

DECLARATION OF CONFORMITY

MANUFACTURER: LS ELECTRIC Co., Ltd

Cheon-An Plant, 56, Samseong 4-gil, Dongnam-gu, 31226, Cheonan-si, Chungcheongnam-do, Republic of KOREA

Declare under our sole responsibility that the following apparatus:

Type of Equipment : Inverter(Power Conversion Equipment)

Model Name : <u>STARVERT-iG5A series</u>

which this declaration relates to, when applied under the operating conditions given in the User Manual, comply with the CDM class IE2: losses more than 25% lower than RCDM value, according to the provisions of the following standard:

IEC 61800-9-2:2017

Adjustable speed electrical power drive systems - Part 9-2: Ecodesign for power drive systems, motor starters, power electronics and their driven applications - Energy efficiency indicators for power drive systems and motor starters

Done at Plant Cheon-An 20, May, 2021

Signatures:

박 창 권

2021.5, 20

Mr. Chang Keun Park / Senior Manager



Technical Document of ECO Design

For the determination of the IE class, the power losses of VSDs is determined according to the input-output method.

When applied under the operating conditions given in the User Manual and the power losses Measurement Test, this Model comply with the CDM class IE2 as shown in Table 1.

Conditions of the power losses Measurement Test

1. Rated Power Supply Voltage

- 1 Phase 200~230VAC(-15% ~ +10%)

- 3 Phase 200~230VAC(-15% ~ +10%)

- 3 Phase 380~480VAC(-15% ~ +10%)

2. Rated Power Supply Frequency : 50 \sim 60Hz(\pm 5%)

3. Carrier Frequency: Default value

4. Load Current: HD Rated Output Current

5. Operation at room temperature

Model Name: STARVERT-iG5A series

Table 1. IE Class of the CDM

Voltage (V)	Series	Model Name	Rated Power (kW)	HD_Rated output current (A)	ND_Rated output current (A)	S _{r,equ} (kVA)	Standby Loss (W)	Relative losses of the CDM(%)								P _{L,CDM} /	IE Class of
								Point1 (0,25)	Point2 (0,50)	Point3 (0,100)	Point4 (50,25)	Point5 (50,50)	Point6 (50,100)	Point7 (90,50)	Point8 (90,100)	P _{L,RCDM} (%)	the CDM
230	IG5A	SV004iG5A-1	0.4	2.5	10-0	1.0	4.2	1.2%	1.4%	1.6%	1.3%	1.4%	1.7%	1.5%	1.9%	17.1%	IE2
230	IG5A	SV008iG5A-1	0.75	5	-	2.0	4.2	1.1%	1.2%	1.4%	1.2%	1.3%	1.5%	1.3%	1.7%	20.6%	IE2
230	IG5A	SV015iG5A-1	1.5	8	-	3.2	5.6	0.9%	1.0%	1.2%	1.0%	1.1%	1.3%	1.1%	1.4%	19.6%	IE2
230	IG5A	SV004iG5A-2	0.4	2.5	-	1.0	4.2	1.2%	1.4%	1.6%	1.3%	1.4%	1.7%	1.5%	1.9%	17.1%	IE2
230	IG5A	SV008iG5A-2	0.75	5	-	2.0	4.2	1.2%	1.3%	1.5%	1.2%	1.3%	1.6%	1.4%	1.8%	21.6%	IE2
230	IG5A	SV015iG5A-2	1.5	8	-	3.2	5.6	0.8%	1.0%	1.5%	0.9%	1.1%	1.8%	1.3%	2.1%	29.4%	IE2
230	IG5A	SV022iG5A-2	2.2	12	-	4.8	5.6	0.6%	0.8%	1.2%	0.7%	0.9%	1.4%	1.0%	1.6%	25.2%	IE2
230	IG5A	SV037iG5A-2	3.7	16	, - ,	6.4	6.3	0.7%	0.8%	1.2%	0.7%	0.9%	1.4%	1.0%	1.6%	27.0%	IE2
230	IG5A	SV040iG5A-2	4	17	-	6.8	6.3	0.7%	0.8%	1.2%	0.7%	0.9%	1.4%	1.0%	1.7%	27.5%	IE2
230	IG5A	SV055iG5A-2	5.5	24	-	9.6	18.0	0.6%	0.7%	1.0%	0.6%	0.8%	1.2%	0.9%	1.4%	24.6%	IE2
230	IG5A	SV075iG5A-2	7.5	32	-	12.7	18.0	0.6%	0.7%	1.1%	0.6%	0.8%	1.2%	0.9%	1.5%	27.1%	IE2
230	IG5A	SV110iG5A-2	11	46	-	18.3	29.0	0.4%	0.5%	0.9%	0.5%	0.7%	1.1%	0.7%	1.3%	25.5%	IE2
230	IG5A	SV150iG5A-2	15	60	-	23.9	29.0	0.5%	0.6%	0.9%	0.5%	0.7%	1.1%	0.7%	1.4%	27.8%	IE2
230	IG5A	SV185iG5A-2	18.5	74	-	29.5	29.0	0.4%	0.5%	0.8%	0.4%	0.6%	1.0%	0.7%	1.3%	25.8%	IE2
230	IG5A	SV220iG5A-2	22	88	-	35.1	29.0	0.4%	0.5%	0.8%	0.4%	0.6%	1.0%	0.7%	1.3%	25.8%	IE2
480	IG5A	SV004iG5A-4	0.4	1.25	-	1.0	4.2	1.3%	1.4%	1.6%	1.3%	1.4%	1.7%	1.5%	1.9%	17.5%	IE2
480	IG5A	SV008iG5A-4	0.75	2.5	-	2.1	4.2	1.1%	1.3%	1.5%	1.2%	1.3%	1.6%	1.4%	1.8%	21.5%	IE2
480	IG5A	SV015iG5A-4	1.5	4	-	3.3	5.6	0.8%	1.0%	1.5%	0.9%	1.1%	1.7%	1.2%	2.0%	30.2%	IE2
480	IG5A	SV022iG5A-4	2.2	6	-	5.0	5.6	0.8%	0.9%	1.4%	0.8%	1.0%	1.6%	1.2%	1.9%	30.4%	IE2
480	IG5A	SV037iG5A-4	3.7	8	-	6.7	7.0	1.0%	1.2%	1.8%	1.0%	1.3%	2.1%	1.5%	2.4%	40.7%	IE2
480	IG5A	SV040iG5A-4	4	9	-	7.5	7.0	0.9%	1.1%	1.6%	0.9%	1.2%	1.9%	1.3%	2.2%	37.4%	IE2
480	IG5A	SV055iG5A-4	5.5	12	-	10.0	20.0	0.9%	1.1%	1.6%	0.9%	1.2%	1.9%	1.3%	2.2%	40.6%	IE2
480	IG5A	SV075iG5A-4	7.5	16	-	13.3	20.0	0.9%	1.0%	1.6%	0.9%	1.1%	1.8%	1.3%	2.1%	39.5%	IE2
480	IG5A	SV110iG5A-4	11	24	-	20.0	27.6	0.5%	0.7%	1.1%	0.6%	0.8%	1.3%	0.9%	1.7%	32.7%	IE2
480	IG5A	SV150iG5A-4	15	30	-	24.9	27.6	0.6%	0.7%	1.2%	0.6%	0.9%	1.4%	0.9%	1.7%	35.1%	IE2
480	IG5A	SV185iG5A-4	18.5	39	-	32.4	27.6	0.4%	0.5%	0.8%	0.4%	0.6%	0.9%	0.6%	1.1%	23.4%	IE2
480	IG5A	SV220iG5A-4	22	45	-	37.4	27.6	0.4%	0.5%	0.8%	0.4%	0.6%	0.9%	0.6%	1.2%	24.1%	IE2