**LS** ELECTRIC

# DECLARATION OF CONFORMITY

**MANUFACTURER :  LS ELECTRIC Co., Ltd**

Cheon-An Plant, 56, Samseong 4-gil, Dongnam-gu, 31226,

Cheonan-si, Chungcheongnam-do, Republic of KOREA

**Declare under our sole responsibility that the following apparatus:**

**Type of Equipment : Inverter(Power Conversion Equipment)**

**Model Name         : LSLV-S100 series**

**which this declaration relates to, when applied under the operating conditions given in the User Manual, comply with the CDM class IE2: losses more than 25% lower than RCDM value, according to the provisions of the following standard:**

| | |
|---|---|
| IEC 61800-9-2:2017 | Adjustable speed electrical power drive systems - Part 9-2: Ecodesign for power drive systems, motor starters, power electronics and their driven applications - Energy efficiency indicators for power drive systems and motor starters |

**Done at Plant Cheon-An   18, June, 2021**

**Signatures :**      박창근    2021. 5. 20

**Mr. Chang Keun Park / Senior Manager**

# Technical Document of ECO Design

For the determination of the IE class, the power losses of VSDs is determined according to the input-output method.

When applied under the operating conditions given in the User Manual and the power losses Measurement Test, this Model comply with the CDM class IE2 as shown in Table 1.

※ Conditions of the power losses Measurement Test

1. Rated Power Supply Voltage
   - 1 Phase 200~240VAC(-15% ~ +10%)
   - 3 Phase 200~240VAC(-15% ~ +10%)
   - 3 Phase 380~480VAC(-15% ~ +10%)
2. Rated Power Supply Frequency : 50 ~60Hz(±5%)
3. Carrier Frequency : Default value
4. Load Current : HD Rated Output Current
5. Operation at room temperature

Model Name : LSLV-S100 series

Table 1. IE Class of the CDM

| Voltage (V) | Series | Model Name | Rated Power (kW) | HD_Rated output current (A) | ND_Rated output current (A) | $S_{r,equ}$ (kVA) | Standby Loss (W) | Relative losses of the CDM(%) | | | | | | | | $P_{L,CDM}$ / $P_{L,RCDM}$ (%) | IE Class of the CDM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Point1 (0,25) | Point2 (0,50) | Point3 (0,100) | Point4 (50,25) | Point5 (50,50) | Point6 (50,100) | Point7 (90,50) | Point8 (90,100) | | |
| 240 | S100 | LSLV0004S100-1 | 0.4 | 2.5 | 3.1 | 1.0 | 12.6 | 0.9% | 1.0% | 1.1% | 0.9% | 1.0% | 1.2% | 1.1% | 1.3% | 12.2% | IE2 |
| 240 | S100 | LSLV0008S100-1 | 0.75 | 5 | 6 | 2.1 | 12.6 | 0.8% | 0.9% | 1.0% | 0.8% | 0.9% | 1.1% | 1.0% | 1.2% | 14.9% | IE2 |
| 240 | S100 | LSLV0015S100-1 | 1.5 | 8 | 9.6 | 3.3 | 12.6 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.2% | 0.9% | 1.4% | 21.5% | IE2 |
| 240 | S100 | LSLV0022S100-1 | 2.2 | 11 | 12 | 4.6 | 12.6 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.3% | 0.9% | 1.5% | 23.3% | IE2 |
| 240 | S100 | LSLV0004S100-2 | 0.4 | 2.5 | 3.1 | 1.0 | 12.6 | 0.9% | 0.9% | 1.1% | 0.9% | 1.0% | 1.2% | 1.0% | 1.3% | 11.9% | IE2 |
| 240 | S100 | LSLV0008S100-2 | 0.75 | 5 | 6 | 2.1 | 12.6 | 0.8% | 0.9% | 1.0% | 0.8% | 0.9% | 1.1% | 0.9% | 1.2% | 14.5% | IE2 |
| 240 | S100 | LSLV0015S100-2 | 1.5 | 8 | 9.6 | 3.3 | 16.8 | 0.6% | 0.7% | 1.0% | 0.6% | 0.7% | 1.2% | 0.8% | 1.4% | 20.8% | IE2 |
| 240 | S100 | LSLV0022S100-2 | 2.2 | 11 | 12 | 4.6 | 16.8 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.2% | 0.9% | 1.4% | 22.6% | IE2 |
| 240 | S100 | LSLV0037S100-2 | 3.7 | 16 | 18 | 6.7 | 18.9 | 0.6% | 0.7% | 1.1% | 0.7% | 0.8% | 1.3% | 0.9% | 1.6% | 25.9% | IE2 |
| 240 | S100 | LSLV0040S100-2 | 4.0 | 17 | 18.0 | 7.1 | 18.9 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.3% | 0.9% | 1.5% | 25.4% | IE2 |
| 240 | S100 | LSLV0055S100-2 | 5.5 | 24 | 30 | 10.0 | 23.2 | 0.6% | 0.7% | 1.0% | 0.6% | 0.7% | 1.2% | 0.8% | 1.4% | 25.4% | IE2 |
| 240 | S100 | LSLV0075S100-2 | 7.5 | 32 | 40 | 13.3 | 23.2 | 0.6% | 0.7% | 1.0% | 0.6% | 0.7% | 1.2% | 0.8% | 1.4% | 26.0% | IE2 |
| 240 | S100 | LSLV0110S100-2 | 11 | 46 | 56 | 19.1 | 23.2 | 0.4% | 0.5% | 0.8% | 0.4% | 0.6% | 1.0% | 0.7% | 1.3% | 24.4% | IE2 |
| 240 | S100 | LSLV0150S100-2 | 15 | 60 | 69 | 24.9 | 23.2 | 0.4% | 0.5% | 0.8% | 0.4% | 0.6% | 1.0% | 0.6% | 1.2% | 24.2% | IE2 |
| 480 | S100 | LSLV0004S100-4 | 0.4 | 1.25 | 1.56 | 1.0 | 12.6 | 0.8% | 0.9% | 1.1% | 0.9% | 1.0% | 1.1% | 1.0% | 1.3% | 11.5% | IE2 |
| 480 | S100 | LSLV0008S100-4 | 0.75 | 2.5 | 3.1 | 2.1 | 12.6 | 0.8% | 0.9% | 1.0% | 0.8% | 0.9% | 1.1% | 0.9% | 1.2% | 14.5% | IE2 |
| 480 | S100 | LSLV0015S100-4 | 1.5 | 4 | 5 | 3.3 | 16.8 | 0.6% | 0.7% | 1.0% | 0.6% | 0.7% | 1.2% | 0.8% | 1.4% | 20.8% | IE2 |
| 480 | S100 | LSLV0022S100-4 | 2.2 | 5.5 | 6.9 | 4.6 | 16.8 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.2% | 0.9% | 1.4% | 22.6% | IE2 |
| 480 | S100 | LSLV0037S100-4 | 3.7 | 8 | 10 | 6.7 | 21.0 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.3% | 0.9% | 1.5% | 25.0% | IE2 |
| 480 | S100 | LSLV0040S100-4 | 4.0 | 9 | 10.0 | 7.5 | 21.0 | 0.6% | 0.7% | 1.1% | 0.6% | 0.8% | 1.2% | 0.9% | 1.4% | 24.0% | IE2 |
| 480 | S100 | LSLV0055S100-4 | 5.5 | 12 | 16 | 10.0 | 25.8 | 0.6% | 0.7% | 1.0% | 0.6% | 0.8% | 1.2% | 0.9% | 1.4% | 26.4% | IE2 |
| 480 | S100 | LSLV0075S100-4 | 7.5 | 16 | 23 | 13.3 | 25.8 | 0.6% | 0.7% | 1.0% | 0.6% | 0.7% | 1.2% | 0.8% | 1.4% | 26.0% | IE2 |
| 480 | S100 | LSLV0110S100-4 | 11 | 24 | 30 | 20.0 | 25.8 | 0.5% | 0.6% | 0.9% | 0.5% | 0.7% | 1.1% | 0.7% | 1.4% | 27.3% | IE2 |
| 480 | S100 | LSLV0150S100-4 | 15 | 30 | 38 | 24.9 | 25.8 | 0.5% | 0.6% | 1.0% | 0.5% | 0.8% | 1.2% | 0.8% | 1.5% | 30.3% | IE2 |
| 480 | S100 | LSLV0185S100-4 | 18.5 | 39 | 44 | 32.4 | 25.8 | 0.5% | 0.6% | 0.9% | 0.5% | 0.7% | 1.1% | 0.7% | 1.4% | 28.1% | IE2 |
| 480 | S100 | LSLV0220S100-4 | 22 | 45 | 58 | 37.4 | 25.8 | 0.4% | 0.6% | 0.9% | 0.5% | 0.7% | 1.1% | 0.7% | 1.4% | 27.8% | IE2 |
| 480 | S100 | LSLV0300S100-4 | 30 | 61 | 75 | 50.7 | 53.5 | 0.4% | 0.5% | 0.9% | 0.4% | 0.6% | 1.0% | 0.6% | 1.4% | 28.6% | IE2 |
| 480 | S100 | LSLV0370S100-4 | 37 | 75 | 91 | 62.4 | 53.5 | 0.4% | 0.5% | 0.8% | 0.4% | 0.6% | 1.0% | 0.6% | 1.3% | 27.5% | IE2 |
| 480 | S100 | LSLV0450S100-4 | 45 | 91 | 107 | 75.7 | 53.5 | 0.4% | 0.5% | 0.9% | 0.4% | 0.6% | 1.0% | 0.6% | 1.3% | 27.9% | IE2 |
| 480 | S100 | LSLV0550S100-4 | 55 | 110 | 142 | 91.5 | 53.5 | 0.3% | 0.5% | 0.8% | 0.4% | 0.5% | 0.9% | 0.6% | 1.2% | 25.6% | IE2 |
| 480 | S100 | LSLV0750S100-4 | 75 | 152 | 169 | 126.4 | 53.5 | 0.3% | 0.5% | 0.8% | 0.4% | 0.5% | 0.9% | 0.6% | 1.2% | 28.9% | IE2 |