SIKES

EMC/EMI INPUT FILTER

Descriptions

Frequency Inverters can, because of their internal functional sequences, severe disturb other electrical and electronic equipments that are located close to it. To ensure on one hand a failure-free operation of all equipments and on the other hand to comply with the legal requirements of the EMC, the Line filters of the series SKS-EFI have been developed.

SIKES 3-phase EMC/EMI input filters are designed to eliminate the high attenuation for both common and differential mode with highest requirements like Power Drive Systems according to EN61800-3 or other power electronic equipment according to EN55011, such as frequency inverter for motors, UPS, etc.
This filter can help your equipment meet the requirements of EMC category C2 and C3.

Functions

- Easy installation and contacting;
- Reliable and mechanical robust structure;
- High insertion loss ;
- Solid, touch safe connection technology according to EN60204-1 ;
- Guaranteed filter performance under full-load operating conditions ;
- Excellent price / performance ratio ;
- Attenuation performance according to EN 61800-3 and EN 55011.

Technical Standards

- **Systems:** IEC/EN60939, GB/T15287-94, UL1283 GB7343-1987, GB/T14472(IEC384-14),GB7343-1987, GB/T14472(IEC384-14)

Applications

- IT power distribution networks
- Process automation equipment
- Three-phase power supplies and UPS
- Lifts & elevator inverters
- Three-phase variable speed drives, frequency inverters, and power drive systems.
- Applications with low-leakage current requirements

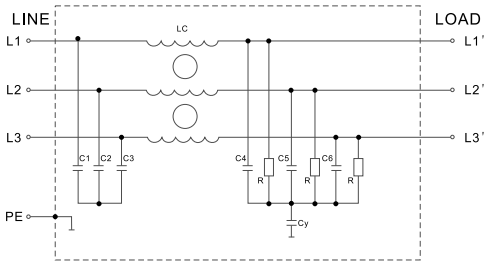
Environmental conditions	
Operating temperature	Ambient : -25°C to +40°C
Storage temperature	-25°C to +40°C
Relative humidity	80% throughout the year, 95% for max. 30 days
Mountingheight	up to 2000m 1% derating per 100m
Others	Aggressive atmosphere or condensation are not allowed.
EMC category	Meet the requirements of C2 and C3

Features

Main Characteristics	
Rated Voltage	AC 300/440V
Output Motor Frequency	50/ 60 Hz
Rated current	3~200A@40℃
Test Voltage	line - line: 1800VDC, 5s; line - ground: 2000VAC, 5s
Range of Temperature	-25℃~ 100℃
Insulation Resistance	line - ground 500VDC, ≥200MΩ

Design features	
Climatic category	25/085/21 (EN 60068-1)
Test isolation voltage	1500VDC(L-N), 1 min; 1500VDC (L-L), 1 min. （Voltage from 0 with the speed lower than 150V/S raised slowly up to test voltage.）
Cabinet material	Treated and painted steel, metal enclosure
Degree of protection	IP20 indoor
Ventilation	Natural Air Cooling
Mounting	On the floor or on the wall or inside the panel
Installation	Indoor standards
Connection Mode	Terminals

Block schematic



Mechanical data

All dimensions in mm; 1 inch = 25,4 mm

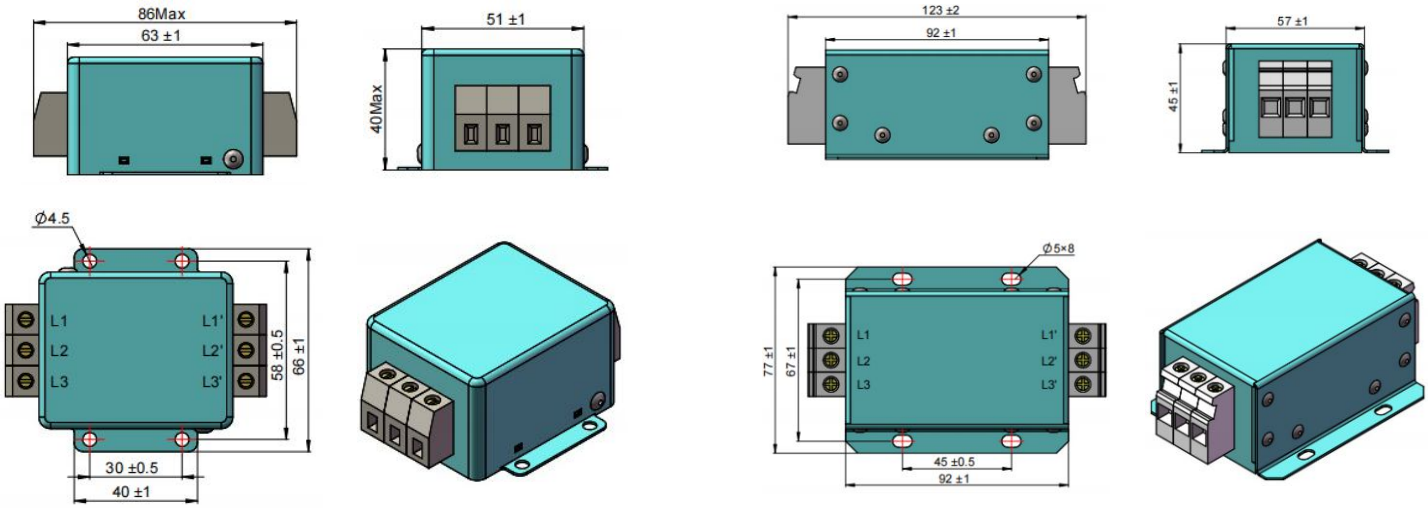


Fig. 01

Fig. 02

Mechanical data

All dimensions in mm; 1 inch = 25,4 mm

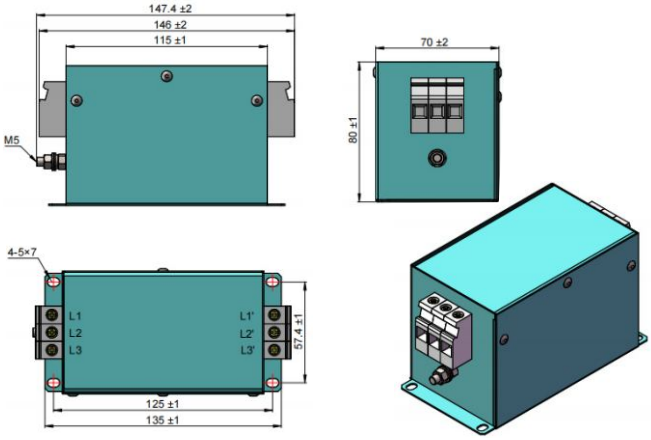


Fig. 03

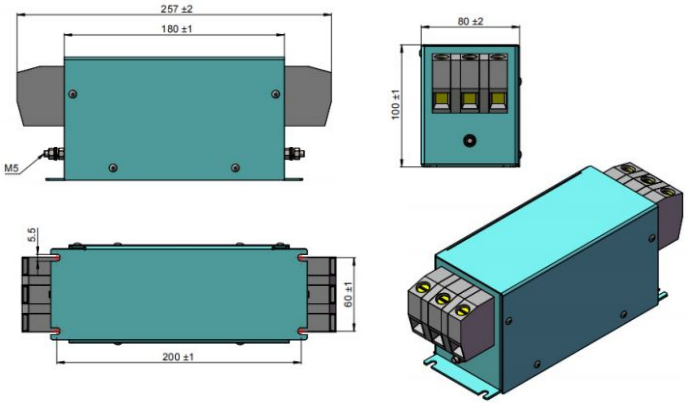


Fig. 04

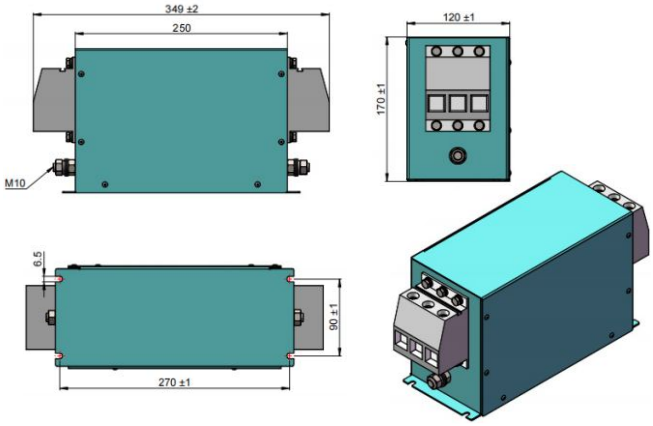


Fig. 05

Selection Table

Type	Dimension Fig.	Rated Current (A)	Power (Kw)	Rated Voltage	Leakage Current (mA)	Connection Mode	Insulation Resistance	Weight (kg)
SKS-EFS-0003/4-T	Fig. 01	3		300/440VAC	3.5	Terminals	≥500(MΩ)	0.25
SKS-EFS-0005/4-T	Fig. 01	5		300/440VAC	3.5	Terminals	≥500(MΩ)	0.25
SKS-EFS-0010/4-T	Fig. 01	10		300/440VAC	3.5	Terminals	≥500(MΩ)	0.25
SKS-EFS-0015/4-T	Fig. 02	15		300/440VAC	3.5	Terminals	≥500(MΩ)	0.55
SKS-EFS-0016/4-T	Fig. 02	16		300/440VAC	3.5	Terminals	≥500(MΩ)	0.55
SKS-EFS-0020/4-T	Fig. 02	20		300/440VAC	3.5	Terminals	≥500(MΩ)	0.55
SKS-EFS-0025/4-T	Fig. 02	25		300/440VAC	3.5	Terminals	≥500(MΩ)	0.55
SKS-EFS-0030/4-T	Fig. 02	30		300/440VAC	3.5	Terminals	≥500(MΩ)	0.55
SKS-EFS-0045/4-T	Fig. 03	45		300/440VAC	7		≥500(MΩ)	1.5
SKS-EFS-0050/4-T	Fig. 03	50		300/440VAC	7		≥500(MΩ)	1.5
SKS-EFS-0055/4-T	Fig. 03	55		300/440VAC	7		≥500(MΩ)	1. 5
SKS-EFS-0060/4-T	Fig. 03	60		300/440VAC	7		≥500(MΩ)	1.5
SKS-EFS-0063/4-T	Fig. 03	63		300/440VAC	7		≥500(MΩ)	1.5
SKS-EFS-0080/4-T	Fig. 04	80		300/440VAC	7		≥500(MΩ)	3.0
SKS-EFS-0100/4-T	Fig. 04	100		300/440VAC	7		≥500(MΩ)	3.0
SKS-EFS-0120/4-T	Fig. 04	120		300/440VAC	7		≥500(MΩ)	5.0
SKS-EFS-0150/4-T	Fig.05	150		300/440VAC	10		≥500(MΩ)	5.0
SKS-EFS-0200/4-T	Fig.05	200		300/440VAC	10		≥500(MΩ)	5.0

Model Rules:

SKS-□□□-□□□□/□

- Rated Voltage (2 for 220V,4 for 400V)
- Rated current
- Series name
- Brand name

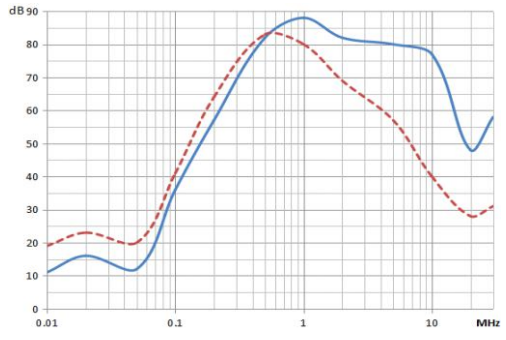
Insertion Loss

Note: The insertion loss is measured by IEC/CISPR 17 under the no-load 50Ω-50Ω test system. The final effect is based on the actual working condition data.

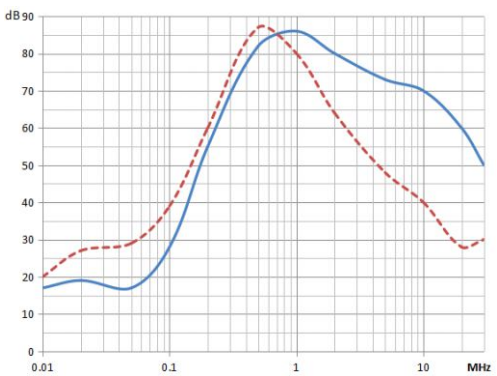
——— Common Mode

- - - - - - - - Differential Mode

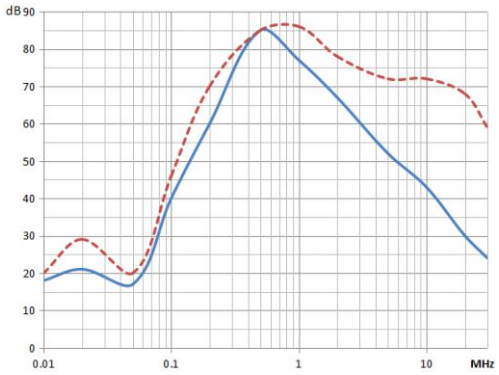
3 ~ 10A



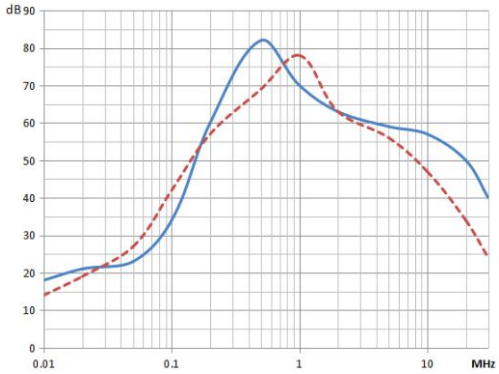
10 ~ 20A



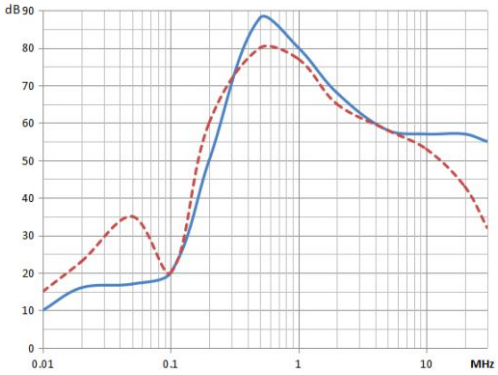
25 ~ 30A



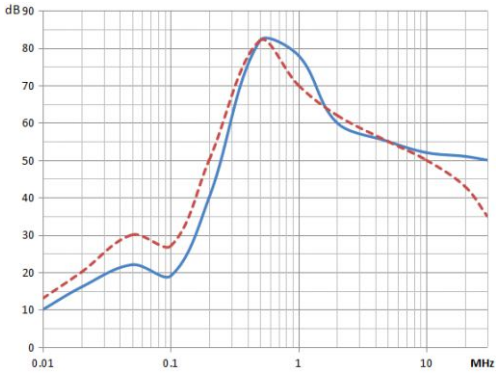
45 ~ 63A



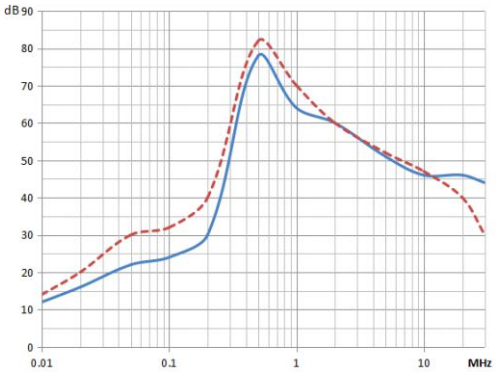
80A



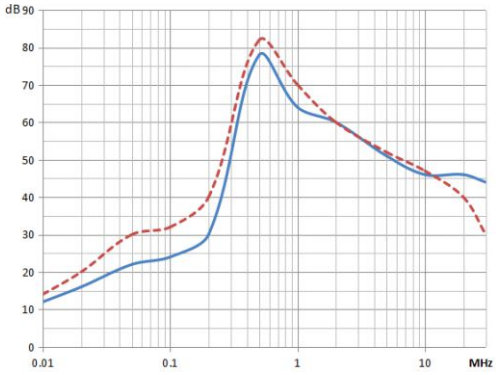
100 ~ 120A



150A



200A



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