

### **Attestation of Conformity**

Attestation No: SHA-AoC-230023

Applicant Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.

201112

Factory Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.

201112

Product Description: Hybrid inverter / AC Coupled inverter

Brand Name: Afore

Model: AF1K-SL-0, AF1.5K-SL-0, AF2K-SL-0, AF3K-SL-0, AF3K-SL-0, AF3.6K-SL-0,

AF4K-SL-0, AF4.6K-SL-0, AF5K-SL-0, AF5.5K-SL-0, AF6K-SL-0

AF1K-SL-1, AF1.5K-SL-1, AF2K-SL-1, AF2.5K-SL-1, AF3K-SL-1, AF3.6K-SL-1 AF3K-SL, AF3.6K-SL, AF4K-SL, AF4K-SL, AF5K-SL, AF5.5K-SL, AF6K-SL

AF4K-SLP, AF4.6K-SLP, AF5K-SLP, AF5.5K-SLP, AF6K-SLP

Characteristics: See appendix for details

Standards: EN IEC 61000-6-1: 2019; EN IEC 61000-6-3: 2021;

EN 61000-3-12: 2011; EN IEC 61000-3-11: 2019

EU Directive: the EMC Directive 2014/30/EU

Test Report No: 230601235SHA-001

Issued by: Intertek Testing Services Ltd. Shanghai

West Area, 2nd Floor, No. 707, Zhangyang Road, China (Shanghai)

Pilot Free Trade Zone, Shanghai, P. R. China

Issue date: 2023-12-20

This is to attest that the Technical Construction File for the product listed above has been evaluated against the Essential Safety Requirements of Annex I of the EMC Directive (2014/30/EU). This Attestation can be used in support of the Manufacturers Declaration of Conformity on affixing the CE marking. Product conformity to CE marking is not assured until all other applicable EU Directives are met in full.

Signature

Name: Gary Hu

CE



This is an Appendix to Attestation of Conformity Number: SHA-AoC-230023

#### **Ratings & Principle Characteristics:**

|                                      | Specifications table           |                 |                 |                 |           |
|--------------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------|
| Model                                | AF1K-SL-1                      | AF1.5K-<br>SL-1 | AF2K-SL-1       | AF2.5K-<br>SL-1 | AF3K-SL-1 |
| PV input                             |                                |                 | 1               |                 |           |
| P pv Max(W)                          | 1500                           | 2300            | 3000            | 3800            | 4500      |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550             | 550             | 550             | 550       |
| Isc PV (absolute Max.) (A)           | 26                             | 26              | 26              | 26              | 26        |
| Number MPP trackers                  | 1                              | 1               | 1               | 1               | 1         |
| Number input strings                 | 1                              | 1               | 1               | 1               | 1         |
| Max. PV input current / strings (A)  | 18.5                           | 18.5            | 18.5            | 18.5            | 18.5      |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500          | 80-500          | 80-500          | 80-500    |
| Vdc range @ full power (Vdc)         | 80-500                         | 90-500          | 120-500         | 150-500         | 170-500   |
| Battery (charge/discharge)           |                                |                 |                 |                 |           |
| Battery type                         |                                |                 | ion/Lead-acid e |                 |           |
| Battery Normal Voltage (Range) (Vdc) | 51.2V (40-60V)                 |                 |                 | T               |           |
| Max charge/discharge Current(A)      | 25                             | 40              | 50              | 63              | 80        |
| Max charge/discharge Power(W)        | 1000                           | 1500            | 2000            | 2500            | 3000      |
| AC Grid (input and output)           |                                |                 |                 |                 |           |
| Normal AC Voltage (VAC)              | L/N/PE, 230Vac                 |                 |                 |                 |           |
| Frequency (Hz)                       |                                |                 | 50              |                 | T         |
| Normal AC Current (A)                | 4.4                            | 6.6             | 8.7             | 10.9            | 13.1      |
| Max. cont. input/output current (A)  | 5                              | 7               | 10              | 12              | 14        |
| Rated Power(W)                       | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Rated Apparent Power (VA)            | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Max. cont. Power (W)                 | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Max. cont. Apparent Power (VA)       | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Power factor (adjustable)            |                                |                 | 1.0( -0.8~ +0.8 | )               |           |
| AC Load output (stand alone)         |                                |                 | (2.1/2.2.2.2.1  |                 |           |
| Normal Voltage (VAC)                 |                                | <u> </u>        | _/N/PE, 230Va   | <u> </u>        |           |
| Frequency (Hz)                       |                                |                 | 50              |                 | T         |
| Nominal Current(A)                   | 4.4                            | 6.6             | 8.7             | 10.9            | 13.1      |
| Max. cont. current (A)               | 5                              | 7               | 10              | 12              | 14        |
| Max. cont. Power (W)                 | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Rated Apparent Power (VA)            | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Max. cont. Apparent Power (VA)       | 1000                           | 1500            | 2000            | 2500            | 3000      |
| Power factor                         |                                |                 | 1.0             |                 |           |
| Others                               |                                |                 |                 |                 |           |
| Ingress protection (IP)              |                                |                 | IP65            |                 |           |
| Protective class                     |                                |                 | Class I         |                 |           |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |                 |                 |                 |           |
| Inverter Isolation                   |                                | Non-is          | solated (PV-AC  | S-BAT)          |           |
| Overvoltage category                 |                                |                 | (AC Main), OV   |                 |           |
| Firmware                             |                                |                 | 1.01            |                 |           |



This is an Appendix to Attestation of Conformity Number: SHA-AoC-230023

#### **Ratings & Principle Characteristics:**

|                                      | Specification                  | s table        |                  |          |  |
|--------------------------------------|--------------------------------|----------------|------------------|----------|--|
| Model                                | AF3.6K-SL-1                    | AF3K-SL        | AF3.6K-SL        | AF4K-SL  |  |
| PV input                             |                                |                |                  |          |  |
| P pv Max(W)                          | 5400                           | 4500           | 5400             | 6000     |  |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550            | 550              | 550      |  |
| Isc PV (absolute Max.) (A)           | 26                             | 26 x 2         | 26 x 2           | 26 x 2   |  |
| Number MPP trackers                  | 1                              | 2              | 2                | 2        |  |
| Number input strings                 | 1                              | 1/1            | 1/1              | 1/1      |  |
| Max. PV input current / strings (A)  | 18.5                           | 18.5 x 2       | 18.5 x 2         | 18.5 x 2 |  |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500         | 80-500           | 80-500   |  |
| Vdc range @ full power (Vdc)         | 210-500                        | 90-500         | 110-500          | 120-500  |  |
| Battery (charge/discharge)           |                                |                |                  |          |  |
| Battery type                         |                                | Li-ion/Lea     | d-acid etc.      |          |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (        | 40-60V)          |          |  |
| Max charge/discharge Current(A)      | 80                             | 80             | 80               | 80       |  |
| Max charge/discharge Power(W)        | 3600                           | 3000           | 3600             | 4000     |  |
| AC Grid (input and output)           |                                |                |                  |          |  |
| Normal AC Voltage (VAC)              | L/N/PE, 230Vac                 |                |                  |          |  |
| Frequency (Hz)                       |                                | 5              | 50               |          |  |
| Normal AC Current (A)                | 15.7                           | 13.1           | 15.7             | 17.4     |  |
| Max. cont. input/output current (A)  | 17                             | 14             | 17               | 19       |  |
| Normal Power (W)                     | 3600                           | 3000           | 3600             | 4000     |  |
| Rated Apparent Power (VA)            | 3600                           | 3000           | 3600             | 4000     |  |
| Max. cont. input/output Power (W)    | 3600                           | 3000           | 3600             | 4000     |  |
| Max. cont. Apparent Power (VA)       | 3600                           | 3000           | 3600             | 4000     |  |
| Power factor(adjustable)             |                                | 1.0( -0.8      | 8~ +0.8)         |          |  |
| AC Load output (stand alone)         |                                |                |                  |          |  |
| Normal Voltage (VAC)                 |                                | L/N/PE,        | 230Vac           |          |  |
| Frequency (Hz)                       |                                | 5              | 50               |          |  |
| Nominal Current (A)                  | 15.7                           | 13.1           | 15.7             | 17.4     |  |
| Max. cont. current (A)               | 17                             | 14             | 17               | 19       |  |
| Max. cont. Power (W)                 | 3600                           | 3000           | 3600             | 4000     |  |
| Rated Apparent Power (VA)            | 3600                           | 3000           | 3600             | 4000     |  |
| Max. cont. Apparent Power (VA)       | 3600                           | 3000           | 3600             | 4000     |  |
| Power factor                         |                                | 1              | .0               |          |  |
| Others                               |                                |                |                  |          |  |
| Ingress protection (IP)              |                                |                | 65               |          |  |
| Protective class                     | Class I                        |                |                  |          |  |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |                |                  |          |  |
| Inverter Isolation                   |                                | Non-isolated   | (PV-AC-BAT)      |          |  |
| Overvoltage category                 |                                | OVC III (AC Ma | in), OVC II (PV) |          |  |
| Firmware                             |                                | 1.             | 01               |          |  |



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#### **Ratings & Principle Characteristics:**

|                                      | Specification                  | s table    |                   |          |
|--------------------------------------|--------------------------------|------------|-------------------|----------|
| Model                                | AF4.6K-SL                      | AF5K-SL    | AF5.5K-SL         | AF6K-SL  |
| PV input                             |                                |            |                   |          |
| P pv Max(W)                          | 6900                           | 7500       | 8300              | 9000     |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550        | 550               | 550      |
| Isc PV (absolute Max.) (A)           | 26 x 2                         | 26 x 2     | 26 x 2            | 26 x 2   |
| Number MPP trackers                  | 2                              | 2          | 2                 | 2        |
| Number input strings                 | 1/1                            | 1/1        | 1/1               | 1/1      |
| Max. PV input current / strings (A)  | 18.5 x 2                       | 18.5 x 2   | 18.5 x 2          | 18.5 x 2 |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500     | 80-500            | 80-500   |
| Vdc range @ full power (Vdc)         | 130-500                        | 150-500    | 160-500           | 170-500  |
| Battery (charge/discharge)           |                                |            |                   |          |
| Battery type                         |                                | Li-ion/Lea | nd-acid etc.      |          |
| Battery Normal Voltage (Range) (Vdc) |                                |            | (40-60V)          |          |
| Max charge/discharge Current(A)      | 80                             | 80         | 80                | 80       |
| Max charge/discharge Power(W)        | 4600                           | 4800       | 4800              | 4800     |
| AC Grid (input and output)           |                                |            |                   |          |
| Normal AC Voltage (VAC)              | L/N/PE, 230Vac                 |            |                   |          |
| Frequency (Hz)                       |                                | Į          | 50                |          |
| Normal AC Current (A)                | 20                             | 21.8       | 24                | 26.1     |
| Max. cont. input/output current (A)  | 22                             | 23         | 26                | 28       |
| Normal Power (W)                     | 4600                           | 5000       | 5500              | 6000     |
| Rated Apparent Power (VA)            | 4600                           | 5000       | 5500              | 6000     |
| Max. cont. input/output Power (W)    | 4600                           | 5000       | 5500              | 6000     |
| Max. cont. Apparent Power (VA)       | 4600                           | 5000       | 5500              | 6000     |
| Power factor(adjustable)             |                                | 1.0( -0.   | 8~ +0.8)          |          |
| AC Load output (stand alone)         |                                |            |                   |          |
| Normal Voltage (VAC)                 |                                | L/N/PE     | , 230Vac          |          |
| Frequency (Hz)                       |                                |            | 50                |          |
| Nominal Current(A)                   | 20                             | 21.8       | 24                | 26.1     |
| Max. cont. current (A)               | 22                             | 23         | 26                | 28       |
| Max. cont. Power (W)                 | 4600                           | 5000       | 5500              | 6000     |
| Rated Apparent Power (VA)            | 4600                           | 5000       | 5500              | 6000     |
| Max. cont. Apparent Power (VA)       | 4600                           | 5000       | 5500              | 6000     |
| Power factor                         |                                | 1          | .0                |          |
| Others                               |                                |            |                   |          |
| Ingress protection (IP)              |                                |            | P65               |          |
| Protective class                     | Class I                        |            |                   |          |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |            |                   |          |
| Inverter Isolation                   |                                |            | (PV-AC-BAT)       |          |
| Overvoltage category                 |                                |            | ain), OVC II (PV) |          |
| Firmware                             |                                | 1.         | .01               |          |



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Ratings & Principle Characteristics:

| Specifications table                                |                                |                |                 |                |          |
|---|--------------------------------|----------------|-----------------|----------------|----------|
| Model   | AF4K-SLP                       | AF4.6K-<br>SLP | AF5K-SLP        | AF5.5K-<br>SLP | AF6K-SLP |
| PV input  |                                |                |                 |                | _        |
| P pv Max(W)   | 6000                           | 6900           | 7500            | 8300           | 9000     |
| Vmax PV (Vdc) (absolute Max.)                       | 550                            | 550            | 550             | 550            | 550      |
| Isc PV (absolute Max.) (A)                          | 26 x 2                         | 26 x 2         | 26 x 2          | 26 x 2         | 26 x 2   |
| Number MPP trackers                                 | 2                              | 2              | 2               | 2              | 2        |
| Number input strings                                | 1/1                            | 1/1            | 1/1             | 1/1            | 1/1      |
| Max. PV input current / strings (A)                 | 18.5 x 2                       | 18.5 x 2       | 18.5 x 2        | 18.5 x 2       | 18.5 x 2 |
| MPPT voltage range (Vdc)                            | 80-500                         | 80-500         | 80-500          | 80-500         | 80-500   |
| Vdc range @ full power (Vdc)                        | 120-500                        | 130-500        | 150-500         | 160-500        | 170-500  |
| Battery (charge/discharge)                          |                                | 1 .            | /               |                |          |
| Battery type  |                                |                | ion/Lead-acid e |                |          |
| Battery Normal Voltage (Range) (Vdc)                | 100                            |                | 51.2V (40-60V)  |                | 400      |
| Max charge/discharge Current(A)                     | 120                            | 120            | 120             | 120            | 120      |
| Max charge/discharge Power(W)                       | 4000                           | 4600           | 5000            | 5500           | 6000     |
| AC Grid (input and output)  Normal AC Voltage (VAC) | L/N/PE, 230Vac                 |                |                 |                |          |
| Frequency (Hz)                                      |                                |                | 50              | <u> </u>       |          |
| Normal AC Current (A)                               | 17.4                           | 20             | 21.8            | 24             | 26.1     |
| Max. cont. input/output current (A)                 | 19                             | 22             | 23              | 26             | 28       |
| Rated Power(W)                                      | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Rated Apparent Power (VA)                           | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Max. cont. Power (W)                                | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Max. cont. Apparent Power (VA)                      | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Power factor (adjustable)                           |                                |                | 1.0( -0.8~ +0.8 |                |          |
| AC Load output (stand alone)                        |                                |                | `               | ,              |          |
| Normal Voltage (VAC)                                |                                |                | _/N/PE, 230Va   | 0              |          |
| Frequency (Hz)                                      |                                |                | 50              |                |          |
| Nominal Current(A)                                  | 17.4                           | 20             | 21.8            | 24             | 26.1     |
| Max. cont. current (A)                              | 19                             | 22             | 23              | 26             | 28       |
| Max. cont. Power (W)                                | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Max. cont. Apparent Power (VA)                      | 4000                           | 4600           | 5000            | 5500           | 6000     |
| Power factor  |                                |                | 1.0             |                |          |
| Others  |                                |                |                 |                |          |
| Ingress protection (IP)                             |                                |                | IP65            |                |          |
| Protective class                                    |                                |                | Class I         |                |          |
| Temperature (°C)                                    | -25°C to +60°C (Derating 45°C) |                |                 |                |          |
| Inverter Isolation                                  |                                | Non-iso        | olated (PV - AC | S - BAT)       |          |
| Overvoltage category                                |                                | OVC III        | (AC Main), OV   | C II (PV)      |          |
| Firmware  |                                |                | 1.01            |                |          |



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#### **Ratings & Principle Characteristics:**

| Specifications table                 |                                |             |                  |             |  |
|--------------------------------------|--------------------------------|-------------|------------------|-------------|--|
| Model                                | AF1K-SL-0                      | AF1.5K-SL-0 | AF2K-SL-0        | AF2.5K-SL-0 |  |
| Battery (charge/discharge)           |                                |             |                  |             |  |
| Battery type                         |                                | Li-ion/Lead | d-acid etc.      |             |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (4    | 10-60V)          |             |  |
| Max charge/discharge Current(A)      | 25                             | 40          | 50               | 63          |  |
| Max charge/discharge Power(W)        | 1000                           | 1500        | 2000             | 2500        |  |
| AC Grid (input and output)           |                                |             |                  |             |  |
| Normal AC Voltage (VAC)              |                                | L/N/PE,     |                  |             |  |
| Frequency (Hz)                       |                                | 5           |                  |             |  |
| Normal AC Current (A)                | 4.4                            | 6.6         | 8.7              | 10.9        |  |
| Max. cont. input/output current (A)  | 5                              | 7           | 10               | 12          |  |
| Rated Power(W)                       | 1000                           | 1500        | 2000             | 2500        |  |
| Rated Apparent Power (VA)            | 1000                           | 1500        | 2000             | 2500        |  |
| Max. cont. Power (W)                 | 1000                           | 1500        | 2000             | 2500        |  |
| Max. cont. Apparent Power (VA)       | 1000 1500 2000 2500            |             |                  |             |  |
| Power factor (adjustable)            |                                | 1.0( -0.8   | 3~ <b>+</b> 0.8) |             |  |
| AC Load output (stand alone)         |                                |             |                  |             |  |
| Normal Voltage (VAC)                 |                                | L/N/PE,     |                  |             |  |
| Frequency (Hz)                       |                                | 5           | *                |             |  |
| Nominal Current(A)                   | 4.4                            | 6.6         | 8.7              | 10.9        |  |
| Max. cont. current (A)               | 5                              | 7           | 10               | 12          |  |
| Max. cont. Power (W)                 | 1000                           | 1500        | 2000             | 2500        |  |
| Rated Apparent Power (VA)            | 1000                           | 1500        | 2000             | 2500        |  |
| Max. cont. Apparent Power (VA)       | 1000                           | 1500        | 2000             | 2500        |  |
| Power factor                         |                                | 1.          | 0                |             |  |
| Others                               |                                |             |                  |             |  |
| Ingress protection (IP)              | IP65                           |             |                  |             |  |
| Protective class                     | Class I                        |             |                  |             |  |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |             |                  |             |  |
| Inverter Isolation                   | Non-isolated (AC-BAT)          |             |                  |             |  |
| Overvoltage category                 |                                | OVC III (A  | AC Main)         |             |  |
| Firmware                             |                                | 1.0         | )1               |             |  |



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#### **Ratings & Principle Characteristics:**

|                                      | Specifications table           |               |             |             |  |  |
|--------------------------------------|--------------------------------|---------------|-------------|-------------|--|--|
| Model                                | AF3K-SL-0                      | AF3.6K-SL-0   | AF4K-SL-0   | AF4.6K-SL-0 |  |  |
| Battery (charge/discharge)           |                                |               |             |             |  |  |
| Battery type                         |                                | Li-ion/Lead   | d-acid etc. |             |  |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (4      | I0-60V)     |             |  |  |
| Max charge/discharge Current(A)      | 80                             | 80 80 120 120 |             |             |  |  |
| Max charge/discharge Power(W)        | 3000                           | 3600          | 4000        | 4600        |  |  |
| AC Grid (input and output)           |                                |               |             |             |  |  |
| Normal AC Voltage (VAC)              |                                | L/N/PE,       | 230Vac      |             |  |  |
| Frequency (Hz)                       |                                | 50            | )           |             |  |  |
| Normal AC Current (A)                | 13.1                           | 15.7          | 17.4        | 20          |  |  |
| Max. cont. input/output current (A)  | 14                             | 17            | 19          | 22          |  |  |
| Normal Power (W)                     | 3000                           | 3600          | 4000        | 4600        |  |  |
| Rated Apparent Power (VA)            | 3000                           | 3600          | 4000        | 4600        |  |  |
| Max. cont. input/output Power (W)    | 3000                           | 3600          | 4000        | 4600        |  |  |
| Max. cont. Apparent Power (VA)       | 3000 3600 4000 4600            |               |             |             |  |  |
| Power factor(adjustable)             |                                | 1.0( -0.8     | ~ +0.8)     |             |  |  |
| AC Load output (stand alone)         |                                |               |             |             |  |  |
| Normal Voltage (VAC)                 |                                | L/N/PE,       | 230Vac      |             |  |  |
| Frequency (Hz)                       |                                | 50            |             |             |  |  |
| Nominal Current (A)                  | 13.1                           | 15.7          | 17.4        | 20          |  |  |
| Max. cont. current (A)               | 14                             | 17            | 19          | 22          |  |  |
| Max. cont. Power (W)                 | 3000                           | 3600          | 4000        | 4600        |  |  |
| Rated Apparent Power (VA)            | 3000                           | 3600          | 4000        | 4600        |  |  |
| Max. cont. Apparent Power (VA)       | 3000                           | 3600          | 4000        | 4600        |  |  |
| Power factor                         | 1.0                            |               |             |             |  |  |
| Others                               |                                |               |             |             |  |  |
| Ingress protection (IP)              | IP65                           |               |             |             |  |  |
| Protective class                     | Class I                        |               |             |             |  |  |
| Temperature (℃)                      | -25°C to +60°C (Derating 45°C) |               |             |             |  |  |
| Inverter Isolation                   | Non-isolated (AC-BAT)          |               |             |             |  |  |
| Overvoltage category                 |                                | OVC III (A    | AC Main)    |             |  |  |
| Firmware                             |                                | 1.0           | )1          |             |  |  |



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#### **Ratings & Principle Characteristics:**

| Specifications table                 |                                |             |             |  |  |
|--------------------------------------|--------------------------------|-------------|-------------|--|--|
| Model                                | AF5K-SL-0                      | AF5.5K-SL-0 | AF6K-SL-0   |  |  |
| Battery (charge/discharge)           |                                |             |             |  |  |
| Battery type                         |                                | Li-ion/Lead | d-acid etc. |  |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (4    | 40-60V)     |  |  |
| Max charge/discharge Current(A)      | 120                            | 120         | 120         |  |  |
| Max charge/discharge Power(W)        | 5000                           | 5500        | 6000        |  |  |
| AC Grid (input and output)           |                                |             |             |  |  |
| Normal AC Voltage (VAC)              |                                | L/N/PE,     | 230Vac      |  |  |
| Frequency (Hz)                       |                                | 5           | 0           |  |  |
| Normal AC Current (A)                | 21.8                           | 24          | 26.1        |  |  |
| Max. cont. input/output current (A)  | 23                             | 26          | 28          |  |  |
| Normal Power (W)                     | 5000                           | 5500        | 6000        |  |  |
| Rated Apparent Power (VA)            | 5000                           | 5500        | 6000        |  |  |
| Max. cont. input/output Power (W)    | 5000                           | 5500        | 6000        |  |  |
| Max. cont. Apparent Power (VA)       | 5000 5500 6000                 |             |             |  |  |
| Power factor(adjustable)             |                                | 1.0( -0.8   | 3~ +0.8)    |  |  |
| AC Load output (stand alone)         |                                |             |             |  |  |
| Normal Voltage (VAC)                 |                                | L/N/PE,     | 230Vac      |  |  |
| Frequency (Hz)                       |                                | 5           | 0           |  |  |
| Nominal Current(A)                   | 21.8                           | 24          | 26.1        |  |  |
| Max. cont. current (A)               | 23                             | 26          | 28          |  |  |
| Max. cont. Power (W)                 | 5000                           | 5500        | 6000        |  |  |
| Rated Apparent Power (VA)            | 5000                           | 5500        | 6000        |  |  |
| Max. cont. Apparent Power (VA)       | 5000                           | 5500        | 6000        |  |  |
| Power factor                         | 1.0                            |             |             |  |  |
| Others                               |                                |             |             |  |  |
| Ingress protection (IP)              | IP65                           |             |             |  |  |
| Protective class                     | Class I                        |             |             |  |  |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |             |             |  |  |
| Inverter Isolation                   | Non-isolated (AC-BAT)          |             |             |  |  |
| Overvoltage category                 |                                | OVC III (/  |             |  |  |
| Firmware                             |                                | 1.0         | 01          |  |  |



# Certificate of Conformity

Certificate Number: CN-PV-230621

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.201112

Product: Hybrid Inverter

Ratings & Principle See appendix of Certificate of Conformity Characteristics:

Model: AF1K-SL-1, AF1.5K-SL-1, AF2K-SL-1, AF2.5K-SL-1, AF3K-SL-1, AF3.6K-SL-1,

AF3K-SL, AF3.6K-SL, AF4K-SL, AF4.6K-SL, AF5K-SL, AF5.5K-SL, AF6K-SL, AF4K-

SLP, AF4.6K-SLP, AF5K-SLP, AF5.5K-SLP, AF6K-SLP

Brand Name<s>: Afore

**Product Complies with:** EN 50549-1:2019 Requirements for the connection of generation equipment

in parallel with public distribution networks

**Certificate Issuing Office** 

Name & Address:

Signature

Intertek Testing Services Ltd. Shanghai

West Area, 2<sup>nd</sup> Floor, No. 707, Zhangyang Road

China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China

Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

**Test Report No.<s>:** 2308A0582SHA-001

Additional information in Appendix.

**Certification Manager: Qiao Qiao** 

Date: 15 November 2023

ACCREDIA 5

PRD N° 306B

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This is an Appendix to Certificate of Conformity Number: CN-PV-230621

#### **Ratings & Principle Characteristics:**

| Specifications table              |                         |            |                 |                 |           |
|-----------------------------------|-------------------------|------------|-----------------|-----------------|-----------|
| Model                             | AF1K-SL-1               | AF1.5K-SL- | AF2K-SL-1       | AF2.5K-SL-<br>1 | AF3K-SL-1 |
| Input                             |                         |            |                 |                 |           |
| Ppv Max (W)                       | 1500                    | 2300       | 3000            | 3800            | 4500      |
| Vmax PV (V)                       | 550                     | 550        | 550             | 550             | 550       |
| Isc PV (absolute Max.) (A)        | 26                      | 26         | 26              | 26              | 26        |
| Number of MPP trackers            | 1                       | 1          | 1               | 1               | 1         |
| Number of input strings           | 1                       | 1          | 1               | 1               | 1         |
| Max. PV input range (A)           | 18.5                    | 18.5       | 18.5            | 18.5            | 18.5      |
| MPPT Voltage Range (V)            | 80-500                  | 80-500     | 80-500          | 80-500          | 80-500    |
| Vdc range @ full power (V)        | 80-500                  | 90-500     | 120-500         | 150-500         | 170-500   |
| Battery (input and output)        |                         |            |                 |                 |           |
| Battery type                      | Li-ion / lead acid etc. |            |                 |                 |           |
| Battery Nominal Voltage (V)       |                         | 51.2       |                 |                 |           |
| Battery Voltage Range (V)         |                         | 40-60      |                 |                 |           |
| Max. Charge/Discharge Current (A) | 25                      | 40         | 50              | 63              | 80        |
| Max. Charge/Discharge Power (W)   | 1000                    | 1500       | 2000            | 2500            | 3000      |
| AC Grid (input and output)        |                         |            |                 |                 |           |
| Nominal Voltage (V)               |                         |            | L/N/PE. 230Va   | C               |           |
| Nominal Frequency (Hz)            |                         |            | 50              | - ///           |           |
| Max. continuous Input/output      |                         |            |                 | .07             |           |
| Current (A)                       | 5                       | 7          | 10              | 12              | 14        |
| Nominal Power (W)                 | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Max. Power (W)                    | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Max. apparent Power (VA)          | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Power Factor                      |                         |            | .8~+0.8 adjusta | able)           |           |
| AC Load output                    |                         | <u> </u>   |                 | ,               |           |
| Nominal Output Voltage (V)        |                         | All        | L/N/PE, 230Va   | <br>C           |           |
| Nominal Frequency (Hz)            |                         | 0 -        | 50              |                 |           |
| Max. continuous Input/output      | _                       | _          |                 | 10              |           |
| Current (A)                       | 5                       | 7          | 10              | 12              | 14        |
| Nominal Output Power(W)           | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Max. Output Power (W)             | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Max. apparent Power (VA)          | 1000                    | 1500       | 2000            | 2500            | 3000      |
| Power Factor                      |                         |            | 1               |                 |           |
| others                            |                         |            |                 |                 |           |
| Ingress protection (IP)           |                         |            | IP65            |                 |           |
| Temperature (°C)                  |                         | -25°C to   | +60°C (Derati   | ng45°C)         |           |
| Inverter Isolation                |                         |            | Non-isolated    | 3/              |           |
| Firmware Version                  |                         |            | 1.01            |                 |           |

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This is an Appendix to Certificate of Conformity Number: CN-PV-230621

#### **Ratings & Principle Characteristics:**

| Specifications table              |                         |                         |                  |          |           |  |
|-----------------------------------|-------------------------|-------------------------|------------------|----------|-----------|--|
| Model                             | AF3.6K-SL-<br>1         | AF3K-SL                 | AF3.6K-SL        | AF4K-SL  | AF4.6K-SL |  |
| Input                             |                         |                         |                  |          |           |  |
| Ppv Max (W)                       | 5400                    | 4500                    | 5400             | 6000     | 6900      |  |
| Vmax PV (V)                       | 550                     | 550                     | 550              | 550      | 550       |  |
| Isc PV (absolute Max.) (A)        | 26                      | 26 x 2                  | 26 x 2           | 26 x 2   | 26 x 2    |  |
| Number of MPP trackers            | 1                       | 2                       | 2                | 2        | 2         |  |
| Number of input strings           | 1                       | 1/1                     | 1/1              | 1/1      | 1/1       |  |
| Max. PV input range (A)           | 18.5                    | 18.5 x 2                | 18.5 x 2         | 18.5 x 2 | 18.5 x 2  |  |
| MPPT Voltage Range (V)            | 80-500                  | 80-500                  | 80-500           | 80-500   | 80-500    |  |
| Vdc range @ full power (V)        | 210-500                 | 90-500                  | 110-500          | 120-500  | 130-500   |  |
| Battery (input and output)        |                         |                         |                  |          |           |  |
| Battery type                      |                         | Li-ion / lead acid etc. |                  |          |           |  |
| Battery Nominal Voltage (V)       | 51.2                    |                         |                  |          |           |  |
| Battery Voltage Range (V)         |                         | 40-60                   |                  |          |           |  |
| Max. Charge/Discharge Current (A) | 80                      | 80                      | 80               | 80       | 80        |  |
| Max. Charge/Discharge Power (W)   | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| AC Grid (input and output)        | Grid (input and output) |                         |                  |          |           |  |
| Nominal Voltage (V)               |                         |                         | L/N/PE. 230Vac   | ;        |           |  |
| Nominal Frequency (Hz)            |                         |                         | 50               |          |           |  |
| Max. continuous Input/output      | 47                      | 4.4                     | 47               | 10       | 20        |  |
| Current (A)                       | 17                      | 14                      | 17               | 19       | 22        |  |
| Nominal Power (W)                 | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Max. Power (W)                    | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Max. apparent Power (VA)          | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Power Factor                      |                         | 1(-0                    | 0.8~+0.8 adjusta | ible)    | 1         |  |
| AC Load output                    |                         |                         |                  |          |           |  |
| Nominal Output Voltage (V)        | ALCO DE                 | - 650                   | L/N/PE. 230Vac   | ;        |           |  |
| Nominal Frequency (Hz)            |                         | 0 -                     | 50               |          |           |  |
| Max. continuous Input/output      | 17                      | 14                      | 17               | 19       | 22        |  |
| Current (A)                       | 17                      | 14                      | 17               | 19       | 22        |  |
| Nominal Output Power(W)           | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Max. Output Power (W)             | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Max. apparent Power (VA)          | 3600                    | 3000                    | 3600             | 4000     | 4600      |  |
| Power Factor                      |                         |                         | 1                |          | •         |  |
| others                            |                         |                         |                  |          |           |  |
| Ingress protection (IP)           |                         |                         | IP65             |          |           |  |
| Temperature (°C)                  |                         | -25°C t                 | o +60°C (Deratii | ng45°C)  |           |  |
| Inverter Isolation                |                         |                         | Non-isolated     |          |           |  |
| Firmware Version                  |                         |                         | 1.01             |          |           |  |

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This is an Appendix to Certificate of Conformity Number: CN-PV-230621

#### **Ratings & Principle Characteristics:**

| Specifications table              |                         |           |                  |        |  |
|-----------------------------------|-------------------------|-----------|------------------|--------|--|
| Model                             | AF5K-SL                 | AF5.5K-SL | AF6K-SL          |        |  |
| Input                             |                         |           |                  |        |  |
| Ppv Max (W)                       | 7500                    | 8300      | 9000             |        |  |
| Vmax PV (V)                       | 550                     | 550       | 550              |        |  |
| Isc PV (absolute Max.) (A)        | 26 x 2                  | 26 x 2    | 26 x 2           |        |  |
| Number of MPP trackers            | 2                       | 2         | 2                |        |  |
| Number of input strings           | 1/1                     | 1/1       | 1/1              |        |  |
| Max. PV input range (A)           | 18.5 x 2                | 18.5 x 2  | 18.5 x 2         |        |  |
| MPPT Voltage Range (V)            | 80-500                  | 80-500    | 80-500           |        |  |
| Vdc range @ full power (V)        | 150-500                 | 160-500   | 170-500          |        |  |
| Battery (input and output)        |                         |           |                  |        |  |
| Battery type                      | Li-ion / lead acid etc. |           |                  |        |  |
| Battery Nominal Voltage (V)       | 7                       | 51.2      |                  |        |  |
| Battery Voltage Range (V)         |                         |           | 40-60            |        |  |
| Max. Charge/Discharge Current (A) | 80                      | 80        | 80               |        |  |
| Max. Charge/Discharge Power (W)   | 4800                    | 4800      | 4800             |        |  |
| AC Grid (input and output)        |                         |           |                  |        |  |
| Nominal Voltage (V)               |                         |           | _/N/PE. 230Vac   |        |  |
| Nominal Frequency (Hz)            | 50                      |           |                  |        |  |
| Max. continuous Input/output      | 22                      | 200       | 20               |        |  |
| Current (A)                       | 23                      | 26        | 28               | //     |  |
| Nominal Power (W)                 | 5000                    | 5500      | 6000             | ///    |  |
| Max. Power (W)                    | 5000                    | 5500      | 6000             | ///    |  |
| Max. apparent Power (VA)          | 5000                    | 5500      | 6000             | 7      |  |
| Power Factor                      |                         | 1(-0      | .8~+0.8 adjustal | ole)   |  |
| AC Load output                    |                         | ,         |                  | ,      |  |
| Nominal Output Voltage (V)        | _ \                     | 0 ///     | /N/PE. 230Vac    |        |  |
| Nominal Frequency (Hz)            |                         | All Land  | 50               |        |  |
| Max. continuous Input/output      | 00                      | 00        | 00               |        |  |
| Current (A)                       | 23                      | 26        | 28               |        |  |
| Nominal Output Power(W)           | 5000                    | 5500      | 6000             |        |  |
| Max. Output Power (W)             | 5000                    | 5500      | 6000             |        |  |
| Max. apparent Power (VA)          | 5000                    | 5500      | 6000             |        |  |
| Power Factor                      |                         | 1         | 1                | 1      |  |
| others                            |                         |           |                  |        |  |
| Ingress protection (IP)           | IP65                    |           |                  |        |  |
| Temperature (°C)                  |                         | -25°C to  | +60°C (Deratin   | g45°C) |  |
| Inverter Isolation                |                         |           | Non-isolated     | ·      |  |
| Firmware Version                  |                         |           | 1.01             |        |  |

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This is an Appendix to Certificate of Conformity Number: CN-PV-230621

#### **Ratings & Principle Characteristics:**

| Ratings & Principle Characteristics: | Specificat                  | ions table     |                  |                |          |
|--------------------------------------|-----------------------------|----------------|------------------|----------------|----------|
| Model                                | AF4K-SLP                    | AF4.6K-<br>SLP | AF5K-SLP         | AF5.5K-<br>SLP | AF6K-SLP |
| PV input                             |                             |                |                  |                |          |
| P pv Max(W)                          | 6000                        | 6900           | 7500             | 8300           | 9000     |
| Vmax PV (Vdc) (absolute Max.)        | 550                         | 550            | 550              | 550            | 550      |
| Isc PV (absolute Max.) (A)           | 26 x 2                      | 26 x 2         | 26 x 2           | 26 x 2         | 26 x 2   |
| Number MPP trackers                  | 2                           | 2              | 2                | 2              | 2        |
| Number input strings                 | 1/1                         | 1/1            | 1/1              | 1/1            | 1/1      |
| Max. PV input current / strings (A)  | 18.5 x 2                    | 18.5 x 2       | 18.5 x 2         | 18.5 x 2       | 18.5 x 2 |
| MPPT voltage range (Vdc)             | 80-500                      | 80-500         | 80-500           | 80-500         | 80-500   |
| Vdc range @ full power (Vdc)         | 120-500                     | 130-500        | 150-500          | 160-500        | 170-500  |
| Battery (charge/discharge)           |                             |                |                  |                |          |
| Battery type                         | 100                         |                | Li-ion/Lead-acid |                |          |
| Battery Normal Voltage (Range) (Vdc) |                             |                | 51.2V (40-60V)   |                |          |
| Max charge/discharge Current(A)      | 120                         | 120            | 120              | 120            | 120      |
| Max charge/discharge Power(W)        | 4000                        | 4600           | 5000             | 5500           | 6000     |
| AC Grid (input and output)           |                             |                |                  |                |          |
| Normal AC Voltage (VAC)              | L/N/PE, 230Vac              |                |                  |                |          |
| Frequency (Hz)                       |                             |                | 50               |                |          |
| Normal AC Current (A)                | 17.4                        | 20             | 21.8             | 24             | 26.1     |
| Max. cont. input/output current (A)  | 19                          | 22             | 23               | 26             | 28       |
| Rated Power(W)                       | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Rated Apparent Power (VA)            | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Max. cont. Power (W)                 | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Max. cont. Apparent Power (VA)       | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Power factor (adjustable)            |                             |                | 1.0( -0.8~ +0.8) | )              |          |
| AC Load output                       |                             |                |                  |                |          |
| Normal Voltage (VAC)                 |                             |                | L/N/PE, 230Va    | <u> </u>       |          |
| Frequency (Hz)                       |                             |                | 50               |                | T        |
| Nominal Current(A)                   | 17.4                        | 20             | 21.8             | 24             | 26.1     |
| Max. cont. current (A)               | 19                          | 22             | 23               | 26             | 28       |
| Max. cont. Power (W)                 | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Max. cont. Apparent Power (VA)       | 4000                        | 4600           | 5000             | 5500           | 6000     |
| Power factor                         |                             |                | 1.0              |                |          |
| Others                               |                             |                |                  |                |          |
| Ingress protection (IP)              | IP65                        |                |                  |                |          |
| Protective class                     |                             |                | Class I          |                |          |
| Temperature (℃)                      | -25℃ to +60℃ (Derating 45℃) |                |                  |                |          |
| Inverter Isolation                   |                             | Non-is         | olated (PV - AC  | : - BAT)       |          |
| Overvoltage category                 |                             | OVC III        | (AC Main), OV    | C II (PV)      |          |
| Firmware                             |                             |                | 1.01             |                |          |

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Intertek



#### Afore New Energy Technology (Shanghai) Co., LTD

ADD: Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China. TEL: +86-21-5432 6236 FAX: +86-21-5432 6136

www.aforenergy.com

#### **EU DECLARATION OF CONFIRMITY**

To, Whomever it may concern

We, Afore New Energy Technology (Shanghai) Co., Ltd declares that the following

products:

|               | i i         |
|---------------|-------------|
| Afore Model # | VTAC Model# |
| AF6K-SL       | VT-6607106  |
| AF6K-SLP      | VT-AF6K-SLP |
| AF3.6K-SL     | VT-6607136  |
| AF3.6K-SL     | VT-6607136  |
|               |             |
| AF5.0K-SL     | VT-6607105  |

Gomplies with following directives and standards:

Low Voltage Directive 2014/35/EU

EN 62109-1:2020

EN 62109-2:2021

EMC Directive 2014/30/EU

EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019

Regulation (EU) 2016/631 (NC RfG)

EN 50549-1:2019/AC: 2019

This declaration of conformity is issued under the responsibility of the manufacturer.

Afore New Energy Technology (Shanghai) Co., Ltd

Date 16th April 2024





## **Attestation of Conformity**

Attestation No: SHA-AoC-230020

Applicant Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.

201112

Factory Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.

201112

Product Description: Hybrid inverter

Brand Name: Afore

Model: AF\*-SL-1 (\*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K)

AF\*-SL (\*= 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K)

AF\*-SLP (\*=4K, 4.6K, 5K, 5.5K, 6K)

Characteristics: See appendix for details

Standards: EN 62109-1:2010; EN 62109-2:2011;

EU Directive: the Low Voltage Directive (LVD) (2014/35/EU)

Test Report No: 230601215SHA-001, 230601215SHA-002 Issued by: Intertek Testing Services Ltd. Shanghai

West Area, 2nd Floor, No. 707, Zhangyang Road, China (Shanghai)

Pilot Free Trade Zone, Shanghai, P. R. China

Issue date: 2023-11-15

This is to attest that the Technical Construction File for the product listed above has been evaluated against the Essential Safety Requirements of Annex I of the Low Voltage Directive (2014/35/EU). This Attestation can be used in support of the Manufacturers Declaration of Conformity on affixing the CE mark. Product conformity to CE marking is not assured until all other applicable EU Regulations are met in full.

Signature

Name: Qiao Qiao

CE



This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

#### Ratings & Principle Characteristics:

| Specifications table                 |                                |                 |                  |                 |           |
|--------------------------------------|--------------------------------|-----------------|------------------|-----------------|-----------|
| Model                                | AF1K-SL-1                      | AF1.5K-<br>SL-1 | AF2K-SL-1        | AF2.5K-<br>SL-1 | AF3K-SL-1 |
| PV input                             |                                |                 |                  |                 | _         |
| P pv Max(W)                          | 1500                           | 2300            | 3000             | 3800            | 4500      |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550             | 550              | 550             | 550       |
| Isc PV (absolute Max.) (A)           | 26                             | 26              | 26               | 26              | 26        |
| Number MPP trackers                  | 1                              | 1               | 1                | 1               | 1         |
| Number input strings                 | 1                              | 1               | 1                | 1               | 1         |
| Max. PV input current / strings (A)  | 18.5                           | 18.5            | 18.5             | 18.5            | 18.5      |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500          | 80-500           | 80-500          | 80-500    |
| Vdc range @ full power (Vdc)         | 80-500                         | 90-500          | 120-500          | 150-500         | 170-500   |
| Battery (charge/discharge)           |                                |                 |                  |                 |           |
| Battery type                         |                                |                 | Li-ion/Lead-acid |                 |           |
| Battery Normal Voltage (Range) (Vdc) |                                |                 | 51.2V (40-60V)   |                 |           |
| Max charge/discharge Current(A)      | 25                             | 40              | 50               | 63              | 80        |
| Max charge/discharge Power(W)        | 1000                           | 1500            | 2000             | 2500            | 3000      |
| AC Grid (input and output)           |                                |                 |                  |                 |           |
| Normal AC Voltage (VAC)              |                                |                 | L/N/PE, 230Va    | 0               |           |
| Frequency (Hz)                       |                                |                 | 50               |                 |           |
| Normal AC Current (A)                | 4.4                            | 6.6             | 8.7              | 10.9            | 13.1      |
| Max. cont. input/output current (A)  | 5                              | 7               | 10               | 12              | 14        |
| Rated Power(W)                       | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Rated Apparent Power (VA)            | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Max. cont. Power (W)                 | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Max. cont. Apparent Power (VA)       | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Power factor (adjustable)            |                                |                 | 1.0( -0.8~ +0.8  | )               |           |
| AC Load output (stand alone)         |                                |                 |                  |                 |           |
| Normal Voltage (VAC)                 |                                | L/N/PE, 230Vac  |                  |                 |           |
| Frequency (Hz)                       | 50                             |                 |                  |                 | T         |
| Nominal Current(A)                   | 4.4                            | 6.6             | 8.7              | 10.9            | 13.1      |
| Max. cont. current (A)               | 5                              | 7               | 10               | 12              | 14        |
| Max. cont. Power (W)                 | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Rated Apparent Power (VA)            | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Max. cont. Apparent Power (VA)       | 1000                           | 1500            | 2000             | 2500            | 3000      |
| Power factor                         | 1.0                            |                 |                  |                 |           |
| Others                               |                                |                 |                  |                 |           |
| Ingress protection (IP)              | IP65                           |                 |                  |                 |           |
| Protective class                     | Class I                        |                 |                  |                 |           |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |                 |                  |                 |           |
| Inverter Isolation                   | Non-isolated (PV-AC-BAT)       |                 |                  |                 |           |
| Overvoltage category                 | OVC III (AC Main), OVC II (PV) |                 |                  |                 |           |
| Firmware                             | 1.01                           |                 |                  |                 |           |



This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

#### **Ratings & Principle Characteristics:**

|                                      | Specifications table           |          |           |          |  |
|--------------------------------------|--------------------------------|----------|-----------|----------|--|
| Model                                | AF3.6K-SL-1                    | AF3K-SL  | AF3.6K-SL | AF4K-SL  |  |
| PV input                             |                                |          |           |          |  |
| P pv Max(W)                          | 5400                           | 4500     | 5400      | 6000     |  |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550      | 550       | 550      |  |
| Isc PV (absolute Max.) (A)           | 26                             | 26 x 2   | 26 x 2    | 26 x 2   |  |
| Number MPP trackers                  | 1                              | 2        | 2         | 2        |  |
| Number input strings                 | 1                              | 1/1      | 1/1       | 1/1      |  |
| Max. PV input current / strings (A)  | 18.5                           | 18.5 x 2 | 18.5 x 2  | 18.5 x 2 |  |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500   | 80-500    | 80-500   |  |
| Vdc range @ full power (Vdc)         | 210-500                        | 90-500   | 110-500   | 120-500  |  |
| Battery (charge/discharge)           |                                |          |           |          |  |
| Battery type                         |                                | Li-ion/L | ead-acid  |          |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (  | 40-60V)   |          |  |
| Max charge/discharge Current(A)      | 80                             | 80       | 80        | 80       |  |
| Max charge/discharge Power(W)        | 3600                           | 3000     | 3600      | 4000     |  |
| AC Grid (input and output)           |                                |          |           |          |  |
| Normal AC Voltage (VAC)              |                                | L/N/PE   | , 230Vac  |          |  |
| Frequency (Hz)                       |                                | Ę        | 50        |          |  |
| Normal AC Current (A)                | 15.7                           | 13.1     | 15.7      | 17.4     |  |
| Max. cont. input/output current (A)  | 17                             | 14       | 17        | 19       |  |
| Normal Power (W)                     | 3600                           | 3000     | 3600      | 4000     |  |
| Rated Apparent Power (VA)            | 3600                           | 3000     | 3600      | 4000     |  |
| Max. cont. input/output Power (W)    | 3600                           | 3000     | 3600      | 4000     |  |
| Max. cont. Apparent Power (VA)       | 3600                           | 3000     | 3600      | 4000     |  |
| Power factor(adjustable)             |                                | 1.0( -0. | 8~ +0.8)  |          |  |
| AC Load output (stand alone)         |                                |          |           |          |  |
| Normal Voltage (VAC)                 | L/N/PE, 230Vac                 |          |           |          |  |
| Frequency (Hz)                       | 50                             |          |           |          |  |
| Nominal Current (A)                  | 15.7                           | 13.1     | 15.7      | 17.4     |  |
| Max. cont. current (A)               | 17                             | 14       | 17        | 19       |  |
| Max. cont. Power (W)                 | 3600                           | 3000     | 3600      | 4000     |  |
| Rated Apparent Power (VA)            | 3600                           | 3000     | 3600      | 4000     |  |
| Max. cont. Apparent Power (VA)       | 3600                           | 3000     | 3600      | 4000     |  |
| Power factor                         | 1.0                            |          |           |          |  |
| Others                               |                                |          |           |          |  |
| Ingress protection (IP)              | IP65                           |          |           |          |  |
| Protective class                     | Class I                        |          |           |          |  |
| Temperature (℃)                      | -25°C to +60°C (Derating 45°C) |          |           |          |  |
| Inverter Isolation                   | Non-isolated (PV-AC-BAT)       |          |           |          |  |
| Overvoltage category                 | OVC III (AC Main), OVC II (PV) |          |           |          |  |
| Firmware                             | 1.01                           |          |           |          |  |



This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

#### **Ratings & Principle Characteristics:**

| Specifications table                 |                                |          |           |          |  |
|--------------------------------------|--------------------------------|----------|-----------|----------|--|
| Model                                | AF4.6K-SL                      | AF5K-SL  | AF5.5K-SL | AF6K-SL  |  |
| PV input                             |                                |          |           |          |  |
| P pv Max(W)                          | 6900                           | 7500     | 8300      | 9000     |  |
| Vmax PV (Vdc) (absolute Max.)        | 550                            | 550      | 550       | 550      |  |
| Isc PV (absolute Max.) (A)           | 26 x 2                         | 26 x 2   | 26 x 2    | 26 x 2   |  |
| Number MPP trackers                  | 2                              | 2        | 2         | 2        |  |
| Number input strings                 | 1/1                            | 1/1      | 1/1       | 1/1      |  |
| Max. PV input current / strings (A)  | 18.5 x 2                       | 18.5 x 2 | 18.5 x 2  | 18.5 x 2 |  |
| MPPT voltage range (Vdc)             | 80-500                         | 80-500   | 80-500    | 80-500   |  |
| Vdc range @ full power (Vdc)         | 130-500                        | 150-500  | 160-500   | 170-500  |  |
| Battery (charge/discharge)           |                                |          |           |          |  |
| Battery type                         | Li-ion/Lead-acid               |          |           |          |  |
| Battery Normal Voltage (Range) (Vdc) |                                | 51.2V (  | 40-60V)   |          |  |
| Max charge/discharge Current(A)      | 80                             | 80       | 80        | 80       |  |
| Max charge/discharge Power(W)        | 4600                           | 4800     | 4800      | 4800     |  |
| AC Grid (input and output)           |                                |          |           |          |  |
| Normal AC Voltage (VAC)              | L/N/PE, 230Vac                 |          |           |          |  |
| Frequency (Hz)                       |                                | 5        | 50        |          |  |
| Normal AC Current (A)                | 20                             | 21.8     | 24        | 26.1     |  |
| Max. cont. input/output current (A)  | 22                             | 23       | 26        | 28       |  |
| Normal Power (W)                     | 4600                           | 5000     | 5500      | 6000     |  |
| Rated Apparent Power (VA)            | 4600                           | 5000     | 5500      | 6000     |  |
| Max. cont. input/output Power (W)    | 4600                           | 5000     | 5500      | 6000     |  |
| Max. cont. Apparent Power (VA)       | 4600                           | 5000     | 5500      | 6000     |  |
| Power factor(adjustable)             |                                | 1.0( -0. | 8~ +0.8)  |          |  |
| AC Load output (stand alone)         |                                |          |           |          |  |
| Normal Voltage (VAC)                 | L/N/PE, 230Vac                 |          |           |          |  |
| Frequency (Hz)                       | 50                             |          |           |          |  |
| Nominal Current(A)                   | 20                             | 21.8     | 24        | 26.1     |  |
| Max. cont. current (A)               | 22                             | 23       | 26        | 28       |  |
| Max. cont. Power (W)                 | 4600                           | 5000     | 5500      | 6000     |  |
| Rated Apparent Power (VA)            | 4600                           | 5000     | 5500      | 6000     |  |
| Max. cont. Apparent Power (VA)       | 4600                           | 5000     | 5500      | 6000     |  |
| Power factor                         |                                | 1        | .0        |          |  |
| Others                               |                                |          |           |          |  |
| Ingress protection (IP)              | IP65                           |          |           |          |  |
| Protective class                     | Class I                        |          |           |          |  |
| Temperature (°C)                     | -25°C to +60°C (Derating 45°C) |          |           |          |  |
| Inverter Isolation                   | Non-isolated (PV-AC-BAT)       |          |           |          |  |
| Overvoltage category                 | OVC III (AC Main), OVC II (PV) |          |           |          |  |
| Firmware                             | 1.01                           |          |           |          |  |



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**Ratings & Principle Characteristics:** 

| Specifications table                               |                                |                |                                       |                |          |  |
|--|--------------------------------|----------------|---------------------------------------|----------------|----------|--|
| Model  | AF4K-SLP                       | AF4.6K-<br>SLP | AF5K-SLP                              | AF5.5K-<br>SLP | AF6K-SLP |  |
| PV input   |                                |                |                                       |                |          |  |
| P pv Max(W)  | 6000                           | 6900           | 7500                                  | 8300           | 9000     |  |
| Vmax PV (Vdc) (absolute Max.)                      | 550                            | 550            | 550                                   | 550            | 550      |  |
| Isc PV (absolute Max.) (A)                         | 26 x 2                         | 26 x 2         | 26 x 2                                | 26 x 2         | 26 x 2   |  |
| Number MPP trackers                                | 2                              | 2              | 2                                     | 2              | 2        |  |
| Number input strings                               | 1/1                            | 1/1            | 1/1                                   | 1/1            | 1/1      |  |
| Max. PV input current / strings (A)                | 18.5 x 2                       | 18.5 x 2       | 18.5 x 2                              | 18.5 x 2       | 18.5 x 2 |  |
| MPPT voltage range (Vdc)                           | 80-500                         | 80-500         | 80-500                                | 80-500         | 80-500   |  |
| Vdc range @ full power (Vdc)                       | 120-500                        | 130-500        | 150-500                               | 160-500        | 170-500  |  |
| Battery (charge/discharge)                         |                                |                | //                                    | 4 -            |          |  |
| Battery type                                       | Li-ion/Lead-acid etc.          |                |                                       |                |          |  |
| Battery Normal Voltage (Range) (Vdc)               | 400                            |                | 51.2V (40-60V)                        |                | 400      |  |
| Max charge/discharge Current(A)                    | 120                            | 120            | 120                                   | 120            | 120      |  |
| Max charge/discharge Power(W)                      | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| AC Grid (input and output)                         | L/N/PE, 230Vac                 |                |                                       |                |          |  |
| Normal AC Voltage (VAC)                            |                                | L              | · · · · · · · · · · · · · · · · · · · | <i>j</i>       |          |  |
| Frequency (Hz)                                     |                                |                | 50                                    |                |          |  |
| Normal AC Current (A)                              | 17.4                           | 20             | 21.8                                  | 24             | 26.1     |  |
| Max. cont. input/output current (A)                | 19                             | 22             | 23                                    | 26             | 28       |  |
| Rated Power(W)                                     | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Rated Apparent Power (VA)                          | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Max. cont. Power (W)                               | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Max. cont. Apparent Power (VA)                     | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Power factor (adjustable)                          |                                |                | 1.0( -0.8~ +0.8)                      | )              |          |  |
| AC Load output-(stand alone)  Normal Voltage (VAC) |                                |                | /N/DE 220\/a                          |                |          |  |
| Frequency (Hz)                                     | L/N/PE, 230Vac                 |                |                                       |                |          |  |
| Nominal Current(A)                                 | 17.4                           | 20             | 50<br>21.8                            | 24             | 26.1     |  |
| Max. cont. current (A)                             | 19                             | 22             | 23                                    | 26             | 28       |  |
| Max. cont. Power (W)                               | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Max. cont. Apparent Power (VA)                     | 4000                           | 4600           | 5000                                  | 5500           | 6000     |  |
| Power factor                                       | 4000                           | 4000           | 1.0                                   | 0000           | 1 0000   |  |
| Others   |                                |                | 1.0                                   |                |          |  |
|  |                                |                | IDOE                                  |                |          |  |
| Ingress protection (IP)                            | IP65                           |                |                                       |                |          |  |
| Protective class                                   | Class I                        |                |                                       |                |          |  |
| Temperature (℃)                                    | -25°C to +60°C (Derating 45°C) |                |                                       |                |          |  |
| Inverter Isolation                                 | Non-isolated (PV - AC - BAT)   |                |                                       |                |          |  |
| Overvoltage category                               | OVC III (AC Main), OVC II (PV) |                |                                       |                |          |  |
| Firmware   | 1.01                           |                |                                       |                |          |  |