SPGL
STANDARD-POWER

Active Harmonic Filter

Hi-Tech Power Quality Solution

Modular and Cabinet

New

;

An UK Brand Global

Http://www.standard-power.com.

Comparison, Specification and Data Sheet

Comparison of AHF and Traditional Power Filter (TPF)

SPGL AHF is the best hi-tech solution of power filter for any kinds loads.

	TPF	AHF
Technology	traditional power filter	modern power & electronic technologies
Respond time	normal respond	highest speed
Harmonic	only designed harmonics	automatic up to 50th
Efficiency	low	highest active filter
Stactic	non	yes,execellent
Power factor	non	yes,static compensation
Unbalance	non	excellent unbalance compensation
Resonance	yes	non
Overload	yes	non
Volume	big	very miniaturized

Very important function

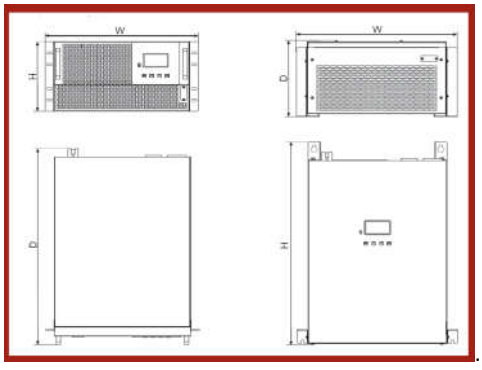
Comparison table TPF and AHF

Specification and Data Sheet

Product specification	200A	150A	100A	75A	50A	30A	Integral-cabinet type
System parameter							
Voltage	400V/690V(-20%,+20%)						
Rated frequency	50/60±5Hz						
Wiring system	three-phase three-wire/three-phase four-wire						
Circuit topology	three-level						
Performance index							
Rated current	30~200A						
Compensation mode	realize the random combination of harmonic, reactive and unbalance compensations						
Harmonic compensation capacity	2-50 times of harmonic compensations, eliminate all or specified harmonic waves						
Harmonic number setting	individual setting for each harmonic wave is allowed						
Harmonic compensation efficiency	more than 97%						
Reactive compensation	capacitive and inductive whole-range reactive compensation						
Three-phase unbalance compensation	Yes						
Total response time	≤5ms						
Overall efficiency	>97%						
Parallel operation capacity	support parallel operation for 10 modules in the maximum						
CT parameters	current at primary side 100~10000A,secondary current 5A (1A is optional)						
CT location	load side or power supply side						
Protection method	grid over-voltage & under-voltage, grid over-frequency & under-frequency, inverted sequence of input voltage, over-current, overheat, overload automatic current limit protection, bus short circuit						
Cooling mode	smart air cooling, according to heat dissipation condition conditions and load, automatically adjust air volume						
Noise	≤65dB						

Communication monitoring capability						
Communication protocol	modbus agreement					
Communication interface	RS485/RS232 /selectable ethernet network communication interface					
Monitoring module	2.8 inch LCD display					
Display content	voltage, current, frequency, power factor and such real-time operating information, wave curve, parameter configure, and log query					
Mechanical properties						
IP grade	IP20 (others can be customized)					
Dimension W*D*H(mm)	674*710*250	554*656*250	484*646*232	399*626*200	359*538*200	
Weight (Kg)	60Kg	47Kg	38Kg	27Kg	22Kg	
Color	Zp7021					
Environmental requirements						
Operating temperature	-25°C~>+40°C, if over 40°C, derate to run					
Relative humidity	5%~95%, without frost					
The altitude for full load running	2000m,if exceeding,derate to run					
Corresponding qualification						
Qualification authentication	IEC conformity, test report etc.					

10A,15A,20A SGPL AHF are available on request.
Cabinet extending up to 500A per standard cabinet
Standard cabinet dimension is 2200x1000x1000mm, H x L x D,
The cabinet with circuit breaker and bus bar system



Rack type and wall type

Operation Case

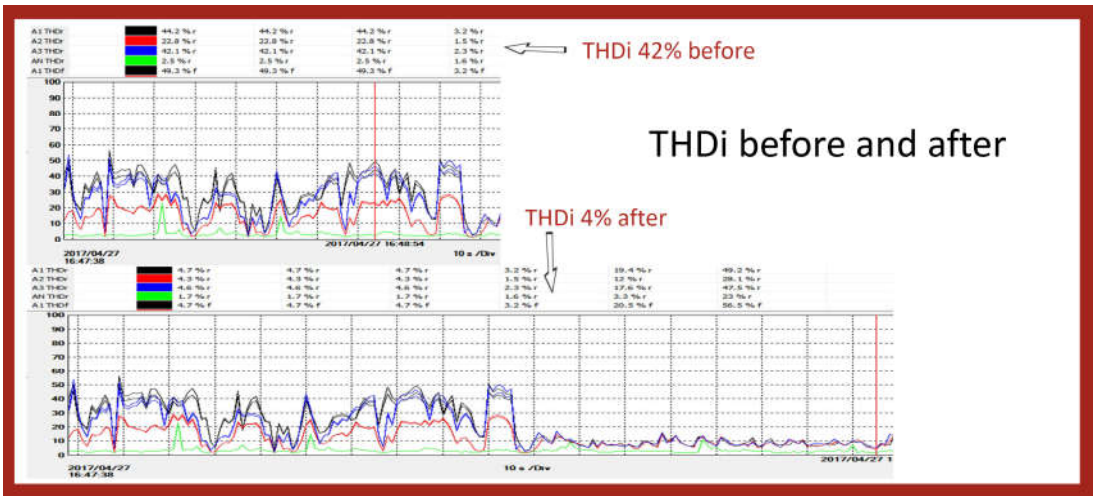
Equipment:

The transformer capacity of the plant is 630kVA,

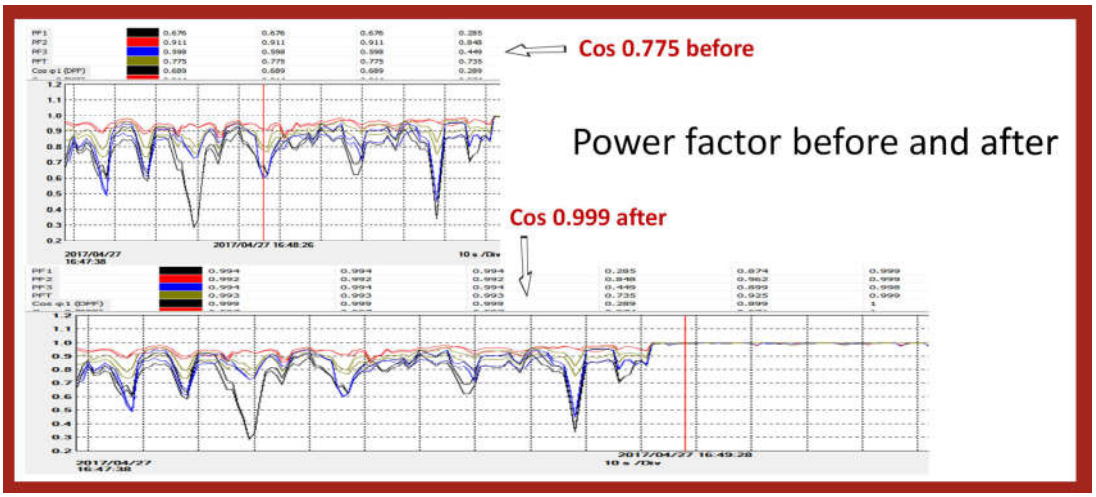
the harmonic current is mainly 5th and 7^{th,} up to 42%

current PF is 0.75 only,3 phase 4 wire system

the load types are mainly injection molding, inverter and heating equipment



The THDi before 42% and 4% after



The Power Factor before 0.775 and 0.999 after

Wall mounting on site