

Specifications

Rated input/output

SV□□□ iG5A-□		055-2	075-2	055-4	075-4
Motor ^{Note 1}	[HP]	7.5	10	7.5	10
	[kW]	5.5	7.5	5.5	7.5
Rated output	Capacity [kVA] ^{Note 2}	9.1	12.2	9.1	12.2
	Current [A] ^{Note 3}	24	32	12	16
	Frequency	0~400 [Hz] ^{Note 4}			
	Voltage [V]	3Phases 200~230V ^{Note 5}		3Phases 380~460V ^{Note 5}	
Rated input	Voltage [V]	3Phases 200~230 VAC (+10%, -15%)		3Phases 380~460 VAC (+10%, -15%)	
	Frequency	50~60 [Hz] (±5%)			
Cooling type		Forced cooling			
Weight (kg)		3.86	4.01	3.86	4.01

Note 1 : The motor capacities were indicated assuming to use 4 poles standard motors.

Note 2 : The rated input voltage for 200V is 220V and 400V is 440V.

Note 3 : Derating is needed when the carrier frequency is setup over 3kHz.

Note 4 : The maximum frequency can not be setup up to 300Hz in case of sensorless vector control.

Note 5 : The maximum output voltage does not rise over rated input voltage and the output voltage can be freely set up unless it exceeds the input voltage.

Control

Control type	V/F and sensloress vector	
Frequency setup resolution	Digital : 0.01Hz	
	Analog : 0.06Hz (Maximum frequency:60Hz)	
Frequency precision	Digital operation : 0.01% of maximum output frequency	
	Analog operation : 0.1% of maximum output frequency	
V/F pattern	Linear, square, user V/F	
Overload capacity	150%/1Minute	
Torque boost	Manual torque boost and auto torque boost	
Regenerative	Maximum brake	20% ^{Note 1}
braking torque	Time/	150% with resistor ^{Note 2}

Note 1 : 20% torque regenerative refers to the average braking torque of the motor loss which is generated at deceleration stopping.

Note 2 : Please refer to the user manual regarding the braking resistor specification.

Operation

Operation type	Selection among loader, terminal, communication, remote loader operations		
Frequency setup	Digital : Loader		
	Analog : 0~10V, -10~+10V, 0~20mA		
Operation function	PID control, up-down operation, 3-wire operation		
Input	P1~P8 Multi function terminal (8points)	NPN/ PNP selection	
		Function : Forward run, reverse run, emergency stop, fault reset, Jog, multi-step frequency-high, middle, low, multi-step deceleration-high, middle,low, DC braking during stop, second motor selection, frequency increase, frequency decrease, 3-wire run, external trip A/B, changing run pattern from PID to normal operation mode	
		Changing run pattern from the option run to main operation mode, analog frequency fix, Selecting during acceleration/deceleration stop	
Output	Multi function open collector terminal	Outputs of the inverter faults or running modes	Below DC 24V 50mA
	Multifunction relay terminal		Below 1 A (N.O, N.C) AC250V, Below 1A DC30V
	Analogue output	0~10Vdc (Below 10mA) : Selection among frequency, current, voltage, DC voltage	

Protective feature

Trip	Over voltage, low voltage, over current, ground fault current detection, inverter over-heating, motor over-heating, output overload protection, communication error, output phase open, frequency command loss, hardware fault, cooling fan fault
Alarm	Stall prevention, overload
Instant power failure	Below 15msec : Runs without stopping yet both input voltage and output should be within rated value
	Over 15 Msec: Automatic restart

Exterior structure and Environment

Protection	Open type IP20
Ambient temperature	-10°C ~50°C
Storage temperature	-20°C ~65°C
Ambient humidity	Below 90% RH (Non-condensing)
Altitude, vibration	Below 1000M or 3,300FT . Below 5.9m/sec ² (0.6G)
Ambient atmospheric pressure	70~106 kPa
Application site	No corrosive gas, combustible gas, oil mist or dust

Wiring & Dimension

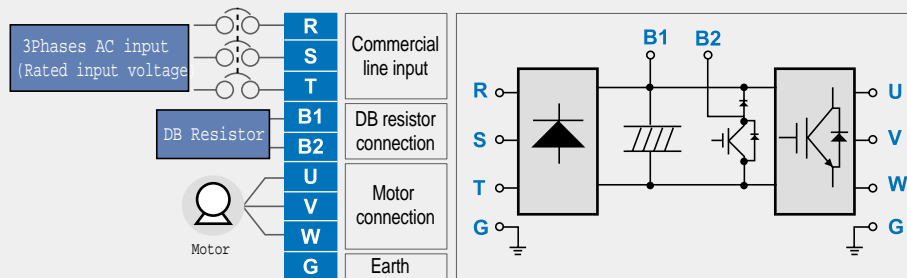
■ Wiring



Control terminal

Terminal	Function	
MO	Multi function open-collector output	
MG	MO common	
24	24V output /100mA	
P1	Multi function input (initial setup)	
P2		FX : Forward run command RX : Reverse run command
CM	Input signal common	
P3	Multi function input (initial setup)	
P4		BX : Emergency stop
P5		JOG : Jog frequency run RST : Trip release signal
CM	Input signal common	
P6	Multi function input (initial setup)	
P7	Multi step frequency-low	
P8	Multi step frequency-middle	
VR	Multi step frequency-high	
VR	10V output terminal for the volume resistor	
V1	Voltage signal input for frequency setup : -10~+10V	
I	Current signal input for frequency setup : 0~20mA	
AM	Multi function analog output signal : 0~10V	
3A	Multi function relay output	
3B		A contact point output
3C		B contact point output Contact point common
S+	RS485 communication signal connection	
S-		

Power Terminals



■ Dimension

Inverter	SV055iG5A-2	SV075iG5A-2	SV055iG5A-4	SV075iG5A-4
Capacity [kW]	5.5	7.5	5.5	7.5
W [mm]	180	180	180	180
W1 [mm]	170	170	170	170
H [mm]	220	220	220	220
H1 [mm]	210	210	210	210
D [mm]	170	170	170	170
φ [mm]	4.5	4.5	4.5	4.5
A [mm]	5	5	5	5
B [mm]	4.5	4.5	4.5	4.5
Weight [Kg]	3.86	4.01	3.86	4.01

