

MULTIFUNCTION TRANSDUCER

Multifunction Transducer is a versatile all combination product for LT/HT application and 3 phase / 3 wire/4 wire measuring means. It measures most of the basic electrical quantity like V, I, PF, Freq, W, VA & VAr. This is suitable for 4 quadrant power measurement are computes import/export powers with sign in the magnitude of output. If given 2/3 current outputs equivalent to the measured basic electrical quantities or



panel quantities through MODBUS communication. The MFT is configurable for all kind of combination of power measurements and assigned the analog output to the desired parameter. While in field operation, the measured parameters are available to computer system for logging continuously. The RS485 is suitable for multidrop communication; hence logging of similar transducer with network could be possible.MFT comply with IEC 60688 standards and EMIC/EMI standards. MFT housed in compact Din-Rail mounting, ABS enclosure.

Features

- Fully programmable inputs and outputs
- Accuracy class 0.5 or 0.2
- True RMS measurement
- Most suitable in Harmonic 31st condition
- Up to 3 current outputs
- Build in MODBUS communication
- Software configurable output and input with PC
- User friendly for a range of electrical parameter with a single transducer
- All measured parameters are available through serial port
- Non-Volatile storage of configuration
- Response time

Technical Specification

Voltage Circuit

Nominal Voltage Circuit	3 Wire System (90 - 600) V(L-L) 4 Wire System (57.7 to 300) V(L-N)

Measuring Range	0 - 120 %
Burden	Less than 0.25 VA
Max. Overload Voltage	1.2 Times Condition / 1.5 Times
Starting Voltage	30 V

Current Circuit

Nominal Input Current	1/5 Amps
Measuring Range	0 - 120 % in In
Burden	0.25 VA
Max. Overload Current	2 Times Continuously & 20 times for 5 seconds, 40 times for 2 seconds
Starting Current	0.02 A
Mains Frequency	45 to 55 Hz
Measurement	True RMS in Harmonic Load
Accuracy	Class 0.2 / Class 0.5 ± 0.5% OFS

Analog Outputs

Туре	Current / Voltage Output
Current Output	0 - 20 mA or 4 - 20 mA
Load Impedance	750 Ohm
Response Time	Better than 1 Second

Environment

Operating Temperature	0 - 55 °C
Humidity	0 - 95 % RH Non - Condensing
Auxiliary Supply	90 - 270 V AC/ V DC
Power Consumption	48 V DC (+/- 10%)

Casing Details

Dimension	150 W x 75 H x 110 D
Weight	700 Gram(Approximately)
Mounting	Din - Rail

Communication

Туре	Rs 485 Modbus-RTU Protocol Industrial Standard
Data Through Serial Port	Basic Electrical and Power Quantities
Input and Output Configuration	User Friendly Software Selectable to Configure Measuring type and Output selection to measured quantities

APPLICATIONS

- Electrical distribution panels
- SCADA systems
- Generating stations, transmission & distribution
- Control panels & Instrument panels

STANDARDS

Measurement standard: IEC 62053-22, IS 14697
EMI/EMC: IEC 61000-4/-2/-3/-4/-5/-6/-11

• Safety: IEC 61010-1

Environment: IEC 60068-2Outlines Standard: Din 43700



