

Measuring current transformer type WR...



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Measuring current transformer WR115x305

Device features

- 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

Product description

The measuring current transformers of the WR... series are high-sensitive transformers of rectangular type, which in combination with residual current monitors 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.

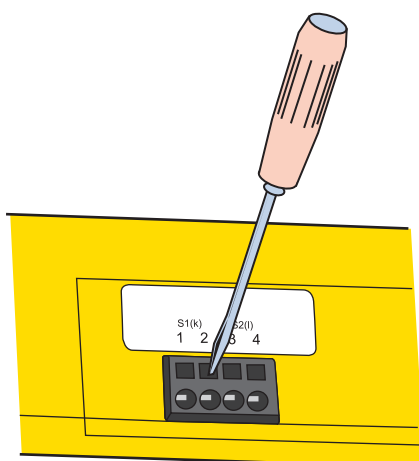
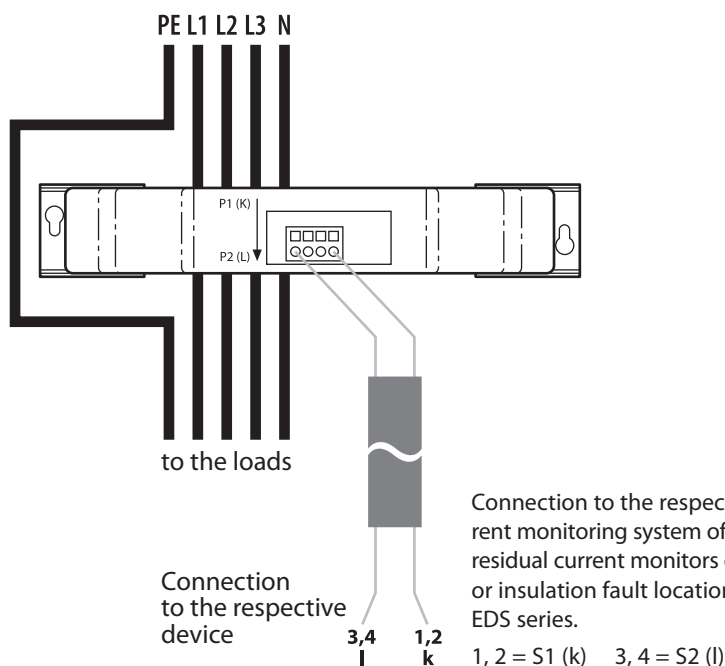
Standards

The measuring current transformers of the WR... series comply with the requirements of IEC 60044-1.

Installation instructions

- 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



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

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

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 acc. to 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) measuring current transformer

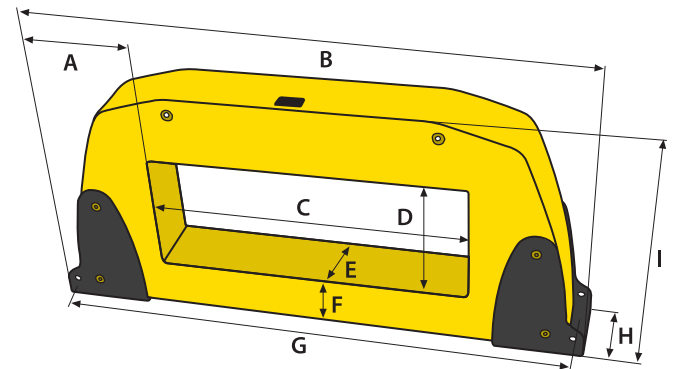
Single wire ≥ 0.75 mm ²	0...1 m
Einzeldraht verdrillt $\geq 0,75$ mm ²	0...10 m
Shielded cable ≥ 0.5 mm ²	0...40 m
Recommended cable (shielded)	J-Y(ST)Y min. 2 x 0.8

Other

Degree of protection, internal components (DIN EN 60529)	IP40
Degree of protection, terminals (DIN EN 60529)	IP20
Screw fixing	M5 with mounting brackets
Flammability class	UL94V-0
Instruction leaflet	409014
Approval	UL (under consideration)

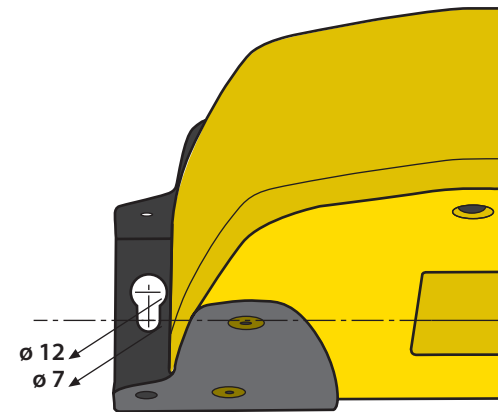
Ordering information

Type	Inside dimensions	Fixing Mounting brackets	Art. No.
WR70x175	70x175 mm	×	B 9808 0609
WR115x305	115x305 mm	×	B 9808 0610

Dimension diagram

Dimensions

Type	A	B	C	D	E	F	G	H	I	Weight
WR70x175	90.75	357.5	176	71	56.5	51.5	337.5	61	190	2.96 kg
WR115x305	110	526	306	116	67	55.5	506	72.5	242.5	5.56 kg

All dimensions are given in mm

Fixing




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