

MT-FF FREQUENCY Divider & Isolator



FEATURE

- 8 Outputs Range Programmable by dip switches
- Modular Design, Easy Maintain and Save Stock;
- Dual pulse output available
- Design by CE standard



SPECIFICATION

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

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:

600g

ADJUSTMENT

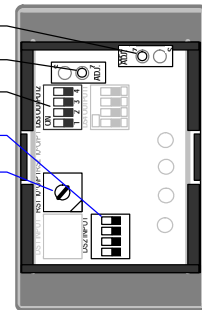
O/P 2 Indication (LED)

O/P 1 Indication (LED)

Excitation Supply DC 10V or 24V (by dip-switch)

DS2: Programming for I/P Level / 4 Ranges (by Dip-Switch)

RS1: Programming for O/P / 8 Ranges (by Rotary-Switch)



* 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		0 ~ Input / 1 Hz	0	10 V	
		0 ~ Input / 2 Hz	1		
12 Vp		0 ~ Input / 4 Hz	2	24 V	
		0 ~ Input / 8 Hz	3		
24 Vp		0 ~ Input / 16 Hz	4		
		0 ~ Input / 32 Hz	5		
220 Vac		0 ~ Input / 64 Hz	6		
		0 ~ Input / 128 Hz	7		

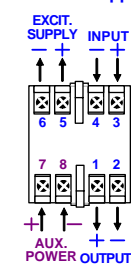
Accuracy: ±0.1% of F.S.
Response time: ≤250 mS Plus one pulse cycle
Input mode: Voltage pulse, Open collector, Mechanical contact (30 Hz max)
Pulse width: 10 msec. min @ < 20 Hz
 Duty ratio 20 ~ 80% @ > 20 Hz
Input level: 5Vp, 12Vp, 24Vp, 220Vac selectable by dip- switch on top
Excitation: DC 10V/24V, 40mA
Output mode: Voltage pulse, Open collector, Mechanical contact (30 Hz max)
Power Supply: AC 115 or 230V ±10%, 50/60 Hz

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 °C
Operating relative humidity: 20~95 %RH
Temperature coefficient: ≤100 PPM/°C
Storage temperature: -10~70 °C

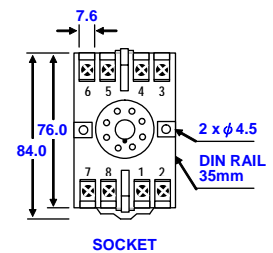
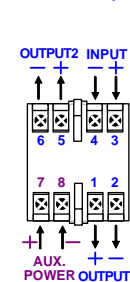
Insulation resistance: ≥ 100MΩ @500Vdc
Surge test: 4 KV, 1.2 x 50 μS
Dielectric Strength: AC 2KV, 50/60Hz, 1 min.
 Between Power / Input / Output / Case

CONNECTION DIAGRAM & SOCKET

MT-FF WITH 1 Pulse Output & Excit. Supply



MT-FF WITH 2 Pulse Output



ORDERING INFORMATION

Remark: ▶ When you select coding P for output range, please specify initial range.
 ▶ After change output range by rotary switches (R-S), re-calibration is to be requested.

MT-FF		Output Loop	Input Range	Input Mode	Output 1 Range	Output 2 Range	Output Mode	Aux. Power					
CODE	OUTPUT LOOP	CODE	INPUT	CODE	INPUT	CODE	INPUT MODE	CODE	OUTPUT	CODE	OUTPUT MODE	CODE	AUX. POWER
1	Single Output	H1	0 ~ 0.1 Hz	HA	0 ~ 10K Hz	OC	Open collect	A1	AC 115 V	OC	Open collect	A1	AC 115 V
2	Dual Output	H2	0 ~ 1 Hz	HB	0 ~ 20K Hz	MC	Mech. contact	A2	AC 230 V	MC	Mech. contact	D12	DC 12 V
The excitation supply was removed when you select dual o/p mode.		H3	0 ~ 10 Hz	HC	0 ~ 50k Hz	V	Volt pulse	D24	DC 24 V	V	Volt pulse	D48	DC 48 V
		H4	0 ~ 20 Hz	HO	Specify (Hz)	05	5 Vp			05	5 Vp		
		H5	0 ~ 50 Hz			12	12 Vp			12	12 Vp		
		H6	0 ~ 100 Hz			24	24 Vp			24	24 Vp		
		H7	0 ~ 200 Hz			22	220 Vac			VO	Specify		
		H8	0 ~ 500 Hz										
		H9	0 ~ 1K Hz										

OUTPUT MODE: P Programmable 8 Ranges (by R-S): 0~Input / 1 Hz to 0~Input / 128 Hz (please specify)
 E Excitation
 F Specify(Hz o/p)
 N None
 *Dual output is available in same range