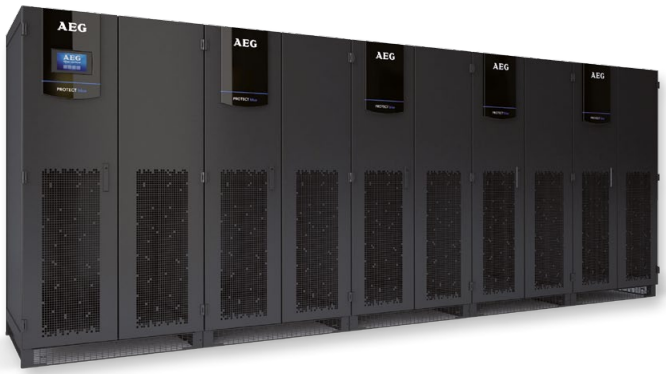
PROTECT BLUE

SCALABLE ARCHITECTURE



Three phase UPS

3 level IGBT technology

250 – 4000 kW* power supply

High efficiency, state-of-the-art high power UPS for data centers

The UPS series Protect Blue by AEG Power Solutions offers a highly efficient, highly reliable UPS solution for large data centers and IT applications in power ranges up to 4 MW.

Created for the future of power supply

In times of constantly increasing energy prices, Protect Blue helps reduce the costs for operation and cooling to a great extent through high efficiency.

Modular architecture, flexible performance and maximum redundancy

Protect Blue is based on a 250 kW power block architecture that can be configured with parallel operation to meet high power requirements (up to 4000 kW); n+1 redundancy operation is also possible. All "Power Blocks" are equipped with decentralized control mechanisms to increase operational safety.

Highest efficiency during online operation

Protect Blue is transformer-less, works with the latest 3 level IGBT technology and therefore typically reaches an efficiency level of up to 95.5 % (in double conversion, VFI). Protect Blue combines all the advantages of this technology, such as low input THDi <3 %, high input power factor >0.99 and output power factor up to 1.

Main characteristics

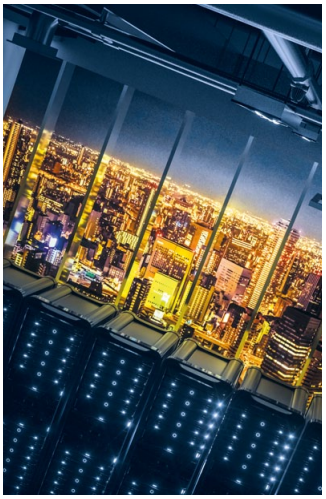
- Flexible power configuration from 250 kW
- Parallel switching up to 4 MW
- Developed for tomorrow's power supply system: need- and price-oriented energy management
- High operating security through a flexible redundancy concept
- Highest possible typical efficiency of up to 95.5 % during genuine "online" operation
- Three operating modes available: double conversion (VFI), ECO mode (VFD) and Idle mode
- Low input THDi <3 %
- Output power factor up to 1
- Intuitive 7" touch screen
- Front access to all important components
- Wall assembly possible
- Extensive communication options
- Highest reliability based on quality components and many years of AEG PS industry experience
- Unique AeBM battery management system maintains the battery

** In parallel mode*

AEG
POWER SOLUTIONS

PROTECT BLUE

TECHNICAL DATA



Classification VFI SS 111 acc. to IEC 62040-3	Protect Blue				
POWER RATING					
Nominal apparent power (kVA)	250	500	750	1000	1250
Nominal active power @ PF = 1 (kW)	250	500	750	1000	1250
Nominal active power @ PF = 0.9 (kW)	225	450	675	900	1125
SYSTEM					
Nominal input current (with nominal input voltage and at output PF = 0.9) (A)	383	766	1149	1532	1915
AC/AC efficiency (VFI SS 111)	Up to 95.5 %				
UPS INPUT					
Nominal voltage	3 x 400 V, 3 Phase + N				
Input voltage range	380/400/415 V; ±10 %				
Frequency	50 Hz / 60 Hz (adjustable)				
Total harmonic distortion (THDi)*	≤3 %				
Power factor	>0.99				
INVERTER					
Nominal voltage	3 x 400 V (380 V, 415 V adjustable), 3 phase + neutral				
Frequency	50 Hz / 60 Hz (adjustable)				
Precision static/dynamic	±1 % / ±5 %				
Total harmonic distortion (for linear load)	<3 %				
Overload capacity*	@ p.f. 0.8, 125 % for 10 min., 150 % for 30 s				
Crest factor	3 : 1				
Short circuit current response*	270 % of nominal current for 100 ms				
Admissible power factor (without derating)	From 0.1 inductive to 0.1 capacitive, up to 1				
BATTERY					
Rated voltage	480 VDC				
Charging characteristics per DIN 41773	IU				
STATIC BYPASS					
Nominal voltage	3 x 400 V (380, 415 V adjustable), 3 phase + neutral				
Frequency	50 Hz / 60 Hz (adjustable)				
Synchronization range	±1 % to ±3 %				
Transfer time at mains outage	0 ms (without interruption)				
Admissible overload*	1000 % for 20 ms				
GENERAL DATA					
Parallel mode	Up to 4 MW with multiple arrays				
Audible noise	80 dB(A) dependent on equipment installed and load state				
Operating temperature range/humidity	0° – 40 °C / <95 % (without condensation)				
Protection	IP20				
Color	RAL 9005				
Cable entry	Power Block: bottom; CSP: bottom (standard)/top (option)				
Environmental conditions	Free from corrosive air and conductive dust				
COMMUNICATION					
Display	7" graphical LCD touch screen				
Alarm signals	Acoustic and visual				
Interfaces	Remote signal contact, RS232 / 485, SNMP, Modbus, Profibus, BACnet, COM server				
DIMENSIONS (POWER BLOCKS ONLY, WITHOUT CSP)					
Dimensions H x W x D (mm)	1915 x 1000 x 960	1915 x 2000 x 960	1915 x 3000 x 960	1915 x 4000 x 960	1915 x 5000 x 960
Footprint (m²)	0.96	1.92	2.88	3.84	4.80
Weight (kg)	897	1794	2691	3588	4485

* Conditions apply

AEG Power Solutions

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

www.aegps.com

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