ELECTRONIC BURDEN
FOR INSTRUMENT TRANSFORMER
DAC-PBVC-8

DAC-PBVC-8 is a burden device for error test of both instrument voltage transformers (VT) and current transformers (CT).
The device creates the “specified burden” by specifying both the “burden VA” and the “Burden power factor” for VT or CT to be tested.
DAC-PBVC-8, a compact, lightweight and power-saving burden with USB and GP-IB interfaces, can help you to accomplish error tests readily and smoothly.

Features

- Usable for both voltage transformers (VT) and current transformers (CT).
- Allows the setting of perfectly low burdens (zero burdens).
- Allows the setting in increments as small as 0.001 VA to the maximum of 100VA.
- Lead-wire compensation is available as maximum 1 ohm with a four-terminal connection.
- Up to 100 sets of test conditioning parameters can be stored.

Technical Explanation

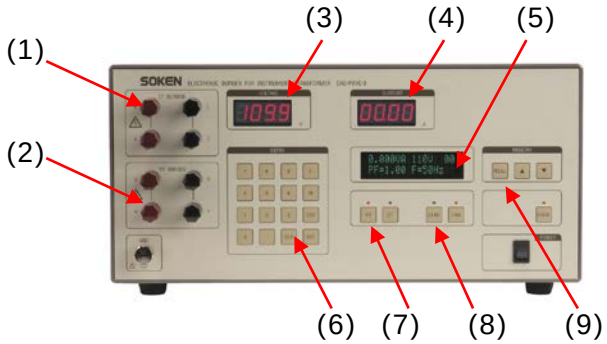
DAC-PBVC-8 is an electronic burden combining the advantages of 2 kinds of method: “real burden method” constructed from resistance and reactance, and “imaginary burden method” created by electronic circuitry (patent no. 3162307). This device allows automatic setting of burden at infinite resolution, though it is difficult for only the conventional real burden method. Because large capacity burdens can be generated using small-capacity electronic burdens, DAC-PBVC-8 has a compact and lightweight body. Furthermore, since the ratio of control capacity becomes small, a stable burden is realized.

Model DAC-PBVC-8
ELECTRONIC BURDEN FOR INSTRUMENT TRANSFORMER

Specifications

Rated Secondary voltage	: VT MODE	: 110/√3V and 110V
Rated Secondary Current	: CT MODE	: 1A and 5A
Test voltage	: VT MODE	: 2 to 120% of the rated Sec. Voltage
	CT MODE	: 1 to 120% of the rated Sec. Current
Burden Power factor	: 0.20(lagging) - 1 - 0.80 (leading)	
Burden VA to be set	: 0.000 to 100.0 VA	
Lead-wire compensation	: 0 to 1.000Ω under CT mode	
Burden setting accuracy	: ±4%, (±10% for 1/10 or less of rating)	
Interface	: USB (2.0/1.1) / GP-IB (IEEE488) *	
	*(simultaneous-use is not possible)	
Test Frequency	: 50/60 Hz	
AC Source	: 100 to 240 VAC ±10%, 50/60Hz	
Power consumption	: About 150VA	
Operating environment	: Temperature 5 to 35℃	
	Humidity 35 to 80%, non-condensing	
Accuracy of voltmeter and ammeter	: ±(3% reading + 3 digits)	
Dimensions	: W430 x H200 x D450mm (Excluding potions)	
Weight	: about 26kg	

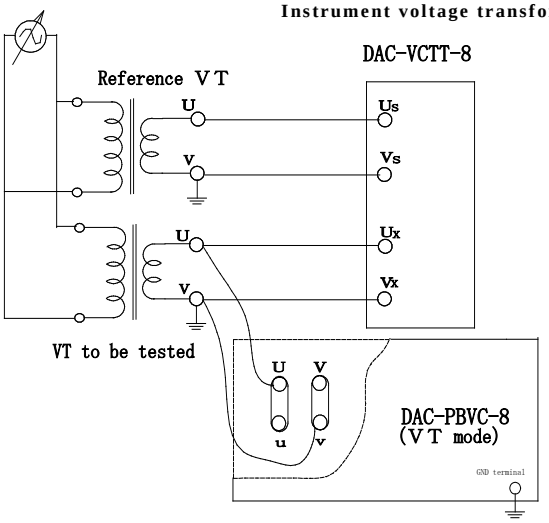
Front Panel



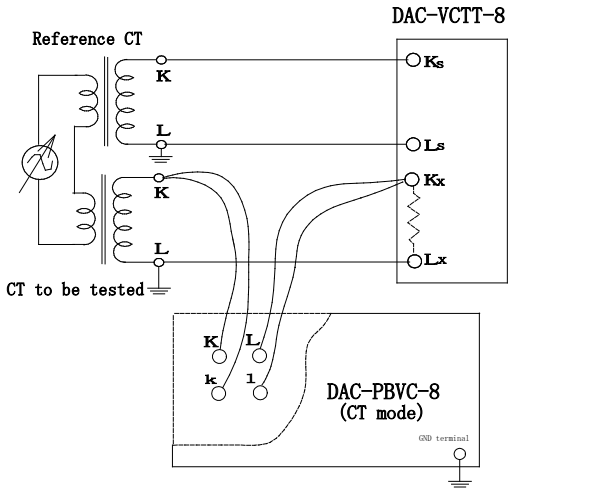
(1) CT Connection terminals
(2) VT Connection terminals
(3) Voltage display
(4) Current display
(5) Setting display
(6) Ten-Key pad
(7) Mode setting
(8) MEAS
(9) Range setting

Connecting diagram

Test equipment for Instrument voltage transformer



Test equipment for instrument current transformer



In this case, only the connection cables of the electronic burden are compensated.

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