

Green Innovators of Innovation

Variable Frequency Drive **LS Inverter Series**

iE5 / iC5 / iG5A / iS5 / iS7 / iH / iP5A / iV5



Drive Solution



LS Industrial Systems
www.lsis.biz



Take another look!

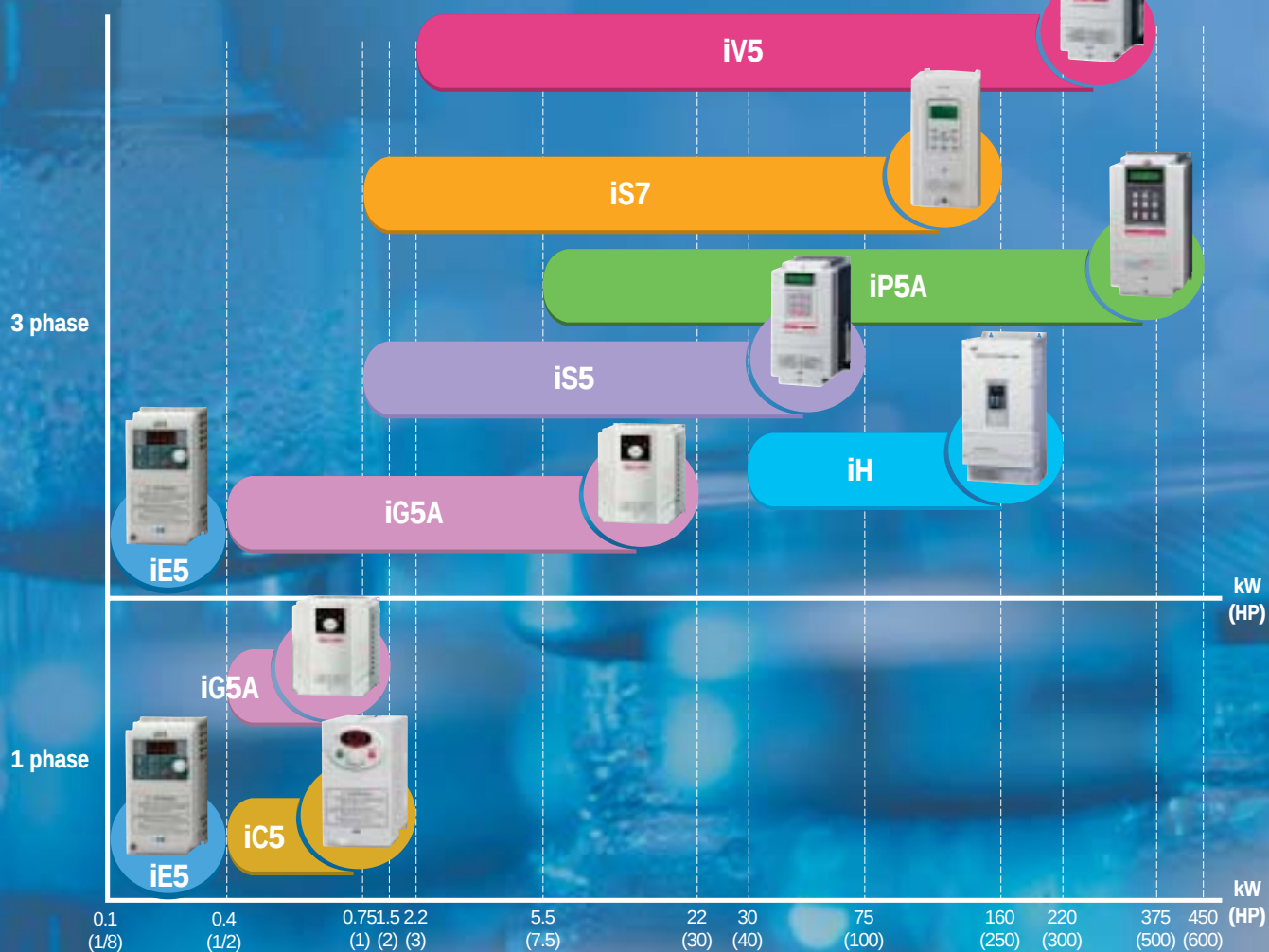
Simplicity-Precision, Flexibility-Standardization and Easy to use-Diversity are the inherent qualities of LS Variable Frequency Drives.

As an one-stop drive solution provider, LS is ready to offer its own competitive solutions into the general power transmission industry.





Performance



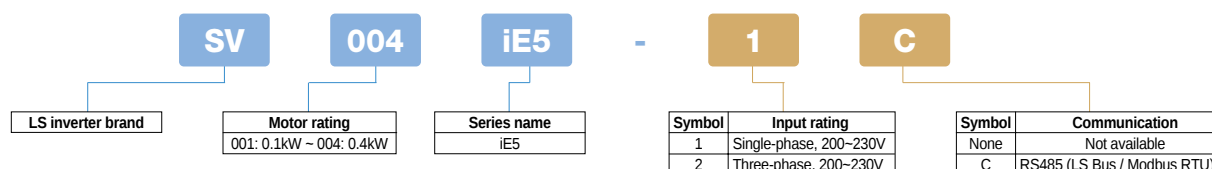
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- V/f control
- Compact size: 68 × 128 × 85mm (2.7 × 5 × 3.3 inch)
- 0.1 ~ 200Hz frequency output
- 1 ~ 10kHz carrier frequency
- Fault history: Last 3 faults
- IP20 enclosure
- RS485 (LS Bus / Modbus RTU) communication (Built-in option)
- DC Injection braking
- Selectable manual/automatic torque boost
- Selectable PNP/NPN input signal
- PI control
- Up-Down & 3-Wire operation
- Automatic restart after instantaneous power failure
- Built-in potentiometer
- Monitoring & commissioning PC based software tool (Drive View)
- Parameter copy unit



Model Number



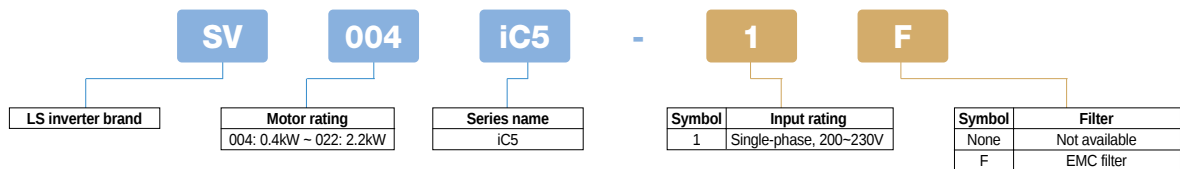
General specification

Model number: SV □ □ □ iE5- □			001-1	002-1	004-1	001-2	002-2	004-2
Motor rating		[HP]	0.13	0.25	0.5	0.13	0.25	0.5
		[kW]	0.1	0.2	0.4	0.1	0.2	0.4
Output rating	Capacity	[kVA]	0.3	0.6	0.95	0.3	0.6	1.14
	Current	[A]	0.8	1.4	2.5	0.8	1.6	3.0
	Voltage	[V]	Three-phase 200 ~ 230V					
Input rating	Frequency	[Hz]	0.1 ~ 200Hz					
	Voltage	[V]	Single-phase 200 ~ 230V (± 10%)			Three-phase 200 ~ 230V (± 10%)		
	Frequency	[Hz]	50 ~ 60Hz (± 5%)					
	Current	[A]	2.0	3.5	5.5	1.2	2.0	3.5
Weight		[kg]	0.44	0.46	1.68	0.43	0.45	0.67
Control Spec	Control method		V/f, Slip compensation					
	Speed reference resolution		Digital command: 0.01Hz / Analog reference: 0.1Hz (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 V/f					
	Overload capacity		150% for 1 minute					
	Torque boost		Auto & manual torque boost					
Operation	Keypad Display		4 digit, 7 segment LED					
	Operation method		Keypad / Terminal / Communication					
	Frequency setting		Analog: 0 to 10V / 0 to 20mA / Potentiometer / Digital: Keypad					
	Operation function		PI control / Up-Down operation / 3-Wire operation					
Input signal	Multi-function terminal		PNP / NPN selectable					
	(P1 ~ P5)		5 points (programmable)					
Output signal	Multi-function relay		Fault output & inverter status output (N.O., N.C.) Less than AC 250V, 0.3A / Less than DC 30V 1A					
	Analog output		0 to 10Vdc (less than 10mA): frequency / current / voltage / DC voltage selectable					
Protection	Inverter trip		Over voltage / Low voltage / Over current / Ground fault / Inverter overload / Overload trip / Inverter overheat / Condenser overload / Output phase open / Frequency command loss / Hardware fault / etc.					
	Inverter alarm		Stall prevention					
Enclosure			IP20					
Option	Communication, copy unit		RS485(LS Bus / Modbus RTU), Parameter copy unit					



- EMC filter - class A (Built-in option)
- Selectable V/f, sensorless vector control
- Motor parameter Auto-tuning
- 150% torque at 0.5Hz
- 0.1 ~ 400Hz frequency output
- 1 ~ 15kHz carrier frequency
- 0 ~ 10Vdc analog input
- IP20 enclosure
- Selectable manual/automatic torque boost
- Built-in potentiometer
- Selectable PNP/NPN Input signal
- Fault history: Last 5 faults
- Enhanced process PID control
- Up-Down & 3-Wire operation
- Modbus RTU communication (optional)
- 8 programmable I/O
- Parameter copy unit
- Monitoring & commissioning PC based software tool (Drive View)

Model Number



General specification

Model number: SV □ □ □ iC5-□ □			004-1	008-1	015-1	022-1
Motor rating		[HP]	0.5	1	2	3
		[kW]	0.4	0.75	1.5	2.2
Output rating	Capacity	[kVA]	0.95	1.9	3	4.5
	Current	[A]	2.5	5	8	12
	Voltage	[V]	Three-phase 200 ~ 230V			
	Frequency	[Hz]	0.1 ~ 400Hz			
Input rating	Voltage	[V]	Single-phase 200 ~ 230V (± 10%)			
	Frequency	[Hz]	50 ~ 60Hz (± 5%)			
	Current	[A]	5.5	9.2	16	21.6
Weight		[kg]	0.87	0.89	1.79	1.85
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				
	Overload capacity	150% for 1 minute, 200% for 30 seconds				
	Torque boost	Auto & manual torque boost				
Operation	Keypad Display	3 digit, 7 segment LED				
	Operation method	Keypad / Terminal / Communication				
	Frequency setting	Analog: 0 to 10V / 4 to 20mA / Potentiometer / Digital: Keypad				
	Operation function	PID control / Up-Down operation / 3-Wire operation				
Input signal	Multi-function terminal (P1 ~ P5)	PNP / NPN selectable 5 points (programmable)				
	Multi-function relay	(N.O., N.C.) Less than AC 250V, 0.3A / Less than DC 30V 1A				
Output signal	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 / Ground fault / Inverter overheat / Output phase open / Inverter overload Overload trip / Communication error / Frequency command loss / Hardware fault / Fan fault / etc.				
	Inverter alarm	Stall prevention, Overload				
Enclosure		IP20				
Option	Communication, copy unit	Modbus RTU, Parameter copy unit				

iG5A

Variable Frequency Drive / Inverter

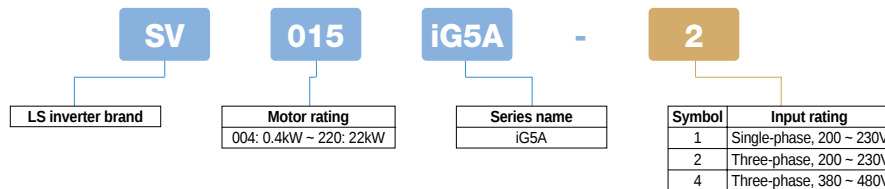
Powerful & compact sensorless vector control VFD

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	
	Voltage	[V]	Three-phase 200 ~ 230V					
Input rating	Frequency	[Hz]	0.1 ~ 400Hz					
	Voltage	[V]	Single-phase 200 ~ 230V (+10%, -15%)					
	Frequency	[Hz]	50 ~ 60Hz (± 5%)					
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
	Voltage	[V]	Three-phase 200 ~ 230V											
Input rating	Frequency	[Hz]	0.1 ~ 400Hz											
	Voltage	[V]	Three-phase 200 ~ 230V (+10%, -15%)											
	Frequency	[Hz]	50 ~ 60Hz (± 5%)											
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
	Voltage	[V]	Three-phase 380 ~ 480V											
Input rating	Frequency	[Hz]	0.1 ~ 400Hz											
	Voltage	[V]	Three-phase 380 ~ 480V (+10%, -15%)											
	Frequency	[Hz]	50 ~ 60Hz (± 5%)											
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												
	Overload capacity	150% for 1 minute												
Operation	Torque boost	Auto & manual torque boost												
	Keypad Display	4 digit, 7 segment LED												
	Operation method	Keypad / Terminal / Communication												
	Frequency setting	Analog: 0 to 10V / -10 to 10V / 0 to 20mA / Digital: Keypad												
	Operation function	PID control / Up-Down operation / 3-Wire operation												
Input signal	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 alarm	OInverter overload / Overload trip / Communication error / Frequency command loss / Hardware fault / Fan fault / Brake error / etc.												
Enclosure		IP20, NEMA1 (Optional)												
Option		Cable, conduit kit												
Others		Remote cable(2M/3M/5M) plus external keypad, Conduit kit for NEMA 1												
		Built-in Dynamic braking transistor, Built-in RS485(LS Bus / Modbus RTU)												



- Selectable V/f, Sensorless vector, Sensored vector control (Optional)
- Built-in process PID control
- Optimum acceleration & deceleration for a maximum torque
- APP parameter group for special operations:
Traverse, Multi Motor Control, DRAW
- Multi-function I/O terminal:
Input: 27 functions / Output: 21 functions
- Multi Motor Control (Up to 4 motors: Optional)
- Motor parameter Auto-tuning
- Parameter Read/Write function using a detachable LCD Keypad
- 8 Preset speeds
- Extension I/O boards (Optional): Sub-A, Sub-B, Sub-C
- Communication options:
Modbus RTU, Profibus-DP, DeviceNet, RS485(LS Bus), Fnet(LS PLC link)
- Built-in Dynamic braking transistor (Up to 7.5kW[10HP])
- Monitoring & commissioning PC based software tool (Drive View)

Model Number

SV		008		iS5		-		2		N		O		,		380V	
LS inverter brand		Motor rating		Series name				Symbol		Loader		Symbol		UL certification		Symbol	
		008: 0.75kW ~ 750: 75kW		iS5				2		None		O		Open type		None	
								4		Non Loader		E		Enclosed type 1		****	
								Three-phase, 200 ~ 230V								200~230V or 380~480V	
								Three-phase, 380 ~ 480V								380V, 440V, 460V, 480V	

General specification

Model number: SV □ □ □ iS5-2 □		008	015	022	037	055	075	110	150	185	220	300	370	450	550
Motor rating	[HP]	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55
	Capacity [kVA]	1.9	3	4.5	6.1	9.1	12.2	17.5	22.9	28.5	33.5	46	55	68	84
	Current [A]	5	8	12	16	24	32	46	60	74	88	122	146	180	220
Output rating	Voltage [V]	Three-phase 200 ~ 230V													
	Frequency [Hz]	0.1 ~ 400Hz (Sensorless control: 0.1~300Hz, Sensored control: 0.1~120Hz)													
	Voltage [V]	Three-phase 200 ~ 230V (±10%)													
	Frequency [Hz]	50 ~ 60Hz (±5%)													
Weight	[kg]	4.6	4.6	4.8	4.9	7.5	7.7	13.8	14.3	19.4	20.0	42.0	42.0	61	61

Model number: SV □ □ □ iS5-4 □		008	015	022	037	055	075	110	150	185	220	300	370	450	550	750
Motor rating	[HP]	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
	Capacity [kVA]	1.9	3	4.5	6.1	9.1	12.2	17.5	22.9	29.7	34.3	45	56	68	82	100
	Current [A]	2.5	4	6	8	12	16	24	30	39	45	61	75	91	110	152
Output rating	Voltage [V]	Three-phase 380 ~ 480V														
	Frequency [Hz]	0.1 ~ 400Hz (Sensorless control: 0.1~300Hz, Sensored control: 0.1~120Hz)														
	Voltage [V]	Three-phase 380 ~ 480V (±10%)														
	Frequency [Hz]	50 ~ 60Hz (±5%)														
Weight	[kg]	4.7	4.7	4.8	4.9	7.7	7.7	13.9	14.4	20	20	45	45	63	63	68

Control Spec	Control method	Sensorless vector, Sensored vector, V/f													
	Speed reference resolution	Digital command: 0.01Hz (less than 100Hz), 0.1Hz (greater than 100Hz) / Analog reference: 0.03Hz (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, 200% for 0.5 second													
	Torque boost	Auto & manual(0 ~ 15%) torque boost													
	Keypad Display	32 characters LCD keypad / 4 digit, 7 segment LED keypad													
	Operation method	Keypad / Terminal / Communication													
Input signal	Frequency setting	Analog: 0 to 10V / 4 to 20mA / Additional port for Sub-board(0~10V) / Digital: Keypad													
	Operation function	DC braking / Frequency limit / Frequency jump / Second function / Second Function / Slip compensation / Reverse rotation prevention / Auto restart / Inverter By-pass / Auto-Tuning / PID control													
	Sart signal	Forward / Reverse													
	Multi-step	Up to 8 speeds can be set (Use Multi-function terminal)													
Output signal	Multi-step Accel/Decel time	0~6,000 sec, Up to 8 types can be set and selected for each setting (Use Multi-function terminal)													
	Emergency stop	Interrupts the Output from Inverter													
	JOG operation	Operates from Internal sequence by setting Multi-function terminal (5 way * 8 Step)													
	Auto operation	Trip status is removed when Protection function is active													
Protection	Fault reset	Frequency detection level / Overload alarm / Stalling / Over voltage / Low voltage / Inverter overheat / Run / Stop / Constant speed / Inverter By-pass / Speed search / Auto-operation step / Auto-operation sequence													
	Operating status	Contact output (30A, 30C, 30B) - AC250V 1A, DC30V 1A													
	Fault output	Output frequency / Output current / Output voltage(0~10V) / DC voltage / Output torque selectable													
	Indicator														
Enclosure	Inverter trip	Over voltage / Low voltage / Over current 1, 2 / Fuse open / Ground fault / Inverter overheat / Electronic thermal / Output phase open / overload / External Fault A, B / Over speed / Communication Error / Frequency command loss / Hardware fault / M/C fail / etc													
	Inverter alarm	Stall prevention / Overload / Temperature sensor fault													
	IP20(0.75~7.5kW[1~10HP]), IP00(11~75kW[15~100HP])														
	Option	LCD Keypad, Remote cable(2M/3M/5M), Sub-A board(Extension I/O), Sub-B board(Encoder I/O), Sub-C board(Extension I/O: current input), MMC board													
Others	Communication	RS485(LS Bus), Modbus RTU, DeviceNet, Profibus-DP, Fnet													
	Built-in Dynamic braking transistor(0.75~7.5kW[1~10HP])														

iS7

Variable Frequency Drive / Inverter

High Torque Performance and Precise VFD

3 phase 0.75~22kW(1~30HP), 200~230V

3 phase 0.75~160kW(1~250HP), 380~480V

- Constant torque / Variable torque dual rating
- Selectable V/f, V/f PG, sensorless vector, sensed vector
- 150 MIPS(million instructions per second) high speed DSP
- High performances & functions:
 - Droop control (automatic torque balance)
 - KEB (Kinetic Energy Buffering) protection
 - Ride Through (LV Trip Delay) protection
 - Under Load Trip protection
 - PMSM sensorless vector function
 - Power brake & Flux Brake function
 - Static motor parameter Auto-tuning*
- Easy to control: Easy Start Mode, User & Macro group, Multi Function Key
- 2nd motor sensorless control and parameter setting
- Available IP54 enclosure(0.75~22kW[1~30HP]) as built-in option
- Built-in RS485(LS Bus / Modbus RTU) communication
- Built-in Dynamic braking transistor (0.75~22kW[1~30HP])
- Available EMC Filter & DC Reactor as built-in option
- EMC Filter(0.75~22kW[1~30HP]) / DC Reactor(0.75~160kW[1~215HP])
- Wide graphic LCD keypad (6 different languages)
- PLC board (optional):
 - Master-K platform: 14 max. inputs & 7 max. outputs
- Extension I/O boards (Optional):
 - 11 max. inputs & 6 max outputs
- Communication boards (Optional):
 - Profibus-DP, DeviceNet, Modbus TCP, Rnet, LonWorks, CANopen
- Monitoring & commissioning PC based software tool (Drive View)



Model Number

LS inverter brand	Motor rating	Series name	Symbol	Input rating	Symbol	Loader	Symbol	UL Certification	Symbol	Filter	Symbol	DCR
SV	0008	iS7	2	Three-phase, 200 ~ 230V	N	Non Loader	O	Open type	None	Not available	None	Not available
			4	Three-phase, 380 ~ 480V	S	Graphic Loader	E	Enclosed Type 1 (NEMA1)	F	EMC filter	D	DC Reactor
							P	NEMA 12				

General specification

Model number: SV□□□iS7-2□		008	015	022	037	055	075	110	150	185	220
Motor rating	[HP]	1	2	3	5	7.5	10	15	20	25	30
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
Output rating	Capacity [kVA]	1.9	3	4.5	6.1	9.1	12.2	17.5	22.9	28.5	33.5
	Current (CT) [A]	5	8	12	16	24	32	46	60	74	88
	Current (VT) [A]	8	12	16	24	32	46	60	74	88	124
	Voltage [V]	Three-phase 200 ~ 230V									
Input rating	Frequency [Hz]	0.01 ~ 400Hz (Sensorless-1 control: 0.01~300Hz, Sensorless-2 or Sensed control: 0.01~120Hz)									
	Voltage [V]	Three-phase 200 ~ 230V (-15% ~ +10%)									
	Frequency [Hz]	50 ~ 60Hz (±5%)									
	Current (CT) [A]	8.3	12.9	18.6	24	32.9	41.4	58	69	88	96
	Current (VT) [A]	7	10.6	14.8	21.8	28	42	52	60	75	107

Model number: SV□□□iS7-4□		008	015	022	037	055	075	110	150	185	220	300	370	450	550	750	900	1100	1320	1600
Motor rating	[HP]	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	120	150	180	225
	[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160
Output rating	Capacity [kVA]	1.9	3	4.5	6.1	9.1	12.2	17.5	22.9	29.7	34.3	46	57	69	84	116	139	170	201	248
	Current (CT) [A]	2.5	4	6	8	12	16	24	30	39	45	61	75	91	110	152	183	223	264	325
	Current (VT) [A]	4	6	8	12	16	24	30	39	45	61	75	91	110	152	183	223	264	325	370
	Voltage [V]	Three-phase 380 ~ 480V																		
Input rating	Frequency [Hz]	0.01 ~ 400Hz (Sensorless-1 control: 0.01~300Hz, Sensorless-2 or Sensed control: 0.01~120Hz)																		
	Voltage [V]	Three-phase 380 ~ 480V (-15% ~ +10%)																		
	Frequency [Hz]	50 ~ 60Hz (±5%)																		
	Current (CT) [A]	4.3	7.2	10.6	15.4	21	25.8	39	44	57	57	57	69	83	113	154	195	239	286	362
	Current (VT) [A]	3.5	5.3	7.3	10.8	13.8	22.5	26	33	40	52.2	90	109	123	162	195	237	282	350	403
Control Spec	Control method	V/f, V/f PG, Slip compensation, Sensorless-1 vector, Sensorless-2 vector, Sensed 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	CT(Heavy duty): 150% for 1 minute, VT(Normal duty): 110% for 1 minute																		
	Torque boost	Auto & Manual torque boost																		
	Keypad Display	Wide graphic LCD keypad (available 6 languages*)																		
	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 / DC braking / Frequency limit / Second function / Slip compensation / Reverse rotation prevention / Auto restart / Inverter By-pass / Auto-tuning / Flying star / Energy buffering / Power braking / Flux braking / Low leakage / MMC / Easy start																		
	Multi-function terminal (P1 ~ P8)	PNP / NPN selectable																		
	Multi-function relay	8 points (programmable)																		
Output signal	Multi-function open collector	Fault output & inverter status output (N.O., N.C.) Less than AC250V, 1A / Less than DC 30V 1A																		
	Analog output	DC24V (less than 50mA)																		
		0 to 10Vdc (less than 10mA): frequency / current / voltage / DC voltage selectable																		
Protection	Inverter trip	Over current / Over voltage / Low current / External trip / Ground fault / Inverter overheat / I/O phase open / Overload / Communication error / Frequency command loss / Hardware fault / Fan fault / Pre-PID fault / No motor trip / External brake trip / etc.																		
	Inverter alarm	Stall prevention / Overload / Light load / Encoder connection error / Keypad command loss / Speed command loss																		
Enclosure		IP21(0.75~75kW[1~100HP]), IP20(90~160kW[125~215HP]), IP54(0.75~22kW[1~30HP])* , UL Type 1(Optional)*																		
Option	Board, Cable, Keypad Communication	Graphic LCD keypad(P21), Extension I/O, Isolation I/O, Encoder board, PLC board, Remote cable(2M/3M)																		
Others		Profibus-DP, DeviceNet, Modbus TCP, Rnet, LonWorks, CANopen, EtherNet/IP* Built-in Dynamic braking transistor (0.75~22kW[1~30HP]), Built-in RS485(LS Bus / Modbus RTU)																		

*Available soon



- Space Vector PWM technology
- Constant torque / Variable torque dual rating
- Low noise level (high performance DSP & IGBT)
- Precise torque calculation through current control (high torque performance)
- 4 ~ 20mA Analog output
- 2 line 32 characters LCD display as standard
- Built-in Process PI control
- 150% starting torque
- 2 ~ 10kHz carrier frequency
- Slip compensation
- Recovery from momentary power failure (Flying start)
- Monitoring & commissioning PC based software tool (Drive View)

Model Number

LS inverter brand	SV	037	iH	-	4	U	,	380V
	Motor rating		Series name		Input rating	Symbol UL Certification		Symbol Rated voltage
	030:30kW ~ 220: 220kW		iH		2 Three-phase, 200 ~ 230V	U UL 508C		**** 220V, 380V, 440V, 460V
					4 Three-phase, 380 ~ 480V			

General specification

Model number: SV □ □ □ iH- □ □ □			030-2U	037-2U	045-2U	055-2U	030-4U	037-4U	045-4U	055-4U	075-4U	090-4U	110-4U	132-4U	160-4U	220-4U
Motor rating	Constant Torque	[HP]	40	50	60	75	40	50	60	75	100	125	150	175	215	300
	Constant Torque	[kW]	30	37	45	55	30	37	45	55	75	90	110	132	160	220
	Variable Torque	[HP]					50	60	75	100	125	150	175	215	250	350
	Variable Torque	[kW]					37	45	55	75	90	110	132	160	185	280
Output ratings (380V based)	Constant Torque FLA	[A]	122	146	180	220	61	75	91	110	152	183	223	264	325	432
	Constant Torque	[kVA]	46	55	68	83	40	50	60	70	100	120	145	170	200	280
	Variable Torque FLA	[A]					80	96	115	125	160	228	264	330	361	477
	Variable Torque	[kVA]					52	62	74	80	103	147	170	213	233	307
	Voltage	[V]	Three-phase, 200 ~ 230V				Three-phase, 380 ~ 460V									
	Frequency	[Hz]	0.5 ~ 400Hz				0.5 ~ 400Hz									
Input ratings	Voltage	[V]	Three-phase, 200 ~ 230V (± 10%)				Three-phase, 380 ~ 460V (± 10%)									
	Frequency	[Hz]	50 ~ 60Hz (± 5%)				50 ~ 60Hz (± 5%)									
Weight		[kg]	42	42	56	56	45	45	63	63	68	98	98	122	122	175
Control method			V/f (Space Vector PWM)													
Speed reference resolution			Digital command: 0.01Hz (below 99Hz) & 0.1Hz (100Hz and over) / Analog command: 0.03Hz at 60Hz													
Frequency accuracy			Digital: 0.01% of Maximum output frequency / Analog: 0.1 % of Maximum output frequency													
V/f curve			Linear / Squared, User custom V/f													
Overload capacity	Constant Torque		150% for 1 minute, 200% for 0.5 second													
	Variable Torque		110% for 1 minute, 150% for 0.5 second													
Torque boost			Auto & Manual(0 ~ 20%) torque boost													
Multi-function input terminal			6 points (programmable)													
Multi-function output			5 points (Programmable) : 2 form A contact (N.O.) / Fault contact output (A,B,C)-AC 250V 1A, DC 30V 1A / 3 Open collect Output: 24V 25mA													
Analog output			4 ~ 20mA													
Input signal	Operation method		Keypad / Terminal / Communication													
	Frequency setting		Analog: 0 ~ 10V, 4 ~ 20mA / Digital : Keypad													
	Start signal		Forward / Reverse													
	Multi-step operation		Up to 8 speeds can be set (Use Multi-function terminal)													
	Multi-step Accel/Decel time		0.1~6,000 sec, Up to 8 types can be set and selected for each setting (Use Multi-function terminal)													
	Operation function		DC braking / Frequency limit / Frequency jump / Slip compensation / PI control / Stall prevention													
	Emergency stop		Interrupts the Output from Inverter													
	JOG		JOG operation													
Fault reset			Trip status is removed when Protection function is active													
Output signal	Operating status		Frequency detection level / Overload alarm / Stalling / Over voltage / Low voltage / Inverter overheat/ Run / Stop / Constant speed / Speed search													
	Indicator		RPM, Output frequency / Output current / Output voltage(Voltage: 0~10V, Pulse : 500Hz)													
Protection	Inverter trip		Over voltage / Low voltage / Over current / Inverter overheating / Fuse open / Ground fault / Overload / M/C fail / etc.													
	Inverter alarm		Stall prevention / Overload													
Enclosure			IP00													
Option			RS485(LS Bus), Remote cable(2M/3M/4M)													

iP5A

Variable Frequency Drive / Inverter

Fan & Pump specialized VFD

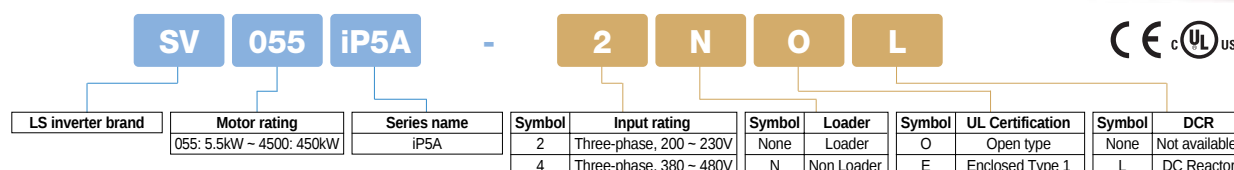
3 phase 5.5~30kW(7.5~40HP), 200~230V
3 phase 5.5~450kW(7.5~600HP), 380~480V

- Specialized functions for Fan & Pump:
Advanced PID control (Pre-PID, Dual PID)
Multi Motor Control function
(Up to 4 motors: 5.5 ~ 90kW[7.5~125HP])
- Energy saving & High efficiency:
Sleep & Wake-up function
Flying Starting function
Automatic energy saving function
Flux Braking Algorithm
- Improved protection functions:
Pre-heater function
Low Leakage PWM
Safety stop function

- Automatic carrier frequency change
- Selectable V/f, Sensorless vector control
- Long-life condenser & Simple framework
- Easy Start function
- Selectable PNP/NPN input signal
- Plug-in type control terminals
- Cooling fan On/Off control
- Built-in RS485(LS Bus) communication
- Communication boards (Optional):
Modbus RTU, DeviceNet, Profibus-DP, LonWorks,
BACnet, Modbus TCP*
- Monitoring & commissioning PC based software tool (Drive View)



Model Number



General specification

Model number: SV ○ ○ ○ iP5A-2 ○		055	075	110	150	185	220	300
Motor rating (Fan/Pump)	[HP]	7.5	10	15	20	25	30	40
	[kW]	5.5	7.5	11	15	18.5	22	30
	Current (110% overload)	24	32	46	60	74	88	115
Motor rating (General load)	[HP]	5	7.5	10	15	20	25	30
	[kW]	3.7	5.5	7.5	11	15	18.5	22
	Current (150% overload)	17	23	33	44	54	68	84
Output rating	[kVA]	9.1	12.2	17.5	22.9	28.2	33.5	43.8
	Voltage	Three-phase 200 ~ 230V						
	Frequency	0.01 ~ 120Hz						
Input rating	Voltage	Three-phase 200 ~ 230V (-15% ~ +10%)						
	Frequency	50 ~ 60Hz (± 5%)						
	Weight	4.9	6	6	13	13.5	20	20

Model number: SV ○ ○ ○ iP5A-4 ○		055	075	110	150	185	220	300	370	450	550	750	900	1100	1320	1600	2200	2800	3150	3750	4500
Motor rating (Fan/Pump)	[HP]	7.5	10	15	20	25	30	40	50	60	75	100	125	150	175	215	300	350	400	500	600
	[kW]	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	220	280	315	375	450
	Current (110% overload)	12	16	24	30	39	45	61	75	91	110	152	183	223	264	325	432	547	613	731	877
Motor rating (General load)	[HP]	5	7.5	10	15	20	25	30	40	50	60	75	100	125	150	175	215	300	350	400	500
	[kW]	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	220	280	315	375
	Current (Non DCR / DCR) (150% overload)	8.8	12	16	22/24	28/30	34/39	44/45	61	75	91	110	152	183	223	264	325	432	547	613	731
Output rating	[kVA]	9.6	12.7	19.1	23.9	31.1	35.9	48.6	59.8	72.5	87.6	121.1	145.8	178	210	259	344	436	488	582	699
	Voltage	Three-phase 380 ~ 480V																			
	Frequency	0.01 ~ 120Hz																			
Input rating	Voltage	Three-phase 380 ~ 480V (-15% ~ +10%)																			
	Frequency	50 ~ 60Hz (± 5%)																			
	Weight	4.9	6	6	12.5	13	20	20	27	27	29	42	43						243	280	380
Built-in DCR type	[kg]				19.5	19.5	26.5	26.5	39	40	42	67	68	101	101	114	200	200			

Control Spec	Control method	V/f, Slip compensation, Sensorless vector
	Speed reference resolution	Digital command: 0.01Hz (below 100Hz), 0.1Hz(over 100Hz) / Analog reference: 0.1Hz/60Hz
	Frequency accuracy	Digital command: 0.01% of Max output freq. / Analog signal command of 0.1% of Max output freq.
Operation	V/f curve	Linear, Squared, User custom V/f
	Overload capacity	110% for 1 minute, 120% for 1 minute(based on ambient 25°C)
	Torque boost	Auto & Manual(0 ~ 15%) torque boost
Input signal	Keypad Display	32 characters LCD keypad
	Operation method	Keypad / Terminal / Communication
	Frequency setting	Analog: 0 ~ 12V / -12V ~ 12V / 4 ~ 20mA or 0 ~ 20mA / Pulse / Ext - PID / Digital: Keypad
Output signal	Operation function	DC braking / Frequency limit / Frequency jump / Second function / Slip compensation / Reverse rotation prevention / Auto restart / Inverter By-pass / Auto-tuning / PID control / Flying star / Safety stop / Flux braking / Low leakage / Pre-PID / Dual-PID / MMC / Easy start / Pre-heater
	Sart signal	Forward / Reverse
	Multi-step	Up to 8 speeds can be set including JOG (Use Programmable Digital Input terminal)
Protection	Multi-step Accel/Decel time	0.1~6,000 sec, Up to 4 types can be set (Use Multi-function terminal)
	Emergency stop	Accel/Decel curve : Linear, U curve, S curve
	JOG	Interrupts the Output from Inverter
Enclosure Option	Fault reset	JOG operation
	Operating status	Trip status is removed when Protection function is active
	Fault output	Frequency detection level / Overload alarm / Stalling / Over voltage / Low voltage / Inverter overheating / Run / Stop / Constant speed / Inverter By-pass / Speed search
Communication	Indicator	Contact output (3A, 3C, 3B) - AC250V 1A, DC30V 1A
		Output frequency / Output current / Output voltage / DC Link voltage(Output voltage:0~10V)

*Available soon



- Ultimate performance solution for System Drive
- Advanced Speed & Torque control (200% instantaneous torque: Max. 250%)
- Precious Speed & Position synchronization operation
- Static motor parameter Auto-tuning
- Draw / Droop / Process PID control
- Highly precious control through optional Sincos Encoder
- Synchronous motor sensorless control (SPM & IPM motors)
- Specialized functions for various applications
 - Load balance function
 - Diameter calculation / Taper function
 - Splicing / Inertia compensation function
 - Quick stop function
- Built-in Dynamic braking transistor (2.2~22kW[3~30HP])
- User-friendly LCD keypad (Detachable)
- Plug-in type control terminals
- Extension I/O boards (Optional):
 - EL I/O (for Elevator application)
 - Encoder division (open collector)
 - Synchronization option (Speed/Position control)
 - Sincos encoder
- Communication boards (Optional)
 - RS485(LS Bus / Modbus RTU)
 - Profibus-DP
 - DeviceNet
- Monitoring & commissioning PC based software tool (Drive View)

Model Number

LS inverter brand	Motor rating	Series name	Symbol	Input rating	Symbol	Dynamic Brake	Symbol	Cover type	Symbol	Rated voltage
SV	022	iV5	2	Three-phase, 200 ~ 230V	None	Not available	None	Metallic cover	None	200~230V or 380~480V
	022: 2.2kW ~ 3750: 370kW	iV5	4	Three-phase, 380 ~ 480V	DB	Dynamic Braking	(MD)	Mold cover*	****	380V, 460V, 480V*

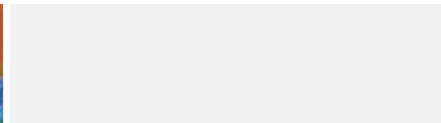
General specification

Model number: SV □ □ iV5-2 □		022	037	055	075	110	150	185	220	300	370
Motor rating	[HP]	3	5	7.5	10	15	20	25	30	40	50
	[kW]	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37
Output rating	Capacity	4.5	6.1	9.1	12.2	17.5	22.5	28.2	33.1	46	55
	Current	12	16	24	32	46	59	74	88	122	146
	Voltage	Three-phase 200 ~ 230V									
Input rating	RPM	0 ~ 3600 [RPM]									
	Voltage	Three-phase 200 ~ 230V (+10%, -10%)									
	Frequency	50 ~ 60Hz (± 5%)									
Weight	Mold cover type	6	6	7.7	7.7	13.7	13.7	20.3	20.3		
	Metallic cover type			14	14	28	28	28	28	42	42

Model number: SV □ □ iV5-4 □		022	037	055	075	110	150	185	220	300	370	450	550	750	900	1100	1320	1600	2200	2800	3150	3750
Motor rating	[HP]	3	5	7.5	10	15	20	25	30	40	50	60	75	100	120	150	175	215	300	373	420	500
	[kW]	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	220	280	315	375
Output rating	Capacity	4.5	6.1	9.1	12.2	18.3	22.9	29.7	34.3	46	57	70	85	116	140	170	200	250	329	416	468	557
	Current	6	8	12	16	24	30	39	45	61	75	91	110	152	183	223	264	325	432	546	614	731
	Voltage	Three-phase 380 ~ 480V																				
Input rating	RPM	0 ~ 3600 [RPM]																				
	Voltage	Three-phase 380 ~ 480V (+10%, -10%)																				
	Frequency	50 ~ 60Hz (± 5%)																				
Weight	Mold cover type	6	6	7.7	7.7	13.7	13.7	20.3	20.3													
	Metallic cover type			14	14	28	28	28	28	42	42	63	63	68	98	98	112	112	175	243	380	380

Control Spec	Control method	Sensored Vector (speed sensor)																				
	Speed reference resolution	Digital command: 0.1rpm / Analog reference: ± 0.0005% of Max output freq.																				
	Speed accuracy	Digital command: ± 0.01(0~40°C) of Max output freq. / Analog signal reference: ± 0.02(25 ± 10°C) of Max output freq.																				
	Cut-off frequency of ASR	50Hz																				
	Torque control accuracy	3%																				
	Accel/Decel time	0.00~6000.0 sec																				
	Accel/Decel combination	4 combinations of Accel/Decel time																				
	Accel/Decel curve	Linear / S curve																				
Input signal	Frequency setting	Analog: -10 to 10V / 4 to 20mA / Digital: Keypad																				
	Analog input	3 channels (AI1, AI2, AI3): Extension I/O 2 channels (AI4, AI5) -10 to 10V / 0 to 10V / 10 to 0V / 4 to 20mA / 20 to 4mA / (AI3, AI5) Extension I/O: Motor NTC/PTC selectable Selectable among 15 different Multi-function analog inputs AI3, AI5: NTC is available only with LG-OTIS motors (both of NTC and PTC are available in case of SV2800iV5-SV3750iV5)																				
Output signal	Contact input	FX, RX, BX, RST, P1-P7 Selectable among 40 different Multi-function analog inputs																				
	Analog output	2 channels (AO1, AO2) -10 to 10V / 10 to -10V / 0 to 10V / 10 to 0V Selectable among 40 different Multi-function analog outputs																				
	Contact output	Multi-function contact output: 2 channels (1A-1B, 2A-2B) Fault contact output: 1 channel (30A-30C, 30B-30C)																				
	Open collector	1 channel (OC1/EG)																				
Protection		Over voltage / Over current / Low voltage / Inverter overheat / Inverter thermal malfunction / Motor overheat / Motor thermal malfunction / Overspeed / BX (Instantaneous IGBT gate block) / Fuse open / External fault / Encoder error / Electronic thermal / Overload / IGBT short / Communication error / etc.																				
Enclosure		IP00 (2.2~22kW[3~30HP]): Mold cover* / 30~374kW[40~500HP]: Metallic cover, IP20 (2.2~22kW[3~30HP]): Metallic cover																				
Option	Board	EL I/O (for Elevator application), Encoder division (open collector), Synchronization option (Speed/Position control), Sincos encoder																				
	Communication	RS485(LS Bus / Modbus RTU), Profibus-DP, DeviceNet																				

*Available soon



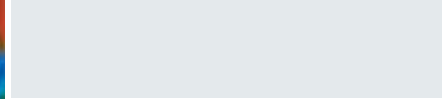
Comparison

Variable Frequency Drive / Inverter

Model Series		iE5		iC5	iG5A			iS5	
Input Phase		Single-phase	Three-phase	Single-phase	Single-phase	Three-phase		Three-phase	
Voltage Range		200~230V		200~230V	200~230V		380~480V	200~230V	380~480V
Motor rating		0.1~0.4kW	0.1~0.4kW	0.4~2.2V	0.4~1.5kW	0.4~22kW	0.4~22kW	0.75~55kW	0.75~75kW
		0.13~0.5HP	0.13~0.5HP	0.5~3HP	0.5~2HP	0.5~30HP	0.5~30HP	1~75HP	1~100HP
Constant Torque		Standard		Standard	Standard			Standard	
Variable Torque									
Control method	V/f	Standard		Standard	Standard			Standard	
	Sensorless Vector			Standard	Standard			Standard	
	Sensored Vector							Option	
Enclosure	IP00							Standard	Standard
								11~22kW	11~75kW
								15~30HP	15~100HP
	IP20	Standard		Standard	Standard			Standard	
		0.1~0.4kW		0.4~2.2kW	0.4~22kW			0.75~7.5kW	
		0.13~0.5HP		0.5~3HP	0.5~30HP			1~10HP	
	IP21								
	IP54								
	UL Type 1				Option				
					0.4~22kW				
					0.5~30HP				
Keypad	Type	Fixed type		Fixed type	Fixed type			Detachable type	
	Built-in	0.1~0.4kW		0.4~2.2kW	0.4~22kW			30~55kW	30~75kW
		0.13~0.5HP		0.5~3HP	0.5~30HP			40~75HP	40~100HP
	Option							0.75~22kW	
Remote cable	2 meters				Option			1~30HP	
	3 meters				Option			Option	
	5 meters				Option			Option	
Braking transistor					Standard			Standard	
					0.4~22kW			0.75~7.5kW	
					0.5~30HP			1~10HP	
EMC Filter				Built-in Option					
				0.4~2.2kW					
				0.5~3HP					
DC Reactor									
RS485(LS Bus)		Standard			Standard			Option	
Modbus RTU		Standard		Option	Standard			Option	
Modbus TCP									
DeviceNet								Option	
Profibus-DP								Option	
Fnet(LS PLC link)								Option	
Rnet									
LonWorks									
CANopen									
BACnet									
EtherNet/IP									
CC-Link									
MMC(Mult Motor Control)								Option	
Encoder								Option	
Sincos encoder									
PLC									
Extension I/O								Option	
Elevator I/O									
Synchronization I/O									

Model Series		iS7		iH		iP5A		iV5	
Input Phase		Three-phase		Three-phase		Three-phase		Three-phase	
Voltage Range		200~230V	380~480V	200~230V	380~480V	200~230V	380~480V	200~230V	380~480V
Motor rating		0.75~22kW 1~30HP	0.75~160kW 1~215HP	30~55kW 40~75HP	30~220kW 40~300HP	5.5~30kW 7.5~40HP	5.5~450kW 7.5~600HP	2.2~37kW 3~50HP	2.2~375kW 3~500HP
Constant Torque		Standard		Standard		Standard		Standard	
Variable Torque		Standard		Standard		Standard			
Control method	V/f	Standard		Standard		Standard			
	Sensorless Vector	Standard				Standard			
	Sensored Vector	Option						Standard	
Enclosure	IP00					Standard	Standard	Standard	Standard
						15~30kW	15~450kW	2.2~22kW	2.2~375kW
						20~40HP	20~600HP	3~30HP	3~500HP
	IP20		Standard	Standard	Standard	Standard		Standard	
			90~160kW 125~215HP	30~55kW 40~75HP	30~220kW 40~300HP	5.5~11kW 7.5~15HP		5.5~22kW 7.5~30HP	
	IP21	Standard	Standard						
		0.75~22kW 1~30HP	0.75~75kW 1~100HP						
	IP54	Built-in Option							
		0.75~22kW 1~30HP							
	UL Type 1	Option				Standard	Standard		
		0.75~75kW 1~100HP				5.5~11kW 7.5~15HP	5.5~11kW 7.5~15HP		
Keypad	Type	Detachable type		Detachable type		Detachable type		Detachable type	
	Built-in	90~160kW 125~215HP		30~220kW 40~300HP		37~450kW 50~600HP		2.2~370kW 3~500HP	
		0.75~75kW 1~100HP				5.5~30kW 7.5~40HP			
	Option								
Remote cable	2 meters	Option		Option		Option			
	3 meters	Option		Option		Option			
	5 meters			Option		Option			
Braking transistor		Standard						Standard	
		0.75~22kW 1~30HP						2.2~22kW 3~30HP	
EMC Filter		Built-in Option							
		0.75~22kW 1~30HP							
DC Reactor		Built-in Option	Built-in Option				Built-in Option		
		0.75~22kW 1~30HP	0.75~160kW 1~215HP				15~280kW 20~350HP		
RS485(LS Bus)		Standard		Option		Standard / Option		Option	
Modbus RTU		Standard				Option		Option	
Modbus TCP		Option				Option*			
DeviceNet		Option				Option		Option	
Profibus-DP		Option				Option		Option	
Fnet(LS PLC link)									
Rnet		Option							
LonWorks		Option				Option			
CANopen		Option							
BACnet						Option			
EtherNet/IP		Option*							
CC-Link		Option*							
MMC(Multi Motor Control)		Standard				Standard			
Encoder		Option						Standard	
Sincos encoder								Option	
PLC		Option							
Extension I/O		Option							
Elevator I/O								Option	
Synchronization I/O								Option	

* Available soon



Option list

Variable Frequency Drive / Inverter

Series	Option	Description
iC5	SV-iC5 Modbus RTU	iC5 Modbus communication card
	SV-iC5 Copy Unit	iC5 Copy Unit
iG5A	SV-iG5A REMOTE CABLE 2M	2 meter connection cable between inverter and keypad plus fixture
	SV-iG5A REMOTE CABLE 3M	3 meter connection cable between inverter and keypad plus fixture
	SV-iG5A REMOTE CABLE 5M	5 meter connection cable between inverter and keypad plus fixture
	NEMA OPTION 1 (SV004/008iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 0.4~0.75kW)
	NEMA OPTION 2 (SV015iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 1.5kW)
	NEMA OPTION 3 (SV022~040iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 2.2~4kW)
	NEMA OPTION 4 (SV055/075iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 5.5~7.5kW)
	NEMA OPTION 5 (SV110/150iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 11~15kW)
	NEMA OPTION 6 (SV185/220iG5A-2/4)	Conduit Kit for NEMA 1 (iG5A 18.5~22kW)
iS5	SV-iS5 LCD KEYPAD	LCD display keypad for iS5
	SV-iS5/iP5A REMOTE CABLE(2M)	2 meter connection cable between inverter and keypad
	SV-iS5/iP5A REMOTE CABLE(3M)	3 meter connection cable between inverter and keypad
	SV-iS5/iP5A REMOTE CABLE(5M)	5 meter connection cable between inverter and keypad
	SV-iS5 SUB BOARD A	Extension I/O module, 3 multi-functional inputs and 3 outputs
	SV-iS5 SUB BOARD B	Encoder pulse input and output module
	SV-iS5 SUB BOARD C	Extension I/O module, 3 inputs, 1 output and 2 analog meter outputs
	SV-iS5/iP5A SUB BOARD E	Current output board (Only available in case that the dedicated O/S is installed)
	SV-iS5 MMC	Multi Motor Control board
	SV-iS5/iH RS485	RS485(LS Bus) communication board
	SV-iS5 MODBUS	Modbus RTU communication board
	SV-iS5/iP5A/IV5 DEVICENET	DeviceNet communication board
	SV-iS5 F-NET	LS PLC link board
iS7	SV-iS5/iP5A/IV5 PROFIBUS	Profibus DP communication board
	SV-iS7 LCD KEYPAD	Graphic LCD display keypad for iS7 (128x64 COG, 11 Rubber Key, 3 LED, IP21)- Multi Languages (English, Italian, Spanish, Russian, Turkish, Arabic) *
	SV-iS7 REMOTE CABLE(2M)*	2 meter connection cable between inverter and keypad
	SV-iS7 REMOTE CABLE(3M)*	3 meter connection cable between inverter and keypad
	SV-iS7 ISOLATION I/O	Insulated I/O module, 8 multi-functional inputs and 2 output
	SV-iS7 EXTENSION I/O	Extension I/O module, 3 multi-functional inputs and 3 output
	SV-iS7 ENCODER	Encoder board for closed loop control
	SV-iS7 PROFIBUS-DP	Profibus-DP communication board
	SV-iS7 PLC	PLC card (MK120S Platform)
	SV-iS7 R-net	Rnet communication board
	SV-iS7 Modbus TCP	100M BASE-TX, 10M BASE-T support
	SV-iS7 DEVICENET	DeviceNet Communication board
	SV-iS7 LONWORKS	LonWork Communication board
iH	SV-iS7 CANopen	CanOpen communication board
	SV-iH LOADER CABLE 2M	2 meter connection cable between inverter and keypad
	SV-iH LOADER CABLE 3M	3 meter connection cable between inverter and keypad
	SV-iH LOADER CABLE 5M	5 meter connection cable between inverter and keypad
iP5A	SV-iS5/iH RS485	RS485(LS Bus) communication board
	SV-iP5A LCD KEYPAD	LCD display keypad for iP5A
	SV-iP5A LonWork Extension	LonWorks communication board
	SV-iP5A BACNet	BACnet communication board
	SV-iP5A/IV5 RS485/Modbus-RTU	RS485(LS Bus / Modbus RTU) communication board
	SV-iS5/iP5A/IV5 DEVICENET	DeviceNet communication board
	SV-iS5/iP5A/IV5 PROFIBUS	Profibus-DP communication board
	SV-iS5/iP5A SUB BOARD E	Current output board
	SV-iS5/iP5A REMOTE CABLE(2M)	2 meter connection cable between inverter and keypad
	SV-iS5/iP5A REMOTE CABLE(3M)	3 meter connection cable between inverter and keypad
	SV-iS5/iP5A REMOTE CABLE(5M)	5 meter connection cable between inverter and keypad
	SV-iP5A MODBUS TCP*	Modbus TCP communication card
iV5	SV-iV5 EL I/O	I/O interface board for Elevator application
	SV-iV5 ENC_DIV(OC)	Encoder division board (Open collector)
	SV-iV5 SYNC I/O	Synchronization operation board (Speed/Positioning control)
	SV-iS5/iP5A/IV5 PROFIBUS	Profibus-DP communication board
	SV-iS5/iP5A/IV5 DEVICENET	DeviceNet communication board
	SV-iP5A/IV5 RS485/Modbus-RTU	RS485(LS Bus / Modbus RTU) communication board
	SV-iV5 Sincos Encoder	Sincos encoder signal input board

* Available soon

Dynamic Braking Unit list

Variable Frequency Drive / Inverter

Model name	Specifications
Dynamic Braking Unit	: Based on 150% torque for 100 seconds
SV150DBU-2	Brake unit for 11 to 15kW, 230V / 10%ED
SV220DBU-2	Brake unit for 18.5 to 22kW, 230V / 10%ED
SV037DBH-2(NEW)	Brake unit for 30 to 37kW, 230V / 10%ED
SV150DBU-4	Brake unit for 11 to 15kW, 400V / 10%ED
SV220DBU-4	Brake unit for 18.5 to 22kW, 400V / 10%ED
SV037DBH-4(NEW)	Brake unit for 30 to 37kW, 400V / 10%ED
SV075DBH-4(NEW)	Brake unit for 45 to 75kW, 400V / 10%ED
SV150DBU-2U	Brake unit for 11 to 15kW, 230V / 10%ED (UL, cUL listed)
SV220DBU-2U	Brake unit for 18.5 to 22kW, 230V / 10%ED (UL, cUL listed)
SV370DBU-2U	Brake unit for 30 to 37kW, 230V / 10%ED (UL, cUL listed)
SV550DBU-2U	Brake unit for 45 to 55kW, 230V / 10%ED (UL, cUL listed)
SV150DBU-4U	Brake unit for 11 to 15kW, 400V / 10%ED (UL, cUL listed)
SV220DBU-4U	Brake unit for 18.5 to 22kW, 400V / 10%ED (UL, cUL listed)
SV370DBU-4U	Brake unit for 30 to 37kW, 400V / 10%ED (UL, cUL listed)
SV550DBU-4U	Brake unit for 45 to 55kW, 400V / 10%ED (UL, cUL listed)
SV750DBU-4U	Brake unit for 75kW, 400V / 10%ED (UL, cUL listed)
SV750DB-4*	Brake unit for 45 to 75kW, 400V / 100%ED (CE marked)
SV2200DB-4*	Brake unit for 160 to 220kW, 400V / 100%ED (CE marked)

* Available soon

External resistor list

Variable Frequency Drive / Inverter

Model name	Specifications
External brake resistors	: Based on 5% ED (Enable duty)
MCRA 120 W 100 OHM J	120 watt, 100 ohm resistor
MCRA 120 W 50 OHM J	120 watt, 50 ohm resistor
MCRA 120 W 40 OHM J	120 watt, 40 ohm resistor
MCRA 200 W 100 OHM J	200 watt, 100 ohm resistor
MCRA 200 W 160 OHM J	200 watt, 160 ohm resistor
MCRA 200 W 200 OHM J	200 watt, 200 ohm resistor
MCRB 300 W 100 OHM J	300 watt, 100 ohm resistor
MCRB 400 W 200 OHM J	400 watt, 200 ohm resistor
MCRB 400 W 160 OHM J	400 watt, 160 ohm resistor
MCRB 400 W 100 OHM J	400 watt, 100 ohm resistor
MCRB 400 W 50 OHM J	400 watt, 50 ohm resistor
MCRB 400 W 40 OHM J	400 watt, 40 ohm resistor
MCRB-ST 0.6 KW 130 OHM J	600 watt, 130 ohm resistor
MCRB-ST 0.6 KW 33 OHM J	600 watt, 33 ohm resistor
MCRM-ST 0.8 KW 20 OHM J	800 watt, 20 ohm resistor
MCRM-ST 1.0 KW 85 OHM J	1 kW, 85 ohm resistor
MCRM-ST 1.2 KW 60 OHM J	1.2 kW, 60 ohm resistor
MCRM-ST 1.2 KW 15 OHM J	1.2 kW, 15 ohm resistor
MCRM-ST 2.0 KW 40 OHM J	2 kW, 40 ohm resistor
MCRM-ST 2.4 KW 30 OHM J	2.4 kW, 30 ohm resistor
MCRM-ST 2.4 KW 10 OHM J	2.4 kW, 10 ohm resistor
MCRM-ST 2.4 KW 8 OHM J	2.4 kW, 8 ohm resistor
MCRM-ST 3.6 KW 20 OHM J	3.6 kW, 30 ohm resistor
MCRM-ST 3.6 KW 5 OHM J	3.6 kW, 5 ohm resistor

Green Innovators of Innovation



Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance.
Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.

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