# **Analog Transducer**

**Analog Frequency Transducer** 



## **FEATURES**

- The Analog Frequency Transducers are instruments conceived to measure voltage in AC systems and calculate its frequency, converting and transmitting the obtained values proportionally, by means of an analog output
- The measurement concept of frequency transducers is based on zero crossing techniques

### **APPLICATIONS**

- Conversion of frequency values into analog DC signals, using automation standards accepted by PLC's, digital indicators, controllers and other related instruments
- Signal Isolation
- Protection of general electrical machinery

### **PRODUCT INFO**

#### **MULTIPLE END APPLICATIONS**

 Several options for inputs and outputs, suited for the most varied applications in automation systems.

#### **INSTALLATION AND ENCLOSURE**

- Panel's Background, Side Screws Fastening
- Connection Lug terminals
- Robust enclosure (IP -40)

#### **ISOLATION**

• 2kV between inputs and outputs (60Hz, 1 minute)

#### **ANALOG OUTPUT**

- Response time: < 400ms</li>
- Output Ripple: < 1.0%
- Output values and maximum (current output) or minimum (voltage output) admittable resistances:

420mAdc (0750Ω)	010mAdc (01kΩ)
020mAdc (0750Ω)	01Vdc (1kΩ - minimum value)
01mAdc (010kΩ)	05Vdc (1kΩ - minimum value)
05 mAdc (02kΩ)	010Vdc (2kΩ - minimum value)

	Connections Diagrams	Single-Phase
MEASUREMENTS	Voltage Input – Working Range	220Vc.a. / ± 20% do valor nominal
AND INPUT INFO	Connections	Lug Terminals (IP-00)
	Maximum Cable to be Used	Measurement inputs and power supply: 4mm² (Recommended 2.5mm²) Output: depends on the combined impedance of cabling (distance related) and of the instruments that will be connect to the transducer, check admittable resistances info for each output type.
	Frequency Range (measurement)	55 to 65 Hz (default), other frequency ranges available
	Internal Consumption	0.3 VA
ACCURACY at 25°C (77°F), referred to the full scale	Frequency	0.1%
POWER SUPPLY	Voltage	12Vdc (90 to 120% of nominal value) 24, 48 or 125Vdc (80 to 120% of nominal value) 110 or 220Vac (85 to 115% of nominal value)
	Internal Consumption	< 3.5VA
CASE	Material	High mechanical resistance extruded aluminum enclosure
	Mass	0.5kg
	Protection Degree	IP-40
ENVIRONMENTAL	Operation/Storage Temperature	0 to 50°C (32 to 122 °F) -10 to 60°C (14 to 140 °F)
CONDITIONS	Relative Air Humidity	Maximum of 90% (without-condensation)

0.01%/°C

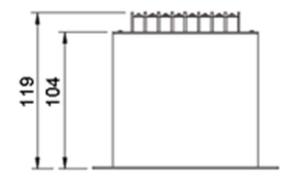


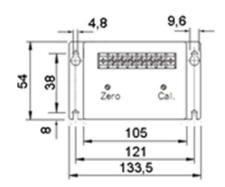
Temperature Coefficient

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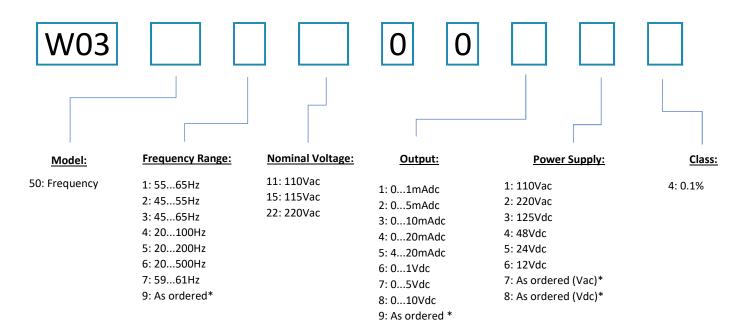
#### **DIMENSIONS**





Dimensions in millimeters

## How to Specify:



#### NOTE:

Standard Model: (Example)

# W03 <u>50 2 22</u> 0 0 <u>5 3 4</u>

Transducer {Frequency} {Frequency Range: 45...55Hz} {Voltage Input: 220Vac} {Output: 4...20mAdc} {Power Supply: 125Vdc} {Class: 0.1%}

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<sup>\*</sup> Please consult technical support to check availability for a particular range/output/power supply.