

# iP5A

Variable Frequency Drive / Inverter

Fan & Pump specialized inverter

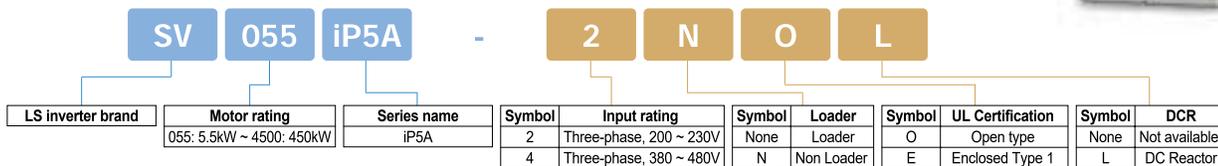
3 phase 5.5 - 30kW, 200V

3 phase 5.5 - 450kW, 400V

- Specialized functions for Fan & Pump :
  - Advanced PID control (Pre-PID, Dual PID)
  - MMC (Multi Motor Control) function (5.5-90kW)
- Energy saving & High efficiency :
  - Sleep & Wake-up function
  - Flying Starting function
  - Automatic energy saving function
  - Flux Braking Algorithm
- Improved protection functions :
  - Pre Heating 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 LS Bus communication
- Communication boards (Optional) :
  - Modbus-RTU, DeviceNet, Profibus-DP
  - LonWork, BACNet, Modbus-TCP (available soon)
- Monitoring & commissioning software (DriveView)



## Inverter 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)	[A]	24	32	46	60	74	88	115
		Normal duty: 110% for 1 minute						
Motor rating (Normal load)	[HP]	5	7.5	10	15	20	25	30
	[kW]	3.7	5.5	7.5	11	15	18.5	22
Current (110% overload)	[A]	17	23	33	44	54	68	84
		Heavy duty: 150% for 1 minute						
Output rating	[kVA]	9.1	12.2	17.5	22.9	28.2	33.5	43.8
	[V]	Three-Phase 200 ~ 230V						
Frequency	[Hz]	0.01 ~ 120Hz						
		Three-Phase 200 ~ 230V (-15% ~ +10%)						
Input rating	[V]	50 ~ 60Hz (± 5%)						
	[Hz]							
Enclosure		IP20 / UL type1						
Weight	Non DCR type	[kg]	4.9	6	6	13	13.5	20
			IP00 / UL open (IP20 / UL type1 option)					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)	[A]	12	16	24	30	39	45	61	75	91	110	152	183	223	264	325	432	547	613	731	877	
		Normal duty: 110% for 1 minute																				
Motor rating (Normal 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 (110% overload)	[A]	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	
		Heavy duty: 150% for 1 minute																				
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	
	[V]	Three-Phase 380 ~ 480V																				
Frequency	[Hz]	0.01 ~ 120Hz																				
		Three-Phase 380 ~ 480V (-15% ~ +10%)																				
Input rating	[V]	50 ~ 60Hz (± 5%)																				
	[Hz]																					
Enclosure		IP20 / UL type1							IP00 / UL open (IP20/UL type1 option)							IP00 / UL open						
Weight	Non DCR type	[kg]	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, Sensorless Vector, Slip compensation, Easy start
	Speed reference resolution	Digital command: 0.01Hz (less than 100Hz), 0.1Hz (greater than 100Hz) / Analog reference: 0.01Hz (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	Torque boost	150% for 1 minute, 110% for 1 minute
	Keypad Display	Auto & manual(0 ~ 15%) torque boost
Operation method	Keypad / Terminal / Communication operation	LCD keypad
	Frequency setting	Keypad / Terminal / Communication operation
Input signal	Multi-function terminal (P1 ~ P8)	Analog: 0 to 12V / -12 to 12V / 0 to 20mA / 4 to 20mA / Digital: Keypad/ Communication
	Multi-function relay	PID control / DC braking / MMC / Easy start / Dual-PID / Safety stop / Flux braking
Output signal	Analog output	PNP / NPN selectable
		8 points (programmable)
Protection	Inverter trip	Fault output & inverter status output (N.O., N.C.) Less than AC 250V, 1A / Less than DC 30V 1A
	Inverter alarm	0 to 12Vdc (less than 1mA)
Option	Keypad	Over voltage / Low voltage / Over current / Ground fault detection / Inverter overload / Overload trip / Inverter overheat / Output phase loss / Overload protection / Frequency command loss / Hardware fault
	Board, Cable	Stall prevention, Overload, Temperature sensor fault
Others	Communication	LCD keypad
		Current output card, REMOTE CABLE(2M/3M/5M)