### **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:

Type of Equipment:

EN 61800-3/A11 (2000) EN 61000-4-2/A2 (2001) EN 61000-4-3/A2 (2001) EN 61000-4-4/A2 (2001) EN 61000-4-5/A1 (2001) EN 61000-4-6/A1 (2001) EN 55011/A2 (2002) EN 50178 (1997) IEC/TR 61000-2-1 (1990) EN 61000-2-2 (2002)

**Inverter (Power Conversion Equipment)** 

Model Name: SV - iG5A Series

Trade Mark: LG Industrial Systems Co., Ltd.

Representative: LG International (Deutschland) GmbH

Address: Lyoner Strasse 15,

Frankfurt am Main, 60528,

Germany

Manufacturer: LG Industrial Systems Co., Ltd.

Address: 181, Samsung-ri, Mokchon-Eup,

Chonan, Chungnam, 330-845,

Korea

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

Place: Frankfurt am Main Chonan, Chungnam,

<u>Germany</u> <u>Korea</u>

Mr. Ik-Seong Yang / Dept. Manager

1. S. Jang 20/03/01

(Full name / Position)

Mr. Jin Goo Song / 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:

• EN 50178 (1997)	"Electronic equipment for use in power installations".
• EN 61800-3/A11 (2000)	"Adjustable speed electrical power drive systems. Part 3: EMC product standard including specific methods"
• EN 55011/A2 (2002)	"Industrial, scientific and medical (ISM) radio-frequency equipment. Radio disturbances characteristics. Limits and methods of measurement"
• EN 61000-4-2/A2 (2001)	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 2: Electrostatic discharge immunity test.
• EN 61000-4-3/A2 (2001)	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 3: Radiated, radiofrequency, electromagnetic field immunity test.
• EN 61000-4-4/A2 (2001)	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 4: Electrical fast transients / burst immunity test.
• EN 61000-4-5/A1 (2000)	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 5: Surge immunity test.
• EN 61000-4-6/A1 (2001)	"Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 6: Immunity to conducted disturbances, induced by radio-frequency fields.
• CEI/TR 61000-2-1 (1990)	"Electromagnetic compatibility (EMC). Part 2: Environment. Environment description for low-frequency conducted disturbances and signaling in public low voltages supply systems"
• EN 61000-2-2 (2002)	"Electromagnetic compatibility (EMC). Part 2: Environment. Compatibility level for low-frequency conducted disturbances and signaling in public low voltages supply systems"

# EMI / RFI POWER LINE FILTERS LG inverters, iG5A series





#### **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 OF 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 STANDARS **TO EN 50081 -> EN61000-6-3:02 and EN61000-6-1:02** 

#### **CAUTION**

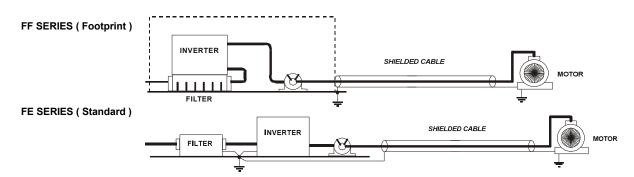
IN CASE OF A LEAKAGE CURRENT PROTECTIVE DEVICES IS USED ON POWER SUPPLY, IT MAY BE FAULT AT POWER-ON OR OFF. IN AVOID THIS CASE, THE SENSE CURRENT OF PROTECTIVE DEVICE SHOULD BE LARGER THAN VALUE OF LEAKAGE CURRENT AT WORST CASE IN THE BELOW TABLE.

#### 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 enclousure, usually directly after the enclousures 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 <u>ferrite core</u> (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 enclousure 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.



# **EMI / RFI POWER LINE FILTERS** LG inverters, iG5A series



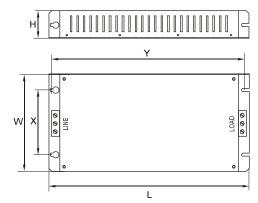


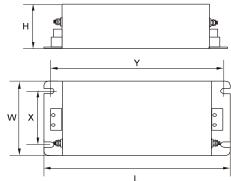
iG5A series	/ F0	otprint Filters								
INVERTER	POWER	CODE	CURRENT	VOLTAGE	LEAKAGE CURRENT	DIMENSIONS L W H	MOUNTING Y X	WEIGHT	MOUNT	OUTPUT
THREE PHASE NOM. MAX.										
SV004iG5A-2	0.4kW	FFG5A-T005-(x)	5A	250VAC	0.5mA 27mA	175x76.5x40	161x53	1.2Kg.	M4	FS – 1
SV008iG5A-2	0.75kW	( )						Ü		_
SV015iG5A-2	1.5kW	FFG5A-T012-(x)	12A	250VAC	0.5mA 27mA	176.5x107.5x40	162.5x84	1.3Kg.	M4	FS – 2
SV022iG5A-2	2.2kW			050140		170 5 117 5 15	100 5 101	4.017		
SV037iG5A-2	3.7kW	FFG5A-T020-(x)	20A	250VAC	0.5mA 27mA	176.5x147.5x45	162.5x124	1.8Kg.	M4	FS – 2
SV040iG5A-2 SV055iG5A-2	4.0kW	FFOFA TOOK (a)	30A	250VAC	0.5mA 27mA	266x185.5x60	252x162	01/	M4	FS - 2
	5.5kW	FFG5A-T030-(x)						2Kg.		FS - 2
SV075iG5A-2 SV004iG5A-4	7.5kW 0.4kW	FFG5A-T050-(x)	50A	250VAC	0.5mA 27mA	270x189.5x60	252x162	2.5Kg.	M4	F3 - Z
SV004iG5A-4 SV008iG5A-4	0.4KVV 0.75kW	FFG5A-T005-(x)	5A	380VAC	0.5mA 27mA	175x76.5x40	161x53	1.2Kg.	M4	FS – 1
SV006IG5A-4 SV015iG5A-4	1.5kW	FFG5A-T006-(x)	6A	380VAC	0.5mA 27mA	176.5x107.5x40	162.5x84	1.2Kg.	M4	FS – 1
SV013IG5A-4	2.2kW	11 G3A-1000-(X)	0.7	300 VAC	U.SIIIA ZIIIIA	170.38107.3840	102.3x04	1.ZNg.	IVIT	10-1
SV0221G5A-4 SV037iG5A-4	3.7kW	FFG5A-T011-(x)	11A	380VAC	0.5mA 27mA	176.5x147.5x45	162.5x124	1.5Kg.	M4	FS - 2
SV040iG5A-4	4.0kW	11 G3A-1011-(x)	11/	300 VAC	U.SIIIA ZIIIIA	170.58147.5845	102.00124	r.ortg.	IVI	10-2
SV055iG5A-4	5.5kW									
SV075iG5A-4	7.5kW	FFG5A-T030-(x)	30A	380VAC	0.5mA 27mA	266x185.5x60	252x162	2Kg.	M4	FS – 2
iG5A series		andard Filters			I .			-	1	
INVERTER	POWER	CODE	CURRENT	VOLTAGE	LEAKAGE	DIMENSIONS	MOUNTING	WEIGHT	MOUNT	OUTPUT
					CURRENT	L W H	Y X			CHOKES
THREE PHASE SV004iG5A-2	0.4kW				NOM. MAX.					
SV008iG5A-2	0.751347	FF-T006-( v )	Ι 6Δ	250\/AC	0.5mΔ 27mΔ	250×110×60	238×76	1 6Kg		FS _ 2
	0.75kW	FE-T006-(x)	6A	250VAC	0.5mA 27mA	250x110x60	238x76	1.6Kg.		FS – 2
SV015iG5A-2	1.5kW	FE-T006-(x)	6A 12A	250VAC 250VAC	0.5mA 27mA 0.5mA 27mA	250x110x60 250x110x60	238x76 238x76	1.6Kg.		FS - 2 FS - 2
SV022iG5A-2	1.5kW 2.2kW	FE-T012-(x)	12A	250VAC	0.5mA 27mA	250x110x60	238x76	1.6Kg.		FS - 2
SV022iG5A-2 SV037iG5A-2	1.5kW 2.2kW 3.7kW	` ,								
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2	1.5kW 2.2kW 3.7kW 4.0kW	FE-T012-(x)	12A 20A	250VAC 250VAC	0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60	238x76 258x106	1.6Kg. 2.2Kg.		FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW	FE-T012-(x) FE-T020-(x) FE-T030-(x)	12A 20A 30A	250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60	238x76 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg.		FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW	FE-T012-(x)	12A 20A	250VAC 250VAC	0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60	238x76 258x106	1.6Kg. 2.2Kg.		FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW	FE-T012-(x) FE-T020-(x) FE-T030-(x)	12A 20A 30A	250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60	238x76 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg.		FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW	FE-T012-(x) FE-T020-(x) FE-T030-(x)	12A 20A 30A	250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60	238x76 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg.		FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2 SV004iG5A-4	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW 7.5kW 0.4kW	FE-T012-(x) FE-T020-(x) FE-T030-(x) FE-T050-(x)	12A 20A 30A 50A	250VAC 250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60 270x140x90	238x76 258x106 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg. 3.2Kg.		FS - 2 FS - 2 FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2 SV004iG5A-4 SV008iG5A-4	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW 7.5kW 0.4kW	FE-T012-(x) FE-T020-(x) FE-T030-(x) FE-T050-(x)	12A 20A 30A 50A	250VAC 250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60 270x140x90	238x76 258x106 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg. 3.2Kg.		FS - 2 FS - 2 FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2 SV004iG5A-4 SV008iG5A-4 SV015iG5A-4	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW 7.5kW 0.4kW 0.75kW	FE-T012-(x) FE-T020-(x) FE-T030-(x) FE-T050-(x)	12A 20A 30A 50A	250VAC 250VAC 250VAC 250VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60 270x140x90	238x76 258x106 258x106 258x106	1.6Kg. 2.2Kg. 2.4Kg. 3.2Kg.		FS - 2 FS - 2 FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2 SV004iG5A-4 SV008iG5A-4 SV015iG5A-4 SV022iG5A-4	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW 7.5kW 0.4kW 0.75kW	FE-T012-(x)  FE-T020-(x)  FE-T030-(x)  FE-T050-(x)  FE-T006-(x)	12A 20A 30A 50A	250VAC 250VAC 250VAC 250VAC 380VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60 270x140x90 250x110x60	238x76 258x106 258x106 258x106 238x76	1.6Kg. 2.2Kg. 2.4Kg. 3.2Kg.		FS - 2 FS - 2 FS - 2 FS - 2 FS - 2
SV022iG5A-2 SV037iG5A-2 SV040iG5A-2 SV055iG5A-2 SV075iG5A-2 SV004iG5A-4 SV008iG5A-4 SV015iG5A-4 SV022iG5A-4 SV022iG5A-4 SV037iG5A-4	1.5kW 2.2kW 3.7kW 4.0kW 5.5kW 7.5kW 0.4kW 0.75kW 1.5kW 2.2kW	FE-T012-(x)  FE-T020-(x)  FE-T030-(x)  FE-T050-(x)  FE-T006-(x)	12A 20A 30A 50A	250VAC 250VAC 250VAC 250VAC 380VAC	0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA 0.5mA 27mA	250x110x60 270x140x60 270x140x60 270x140x90 250x110x60	238x76 258x106 258x106 258x106 238x76	1.6Kg. 2.2Kg. 2.4Kg. 3.2Kg.		FS - 2 FS - 2 FS - 2 FS - 2 FS - 2

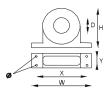
(x) (1) Industrial environment EN50081-2 (A class) -> EN61000-6-4:02 (3) Domestic and industrial environment EN50081-1 (B class) -> EN61000-6-3:02

## FF SERIES (Footprint)









FS SERIES (output chokes)

CODE	D	W	H	Х	Ø
FS - 2	28.5	105	62	90	5

Polígono Industrial de Palou 08400 Granollers (Barcelona) SPAIN / ESPAÑA

Http://www.lifasa.com

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