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

**AEG Power Solutions**

Approach your local AEG Power Solutions representative for further support. Contact details can be found on: www.aegps.com