

Passive Harmonic Filters for Drive and Regenerative Applications:

Features and benefits

- Small compact housing
- RHF-A/RA reduces at full load the total harmonic current distortion to 10%
- RHF-B/RB reduces at full load the total harmonic current distortion to 5%
- One filter for several frequency converters
- High efficiency 99%
- User-friendly commissioning - no adjustment necessary
- No routine maintenance required
- Over temperature protection
- Easy to use in retrofit applications
- Paralleling of modules for larger applications
- Side by side mounting with the drive



Model

RHF-A or B = Drive only Harmonic Filter

RHF-RA or RB = Drive & Regenerative Harmonic Filter

Range

380 - 415V, 50Hz, 10 - 480A

380 - 415V, 60Hz, 10 - 480A

440 - 480V, 60Hz, 10 - 436A

600V, 60Hz, 15 - 395A

690V, 50Hz, 15 - 395A

Ambient temperature

5° to 45°C without de-rating, up to 60°C with de-rating.

Overload capacity

150%

Enclosure

IP20

IP21/NEMA 1 kit is optional for IP20 enclosures

Approvals

- CE
- UL (440 – 480V and 600V versions)

Standards

- IEEE519 RHF-B / RB, but RHF-A/RA subject to installation
- IEC61000-3-2 (<16A) All units
- IEC61000-3-12 (16-75A) All units
- IEC61000-3-4 (>75A) All units

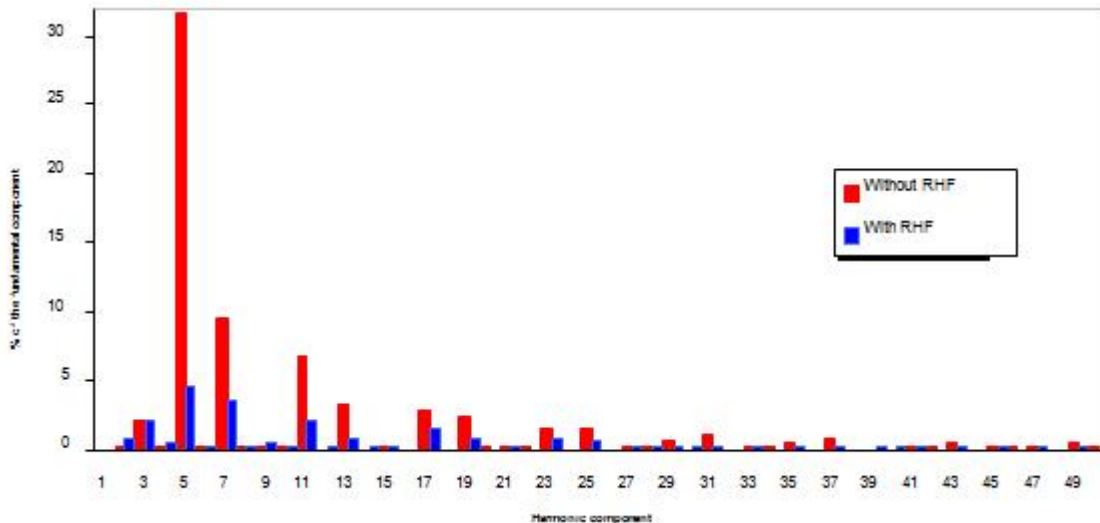
Enclosure	Dimensions in mm		
	A Height	B Width	C Depth
X1	332	190	206
X2	450	232	248
X3	594	378	242
X4	624	378	333
X5	739	418	333
X6	778	418	596
X7	909	468	449
X8	911	468	540



Example of typical THID values:

Rectifier without chokes	• THID ~80%
Rectifier with 4% uk choke	• THID ~40%
Rectifier with Harmonic filter type A	• THID <16%
Rectifier with Harmonic filter type B	• THID <10%
Rectifier with Harmonic filter type A and link choke	• THID <10%
Rectifier with Harmonic filter type B and link choke	• THID <5%

Fourier Analysis of mains currents



This scope traces below show a standard 6 pulse drive and then with the RHF module:

