

AEG

POWER
SOLUTIONS

POWER COMPETENCES FOR NUCLEAR APPLICATIONS



NUCLEAR POWER APPLICATIONS

Reliable solutions for today's energy sector

Our references

- NPP Mochovce, Slovakia, Switch Mode AC 7000, 2015
- NPP Leibstadt, Switzerland, Inverter Transokraft, 2015
- NPP Bohunice, Slovakia, Charger Profitec, 2014
- NPP Doel, Belgium, Charger Profitec, 2014
- NPP Ling Ao, China, Inverter Transokraft, 2014
- NPP Taishan, China, Switch modes AC 7000, AC 2000, DC 2000, 2014
- NPP Flamanville, France, Switch modes AC 7000, AC 2000, 2014
- NPP Grafenrheinfeld, Germany, Charger Profitec, 2014
- NPP Loviisa, Finland, Charger Profitec, 2013
- NPP Atucha 2, Argentina, Profitec S, 2012
- NPP Gösgen, Switzerland, Transokraft, 2010
- NPP Forsmark, Sweden, Inverter Transokraft, Switch mode AC 7000, 2010
- NPP Olkiluoto 3, Finland, Inverter Transokraft, 2009

and many more ...

AEG Power Solutions has a long and reliable history in nuclear applications; our NPP specialists have been assisting Nuclear power plants around the world since 1970. For the nuclear industry, AEG PS provides reliable standard and customized power system solutions, particularly UPS, chargers and converters, ensuring continuous power for 1E equipment. In addition to our NPP equipment production site located in Germany, we support projects and provide service related to the entire design process, including theoretical and/or experimental verification of EMC, environmental and seismic requirements.

Our mission is to maintain our position as one of the world's leading power solutions companies, and to continue to deliver outstanding service,

innovative products and customizable, robust and reliable solutions; that meet the demands of today's energy provision and prepares for tomorrow's challenges.

To fulfill these demands, AEG Power Solutions owns a wide range of Class 1E equipment such as inverters, chargers, UPS and converters.

Our NPP specialists are involved within all areas of a project – from the power solution selection and quote, to your installation. Throughout the entire process, our specialists will be on hand providing the engineering solutions for all your mechanical and electrical needs. AEG Power Solutions is one of the highest qualified suppliers of nuclear equipment.





Pure analogue – a wide range of Class 1E equipment Our products are specifically designed for use in NPP's

For nuclear applications, we provide equipment that is designed with analogue components only – no software is used. This separate design process, results in the highest quality equipment with the greatest reliability and the longest lifetime.

Profitec S N1

The analogue charger product range Profitec S N1 covers most variations of input and output voltages with different currents.

In its standard layout, we provide a natural air cooled B6C Thyristor bridge, resulting in low maintenance costs and the highest reliability. When needed, the charger can be fully equipped with our patented overvoltage limiter which was invented in partnership with several NPP operators or with a diagnostic interface (100% analogue).

- Input voltages
230/240/380/400/415/525/ 660/690 VAC
- Output voltages
24 /4-8/60/110/125/ 220 / 250 VDC
- Output currents from 30 – 2500 A

Transokraft

This is our inverter product range and consists of inverters with one or three phase output and with or without a static bypass switch. The inverters control and regulation is designed fully analogue as well. For completion of your inverter system we also provide customized distribution boards, bypass transformers cabinets and stabilizers.

Since the supplying charger does not contain Forsmark limitation components, the inverter is designed to withstand transient DC overvoltage >1,5x nominal DC voltage. Together with our charger Profitec S N1, we provide a complete UPS system.

- Input voltages
110/125/220/230 VDC
- Output voltages
110/125/220/230/240/380/400/415 VAC
- Output ratings from 10 – 400 kVA

Switch mode rectifiers & converters

For a secure supply for I&C we have designed a wide range of analogue switch modes containing the products DC 2000, AC 2000 and AC 7000.

Multiple modules can run in parallel in one cabinet and even mixed cabinet configurations for e.g. AC/DC and DC/DC are available.

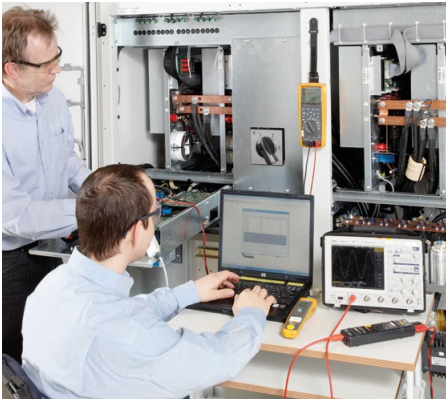
AC/DC:

- Input voltages
220/230/240/380/400/415 VAC
- Output voltages
24/4-8/60/110/125/220 VDC
- Output current from 10 – 220 A

DC/DC:

- Input voltages 110/220 VDC
- Output voltages 24/4-8/60 VDC
- Output current from 10 – 100 A

For all our products we offer diagnostic equipment which enables the operator to check, validate and/or correct all important equipment settings without touching the cabling of the product. This ability reduces the operational costs for the NPP owner.



Complete project handling

In addition to our products being designed and manufactured in Germany, we provide complete competences around the entire project including handling the qualification process, project management, installation, electrical testing and documentation.

Qualification and certification

Depending upon the specific need we have qualification certificates according to RCCE, IEEE and KTA requirements.

Depending upon the project requirement, we provide special qualification processes for seismic, EMC, ageing or electrical testing as needed. We are knowledgeable of most applicable standards and have relationships with many laboratories in Germany and around the world.

We provide qualification and perform test programs and equipment according to the necessary standards and norms.

Reliable and dedicated service

With over 60 years of expertise in power systems and solutions, AEG Power Solutions is renowned for its unparalleled service and technical support for critical application environments. As a world class system provider, you can rely on our global network of 20 Service Centers supported by over 150 field engineers and more than 100 certified service partners from around the world.

From the power solution selection to your process installation and commissioning, our certified experts go beyond your expectations by offering service excellence that will ensure the lowest operational cost for your mission-critical equipment. The reliability of your installed power solution is supported by a Global Service Team renowned for its short response time and trouble shooting efficiency.

Defined quality

Our processes, rules and regulations are defined in the certified quality management handbook. The quality management handbook is supported by various quality- production- and service certificates.



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