

# WGBU

Transformer with built-in earth leakage relay



## Description

The **WGBU** Series is a compact earth leakage protection system. It is composed of a toroidal transformer with a built-in earth leakage relay.

- Multi-range electronic relay
  - The sensitivity can be adjusted to 0.03 ... 3 A
  - Trigger delay of 0.02 ... 1 ws, adjustable
- Type A relay with high frequency current filtering and high immunity. Monitoring in true root mean square (TRMS).
- LED indicators:
  - Grid connection LED
  - Pre-alarm and trigger LED: 1 flash every 2 s, leak between 25 and 50 % of the sensitivity selected; 1 flash every 1 s, leak between 50 and 75 % of the sensitivity selected; 1 flash every 0.5 s, leak exceeding 75 % of the sensitivity selected; permanently lit, trigger of the earth leakage protection.

## Application

The **WGBU** series offers a reliable earth leakage protection, with simpler cabling and savings in the assembly time. In addition, installation is very simple, thanks to its compact dimensions.

## Features

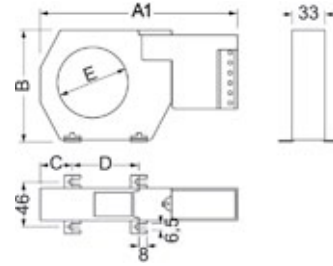
Earth leakage	Protection
Class	A superimmunized
Measurement	True root mean square (TRMS)
Sensitivity	0.03 ... 3 A
Delay	0.02 ... 1 s
Earth leakage transformer	Built-in transformers of the <b>WG</b>
Test and Reset	With built-in buttons, T & R
Associated circuit breaker	Contact or Circuit breaker + trigger coil
LED indicator	<ul style="list-style-type: none"> <li>• Power supply voltage</li> <li>• Trip due to leakage</li> <li>• Pre-alarm</li> </ul>
Remote Control (inputs)	External Test Option
Circuit breaker control	Through an NO/NC switched relay, depending on the connection with the circuit breaker
Features	
Auxiliary power supply	230 Vac ( $\pm 20\%$ ) 50 / 60 Hz
Output contacts	250 Vac, 6 A
Operating temperature	-10 ... +50 °C
Construction features	
Fixing	DIN Panel / Rail
Dimensions	Depending on the type
Weight	Depending on the type
Degree of protection	IP 20 Terminals, IP 41 back panel
Standards	
IEC 60947-2, IEC 60755, IEC 62020, IEC 61008	

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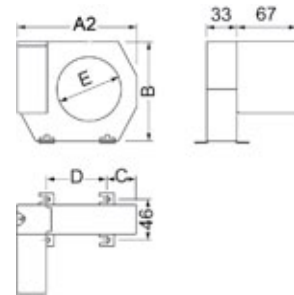
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## Dimensions

WGBU



WGBU-90



Type	A1	A2	B	C	D	E
WGBU-35 (A1) / WGBU-90-35 (A2)	166	100	79	26	48,5	35
WGBU-70 (A1) / WGBU-90-70 (A2)	196	130	110	332	66	70
WGBU-105 (A1) / WGBU-90-105 (A2)	236	170	146	38	94	105
WGBU-140 (A1) / WGBU-90-140 (A2)	286	220	196	48,5	123	140
WGBU-210 (A1) / WGBU-90-210 (A2)	365	299	284	69	161	210

## References

Weight (g)	Useful diameter (mm)	$I_n$ (A)	Delay (s)	Type	Code
380	35 Ø	0,03 ... 3	0,02 ... 1	WGBU-35	P16011
474	70 Ø	0,03 ... 3	0,02 ... 1	WGBU-70	P16012
744	105 Ø	0,03 ... 3	0,02 ... 1	WGBU-105	P16013
1422	140 Ø	0,03 ... 3	0,02 ... 1	WGBU-140	P16014
2240	210 Ø	0,03 ... 3	0,02 ... 1	WGBU-210	P16015
380	35 Ø	0,03 ... 3	0,02 ... 1	WGBU-90-35	P16021
474	70 Ø	0,03 ... 3	0,02 ... 1	WGBU-90-70	P16022
744	105 Ø	0,03 ... 3	0,02 ... 1	WGBU-90-105	P16023
1422	140 Ø	0,03 ... 3	0,02 ... 1	WGBU-90-140	P16024
2240	210 Ø	0,03 ... 3	0,02 ... 1	WGBU-90-210	P16025

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A.

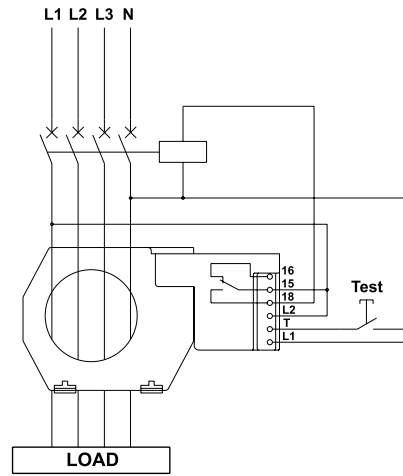
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## Connections



### Shunt coil



### Undervoltage coil

