

## 6A to 300A, 500VAC EMI Filters

### Features

- ◆ Two Stage Filter for Better Performance
- ◆ Low Profile
- ◆ Conforms to UL and EN Safety Agency Certifications

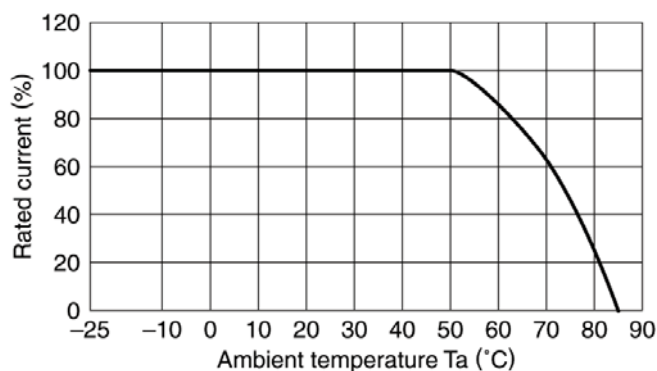
### Key Market Segments & Applications



### Specifications

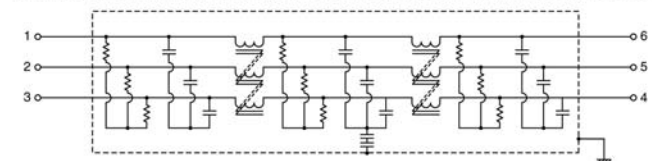
| Model                        |    | RTHN-5006   | RTHN-5010 | RTHN-5020 | RTHN-5030 | RTHN-5040 |
|------------------------------|----|---|-----------|-----------|-----------|-----------|
| Rated Voltage (AC, DC)       | V  | 500V Three phase  |           |           |           |           |
| Rated Current                | A  | 6A  | 10A       | 20A       | 30A       | 40A       |
| DC Resistance (total)        | mΩ | 290   | 120       | 50        | 25        | 20        |
| Model                        |    | RTHN-5050   | RTHN-5060 | RTHN-5080 | RTHN-5100 | RTHN-5150 |
| Rated Voltage (AC, DC)       | V  | 500V Three phase  |           |           |           |           |
| Rated Current                | A  | 50A   | 60A       | 80A       | 100A      | 150A      |
| DC Resistance (total)        | mΩ | 14  | 10        | 10        | 8         | 6         |
| Model                        |    | RTHN-5200   | RTHN-5250 | RTHN-5300 |           |           |
| Rated Voltage (AC, DC)       | V  | 500V Three phase  |           |           |           |           |
| Rated Current                | A  | 200A  | 250A      | 300A      |           |           |
| DC Resistance (total)        | mΩ | 4   | 3         | 2         |           |           |
| Withstand Voltage            | V  | Terminals to Case: 2500VAC (1 Minute)   |           |           |           |           |
| Isolation Resistance         | MΩ | 100MΩ minimum (500VDC, 1 Minute)  |           |           |           |           |
| Leakage Current (max)        | mA | 6A to 300A Models: 2.5mA at 250VAC 60Hz, 5mA at 500VAC 60Hz<br>400A to 1000A Models: 17.5mA at 250VAC 60Hz, 35mA at 500VAC 60Hz |           |           |           |           |
| Operating Temperature        | °C | -25 to +85°C (Derate above 50°C, see derating curve)  |           |           |           |           |
| Storage Temperature          | °C | -25 to +85°C  |           |           |           |           |
| Safety Agency Certifications | -  | UL1283 (Up to 150A) & EN60939 (Up to 300A)  |           |           |           |           |
| Weight                       | g  | 700g to 18000g model dependant (See weights chart on website)   |           |           |           |           |
| Warranty                     | yr | 1 Year  |           |           |           |           |

### Derating

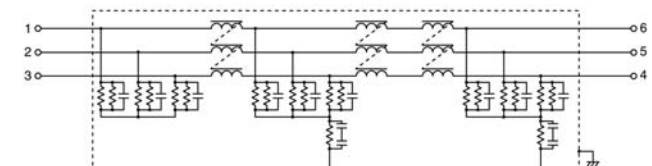


### Circuit

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

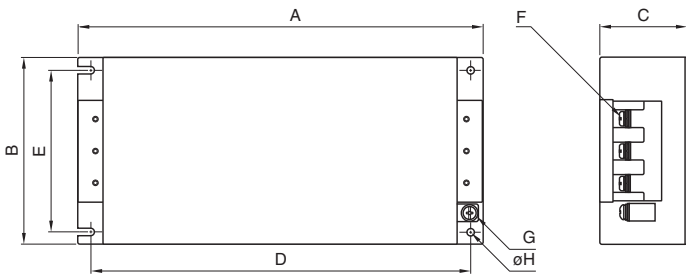


RTHN-5400/5600/5A00

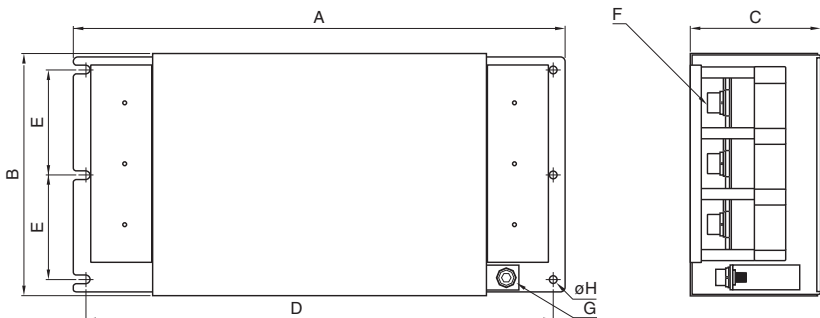


Outline Drawing

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<br><br>M5 : 2.5N · m<br><br>M6 : 4.8N · m<br><br>M8 : 7.64N · m<br><br>M10 : 11.8N · m |
| RTHN-5010 |     |     |     |     |      |     |    |     |   |
| RTHN-5020 | 240 | 105 | 55  | 225 | 85   | M4  | M4 |     |   |
| RTHN-5030 |     |     |     |     |      |     |    |     |   |
| RTHN-5040 | 300 | 128 | 68  | 280 | 102  | M5  | M4 | 5.5 |   |
| RTHN-5050 |     |     |     |     |      |     |    |     |   |
| RTHN-5060 |     |     |     |     |      |     |    |     |   |
| RTHN-5080 | 430 | 161 | 85  | 410 | 135  | M8  | M6 | 6.5 |   |
| RTHN-5100 |     |     |     |     |      |     |    |     |   |
| RTHN-5150 | 473 | 190 | 88  | 453 | 164  | M8  | M6 |     |   |
| RTHN-5200 | 593 | 195 | 103 | 573 | 84.5 | M10 | M8 |     |   |
| RTHN-5250 |     |     |     |     |      |     |    |     |   |
| RTHN-5300 |     |     |     |     |      |     |    |     |   |

For Additional Information, please visit  
us.tdk-lambda.com/lp/products/r-series.htm

