

iS5

Variable Frequency Drive / Inverter

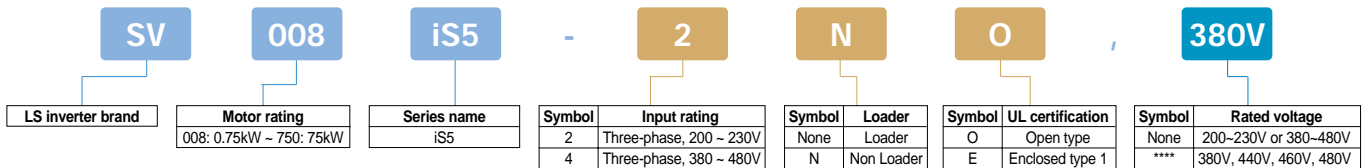
Precise vector control standard VFD

3 phase 0.75~55kW(1~75HP), 200~230V
3 phase 0.75~75kW(1~100HP), 380~480V



- 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



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 |
| Output rating | 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 |
| | Voltage [V] | Three-phase 200 ~ 230V | | | | | | | | | | | | | |
| | Frequency [Hz] | 0.1 ~ 400Hz (Sensorless control: 0.1~300Hz, Sensored control: 0.1~120Hz) | | | | | | | | | | | | | |
| Input rating | 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 |
| Output rating | 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 |
| | Voltage [V] | Three-phase 380 ~ 480V | | | | | | | | | | | | | | |
| | Frequency [Hz] | 0.1 ~ 400Hz (Sensorless control: 0.1~300Hz, Sensored control: 0.1~120Hz) | | | | | | | | | | | | | | |
| Input rating | 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 |
| Overload capacity | Overload capacity | 150% for 1 minute, 200% for 0.5 second |
| | Torque boost | Auto & manual(0 ~ 15%) torque boost |
| Operation | Keypad Display | 32 characters LCD keypad / 4 digit, 7 segment LED keypad |
| | Operation method | Keypad / Terminal / Communication |
| | 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 |
| Input signal | Sart signal | Forward / Reverse |
| | Multi-step | Up to 8 speeds can be set (Use Multi-function terminal) |
| | 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 | Accel/Decel curve : Linear, U curve, S curve |
| Output signal | JOG | Interrupts the Output from Inverter |
| | Auto operation | JOG operation |
| | Fault reset | Operates from Internal sequence by setting Multi-function terminal (5 way * 8 Step) |
| | Operating status | Trip status is removed when Protection function is active |
| Protection | Inverter trip | 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 |
| | Inverter alarm | Contact output (30A, 30C, 30B) - AC250V 1A, DC30V 1A |
| Enclosure | Board, cable, keypad | Output frequency / Output current / Output voltage(0~10V) / DC voltage / Output torque selectable |
| | Communication | 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 |
| Others | Option | Stall prevention / Overload / Temperature sensor fault |
| | Communication | IP20(0.75~7.5kW[1~10HP]), IP00(11~75kW[15~100HP]) |