



- Power Frequency Transducer
- Precision true RMS class 0,5 measurement, not affected by any waveform distortion
- Up to two individual very fast analogue output signals (<50mS), (optional)
- DIN96 Slave Indicator with frequency scale (optional)

Specifications

Monitored Voltage:	100-120V, 200-240V, 380-415V, 440-460V, 480VAC, 40-70Hz (Fuse 0,5A)
Optional Separate 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
Frequency range:	45-55Hz
(Other range on request)	55-65Hz 45-65Hz 30-70Hz
Analogue output 1:	mA: Up to 20mA, max 500R
(see page 2 for available outputs)	V: Up to 10V, min 100kohm (other on request)
Analogue output 2:	mA: Up to 20mA, max 500R
(see page 2 for available outputs)	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 MCFB4x is for use in applications that require a very fast response, precision monitoring of the frequency. Ideal for systems for regulation and control of the frequency on generators, motors and inverters.

The MCFB4x is a precision frequency measuring transducer for AC voltage input.

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.



Up to two individual very fast analogue output signals (optional) proportional to the measured frequency level (see page 2 for available outputs). The analogue output is isolated from both voltage input and auxiliary power.

The standard model have **one** output signal, but optional model have **two** output signals.

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 both voltage input and auxiliary power.

The standard models takes the auxiliary supply voltage from the monitored voltage (terminal 1 & 2).

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

Models	O/P 1	O/P 2	Standard model	Optional model
MCFB4A	X	-	X	-
MCFB4B	X	X	-	X

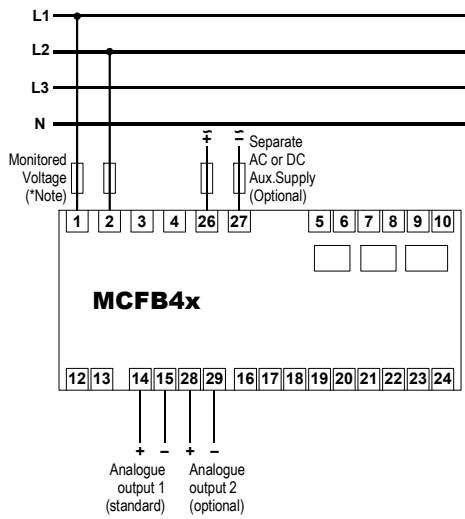
The unit meets EN 60255-27 Cat. III, Pollution degree 2 and the relevant environmental and EMC tests specified in EN 60255-26 to comply with the requirements of the major Classification Societies.

Related information:

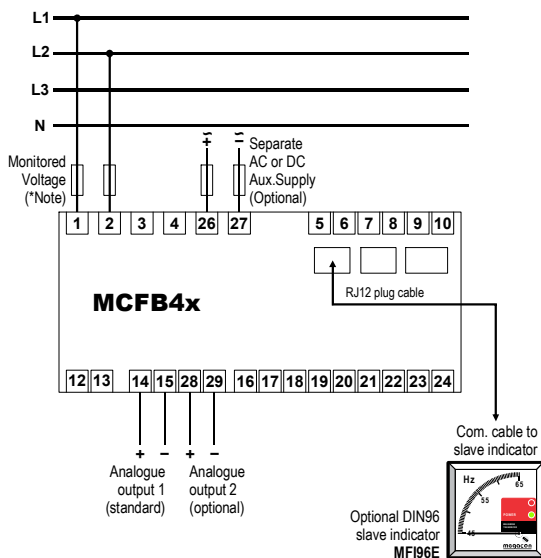
The MCFB4x series are also available for panel mounting as MPFE series.

Connection Diagram

Connection Diagram without optional slave instrument



Connection Diagram with optional slave instrument



*Note: The standard models takes the auxiliary supply voltage from the monitored voltage (terminal 1 & 2).

Analogue Output

The output signals are proportional to the meter reading (see page 1 for an overview of models and functions).

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

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

Outputs 2

O/P11	0 - 10mA
O/P12	0 - 20mA
O/P13	4 - 20mA
O/P14	N/A
O/P15	N/A
O/P16	N/A
O/P17	N/A
O/P18	0 - 10V
O/P19	0,2 - 10V
O/P20	4,3 - 20mA

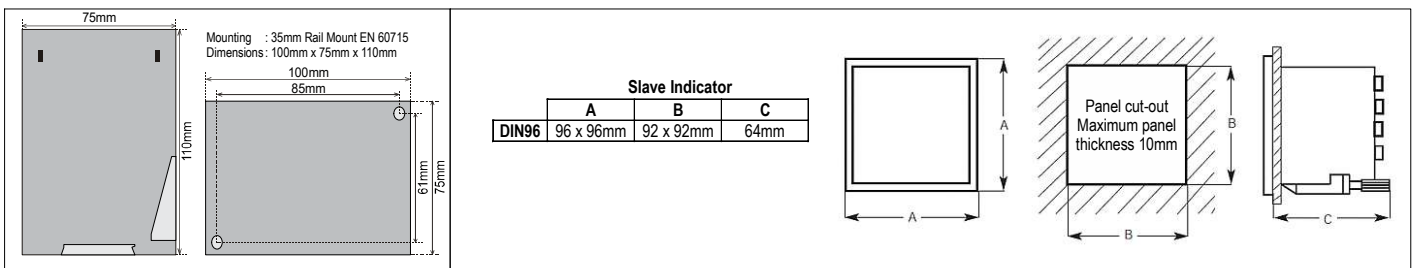
Connection

Terminal type : Terminal Clamp and Screw
 Wire max. : 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	: MCFB4B	Optional Separate Aux. Supply:
Aux. Supply	: 200-240VAC	Add -SA for models with
Input Voltage	: 110V	Separate AC Aux. Supply.
Range	: 45-65Hz	(Example: MCFB4B-SA)
Analogue output 1	: O/P3: 4-20mA	Add -SD for models with
Analogue output 2	: O/P18: 0-10VDC	Separate DC Aux. Supply.
		(Example: MCFB4B-SD)

