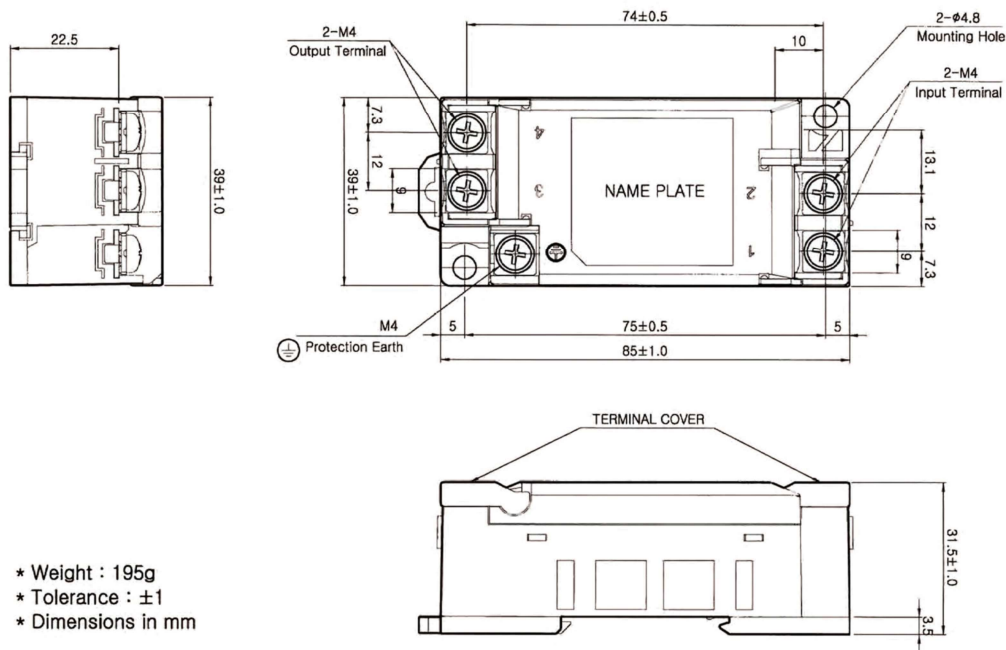


ENS-Series_Single Phase Noise Filter



Feature

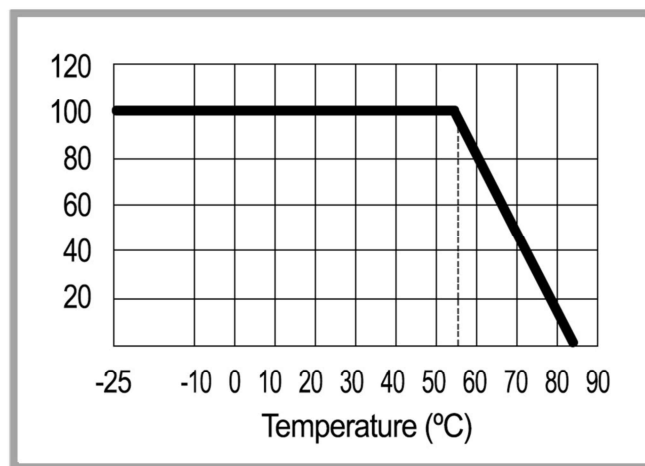
- Single Phase
- High Attenuation Characteristics (150KHz ~ 1MHz)
- 1-Stage Filter
- Low Leakage / Safety Cover
- Easy Push-Down Terminal Block
- Din Rail Mountable



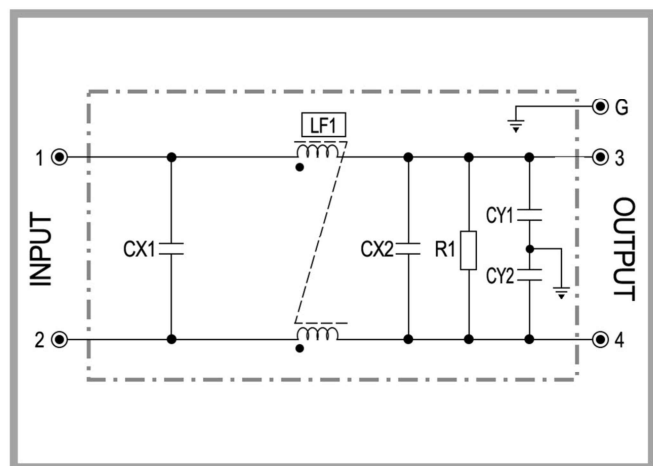
MODEL	Rated Voltage (AC/DC) (50Hz/60Hz)	Rated Current	Laekage Current (60Hz)	Naximum Air Temperature	Operating Temperature
ENS-2006	250V MAX	6A	1.0mA Max	55°C Max	-25°C ~ +85°C
ENS-2010	250V MAX	10A	1.0mA Max	55°C Max	-25°C ~ +85°C
ENS-2016	250V MAX	16A	1.0mA Max	55°C Max	-25°C ~ +85°C
ENS-2020	250V MAX	20A	1.0mA Max	55°C Max	-25°C ~ +85°C

ENS-Series

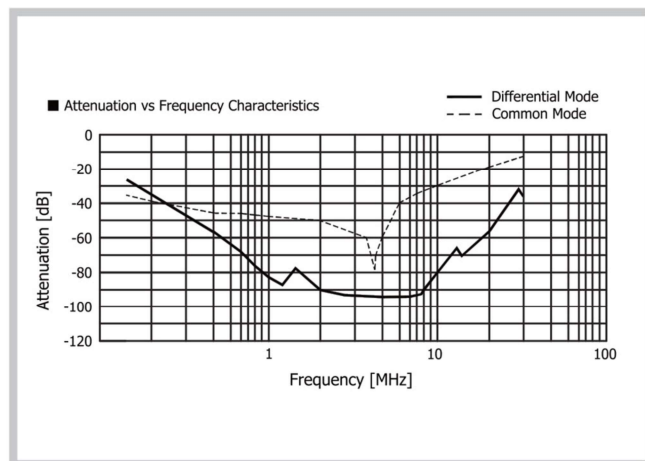
ENS-Series Derating Curve



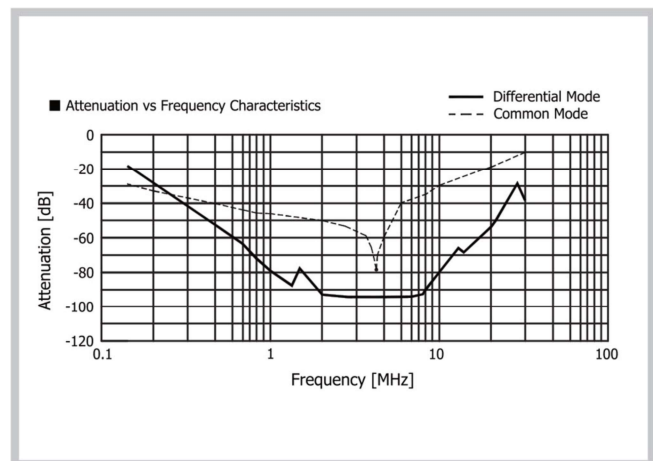
ENS-Series Circuit Diagram



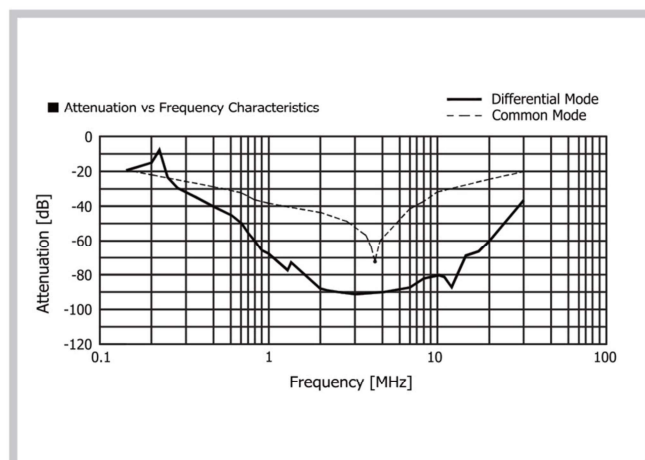
ENS-2006 Attenuation Characteristics



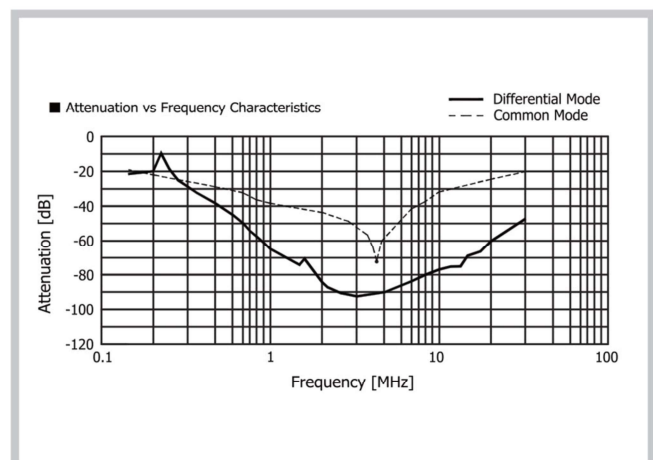
ENS-2010 Attenuation Characteristics



ENS-2016 Attenuation Characteristics



ENS-2020 Attenuation Characteristics



Specifications

	MODEL	Unit.	ENS-2006	ENS-2010	ENS-2016	ENS-2020
INPUT	Voltage	[V]	1Ø, AC 250 or DC250			
	Frequency	[Hz]	50 / 60			
	Rated Current (*1)	[A]	6	10	16	20
Voltage Drop		[V]	0.3V Max			
Electrical Resistance		[V]	2.500VAC (at cut off current 20mA/min)			
Electrical Resistance		[MΩ]	500mΩ Min (500VDC / 1 Min)			
Leakage Current (60Hz)	125V	[mA]	0.5mA Max			
	250V	[mA]	1.0mA Max			
DC Resistance (Max)		[mΩ]	110	40	20	15
Maximum Air Temperature		[°C]	55°C Max			
Environment	Operating temp. & Humidity	–	-25 ~ -85°C . 20 ~ 95% RH (Refer to Derating curve)			
	Storage temp. & Humidity	–	-40 ~ +85°C . 20 ~ 95% RH (Non Condensing)			
	Vibration	–	-10 ~ 55Hz at 2G 3minutes period, 1hour each X, Y and Z			
Dimension	Size (WxHxD)	[mm]	85x30x39 (Without Projection)			
Weight (Typ)		[g]	170g			
Safety Standards		–	Approved by Standard IEC/EN60939-2			

*1. Value for Ta less than 55°C

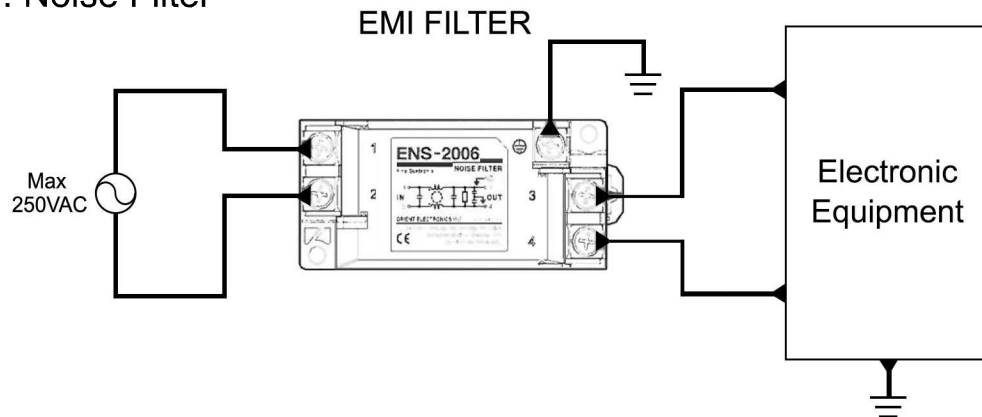
For Ta mor than 55°C, According to the derating curve as bove

User Guide

1. INSTALLATION CONDITION

1. Installation Condition

1-1. Noise Filter



1-2. Terminal Connection

Marking	Pin Connection		Function
1	INPUT	AC	NOise Filter AC Terminal
2		AC	
3	OUTPUT	AC	Noise Filter AC Terminal
4		AC	
G	Flame ground		CASE

1-3. Applicable Electric Cable

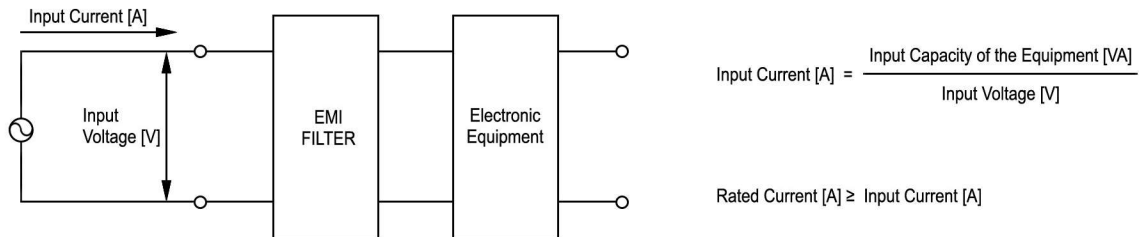
Rated Current (A)	Tech. Info	
	Face cut Size (mm ²)	AWG SIZE
6	0.75	18
10	1.0	16
16	1.5	14
20	2.5	12

1-4. Recmmented Clamping Torque

Screw	Torque	
M4	1.27N.m	

2-1. Rated Voltage : 250VAC

2-2. Rated Current



2-3. Withstand Voltage Test

AC, AC2500V, Current 20mA

2-4. Isolation Resistance Test

AC, DC500V, 500mΩ

2-5. Leakage Current Test

Input Voltage	Leakage Current	Note
0 ~ 250VAC	1.0mA Max	입력 전압 인가시 LINE-GND간 최대 누설전류

3. ENVIRONMENT CONDITION

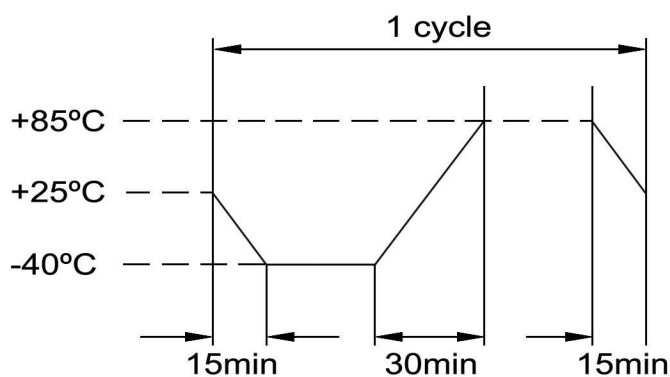
3-1. Operating Temperature Test

(1) : -25°C ~ +85°C

(2) : 20 ~ 95% RH

3-2. Heat Cycle Test

-40°C ~ +85°C

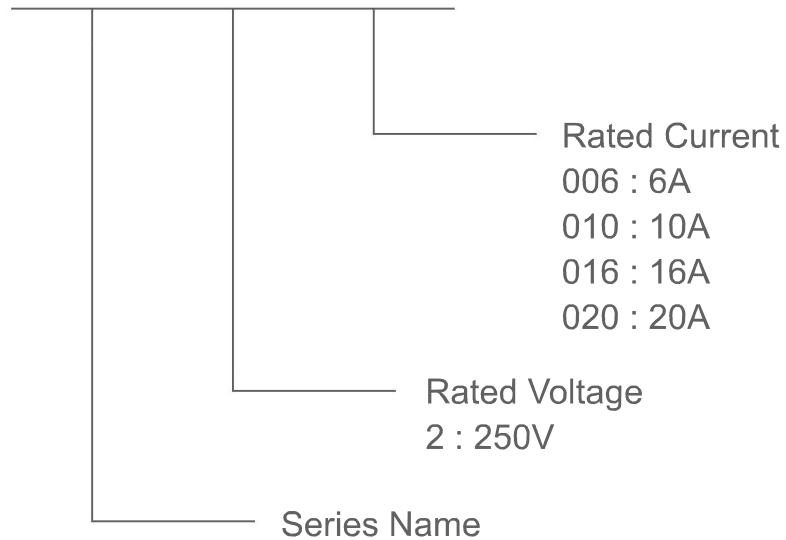


3-3. Vibration Test

- (1) Vibration Frequency : 10 ~ 55 Hz, 2G
- (2) Vibration Period : 3 minutes

4. ORDERING INFORMATION

ENS – 2006



Attenuation Characteristics

1. METHOD OF MEASURING ATTENUATION

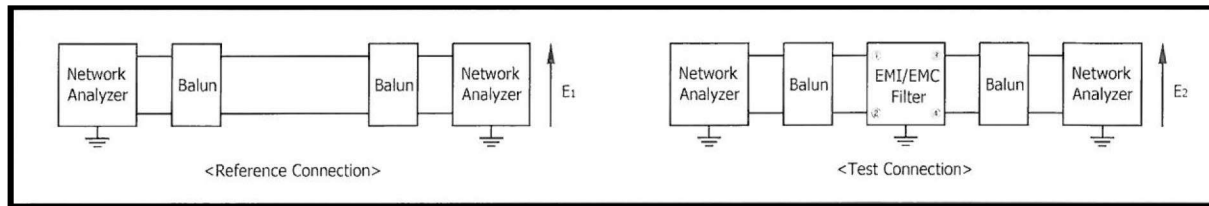


Fig.3.1 Differential Mode Attenuation Measuring Diagram

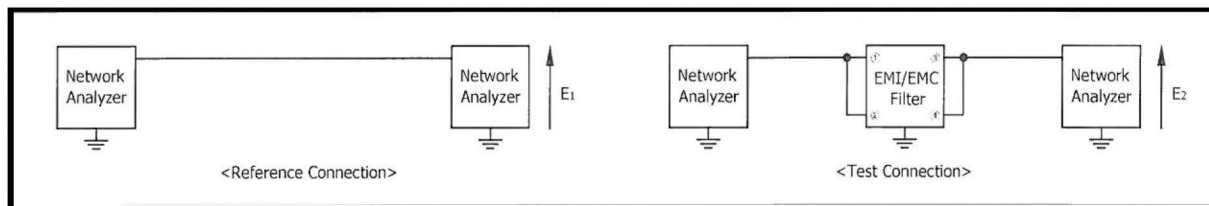
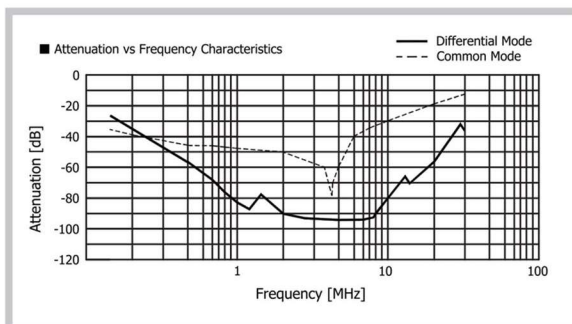


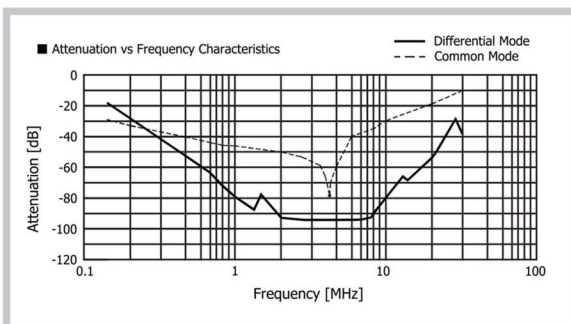
Fig.3.2 Common Mode Attenuation Measuring Diagram

2. ATTENUATION CHARACTERISTICS

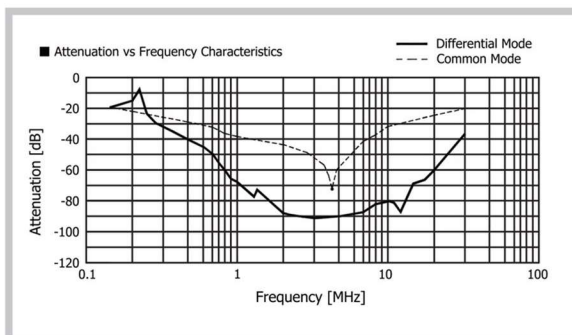
ENS-2006



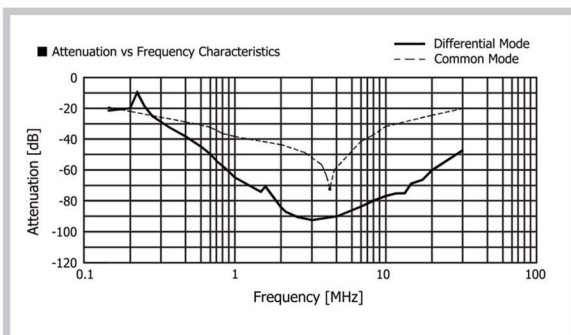
ENS-2010



ENS-2016



ENS-2020

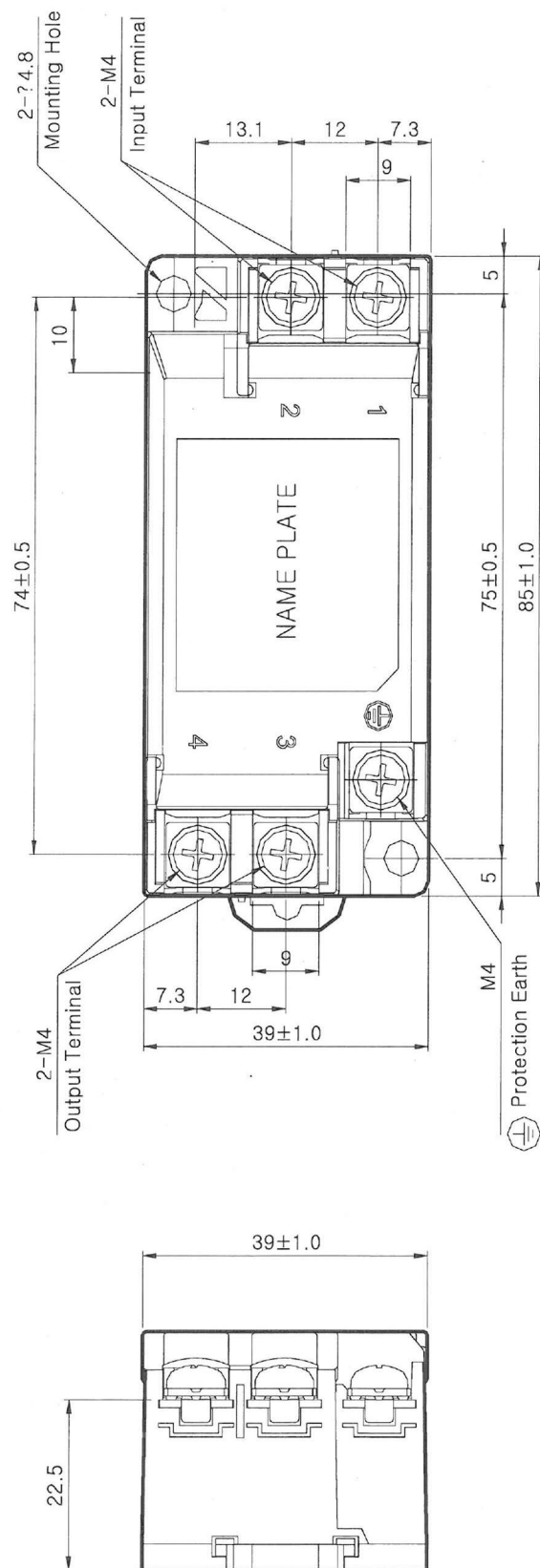


$$\text{Attenuation [dB]} = -20 \log(E_1/E_2)$$

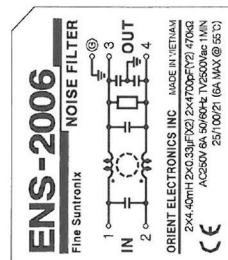
E_1 = Voltage in state without filter
 E_2 = Voltage in state with filters

Dimension

ENS-2 Series



※ NAME PLATE : ENS-2Series



- * Weight : 195g
- * Tolerance : ±1
- * Dimensions in mm