masibus
A Sonepar Company

PDV

PDA

Programmable AC Current/ Voltage Transducer

- PDA Current Transducer
- PDV Voltage Transducer

True RMS | Aux. Supply | Long Term Stability | Galvanic Isolation | Mounting

Available In Class 0.2 Accuracy

RoHS

The Masibus PDA / PDV is used to measure and convert AC current or voltage input into a load independent DC current or voltage output signal. Output signal generated is proportional to the root mean square value of the input current or voltage.

It is equipped with two load-independent, galvanically-isolated analogue outputs that can be configured for different input range and output curves.

AC transducer offers an economical and accurate means of current & voltage measurement on systems where transducers are calibrated to true RMS measurement.

AC transducers are having its application to interface with RTUs. Masibus make transducers are also available with dual output option. It provides accuracy class 0.2 with up to 3 KV isolation.

All transducers performs with exceptional accuracy, repeatability and reliability. In addition to being most accurate, our transducers are equally preferred by OEMs/ end users to other makes for their excellent stability over a long period of operation. This world class technology now comes to you at a very competitive price.

Features

- High accuracy class 0.2
- Confirms to IEC 60688
- True RMS measurement
- Long range, site-configurable inputs & outputs
- Onsite selectable output type (DC current / DC voltage)
- Load-independent accuracy on all outputs
- Available in single or dual output type
- Programming port for easy configuration
- Fast response
- Excellent long term stability
- Good isolation & impulse resistance
- Transient protected
- DIN-Rail mounting

Applications

- Generating/transmission distribution stations
- Building management
- Load dispatch center
- Power equipment's OEMs
- HT/LT panels
- Substation automation
- SCADA
- Local and central monitoring systems

TECHNICAL SPECIFICATIONS: AC CURRENT/ VOLTAGE TRANSDUCER

Configuration	Single phase

Input

AC Voltage	
Nominal Input (Un) (PT Secondary)	57.7 V to 415 V
Measuring Voltage Range	0 to 130 % Un
Measurement Method	True RMS
Burden	<0.3VA at Un
PT Ratio	1 to 9999.999 programmable on site
Maximum Overload Voltage	1.3 x Un continuously 2 x Un for 1 s, with up to 10 repetitions at 10 s intervals
AC Current	
Nominal Input (In) (CT Secondary)	1A to 5A
Measuring Current Range	0 to 150 % In
Measurement Method	True RMS
Burden	<0.2VA at In
CT Ratio	1 to 9999.999 programmable on site
Maximum Overload Current	2 x In continuously 20 x In for 1 s, with up to 10 repetitions at 100 s intervals
Frequency	45 to 65Hz

Analogue output

Accuracy Class	0.2
No. of Outputs	2
Output Type	4-20mA, 0-20mA, 0-10V, 0-5V, 1-5V DC
Maximum Load Resistance	≤750 Ω for 20 mA, ≥ 2 k Ω for 10 V (for each output)
Response Time	<500mS
Ripple	<0.4% peak to peak
Usage Group	I

Standards compliance

Standards	Accuracy as per IEC 60688

Auxiliary Power Supply

Power Supply	Universal aux. supply : 85-265VAC, 50/60Hz or 100-300VDC Burden : < 5.5VA (2.2W) DC aux. Supply : 20-60VDC Burden : < 2.2W

Isolation (Withstanding Voltage)
Between primary terminals* and secondary terminals**: **At least 3000 V AC for 1 minute**
Between primary terminals*: **At least 3000 V AC for 1 minute**
Between secondary terminals**: **At least 500 V AC for 1 minute**
* Primary terminals indicate aux power terminals & input terminals.
** Secondary terminals indicate analog O/P-1 and analog O/P-2.
Insulation resistance: 200MΩ or more at 500 V DC between Input/Output/Power/ Case and grounding terminal

Environmental

Operating Temperature	0 to +55℃
Storage Temperature	-40º to 85ºC
Relative Humidity	25-95% non-condensing
Warm up Time	15 minutes
Installation Category	CAT III for < 300V AC
Protection Class	II
Pollution Degree	2
Ingress Protection	Housing : IP40, terminals : IP20

Mechanical

Mounting Type	DIN-Rail
Dimension (in mm)	71H x 61W x 112D
Case Material	ABS
Weight	0.4 Kg
Connector Type	Metal screw
Conductor Size for Terminals	≤ 4 mm^2

Communication Ports

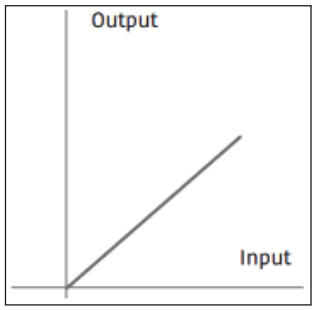
Mini USB type: For on-site configuration

Configuration Software Tool

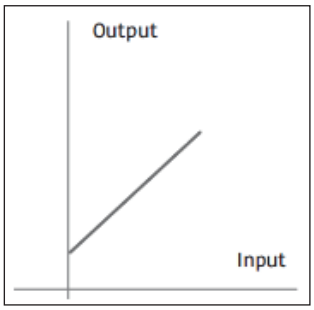
mMFT
For on-site configuration of measurement inputs, output and online parameter reading. It can be freely downloaded from www.masibus.com

INPUT - OUTPUT SIGNAL CURVES

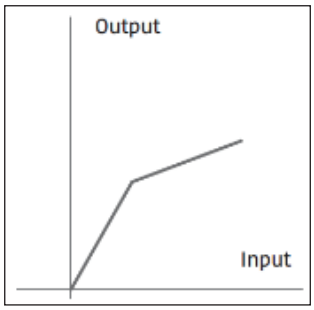
Curve A
Linear



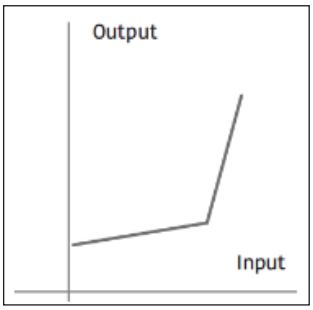
Curve B
Linear with Live Zero



Curve C
Compressed Upper Region



Curve D
Compressed Lower Region



Ordering Code

Model	Auxiliary Power Supply		Analogue Output			
			Output Type-1		Output Type-2	
PDA	U1	85-265VAC, 50/60Hz or 100-300VDC	1	4-20mA	N	None
PDV	U2	20-60VDC	2	0-20mA	1	4-20mA
			3	0-5V	2	0-20mA
			4	1-5V	3	0-5V
			5	0-10V	4	1-5V
					5	0-10V

Cable Accessory (Extra Cost)	
Part No.	Description
TT7SCC	Configuration cable

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