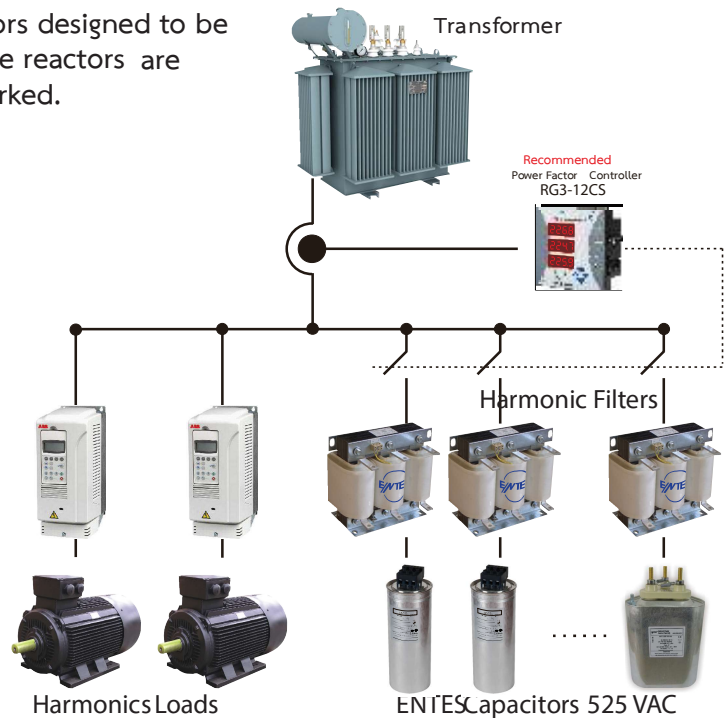
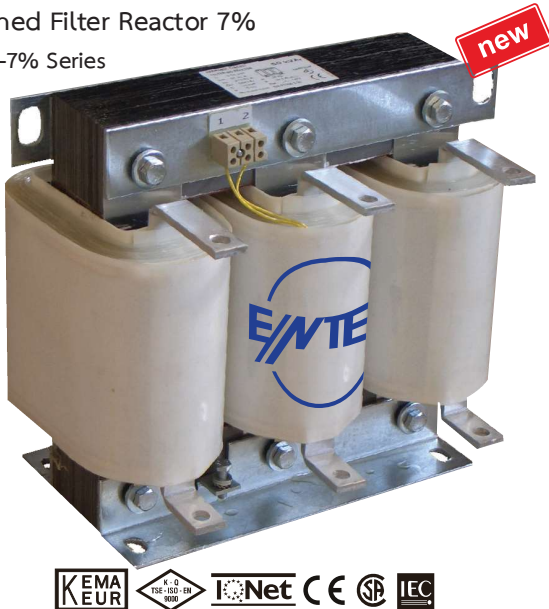


GENERAL INFORMATION ON REACTORS

ENTES Detuned filter reactors are high quality reactors designed to be used in detuned power factor correction units. These reactors are compatible with european standards and are CE marked.

Detuned Filter Reactor 7%

ENT.H-7% Series



TECHNICAL SPECIFICATIONS:

- Single or three phase, high permeable iron core, air gapped design
- High quality copper or aluminium windings
- Available at any resonance frequency
- Linearty according to resonance frequency
- Harmonic loads according to EN 61000-2-2
 - U1= %106 x UN
 - U3= %0.5 x UN
 - U5= %5 x UN
 - U7= %5 x UN
- Thermal Switch for overload protection
- Terminal block, bar or cable connection depending on current value
- Vacuum impregnated varnish to ensure silent and moisture-immune operation
- CE sign and compatibility with EN 61558 2-20
- Manufactured under ISO 9000 quality management

DETUNED FILTER REACTORS

Detuned Filter Reactors, are used in series with capacitor banks in power factor correction units. By using these types of detuned reactors it is possible to avoid following negative effects on system.

Harmonic Distortion Problem

- Overcurrent during switching on the capacitor banks.
- Overload of capacitor banks because of the harmonics resonance.
- Short lifetime on capacitors.
- Overheating of the utility transmission cables.
- Overheating of the distribution transformer.
- Unintended triggering of the protective devices.
- Distortion of utility voltage waveform and problems on voltage sensitive devices.
- Interferences on data transmission systems.
- Unexplainable faults in electronic boards.

Chosing the correct detuned filter reactor and capacitor value on detuned power factor correction systems is very important. To obtain optimum performance form a detuned power factor correction system following criteria must be controlled and met during the pairing of the reactors and capacitors.

VOLTAGE and CURRENT

Voltage and current values are set and designed according to specifications given by the customer.

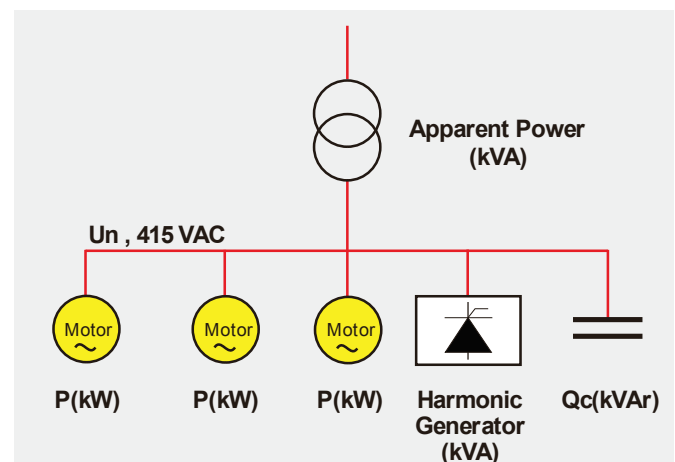
ISOLATION CLASSES

Class	Max. Temperature (Peak)	Max. Temperature Rise (Average)	
		Rated Load	Short Circuit
E	120°C	75°C	135°C
B	130°C	80°C	145°C
F	155°C	100°C	170°C
H	180°C	135°C	200°C

Insulation Class H on request

ENVIRONMENT

Ambient Temperature	-10°C To +40°C
Shelf Temperature	-20°C To +70°C
Max. Elevation	Up to 1000 m.



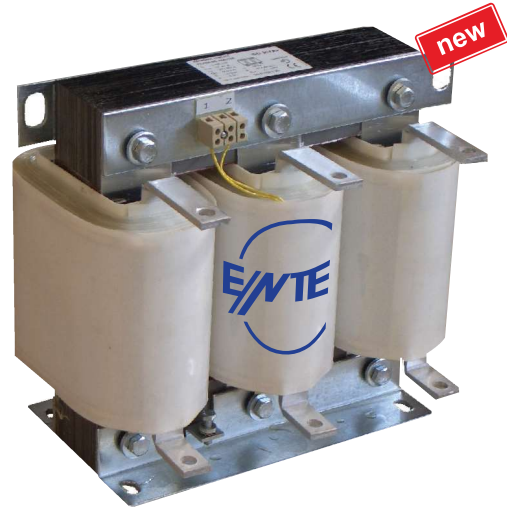
VALUES TO BE SPECIFIED FOR CUSTOM DETUNED FILTER REACTORS

- Utility Voltage.
- Resonance Frequency.
- Information on the available capacitors.

ENTES Detuned filter reactors are high quality reactors designed to be used in detuned power factor correction units. These reactors are compatible with european standards and are CE marked.



ENT.H-7% Series



400V 50Hz Utility Voltage, 189Hz Resonance Frequency (p=7%)

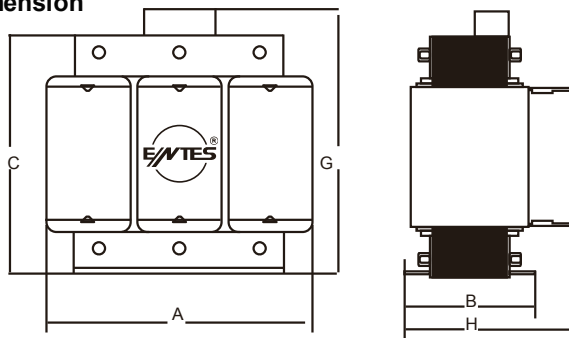


TYPE	L (mH)	I _{rms} (A)	I _{lh} (A)	I _{lin} (A)	C* (μF)	Size	Weight (Kg)	ราคา
ENT.H-7-400-25	1.53	40.17	44.18	83.88	157.19	7	17.5	28,000.-
ENT.H-7-400-50	0.77	80.33	88.37	167.76	314.38	10	21	33,000.-

Note : Detuned Filter Reactor co-operation work with **Capacitor 525 VAC**

User Level		Equipments for Installation		
Qn at 400 VAC	Qn at 525 VAC	Detuned Filter Reactor	Contactor	Power Factor Controller
25 kVAR	40 kVAR (20x2)	ENT.H-7-400-25	ENT-KT-25-C11	RG3-12C/CS/CS-T (recommended)
50 kVAR	80 kVAR (20x4)	ENT.H-7-400-50	ENT-KT-60-C12	RG3-12C/CS/CS-T (recommended)

Dimension



SIZE	A	B	C	G	H
7	240	130	200	-	230
10	265	152	220	-	252

Special Note

Other Size Detuned Filter Reactor 5.67% , 7% , 14%
(Start up 6.25 kVAR - 100 kVAR)

Call Price.-

Application : industrial Case Study

- 12 Steps 50 kVAR 400 VAC with 7% ENTES Detuned Filter Reactor

