

# LSIS VFD Quick Start Guide

## C100, S100, H100, and iS7

### 1. C100 Basic Setup Parameters

The basic drive and motor parameters are shown in Table 1. Set the parameters according to your application.

Table 1. C100 Basic Setup Parameters

C100					
7 Segment Group	No	Description	Default	Set Options	Notes
Drive	0.00	Command Freq	0.00	0 - Max Freq	
Drive	ACC	Acc Time	20	0 - 6000	
Drive	dEC	Decel Time	30	1 - 6000	
Drive	drV	Run Command	1 Fx/Rx-1	0: Keypad 1: Fx/Rx-1 2: Fx/Rx-2 3: Comm RS485	Start/Stop FW or REV wired separate (P1 = FW, P2 = Rev) 2 Wire Start/Stop (P1 = FW, P2 = Rev)
Drive	Frq	Freq Command	0 Keypad-1	0: Keypad-1 1: Keypad-2 2: Panel Pot V2 (0-5V) 3: Terminal A1 (0-10V) 4: Terminal A1 (4-20mA) 5: Panel Pot + Terminal A1 (4-20mA) 6: Panel Pot + Terminal A1 (0-10V) 7: Comm RS485 8: Up/Down	Press ENTER to save values Value Changes immediately Set J1 to V Set J1 to I Set J1 to I Set J1 to V
F	39	Motor Voltage	Depends on drive	40 - 110%	Set as a percentage from the default (220V & 380V)
F	67	Input Voltage (200V)	220	170 - 240V	
F	68	Input Voltage (400V)	380	320 - 480V	
H	30	Motor Capacity	Depends on drive	Depends on drive	
H	31	Poles	4	2 - 12	
H	33	Motor Rated Current	Depends on drive	Depends on drive	
H	36	Motor Eff %	72	70 - 100%	

*Note: Many applications will not require changes to the basic setup parameters from their default values.*

#### 1.1 C100 Recommended Additional Parameter Changes

The C100 has some default settings the user may want to change to obtain better protection of the drive/motor and the application. These changes are recommended, but not needed for all applications.

##### Auto Reset

- Program H21 (Reset/Restart after a fault) to "1"
- Program H26 (Number of Retries) to a number between 0 -10.

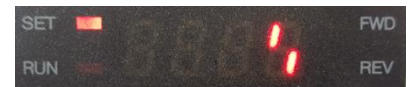
##### Start on Power Loss

- Program H20 (Power on Start) to "1".

##### Phase Loss

- Program H19 (Phase Loss) to detect input and/or output phase loss.

*Note: This parameter display is in the form of 2 bits. Left bit is the Input, Right bit is bit is the Output. "Enabled" is represented with a line on the top of the LED display. "Disabled" is represented with a line at the bottom of the LED display. See image to the right.*



Input detection bit is enabled and output detection is disabled.

##### Speed Search

- Program the second from the left bit in parameter H22 to high. See image to the right.



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### 2. S100/H100/iS7 Basic Setup Parameters

The basic drive and motor parameters are shown in Table 2. Set the parameters according to your application.

Table 2. iS7/H100/S100 Basic Setup Parameters

S100/H100/iS7							
7 Segment		LCD Keypad		Description	Default	Set Options (Use # for 7 Seg)	Notes
Group	No	Group	No				
Operation	0.00	DRV	1	Command Freq	0.00	0 - Max Freq	
Operation	ACC	DRV	3	Acc Time	20	0 - 6000	
Operation	dEC	DRV	4	Decel Time	30	1 - 6000	
Operation	drV	DRV	6	Run Command	1	Fx/Rx-1 0: Keypad 1: Fx/Rx-1 2: Fx/Rx-2 3: Comm RS485 4: Field Bus	Start/Stop FW or REV wired separate (P1 = FW, P2 = Rev) 2 Wire Start/Stop (P1 = FW, P2 = Rev)
Operation	Frq	DRV	7	Freq Command	0	Keypad-1 0: Keypad-1 1: Keypad-2 2: V1 4: V2 5: I1/I2 6: Comm RS485 8: Field Bus 12: Pulse	Value Changes immediately S100 & H100 = I2, iS7 = I1
dr		DRV	14	Motor Capacity	Depends on drive	Depends on drive	
bA		BAS	11	Poles	4	2 - 12	
bA		BAS	13	Motor Rated Current	Depends on drive	Depends on drive	
bA		BAS	15	Motor Voltage	Depends on drive	Depends on drive	
bA		BAS	16	Motor Eff %	72	70 - 100%	
bA		BAS	19	Input Voltage	220/380	170 - 480V	

Note: Many applications will not require changes to the basic setup parameters from their default values.

#### 2.1 S100/H100/iS7 Recommended Additional Parameter Changes

The S100, H100, and iS7 have some default settings the user may want to change to obtain better protection of the drive/motor and the application. These changes are recommended, but not needed for all applications.

##### Auto Reset

- Program CON 71 bit 3 to High State (0100).
- Program PRT 08 (Reset/Restart after a fault) to "1" (Yes).
- Program PRT 09 (Number of Retries) to a number between 0 -10.
- Program PRT 10 (Auto Reset Time) to desired time to allow cause of fault to clear and safe starting.

##### Start on Power Loss

- Program ADV 10 (Power on Start) to "1" (Yes).

##### Phase Loss

- Program PRT 05 (Phase Loss) to detect input and/or output phase loss.

Note: This parameter display is in the form of 2 bits on the S100. It is displayed as DIP switches on the H100 and iS7. Left bit is the Input, Right bit is the Output. "Enabled" is represented with a line on the top of the LED display. "Disabled" is represented with a line at the bottom of the LED display.

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### 3. HP to kW Conversion Table

Use the following conversion table to enter the motor HP. Select the closest size the drive allows in kW (motor power is in kW on most LSIS drives)

Table 3. HP to kW Conversion

<b>HP</b>	1/4	1/2	1	1.5	2	3	5	7	10	15	20	25	30	40	50	60	75	100	125	150	200	225	250	300	350	400	500	600
<b>kW</b>	0.2	0.4	0.75	1.1	1.5	2.2	3.7	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0	45.0	55.0	75	90	110	132	160	185	220	280	315	375	450

### 4. RPM Entry

Table 4. Poles to RPM

<b>RPM</b>	3600	1800	1200
<b>Poles</b>	2	4	6

Example:

If actual motor RPM is 3450.

- Set Motor Poles = 2
- Set Slip RPM = 150 RPM