# **RTCN** SERIES

#### Filter Exclusively for Secondary Side Three-Phase Inverter with Many Current Variations



#### **■ FEATURES**

- 6 to 300A wide range lineup.
- Small due to L1, light and thin.
- Low-profile design.
- Self-tightening screws and an open/close type cover make wiring work easier.
- Terminal block cover included for safety.

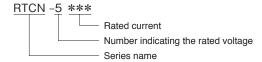
#### ■ SAFETY STANDARDS

UL 1283 UL File No. E62388 (Up to 150A)

EN60939-1/-2 (ENEC14) Licence Ref. No. SE/07115-5 (Up to 60A)

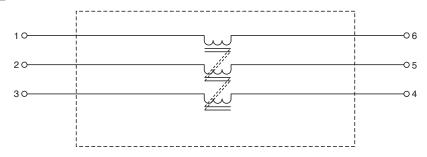
Licence Ref. No. SE/07115-4 (From 80A)

#### **■ PRODUCT IDENTIFICATION**



#### **■ CONFORMITY TO RoHS Directive**

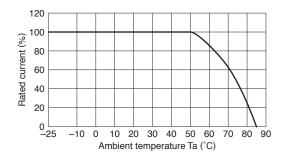
#### **■ CIRCUIT DIAGRAM**



## **■ ELECTRICAL CHARACTERISTICS**

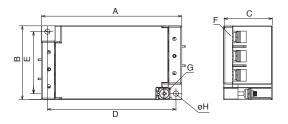
Part No.	Rated voltage (AC/DC)	Rated current (AC/DC)	Withstand voltage	Insulation resistance	Leakage current	Operating temperature range	With derating over	DC resistance (mΩ)	Attenuation frequency range (MHz)		Weight
									Common mode		
									at 10dB	at 5dB	(kg)
RTCN-5006		6A	- AC.2500V - 60s - [Between line - to ground]	100MΩ min. [DC.500V/ 1min]			50°C	145 max.	0.1 to 5	-	0.30
RTCN-5010		10A						60 max.	0.1 to 5	-	0.30
RTCN-5020		20A				-25 to +85°C		25 max.	0.1 to 5	-	0.49
RTCN-5030		30A						13 max.	0.2 to 4	-	0.49
RTCN-5040		40A						10 max.	0.2 to 3	-	0.96
RTCN-5050		50A						7 max.	-	0.2 to 3	0.90
RTCN-5060	500V	60A						5 max.	-	0.2 to 3	0.90
RTCN-5080		80A						5 max.	-	0.1 to 3	3.60
RTCN-5100		100A						4 max.	-	0.1 to 3	3.90
RTCN-5150		150A						3 max.	-	0.1 to 3	6.20
RTCN-5200		200A						4 max.	-	-	8.90
RTCN-5250		250A						3 max.	-	-	8.40
RTCN-5300		300A						2 max.	-	-	8.00

## **■** DERATING GRAPH

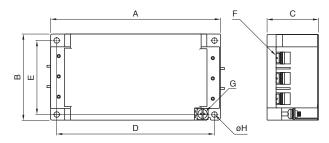


## **■ MECHANICAL**

RTCN-5006/5010



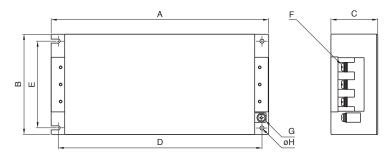
#### RTCN-5020/5030/5040/5050/5060



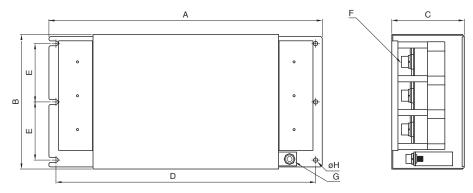
Dimensions in mm

Part No.	Α	В	С	D	Е	F	G	φН	Recommended clamping torque
RTCN-5006	120	62	42	110	F.2	M4	M4	4.5	
RTCN-5010	120	63	42	110	53	IVI4	IVI4	4.5	
RTCN-5020	140	70	42	130	60	M4	M4	4.5	M4:1.27N・m
RTCN-5030	140	70	42	130	60	IVI4	IVI4	4.5	M5∶2.5N • m
RTCN-5040									WIS : 2.5IN * III
RTCN-5050	170	90	54	160	80	M5	M4	4.5	
RTCN-5060									

## RTCN-5080/5100/5150



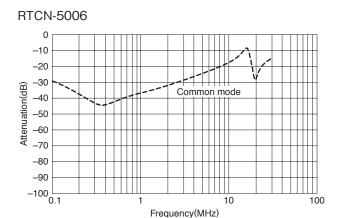
## RTCN-5200/5250/5300

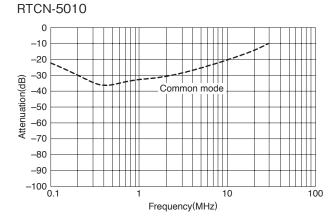


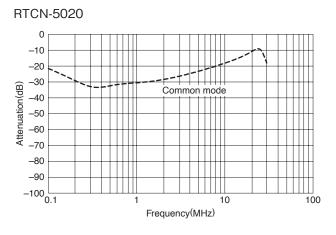
#### Dimensions in mm

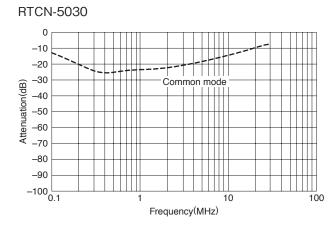
Part No.	Α	В	С	D	Е	F	G	φН	Recommended clamping torque
RTCN-5080	267	161	85	247	135	M8	M6	6.5	
RTCN-5100	207	101	65	247	133	IVIO	IVIO	0.5	M6∶4.8N • m
RTCN-5150	290	190	88	270	164	M8	M6	6.5	M8: 7.64N • m
RTCN-5200									100 . 7.0414 111
RTCN-5250	390	195	103	370	84.5	M10	M8	6.5	M10:11.8N • m
RTCN-5300									

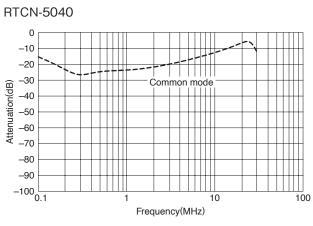
#### ■ ATTENUATION vs. FREQUENCY CHARACTERISTICS

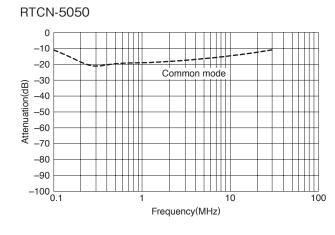


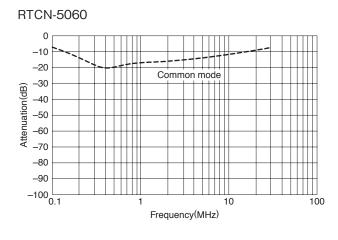


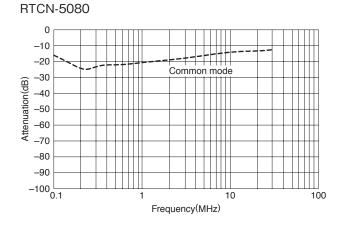










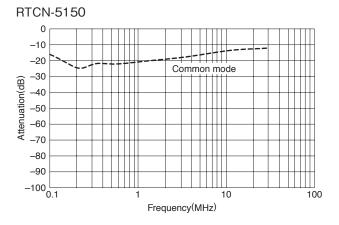


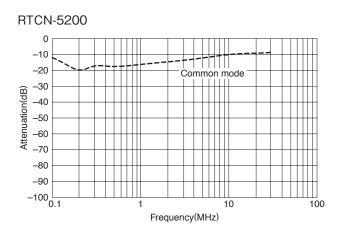
### RTCN-5100 -20 Common mode -30 Attenuation(dB) -40 -50 -60 -70 -80 -90 -100

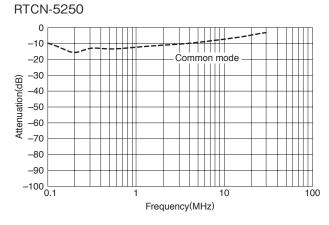
Frequency(MHz)

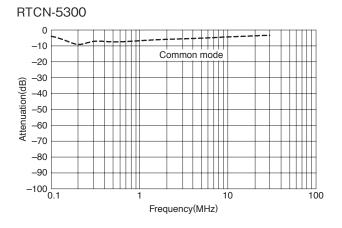
10

100









# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## TDK-Lambda:

<u>RTCN-5006</u> <u>RTCN-5010</u> <u>RTCN-5020</u> <u>RTCN-5030</u> <u>RTCN-5040</u> <u>RTCN-5050</u> <u>RTCN-5060</u> <u>RTCN-5080</u> <u>RTCN-</u>