

# RTHN SERIES

## High-Attenuation Three-Phase Filter with Many Current Variations (Thin Type)



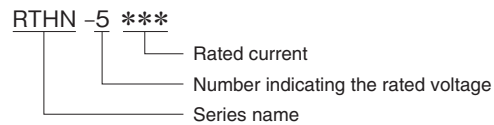
### FEATURES

- 6 to 1,000A wide range lineup.
- High attenuation, thin type with L2.
- Low-profile design.
- Self-tightening screws and an open/close type cover make wiring work easier.
- Terminal block cover included for safety.
- Compliant with RoHS directives.

### SAFETY STANDARDS

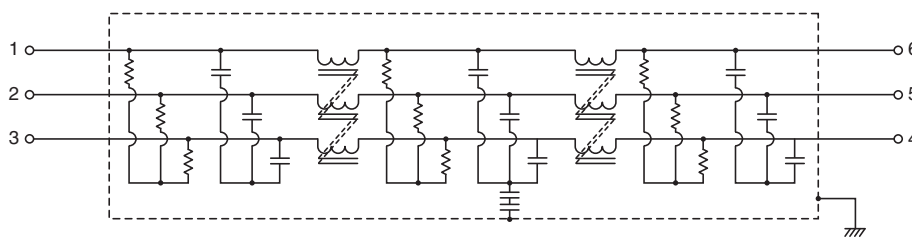
- |         |                                          |
|---------|------------------------------------------|
| UL1283  | File No. E62388 (Up to 150A)             |
| EN60939 | Licence Ref. No. SE/07115-4 (Up to 300A) |

### PRODUCT IDENTIFICATION

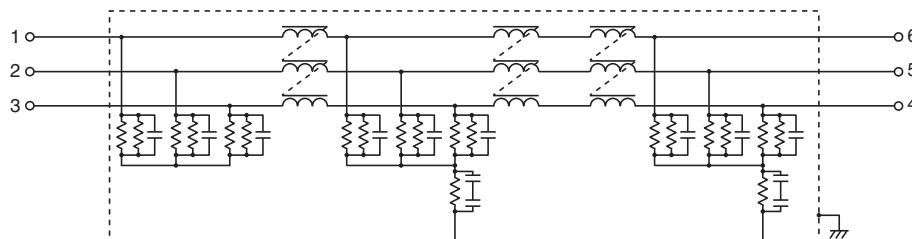


### CIRCUIT DIAGRAMS

RTHN-5006/5010/5020/5030/5040/5050/5060/5080/5100/5150/5200/5250/5300



RTHN-5400/5600/5A00



• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

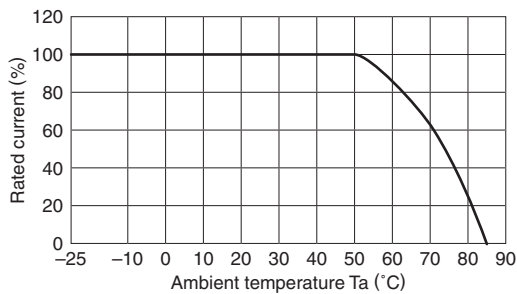
• All specifications are subject to change without notice.

## ELECTRICAL CHARACTERISTICS

Part No.	Rated voltage (AC/DC)	Rated current (AC/DC)	Withstand voltage	Insulation resistance	Leakage current	Operating temperature range	With derating over	DC resistance (mΩ)	Attenuation frequency range (MHz)		Weight (kg)	
									Common mode	Differential mode		
									at 25dB	at 25dB		
RTHN-5006	500V	6A	AC.2500V 60s [Between line to ground]	100MΩ min. [DC.500V/ 1min]	2.5mA max. [250V/60Hz]	-25 to +85°C	50°C	290 max.	0.1 to 30	0.1 to 30	0.7	
RTHN-5010		10A						120 max.	0.1 to 20	0.2 to 30	0.7	
RTHN-5020		20A						50 max.	0.1 to 20	0.2 to 30	1.0	
RTHN-5030		30A						26 max.	0.2 to 20	0.2 to 30	1.0	
RTHN-5040		40A						20 max.	0.2 to 20	0.1 to 30	2.1	
RTHN-5050		50A						14 max.	0.2 to 20	0.2 to 30	2.0	
RTHN-5060		60A						10 max.	0.2 to 20	0.2 to 30	2.0	
RTHN-5080		80A						10 max.	0.1 to 10	0.2 to 30	7.0	
RTHN-5100		100A						8 max.	0.1 to 10	0.2 to 30	7.5	
RTHN-5150		150A						6 max.	0.1 to 10	0.2 to 30	11.6	
RTHN-5200		200A						4 max.	0.3 to 20	0.2 to 30	15.8	
RTHN-5250		250A						3 max.	0.3 to 10	0.2 to 30	15.0	
RTHN-5300		300A						2 max.	0.5 to 6	0.2 to 30	14.3	
* RTHN-5400		400A						17.5mA max. [250V/60Hz]	0.2 max.	0.2 to 7	0.1 to 2	18.0
* RTHN-5600		600A						35mA max. [500V/60Hz]	0.3 max.	0.2 to 7	0.1 to 2	18.0
* RTHN-5A00		1000A						0.5 max.	0.2 to 7	0.1 to 2	18.0	

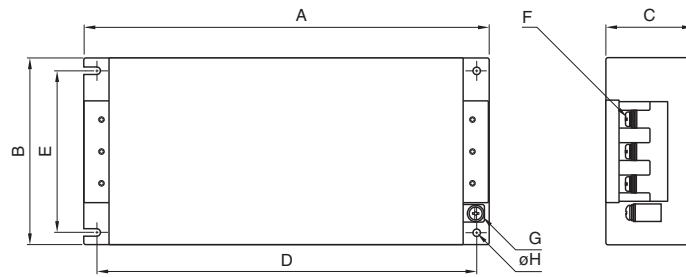
\* Under development

## DERATINGS

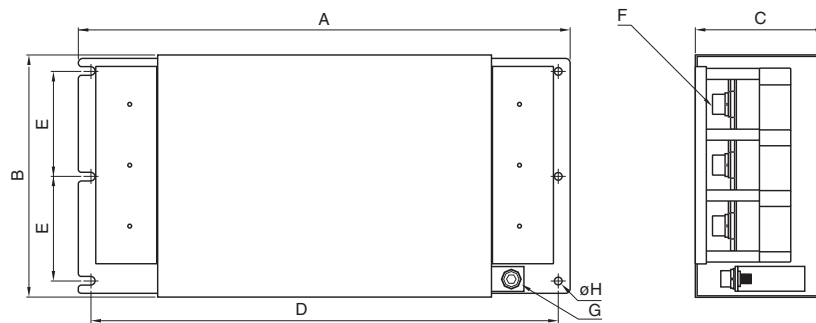


■ SHAPES AND DIMENSIONS

RTHN-5006/5010/5020/5030/5040/5050/5060/5080/5100/5150/



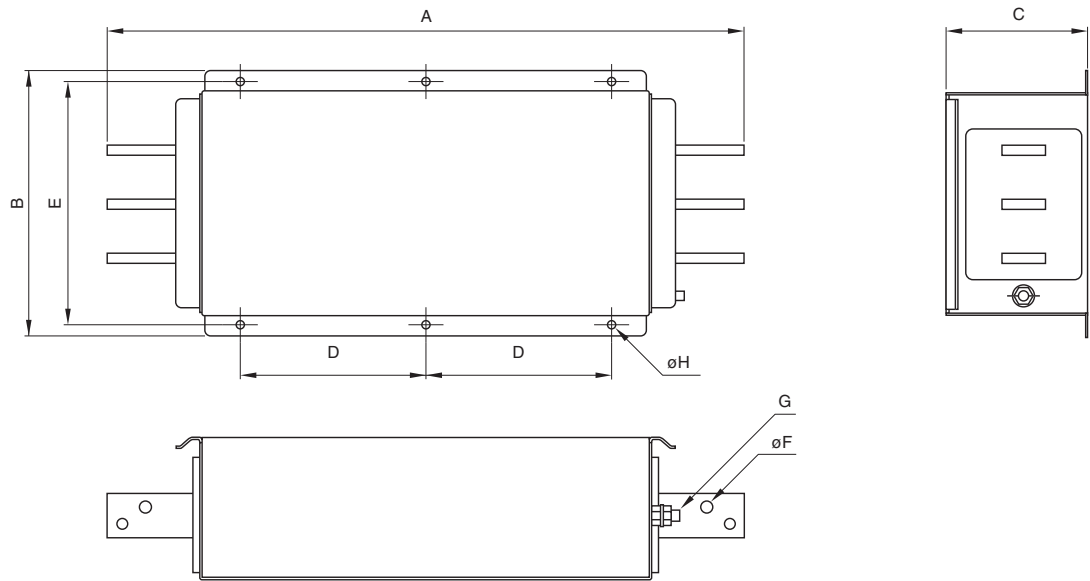
RTHN-5200/5250/5300



Dimensions in mm

Part No.	A	B	C	D	E	F	G	φ H	Recommended clamping torque
RTHN-5006	210	95	50	195	78	M4	M4	4.5	M4 : 1.27N · m M5 : 2.5N · m M6 : 4.8N · m M8 : 7.64N · m M10 : 11.8N · m
RTHN-5010									
RTHN-5020									
RTHN-5030	240	105	55	225	85	M4	M4		
RTHN-5040									
RTHN-5050									
RTHN-5060	300	128	68	280	102	M5	M4	5.5	
RTHN-5080									
RTHN-5100									
RTHN-5150	473	190	88	453	164	M8	M6	6.5	
RTHN-5200									
RTHN-5250									
RTHN-5300	593	195	103	573	84.5	M10	M8		

RTHN-5400/5600/5A00

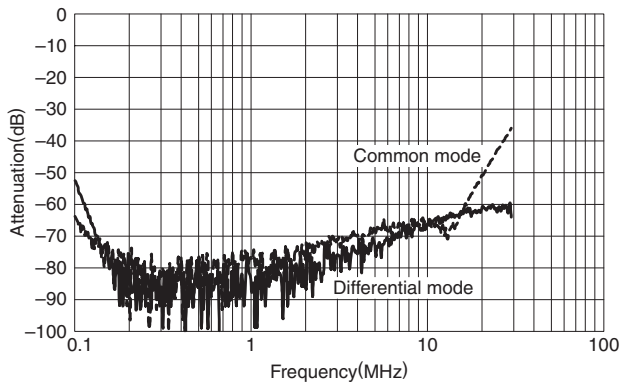


Dimensions in mm

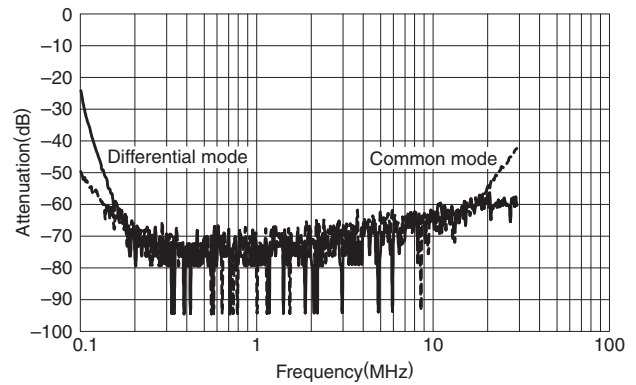
Part No.	A	B	C	D	E	F	G	φ H	Recommended clamping torque
RTHN-5400	610	300	160	210	275	φ10.5-1	M12	9.0	11.8N · m 14.0N · m
RTHN-5600	630					φ13-2			
RTHN-5A00	716								

■ ATTENUATION vs. FREQUENCY CHARACTERISTICS

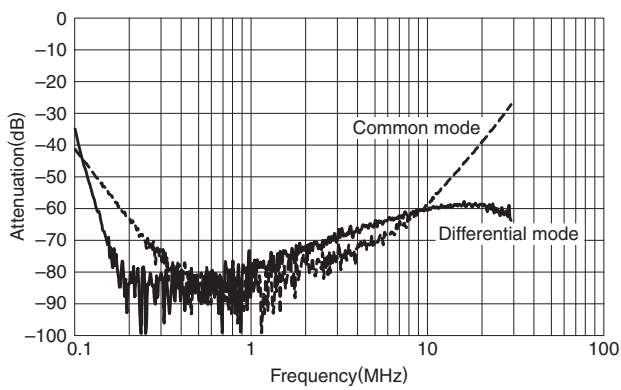
RTHN-5006



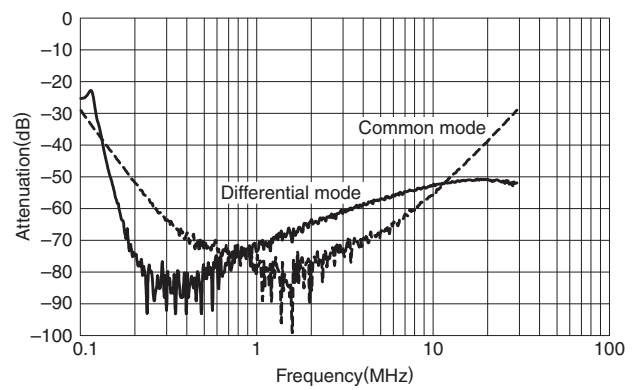
RTHN-5010



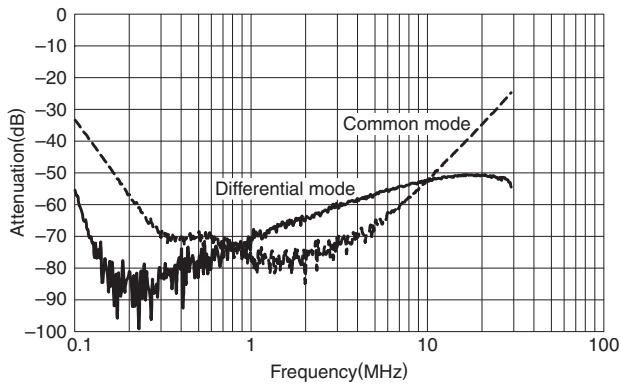
RTHN-5020



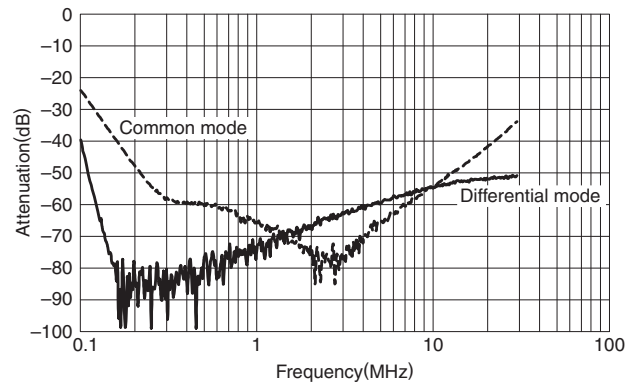
RTHN-5030



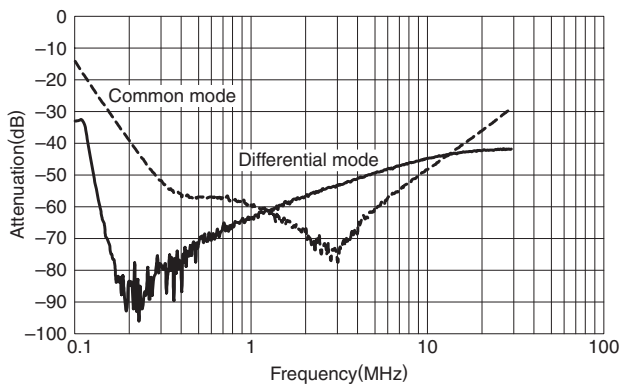
RTHN-5040



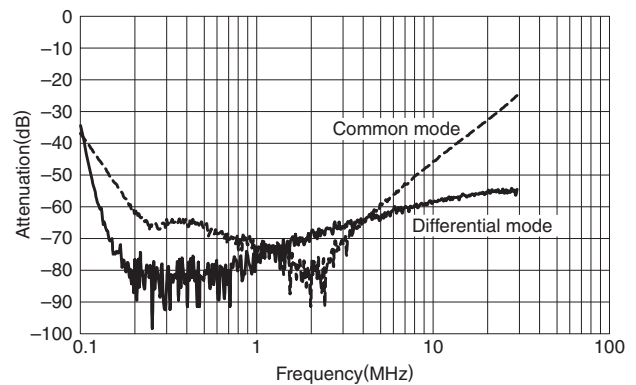
RTHN-5050



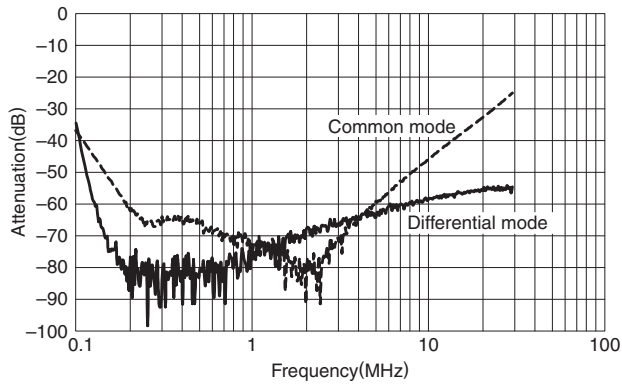
RTHN-5060



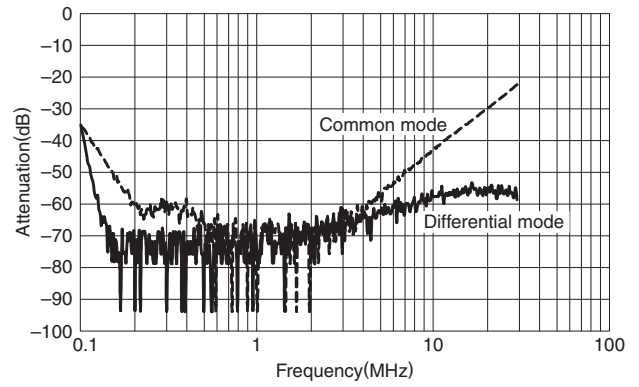
RTHN-5080



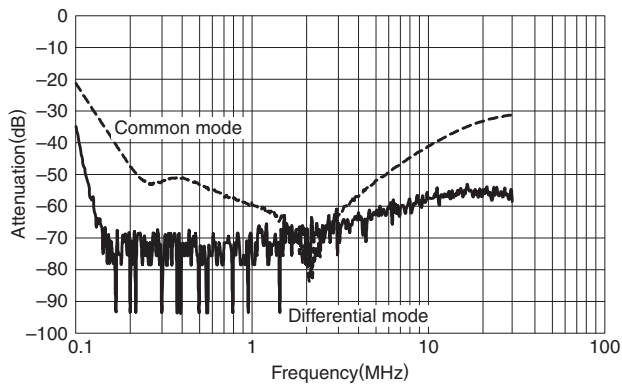
RTHN-5100



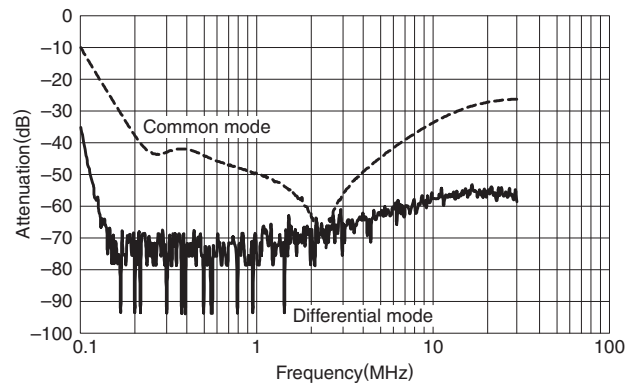
RTHN-5150



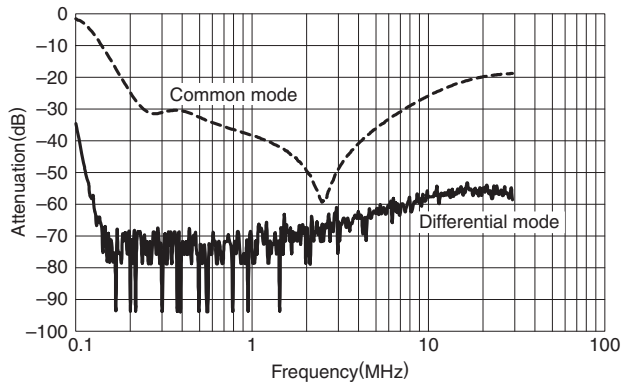
RTHN-5200



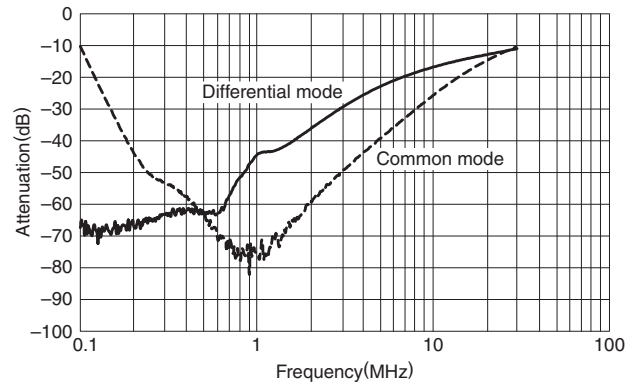
RTHN-5250



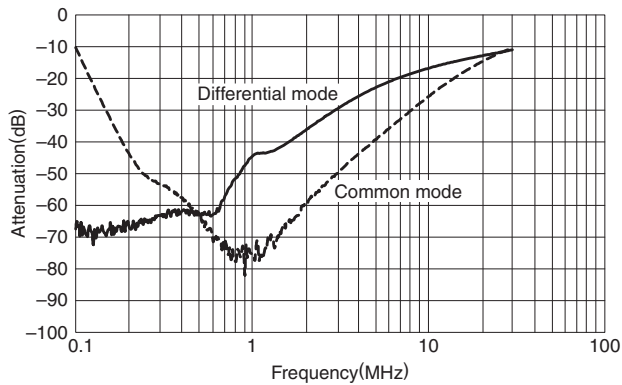
RTHN-5300



RTHN-5400



RTHN-5600



RTHN-5A00

