

BDC - 10I

ELECTRONIC POTENTIAL TRANSFORMER

Standards

IEC 61869-11, IEC 60529, IEC 60255-21, IEC 60068-2, IEC 60060-1, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8



Electronic PT

Description

Electronic potential transformers are voltage transducers with high linearity, operating within a range of 10 to 190% of the rated voltage. These transformers do not exhibit traditional problems such as resonance, core polarization, and failures due to high-frequency and high-voltage transients.

The manufacturing matrix of the electronic PT is entirely national, developed by HVEX and manufactured by Brasformer.

Features:

- Identifies faults, sending instant alerts through operational logic;
- With the measured RMS current data and operational status, it recognizes normal operation;
- Detection of permanent and temporary faults.

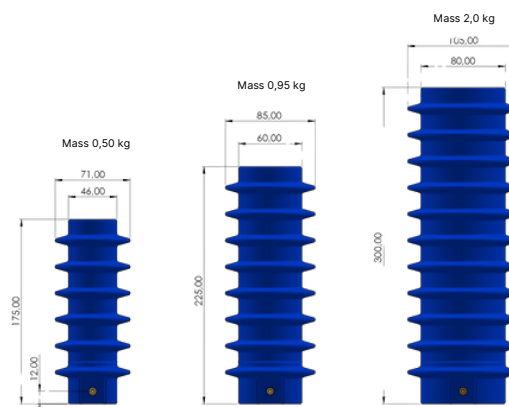
The equipment is easy to install as it is non-intrusive, using a semi-open current transformer for loading and another for current transduction. This can be done using a hot stick on energized networks.

All equipment parameterization is done via the application, available for download on the Play Store.

Operation

Potential Transformers (PTs) are devices that utilize the principle of electrical proportionality in transformer transformation for measurement and protection purposes. PTs are often used as voltage sensors in elements where directly measuring the voltage is not feasible due to its magnitude. The PT establishes a relationship where it receives high voltage and provides a low voltage proportional output from which a reading relative to the high voltage can be extracted.

The advantage of electronic PTs lies in their compatibility as voltage sensor elements for various protection relays. This allows for the integration of voltage readings with control and protection elements, including the parameterization of electrical system protection.



Technical Specifications

Maximum voltage	kV	17,5	24	36
Industrial frequency voltage	kV	34	50	70
Insulation level	kV	95	125	170
Escape line	mm	180	238	321
Frequency	Hz	60	60	60
Capacitance value	pF	80	80	80
Accuracy	%	0,2%	0,3%	3%
Secondary voltage		115/ $\sqrt{3}$		115 V
Power	0,1 VA, for further powers acquire with power amplifier			
Application	Panels, exclusive relays with voltage protection function, or phase voltage differential.			
ANSI	27 V 59 V 87 V			
It features intrinsic protection on the secondary, set at 180 V, preventing overvoltage on the relay.				
Not suitable for electromechanical relays.				
Consult HVEX universal transducer or amplifiers for other applications.				

We provide solutions for improving the efficiency and quality of the energy generation, transmission, and distribution sectors. With a highly specialized team experienced in research, development, and innovation, HVEX in partnership with Brasformer has been developing customized solutions for the Brazilian market. Our wide range of products includes solutions tailored for signal measurement and protection transduction.



Boosting the Innovation



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