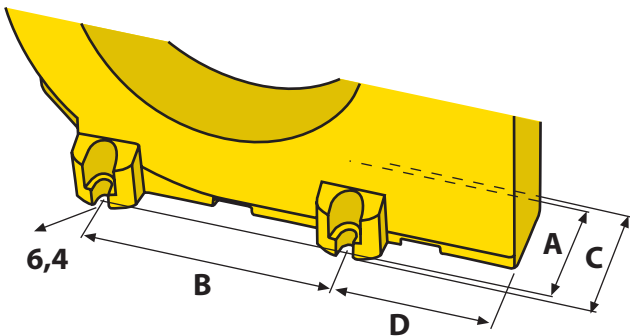
Dimensions in mm

Mounting details

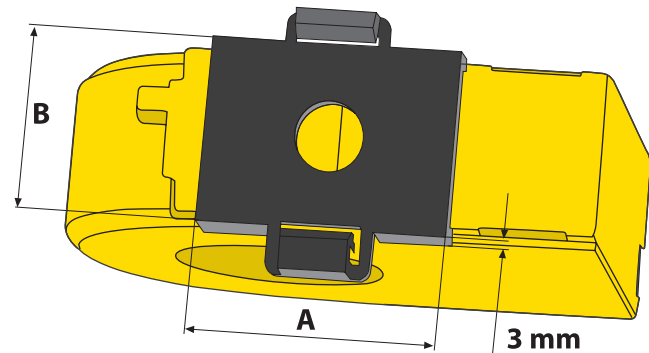
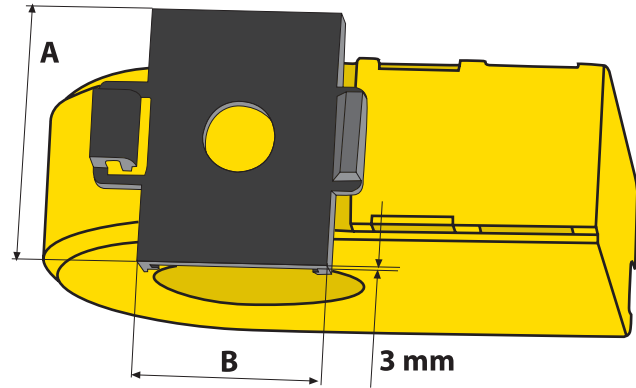
Screw mounting with mounting brackets: W35B, W60B



Screw mounting: W120B, W210B



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



Dimensions screw mounting

| Type | A | B | C | D |
|--|----|------|------|------|
| W35B (fixing with two mounting brackets, diagonally) | 47 | 49.8 | 63 | 12.1 |
| W60B (fixing with four mounting brackets) | 54 | 66 | 70 | 17.7 |
| W120B screw mounting | 51 | 103 | 60.6 | 65 |
| W210B screw mounting | 59 | 180 | 68.6 | 83 |

Dimensions in mm

Dimensions snap-on mounting

| Type | A | B |
|------|------|----|
| W35B | 43.5 | 32 |
| W60B | 50 | 39 |

Dimensions in mm

Selection list

| Type | RCMA470 | RCMA471 |
|-------|---------|---------|
| W35B | × | -- |
| W60B | × | -- |
| W120B | -- | × |
| W210B | -- | × |

4.5