



NIPPON KAIJI KYOKAI

**TYPE APPROVAL CERTIFICATE
FOR AUTOMATIC DEVICES AND EQUIPMENT**

Certificate No. TA20225M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer: **LS ELECTRIC CO., LTD**
Place of Manufacturing: **56, Samsung4-Gil, Mockcheon-Eup, Cheonan-Si,
Chungcheongnam-Do, Korea**
Product description: **Frequency Converter (Inverter)**
Model: **LSLV-H100 Series**

Approval No.: **20A009**
Valid until: **11 March 2025**

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 26 May 2020.

T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

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Attached sheet -1/3 to the Certificate No. TA20225M

Specification & documents:

1. Particulars:

- Input power source: 3-Phase 200V (200~240V, 0.75 ~ 18.5kW))
- 3-Phase 400V (380~480V, 0.75 ~ 500kW)

2. Types and reference drawings:

Motor rating [kW]	Type & Model	
	3-Phase 200V	3-Phase 400V
0.75	LSLV0008H100-2CONN	LSLV0008H100-4COFN
1.5	LSLV0015H100-2CONN	LSLV0015H100-4COFN
2.2	LSLV0022H100-2CONN	LSLV0022H100-4COFN
3.7	LSLV0037H100-2CONN	LSLV0037H100-4COFN
5.5	LSLV0055H100-2CONN	LSLV0055H100-4COFN
7.5	LSLV0075H100-2CONN	LSLV0075H100-4COFN
11	LSLV0110H100-2CONN	LSLV0110H100-4COFN
15	LSLV0150H100-2CONN	LSLV0150H100-4COFN
18.5	LSLV0185H100-2CONN	LSLV0185H100-4COFN
22	-	LSLV0220H100-4COFN
30	-	LSLV0300H100-4COFN
37	-	LSLV0370H100-4COFD
45	-	LSLV0450H100-4COFD
55	-	LSLV0550H100-4COFD
75	-	LSLV0750H100-4COFD
90	-	LSLV0900H100-4COFD
110	-	LSLV1100H100-4COFD
132	-	LSLV1320H100-4COFD
160	-	LSLV1600H100-4COFD
185	-	LSLV1850H100-4COFD
220	-	LSLV2200H100-4COFD
250	-	LSLV2500H100-4COFD
315	-	LSLV3150H100-4COFD
355	-	LSLV3550H100-4COFD
400	-	LSLV4000H100-4COFD
500	-	LSLV5000H100-4COFD

- To be continued -

3. Documentation and Test Reports:

- H100 Catalog
- H100 User Manual-E
- Specifications of H100 Series
- H100 Parts List
- ISO9001 Certificate (Cert No. QMS-0260)
- Type Test Program For LSLV H100 Series
(DOC No. 2019-MR001-093-0001, Rev. Date: 2020.01.08)
- Performance test for LSLV H100 Series (Test report)
(Doc. No. 2019-MR001-093-0002, Rev. Date: 2019.11.28)
- Test Report (DRCREL1911-0859)
- Test Report (DREETC1911-0222)
- Test Report (DRCREL1911-0867)
- Test Report (DREETC1911-0223)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 55°C×16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g×1.5 hours)		X
Inclination test		X
Cold test (Temperature 5°C×2 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (80MHz - 6GHz)		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test (150kHz - 6GHz)		X
Conducted emission test		X
Flame retardant test		--

2. Approval conditions:

- 1) The product is not allowed to be installed in the bridge and on open decks.
- 2) The product is not allowed to be installed in consoles, housing etc. together with other Equipment.
- 3) Tests on the individual product in accordance with Part H 2.12.5 of the Rules are to be performed at the manufacturing plant in the presence of the surveyor.

- The End -