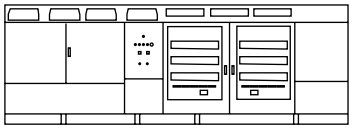
AIPCS 800PS

UL | 800V Power Supply

AI load smoothing.
Future-proof DC architecture.
MV AC → 800 VDC.
High-efficiency AC/DC conversion.



AIPCS 800PS
UL



Preliminary

REFERENCES		FP3660MU
AC	AC Output Power @30 °C [1]	3820 kVA / kW
	AC Output Power @35 °C [1]	3660 kVA / kW
	AC Output Power @40 °C [1]	3500 kVA / kW
	AC Output Power @50 °C [1]	3180 kVA / kW
	Operating Grid Voltage	34.5 kV ±10%
	Operating Grid Frequency	60 Hz
	Current Harmonic Distortion (THDi)	< 3% per IEEE 519
	Power Factor (CosPhi) [2]	0.5 leading ... 0.5 lagging
DC	DC Voltage Range	679 V – 1000 V
	Maximum DC Voltage	1000 V
	DC Voltage Ripple	< 3%
	Max. DC Continuous Current	5743 A
EFFICIENCY & AUX. SUPPLY	Efficiency (Max) (η)	98.00% including MV transformer
CABINET	Footprint dimensions [WxDxH]	21.3 x 6.5 x 7.2 ft
	Footprint dimensions [WxDxH]	6.5 x 2.0 x 2.2 m
	Weight	30865 lbs
	Weight	14000 kg
	Type of Ventilation	Forced air cooling
ENVIRONMENT	Degree of Protection	NEMA 3R
	Operating Temperature Range [3]	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) [4]	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
	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	UL 1741 SA & SB / IEEE 1547.1

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] Optional for temperatures below -25 °C.
[4] Consult Power Electronics for altitudes above 1000 m.

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