

HARMONIC MITIGATION

HMT Three-Phase Zig-Zag Transformers

Product

The HMT (Harmonic Mitigating Transformer) is a three phase transformer with 0° or -30° displacement between the primary and the secondary.

The HMT is used to reduce current harmonics on the primary side of a transformer and voltage distortion on the load. A single HMT reduces the flow of triplen harmonics, 3rd, 9th, 15th, 21st, etc into the transformer primary. Used together on the same power line a 0° and -30° HMT will also reduce the 5th and 7th harmonics.

These transformers are designed to reduce voltage distortion when powering non-linear loads.

Applications

- For use in environments with non-linear loads such as computers and variable speed drives
- Where there is high computer, printer and communication equipment usage, and stable operation is necessary
- Medical facilities including hospitals
- Data centers
- Office buildings
- Schools

Specifications

- DOE-2016 efficiency
- 3 phase, 60 Hz
- 480V primary
- Zig-Zag secondary design voltage 208Y/120V
- 0° and -30° phase shifts
- 15 – 1,500 kVA range
- Aluminum windings
- K-13 standard
- 150°C temperature rise
- 220°C insulation class
- NEMA 3R enclosure
- Heat-cured ASA-61 gray powder coating finish
- Electrostatic shield
- Cores of high quality electrical steel
- UL / cUL Rated



Features, Functions, Benefits

- Space saving design for easy handling and installation
- Termination lugs provided for ease of installation through 75 kVA
- Vibration isolation pads provide quiet operation

Standards

- Meets DOE-2016 standard for energy efficiency
- Built in accordance with NEMA, ANSI, UL and CSA standards
- UL and CSA Listed

Options and Accessories

Consult factory for more information

- 50 Hz
- Other voltages available
- Copper windings
- K-4 and K-20
- Dual electrostatic shield
- 115°C, 80°C temperature rise



The Green Way to Sustained Energy Savings

HARMONIC MITIGATION

HMT Three-Phase Zig-Zag Transformers

Standard models

480V Δ — 208Y/120V, Phase shift of 0°, K13, 150°C temperature rise							
kVA	Catalog Number	Primary Tap Configurations		Dimensions (inches)			Net Wt (lbs)
		FCAN	FCBN	Height	Width	Depth	
15	424-9164-008	2 @ 2.5%	2 @ 2.5%	25	22	22	310
30	424-9194-008	2 @ 2.5%	2 @ 2.5%	28	25	23.5	400
45	424-9214-008	2 @ 2.5%	2 @ 2.5%	32	27	26	585
75	424-9234-008	2 @ 2.5%	2 @ 2.5%	38	29	29	775
112	424-9254-008	2 @ 2.5%	2 @ 2.5%	42	33	32.5	1,000
150	424-9264-008	2 @ 2.5%	2 @ 2.5%	46	35	37	1,530
225	424-9294-008	2 @ 2.5%	2 @ 2.5%	46	35	37	1,660
300	424-9314-008	2 @ 2.5%	2 @ 2.5%	60	48	43.5	2,360
500	424-9344-008	2 @ 2.5%	2 @ 2.5%	72	52	44	3,760

Dimensions subject to change without notice. Consult factory if exact measurements are critical.