

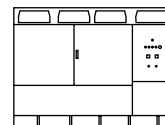


# HEMK

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**Easy maintenance.**  
**Multilevel topology.**  
**Advanced grid support.**  
**Bus Plus. Combine Solar and Storage.**



**COMMON FEATURES**

|                            |                                            |                                                                                                        |
|----------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------|
| AC                         | Operating Grid Frequency (Hz)              | 50 / 60 Hz                                                                                             |
|                            | Current Harmonic Distortion (THDi)         | < 3% per IEEE 519                                                                                      |
|                            | Power Factor (CosPhi) <sup>[2]</sup>       | 0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night                             |
| DC                         | Maximum DC Voltage                         | 1500 V                                                                                                 |
|                            | Number of Inputs                           | Up to 40                                                                                               |
|                            | Number of Freemaq DC/DC <sup>[4]</sup>     | Up to 4                                                                                                |
| EFFICIENCY                 | Efficiency (Max) (η)                       | 98.95%                                                                                                 |
|                            | Euroeta (η)                                | 98.53%                                                                                                 |
| CABINET                    | Dimensions [WxDxH] (ft)                    | 9.8 x 6.5 x 7.5                                                                                        |
|                            | Dimensions [WxDxH] (m)                     | 3.0 x 2.0 x 2.3                                                                                        |
|                            | Weight (lbs)                               | 10365                                                                                                  |
|                            | Weight (kg)                                | 4700                                                                                                   |
|                            | Type of Ventilation                        | Forced air cooling                                                                                     |
| ENVIRONMENT                | Degree of Protection                       | NEMA 3R / IP55                                                                                         |
|                            | Operating Temperature Range <sup>[5]</sup> | From -25 °C to +60 °C, >30 °C power derating                                                           |
|                            | Operating Relative Humidity Range          | From 4% to 100% non-condensing                                                                         |
|                            | Storage Temperature Range                  | From -40 °C to +60 °C                                                                                  |
|                            | Max. Altitude (above sea level)            | 2000 m / >2000 m power derating (max. 4000 m)                                                          |
| CONTROL INTERFACE          | Communication Protocol                     | Modbus TCP                                                                                             |
|                            | Power Plant Controller                     | Optional                                                                                               |
|                            | Keyed ON/OFF Switch                        | Standard                                                                                               |
| PROTECTIONS                | Ground Fault Protection                    | GFDI and isolation monitoring device                                                                   |
|                            | Humidity Control                           | Active heating                                                                                         |
|                            | General AC Protection & Disconn.           | Circuit breaker                                                                                        |
|                            | General DC Protection & Disconn.           | Fuses, Motorized DC disconnect switches                                                                |
|                            | Overvoltage Protection                     | Type 2 protection for AC and DC                                                                        |
| CERTIFICATIONS & STANDARDS | Safety                                     | UL 1741 / CSA 22.2 No.1071-16 / IEC 62109-1 / IEC 62109-2                                              |
|                            | Installation                               | NEC 2023                                                                                               |
|                            | Utility Interconnect <sup>[6]</sup>        | UL 1741 SA & SB / IEEE 1547.1 / IEC 62116 / / G99 / VDE 4110-4120-4130 / CEI 0-16 / NTS 2.1 / EN 50549 |

**REFERENCES**

|    |                                                  |                |
|----|--------------------------------------------------|----------------|
|    |                                                  | <b>FS5000K</b> |
| AC | AC Output Power (kVA/kW) @30 °C <sup>[1]</sup>   | 5030           |
|    | AC Output Power (kVA/kW) @35 °C <sup>[1]</sup>   | 5000           |
|    | AC Output Power (kVA/kW) @40 °C <sup>[1]</sup>   | 4780           |
|    | AC Output Power (kVA/kW) @50 °C <sup>[1]</sup>   | 4345           |
|    | Max. AC Output Current (A) @30 °C                | 4400           |
|    | Operating Grid Voltage (VAC)                     | 660 V ±10%     |
| DC | DC Voltage Range Full Power <sup>[3]</sup>       | 934 V – 1300 V |
|    | Max. DC Continuous Current (A) <sup>[4]</sup>    | 5495           |
|    | Max. DC Short Circuit Current (A) <sup>[4]</sup> | 8000           |

**REFERENCES**

|    |                                                  |                |
|----|--------------------------------------------------|----------------|
|    |                                                  | <b>FS5075K</b> |
| AC | AC Output Power (kVA/kW) @30 °C <sup>[1]</sup>   | 5260           |
|    | AC Output Power (kVA/kW) @35 °C <sup>[1]</sup>   | 5075           |
|    | AC Output Power (kVA/kW) @40 °C <sup>[1]</sup>   | 4860           |
|    | AC Output Power (kVA/kW) @50 °C <sup>[1]</sup>   | 4430           |
|    | Max. AC Output Current (A) @30 °C                | 4400           |
|    | Operating Grid Voltage (VAC)                     | 690 V ±10%     |
| DC | DC Voltage Range Full Power <sup>[3]</sup>       | 976 V – 1300 V |
|    | Max. DC Continuous Current (A) <sup>[4]</sup>    | 5498           |
|    | Max. DC Short Circuit Current (A) <sup>[4]</sup> | 8000           |

**NOTES**

- [1] Values at 1.00-Vac nom and cosφ=1. Consult Power Electronics for derating curves. The maximum AC output power must be limited to meet the P-Q capability requirement at the inverter level of some grid codes.
- [2] Consult P-Q charts available:  $Q(kVar) = \sqrt{(S(kVA))^2 - P(kW)^2}$ .
- [3] Consult Power Electronics for derating curves. In the event of overvoltage in the grid, the minimum DC voltage will vary proportionally with the AC voltage.
- [4] Consult Power Electronics for Freemaq DC/DC connection configurations.
- [5] Optional available for temperatures down to -35 °C.
- [6] Consult Power Electronics for other applicable standards / grid codes.