De-tuning Reactors



The primary purpose of de-tuning reactors in a capacitor bank, is to prevent a phenomenon in the electrical system known as harmonic resonance. Resonance can have a devastating effect on electrical equipment, and is the main reason why older capacitor banks without de-tuning reactors fail and cause problems in the facility's power distribution system.



Reactors for Harmonic Filtering

Features

- High quality materials
- Design optimized to reduce total losses
- Small mechanical size
- Low noise level due to the glued air gaps
- 7% impedance (Z), 14%Z available on request

Benefits

- Eliminates harmonic amplification
- Enhances life of capacitors by reducing voltage and thermal stress due to harmonics
- Reduces over heating of the transformer, busbars, cables, switchgear etc caused due to harmonic amplification
- Improves Power Factor in harmonic rich environment

Technical specifications

Standards	IEC60289, IEC60076, VDE 0532 UL/Ur file E202612, RoHs, CE
Design	Iron core multiple airgap, low loss grain oriented steel
Tolerance, Inductance	-3 +3%
Linearity/%	1.75 x In 95% inductance
Insulation level	4 kVac
Temperature Class	F155 ⁰ C 6.25-12.5 kVAR / H 180 ⁰ C 25-75 kVAR
Cooling	Natural cooling
Ambient Temperature	-20 + 60 ⁰ C T60
Protection Class	IPOO
Installation	Screw Fastening
Noise level	Max 50 dB with rated harmonic Currents at 1 m distance

Part #	kVAR	Voltage	Length (mm)	Width (mm)	Height (mm)	Weight kg
3INP15.3/3.06CU	15	480V	230	96	243	14
3INP33.1/1.84CU	25	480V	230	140	200	19
3INP39.8/1.54CU	30	480V	225	124	260	24
3INP66.2/0.919CU	50	480V	300	150	260	37
3INP132.4/0.46CU	100	480V	360	190	320	65

(Dimensions and weight may vary slightly.)

600V De-tuning Reactors

480V De-tuning Reactors

(Dimensions and weight may vary slightly.)

Part #	kVAR	Voltage	Length (mm)	Width (mm)	Height (mm)	Weight kg
3INP21.2/3.6CU	20	600V	225	124	215	20
3INP42.4/1.76CU	40	600V	283	148	285	32
3INP53/1.436CU	50	600V	283	148	295	34
3INP63.6/1.2CU	60	600V	283	148	321	37
3INP105.9/0.869CU	100	600V	309	166	410	65

Other sizes available by special request