Hitachi Inverter

HITACHI
Inspire the Next

L700 series

NEW

1. Product Features

1 High starting torque 150%* at 0.5Hz

Features Sensorless Vector Control so the L700 can be applied to constant torque loads where high starting torque is needed.

*90kW and over : 120% at 0.5Hz

2 Easy sequence [EzSQ]programming function

Sequence operation is realized by downloading to an inverter a program created with Hitachi's EzSQ software. User program can be compiled on EzSQ software on a PC. External components can be simplified or eliminated, resulting in cost-savings.

*EzSQ software:planned

3 Ease of Maintenance and Transition

Long life time components

Decreased down-time & less maintenance yield lower cost of ownership.
Design lifetime 10 years or more for DC bus capacitors & Cooling fan.

Easy migration

Move existing L300P logic terminal strip to L700 without wiring change.
Read L300P parameters via SRW remote operator and write them to L700.

4 Compact design to save space

EMC Filter is built in for all models.
Brake circuit is included up to 30kW.

5 Network compatibility

A serial RS-485 Modbus-RTU port is standard.
The L700 can communicate via Device Net and PROFIBUS with optional expansion cards.

-DeviceNet is a trade mark of Open DeviceNet Vender Association, Inc.

-PROFIBUS-DP is a registered trade mark of PROFIBUS Nutzer Organization

6 Various versatile functions

•Over-current suppress functions reduce nuisance tripping •Life time warning function
•Micro surge voltage suppress function •Data compare function(Data change check)

2. Standard Specifications

Power Source		200V Class	400V Class
Model L700-□□□□□		110LFF to 750LFF	110HFF to 1600HFF
Output rating	Applicable motor(kW)	11 to 75kW	11 to160kW
	Output current(A)	44 to 270A	22 to 290A
	Output voltage(V)	Three-phase 200V to 240V (proportional to input voltage)	Three-phase 380V to480V (proportional to input voltage)
	Output frequency	0.1 to 400Hz	
Input rating	Input voltage(V)	Three-phase 200V to 240V, 50/60Hz	Three-phase 380V to 480V, 50/60Hz
	Range	Voltage : +10%/-15%, Frequency: ± 5%	
Control		Sinusoidal wave Pulse Width Moduration	
Frequency accuracy		Digital command: ±0.01% of the maximum frequency Analog command: ±0.2% of the maximum frequency (25°C ±10°C)	
Overload capacity		120% of output current for 1 minute	
V/f characteristics		V/f control (constant torque, reduced torque, free-V/f): base freq. 30Hz to 400Hz adjustable,Sensorless vector control,	
Starting torque		150%/0.5Hz (sensorless vector control) (90kW and over : 120% at 0.5Hz)	
Ramp time		0.01 to 3,600sec. (linear / S-curve)	
Environ-mental conditions	Temperature	-10 to 40℃ (carrier derating required for ambient)	
	Storage	-20 to 65℃(temporary during transportation) / 20 to 90%RH(no condensation)	
	Vibration	5.9m/s^2(0.6G), 10 to 55Hz based on JIC C 60068-2-6:2010(IEC 60068-2-6:2007)	
	Installation	Altitude of 1,000m or less, indoor (no corrosive gas, dust)	

3. Dimensions

200V Class:W x H x D

11,15kW	18.5 to 30kW	37kW	45,55kW	75kW
210×260×170	250×390×190	310×540×195	390×550×250	480×700×248

400V Class:W x H x D

11,15kW	18.5 to 30kW	37kW	45 to 75kW	90,110kW	132,160kW
210×260×170	250×390×190	310×540×195	390×550×250	390×700×270	480×740×270

4. Model Configuration

Applied Motor Capacity (kW)	11	15	18.5	22	30	37	45	55	75	90	110	132	160
200V Class	●	●	●	●	●	●	●	●	●				
400V Class	●	●	●	●	●	●	●	●	●	●	●	●	●

5. Model Name Indication

L700-110 L F F

- L700-110: Series Name
- 110: Applied Motor Capacity 110:11kW to 1600:160kW
- L: Power Source L:3-phase 200V class, H:3-phase 400V class
- F: With Digital Operator
- F: Integrated EMC filter