FREQUENCY SCALER

MT-FF

FEATURE

- 8 Outputs Range Programmable in One
- Modular Design, Easy Maintain and Save Stock;
- Dual pulse output available
- CE Approved

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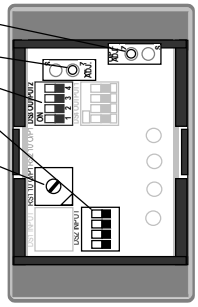
SPECIFICATION

Input Range	Input Impedance	Output Range	Output Mode
0 ~ 0.1 Hz	≧1M ohm	0 ~ Input / 1 Hz	Open collect: 30Vdc; 40mA 0~50K Hz maximum; Pulse width: 50% duty cycle
0 ~ 1 Hz	≧1M ohm	0 ~ Input / 2 Hz	
0 ~ 10 Hz	≧1M ohm	0 ~ Input / 4 Hz	
0 ~ 20 Hz	≧1M ohm	0 ~ Input / 8 Hz	
0 ~ 50 Hz	≧1M ohm	0 ~ Input / 16 Hz	Voltage pulse: 5V, 12V, 24V; 10mA 0~50K Hz maximum; Pulse width: 50% duty cycle
0 ~ 100 Hz	≧1M ohm	0 ~ Input / 32 Hz	
0 ~ 200 Hz	≧1M ohm	0 ~ Input / 64 Hz	
0 ~ 500 Hz	≧1M ohm	0 ~ Input / 128 Hz	
0 ~ 1K Hz	≧1M ohm		Mech. Contact: 110Vac; 1A 0~130 pulse/minute maximum; On pulse width: 50% duty cycle
0 ~ 2K Hz	≧1M ohm		
0 ~ 5K Hz	≧1M ohm		
0 ~ 10K Hz	≧1M ohm		
0 ~ 20K Hz	≧1M ohm		
0 ~ 50K Hz	≧1M ohm		

Accuracy: ±0.1% of R.O.
Response time: ≦250 msec. Plus one pulse cycle
Input mode: Voltage pulse, Open collector, Mechanical contact (30 Hz maximum)
Pulse width: 10 msec. minimum at < 20 Hz; Duty ratio 20 ~ 80% at > 20 Hz
Input level: 5Vp, 12Vp, 24Vp, 220Vac selectable by dip- switch on top
Excitation: DC 10V/24V, 40mA; Changeable by dip switch
Output mode: Voltage pulse, Open collector, Mechanical contact (30 Hz maximum)
Power Supply: AC 115 or 230V ±10%, 50/60 Hz; Changeable by jumper inside; Option: DC 12V, 24V, 48V ±10%, (Isolated)
Power consumption: DC 5W, AC 6.5VA
Option range: Ultra-low frequency: 0 ~ 0.1 Hz; Ultra-high frequency: 0 ~ 50K/100K Hz
Dual output: Available when excitation supply was removed
Operating temperature: 0~60 ℃
Operating relative humidity: 20~95 %RH
Temperature coefficient: ≦100 PPM/℃
Storage temperature: -10~70 ℃
Isolation: Between Power / Input / Output1 / Output2
Insulation resistance: ≧100M ohm at 500Vdc
Surge test: 4 KV, 1.2 x 50 μ sec. Common mode & differential mode
Dielectric Strength: AC 2.0 KV for 1 min Between Power / Input / Output / Case
Standard: Comply with EN50081-1, EN50082-2
Dimensions: 50mm(W) x 87mm(H) x 123mm(D)-with socket
Mounting: Surface and DIN rail 35mm WIDE
Weight: 500g

ADJUSTMENT

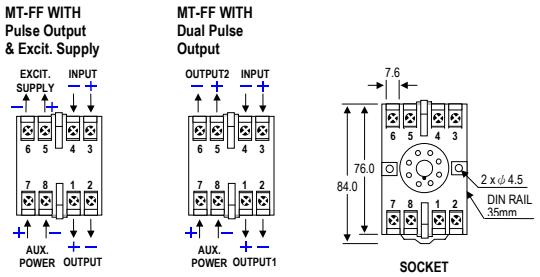


* MT-FF IS ONLY SINGLE OUTPUT WITH EXCITATION SUPPLY. IT COULD BE SPECIFIED IN DUAL OUTPUT IN SAME RANGE, WHEN EXCITATION SUPPLY WAS REMOVED.

PROGRAMMING FOR OUTPUT:

INPUT LEVEL	DS2 (1)	OUTPUT SIGNAL	OUTPUT RS1 (2)	EXCIT. SUPPLY	OUTPUT DS2 (3)
5 Vp	ON 1 2 3 4	0 ~ Input / 1 Hz	0	10 V	ON 1 2 3 4
		0 ~ Input / 2 Hz	1		
12 Vp	ON 1 2 3 4	0 ~ Input / 4 Hz	2	24 V	ON 1 2 3 4
		0 ~ Input / 8 Hz	3		
24 Vp	ON 1 2 3 4	0 ~ Input / 16 Hz	4		
		0 ~ Input / 32 Hz	5		
220 Vac	ON 1 2 3 4	0 ~ Input / 64 Hz	6		
		0 ~ Input / 128 Hz	7		

CONNECTION DIAGRAM & SOCKET



ORDER INFORMATION

MT-FF [Output Loop] — [Input Range] [Input Mode] — [Output Range] [Output Mode] — [Aux. Power]

Output Loop

CODE	OUTPUT LOOP
1	Single Output
2	Dual Output

The excitation supply was removed when you select dual o/p mode.

Input Range / Input Mode

CODE	INPUT	CODE	INPUT
H1	0 ~ 0.1 Hz	HA	0 ~ 10K Hz
H2	0 ~ 1 Hz	HB	0 ~ 20K Hz
H3	0 ~ 10 Hz	HC	0 ~ 50k Hz
H4	0 ~ 20 Hz	HD	0 ~ 100K Hz
H5	0 ~ 50 Hz	O	Specify
H6	0 ~ 100 Hz		
H7	0 ~ 200 Hz		
H8	0 ~ 500 Hz		
H9	0 ~ 1K Hz		

Input Mode

CODE	INPUT MODE
OC	Open collect
MC	Mech. contact
V	Volt pulse
05	5 Vp
12	12 Vp
24	24 Vp
22	220 Vac
O	Specify

Output Range

CODE	OUTPUT
P	Programmable 8 Ranges: 0~Input / 1 Hz to 0~Input / 128 Hz
E	Excitation
O	Specify

*Dual output is available in same range

Output Mode

CODE	OUTPUT MODE
OC	Open collect
MC	Mech. contact
V	Volt pulse
05	5 Vp
12	12 Vp
24	24 Vp
O	Specify

Aux. Power

CODE	AUX. POWER
A1	AC 115 V
A2	AC 230 V
D12	DC 12 V
D24	DC 24 V
D48	DC 48 V
O	Specify

Unit it's been calibrated in factory accord order. Unit opened by customer for re-program may loose guarantee.