

iG5A

Variable Frequency Drive / Inverter

Powerful & compact sensorless vector control VFD

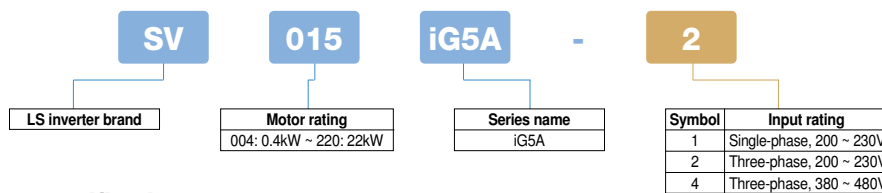
1 phase 0.4~1.5kW(0.5~2HP), 200~230V
 3 phase 0.4~22kW(0.5~30HP), 200~230V
 3 phase 0.4~22kW(0.5~30HP), 380~480V

Selectable V/f, sensorless vector control
 Motor parameter Auto-tuning
 Powerful torque at overall speed range
 0.1 ~ 400Hz frequency output
 1 ~ 15kHz carrier frequency
 -15% ~ +10% input voltage margin
 Fault history: Last 5 faults
 0~10Vdc / -10~+10Vdc analog input
 IP20 enclosure, UL Type 1 (Option)
 Selectable manual/automatic torque boost
 Selectable PNP/NPN input signal

2nd motor control and parameter setting
 Built-in Dynamic braking transistor as standard
 Enhanced process PID control
 Built-in RS485 (LS Bus / Modbus RTU) communication
 Cooling fan On/Off control & Easy change
 Remote control using external keypad * RJ45 cable(Optional)
 Upgraded functions: Sleep & Wake-up (Energy savings)
 KEB (Kinetic Energy Buffering) protection
 Low leakage PWM algorithm
 Monitoring & commissioning PC based software tool (Drive View)



Model Number



General specification

Model number: SV	iG5A-1	004	008	015
Motor rating	[HP]	0.5	1	2
	[kW]	0.4	0.75	1.5
Output rating	Capacity [kVA]	0.95	1.9	3.0
	Current [A]	2.5	5	8
Input rating	Voltage [V]	Three-phase 200 ~ 230V		
	Frequency [Hz]	0.1 ~ 400Hz		
	Voltage [V]	Single-phase 200 ~ 230V (+10%, -15%)		
Weight	[kg]	0.77	1.12	1.84

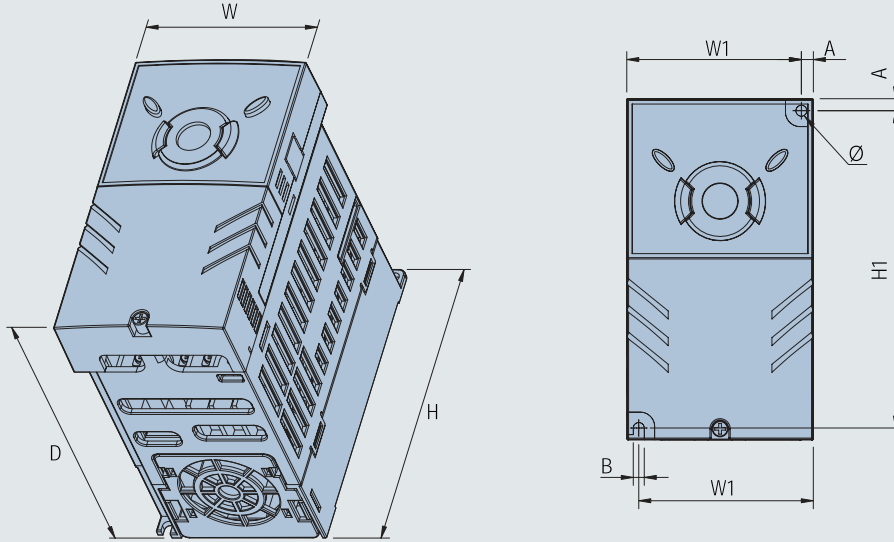
Model number: SV	iG5A-2	004	008	015	022	037	040	055	075	110	150	185	220
Motor rating	[HP]	0.5	1	2	3	5	5.4	7.5	10	15	20	25	30
	[kW]	0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11	15	18.5	22
Output rating	Capacity [kVA]	0.95	1.9	3	4.5	6.1	6.5	9.1	12.2	17.5	22.9	28.2	33.5
	Current [A]	2.5	5	8	12	16	17	24	32	46	60	74	88
Input rating	Voltage [V]	Three-phase 200 ~ 230V (+10%, -15%)											
	Frequency [Hz]	0.1 ~ 400Hz											
	Voltage [V]	Single-phase 200 ~ 230V (+10%, -15%)											
Weight	[kg]	0.76	0.77	1.12	1.84	1.89	1.89	3.66	3.66	9.00	9.00	13.3	13.3

Model number: SV	iG5A-4	004	008	015	022	037	040	055	075	110	150	185	220
Motor rating	[HP]	0.5	1	2	3	5	5.4	7.5	10	15	20	25	30
	[kW]	0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11	15	18.5	22
Output rating	Capacity [kVA]	0.95	1.9	3	4.5	6.1	6.5	9.1	12.2	18.3	22.9	29.7	34.3
	Current [A]	1.25	2.5	4	6	8	9	12	16	24	30	39	45
Input rating	Voltage [V]	Three-phase 380 ~ 480V											
	Frequency [Hz]	0.1 ~ 400Hz											
	Voltage [V]	Three-phase 380 ~ 480V (+10%, -15%)											
Weight	[kg]	0.76	0.77	1.12	1.84	1.89	1.89	3.66	3.66	9.00	9.00	13.3	13.3

Control Spec	Control method	V/f, Slip compensation, Sensorless vector
	Speed reference resolution	Digital command: 0.01Hz / Analog reference: 0.06Hz (Max freq., 60Hz)
	Frequency accuracy	Digital command: 0.01% of Max output freq. / Analog signal command of 0.1% of Max output freq.
	V/f curve	Linear, Squared, User custom V/f
Operation	Overload capacity	150% for 1 minute
	Torque boost	Auto & manual torque boost
	Keypad Display	4 digit, 7 segment LED
	Operation method	Keypad / Terminal / Communication
Input signal	Frequency setting	Analog: 0 to 10V / -10 to 10V / 0 to 20mA / Digital: Keypad
	Operation function	PID control / Up-Down operation / 3-Wire operation
	Multi-function terminal (P1 ~ P8)	PNP / NPN selectable 8 points (programmable)
Output signal	Multi-function relay	Fault output & inverter status output (N.O., N.C.) Less than AC250V, 0.3A / Less than DC 30V 1A
	Multi-function open collector	DC24V (less than 50mA)
	Analog output	0 to 10Vdc (less than 10mA): frequency / current / voltage / DC voltage selectable
Protection	Inverter trip	Over voltage / Low voltage / Over current / Over Current 2 / Ground fault / Inverter overheat / Output phase open / Inverter overload / Overload trip / Communication error / Frequency command loss / Hardware fault / Fan fault / Brake error / etc.
	Inverter alarm	Stall prevention, Overload
Enclosure		IP20, NEMA1 (Optional)
Option	Cable, conduit kit	Remote cable(2M/3M/5M) plus external keypad, Conduit kit for NEMA 1
Others		Built-in Dynamic braking transistor, Built-in RS485(LS Bus / Modbus RTU)

Dimensions

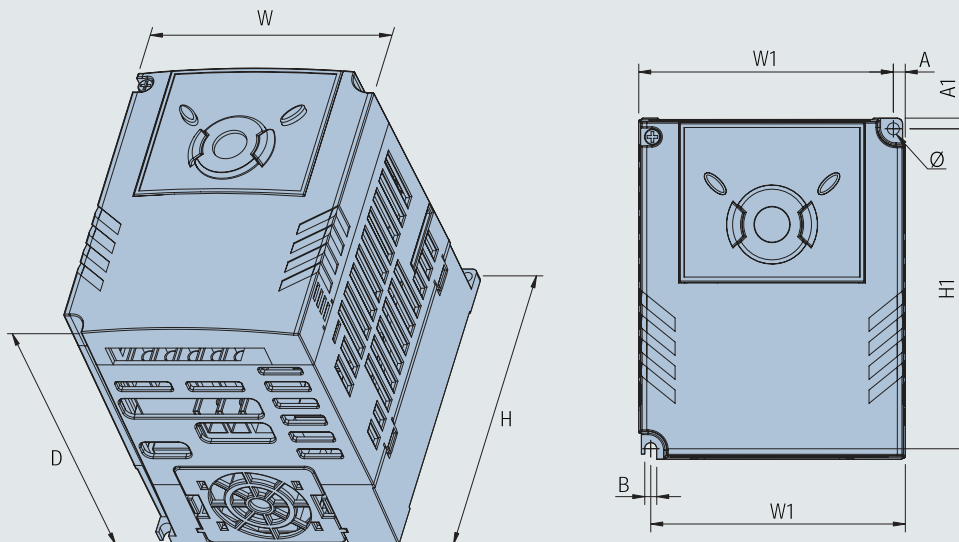
SV004iG5A-2 / SV008iG5A-2, SV004iG5A-4 / SV008iG5A-4



mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV004iG5A-2	0.4	70	65.5	128	119	130	4.0	4.5	4.0	0.76
SV008iG5A-2	0.75	70	65.5	128	119	130	4.0	4.5	4.0	0.77
SV004iG5A-4	0.4	70	65.5	128	119	130	4.0	4.5	4.0	0.76
SV008iG5A-4	0.75	70	65.5	128	119	130	4.0	4.5	4.0	0.77

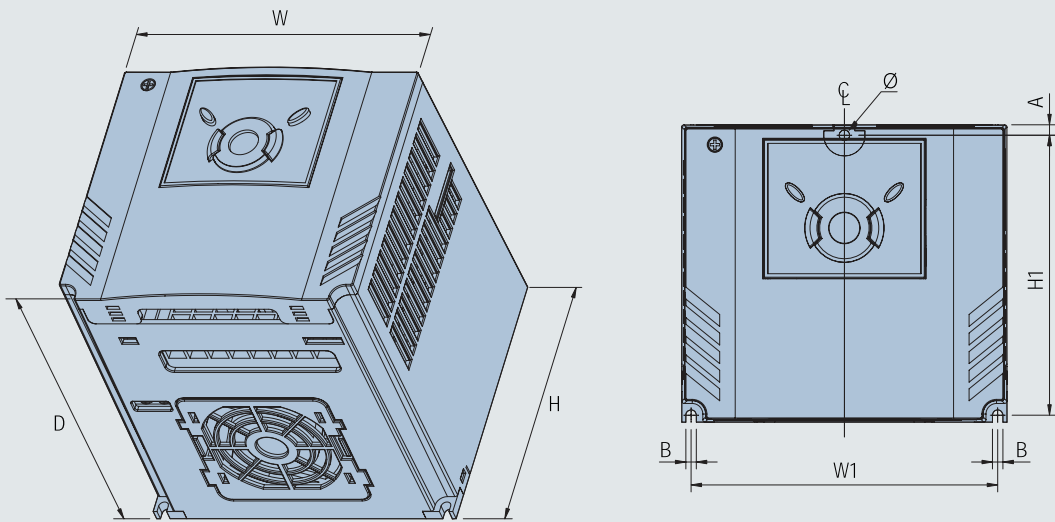
SV015iG5A-2 / SV015iG5A-4



mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV015iG5A-2	1.5	100	95.5	128	120	130	4.5	4.5	4.5	1.12
SV015iG5A-4	1.5	100	95.5	128	120	130	4.5	4.5	4.5	1.12

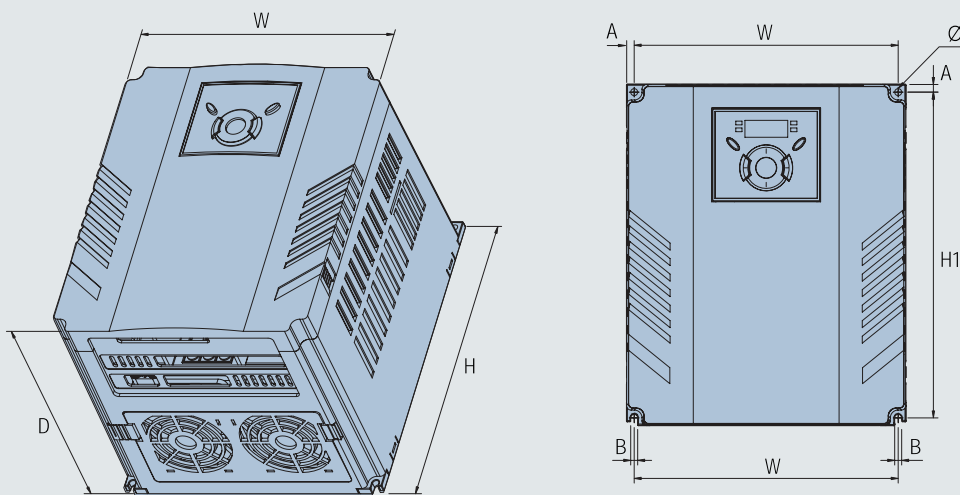
SV022iG5A-2 / SV037iG5A-2 / SV040iG5A-2, SV022iG5A-4 / SV037iG5A-4 / SV040iG5A-4



mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV022iG5A-2	2.2	140	132	128	120.5	155	4.5	4.5	4.5	1.84
SV037iG5A-2	3.7	140	132	128	120.5	155	4.5	4.5	4.5	1.89
SV040iG5A-2	4.0	140	132	128	120.5	155	4.5	4.5	4.5	1.89
SV022iG5A-4	2.2	140	132	128	120.5	155	4.5	4.5	4.5	1.84
SV037iG5A-4	3.7	140	132	128	120.5	155	4.5	4.5	4.5	1.89
SV040iG5A-4	4.0	140	132	128	120.5	155	4.5	4.5	4.5	1.89

SV055iG5A-2 / SV075iG5A-2, SV055iG5A-4 / SV075iG5A-4

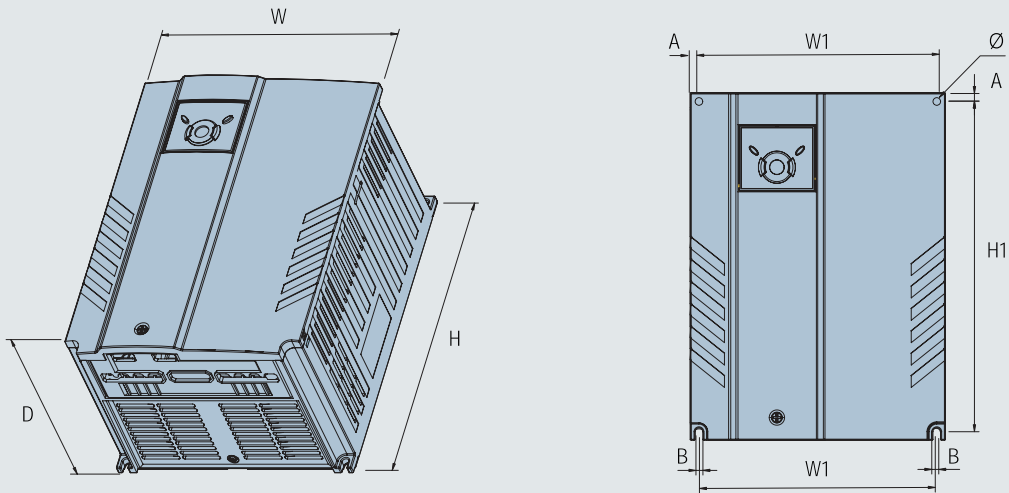


mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV004iG5A-2	5.5	180	170	220	210	170	4.5	5	4.5	3.66
SV008iG5A-2	7.5	180	170	220	210	170	4.5	5	4.5	3.66
SV004iG5A-4	5.5	180	170	220	210	170	4.5	5	4.5	3.66
SV008iG5A-4	7.5	180	170	220	210	170	4.5	5	4.5	3.66

Dimensions

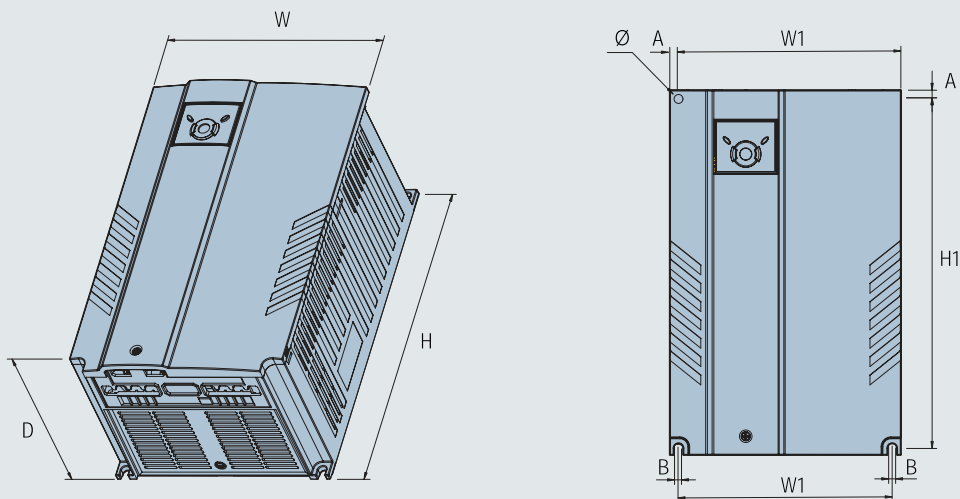
SV110iG5A-2 / SV150iG5A-2 / SV110iG5A-4 / SV150iG5A-4



mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV110iG5A-2	11.0	235	219	320	304	189.5	7.0	8.0	7.0	9.00
SV150iG5A-2	15.0	235	219	320	304	189.5	7.0	8.0	7.0	9.00
SV110iG5A-4	11.0	235	219	320	304	189.5	7.0	8.0	7.0	9.00
SV150iG5A-4	15.0	235	219	320	304	189.5	7.0	8.0	7.0	9.00

SV185iG5A-2 / SV220iG5A-2 / SV185iG5A-4 / SV220iG5A-4



mm (inches)

Inverter model	(kW)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	D (mm)	Ø	A (mm)	B (mm)	(kg)
SV185iG5A-2	18.5	260	240	410	392	208.5	10.0	10.0	10.0	13.3
SV220iG5A-2	22.0	260	240	410	392	208.5	10.0	10.0	10.0	13.3
SV185iG5A-4	18.5	260	240	410	392	208.5	10.0	10.0	10.0	10.0
SV220iG5A-4	22.0	260	240	410	392	208.5	10.0	10.0	10.0	10.0