


## >>> Passive harmonic filters

This product is kind of low-pass harmonic filter to help improving harmonic currents, so that the total THDI can meet the limits of IEEE519, and the power factor can reach above 0.95 at 100% loading. There is no resonance between passive harmonic filter and system power. The input capacity can be switching in different groups according to the load request, to avoid the over compensation and under compensation of power factor. It can be applied to single or multiple 6-pulse inverter driving device, and other three-phase 6-pulse diode or SCR rectifier as follows:

--AC Inverter    --DC Motor Drives            --Fans and Pumps  
--Elevators      --Water Treatment Facilities    --Diode or Silicon Rectifiers

### Technical Data

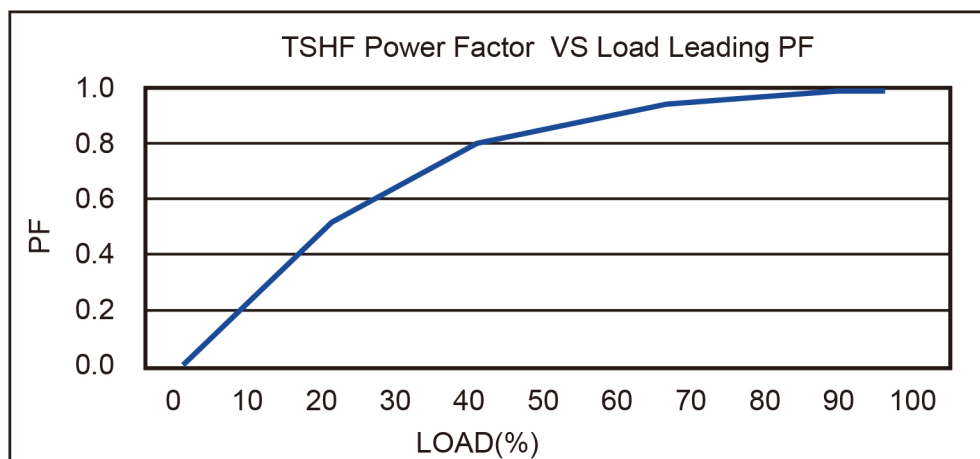
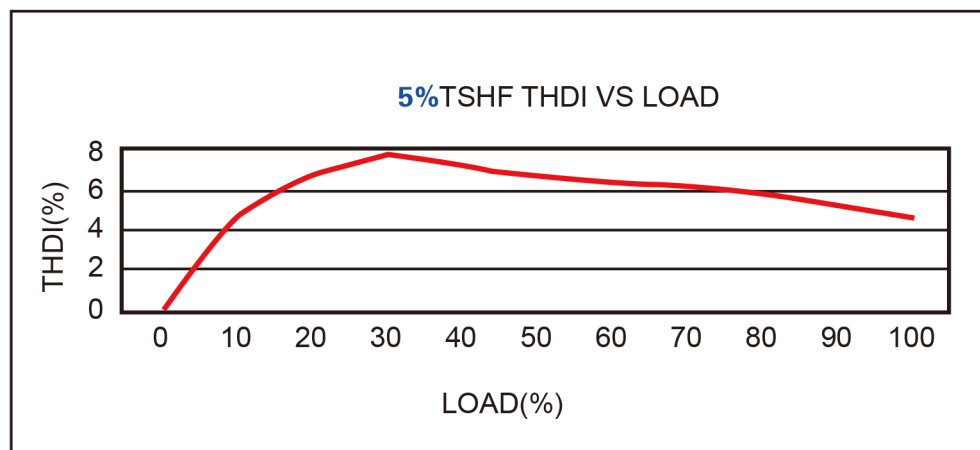
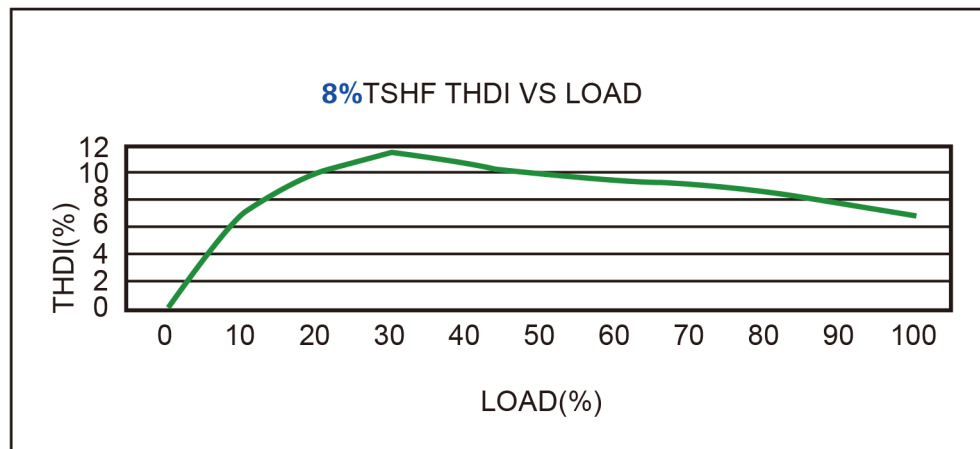
Reference standard	EN60076-6, EN61558-2-20, IEEE-519
Rated frequency	50Hz/60Hz
Rated voltage	220V to 690V
Total harmonic current distortion	According to IEEE-519
Total voltage distortion limits	Special application (hospitals, airports) 3% General system applications 5%
Line voltage tolerance	+/-10%
System impedance	1.5%-6%
THDI Target value	<5%, 8%, 12% at 100% load
Efficiency	>95%
Insulation class	H (UL approved resin and capacitor)
Dielectric test	50Hz 3KV, 60s
Protection class	IP00 (IP20 to IP54 optional)
Overload capability	1.5 times rated current for 1 minute
Ambient temperature	-40 to +50℃
Cooling method	Natural air
Elevation above sea level	≤1000m a.s.l. (≤4000m optional)
Voltage unbalance distortion rate	<1%
Design method	Three phase, dry type iron core, multiple air gap
Winding material	Copper/Aluminum
Terminals	Copper terminals or busbars
Approval marks	CE, TUV, EAC, 

Ordering code (THDI<8%)	Ordering code (THDI<5%)	U <sub>N</sub> (V)	Motor(HP)	Power(KW)	Rated current(A)
f <sub>N</sub> =50Hz, 3Phase, Copper wire winding					
TSHF840020-08	TSHF840020-05	400	20	15	32
TSHF840025-08	TSHF840025-05		25	19	40
TSHF840030-08	TSHF840030-05		30	22	48
TSHF840040-08	TSHF840040-05		40	30	60
TSHF840050-08	TSHF840050-05		50	37	75
TSHF840060-08	TSHF840060-05		60	45	90
TSHF840075-08	TSHF840075-05		75	55	110
TSHF840100-08	TSHF840100-05		100	75	145
TSHF840125-08	TSHF840125-05		125	90	180
TSHF840150-08	TSHF840150-05		150	110	210
TSHF840200-08	TSHF840200-05		200	160	280
TSHF840250-08	TSHF840250-05		250	185	350
TSHF840300-08	TSHF840300-05		300	220	420
TSHF840400-08	TSHF840400-05		400	300	610
TSHF840600-08	TSHF840600-05		600	450	860

Other specifications are available upon request.

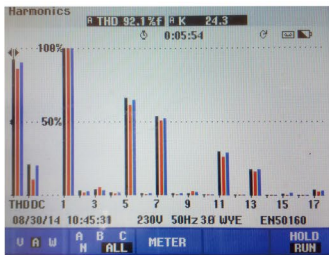
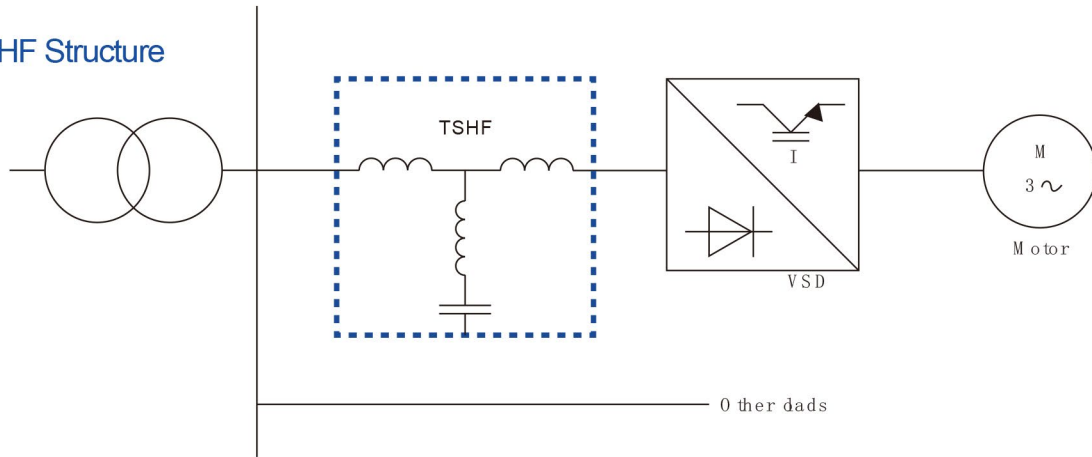


## Performance Characteristics





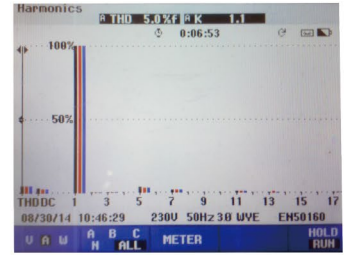
## TSHF Structure



Without



Passive  
hamonic filters



With

