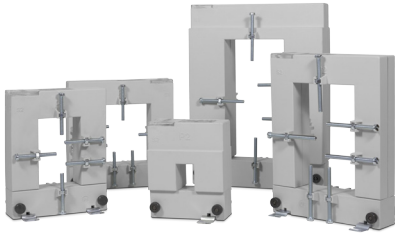


TP-WGC

Split-core earth leakage transformers



Description

The **TP-WGC** series features split-core earth leakage transformers for the earth leakage protection of electrical installations or machines. These transformers are used to control and monitor the leakage currents of an electrical installation and are recommended as a temporary solution for punctual earth leakage protection in parts of the electrical installation that are finished but, due to an error or lack of foresight, do not have the normal protection installed.

TP-WGC transformers have been designed for installation inside an electrical panel or enclosure, mounted with screws or cable ties, facilitating their installation in existing installations.

The earth leakage transformers of the **TP-WGC** series have been designed to operate with the relays of the **WGC** series. The sensitivity (trip current) of the transformer-relay assembly is established by the associated relay. The relays associated with the **TP-WGC** transformer must be programmed with a minimum sensitivity of 300 mA for earth leakage protection.

Technical features

Electrical insulation	Safety	IEC-60664-1 / IEC-60664-3
	Maximum assigned service voltage	720 V
	Assigned impulse voltage / pollution	3 kV / III
Measurement circuit	Range of residual current intensity to be measured in the primary winding	250 mA...30 A
	Nominal current of the secondary winding	60 mA
	Nominal transformation ratio	$K_n = 30/0.06$ A
	Maximum load resistance	480 Ω
	Nominal load, power	0.06 VA
	Accuracy error	$\pm 15\%$
	Working frequency range	45...60 Hz
	Permanent thermal current, I_{cth}	40 A
	Short-circuit thermal current, I_{th}	1.8 kA / 1 s
	Dynamic current, I_{dyn}	4.5 kA/40 ms
Operating conditions	Maximum working voltage	0.72 kV
	Rated insulation voltage	3 kV
	Operating temperature	-10 ... 50 °C
	Relative humidity	95%
	Maximum working height	2,000 m
Mechanical features	Terminal protection	IP 20 IEC 60529
	Housing material / colour	Lexan 923 / RAL 7035
	Self-extinguishing class	UL 94V-0
Connection	Two-wire (S1-S2) connection type	Screw-in terminal (pzl screw)
	Dimensions of rigid/flexible conductors	0.1 to 2.5 mm ² / 27...12 AWG
Connection to protection and measurement devices (RCD, RCM)	Cabling with wire cross-section ≥ 1 mm ²	0...1 m
	Cabling with braided and shielded wire cross-section ≥ 1 mm ²	0...10 m
Safety	Category III - 300 Vac	
Standards	IEC 60044-1	

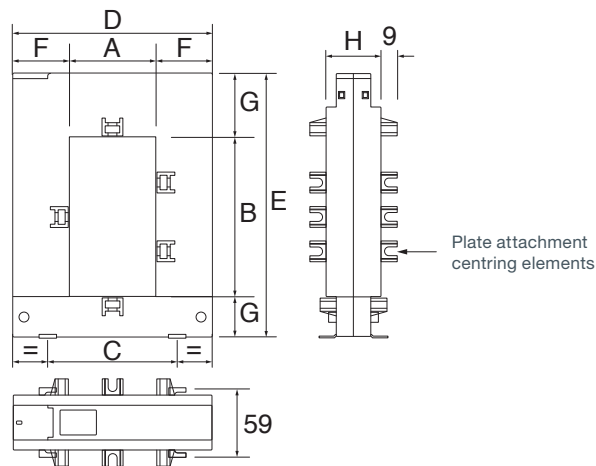
TP-WGC

Split-core earth leakage transformers

References

Type	Code	Internal window (mm)	Weight (g)	I_n (A)
TP-23 WGC	P11111	20 x 30		63
TP-58 WGC	P11121	50 x 80	1	80
TP-88 WGC	P11131	80 x 80	1,3	125 / 160
TP-812 WGC	P11141	80 x 120	1,6	180 / 200
TP-816 WGC	P11151	80 x 160	4,1	225 / 250 / 400

Dimensions



Dimensions (mm)	TP-23 WGC	TP-58 WGC	TP-88 WGC	TP-812 WGC	TP-816 WGC
A	20	50	80	80	80
B	30	80	80	120	160
C	51	78	108	108	120
D	89	114	144	144	184
E	110	145	145	185	245
F	34	32	32	32	52
G	47	32	32	32	47
H	40	32	32	32	52
I	32	32	32	32	38

Note: All types feature attachment centring elements, except for **TP-23 WGC**.