

WGB

Type B earth leakage transformers



Description

The earth leakage transformers of the **WGB** range are especially designed to protect and monitor B-type loads (IEC 60755), and are suitable for measuring AC, DC and pulsating leakage currents.

The range of WGB differential transformers is designed for use with the **RGU-100B** or **CBS-400B** electronic relays, which give them the associated trip current (sensitivity).

The transformers have an Ethernet port to connect them using this type of cable with the relay, which transmits all the readings and other information on the protected or monitored line.

Applications

Earth leakage protection or monitoring of single-phase or three-phase electric loads in alternating current with direct current components, with frequencies of up to 1 kHz, such as:

- Variable speed drives
- UPS
- Photovoltaic Facilities
- Electrical Vehicle Charging
- Active filters.

Technical specifications

Electrical characteristics	Auxiliary power supply	230 Vac \pm 15% 50/60 Hz by cable with an RJ-45 connector using the RGU-100B or CBS-400B relay
	Consumption	15 VA
	Installation category	CAT III
Electric insulation	Safety	IEC 61869-1 / IEC 61869-3
	Maximum operating voltage	720 kV
	Impulse voltage / pollution	3 kV / III
Measuring circuit	Measurement characteristics according to IEC 60755	Type B
	Nominal frequency	0... 1000 Hz
	Measurement accuracy	30 mA \rightarrow \pm 2 mA 100 mA \rightarrow \pm 5 mA 300 / 500 mA \rightarrow \pm 20 mA 1 / 3 A \rightarrow \pm 200 mA
Time behaviour	Response time for 1 x $I_{\Delta n}$	\leq 180 ms
	Response time for 5 x $I_{\Delta n}$	\leq 30 ms
Mechanical characteristics	LED Indicator	Power supply voltage Trip Channel number
	Connection type	RJ-45 Port
	Enclosure	Self-extinguishing V0 plastic
	Colour	RAL 7035
	Assembly	Panel (includes accessory) DIN (optional accessory)
Environmental characteristics	Humidity	Up to 95%
	Maximum altitude	2000 masl
	Operating temperature	-10...+55 °C
Standards	IEC 62020, IEC 60755, IEC 60947-2-M, IEC 61869-2	

* The RGU-100B + WGB or CBS-400B + WGB set guarantees a time of \leq 30 ms for 5 x $I_{\Delta n}$, so in combination with the circuit breaker, a time \leq 40 ms must be ensured to comply with IEC-60947-2-M.

RGU-100B

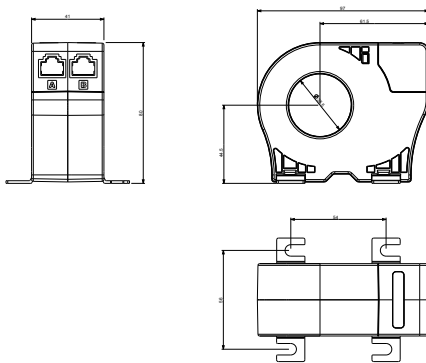
Type-B earth leakage protection and monitoring relay

References

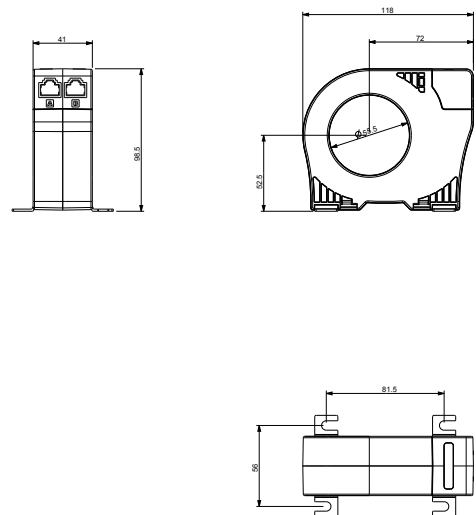
Type	Code	Useful cross-section	$I_{\Delta n}$	Weight
WGB-35	P11B52.	35	0.03... 3 A	230 g
WGB-55	P11B53.	55	0.03... 3 A	360 g
WGB-80	P11B54.	80	0.03... 3 A	570 g
WGB-110	P11B55.	110	0.03... 3 A	750 g
PA-WGB	P19924.	DIN Rail Adapter for WGB transformers		

Dimensions

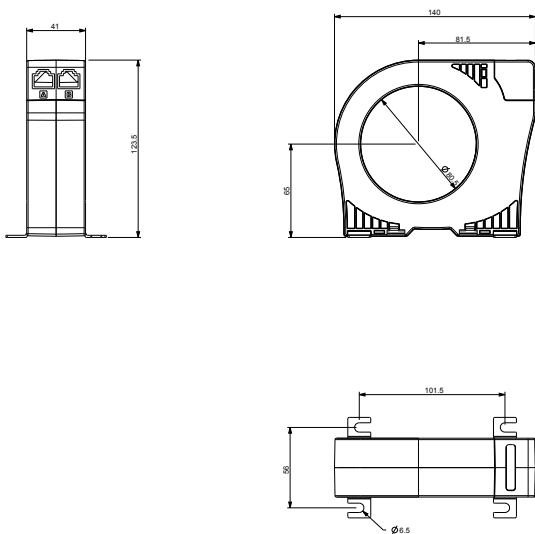
WGC-35



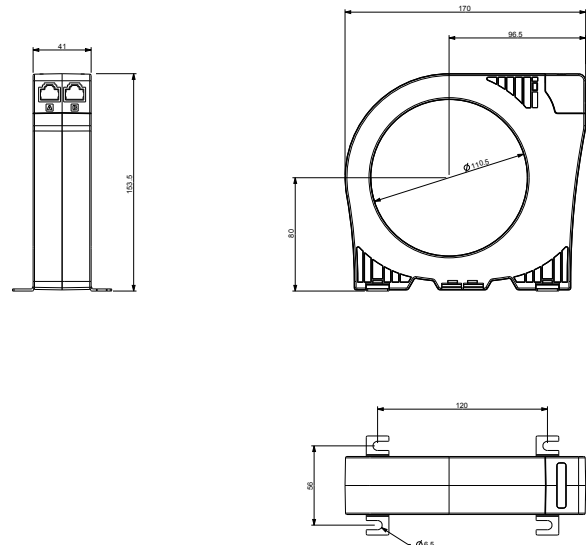
WGC-55



WGC-80



WGC-110



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Connections

