



New micro size Drive **iE5**

0,1~0,4kW 1-Phase 200~230Volts
0,1~0,4kW 3-Phase 200~230Volts



LSIS

Model and Specifications

Motor	220V(Single phase)	220V(3 phase)
0.1kW(1/8HP)	SV001 iE5-1	SV001 iE5-2
0.2kW(1/4HP)	SV002 iE5-1	SV002 iE5-2
0.4kW(0.5HP)	SV004 iE5-1	SV004 iE5-2

C : RS-485 communication is available as option
 - : RS-485 communication is not available

Input voltage
 1 : Single 220V class
 2 : 3Phase 220V class

SV 004 iE5 1 C

LS Drive Starvert series

Maximum motor capacity(kW)
 (001 : 0.1kW ~ 004 : 0.4kW)

LS Drive series name

SV004iE5-1

Drive model

INPUT 200 ~ 230V 1phase
 5.5A 50/60Hz

Input voltage specification

OUTPUT 0 ~ INPUT V 3phase
 2.5A 0.1~200Hz
 0.5HP/0.4kW (D)

Output voltage, Rated output current, Frequency,
 Drive capacity



0010222100155

Barcode and serial number

LS Industrial Systems Co., Ltd. Made in Korea

Standard Specification

Basic specification

Model : SV □ □ □ iE5 - □		001-1	002-1	004-1	001-2	002-2	004-2
Applicable motor ^{*Note1)}	[HP]	1/8	1/4	1/2	1/8	1/4	1/2
	[kW]	0.1	0.2	0.4	0.1	0.2	0.4
Rated output	Rated capacity [kVA] ^{*Note2)}	0.3	0.6	0.95	0.3	0.6	1.14
	Rated current [A]	0.8	1.4	2.5	0.8	1.6	3.0
	Output frequency [Hz]	0 ~ 200 [Hz]					
	Output voltage [V]	3 phase 200 ~ 230V ^{*Note3)}					
Rated input	Applicable voltage [V]	1 phase 200 ~ 230 VAC (±10%)			3 phase 200 ~ 230 VAC (±10%)		
	Input frequency [Hz]	50 ~ 60 [Hz] (±5%)					
	Rated current [A]	2.0	3.5	5.5	1.2	2.0	3.5

^{*Note1)} The standard of rated capacity is 220V.

^{*Note2)} The maximum output voltage does not increase over input voltage and the output voltage can be set below input voltage level.

Control

Control type	V/F Control
Frequency set resolution	Digital command: 0.01Hz Analog command: 0.1Hz (Max.frq: 60Hz)
Frequency accuracy	Digital command: 0.01% of Max. Output frequency Analog command: 0.1% of Max. Output frequency
V/F pattern	Linear, Squared, User V/F
Overload capacity	150% / 1Min
Torque boost	Manual / Auto torque boost

Protection

Trip	Over voltage, Under voltage, Over current, Ground fault, Drive overload, Overload trip, Overheat, Condensor overload, Phase loss overload protection, Frequency command loss, Hardware fault
Alarm	Stall prevention
Momentary power loss	Below 15msec: Operation continued (should be within rated input voltage and rated output) Over 15msec: Auto re-ignition operation.

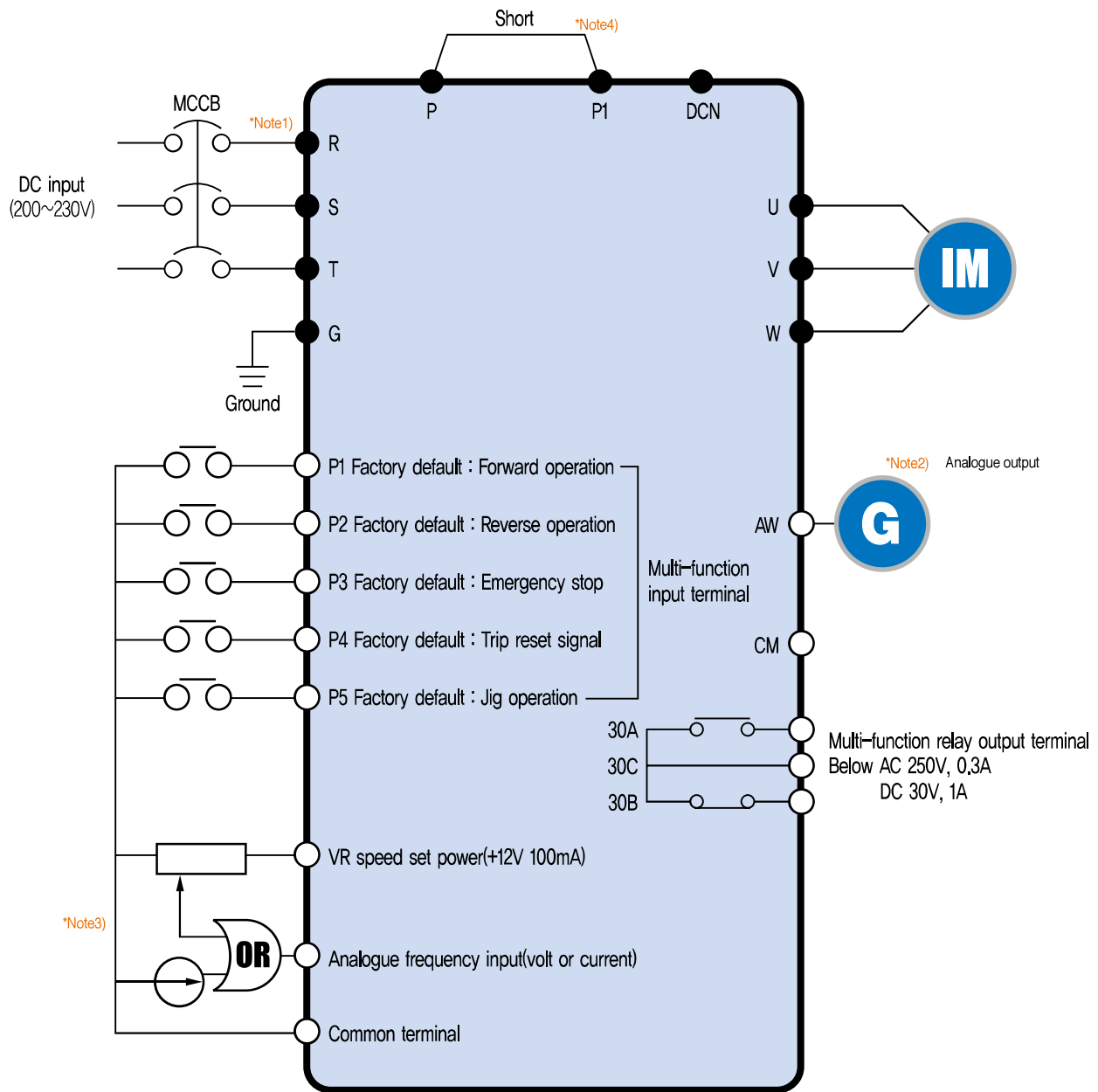
Operation

Operation method	Operation method can be selected between loader, terminal and communication operation	
Frequency set	Analog method: 0~10(V), 0~20(mA), Loader volume Digital method: Loader	
Operation function	PID Control, Up-Down, 3-wire operation	
Input	Multi-function terminal (5 points) P1,P2,P3, P4,P5	NPN / PNP Selectable FWD/REV operation, Fault reset, Jog operation, Multi-step frequency(up/down), DC braking in stop mode, Frequency increase, Frequency decrease, 3 wire-operation external trip A and B, Shift to general operation from PI operation. Analogue command frequency set, Up/down save frequency delete
	Multi-function relay terminal	Fault and drive operation condition output (N., N.C) AC250V below 0.3A and below DC 30V 1A
	Analogue output	0~10Vdc(below 10mA): can be selected among frequency, current, voltage, DC voltage

Guaranteed operation condition

Cooling	Open cooling
Enclosure	IP20 (open type)
Ambient temperature	-10°C ~ 40°C
Protection temperature	-20°C ~ 65°C
Humidity	Below 90% RH (non-condensation)
Altitude/Vibration	Below 1000m (From 1000 to 4000m, the rated input voltage and rated output current of the drive must be derated by 1% for every 100m.), 5.9m/sec square (0.6G)
Installation condition	No corrosive gas, No flammable gas, No oil mist, No dust

Wiring



***Note1)** "●" and "○" means the main circuit and the control circuit respectively.
Please connect to the R and S terminals in case of single phase use.

***Note2)** The analogue output is from zero to 10V.

***Note3)** The voltage current and loader volume is possible for the external speed command.

***Note4)** The P and P1 terminals for DC reactor are connected as short circuit.