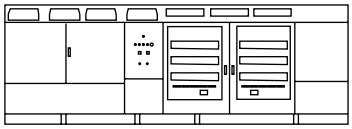
# AIPCSM

## UL

**Millisecond-level response.**
**Ready for highly dynamic AI loads.**
**Grid Forming for enhanced power stability.**
**Modular architecture for maximum availability.**



# AIPCSM
## UL



Preliminary

| REFERENCES | | FP5380MU |
|---|---|---|
| AC | AC Output Power (kVA/kW) @40 °C [1] | 5380 |
| | AC Output Power (kVA/kW) @50 °C [1] | 4910 |
| | Operating Grid Voltage (kV) | 34.5 kV ±10% |
| | Operating Grid Frequency (Hz) | 60 Hz |
| | Current Harmonic Distortion (THDi) | < 3% per IEEE 519 |
| | Power Factor (CosPhi) [2] | 0.5 leading ... 0.5 lagging |
| | Overload Capability | 166% - 100 ms / 150% - 5 s / 120% - 8 s / 110% - 15 s |
| DC [4] | DC Voltage Range [3] | 1019 V – 1500 V |
| | Maximum DC Voltage | 1500 V |
| | DC Voltage Ripple | < 3% |
| | Max. DC Continuous Current (A) | 5586 |
| | Max. DC Short Circuit Current (kA) | 500 kA with a time constant of 1 ms |
| | Battery Technology | All types of batteries (BMS required) |
| EFFICIENCY & AUX. SUPPLY | Efficiency (Max) (η) | 98.03% including MV transformer |
| | CEC (η) | 97.75% including MV transformer |
| CABINET | Dimensions [WxDxH] (ft) | 23.5 x 6.5 x 7.2 |
| | Dimensions [WxDxH] (m) | 7.15 x 2.0 x 2.2 |
| | Weight (lbs) | 32628 |
| | Weight (kg) | 14800 |
| | Type of Ventilation | Forced air cooling |
| ENVIRONMENT | Degree of Protection | NEMA 3R |
| | Operating Temperature Range | From -40 °C to +60 °C, >40 °C power derating (optional below -25 °C) |
| | Operating Relative Humidity Range | From 4% to 100% |
| | Storage Temperature Range | From -40 °C to +60 °C |
| | Max. Altitude (above sea level) | 2000 m |
| CONTROL | Communication Protocol | Modbus TCP |
| | Power Plant Controller | Optional |
| | Keyed ON/OFF Switch | Standard |
| PROTECTIONS | Ground Fault Protection | Insulation monitoring device |
| | Humidity Control | Active heating |
| | General AC Protection & Disconnection | 38 kV MV Switchgear (V) |
| | General DC Protection & Disconnection | High-speed fuses, Motorized DC disconnect switches [5] |
| | Overvoltage Protection | Type II for AC and Type I+II for DC |
| STANDARDS | Safety | UL 1741 / CSA 22.2 No.107.1-16 |
| | Installation | NEC 2023 |
| | Utility Interconnect [6] | UL 1741 SA & SB / IEEE 1547.1 / IEEE 2800 |

NOTES

[1] Values at 1.00·Vac nom and CosPhi=1. Consult Power Electronics for derating curves.
[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] 2 and 4 independent DC inputs available. Consult Power Electronics for further information.
[5] Battery short-circuit disconnection must be done on the battery side.
[6] Consult Power Electronics for other applicable standards/grid codes.

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