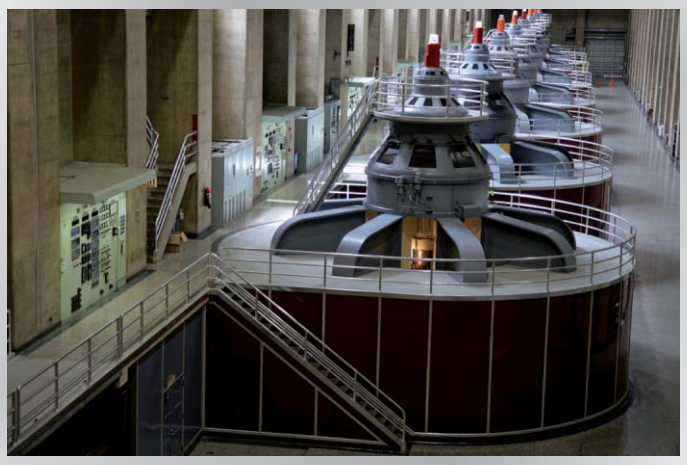
Power Systems Solutions

Excitation Systems
Voltage Regulators
Protective Relays
Genset/Engine Controllers



Proven Worldwide

Basler Electric

Power Systems Solutions

Excitation Systems

Basler Electric is a full-line supplier of excitation systems that offers standard and custom solutions for the complete range of applications and performance requirements worldwide. Our goal is to supply superior equipment to exceed expectations and provide the best possible customer service. This includes support for Westinghouse Distribution & Controls legacy products which originated in the mid 1920s. Our comprehensive technology and accumulated design experience places Basler in a leading position to provide excitation systems for any new generator installations or retrofit applications.

Voltage Regulators

Basler Electric manufactures a complete line of automatic voltage regulators using analog or microprocessor-based technology. These units range from simple voltage regulators to complex excitation systems and provide precision control of virtually any size generator, whether it is applied for standby power or prime power. Basler Electric has reliable, high performance voltage regulators to meet the needs of any application, including distributed generation, cogeneration, and peak shaving.

Genset/Engine Controllers

These products offer a wide range of functionality to support genset and industrial engine applications. The DGC-2020 is a very flexible device with genset control, metering, protection, and paralleled genset control. The IEM-2020 addresses the unique functionality requirements of industrial engine control for pump and compressor applications, although other applications will be supported by this extremely flexible product. A comprehensive programmable logic program adds functionality and reduces the overall installed cost of any genset or industrial engine.

Protective Relays

Basler offers both BE1 utility grade relays and BE3 industrial grade relays for basic protection. The BE1 utility grade relays are designed to operate in harsh electrical environments and meet or exceed all applicable ANSI/IEEE and IEC standards. They can easily be applied for feeder, intertie, bus, transformer, motor, and generator protection. Solid state, single function BE1 relays are available for applications in, and upgrades to, existing schemes. BE1 Numeric Relay Systems combine multifunction protection with control, metering, sequence of events reporting, oscillography, data acquisition, and communications.

At the heart of the digital excitation system are microprocessor-based controllers that provide precise excitation control and configurable logic with the option of incorporating an integrated power system stabilizer. The DECS-400 and DECS-2100 controllers adjust the output of external bridge(s) and monitor machine parameters to control, limit, and protect the synchronous motor or generator from operating beyond its capability. Multiple controllers, capable of continuous operation in excess of 10,000A with excitation forcing levels up to 1500Vdc, allow for backup and supervisory control schemes and offer rectifier bridges with drawout provisions for on-line maintenance.

The DECS line of microprocessor-based voltage regulators are complete excitation systems that include essential features like 0.25% voltage regulation and PID control for enhanced system response. They include all of the high end functions, such as over/under excitation limiters, VAR/PF control, generator protection, annunciation of generator system conditions, and Modbus™ communications. Pulse Width Modulated power stages help with non-linear loads, and Negative Forcing power stages help with power system stability. These devices are the ultimate in functionality, flexibility, and adaptability.

The DGC-2020 and IEM-2020 have expansion modules so that the user can customize the controller to meet any application's objectives. Available expansion modules include the LSM-2020 for kW load sharing and Ethernet communications, the CEM-2020/CEM-2020H for contact input/output expansion, and the AEM-2020 for adding analog inputs from RTD, thermocouples, transducers or other analog inputs. The DGC-2020 and its modules are easy to use, reliable, rugged, and designed for extreme environments. Other options include automatic synchronizers, dial out/in modems, and RS-485 Modbus™ communications.

Basler's retrofit relays provide economical alternatives to replacing or modifying existing panels. Direct "plug and play" relays utilize the existing case of several of the most common electromechanical overcurrent and reclosing relays, including IAC, SFC, CO, COM, ACR, and NLR. Basler's latest expansion of the BE1-50/51B is the addition of arc flash protection. Basler's solid state and numeric relay systems come in multiple case configurations that fit into the cutout of aging relays and simply need to be rewired. The numeric relay systems provide additional control and protective functions, programmable logic, and more I/O for protection upgrades.

Excitation Systems

Basler is known as the Retrofit Expert for aging rotary excited systems. The Basler Solution provides significant advantages in performance, efficiency, and reduced maintenance. We also add value in upgrading existing analog voltage regulator systems with a multifunction stand-alone controller or with the addition of a redundant digital controller. All related accessories can be supplied on a pan chassis for an existing cubicle, or a complete new system can be designed and provided in its own cabinet. Many Application Notes are available to outline specific models, plants, and equipment that have been retrofitted.

Voltage Regulators

Basler Electric is the leader in voltage regulation, having been the pioneer in voltage regulators, with one of the first solid state devices ever made. The line continues to grow, with modern high performance, value packed designs. Today's affordable analog voltage regulators offer high performance and value in one of the most rugged hardware packages on the market, making them the most flexible and dependable devices available for your application.

Genset/Engine Controllers

Many genset applications require remote annunciation to meet NFPA110 Level 1 requirements. Basler Electric's RDP-110 remote display panel provides annunciation of 17 alarm conditions up to 4,000 feet away from the genset. By only requiring 4 wires for operation, installation is much easier and more cost-effective than with conventional annunciation panels. The RDP-110 is available in wall cavity or flush mounting configurations to fit any installation.

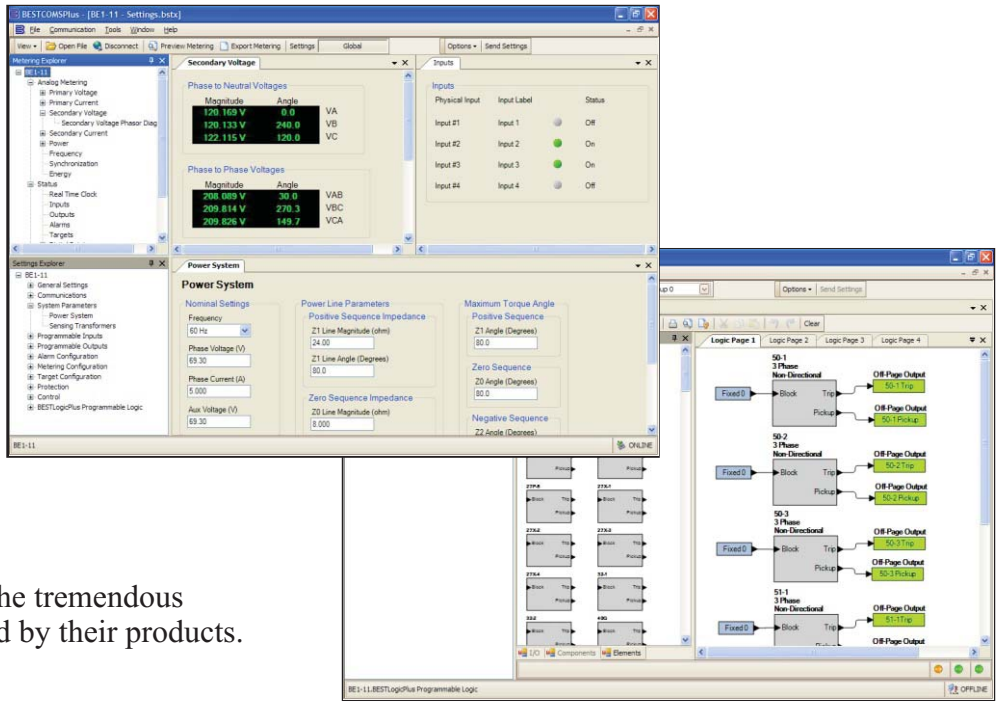
Protective Relays

The BESTNet option connects your relays to the wired world. It provides metering and status web pages, settings, and configuration via Ethernet, and e-mail notification of as many as eight user-defined events. The embedded web server with metering, status, and fault summary information sends e-mail alerts of user-defined conditions. Full BESTCOMS™ support includes IP Discovery function and over Ethernet Support for DHCP or static IP addressing. These features are currently available on BE1-11*f,* BE1-11*i*, BE1-11*g*, BE1-11*m*, BE1-700 Series, and BE1-1051 relays.

The Industry's BEST Software Solutions

BESTCOMS™ is an easy-to-use graphical user interface for setting, monitoring, and communicating with Basler devices. This Windows® based point-and-click tool makes file creation easy and reduces the learning curve. DECS devices include a PID stability program that can save hours of simulation.

Several of Basler Electric's products are equipped with BESTCOMS*Plus*™. This enhanced version adds functionality and BESTLogic*Plus*, with additional logic elements and drag-and-drop capability for developing sophisticated logic schemes.



Basler's software increases the tremendous flexibility and value provided by their products.

Quality

Basler facilities in Highland, Illinois USA; Taylor, Texas USA; Wasselonne, France; and Suzhou, China are ISO 9001:2008 certified. Basler's Quality Policy is applied to all of its manufacturing facilities and uses a Quality System designed to comply with the requirements of ISO Standard 9001.

ISO 9001-2008
Highland, IL USA
Taylor, TX USA
Wasselonne, France
Suzhou, China

The system stresses problem prevention, continuous process improvement, and compliance to well-documented procedures. Basler products meet applicable agency standards, depending on application, geographic, or market requirements. These can include UL, CSA, CE, GOST-R, DNV and ABS.

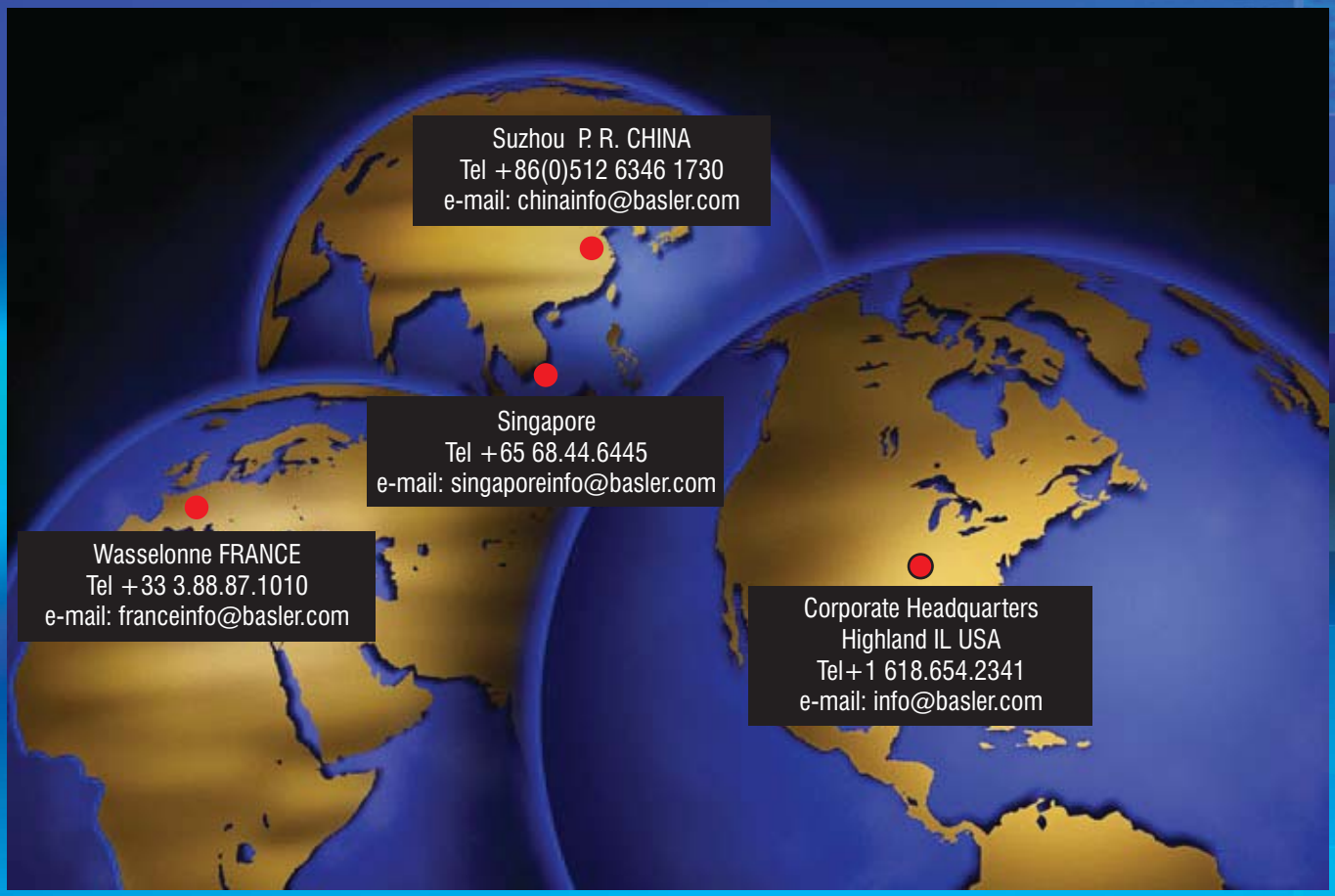
Custom Transformers

Basler's Magnetic Product Group, with transformers ranging from 5VA to 2800kVA, provides complete support from design to delivery. Our transformers are produced in North America and supplied to OEMs in markets such as HVAC, UPS, medical, music amplification, beverage dispensing, broadcast communication, and lighting controls. Comprehensive mechanical

engineering and machine shop capabilities allow Basler to advance simple magnetics into complex "value-added assemblies" through the incorporation of sheet metal, termination schemes, and additional components. This provides a complete drop-in solution, thus freeing our customers' resources to focus on their core competencies.

Corporate Overview

From a small beginning in 1942, Basler Electric now has a global presence and a reputation for high quality, reliable products and precision manufacturing. Basler employees concentrate on solutions to meet customer needs and exceed their expectations. A privately held corporation, Basler is under second and third generation ownership, with Corporate headquarters in Highland, Illinois, and facilities in Taylor, Texas; Piedras Negras, Mexico; Wasselonne, France; Suzhou, China; and Singapore.



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