

FREQUENCY TRANSDUCER

AF-1

FEATURES

- Accuracy $\pm 0.1\%$ RO.
- Excellent long term stability (4 ~ 20mA, 750 Ω)
- Self powered
- High impulse & surge protection (5KV)
- The case can be mounted on a 35mm rail which complies with DIN 46277



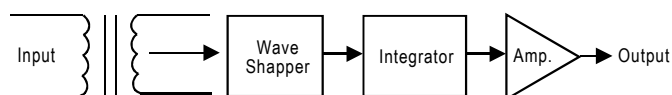
OUTPUT

DC Output Range	Load Resistance	Output Resistance	Output Ripple	Response Time
0~1V	$\geq 500 \Omega$	$\leq 0.05 \Omega$	$\leq 0.5\% R_O$. (peak)	≤ 1 Sec 0~99%
0~5V	$\geq 500 \Omega$			
1~5V	$\geq 500 \Omega$			
0~10V	$\geq 500 \Omega$			
0~1mA	0~15K Ω	$\geq 20M \Omega$		
0~10mA	0~1500 Ω	$\geq 5M \Omega$		
0~20mA	0~750 Ω			
4~20mA	0~750 Ω			
Remark: If DC Source, the output:		0~1mA(0~10K Ω), 0~10mA(0~1K Ω), 0~20mA(0~500 Ω) 4~20mA(0~500 Ω)		

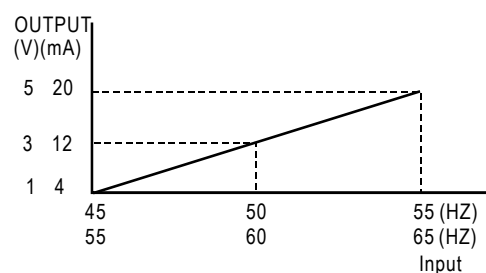
Accuracy: $\pm 0.1\%$ Rated of Output
Output load effect: current output $\leq 0.1\%$ RO.
voltage output $\leq 0.05\%$ RO.
Magnetic field strength: 400A/M. $\leq 0.1\%$ RO.
Span adjustment range: $\geq 5\%$ RO.
Zero adjustment range: $\geq 1\%$ RO.
Operating temperature range: 0~60°C
Storage temperature range: -10~70°C
Temperature coefficient: ≤ 100 PPM from 0 to 60°C
Max. relative humidity: 95%
Isolation: Input/output/power/case
Insulation resistance: $\geq 100M \Omega$, DC 500V
Dielectric withstand voltage: Between input/output/power/case
(IEC 414, 688, ANSI, C37)
Impulse withstand test: 5KV, 1.2 X 50us
(IEC 255-4, ANSI C37 90a)
Performance: Common mode & differential mode
Safety requirements: Designed to comply with IEC688
IEC 414, BS5458.

DESCRIPTION

AF-1 transducer to measure power frequency and provide a DC output directly proportional to the change of input within the specified span. The circuit diagram shown the input signal is shapped to square wave by the wave shappers circuit. The duty cycle of the square wave is change with the frequency of the input signal. Then the square wave is fed into an integrated circuit and the produced DC output is proportional to the input frequency.



INPUT-OUTPUT CURVE



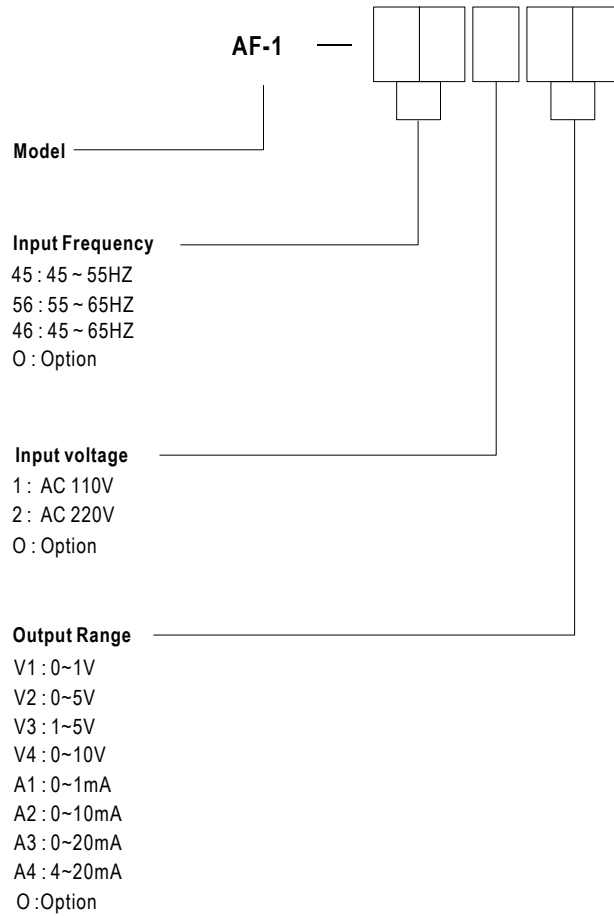
SPECIFICATION

INPUT

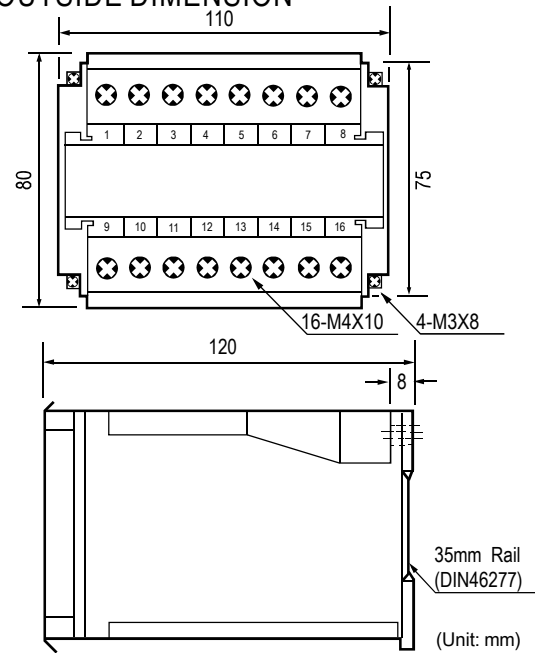
Input Range		Input Burden	Max. Input Over Capability
Frequency	Voltage		
45~55HZ	110V $\pm 20\%$	$\leq 3.5VA$	1.5 X rated continuous 2X rated 10 sec. 4X rated 2 sec.
55~65HZ	or		
45~65HZ	220V $\pm 20\%$		

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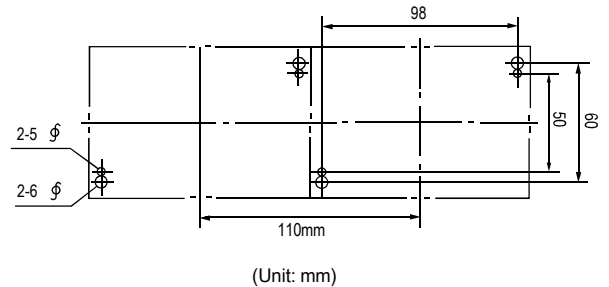
ORDERING MODEL MAKE UP



THE OUTSIDE DIMENSION



PANEL MOUNTING HOLES



CONNECTION DIAGRAM

