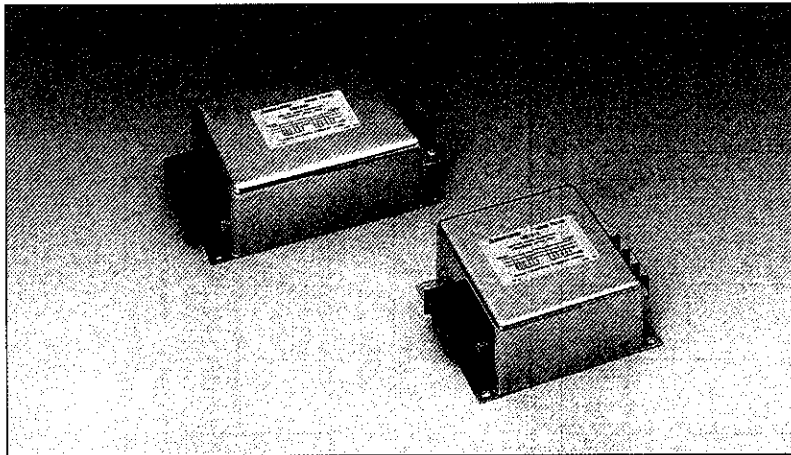


# MB13-SERIES

Three Phase Input Noise Filter with Block Terminal



## Features

- (1) Block Terminal with Cover  
Simple wire connection by block terminal.  
High safety by terminal cover.
- (2) Three Phase Power Line Filter  
Available for Star connection : 400Vac line-line  
Available for Delta connection : 200Vac line-line
- (3) High Attenuation in Compact Package

## Safety standard

- UL1283,
- CSA Std. C22. 2 No. 8
- EN133200 (New European Standard)

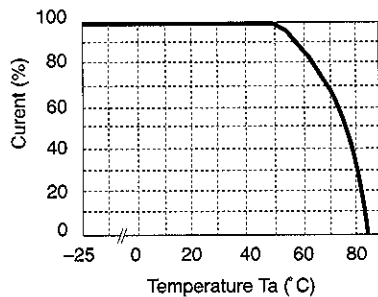
## Specifications

| ITEMS | MODEL                       | MB1310                                                                   | MB1320     | MB1330     | MB1340     | MB1350    |
|-------|-----------------------------|--------------------------------------------------------------------------|------------|------------|------------|-----------|
| 1     | Rated Voltage (AC)          | 500V(50/60Hz)                                                            |            |            |            |           |
| 2     | Rated Current (AC) (Note 1) | 10A                                                                      | 20A        | 30A        | 40A        | 50A       |
| 3     | Test Voltage                | 250VAC(20mA) Terminal to case, 1min. at 25°C, 70%RH                      |            |            |            |           |
| 4     | Isolation Resistance        | 100MΩ min. Terminal to case, 500VDC at 25°C, 70%RH                       |            |            |            |           |
| 5     | Leakage Current             | 250V 60Hz                                                                | 1.0mA max. |            |            |           |
|       |                             | 500V 60Hz                                                                | 2.0mA max. |            |            |           |
| 6     | DC Resistance               | 80m Ω max.                                                               | 30m Ω max. | 20m Ω max. | 11m Ω max. | 7m Ω max. |
| 7     | Temperature Rise            | 35°C max.                                                                |            |            |            |           |
| 8     | Operating Temperature       | -25°C~+85°C                                                              |            |            |            |           |
| 9     | Operating Humidity          | 30%~95% RH (No Dewdrop)                                                  |            |            |            |           |
| 10    | Storage Temperature         | -40°C~+85°C                                                              |            |            |            |           |
| 11    | Storage Humidity            | 10%~95% RH (No Dewdrop)                                                  |            |            |            |           |
| 12    | Vibration                   | 10~55~10Hz, Amplitude (Sweep for 1min) 1.5mm(9G max.) X,Y,Z 2 hours each |            |            |            |           |
| 13    | Safety Standard             | Built to meet : UL1283, CSA C22.2 No.8, EN133200                         |            |            |            |           |
| 14    | Weight (typ)                | 1800g                                                                    | 1800g      | 1800g      | 2800g      | 2800g     |
| 15    | MTBF(hours) (Note 2)        | 573,000                                                                  | 480,000    | 521,000    | 421,000    | 395,000   |

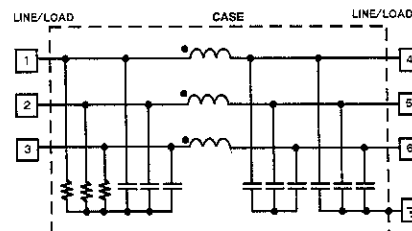
(Note1): Value for  $T_a \leq 50^\circ\text{C}$ . For  $T_a > 50^\circ\text{C}$  derate according to the derating curve shown below.

(Note2): Calculated based on the part stress analysis prediction method as specified in MIL-HDBK-217F.

## DERATING

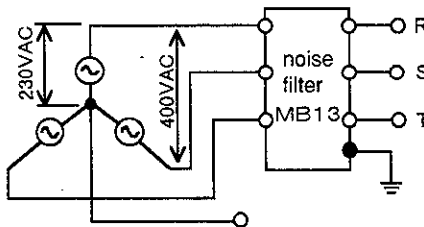


## CIRCUIT

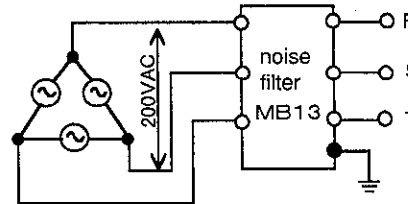


## APPLICATIONS

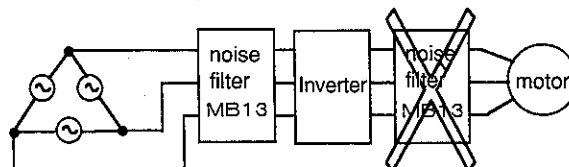
Star connection  
3 Phase 4 Wires 400V line-line. Unused Neutral line



Delta Connection  
3 Phase 3 Wires 200V line-line

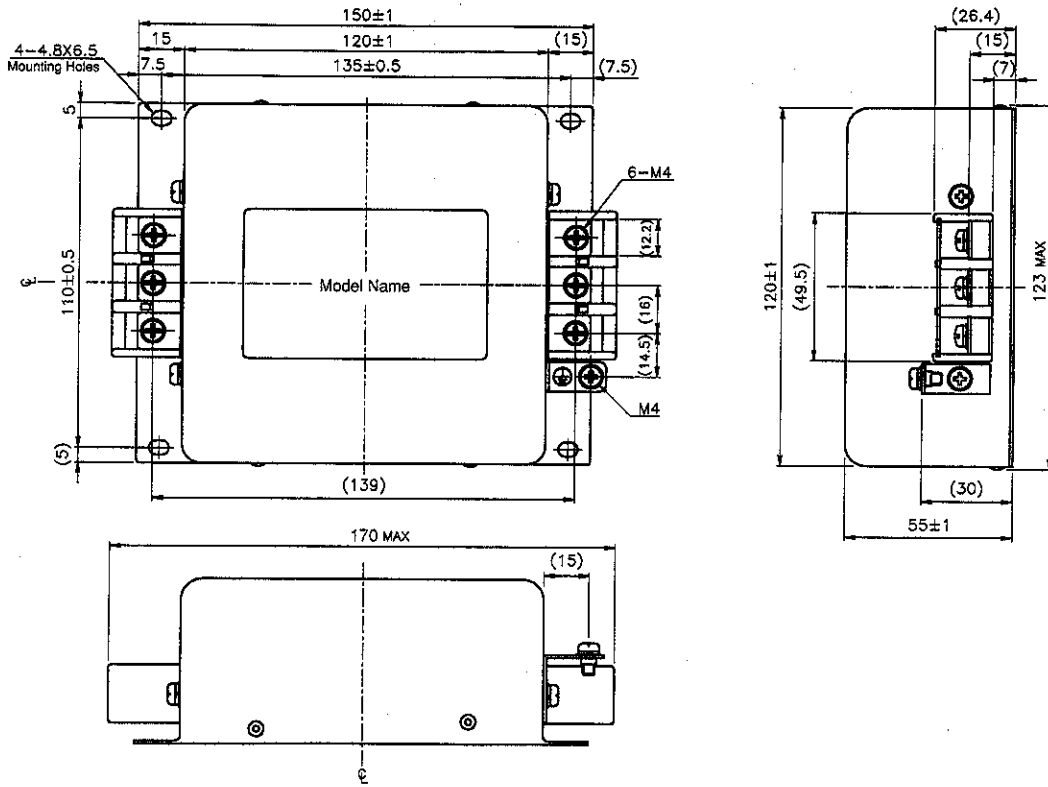


Note: For inverter application  
Do not use MB series between  
inverter and motor.



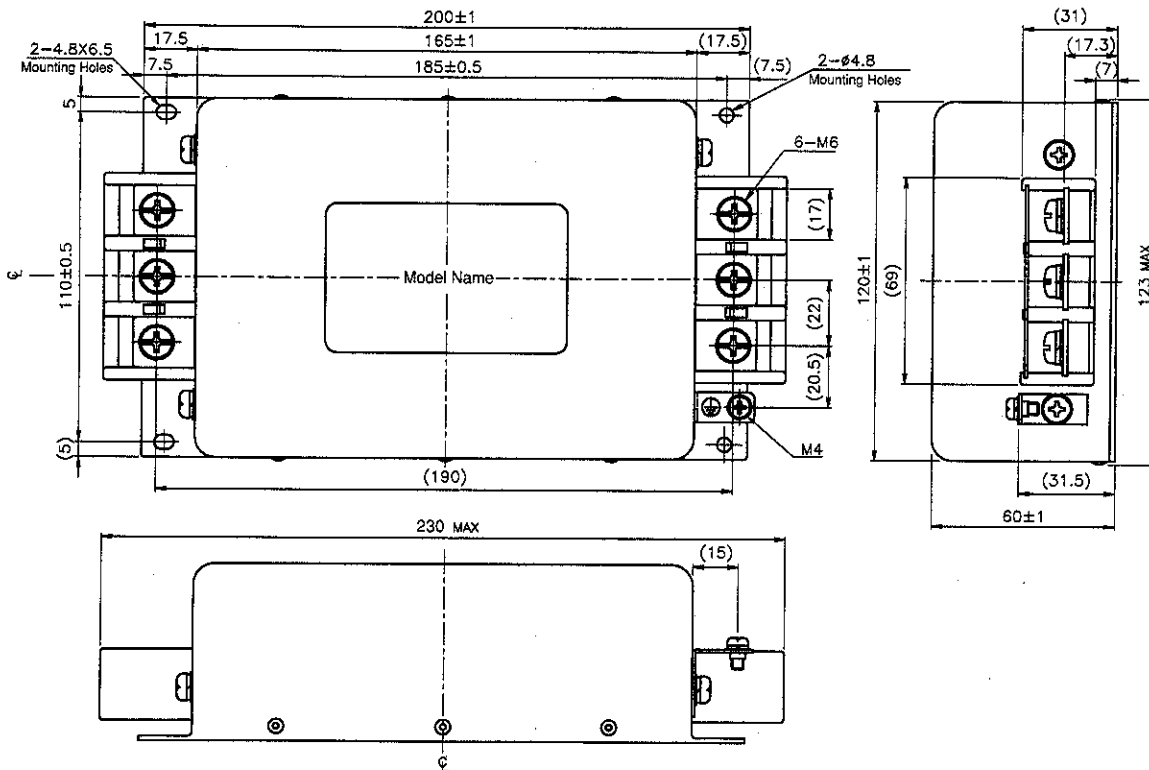
# MB13-SERIES

- MB1310
- MB1320
- MB1330



Noise Filter

- MB1340
- MB1350



(Unit: mm)

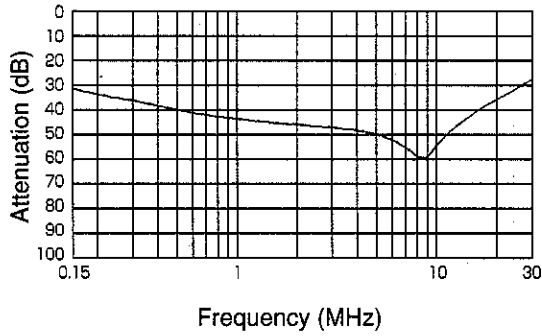
# MB13-SERIES

## CHARACTERISTICS

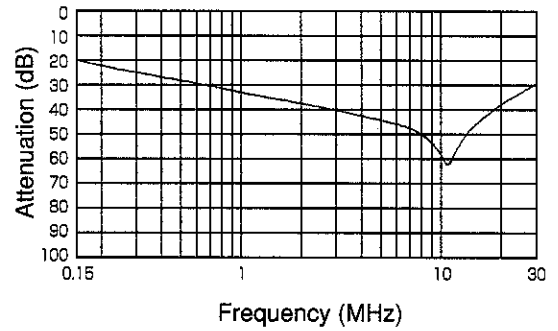
### ■ Typical Insertion Loss

(1) Asymmetrical

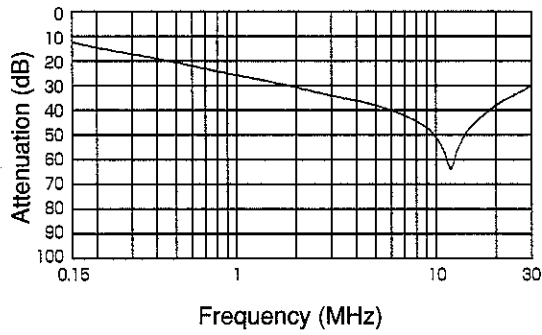
**MB1310**



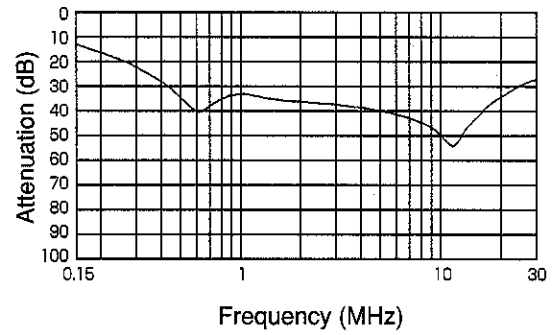
**MB1320**



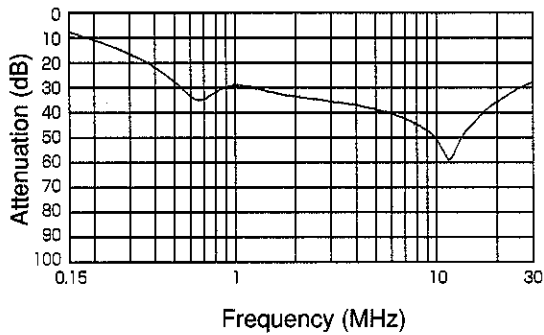
**MB1330**



**MB1340**



**MB1350**



Noise Filter

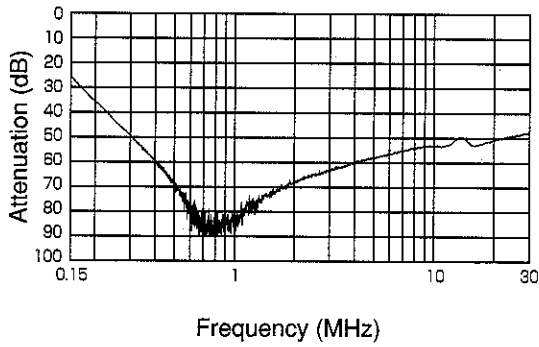
# MB13-SERIES

## CHARACTERISTICS

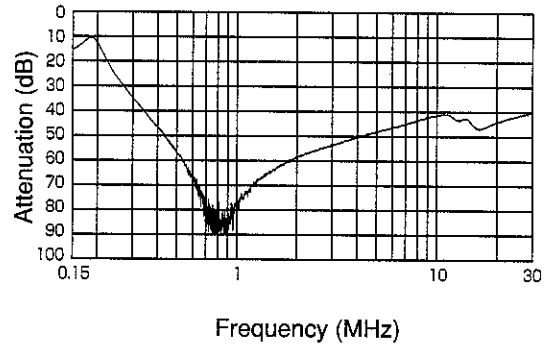
■ Typical Insertion Loss

(2) Symmetrical

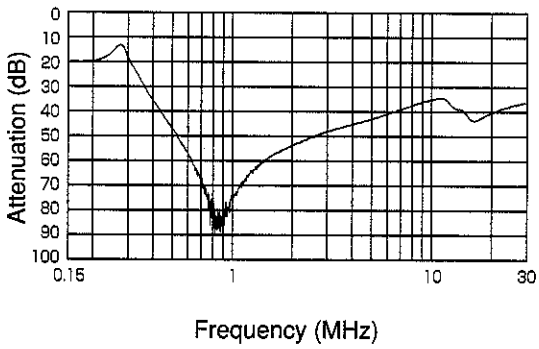
**MB1310**



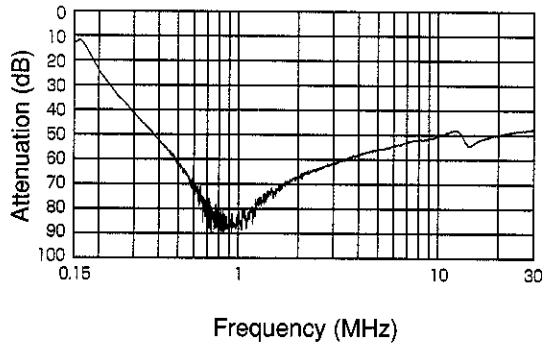
**MB1320**



**MB1330**



**MB1340**



Noise Filter

**MB1350**

