

## PRESS RELEASE

### On the way to Industry 4.0

#### Innovative thermal management solutions with cloud-based remote monitoring

**Hamburg, 24 November 2015.** Electrical equipment specialist Pfannenberg is unveiling a thermal management solution with cloud-based remote monitoring at this year's SPS IPC Drives in Nuremberg, Germany. Communication is provided by a compact device with an integrated SIM card, which receives the relevant data from the connected cooling units via Modbus and transmits it to the cloud over a secure mobile telecommunication link without any need for access to the company's IT infrastructure. The solution developed in cooperation with T-Systems enables users or systems to retrieve status data, diagnostic information and alarm notifications from the cooling units, live and independent of location, through a web browser, or to integrate the data directly into their applications. From 24 to 26 November visitors have the opportunity to see a working model on display at Stand 339 in Hall 5, and discuss this innovative thermal management solution with experts from Pfannenberg to learn more about its functionality and deployment options.



Caption: A step in the direction of networked production: Pfannenberg cooling units with cloud-based remote monitoring

“The smart factory is the wave of the future. As an innovative medium-size company with over 190 patents worldwide, making our cooling solutions fit for networked products is a natural choice”, says Andreas Pfannenberg, Managing Director of the Pfannenberg Group. “With the premium controllers of the newest generation, our

cooling units are able to provide a wealth of relevant data. Thanks to the cloud solution, employees in production management, the service department or the maintenance department, as well as higher-level monitoring systems, receive information about possible malfunctions or imminent failures promptly, wherever they are. This enables them to respond quickly before a serious incident occurs, which helps increase machine availability.”

### **Next-generation thermal management**

The thermal management demo system on display at the trade show consists of a two-compartment switchgear cabinet with a semi-recessed DTI cooling unit on one side and another semi-recessed PWI series air/water heat exchanger on the other side, each equipped with a premium controller. There are three heaters in each of the cabinet compartments, which can be turned on individually at the front using door-mounted switches to simulate heat loads. On an external monitor visitors can observe how the cooling unit reacts to changes in the heat load or opening of the cabinet door.

### **New application-specific chiller systems**

Another highlight at the stand is the updated energy-efficient chiller, which is part of the EB 2.0 series. With revamped case sizes, they now cover the power ranges of 3.2 to 9.5 kW and 14 to 16 kW. The new design with a full metal enclosure makes it easier for manufacturers to design the chillers into their machines. An integrated microchannel condenser also reduces the required refrigerant volume, and the modified interior layout improves accessibility for service personnel. In addition, Pfannenberger offers customers the option of application-specific chiller design directly on site.

### **Top-mounted cooling units: more space and lower cost**

With regard to thermal management, the focus at the fair is on the latest generation of top-mounted DTT cooling units, which can be fitted compactly on all common switchgear cabinets. Placement on top of the cabinet frees up valuable space in other areas and allows better utilisation of small rooms. DTT cooling units are therefore particularly suitable for applications where space is tight or where escape

routes and production paths must be kept clear. They also offer full condensate protection and feature optimised operational energy efficiency as well as effective cooling of the entire cabinet interior.

Also on display at the stand is the compact PFH-T series of energy-efficient heaters with an adjustable thermostat, which feature outstanding power density and heating capacities from 200 to 1,200 W in the same compact housing.

### **Maximum signaling range**

To achieve the greatest possible safety, visual and audible warnings and alarms must reliably reach everyone on site in every corner of a room. A critical consideration in the planning of signalling systems is therefore precise knowledge of the actual coverage area of the devices, in addition to the sound pressure level or luminous intensity of the individual units.

For example, the flashing lights in the Pyra series are suitable for ceiling heights up to 13.5 metres. The pyramidal Pyra-MA flashing sounder alarm device was also honoured with the Red Dot Design Award this year. Pfannenberg is presenting high-performance signaling solutions that significantly reduce the number of signaling devices needed by users.

### **Planning security with fire alarm systems**

Pfannenberg is furthermore presenting the Patrol series of audible signaling devices for fire alarm systems, which fulfil the requirements of EN 54-3 and conform to VdS specifications. These sounder devices simplify project engineering for architects and planners and ensure smooth acceptance of fire alarm systems. In addition, Pfannenberg is presenting its solutions for the functional safety of industrial plants and equipment.

### **Risk minimisation in machine and system operation**

With the SIP/PL-compliant audible alarms in the DS series or flashing lights in the Quadro and PMF series, plant operators can ensure alarm signaling complying with the recently amended EU Seveso III directive. This directive obliges users to take

precautions to prevent fault incidents and to equip plant areas with adequate warning, alarm and safety devices.

Another aid to safety in the machinery area is the modular BR50 signal tower, which can be deployed wherever there is a need for machine status indication and warning signals. Thanks to its sturdy IP54 enclosure (optionally IP55), it can be used both indoors and outdoors as well as in harsh environments. The flexible modular design allows users to customise their signal tower with up to five different modules choosing from six hood colours.

### **About Pfannenberg**

Pfannenberg is a medium-sized company which provides innovative and high-quality electro-technology for industry. Today, the company belongs to the global players of this industry with its headquarters in Hamburg, Germany and its locations in Brazil, China, England, France, Italy, Russia, Singapore and the USA. The product portfolio comprises components and system solutions for the thermal management of electrical enclosures, chillers, visible and audible signaling technology and custom solutions. A special highlight in the Pfannenberg portfolio is the designed illuminations which are commissioned by architects, designers, and urban and spatial planners ([www.art-illumination.com](http://www.art-illumination.com)).

You can find more information about Pfannenberg on: <http://www.pfannenberg.com>

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