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PROFESSION, CONCENTRATION.

# DIRECT **SIKES**

Power Transformers / Harmonic Filter / Sine Wave Filter / EMC Filter/  
Reactor / Regenerative Brake / Braking Chopper / Power Braking Resistor/  
Load test for generator, electric vehicle driver, motor controller, charging  
station etc.

## Harmonic filter

Whole product portfolios of power quality can be offered.



We are developing and producing in China for the world.



**GUANGDONG SIKES Electric Co.,Ltd.**

**SIKES**  
**18** YEARS OF  
SUCCESS

# PHF Harmonic Filters

Designed for matched performance with Danfoss VLT® Series drives

It can be used with the Danfoss Low Voltage AC Drives and other brand of AC Drives.

## Operating Conditions

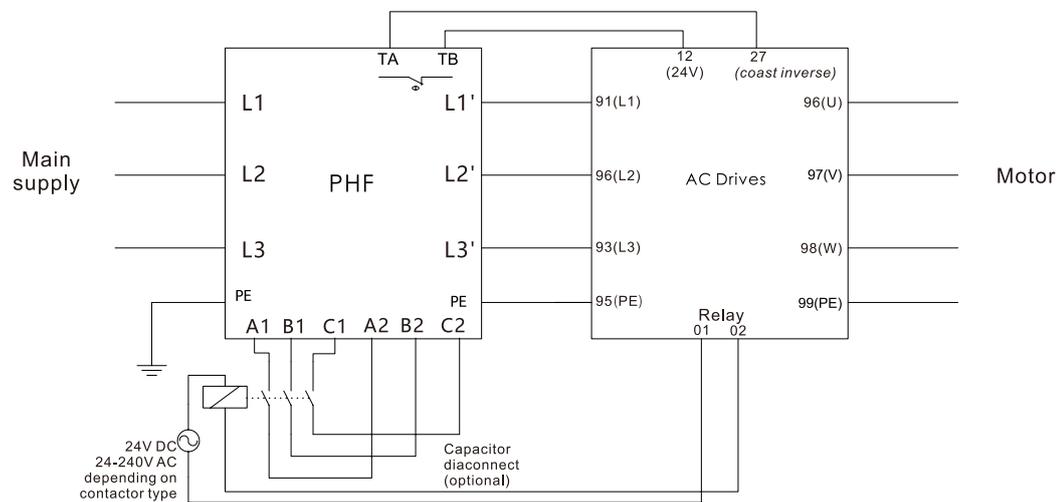
Cooling method	Air cooling
Ambient temperature (operation)	In full load condition: -25°C – +45°C
Storage temperature	-25°C – +70°C
Operation altitude	0 – 2000m
Relative humidity	0 – 95%, no condensation

## STANDARDS

IEEE 519  
EN 61000-2-2, EN 61000-2-4  
IEC/EN 61000-3-2, IEC/EN 61000-3-4, IEC/EN 61000-3-12

## Technical data

Rated voltage	Three phase, $U_{N3}$ =380 to 415V +10% to -15%
Degree of protection	IP20
Harmonic filtering effect	In full load condition, THDI of filter input is less than 10% or 5%. (Background voltage THDU < 2%, ratio of short circuit grid power to installed load > 66)
Frequency	50Hz
Insulation class	Overvoltage category III, according to EN61800-5-1
Overheating protection	140°C



## Electrical Installation

PHF Harmonic Filter contains the following terminals:

[ L1, L2, L3 ]	Mains terminals
[ L1', L2', L3' ]	Output terminals to the frequency converter.
[ A1, B1, C1 ] [ A2, B2, C2 ]	Optional connection terminals for capacitor disconnect.
[ TA, TB ]	Temperature switch connected to the frequency converter.

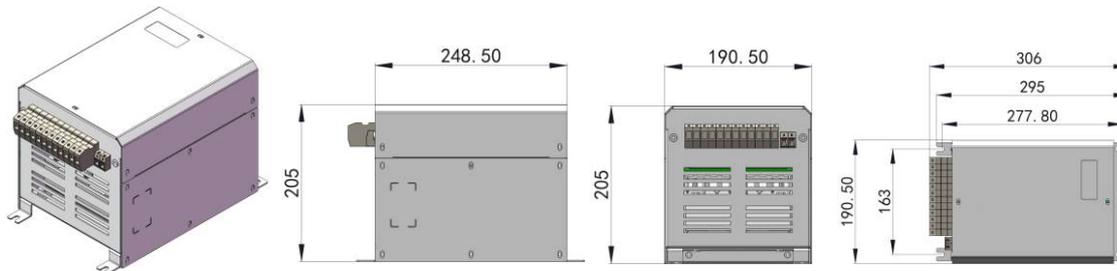
## Type selection table

Selection table, 380~415 V/50 Hz						
Drive values		PHF values				
Power rating (KW)	Input current (A)	Current rating (A)	TYPE		Enclosure type	
			THDI 5%	THDI 10%	THDI 5%	THDI 10%
0.55/1.1/1.5	3	3	SKS-PHF-003-4A5/05	SKS-PHF-003-4A5/10	X1-if-1.5-2.2KW	X1-if-1.5-2.2KW
2.2	5	5	SKS-PHF-005-4A5/05	SKS-PHF-005-4A5/10	X1-if-1.5-2.2KW	X1-if-1.5-2.2KW
4	8	8	SKS-PHF-008-4A5/05	SKS-PHF-008-4A5/10	X1-if-3.7-5.5KW	X1-if-3.7-5.5KW
5.5	10	10	SKS-PHF-010-4A5/05	SKS-PHF-010-4A5/10	X1-if-3.7-5.5KW	X1-if-3.7-5.5KW
7.5	14	14	SKS-PHF-014-4A5/05	SKS-PHF-014-4A5/10	X1	X1
11	22	22	SKS-PHF-022-4A5/05	SKS-PHF-022-4A5/10	X2	X2
15	29	29	SKS-PHF-029-4A5/05	SKS-PHF-029-4A5/10	X2	X2
18.5	34	34	SKS-PHF-034-4A5/05	SKS-PHF-034-4A5/10	X3	X3
22	40	40	SKS-PHF-040-4A5/05	SKS-PHF-040-4A5/10	X3	X3
30	55	55	SKS-PHF-055-4A5/05	SKS-PHF-055-4A5/10	X3	X3
37	66	66	SKS-PHF-066-4A5/05	SKS-PHF-066-4A5/10	X4	X4
45	82	82	SKS-PHF-082-4A5/05	SKS-PHF-082-4A5/10	X4	X4
55	96	96	SKS-PHF-096-4A5/05	SKS-PHF-096-4A5/10	X5	X5
75	133	133	SKS-PHF-133-4A5/05	SKS-PHF-133-4A5/10	X5	X5
90	171	171	SKS-PHF-171-4A5/05	SKS-PHF-171-4A5/10	X6	X6
110	204	204	SKS-PHF-204-4A5/05	SKS-PHF-204-4A5/10	X6	X6
132	251	251	SKS-PHF-251-4A5/05	SKS-PHF-251-4A5/10	X7	X7
160	304	304	SKS-PHF-304-4A5/05	SKS-PHF-304-4A5/10	X7	X7
185	352	352	SKS-PHF-352-4A5/05	SKS-PHF-352-4A5/10	X8	X7
200	381	381	SKS-PHF-381-4A5/05	SKS-PHF-381-4A5/10	X8	X7
220	438	438	SKS-PHF-438-4A5/05	SKS-PHF-438-4A5/10	X8	X7
250	463	480	SKS-PHF-480-4A5/05	SKS-PHF-480-4A5/10	X8	X8

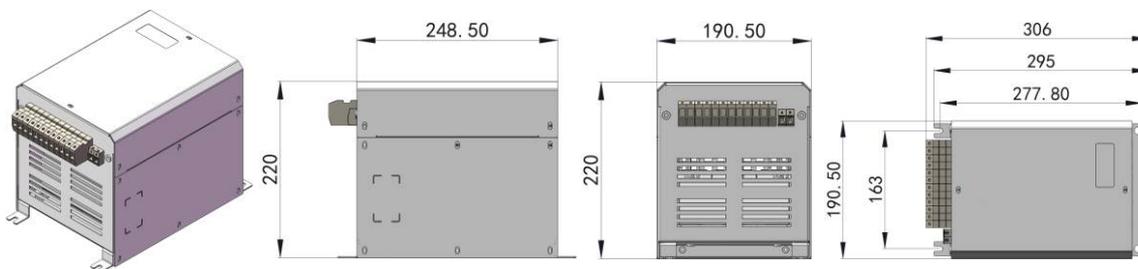
Note: The power of the selected filter and drive shall be matched as closely as possible to achieve the best filtering effect. Otherwise, the filter of larger power can be used with the drive of smaller power. However, the filtering effect will be reduced.

## Overall dimension

机箱型号 X1-if-1.5-2.2KW

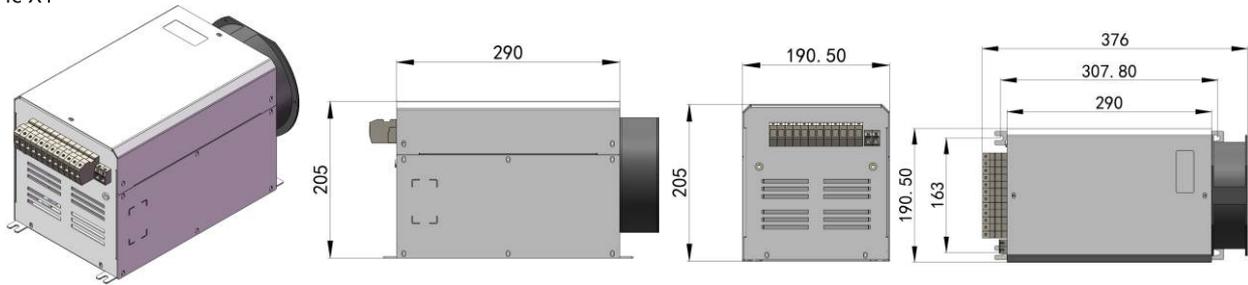


机箱型号 X1-if-3.7-5.5KW

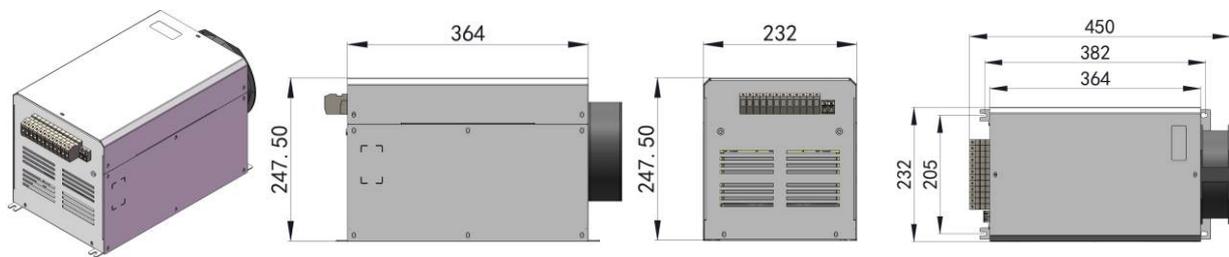


## Overall dimension

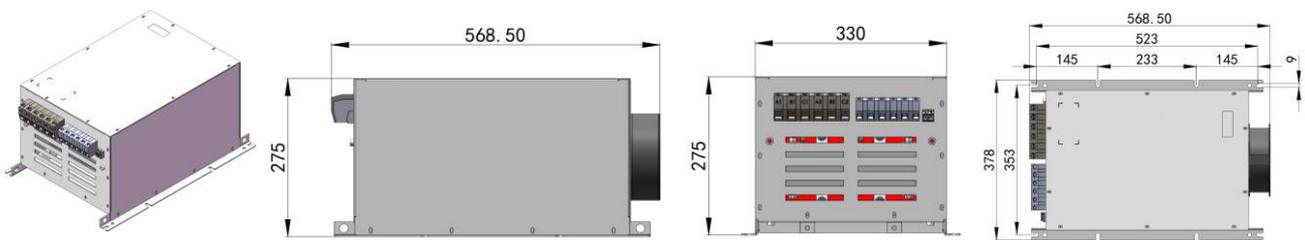
Pic X1



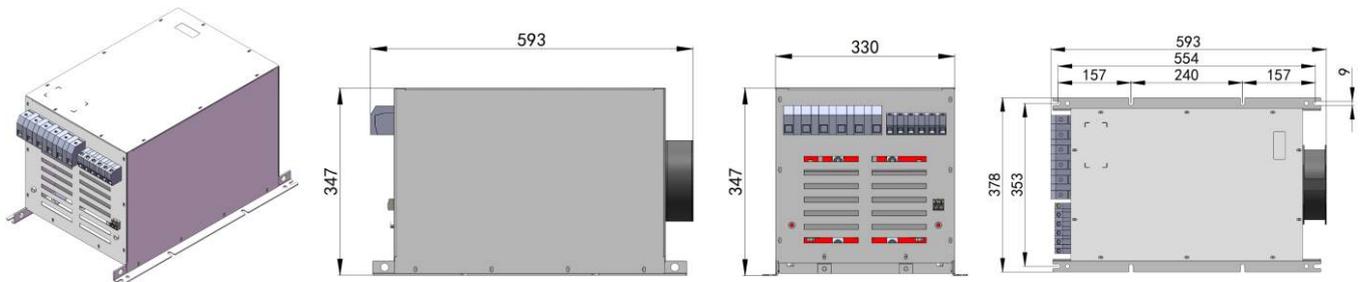
Pic X2



Pic X3

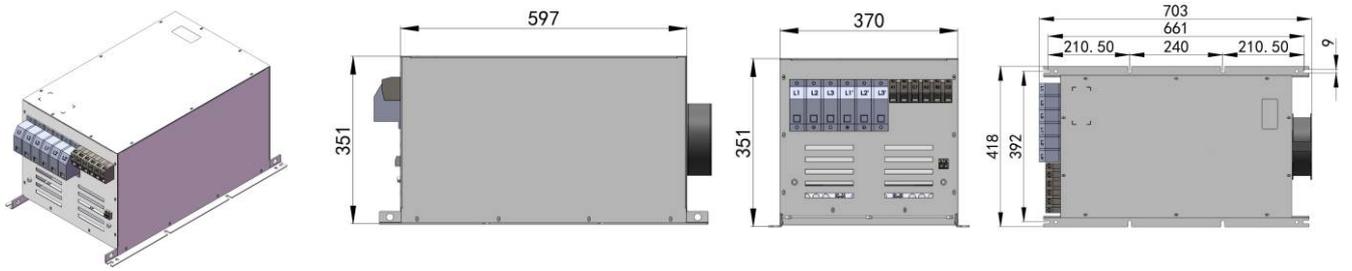


Pic X4

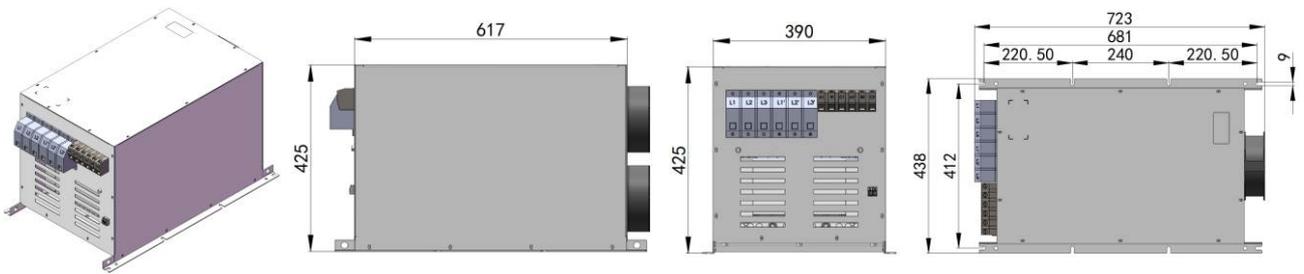


**Overall dimension**

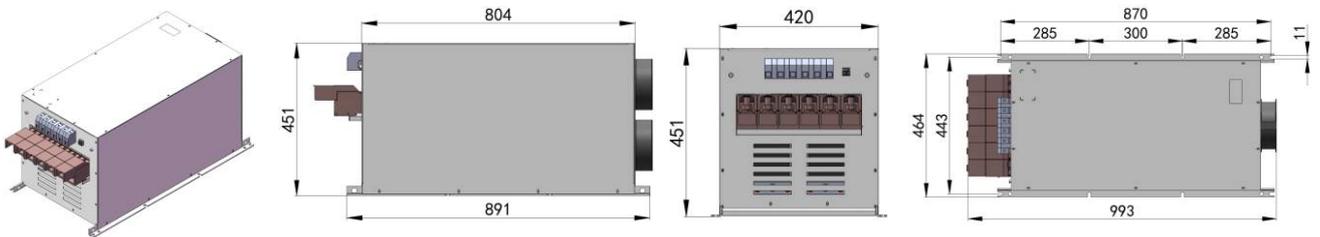
Pic X5



Pic X6



Pic X7



Pic X8

