

Conducted EMI Types 传导干扰的分类

Conducted interference is divided into two types:

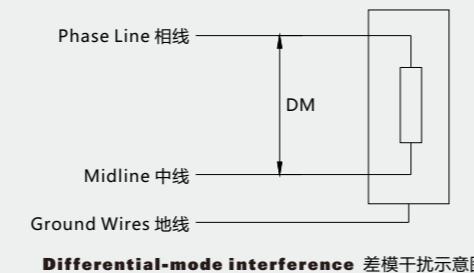
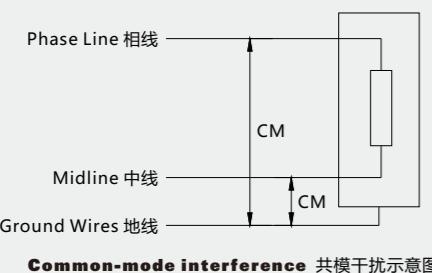
- Common-mode interference: the interference between phase lines of power lines and ground wires, and between the midline and ground. Common-mode line and the midline of the phase-existence of the same size, the same phase.
- Differential-mode interference: the interference between phase lines of power lines and the midline. Differential-mode interference current in the phase line and the midline of the size, phase contrast.

EMI power supply filter should also have the right common mode interference and differential mode interference In vivo.

传导干扰分为两种类型：

- 共模干扰：电源线的相线以及中线和地线之间存在的干扰。共模在相线和中线中同时存在，大小相等，相位相同。
- 差模干扰：电源线的相线和中线之间存在的干扰。差模干扰电流在相线和中线中大小，相位相反。

EMI电源滤波器应同时具有对共模干扰和差模干扰的抑制作用。



EMI Power Line Filter EMI电源滤波器

EMI Power Line Filter from the LC low-pass passive network components. It uses principles of impedance mismatch, so that by the attenuation of electromagnetic interference signals.

Filter filtering effect depends on the extent of impedance mismatch, the greater the impedance difference, the better the filter. For example, to get better results, for low-impedance power supply side, should be accompanied by a high input impedance of the filter; pairs of high input impedance of the load side, then the filter with low output impedance.

EMI电源滤波器由LC低通无源网络构成。它利用阻抗失配原理，使电磁干扰信号受到衰减。

滤波器的滤波效果取决于阻抗失配的程度，阻抗差别越大，滤波器的效果越好。例如，为了得到较好的效果，对低阻抗的电源侧，应配高输入阻抗的滤波器；对高输入阻抗的负载侧，则配低输出阻抗的滤波器。

Insertion loss 插入损耗

Insertion loss (IL) is the ratio that filter access port voltage of the circuit before and after, be expressed with the following:

$$\text{Insertion loss (IL)} = 20 \lg V_1/V_2$$

Where: V_1 - the interference signal voltage before filter access

V_2 - the interference signal voltage after filter access

Insertion loss test methods are detailed in the CISPR17 requirements. In general, product samples provided on the insertion loss curve is obtained in the 50Ω system: the assumption on both sides of the output power and load, input impedance is resistive to 50Ω . As the actual use of the environment in the power side and load side of the impedance vary greatly, so when you get the actual use of the insertion loss values and the samples of different nominal values of insertion loss. Therefore, the selection of EMI power filter is the best way to access equipment that it carried out the actual tests.

插入损耗(IL)是滤波器接入电路前后的端口电压之比，用下式表示：

$$\text{插入损耗 (IL)} = 20 \lg V_1/V_2$$

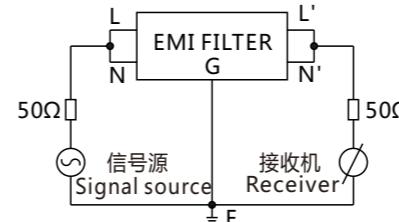
式中： V_1 -滤波器接入之前的干扰信号电压

V_2 -滤波器接入之后的干扰信号电压

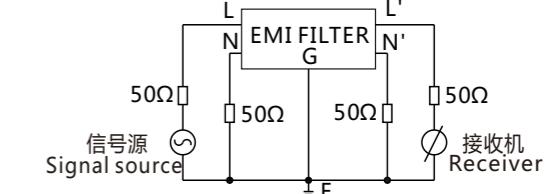
插入损耗的测试方法在CISPR17中有详细的规定。一般来说，产品样本上提供的插入损耗曲线是在 50Ω 系统上获得的：即假设电源和负载两侧的输出，输入阻抗都是电阻性的 50Ω 。由于实际使用环境中的电源侧和负载侧的阻抗变化很大，所以实际使用时获得的插损值会和样本中标称的插损值不同。因此，选用EMI电源滤波器的最佳方法是将它接入设备中进行实际测试。

Under normal circumstances, insertion loss curves for differential-mode insertion loss and common mode insertion loss basis.

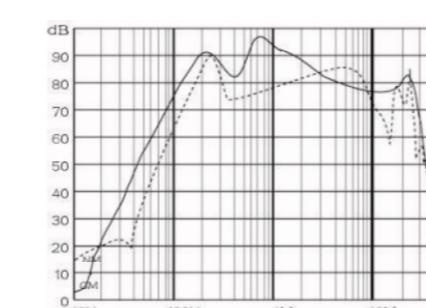
一般情况下，插损曲线分别以差模插入损耗和共模插入损耗的方式提供。



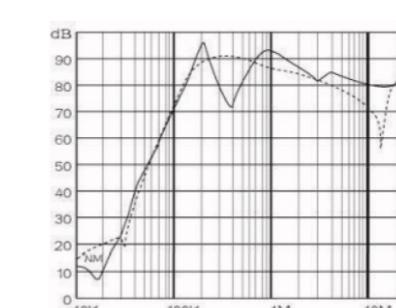
共模干扰插入损耗测试示意图



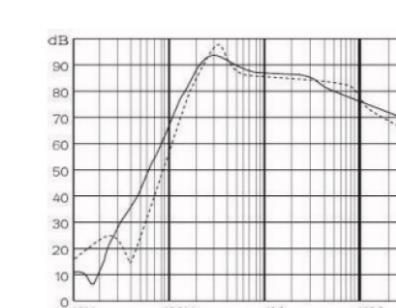
差模干扰插入损耗测试示意图



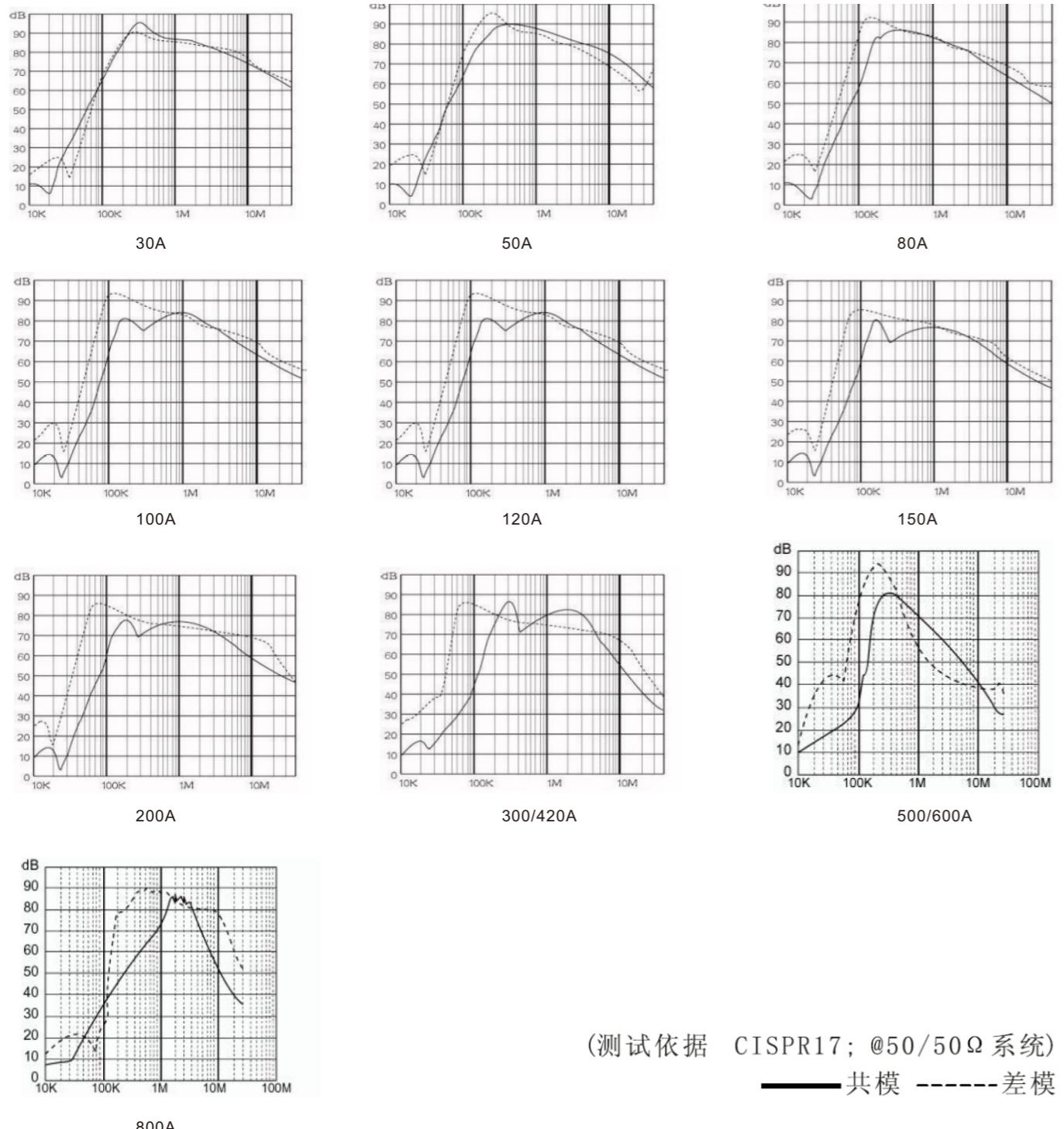
5A



10A



20A



■ Rated current 额定电流

Rated current is defined as under the conditions of safe use conditions, the filter at an ambient temperature of 40°C, the maximum current allowed through. When the ambient temperature exceeds 40°C, when filter allows the current estimate by the following formula:

$$I = IN \sqrt{(85 - \theta) / 45}$$

Where: IN-nominal rated current, θ-Ambient temperature

额定电流是指在安全使用条件下，滤波器在环境温度为40°C时允许通过的最大电流。当环境温度超出40°C时滤波器允许通过的电流由下式估算

$$I = IN \sqrt{(85 - \theta) / 45}$$

其中IN标称额定电流，θ-环境温度。

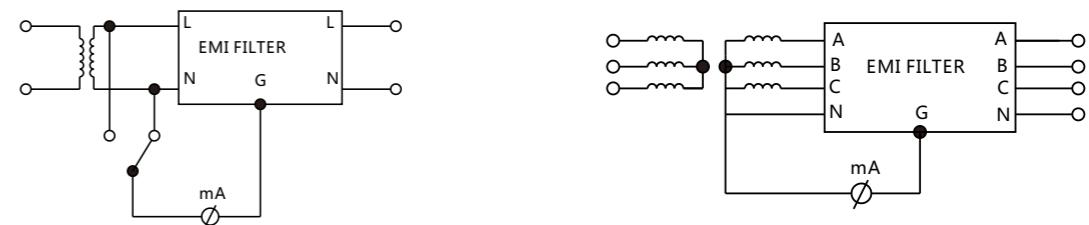
■ Leakage current 泄漏电流

Leakage current: at a given voltage and frequency, the current flow between the filter-phase line or the midline and ground. Under normal circumstances, leakage current from the grounded capacitors (Y capacitor) is caused due to security considerations, a variety of different testing standards for various types of equipment, leakage current from the strict 1 imitations. In particular, medical equipment, in choosing a filter, be sure to take full account of the leakage current. Leakage current typically 250VAC 50HZ, below the ambient temperature is 20°C measured. Works as follows:

泄漏电流：就是在给定电压以及频率下，滤波器相线或者中线与地线之间流过的电流。

通常情况下，泄漏电流由接地电容（Y电容）引起，出于安全方面的考虑，各种不同的测试标准针对各类设备，对泄漏电流有严格的限制。尤其是医疗设备，在选择滤波器时，务必充分考虑到泄漏电流。

泄漏电流通常在250VAC 50HZ，环境温度为20°C之下测定。原理如下：



■ Filter instructions 滤波器的使用说明

Consider the selection of the main filter insertion loss, the manufacturer of the given curve (parameters) in general in the standard 50-system test results are only for reference, but the actual applications are generally not 50 systems, insertion loss will be some offset.

Filter selected second point to note are: operating voltage, operating current, voltage value, leakage current, dimensions, installation methods; special requirements and special applications must be described when ordering.

DIN-type security choice of terminals: DIN security terminal has the following features: touch security; internal solid, has great access to cross-sectional area; in line with European industry standards, than conventional terminals safer and more convenient; use of DIN terminal of the filter is more in line with European market requirements. Most of the products of SIKES to support the kinds of terminal mode.

滤波器的选用主要考虑其插入损耗，生产厂家所给出的曲线（参数）一般在标准50系统测试结果仅做参考，而实际应用设备一般不是50系统，插入损耗会有些偏移。

滤波器选用第二点要注意的是：工作电压、工作电流、耐压值、漏电流、外形尺寸、安装方式；特殊要求及特殊应用必须在订货时加以说明。DIN符合欧洲行业标准，比常规端子更安全，更方便；采用DIN端子之滤波器更符合欧洲市场的要求。西凯士公司大部分产品支持该种端子方式。

General Single Phase EMI Filter 单相通用型滤波器

Product Profile 产品简述

Low leakage current to meet with medical machine special requirements.
Applicable to suppressing noise and high frequency harmonic in power.
Low leakage current with high insert lose of noise.
Control EMI interference between line and line, line and ground.
Available for electronic equipments and measuring instruments.

较小的泄漏电流，满足医疗器械特殊要求；
适用于抑制电网及开关电源所产生的噪声和高频谐波；
较高的插入损耗，较小的泄漏电流；
能有效的抑制线与线、线与地之间的EMI噪声干扰；
用于各种电子设备和电子测量仪器。



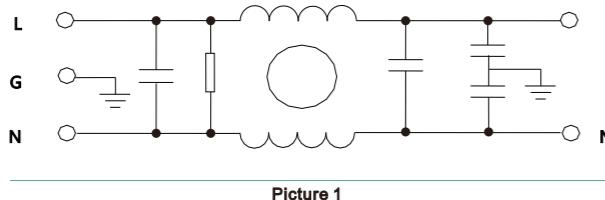
Product Features

- Rated Voltage: AC 250V
- Operating Frequency: 50/60Hz
- Rated Current: 10-300A
- Test Voltage(1min): 1500VDC (Line/line)
1750VAC(Line/Ground)
- Climatic category: 25/085/21

产品特点

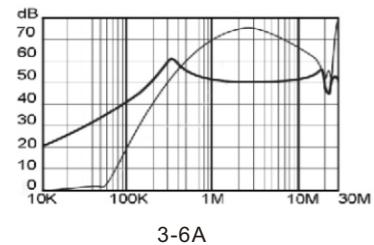
- 额定电压 : AC 250V
- 工作频率 : 50/60Hz
- 额定电流 : 10-300A
- 耐压试验 (一分钟) : DC 1500V (Line/line)
AC 1750V(Line/Ground)
- 气候类别 : 25/085/21

Electrical Diagram 电气原理图

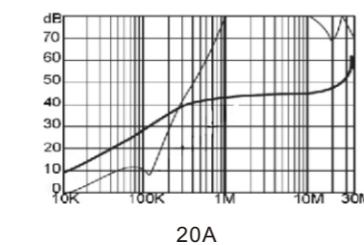


Picture 1

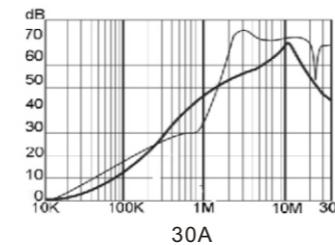
Typical Insertion Losses:(Measured in 50Ω system) 典型插入损耗：(50Ω测试系统)



3-6A

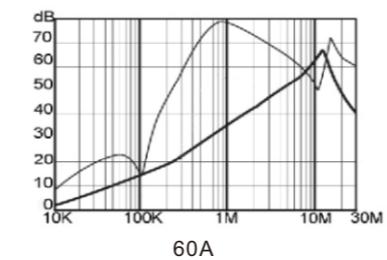


20A

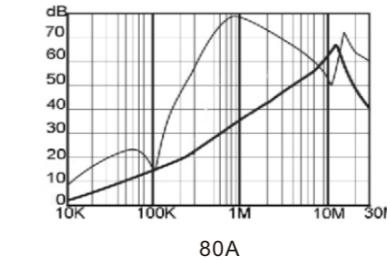


30A

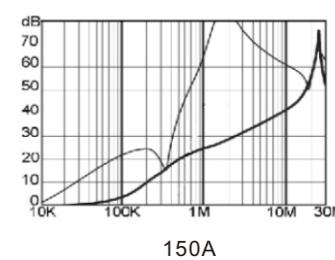
..... Common Mode 共模 Differential Mode 差模



60A

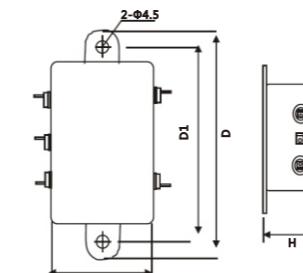


80A

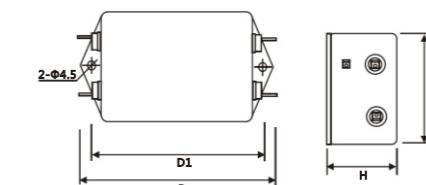


150A

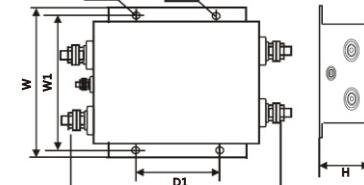
Product Size 产品尺寸图



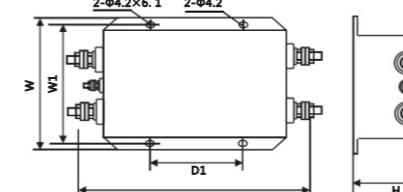
Picture A



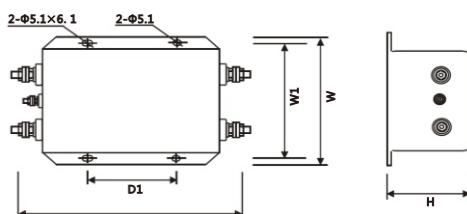
Picture B



Picture C



Picture D



Picture E

Product Characteristics and Selection Table 产品特性和选型表

Type 型号	Picture NO. 图号	Rated Current/Power 额定电流/功率 (A/KW)	Connection Mode 端接方式		Leakage Current 泄漏电流 ≤mA	Insulation Resistance 绝缘电阻 ≥MΩ	Circuit 电路图
			Bolt Screw 螺栓	Male Tab 插片			
SKS-STFI-0003/2	A	3A/0.5KW		√	0.5	≥500MΩ	1
SKS-STFI-0006/2		6A/0.75KW		√	0.5	≥500MΩ	1
SKS-STFI-0010/2	B	10A/1.5KW		√	1.0	≥500MΩ	1
SKS-STFI-0020/2		20A/3.7KW		√	1.5	≥500MΩ	1
SKS-STFI-0030/2	C	30A/5.5KW	√		2.0	≥500MΩ	1
SKS-STFI-0040/2		40A/7.5KW	√		2.5	≥500MΩ	1
SKS-STFI-0050/2	D	50A/11KW	√		2.5	≥500MΩ	1
SKS-STFI-0060/2		60A/15KW	√		2.5	≥500MΩ	1
SKS-STFI-0080/2	E	80	√		4.0	≥500MΩ	1
SKS-STFI-0150/2		150	√		4.0	≥500MΩ	1

High-end Single Phase Filter 单相高端型滤波器

Product Profile 产品简述

High performance filters with differential mode choke.
Broadband attenuation characteristics.

Available for various digital systems(particularly for inverters or switching power supplies).

含差模线圈的高性能电源滤波器；
宽范围的衰减特性；

适用于各种电子和数字设备（尤其是变频器或开关电源）。



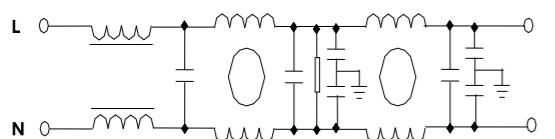
Product Features 产品特点

- Rated Voltage: AC 250V
- Operating Frequency: 50/60Hz
- Rated Current: 3-80A
- Test Voltage(1min): DC 1500V (Line/line)
AC 1500V(Line/Ground)
- Climatic category: 25/085/21

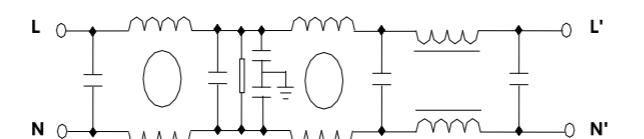
产品特点

- 额定电压 : AC 250V
- 工作频率 : 50/60Hz
- 额定电流 : 3-80A
- 耐压试验 (一分钟) : DC 1500V (Line/line)
AC 1500V(Line/Ground)
- 气候类别 : 25/085/21

Electrical Diagram 电气原理图

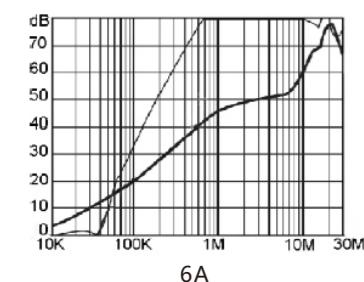


Picture 1

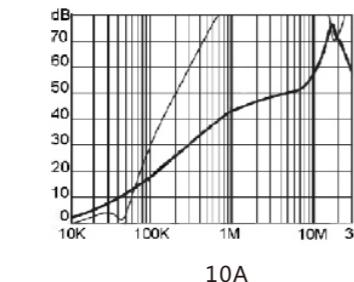


Picture 2

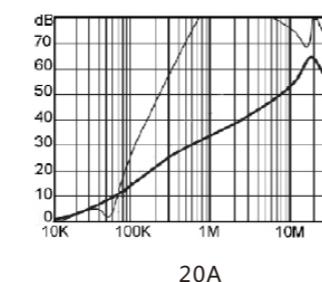
Typical Insertion Losses:(Measured in 50Ω system) 典型插入损耗：(50Ω测试系统)



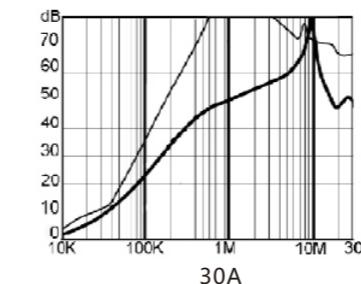
6A



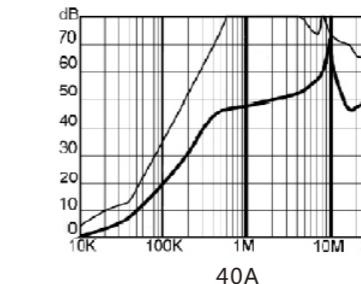
10A



20A



30A

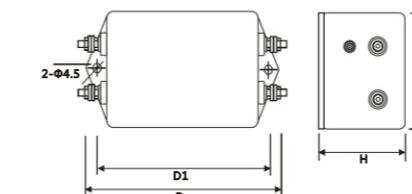


40A

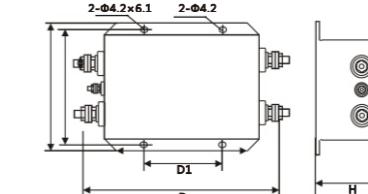
..... Common Mode 共模

..... Differential Mode 差模

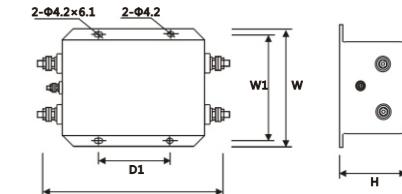
Product Size 产品尺寸图



Picture A



Picture B



Picture C

Product Characteristics 产品特性

Type 型号	Picture NO. 图号	Power 适配功率 (kW)	Rated Current 额定电流 (A)	Connection Mode 端接方式		Leakage Current 泄漏电流 ≤mA	Insulation Resistance 绝缘电阻	Circuit 电路图
				Bolt 螺栓				
SKS-SFI-0006/2	A	0.75kw	6	✓		1.0	≥500MΩ	1
SKS-SFI-0010/2	B	1.5kw	10	✓		1.5	≥500MΩ	1
SKS-SFI-0015/2		2.2kw	15	✓		1.5	≥500MΩ	2
SKS-SFI-0020/2		3.7kw	20	✓		2.0	≥500MΩ	2
SKS-SFI-0030/2	C	5.5kw	30	✓		2.0	≥500MΩ	2
SKS-SFI-0040/2		7.5kw	40	✓		2.5	≥500MΩ	2

EMI Three-phase Input Filter EMI 三相输入滤波器

Product Profile 产品简述

This category of products has superior capability of interference containment and can be applied to data processing system, telecommunication equipment inverter and power conditioning equipment that impose high requirement on interference containment.

该类产品具有良好的干扰抑制能力，可用于数据处理系统、电信系统、变频器及电源净化等需要强干扰抑制器设备中。



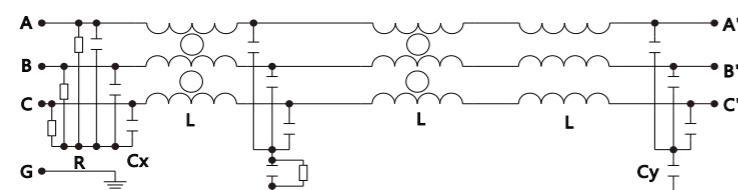
Product Features 产品特点

- Rated Voltage: AC 440/250V
- Test Voltage (1 minute): Phase to Phase DC 1500V; Phase To Ground AC 1500V/DC 2500V
- Operating Frequency: 50/60Hz
- Range of Temperature: -25~85°C
- Insulation Resistance: Phase to ground (up to 300A) ≥ 1500MΩ

产品特点

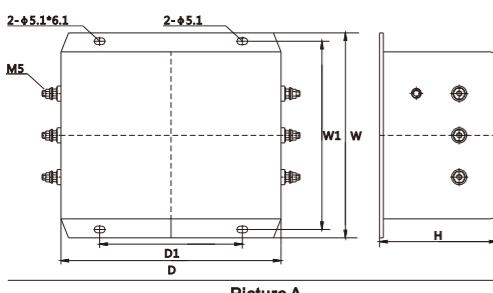
- 额定电压 : AC 440/250V
- 试验电压 (1分钟) : 线至线DC 1500V; 线至地AC 1500V/DC 2500V
- 工作频率 : 50/60Hz
- 范围温度 : -25~85°C
- 绝缘电阻 : 线至地 (300A以下) ≥ 1500MΩ

Electrical Diagram 电气原理图

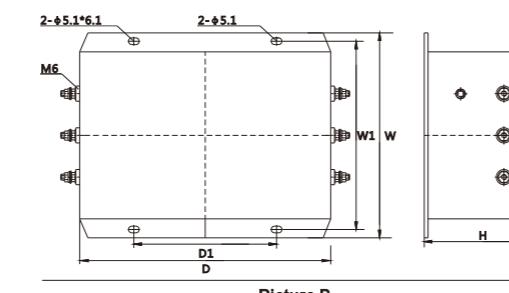


Picture 1

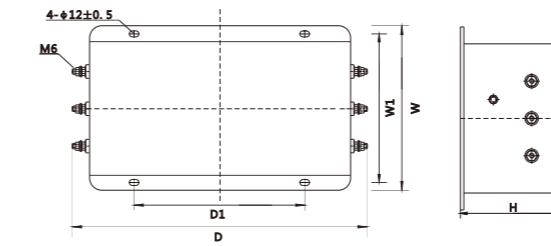
Product Size 产品尺寸图



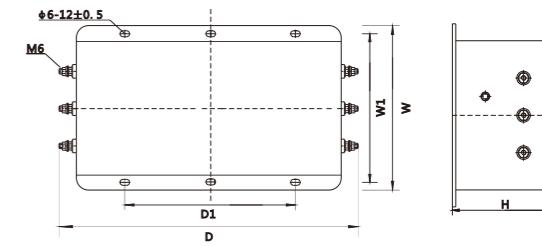
Picture A



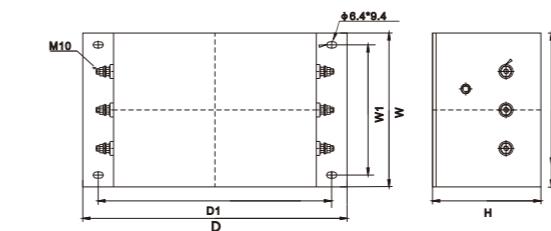
Picture B



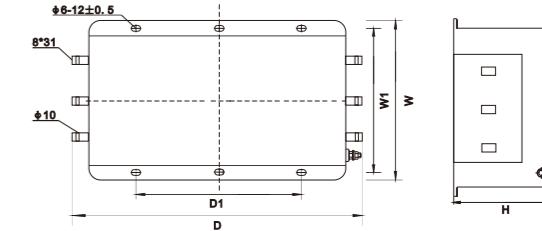
Picture C



Picture D



Picture E



Picture F

Product Characteristics 产品特性

Typical Insertion Deamplification: To be tested in a 50Ω system 典型插入衰减 (在50Ω系统下测试)

Type 型号	Rated Current 额定电流 (A)	Common-mode Insertion Loss 共模插入损耗 (dB/MHz)						Difference-mode Insertion Loss 差模插入损耗 (dB/MHz)						Connection Mode 端接方式			Leakage Current 泄漏电流 mA	Insulation Resistance 绝缘电阻	Circuit Diagram 电路图
		0.15	0.5	1	5	10	30	0.15	0.5	1	5	10	30	Terminal 欧式端子	Bolt 螺栓	Bar 铜排			
SKS-EFI-0005/4	5	80	85	85	75	65	70	85	80	80	80	75	70	✓	✓		1.2	≥500MΩ	1
SKS-EFI-0010/4	10	80	90	90	75	70	65	70	90	90	85	85	70	✓	✓		1.5	≥500MΩ	1
SKS-EFI-0016/4	16	75	90	90	75	75	65	70	90	90	80	75	70	✓	✓		1.5	≥500MΩ	1
SKS-EFI-0030/4	30	75	90	85	75	65	60	70	90	90	85	80	70	✓	✓		2.0	≥500MΩ	1
SKS-EFI-0045/4	45	75	90	85	75	65	55	85	85	75	85	80	70	✓	✓		3.0	≥500MΩ	1
SKS-EFI-0080/4	80	58	78	75	65	60	50	65	85	80	65	60	50	✓	✓		4.0	≥500MΩ	1
SKS-EFI-0100/4	100	65	85	90	80	75	70	65	85	80	80	65	60		✓		6.5	≥500MΩ	1
SKS-EFI-0150/4	150	55	80	75	70	65	55	65	80	85	80	65	55		✓		6.5	≥500MΩ	1
SKS-EFI-0200/4	200	55	85	75	70	65	55	70	90	90	80	75	60		✓		*6.5	≥500MΩ	1
SKS-EFI-0300/4	300	55	85	80	60	52	40	45	80	60	50	45	40		✓		*6.5	≥500MΩ	1
SKS-EFI-0400/4	400	55	82	80	62	50	45	45	82	65	48	45	40		✓		*7.5	≥500MΩ	1
SKS-EFI-0500/4	500	60	63	65	68	55	50	42	68	59	45	74	66		✓		*7.5	≥500MΩ	1
SKS-EFI-0630/4	630	60	63	65	68	55	50	42	68	59	45	74	66		✓		*7.5	≥500MΩ	1
SKS-EFI-0800/4	800	50	77	73	55	43	40	55	65	55	43	35	35		✓		*7.5	≥500MΩ	1
SKS-EFI-1000/4	1000	60	65	70	55	50	45	70	45	45	40	40	40		✓		*7.5	≥500MΩ	1
SKS-EFI-1200/4	1200	60	65	70	55	50	45	70	45	45	40	40	40		✓		*7.5	≥500MΩ	1

Note: It should be guaranteed that products marked with * Be connected to ground safely. 备注：加*产品使用时要确保安全接地。

EMI Three-phase Input Filter EMI 三相输入滤波器

Selection Table 选型表

Type 型号	Picture NO. 图号	Rated Current 额定电流 (A)	Power 适配功率 (kw)	Weight 重量 (kg)	Dimension 外形尺寸 (±5mm)				
					D	D1	W	W1	H
SKS-EFI-0005/4	A	5	0.75-1.5		136	50	105	94	42
SKS-EFI-0010/4		10	2.2-3.7		136	50	105	94	42
SKS-EFI-0020/4		20	5.5-7.5		136	50	105	94	42
SKS-EFI-0030/4	B	30	11-15		165	60	130	115	50
SKS-EFI-0050/4	C	50	18.5-22		240	115	165	145	80
SKS-EFI-0080/4	D	80	30-37		300	172	220	195	100
SKS-EFI-0100/4		100	45		300	172	220	195	100
SKS-EFI-0120/4		120	55		300	172	220	195	100
SKS-EFI-0150/4	E	150	75		352	325	185	151	112
SKS-EFI-0200/4		200	90		352	325	185	151	112
SKS-EFI-0300/4		300	110-160		352	325	185	151	112
SKS-EFI-0400/4	F	400	185-200		470	290	265	240	170
SKS-EFI-0500/4		500	220-250		470	290	265	240	170
SKS-EFI-0630/4		630	280-315		470	290	265	240	170
SKS-EFI-0800/4		800	350-450		470	290	265	240	170
SKS-EFI-1000/4		1000	500		470	290	265	240	170
SKS-EFI-1200/4		1200	550-630		470	290	265	240	170

EMI Three-phase Output Filter EMI 三相输出滤波器

Product Profile 产品简述

This category of products has superior capability of interference containment. It is usually installed at inverter's output terminal and able to minimize the electromagnetic interference generated by inverter.

该类产品具有良好的干扰抑制能力，置于变频器输出端，能有效减少变流器产生的电磁干扰。

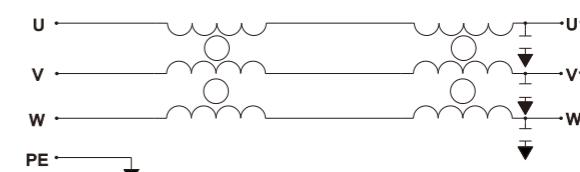


产品特点

- Rated Voltage: AC 440/250V
- Test Voltage (1 minute): Phase to Phase DC 1500V; Phase To Ground AC 1500V/DC 2500V
- Operating Frequency: 50/60Hz
- Range of Temperature: -25~85°C
- Insulation Resistance: Phase to ground ≥ 1500MΩ

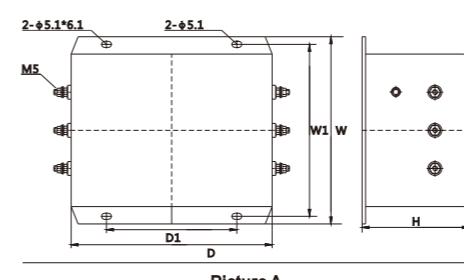
- 额定电压 : AC 440/250V
- 试验电压 (1分钟) : 线至线DC 1500V ; 线至地AC 1500V/DC 2500V
- 工作频率 : 50/60Hz
- 范围温度 : -25~85°C
- 绝缘电阻 : 线至地≥1500MΩ

Electrical Diagram 电气原理图

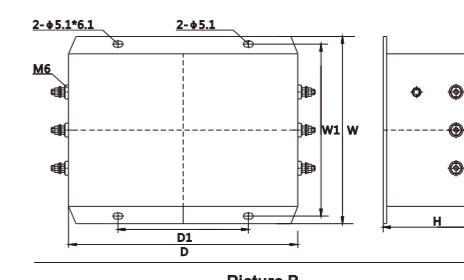


Picture 1

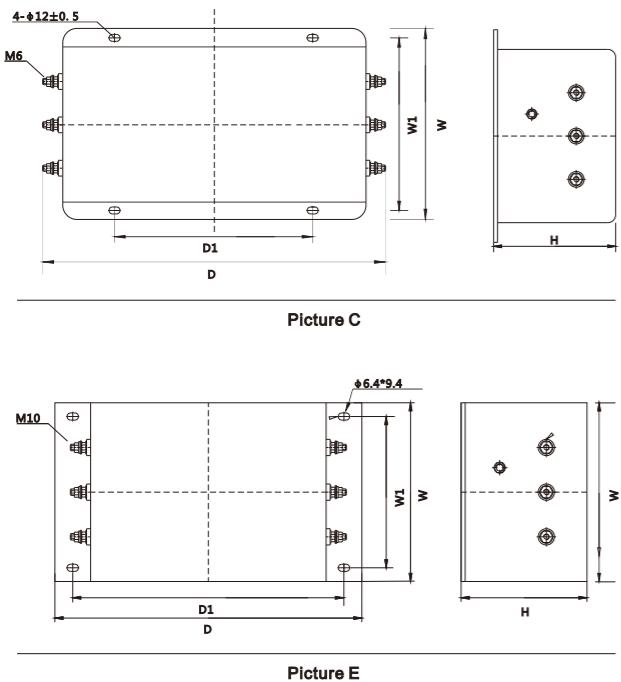
Product Size 产品尺寸图



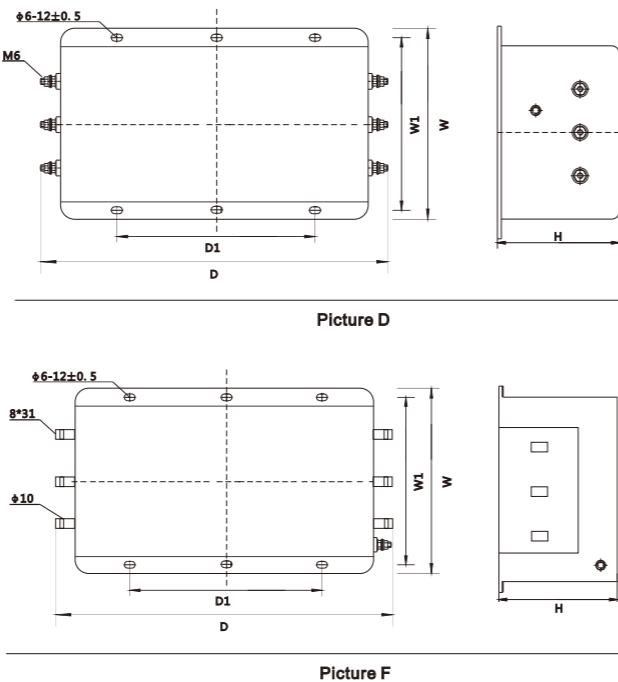
Picture A



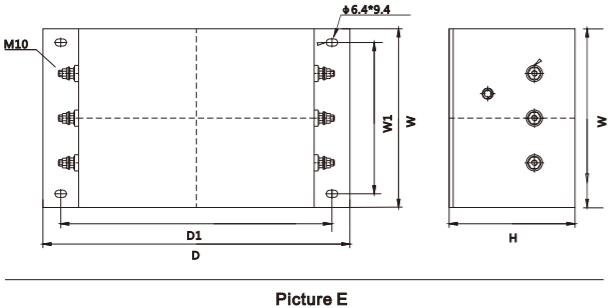
Picture B



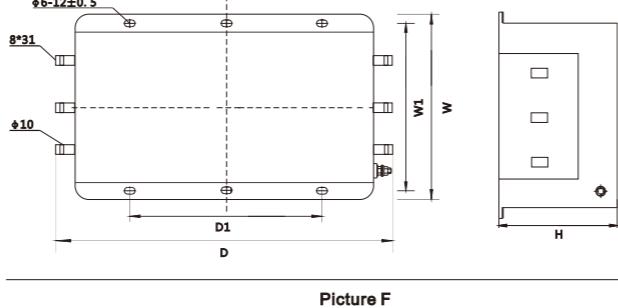
Picture C



Picture D



Picture E



Picture F

Selection Table 选型表

Model Type	Picture NO. 图号	Rated Current 额定电流 (A)	Power 适配功率 (kw)	Weight 重量 (kg)	Dimension 外形尺寸 ($\pm 5\text{mm}$)				
					D	D1	W	W1	H
SKS-EFO-0005/4	A	5	0.75-1.5	/	136	50	105	94	42
SKS-EFO-0010/4		10	2.2-4	/	136	50	105	94	42
SKS-EFO-0020/4		20	5.5-7.5	/	136	50	105	94	42
SKS-EFO-0030/4	B	30	11/15	/	165	60	130	115	50
SKS-EFO-0050/4	C	50	18.5-22	/	240	115	165	145	80
SKS-EFO-0080/4	D	80	30-37	/	300	172	220	195	100
SKS-EFO-0100/4		100	45	/	300	172	220	195	100
SKS-EFO-0120/4		120	55	/	300	172	220	195	100
SKS-EFO-0150/4	E	150	75	/	352	325	185	151	112
SKS-EFO-0200/4		200	90	/	352	325	185	151	112
SKS-EFO-0300/4		300	110-160	/	352	325	185	151	112
SKS-EFO-0400/4	F	400	185-200	/	470	290	265	240	170
SKS-EFO-0500/4		500	220-250	/	470	290	265	240	170
SKS-EFO-0630/4		630	280-315	/	470	290	265	240	170
SKS-EFO-0800/4		800	350-450	/	470	290	265	240	170
SKS-EFO-1000/4		1000	500	/	470	290	265	240	170
SKS-EFO-1200/4		1200	550-630	/	470	290	265	240	170

Product Characteristics 产品特性

Typical Insertion Deamplification: To be tested in a 50Ω system 典型插入衰减 (在50Ω系统下测试)

Type 型号	Rated Current 额定电流 (A)	Connection Mode 端接方式			Leakage current 泄漏电流 ≤mA	Insulation Resistance 绝缘电阻	Circuit 电路图
		Terminal 欧式端子	Bolt 螺栓	Bar 铜排			
SKS-EFO-0005/4	5	√	√		1.2	≥500MΩ	1
SKS-EFO-0010/4	10	√	√		1.5	≥500MΩ	1
SKS-EFO-0020/4	20	√	√		1.5	≥500MΩ	1
SKS-EFO-0030/4	30	√	√		2.0	≥500MΩ	1
SKS-EFO-0050/4	50	√	√		3.0	≥500MΩ	1
SKS-EFO-0080/4	80	√	√		4.0	≥500MΩ	1
SKS-EFO-0100/4	100	√	√		6.5	≥500MΩ	1
SKS-EFO-0120/4	120	√	√		6.5	≥500MΩ	1
SKS-EFO-0150/4	150	√	√		6.5	≥500MΩ	1
SKS-EFO-0200/4	200		√		6.5	≥500MΩ	1
SKS-EFO-0300/4	300			√	6.5	≥500MΩ	1
SKS-EFO-0400/4	400			√	7.5	≥500MΩ	1
SKS-EFO-0500/4	500			√	7.5	≥500MΩ	1
SKS-EFO-0630/4	630			√	7.5	≥500MΩ	1
SKS-EFO-0800/4	800			√	7.5	≥500MΩ	1
SKS-EFO-1000/4	1000			√	7.5	≥500MΩ	1
SKS-EFO-1200/4	1200			√	7.5	≥500MΩ	1

Note: It should be guaranteed that products marked with * Be connected to ground safely. 备注: 加*产品使用时要确保安全接地。

Three Phases Four Wires High Performance Filters

三相四线高性能滤波器

SIKES

Product Profile 产品简述

Relative small volume at equal power.
Mainly used to supress the EMI to the equipment in industrial power net.
Provide high performance of effectively suppressing EMI both in line-to-line and line-to-ground.
Available for three phases,four lines series power supply equipments.

同等功率下相对较小的体积；
主要用来抑制工业电网通过电源线对设备的电磁干扰；
对线-线和线-地间干扰具有优良的抑制力；
适用于三相四线制供电设备。



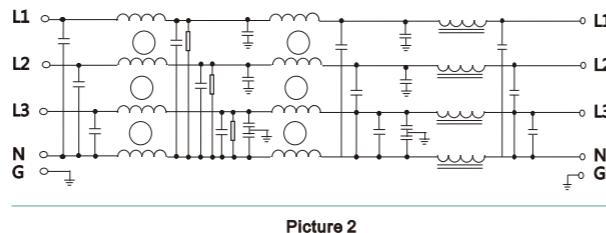
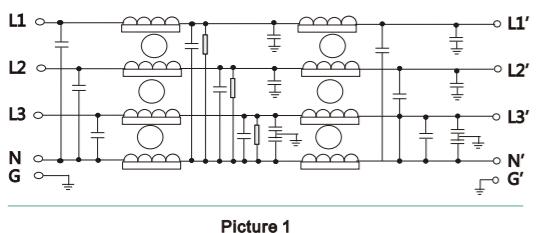
Technical Specifications

- Rated Voltage: AC 440V
- Test Voltage (1 minute): Line to Line DC 1500V; Line To Ground AC 1750V
- Operating Frequency: 50/60Hz
- Rated Current: 3-500A
- Climatic Category: 25/085/21

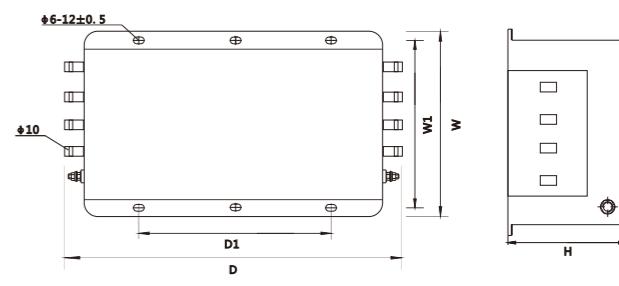
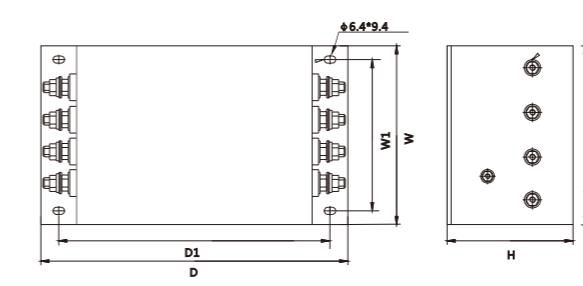
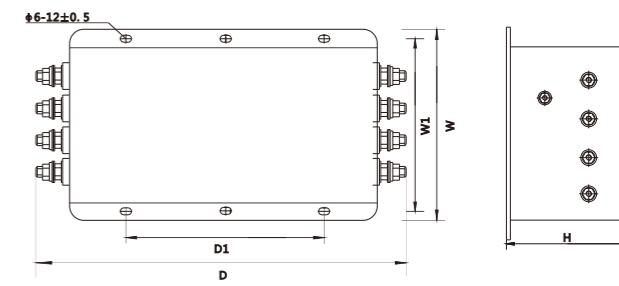
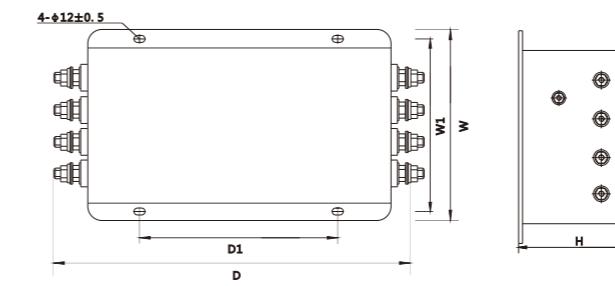
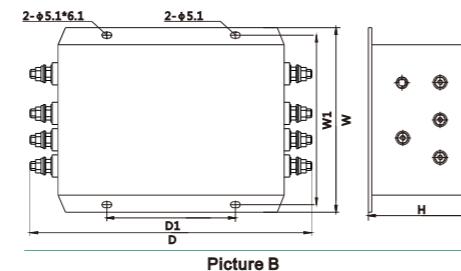
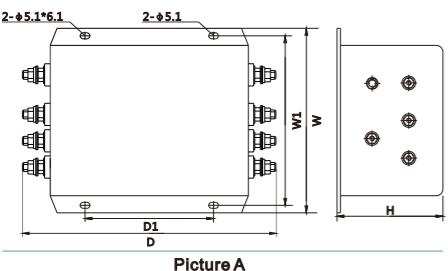
技术参数

- 额定电压 : AC 440V
- 试验电压 (1分钟) : 线至线DC 1500V
线至地AC 1750V
- 工作频率 : 50/60HZ
- 额定电流 : 3-500A
- 气候类别 : 25/085/21

Electrical Diagram 电气原理图

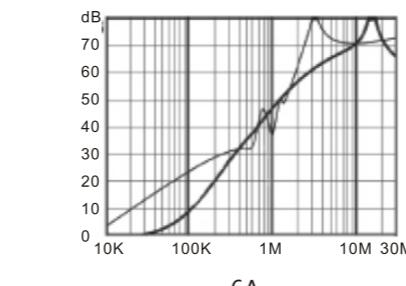


Product Size 产品尺寸图

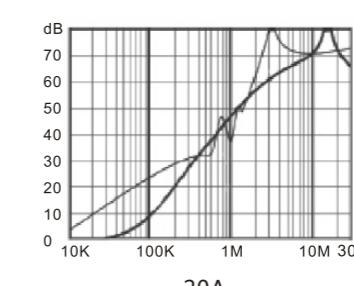


Product Characteristics 产品特性

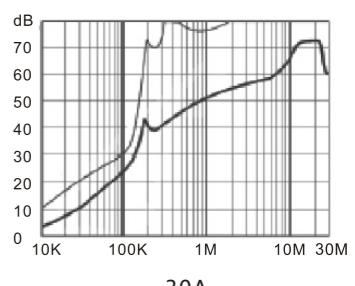
Typical Insertion Deamplification: To be tested in a 50Ω system 典型插入衰减 (在50Ω系统下测试)



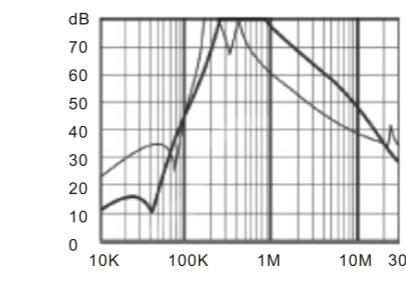
6A



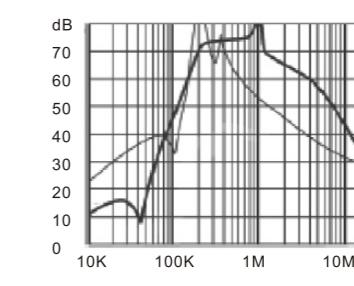
20A



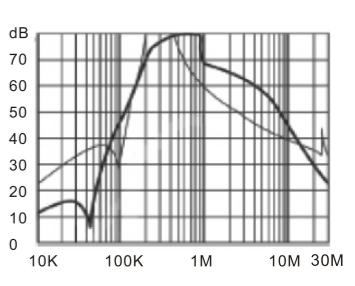
30A



60A



100A



150A

..... Common Mode 共模

..... Differential Mode 差模

Three Phases Four Wires High Performance Filters 三相四线高性能滤波器

Selection Table 选型表

Type 型号	Picture NO. 图号	Rated Current 额定电流 (A)	Power 适配功率 (kw)	Weight 重量 (kg)	Dimension 外形尺寸 (±5mm)					Connection Mode 端接方式			Leakage Current 泄漏电流 ≤mA	Insulation Resistance 绝缘电阻	Circuit 电路图
					D	D1	W	W1	H	Terminal 欧式端子	Bolt 螺栓	Bar 铜排			
SKS-TFF-0006/4	A	6	0.75-1.5	/	141	50	105	94	55	√	√		1.2	≥500MΩ	1
SKS-TFF-0010/4		10	2.2-4	/	141	50	105	94	55	√	√		1.5	≥500MΩ	1
SKS-TFF-0020/4		20	5.5-7.5	/	141	50	105	94	55	√	√		1.5	≥500MΩ	1
SKS-TFF-0030/4	B	30	11/15	/	190	80	135	120	60	√	√		2.0	≥500MΩ	1
SKS-TFF-0040/4		40	18.5	/	240	115	165	145	80	√	√		2.5	≥500MΩ	2
SKS-TFF-0050/4		50	22	/	240	115	165	145	80	√	√		30.0	≥500MΩ	2
SKS-TFF-0060/4	C	60	30	/	240	115	165	145	80	√	√		4.0	≥500MΩ	2
SKS-TFF-0080/4		80	37	/	300	172	220	195	100	√	√		4.0	≥500MΩ	1
SKS-TFF-0100/4		100	45	/	352	325	185	151	112	√	√		•6.5	≥500MΩ	1
SKS-TFF-0200/4	D	200	90	/	352	325	185	151	112		√		•6.5	≥500MΩ	1
SKS-TFF-0300/4		300	110-160	/	470	290	265	240	170		√		•6.5	≥500MΩ	2
SKS-TFF-0500/4		500	220-250	/	470	290	265	240	170		√		•7.5	≥500MΩ	2

Note: It should be guaranteed that products marked with • Be connected to ground safely. 备注：加•产品使用时要确保安全接地。

Sine Wave Filter 正弦波滤波器

Product Profile 产品简述

Brief description: Conversion of the PWM output signal of motor drives into a smooth sine wave with low residual ripple, avoiding the motor insulation damage. Reduce the resonance phenomenon because of distributed capacitance and inductance because of the long cable; Eliminate the excessive motor voltage caused by high dv/dt; Eliminate motor damage caused by eddy loss; Reduce noise of motor by filter application.

将电动机的PWM输出信号转化为低剩余纹波电压的光滑正弦波，防止对电机的绕组绝缘造成损害。减少了因电缆线长而出现的分布电容和分布电感产生共振现象；消除高dv/dt 而造成的电机过电压；削除涡



Product Feature 产品特点

Coiled with foil winding structure, aluminium leading. DC resistance value is small, the resistance to electromagnetic force is strong and with good overload ability in short time; H class or high insulation material is used, which make the products maintain reliable products maintain reliable performance in harsh working conditions; High insulation ability can sustain high Dv/dt voltage impulse to the reactor; VPI process make the humming noise is low.

采用了高性能的箔式绕组结构，铝引出，具有直流电阻小，抗电磁力能力强，短时间过载能力强；采用高性能的H级绝缘材料，使产品在严酷的工作条件下依然可以保持可靠的性能；电抗器绝缘强度高，能承受极高的Dv/dt的电压冲击。电抗器采用真空压力浸渍工艺，可听噪音小。

Selection Table 选型表

电抗器型号 Reactor Type	Picture NO. 图号	Power 功率 (kw)	Rated Current 额定电流 (A)	(Mh) 电感量	Rated Current 压降 (A)	Insulation Class 绝缘等级	Weight 重量 (kg)	Dimension 外形尺寸 (±5mm)														
								D	D1	D2	W	W1	W2	H	H1	H2	e	A*B	A	A1	B	B1
SKS-SWFO-0015-CL/4	/	5	15	4.00	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0020-CL/4	/	7.5	20	3.00	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0030-CL/4	/	11	30	2.00	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0040-CL/4	/	15	40	1.40	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0050-CL/4	/	18.5	50	1.20	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0060-CL/4	/	22	60	1.00	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0080-CL/4	/	30	80	0.80	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0090-CL/4	/	37	90	0.65	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0120-CL/4	/	45	120	0.52	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0150-CL/4	/	55	150	0.45	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0200-CL/4	/	75	200	0.35	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0250-CB/4	/	110	250	0.30	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0300-CB/4	/	132	300	0.24	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0360-CB/4	/	160	360	0.20	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0450-CB/4	/	185	450	0.15	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0500-CB/4	/	220	500	0.15	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0600-CB/4	/	280	600	0.12	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0660-CB/4	/	315	660	0.10	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SKS-SWFO-0750-CB/4	/	365	750	0.09	/	H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

(1): Can be customized. 以上型号为我司标准品，其它规格可以根据客户要求定制。

(2): The leading-out terminals of this product are Aluminum terminals. 此款产品引出排为铝排。

(3): For reference only, welcome to call. 如需参数，选型时请咨询我司业务。