

# S100

Variable Frequency Drive

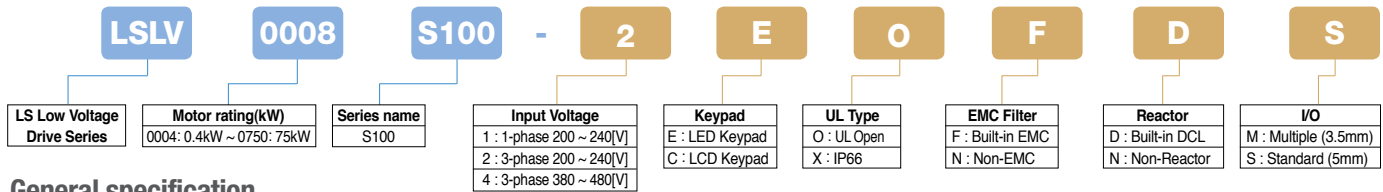
## High Performance Standard VFD

1 phase 0.4~2.2kW(0.5~3HP), 200~240V  
3 phase 0.4~15kW(0.5~20HP), 200~240V  
3 phase 0.4~75kW(0.5~100HP), 380~480V



- Selectable V/f, Sensorless vector control
- Built-in EMC Filter
- Side by Side Installation
- Enhanced Size Competitiveness
- PLC Function(Simple Sequence Operation)
- Compliance with Open Field Networks
  - Profibus-DP, CANopen, EtherNet
- IP66 Enclosure (0.4~22kW)
- PM Sensorless Control
- P2P I/O Share Function
- Capacitor/Fan Life Cycle Management Function
- Smart Copier Option  
(Able to copy parameter and download drive main OS)

### Model Number



### General specification

Model number: LSLV □□□□ S100-1 □□□□	0004	0008	0015	0022	Model number: LSLV □□□□ S100-2 □□□□	0004	0008	0015	0022	0037	0040	0055	0075	0110	0150
<b>Motor rating</b>	Heavy [HP] 0.5	1.0	2.0	3.0	Heavy [HP] 0.5	1.0	2.0	3.0	5.0	5.5	7.5	10.0	15.0	20.0	20.0
	Duty(HD) [kW] 0.4	0.75	1.5	2.2	Duty(HD) [kW] 0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	15.0
	Normal [HP] 1.0	2.0	3.0	5.0	Normal [HP] 1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0	25.0	25.0
	Duty(HD) [kW] 0.75	1.5	2.2	3.7	Duty(HD) [kW] 0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	15.0	18.5
<b>Output rating</b>	Capacity Heavy Duty(HD) [kVA] 1.0	1.9	3.0	4.2	Capacity Heavy Duty(HD) [kVA] 1.0	1.9	3.0	4.2	6.1	6.5	9.1	12.2	17.5	22.9	22.9
	Normal Duty(ND) 1.2	2.3	3.8	4.6	Normal Duty(ND) 1.2	2.3	3.8	4.6	6.9	6.9	11.4	15.2	21.3	26.3	26.3
	Rated Heavy Duty(HD) 2.5	5.0	8.0	11.0	Rated Heavy Duty(HD) 2.5	5.0	8.0	11.0	16.0	17.0	24.0	32.0	46.0	60.0	60.0
	Current Normal Duty(ND) 3.1	6.0	9.6	12.0	Current Normal Duty(ND) 3.1	6.0	9.6	12.0	18.0	18.0	30.0	40.0	56.0	69.0	69.0
	Frequency [Hz] 0~400Hz (IM Sensorless:0~120[Hz])				Frequency [Hz] 0~400Hz (IM Sensorless:0~120[Hz])										
	Voltage [V] 3-phase 200~240V				Voltage [V] 3-phase 200~240V										
<b>Input rating</b>	Voltage [V] 1-phase 200 ~ 240VAC (-15%~+10%)				Voltage [V] 3-phase 200 ~ 240VAC (-15%~+10%)										
	Frequency [Hz] 50 ~ 60Hz (±5%)				Frequency [Hz] 50 ~ 60Hz (±5%)										
	Rated Heavy Duty(HD) 4.4	9.3	15.6	21.7	Rated Heavy Duty(HD) 2.2	4.9	8.4	11.8	17.5	18.5	25.8	34.9	50.8	66.7	66.7
	Current(A) Normal Duty(ND) 5.8	11.7	19.7	24.0	Current(A) Normal Duty(ND) 3.0	6.3	10.8	13.1	19.4	19.4	32.7	44.2	62.3	77.2	77.2
<b>Weight[kg] (Built-in EMC)</b>	0.9(1.14)	1.3(1.76)	1.5(1.76)	2.0(2.22)	0.9	0.9	1.3	1.5	2.0	2.0	3.3	3.3	4.6	7.1	7.1

Model number: LSLV □□□□ S100-4 □□□□	0004	0008	0015	0022	0037	0040	0055	0075	0110	0150	0185	0220	0300	0370	0450	0550	0750
<b>Motor rating</b>	Heavy [HP] 0.5	1.0	2.0	3.0	5.0	5.5	7.5	10.0	15.0	20.0	25.0	30.0	40.0	50.0	60.0	75.0	100.0
	Duty(HD) [kW] 0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0	45.0	55.0	75.0
	Normal [HP] 1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0	25.0	30.0	40.0	50.0	60.0	75.0	100.0	120.0
	Duty(HD) [kW] 0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0	45.0	55.0	75.0	90.0
<b>Output rating</b>	Capacity Heavy Duty(HD) [kVA] 1.0	1.9	3.0	4.2	6.1	6.5	9.1	12.2	18.3	22.9	29.7	34.3	46.5	57.2	69.4	83.8	115.8
	Normal Duty(ND) 1.5	2.4	3.9	5.3	7.6	7.6	12.2	17.5	22.9	29.0	33.5	44.2	57.2	69.4	81.5	108.2	128.8
	Rated Heavy Duty(HD) 2.3	2.5	4.0	5.5	8.0	9.0	12.0	16.0	24.0	30.0	39.0	45.0	61.0	75.0	91.0	110.0	152.0
	Current Normal Duty(ND) 1.0	3.1	5.1	6.9	10.0	10.0	16.0	23.0	30.0	38.0	44.0	58.0	75.0	91.0	107.0	142.0	169.0
	Frequency [Hz] 0~400Hz (IM Sensorless:0~120[Hz])																
	Voltage [V] 3-phase 380 ~ 480V																
<b>Input rating</b>	Voltage [V] 3-phase 380 ~ 480VAC (-15%~+10%)																
	Frequency [Hz] 50 ~ 60Hz (±5%)																
	Rated Heavy Duty(HD) 1.1	2.4	4.2	5.9	8.7	9.8	12.9	17.5	26.5	33.4	43.6	50.7	56.0	69.0	85.0	103.0	143.0
	Current(A) Normal Duty(ND) 2.0	3.3	5.5	7.5	10.8	10.8	17.5	25.4	33.4	42.5	49.5	65.7	69.0	85.0	100.0	134.0	160.0
<b>Weight[kg] (Built-in EMC)</b>	0.9(1.18)	1.9(1.18)	1.3(1.77)	1.5(1.80)	2.0(2.23)	2.0(2.23)	3.3	3.4	4.6	4.8	7.5	7.5	25.8	34.4	34.4	41.8	43.8

<b>Control spec</b>	Control method	V/f, Slip compensation, Sensorless vector
	Speed reference resolution	Digital command: 0.01Hz / Analog command: 0.06Hz (Maximum frequency : 60Hz)
	Frequency accuracy	1% of the maximum output frequency
	V/f curve	Linear, Squared, User V/f
	Overload capacity	HD: 150% 1minute, ND: 120% 1minute
	Torque boost	Manual/Automatic torque boost
<b>Operation</b>	Keypad display	4 digit, 7 segment LED keypad
	Operation method	Keypad / Terminal / Communication option selectable
	Frequency setting	Analog: -10 ~ 10[V] / 0 ~ 10[V], 420[mA] / Digital: Keypad, Pulse train input
	Operation function	PID, Up/Down, 3-Wire, DC braking, Frequency limit, Frequency jump, 2nd function, Slip compensation, Anti reverse rotation, Automatic restart, Commercial power change, Auto-tuning, Flying start, Energy buffering operation, Power braking, Flux braking, Leakage reduction operation
<b>Input signal</b>	Multi-function terminal	NPN(Sink) / PNP(Source) selectable
	Standard I/O(5points)	Function: Forward run, Reverse run, Reset, External trip, Emergency stop, Jog operation, Multi-step frequency-high, middle, low, Multi-step acceleration/deceleration-high, middle, low, DC braking at stop, 2nd motor select, Frequency up/down, 3-wire operation, Change into normal operation during PID operation, Change into main body operation during option operation,
	Multiple I/O(7points)	Analog command frequency fixing, Acceleration/deceleration stop etc. selectable
<b>Output signal</b>	Pulse train	0Hz~32Hz, Low level: 0~0.8V, High level: 3.5~12V
	Open collector terminal	Fault output and drive operation status output
	Multi-function relay	(N.O., N.C.) less than AC 250V 1A, less than DC30V 1A
	Analog output	0 to 10Vdc (4~20mA): Frequency, Output current, Output voltage, DC stage voltage etc. selectable
	Pulse train	Maximum 32kHz, 10~12[V]
<b>Protection</b>	Drive trip	Overcurrent / Overvoltage / Undervoltage / External trip / Ground fault current detection / Drive overheat / Motor overheat / Input-Output phase open / Overload protection / Light load protection / Communication error / Frequency command loss / Hardware fault / Cooling fan fault / Pre-PID motion failure / No motor trip / External brake trip / Option fault / Safety contact fault / Drive temperature sensor fault / Parameter write error / IO board fault
	Drive alarm	Stall prevention / Overload / Light load / Cooling fan fault / Frequency command loss / DB duty cycle / Rotor time constant tuning fault / Capacitor / Fan life time up
<b>Enclosure</b>		IP20, UL Type1, IP66
<b>Option</b>	Keypad	Graphic LCD keypad(IS7)
	Communication	Profibus-DP, EtherNet-IP, Modbus-TCP, CANopen