

## FUD-F

### MULTIPLE RANGE VARIABLE FREQUENCY TRANSDUCER WITH 4-20MA OUTPUT

FUD-F frequency transducer measures Power Frequency over a specified Frequency Range and converts it to an industry standard output signal which is directly proportional to the measured input. These Transducers provide an output which is load independent and isolated from the input. It is used in a variety of Distribution and Transmission Substations, Generation and Industrial applications for measuring various AC power quantities and providing real-time analog signals to drive PLC, SCADA, and driving panel instruments. As the leading product in market, FUD-F multiple range variable frequency transducer adopts SCM as the core with the latest algorithm to achieve precise measurement of frequency in AC circuit.

### Application

1. Oil system;
2. Power plant;
3. Industrial field;
4. Coal auto system;
5. Rail electrical system;
6. Electricity power company;
7. Metallurgy electrical system;

### Features

1. 4-20mA DC output;
2. Frequency transducer;
3. DIN installation 35mm;
4. With the latest algorithm;
5. Accuracy class can reach 0.1%;
6. Excellent linear transducer;
7. 45-65HZ/4-20mA DC signal output;
8. Multiple range frequency transducers;
9. Adopt the SCM as the core technology;
10. 5000 Volts Industry Best Surge Withstand Capability;



### Technical Index

Technical Index	
Standard	GB/T 13850-1998, IEC688:1992
Accuracy	0.1%, 0.2%
Consumption	≤3VA
Insulation voltage	AC 2kV/min.1mA (Between input- output/power)
Response time	≤300ms
Input range	AC100-400V(option), 45Hz-60Hz

**Technical Index - continued**

Absorbed power	$\leq 0.22\text{VA}/220\text{V}$ , $\leq 0.10\text{VA}/100\text{V}$
Overload	2 times continuous
Load resistance	Current output: $R_L \leq 650\Omega$
	Voltage output: $R_L \geq 2\text{k}\Omega$
Working environment	Temperature: $-10$ to $+50^\circ\text{C}$
	RH: 20-90%, without condensation
Storage conditions	Temperature: $-40$ to $+70^\circ\text{C}$
	RH: 20-95%, without condensation
Installation	35mm DIN sliding-way or M4 screws
Dimension	55mm x 75mm x 120mm

## Model Description

**FUD-Type-Input-Power Supply-Frequency range-Output**

AC input	V1: $100\text{V}\pm 40\%$ , V2: $220\text{V}\pm 40\%$ , V3: $270\text{V}\pm 40\%$ , V4: $400\text{V}\pm 40\%$ , V5: User defined.
Power supply	P1: AC 85-265V or DC 100-330V, P2: DC 20-60V.
Frequency range	F1: 45-55Hz, F2: 48-52Hz, F3: 40-60Hz, Fn: User defined.
DC output	O1: 0-5V, O2: 1-5V, O3: 0-20mA, O4: 4-20mA.

**Example 1: FUD-F-V2-P1-F1-O4**

FUD series frequency transducer	Input voltage: $\text{AC}220\pm 40\%$ Power: $\text{AC}220\text{V}\pm 15\%$ F range: 45-55Hz Output: DC4-20mA
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Please check the type, input range, output range and power supply when your order the product.