

# EMI/EMC FILTER

## TB6 SERIES



### FEATURES

- 3-Phase, 2 Stage Filters(Potted with Epoxy Resin)
- Remarkable attenuation for high voltage impulse
- Good shield effect by using metal case.
- Excellent filtering characteristics for both differential mode and common mode.

### APPLICATIONS

- Industrial equipment such as CNC Machine, Inverter, Converter, Telecommunication equipments, FA equipments Elevator.

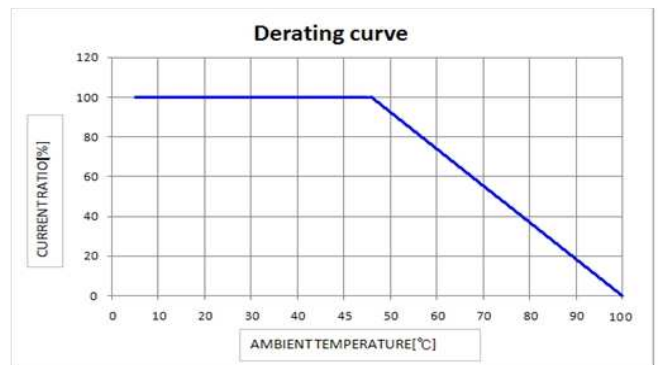
### SPECIFICATIONS

Model	Rated Voltage AC [V]	Rated Current	Voltage Drop Max [V] (Each Phase)	Temperature Rise [°C]
TB6-B006NBDC	3ΦX 480	6	1.0	50
TB6-B010NBDC		10		
TB6-B016NBDC		16		
TB6-B020NBDC		20		
TB6-B030NBDC		30		

- Many variations in X and Y capacitor value are available with approvals. For the details, consult with local agent.

Note: Test Voltage: 3000V DC for 1 minute, line to earth  
 2100V DC for 1 minute, line to line (without Resistor)  
 Insulation Resistance: 300 MΩ minimum at 100V DC, line and ground.  
 Weight: 1.8Kg for TB6-SERIES(6, 10, 16, 20, 30A)

Ambient Temperature Range: -25°C to +50°C max  
 Storage Temperature Range: -25°C to +100°C



### Model Number Construction

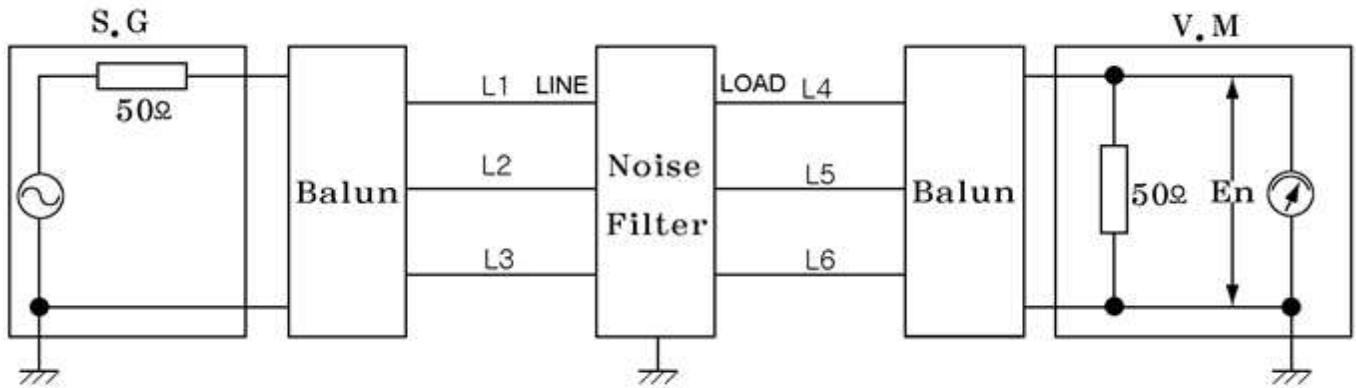
TB6-  
 |  
 Series name  
 (3Phase, 3Line Filter)

B  
 |  
 Input/Output  
 (B = Terminal Block)

006  
 |  
 Rated Current  
 006 = 6 A  
 010 = 10 A  
 016 = 16 A  
 020 = 20 A  
 030 = 30 A

NBDC  
 |  
 Circuit Stage  
 NBDC = 2 Stage

## ● Attenuation Measuring Method



OSC Level: 0 dB

$$\text{Insertion Loss} = -20\log(E1/E2)[\text{dB}]$$

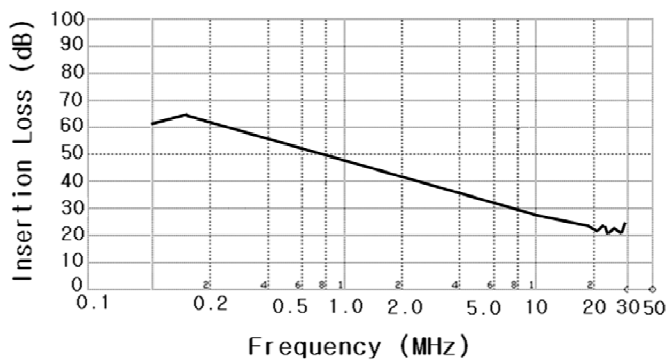
E1 : Level with the Noise Filter in the circuit.

E2 : Level without the Noise Filter in the circuit.

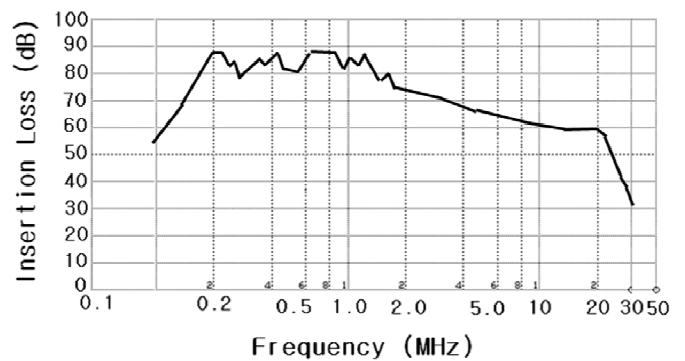
## ● Attenuation Characteristics

TB6-B006NBDC

COMMON MODE

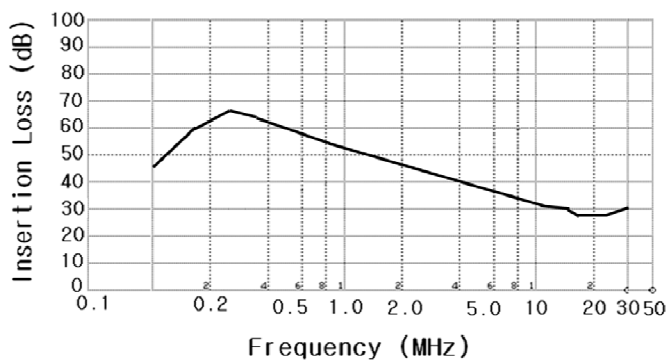


NORMAL MODE

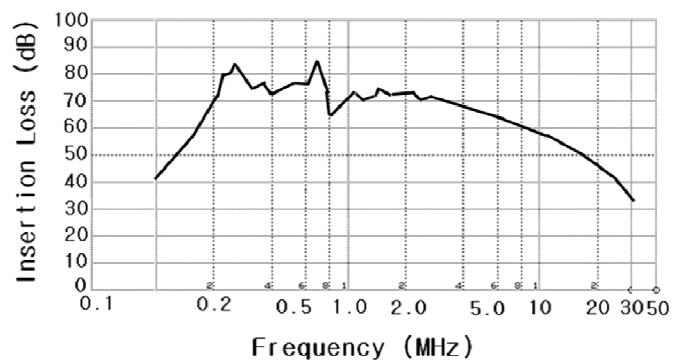


TB6-B010NBDC

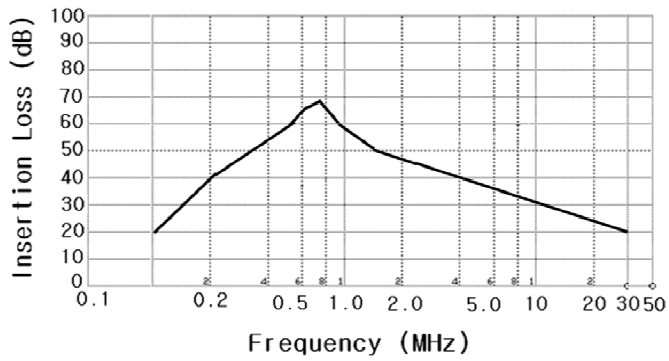
COMMON MODE



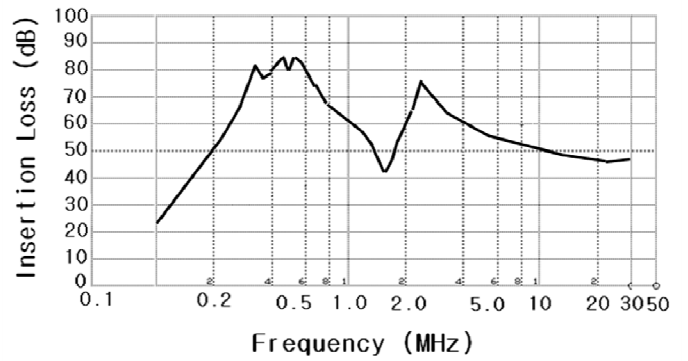
NORMAL MODE



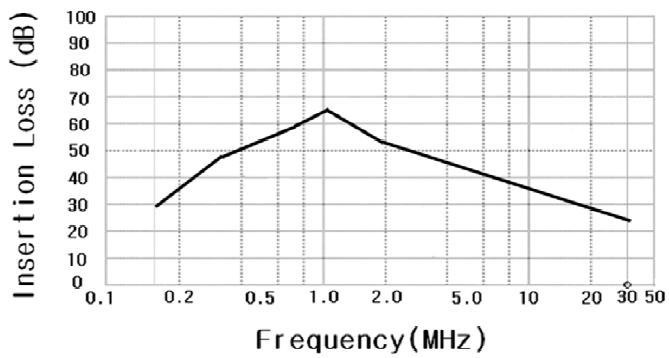
**TB6-B016NBDC**  
**COMMON MODE**



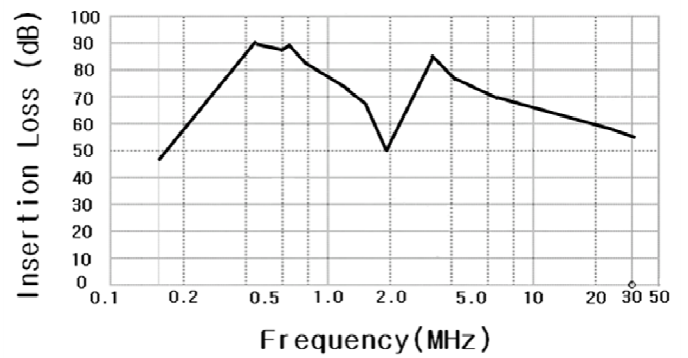
**NORMAL MODE**



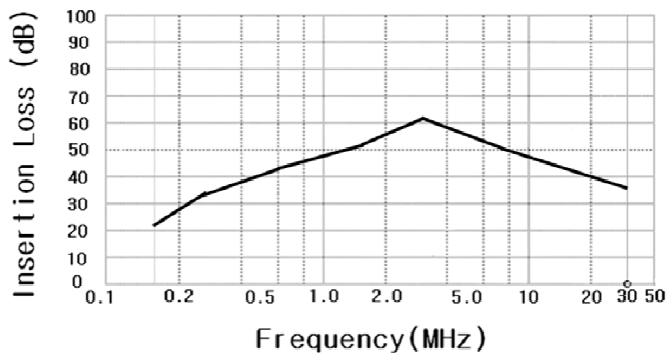
**TB6-B020NBDC**  
**COMMON MODE**



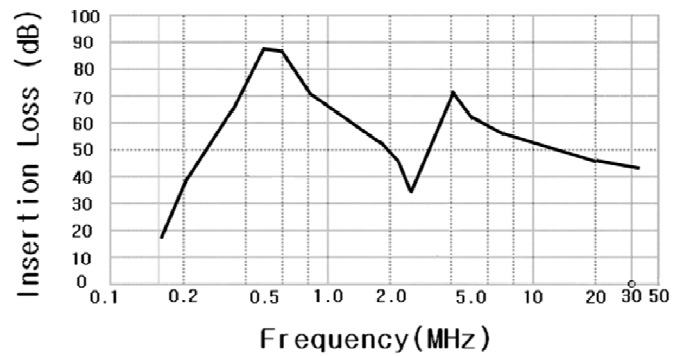
**NORMAL MODE**



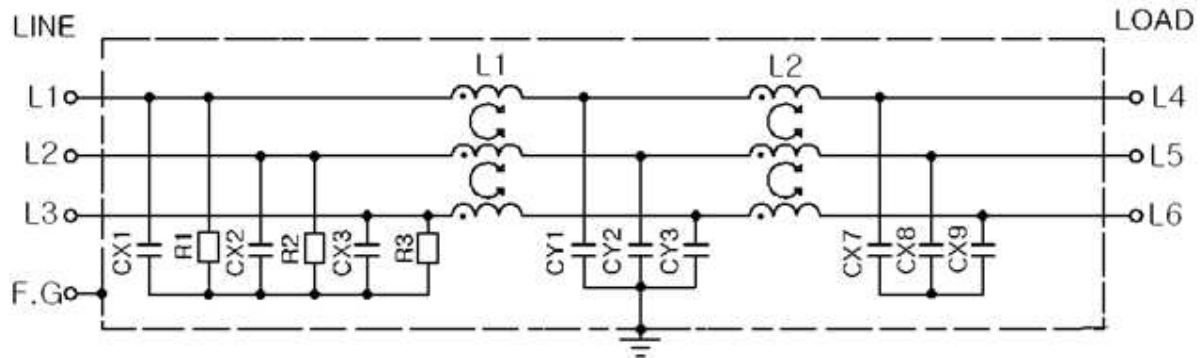
**TB6-B030NBDC**  
**COMMON MODE**



**NORMAL MODE**



● Circuit Diagram



● Shapes and Dimensions

Unit:[mm]

