

Ampd Silo Energy Storage System

Maintenance-free Li-ion energy storage for mission critical backup



A M P D

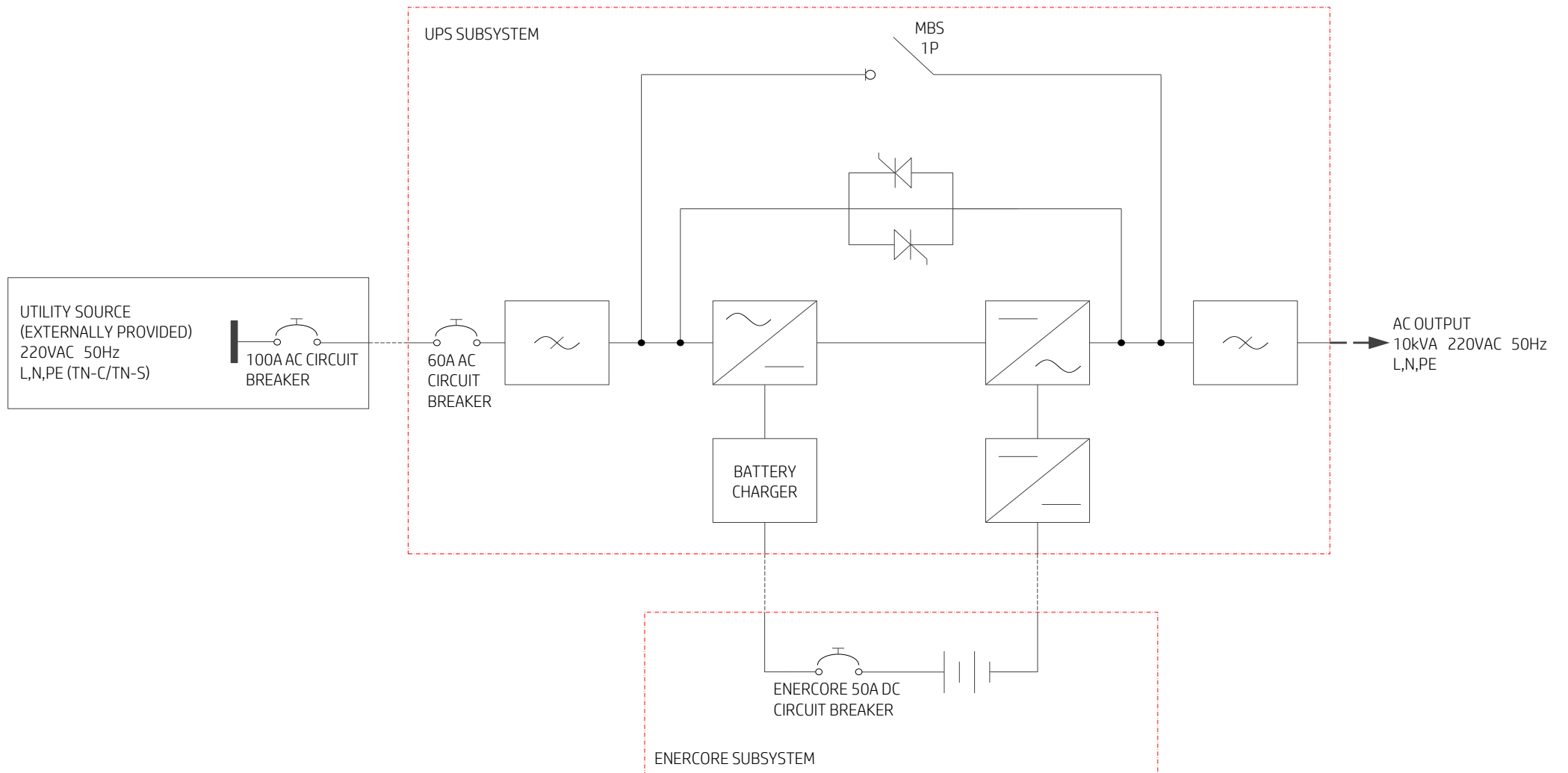
ENERGY

Power to Empower

Ampd Silo

Key Specifications

		Ampd Silo P1	Ampd Silo P3	Ampd Silo P3+
Maximum energy storage capacity		16.8 kWh		
EnerCore configuration		8 x ESM-F battery modules (4 series, 2 parallel)		
Topology		Double conversion, true online, high frequency IGBT based		
Maximum power output		10 kVA / 8 kW	20 kVA / 16 kW	20 kVA / 18 kW
Phase		1 phase in, 1 phase out	3 phase in, 3 phase out	
Input	Min. circuit breaker rating	100 A	80 A	
	Voltage	120 – 276 VAC	208 – 478 VAC	
	Frequency	46 – 64 Hz	40 – 70 Hz	
Output	Voltage	220 / 230 / 240 VAC ± 1%	380 / 400 / 415 VAC ± 1% (3Ph + N + PE)	
	Frequency (in Instant Mode)	50 / 60 Hz ± 0.1 Hz		
	Frequency (in Eco Mode)	Phase locked with input		
	Wave form	Pure sine wave		
	THD	< 3% with linear loads		< 2% with linear loads
	Overload capability	< 105% - 125%: 60 seconds 125% - 135%: 30 seconds >135%: 0.5 seconds		< 110%: 60 minutes 110% - 125%: 10 minutes >150%: 60 seconds
EnerCore subsystem	Configuration	8 x ESM-F battery modules (4 series, 2 parallel)		
	Battery cell	224 x 2.55 Ah, 3.6V Li-ion cells (per EnerCore)		
	Operating voltage range	168.0 – 229.6 VDC (default mode)		
	Max discharge current	70 A (module fuse limited)		
	Max charge current	20 A (electronically limited)		
	Module fuse	300 VDC, 60A, time-delay		
Transfer time (AC to battery mode)		0 ms		
Runtime (8,000 W), default charge		100 minutes		
Runtime (4,000 W), default charge		210 minutes		
Storage & operating environment	General	Indoors, away from direct sunlight, rain, precipitation, condensation and dusty areas		
	Operating temperature range	5 – 40°C		
	Storage temperature range	-10– 40°C		
	Humidity range	0 – 90% (non-condensing)		
Dimensions (H x W x D)		1599 x 600 x 494 mm		
Net weight		223 kg	238 kg	230 kg
Ventilation		Forced air convection		
Parallel scaling		Up to 3 Ampd Silos		Up to 4 Ampd Silos
External connectivity		N/A		SNMP, Modbus (optional add-on module)
Certifications		Designed and tested to UL 9540, UL 1973, UL 1741, CE, IEC and UN standards		
Additional certifications		-		Designed to EMSD ANNEX BSR-BS3-08 specifications



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TITLE:
AMPD SILO P1
INPUT: 1x220/230/240VAC, 50/60Hz
OUTPUT: 1x220/230/240VAC, 50/60Hz
SYSTEM ONE LINE DIAGRAM

SHEET 1 OF 1

DWG NO: SILOP1LVPT2-17

DRAWN: BRANDON NG	21/03/2017
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REV. 1

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