



- Combined Frequency (Hz) and Power Factor (Cosφ) Transducer
- Precision true RMS class 0,5 measurement, not affected by any waveform distortion
- For use with 1A or 5A current transformers
- For Frequency measurement 30-70Hz
- Up to two individual very fast analogue output signals (<50mS), (optional)
- DIN96 Slave Indicators with full scale (optional)

Specifications

Monitored Voltage:	0-500VAC 30-70Hz (Fuse 0,5A)
Standard Auxiliary Voltage AC:	100-120V, 200-240V, 380-415V, 440-460V, 480VAC 40-70Hz (Fuse 0,5A)
Optional Separate Auxiliary Voltage DC:	24-60VDC (Fuse 0,5A) 110-220VDC (Fuse 1A)
Supply tolerance:	+10%, -20%
Power rating:	5VA
Current Input:	1A CT or 5A CT, <0,1VA
Frequency range: (Other range on request)	45-55Hz 55-65Hz 45-65Hz 30-70Hz
Analogue output 1: (Any % of the Hz range) (see page 2 for available outputs)	mA: Up to 20mA, max 500R V: Up to 10V, min 100kohm (other on request)
Analogue output 2: (Cos Phi range 0,5 CAP/1/0,5 IND) (see page 2 for available outputs)	mA: Up to 20mA, max 500R V: Up to 10V, min 500ohm (other on request)
Accuracy:	Class 0,5
Temperature:	-20 to +70°C
Humidity, relative:	0-95%
Weight:	0.6kgs
Front protection:	IP21
Flammability:	UL94-V0

Description

The digitally controlled MT-FP is a precision transducer for Frequency (Hz) and Power Factor (Cosφ).

To be used in applications that require a very fast response, precision monitoring of power factor and frequency.

The unit measures the voltage and current true r.m.s. value, and accuracy is independent of any waveform distortion. A green LED (ON) indicates the auxiliary supply presence.



Two individual very fast analogue output signals proportional to Frequency (Hz) and Power Factor (Cosφ) level.

If an output is used for remote meter reading, we recommend 0-1mA for the slave indicator.

It also includes an additional RJ12 output for a DIN96 Slave Indicator (optional).

The noise-immune mA output is isolated from voltage inputs and auxiliary power.

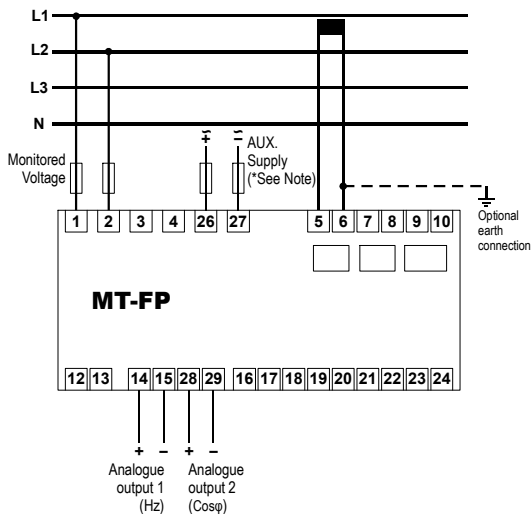
The unit take the auxiliary supply voltage from terminal 26 & 27.

It can also be delivered with optional separate DC auxiliary voltage (terminal 26 & 27), but that must be specified when ordering (see page 2 for ordering code for separate DC Aux. Supply).

The unit meets EN 60255-27 Cat. III, Pollution degree 2 and the relevant environmental and EMC tests specified in EN 60255-26 to comply with the requirements of the major Classification Societies.

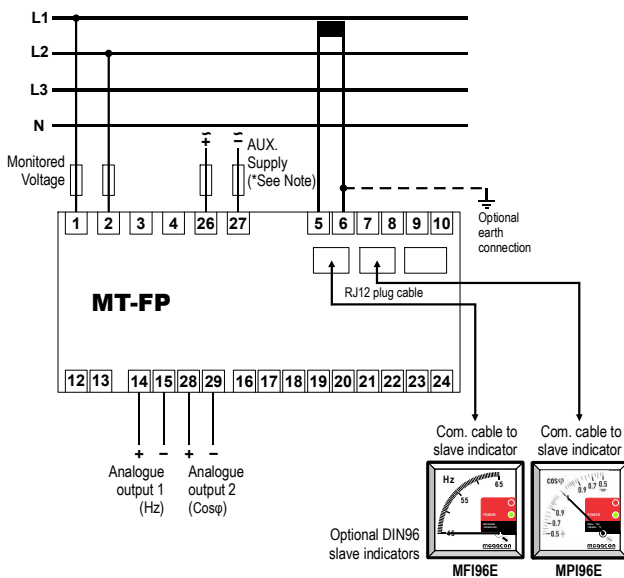
Connection Diagram

Connection Diagram without optional slave instrument



***Note:**
AC AUX. Supply (Standard)
Separate DC Aux. Supply (Optional)

Connection Diagram with optional slave instrument



Analogue Output

The output signals are proportional to the meter reading.

The signal is specifically intended as an input to a control system for monitoring or control.

Add suffix from table below to type designation to specify output required:

Outputs 1 (Hz)

O/P1	0 - 10mA
O/P2	0 - 20mA
O/P3	4 - 20mA
O/P4	4 - 12 - 20mA
O/P5	N/A
O/P6	-10 - 0 - +10mA
O/P7	-20 - 0 - +20mA
O/P8	0 - 10V
O/P9	0,2 - 10V
O/P10	4,3 - 20mA

Outputs 2 (Cosφ)

O/P11	0 - 10mA
O/P12	0 - 20mA
O/P13	N/A
O/P14	4 - 12 - 20mA
O/P15	N/A
O/P16	-10 - 0 - +10mA
O/P17	-20 - 0 - +20mA
O/P18	0 - 10V
O/P19	N/A
O/P20	N/A

Connection

Terminal type
Wire max.

: Terminal Clamp and Screw
: T1-T4,
T26-T27: AWG 24-14,
T5-T10: AWG 12,
other terminals: AWG 24-12

Screw Torque

: 0.5Nm

Overload

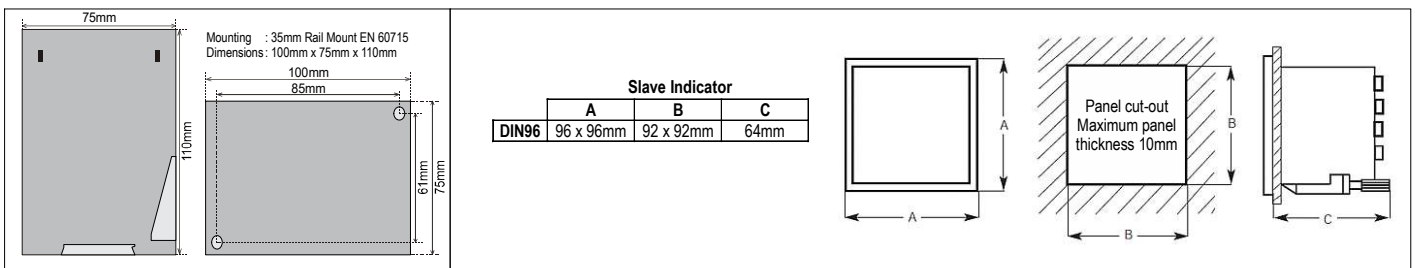
Voltage

: 1.2 x Un continuous
2 x Un for 10secs

Current

: 2.5 x In continuous
5 x In for 1secs (max 25A)

Dimensions



The MEGAcon policy is one of continuous improvement, consequently equipment supplied may vary in detail from this publication.

ORDERING INFORMATION (Example)

Type	: MT-FP
Aux. Supply	: 200-240VAC
Input Voltage	: 440VAC
Input Current C.T.	: 600/5A
Input Frequency range	: 45-50-55Hz
Analogue output 1	: O/P3: 4-20mA
Analogue output 2	: O/P18: 0-10VDC

Optional Separate Aux. Supply:
Add -SD for models with
Separate DC Aux. Supply.
(Example: MT-FP-SD)

