

# H100

PUMP & FAN DRIVE

3-ph/400Vac - 0.8kW ~ 500kW



# HmT

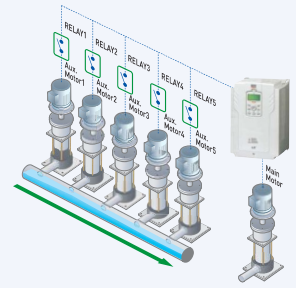
**LS** ELECTRIC

# Features



## LS Electric H100 Drive

The LS Electric H100 drive is an advanced and versatile electric motor drive system that offers efficient and precise control over various industrial and commercial applications. Renowned for its reliability and performance, the H100 drive is designed to enhance the operation of electric motors, optimizing energy consumption while maintaining consistent output levels. Its adaptable design allows for seamless integration into a wide range of systems, including pumps, fans, conveyors, and more. With a user-friendly interface and robust features, the LS Electric H100 drive simplifies the management of motor-driven equipment, contributing to increased productivity and reduced operational costs across diverse sectors such as HVAC (heating, ventilation, and air-conditioning).

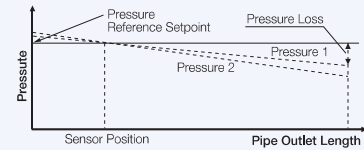


## Multi Motor Control

MMC is incorporated when a single drive is used to control multiple motors in a pump system. It can control 1 main motor and 5 auxiliary motors.

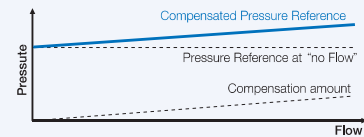
## Flow Compensation

Compensates for hydraulic loss that occurs when the length of pipes are long, adding compensation rate depending on the inverter output frequency.



## Scheduling (Time Event: Real Time Clock)

RTC (Real Time Clock) is used so that selected functions are operable during the set time. (Possible to set different functions including Fx, Rx, multiple acceleration/deceleration time, multiple frequency, PID related function and pre-heat.)



## Dec Valve Ramp

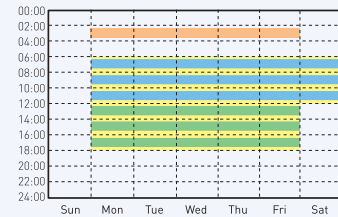
Prevention of pump and pipe damages caused by sudden pressure changes when pumps are stopped or a pump valve is closed - deceleration time can be set.

## Start Ramp & End Ramp

Prevents pump damage by changing ramp using acceleration/deceleration time setting upon initial pump operation and stop.

## Soft Fill Operation

Prevents pump damage caused by dramatic pressure changes during the initial operation.



## Level Detection

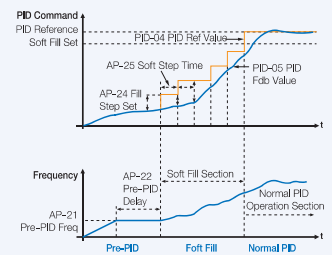
When the drive is operated under frequency that is beyond the set frequency and source (voltage, current etc.) the values to be detected are above or below the user set values. It generates a trip or activates a relay for protective operation.

## Detection of Broken Pipe

Upon PID operations, pipe damages or leakages are detected and a warning sign will be displayed or a trip will take place.

## Under Load Protection

When running pumps, including Now Flow and Dry Pumps are set under a certain frequency, the drive issues warning function. When the trip is generated, Free-Run, stop after deceleration can be selected via parameters.



## Pump Clean

Upon pump operations, the efficiency of pumps may decline when foreign substances are stuck in an impeller. Pump clean removes the foreign substances to extend the pump life and reduce any losses.





## Control

Control Mode	V/F, Slip compensation, simple sensorless
Frequency Setting Resolution	Digital command: 0.01Hz Analog command: 0.06Hz/60Hz
Frequency Setting Level	1% of Max. Output frequency
V/F Pattern	Linear, Square-law torque reduction, user V/F
Overload Capacity	Rated current: 150% 1 minute
Torque Boost	Passive torque boost, Auto torque boost

## Operation

Operation Mode	Keypad/Terminal/Communication	
Frequency Setting	Analog: V10~10(V), 12(Advanced I/O) 0~20 (mA) Digital: Keypad	
Operation Function	<ul style="list-style-type: none"> <li>• Forward/Reverse rotation prevention</li> <li>• Frequency jump</li> <li>• Frequency limit</li> <li>• DC brake</li> <li>• Jog operation</li> <li>• Up-down operation</li> <li>• 3-wire operation</li> </ul>	<ul style="list-style-type: none"> <li>• Dwell operation</li> <li>• Slip compensation</li> <li>• PID control</li> <li>• Energy saving operation</li> <li>• Speed search</li> <li>• Auto restart</li> </ul>

## Environment

Ambient Temperature <sup>*1)</sup>	-10~50°C, Ambient temperature under the condition of no ice or frost
Ambient Humidity	Relative humidity less than 95% RH (to avoid condensation forming)
Storage Temperature	-20~65°C (-4~149°F)
Surrounding Environment	Prevent contact with corrosive gases, inflammable gases, oil stains, dust and other pollutants (Pollution degree 2 environment)
Altitude/Oscillation	Below 1,000 meter, below 9.8 meter/sec <sup>2</sup> (1G)
Pressure	70~106kPa

\*1) 0.1~0.2kW products can be operated at a maximum of 50°C. However, the life span of the may be reduced when continuously with a full load when the ambient temperature exceeds 40°C



3-Phase 400Vac  
or 800Vdc

**Drive Capacity**

- 0.75kW
- 1.5kW
- 2.2kW
- 3.7kW
- 5.5 kW
- 7.5 kW
- 11 kW
- 15 kW
- 18.5 kW
- 22 kW
- 30 kW
- 37 kW
- 45 kW
- 55 kW
- 75 kW
- 
- 
- 
- 500 kW

- LSLV0008H100-4COFN
- LSLV0015H100-4COFN
- LSLV0022H100-4COFN
- LSLV0037H100-4COFN
- LSLV0055H100-4COFN
- LSLV0075H100-4COFN
- LSLV0110H100-4COFN
- LSLV0150H100-4COFN
- LSLV0185H100-4COFN
- LSLV0220H100-4COFN
- LSLV0300H100-4COFN
- LSLV0370H100-4COFD
- LSLV0450H100-4COFD
- LSLV0550H100-4COFD
- LSLV0750H100-4COND
- LSLV0900H100-4COND
- LSLV0750H100-4COFD
- LSLV0900H100-4COFD
- LSLV1100H100-4COFD
- LSLV1320H100-4COFD
- LSLV1600H100-4COFD
- LSLV1850H100-4COFD
- LSLV2200H100-4COFD
- LSLV2500H100-4COFD
- LSLV3150H100-4COFD
- LSLV3550H100-4COFD
- LSLV4000H100-4COFD
- LSLV5000H100-4COFD

