Programmable Frequency to Frequency Converter MicroFREQ F-F

Function: Isolating signal converter which will convert from one frequency range to another frequency range. The MicroFREQ is a microprocessor based signal converter and can therefore be programmed by the user to specify the input and output frequency type and ranges. Both the input and the output stages of the instruments are powered from separate secondaries of the transformer thus maintaining 3 port isolation. The MicroFREQ has the programming function resident in memory.

Connect the MicroFREQ to a terminal or PC via a Lee-Dickens MicroLEAD and change the input and output ranges as required.

SPECIFICATIONS

INPUTS:

Frequency
Between 0 and 10,000 Hz
Minimum Span: 0.1 Hz

Voltage
Minimum 50mV DC
Maximum 50 Volt DC

Transducer Supply
(Potentiometer adjustable)
3 to 24 Volt DC
20mA maximum

OUTPUTS:

Frequency
Between 0 and 1,000 Hz
Minimum Span: 1 Hz

Type of Outputs
(Select one of the following)
1) 24 Volt DC pulse
2) Opto-Coupler rated at 30 V
   5mA,
3) 5V TTL pulse

Shape of Output
(Select one of the following)
1) Even Mark / Space ratio
2) Fixed pulse width
(Please specify)

Input/Output/Supply Isolation
600 Volts > 20M ohms

SUPPLY:

Power Supply Voltage
1) User selectable
115 Volt AC ±15% 50/60 Hz
230 Volt AC ±15% 50/60 Hz
or
2) 18 to 30 Volt DC with converter to maintain signal to power supply isolation

Power Required
3VA Maximum

Pilot Light
Red LED shows Power ON

GENERAL:

Resolution
Minimum 1 count per 1000

Operating Temperature Range
0 to +45ºC

Storage Temperature Range
-20 to +60ºC
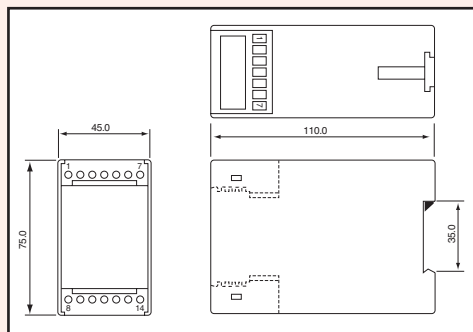
Operating Humidity Range
0 to 95% RH non-condensing

Storage Humidity Range
0 to 95% RH non-condensing

Weight
MicroFREQ   310 gms
MicroLEAD   65 gms

MECHANICAL DETAILS

45.0   110.0   75.0   35.0

TERMINATION DETAILS

Terminal		Terminal	
1	Magnetic Transducer	8	Output -ve
2	Magnetic Transducer	9	Output +ve
3	If above link 3 to 4	10	Unused
4	If not - Logic pulse i/p	11	Unused
5	Pull down 100R to 0V	12	230 Volt AC / 24V DC +ve
6	0V	13	115 Volt AC / Unused
7	3 to 24V transducer supply	14	Neutral / 24V DC -ve

ORDERING DETAILS

a) Give identification code, i.e. MicroFREQ F-F
b) Give power supply voltage, i.e. 240 Volt 60 Hz
c) Give details of input signal, both type and range, i.e. 12 volt dc pulse, 0 to 6000Hz.

d) Give details of output signal, both type and range, i.e.0 to 50 Hz, Even Mark/Space ratio, 5V TTL pulse
e) If programming yourself then please just specify items (a) and (b), and, if programming for the first time, please order a MicroLEAD

LEE-DICKENS LTD
Desborough, Kettering, Northants NN14 2QW U.K.
Tel: (01536) 760156 Fax (01536) 762552