

## **DECLARATION OF CONFORMITY**

Council Directive(s) to which conformity is declared:

**CD 73/23/EEC and CD 89/336/EEC**

Units are certified for compliance with:

**EN50178 (1997)  
EN 50081-1 (1992)  
EN 55022 (1994)  
EN 50082-2 (1995)  
EN 61000-4-2 (1995)  
ENV 50140 (1993) & ENV 50204 (1995)  
EN 61000-4-4 (1995)  
EN 61000-4-5 (1995)  
ENV 50141 (1993)  
EN 61000-4-8 (1993)  
EN 61000-4-11 (1994)**

Type of Equipment:

**Inverter (Power Conversion Equipment)**

Model Name:

**SV - iG Series**

Trade Mark:

**LG Industrial Systems Co., Ltd.**

Representative:

**LG International (Deutschland) GmbH**

Address:

**Lyoner Strasse 15,  
60528, Frankfurt am Main,  
Germany**

Manufacturer:

**LG Industrial Systems Co., Ltd.**

Address:


**181, Samsung-Ri, Mokchon-Myon, Chonan-Si,  
330-845, Chungnam,  
Korea**

**We, the undersigned, hereby declare that equipment specified above conforms to the Directives and Standards mentioned.**

Place: **Frankfurt am Main  
Germany**

**Choan-Si, Chungnam,  
Korea**

 **20/02/01**  
(Signature / Date)

 **02/04/01**  
(Signature / Date)

**Mr. Ik-Seong Yang / Dept. Manager**  
(Full name / Position)

**Mr. Hyuk-Sun Kwon / General Manager**  
(Full name / Position)

## **TECHNICAL STANDARDS APPLIED**

The standards applied in order to comply with the essential requirements of the Directives 73/23/CEE "Electrical material intended to be used with certain limits of voltage" and 89/336/CEE "Electromagnetic Compatibility" are the following ones:

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• <b>EN 50178 (1997)</b>	"Safety of information technology equipment".
• <b>EN 50081-1 (1992)</b>	"Electromagnetic compatibility. Generic emission standard. Part 1: Residential, commercial and light industry."
• <b>EN 55022 (1994)</b>	"Limits and methods of measurements of radio interference characteristics of information technology equipment."
• <b>EN 50082-1 (1997)</b>	"Electromagnetic compatibility. Generic immunity standard. Part 1: Residential, commercial and light industry."
• <b>EN 61000-4-2 (1995)</b>	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 2: Electrostatic discharge immunity test. Basic EMC Publication (IEC 1000-4-2: 1995)."
• <b>ENV 50140 (1993)</b>	"Electromagnetic compatibility - Basic immunity standard - Radiated radio-frequency electro magnetic field - Immunity test."
• <b>ENV 50204 (1995)</b>	"Radio electromagnetic field from digital radio telephones."
• <b>EN 61000-4-4: 1995</b>	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 4: Electrical fast transients / burst immunity test. Basic EMC Publication (IEC 1000-4-4: 1995)."
• <b>EN 61000-4-5: 1995</b>	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 5: Surge immunity test. Basic EMC Publication (IEC 1000-4-5: 1995)."
• <b>ENV 50141 (1993)</b>	"Electromagnetic compatibility. Basic immunity standard. Conducted disturbances induced by radio-frequency fields."
• <b>EN 61000-4-8: 1993</b>	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 8: Power frequency magnetic field immunity test - Basic EMC Publication (IEC 1000-4-8: 1993)."
• <b>EN 61000-4-11: 1994</b>	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 11: Voltage dips, short interruptions and voltage variations immunity tests (IEC 1000-4-11: 1994)."

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# EMI / RFI POWER LINE FILTERS



## RFI FILTERS

THE L.G. RANGE OF POWER LINE FILTERS FF (Footprint) – FE (Standard) SERIES, HAVE BEEN SPECIFICALLY DESIGNED WITH HIGH FREQUENCY LG INVERTERS, THE USE L.G. FILTERS, WITH THE INSTALLATION ADVICE OVERLEAF HELP TO ENSURE TROUBLE FREE USE ALONG SIDE SENSITIVE DEVICES AND COMPLIANCE TO CONDUCTED EMISSION AND IMMUNITY STANDARDS TO EN50081

## CAUTION

IN CASE OF A LEAKAGE CURRENT PROTECTIVE DEVICES IS USED ON POWER SUPPLY, IT MAY BE FAULT AT POWER-ON OR OFF.

IN AVOID THIS CASE, THE SENSE CURRENT OF PROTECTIVE DEVICE SHOULD BE LARGER THAN VALUE OF LAKAGE CURRENT AT WORST CASE IN THE BELOW TABLE.

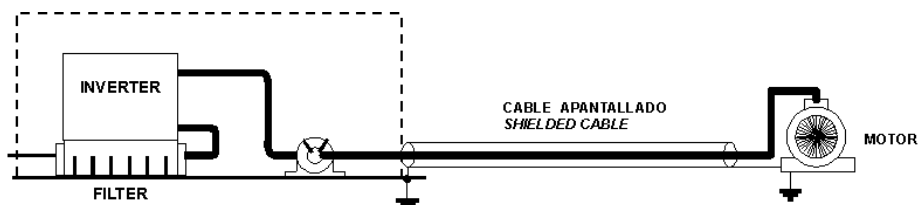
## RECOMMENDED INSTALLATION INSTRUCTIONS

To conform to the **EMC** directive, it is necessary that these instructions be followed as closely as possible. Follow the usual safety procedures when working with electrical equipment. All electrical connections to the filter, inverter and motor must be made by a qualified electrical technician.

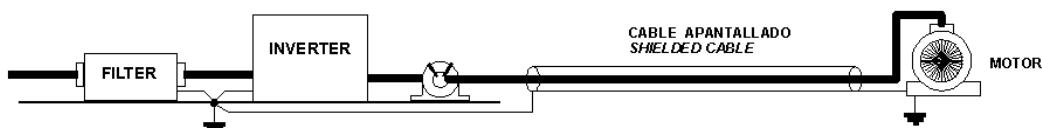
- 1-) Check the filter rating label to ensure that the current, voltage rating and part number are correct.
- 2-) For best results the filter should be fitted as closely as possible to the incoming mains supply of the wiring enclosure, usually directly after the enclosures circuit breaker or supply switch.
- 3-) The back panel of the wiring cabinet of board should be prepared for the mounting dimensions of the filter. Care should be taken to remove any paint etc... from the mounting holes and face area of the panel to ensure the best possible earthing of the filter.
- 4-) Mount the filter securely.
- 5-) Connect the mains supply to the filter terminals marked **LINE**, connect any earth cables to the earth stud provided. Connect the filter terminals marked **LOAD** to the mains input of the inverter using short lengths of appropriate gauge cable.
- 6-) Connect the motor and fit the ferrite core (output chokes) as close to the inverter as possible. Armoured or screened cable should be used with the 3 phase conductors only threaded twice through the center of the ferrite core. The earth conductor should be securely earthed at both inverter and motor ends. The screen should be connected to the enclosure body via and earthed cable gland.
- 7-) Connect any control cables as instructed in the inverter instructions manual.

IT IS IMPORTANT THAT ALL LEAD LENGHTS ARE KEPT AS SHORT AS POSSIBLE AND THAT INCOMING MAINS AND OUTGOING MOTOR CABLES ARE KEPT WELL SEPARATED.

### FF SERIES ( Footprint )



### FE SERIES ( Standard )



# EMI / RFI POWER LINE FILTERS



## RFI Filters (Footprint - Standard) for iG SERIES

iG series / Filtros Estándar / Standard Filters										
VARIADOR INVERTER	POT. POWER	CODIGO CODE	INTENS. CURRENT	TENSION VOLTAGE	CORRIENTE DE FUGAS LEAKAGE CURRENT	DIMENSIONES DIMENSIONS L W H	MONTAJE MOUNTING Y X	PESO WEIGHT	TORNILLOS DE FIJACION MOUNT	CHOQUES DE SALIDA OUTPUT CHOKES
MONOFASICOS		SINGLE PHASE								
( max. )										
SV008iG-1	0.75kW	FE-M010-( x )	10A	250VAC	3.5A	150 x 55 x 45	140 x 36		---	FS – 1
SV015iG-1	1.5kW	FE-M015-( x )	15A	250VAC	3.5A	150 x 55 x 45	140 x 36		---	FS – 2
SV022iG-2	2.2kW									
SV037iG-2	3.7kW	FE-M030-( x )	30A	250VAC	3.5A	170 x 80 x 55	160 x 46		---	FS – 2
SV040iG-2	4.0kW									
TRIFASICOS		THREE PHASE								
NOM. MAX.										
SV004iG-2	0.37kW	FE-T006-( x )	6A	250VAC	0.3A 18A	250 x 110 x 60	238 x 76		---	FS – 2
SV008iG-2	0.75kW	FE-T012-( x )	12A	250VAC	0.3A 18A	250 x 110 x 60	238 x 76		---	FS – 2
SV015iG-2	1.5kW									
SV022iG-2	2.2kW	FE-T020-( x )	20A	250VAC	0.3A 18A	270 x 140 x 60	258 x 106		---	FS – 2
SV037iG-2	3.7kW									
SV040iG-2	4.0kW	FE-T006-( x )	6A	380 VAC	0.5A 27A	250 x 110 x 60	238 x 76		---	FS – 2
SV004iG-4	0.37kW									
SV008iG-4	0.75kW									
SV015iG-4	1.5kW									
SV022iG-4	2.2kW	FE-T012-( x )	12A	380 VAC	0.5A 27A	250 x 110 x 60	238 x 76		---	FS – 2
SV037iG-4	3.7kW									
SV040iG-4	4.0kW									

iG series / Filtros Estándar / Standard Filters											
VARIADOR INVERTER	POT. POWER	CODIGO CODE	INTENS. CURRENT	TENSION VOLTAGE	CORRIENTE DE FUGAS LEAKAGE CURRENT	DIMENSIONES DIMENSIONS L W H	MONTAJE MOUNTING Y X	PESO WEIGHT	TORNILLOS DE FIJACION MOUNT	CHOQUES DE SALIDA OUTPUT CHOKES	
MONOFASICOS		SINGLE PHASE (max.)									
SV008iG-1	0.75kW	FE-M010-( x )	10A	250VAC	3.5A	150 x 55 x 45	140 x 36		---	FS – 1	
SV015iG-1	1.5kW		15A	250VAC	3.5A	150 x 55 x 45	140 x 36		---	FS – 2	
SV022iG-2	2.2kW		FE-M030-( x )	30A	250VAC	3.5A	170 x 80 x 55	160 x 46		---	FS – 2
SV037iG-2	3.7kW										
SV040iG-2	4.0kW										
TRIFASICOS		THREE PHASE NOM. MAX.									
SV004iG-2	0.37kW	FE-T006-( x )	6A	250VAC	0.3A 18A	250 x 110 x 60	238 x 76		---	FS – 2	
SV008iG-2	0.75kW		FE-T012-( x )	12A	250VAC	0.3A 18A	250 x 110 x 60	238 x 76		---	FS – 2
SV015iG-2	1.5kW										
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SV037iG-2	3.7kW	FE-T020-( x )	20A	250VAC	0.3A 18A	270 x 140 x 60	258 x 106		---	FS – 2	
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SV037iG-4	3.7kW										
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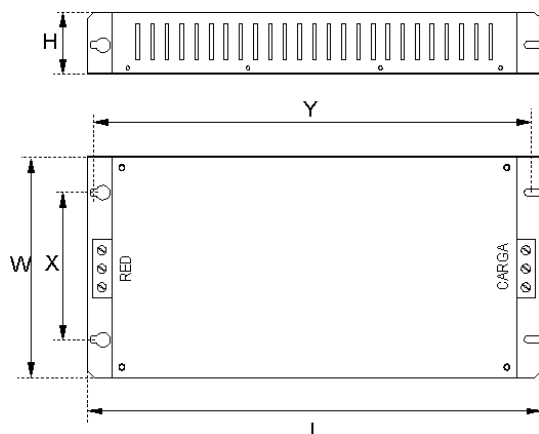
- (x) (1) Industrial environment EN 50081-0 (A class)  
(2) Domestic and industrial environment EN 50081-1 (B class)

# EMI / RFI POWER LINE FILTERS

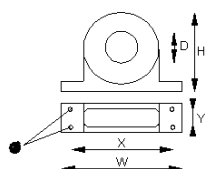
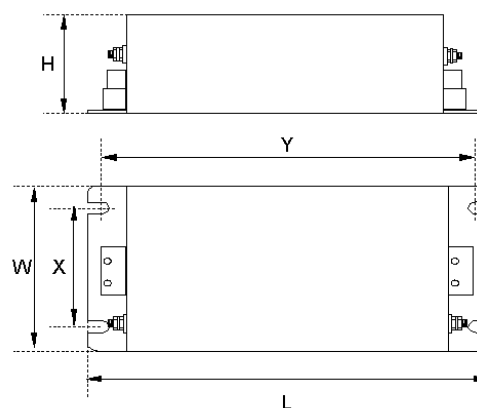


## DIMENSIONS

**FF SERIES ( Footprint )**



**FE SERIES ( Standard )**



**FS SERIES ( output chokes )**

TIPO	D	W	H	X	O
FS - 1	21	85	46	70	5
FS - 2	28.5	105	62	90	5
FS - 3	48	150	110	125 x 30	5
FS - 4	58	200	170	180 x 45	5

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