

## FUD-P4/Q4

### 3P4W ACTIVE AND REACTIVE POWER TRANSDUCER WITH RS485

FUD-P4/Q4 3P4W active reactive power transducer can be customized for multi-power-combined transducer of current, voltage, power and all power measurement in 3P4W, support RS485 port. It adopted SCM technique; excellent stability. Delivering the direction of measured power accurately, applicable for active/reactive power measurement in 3P4W. FUD-P4/Q4 3P4W active and reactive power transducers are used in a variety of Distribution and Transmission Substations, Generation and Industrial applications for measuring various AC and DC power quantities and providing real-time analog signals to drive SCADA, transformer Energy Management Systems, and driving panel instruments.

## Features

1. Excellent linear transducer;
2. Standard DIN install 35mm ;
3. 3P4W active power transducer;
4. 3P4W reactive power transducer;
5. 220V/5A, 100V/5A, 57.7V/5A optional;
6. Power can output forward and reverse;
7. Adopted SCM technique; excellent stability;
8. 4-20mA or 4-12-20mA DC signal output optional;
9. 5000 Volts Industry Best Surge Withstand Capability;
10. Delivering the direction of measured power accurately;
11. Applicable for active/reactive power measurement in 3P4W;
12. Provides real-time analog signals to SCADA and energy management systems;
13. Ideal for distribution substation, generation and feeder monitoring applications;



## Application

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

## Technical Index

Technical Index	
Standard	GB/T 13850-1998, IEC688:1992
Accuracy	0.2%, 0.5%
Consumption	≤5VA
Accuracy drift	Annual variation <0.2%
Insulation voltage	AC 2kV/min.1mA (Between input- output/power)
Insulation resistance	≥20MΩ (DC500V)
Surge voltage	5KV (peak value), 1.2/50μs
Response time	≤350ms
Input range	AC 0-5A, AC 0-500V(option), 50/60Hz
Absorbed power	Per phase voltage: ≤0.5VA/100V Per phase current: <0.1VA/5A
Overload	Current: 2 times continuous, 30 times/1s; Voltage: 2 times continuous
Load resistance	Current output: $R_L \leq 650\Omega$ Voltage output: $R_L \geq 2k\Omega$
Working environment	Temperature: -10 to +50°C RH: 20-90%, without condensation
Storage conditions	Temperature: -40 to +70°C RH: 20-95%, without condensation
Installation	35mm DIN sliding-way or M4 screws
Dimension	110mm x 75mm x 66.9mm

## Model Description

FUD-Type-Input-Power Supply-Output	
Type	P4: 3P4W active power transducer Q4: 3P4W reactive power transducer PQ4: 3P4W active and reactive power transducer
AC input	V0: 57V, V1: 100V, V2: 220V, V3: 270V, V4: 400V, A1: 0-1A, A2: 0-5A.
Power supply	P1: AC 85-265V or DC 100-330V, P2: DC 20-60V.
DC output	O1: 0-20mA, O2: 0-±20mA, O3: 4-20mA, O4: 4-12-20mA, O5: 0-1V, O6: 0-±1V, O7: 0-5V, O8: 0-±5V, O9: RS485.

**Example 1: FUD-P4-V2-A2-P1-O4**

FUD series 3P4W active power transducer

Input: AC220V,  $\pm 5A$  ( $\pm 3300W$ )Power supply: AC220V $\pm 15\%$ 

Output: 4-12-20mA DC

**Example 2: FUD-Q4-V2-A2-P1-O4**

FUD series 3P4W reactive power transducer

Input: AC220V,  $\pm 5A$  ( $\pm 3300var$ )Power supply: AC220V $\pm 15\%$ 

Output: 4-12-20mA DC

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Please check the type, input range, output range and power supply when your order the product.

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