Active Harmonic Filter

Items	400V					
	AHF 005/010/015	AHF 025/035	AHF 050/060	AHF 075/100	AHF 150	AHF 300
System Parameter						
Input phase voltage range	380 (228V~456V)					
Power grid fenquency	50/60Hz (range: 45Hz~62Hz)					
Parallel operation	Unlimited					
Overall efficiency	≥97% (Full load)					
Power grid structure	3P3W/3P4W					
CT Ratio	50/5~10000/5	50/5-10000/5（15A）；150/5~30,000/5（25~150A）module；600/5~10000/5（300A)				
Circuit toplogy	3-Level					
Peroformance Indicator						
Rated capacity	5A/10A/15A	25A/35A	50A/60A	75A/100A	150A	300A
Function	Harmonic compensation, Reactive power compensation, Unbalance compensation					
Control algorithm	Intelligent FFT/ Instantaneous Reactive Power/FFT					
Filtering range	2nd to 61th orders	2nd to 50th orders				
Filtering performance	≥95%					
Reaction time	20μs	<50μs				
Overall response time	5ms	<5ms				
Target power factor	Adjustable from -1 to +1					
Switch frequency	Average 50KHz	Average 20KHz				
Cooling air requirement	96CFM	321CFM	321CFM	543CFM	825CFM	1611CFM
Noise level	<68dB	<56dB			<65 dB	<75dB
Communication & Monitoring Capability						
Communications ports	RS485	RS485, Ethernet port (RJ45)				
Commmunications protocols	MODBUS (RTU)	MODBUS (RTU, TCP/IP)				
Module display interface	WIFI display, 7-inch HMI(central monitor)	4.3-inch HMI (module), 7-inch HMI(central monitor), LED				
Protection functions	Abnormal voltage/frequency protection; Inverter short-circuit protection; Abnormal output current protection; Inverter over-loaded protection, Over-tempearture protection etc,.					
Monitoring alarm	Avaliable					
Fault alarm	Avaliable	Available, 500 alarm records				
Mechanical Properties						
Mounting type	Wall-mounted/Rack-mounted	Wall-mounted/Rack-mounted/Cabinet				
Dimensions(W x D x H)mm	410*340*45(Rack-mounted) 410*45*340(Wall-mounted)	400*490*150 (Rack-mounted) 440*150*470 (Wall-mounted)	440*590*190 (Rack-mounted) 440*190*610 (Wall-mounted)	500*600*190(75A) 440*599*230(100A) (Rack-mounted) 500*190*585(75A) 440*232*625(100A) (Wall-mounted)	500*560*269 (Rack-mounted) 500*286*557 (Wall-mounted)	500*722*370 (Rack-mounted) 500*370*722 (Wall-mounted)
Module net weight	4.98kg	18kg	35kg	40kg	48kg	110kg
Color	Silver	Black				
Environment Requirement						
Attitude	≤1500m; Between 1500m to 4000m, derating 1% every additional 100m					
Ambient temperature	~10℃~40℃ (may derating if ambient temperature exceeds 45℃)					
Relative humidity	5%~95%, non-condensing					
Protection class	IP20 (IP degrees can be customizd)					
Related Qualifications & Standards						
Qualifications	CE, CCS					
Standards compliance	IEEE519, ER G5/4, IEC 61000					