

Cubenergy PowerCombo 20C2H1000KLS | Engineering Technical Specification

AGIM-TEC-2609-0029 · TECHNICAL · v1.0

DOCUMENT ID	AGIM-TEC-2609-0029
TYPE	Technical
VERSION	v1.0
STATUS	Final
CLIENT	EVESCO
PROJECT	PJ2609-0010
UPDATED	2026-10-12
ACCESS	Public Release

Contents

1. Product identity and use 3

2. Electrical and battery data 3

3. Mechanical and environmental basis 4

4. Integrated AC Block boundary 4

5. Mandatory external project scope 4

6. 480 V site interface 5

7. Controls and communications 5

Engineering basis: 20C2H1000KLS-8LS385-6LP48 integrated AC Block · 1,000 kW / 2,315 kWh rated DC · 400 Vac, 50/60 Hz.



Representative Cubenergy PowerCombo product-family image.

1. Product identity and use

ITEM	ENGINEERING BASIS
Manufacturer	Shenzhen Cubenergy Co., Ltd.
Exact configuration	20C2H1000KLS-8LS385-6LP48
System class	20-foot integrated AC/DC containerized BESS
Nominal rating	1,000 kW / 2,315 kWh rated DC
Standard AC interface	400 Vac, three-wire plus PE, 50/60 Hz

2. Electrical and battery data

PARAMETER	TECHNICAL VALUE
Battery chemistry	LFP, 3.2 V / 314 Ah cells
Battery strings	Eight LS385 strings
String configuration	1P288S; 921.6 V nominal
Pack	153.6 V / 314 Ah / 1P48S

PARAMETER	TECHNICAL VALUE
Rated / maximum AC power	1,000 kW / 1,100 kW
Rated AC current	1,443.4 A
Duration ratio	2.315 h based on rated DC energy / rated AC power

3. Mechanical and environmental basis

PARAMETER	TECHNICAL VALUE
Enclosure	IP54, 20-foot outdoor format
Dimensions	6,058 × 2,438 × 2,896 mm
Weight	Up to 26.1 t
Operating temperature	−30 to +50 °C
Thermal management	Liquid cooling plus dehumidification
Fire system	FK-5-1-12 plus water fire-fighting provisions

4. Integrated AC Block boundary

The integrated AC Block includes:

- Eight battery strings and 48 packs
- BMS with string controls and active balancing
- Eight 125 kW PCS modules
- GridPoint Controller
- Internal Power Distribution Unit
- Liquid cooling, dehumidification and environmental controls
- Auxiliary power distribution
- FK-5-1-12 and water fire-fighting provisions
- Internal power and communication wiring

5. Mandatory external project scope

The brochure topology places the transformer and SCADA outside the container:

- 400/480 V transformer or 400 V/medium-voltage step-up transformer
- LV/MV switchgear, bus, disconnects, grounding and protection
- Revenue metering and CTs
- Site EMS/SCADA and plant/utility dispatch integration
- External UPS; the GPC shows only a reserved UPS connection
- Fire-alarm panel and external fire-water supply/piping
- Foundation, clearances, drainage, grounding grid and external cabling
- Transport, insurance, customs, unloading, crane and rigging
- Installation, commissioning, SAT, performance testing, EOR and permitting

6. 480 V site interface

The standard rating is **400 Vac**, with a documented optional grid range of 340–440 V. Connection to a 480 V North American bus uses a project transformer and associated switchgear.

Interface considerations:

- Transformer ratio, impedance, vector group and grounding
- LV current, bus rating and short-circuit duty
- MV interconnection protection and coordination
- Harmonics, power factor, reactive capability and utility functions
- Auxiliary power and UPS architecture
- POI metering, EMS authority and dispatch communications

7. Controls and communications

- RS-485 and Ethernet interfaces
- BMS communications described as Modbus RTU/TCP
- GPC is included; site EMS/SCADA is external

Prepared by AGI&M ASSETS INC. · Engineering Technical Specification · Version 1.0