masibus
A Sonepar Company

PDH Programmable Frequency Transducer

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

Available In Class 0.2 Accuracy

RoHS

The Masibus PDH frequency transducer measures the line frequency of both sine wave and distorted waveforms of nominal input voltage with a fundamental frequency and converts this frequency input into a load-independent DC current or voltage output signal, with the output proportional to the measured frequency.

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

Frequency transducers are having its application to interface with Controllers, Data-Loggers, PLC's, Analog / Digital Indicators, RTUs. It provides accuracy class 0.2 with up to 3 KV isolation.

Our Frequency transducer performs with exceptional accuracy, repeatability and reliability. In addition to being most accurate, our transducer are equally preferred by OEMs/ end users to other makes for their excellent stability over a long period of operation.

Features

- High accuracy class 0.2
- Confirms to IEC 60688
- Site-configurable inputs ranges & 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
- Energy management system

TECHNICAL SPECIFICATIONS: FREQUENCY TRANSDUCER

Configuration	Single phase

Input

Measuring Frequency range	40 to 70 Hz
Nominal Input Voltage (Un)	57.7 V to 500 V
Burden	<0.3VA at Un
Maximum Overload Voltage	1.2 x Un continuously 2 x Un for 1 s, with up to 10 repetitions at 10 s intervals

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	<400mS
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

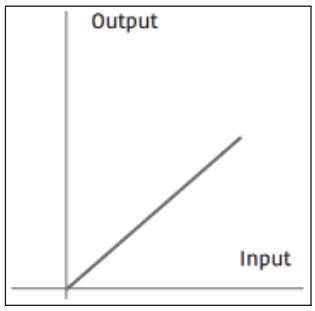
Mounting Type	DIN-Rail
Dimension (in mm)	71H x 61W x 112D
Case Material	ABS
Weight	0.4 Kg
Connector Type	Metal screw
Conductor Size for Terminals	≤ 4 mm^2

Communication Ports

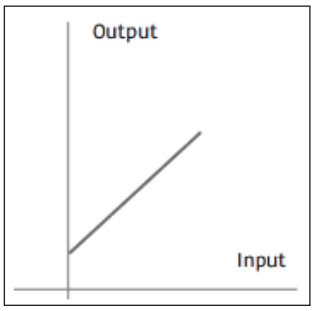
Mini USB type: For on-site configuration

Input - Output Signal Curves

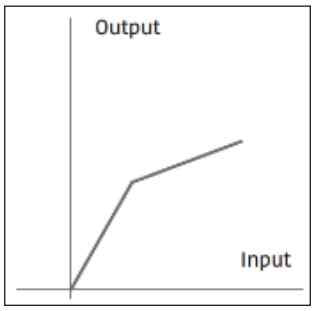
Curve A
Linear



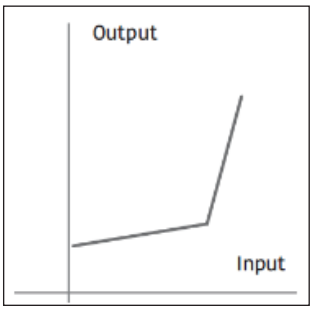
Curve B
Linear with Live Zero



Curve C
Compressed Upper Region



Curve D
Compressed Lower Region



Ordering Code

Model	Auxiliary Power Supply		Analogue Output: Output Type-1		Analogue Output: Output Type-2	
PDH	U1	85-265VAC, 50/60Hz or 100-300VDC	1	4-20mA	N	None
	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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