AEG

POWER
SOLUTIONS

PROTECT 8 S10

Industrial UPS with highly flexible configuration
10 – 120 kVA

Input 380 / 400 / 415 VAC 3 phase
Output 380 / 400 / 415 VAC 3 phase
220 / 230 / 240 VAC 1 phase

Other input/output values available on request

Industrial UPS with a modular building block architecture
The state-of-the-art, double conversion topology and "building block" design of the Protect 8 Uninterruptible Power Supply (UPS) series is flexible. The system ensures the continuous availability of power and safe operations for all types of critical load. In the Protect 8 range, the S10 system meets practically all conceivable requirements to secure power for highly demanding applications in heavy industries or infrastructures and is suitable for use in harsh environments. Protect 8 concept is continuously further developed, as we learn through experience. With an expected lifetime at least 20 years, the Protect 8 is a robust and cost – effective solution, optimized for minimal operating costs.

Typical applications
For all industrial applications
- Oil & Gas
- Petrochemical
- Power generation
- Transportation
- Heavy industry

FEATURES

- Redundant parallel operation
- High efficiency
- Potential free output voltage
- Electrical galvanic isolation with low noise level
- Full redundant control architecture
- Very fast dynamic response time
- Output short circuit proof
- Wide range of ratings with IP protection up to 43 as standard
- EMC immunity and emission better than IEC 62040
- 18 imbedded languages as standard
- Low voltage ripple to prolong battery life time
- Intelligent battery charge and monitoring control
- **Lithium Ion Battery charging options ready and available**

BENEFITS

- Dedicated to very harsh environments
- Robust and reliable solution suitable for stringent seismic spectrums, high humidity level and temperature range, able to operate up to 4000 m above sea level
- **Highly flexible configuration**
- High short-circuit resistance
- High overload capability protection
- Long life time
- Easy to operate
- Complies with all relevant international standards
- Easy service for more than 20 years of life span

Specifications

RECTIFIER UNIT		
Nominal DC voltage	108 V	216 V
Nominal AC voltage	3 x 400 V (3 x 380 V, 3 x 415 V)*	
Input frequency range	50 / 60 Hz ±10 %	
Operation range (min. / max.)	340 V – 460 V	
Input current in A at nominal load	17 – 102 A	18 – 200 A
Rectifier type		
– Standard	6 pulse	
– Option	Filter / 12 pulse	
INVERTER UNIT		
DC Input	108 V ±20 %	216 V ±20 %
@3 phase output voltage configuration		
– Nominal AC voltage in V	3 x 400 V (3 x 380 V, 3 x 415 V)*	
– Nominal output current in A	14 – 87 A	14 – 173 A
– Nominal power in kVA	10 – 60 kVA	10 – 120 kVA
@1 phase output voltage configuration		
– Nominal AC voltage in V	230 V (220 V, 240 V)*	
– Nominal output current in A	22 – 261 A	43 – 522 A
– Nominal power in kVA	5 – 60 kVA	10 – 120 kVA
Output voltage static response	< ±1 %	
Output voltage dynamic response	< ±2 %	
Recovery time	2 ms	
Frequency	50/60 Hz	
Frequency static tolerance	±0.1 %	
Frequency synchronization range	±1 % (±2 %, ±3 %)	
Power factor at nominal load	Cos φ 0.8	
Voltage wave form	Sinusoidal	
Crest factor	≤3	
Overload response 1 min.	150 %	
Overload response 10 min.	125 %	
Short circuit response	≤3 Inominal	
STATIC BYPASS SWITCH		
Nominal AC voltage (@ 3 phase output)	3 x 400 V (3 x 380 V, 3 x 415 V)*	
Nominal AC voltage (@ 1 phase output)	230 V (220 V, 240 V)*	
Nominal Frequency	50/60 Hz	
GENERAL DATA		
Efficiency depending on rating	Up to 90 % / >95 % with ECO Mode	
Degree of protection	IP20 (option up to IP43)*	
Noise level depending on rating	<62 – 70 dB (A)	
Color	RAL 7035	
Operation temperature	-10 °C to 40 °C (without derating)	
Storage temperature	-30 °C to 75 °C	
Maximum altitude without derating	1000 m	
STANDARDS		
Safety	IEC 62040 - 1	
EMC immunity and emission	IEC 62040 - 2	
Performance	IEC 62040 - 3	
CE marking	Yes	

*other on request