EXCEN
ATEX TECHNOLOGY
We Turn Risks Into Safe Solutions

ATEX & IECEx
NRG 3K - UPS System



Picture is for reference purposes only and
includes power distribution and system by-pass (options)

In environments where failure is not an option, EXCEN **ATEX & IECEx Certified UPS system** provides a reliable **backup power** solution for **hazardous areas (Zone 1, Zone 2, Zone 21 & Zone 22)**. Designed in a standard configuration, **up to 6 kVA** (refer to the thermal derating table) to ensure continuous and stable power supply.

Particularly suited for instrumentation, control, and auxiliary systems requiring reliable backup power during power outages or main power fluctuations, featuring a fast transfer time (≤ 15ms). The unit features a highly rugged **IP66 protection** rating and operates reliably across a **wide ambient temperature range**

Mounted on a robust frame, the system features a **modular design** adaptable to your application.
A **glass inspection window** allows immediate visualization of system status and alarms.

Supplied as a **ready-to-install solution**, complete with **ATEX & IECEx Certified battery** in stainless steel enclosure**, AGM, GEL or NiCd technology**, ensuring long service life and high reliability.
A dedicated **Battery breaker** between UPS and battery guarantees maximum safety and easy maintenance.

Input voltage and frequency:	150 to 265 Vac /50 to 140 Vac and 45 to 65 Hz
Output voltage:	pure sine wave 230 Vac (± 2%) / 120 Vac
Output frequency:	50 Hz ± 0.05% (crystal controlled) 45-65 Hz programmable

Customized options with different power and input/output ratings are available upon request.

■ Optional on Request

- Copper free aluminum or SS316L Exd enclosures
- Protective coatings to enhance corrosion resistance in harsh conditions
- Power distribution
- System by-pass

■ Typical Applications

- Oil & Gas facilities (onshore / offshore platforms)
- Chemical and petrochemical plants
- Refineries and process industries
- Emergency shutdown systems (ESD)
- Fire & gas detection systems
- Power distribution and automation systems
- Critical backup for safety-related equipment

EXCEN Srl
Via Marcora, 61/69
20097 S. Donato Milanese (MI) Italy
Phone (+39) 02.51.80.04.29
sales@excen.it | www.excen.it

Thermal Derating — Maximum Output Power vs. Ambient Temperature

Max Power (VA)	Max ambient temperature									
	20°C	25°C	30°C	35°C	40°C	42°C	45°C	48°C	50°C	55°C
500										
1000										
1500										
2000										
2500										
3000										
5000										
6000										

Reduced operation or not recommended.

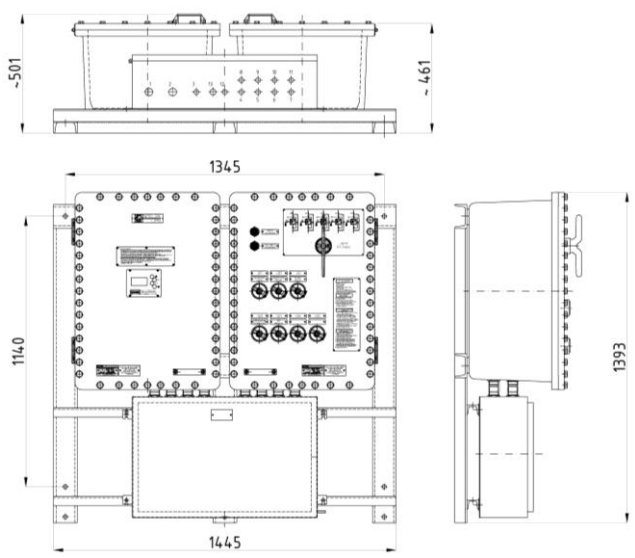
Battery Backup Autonomy

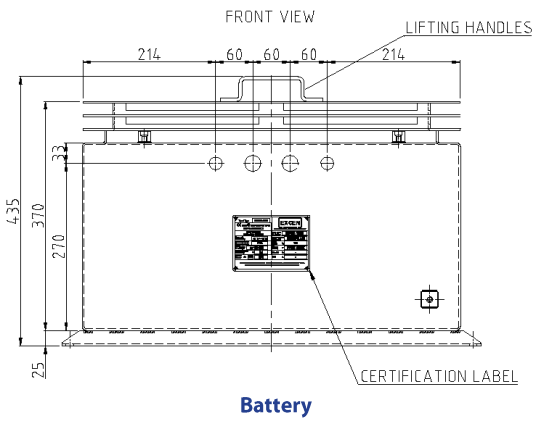
Estimated backup time with battery bank 48 VDC — 205 Ah. Temperature: 25°C.

Rated Load (VA)	Estimated Backup Time
500	15 h 00 min
1,000	7 h 30 min
1,500	4 h 30 min
2,000	3 h 15 min
2,500	2 h 30 min
3,000	2 h 00 min
5,000	1 h 00 min
6,000	0 h 45 min

Note: Actual backup time may vary depending on inverter cut-off voltage threshold, battery age, temperature, and real efficiency.

Example Drawing and dimensions (UPS complete with distribution and bypass - options)





Battery