

VAC sensors in Nuremberg:

VACUUMSCHMELZE presents new additions to its current sensor range at PCIM 2012

Press contact:

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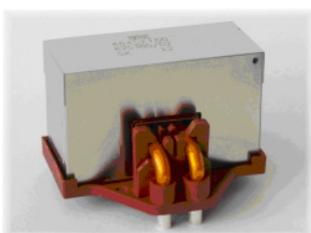
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Hanau / Frankfurt - The "Cores and Components" division of VACUUMSCHMELZE GmbH & Co. KG will present a selection of its current sensors at the 2012 PCIM in Nuremberg from 8th to 10th May. At Stand 307 in Hall 11, the Hanau-based company will demonstrate its materials expertise in the fields of future technologies and clean energy. Products on show include a range of current sensors from its comprehensive portfolio. In addition, Klaus Reichert will hold a presentation entitled "Current Sensors in Power Electronics" at the exhibition forum on Tuesday, 8th May at 11:20 am in Hall 12.

VAC current sensors are widely used in a range of applications such as variable frequency drives or solar inverters to monitor the AC output current and its potential share of DC. Unlike conventional Hall-effect sensors, VACUUMSCHMELZE current sensors use a VAC-developed magnetic field probe of Cobalt based-amorphous alloy as a zero-field detector, which offers distinct benefits such as minimal offset current and negligible long-term drift. Since offset current is practically temperature-independent, the current sensors deliver reliable and ultra-precise readings, generally with double the accuracy of Hall-effect sensors. Vac sensors operate over a broad temperature range providing accurate measurement results and a long life span even in extreme ambient conditions. They feature fast response time and operate over a wide frequency range. Cost optimized design and manufacturing processes make possible using this high-quality solution in high volume applications.

VAC's new family of AC-DC-sensitive differential current sensors (DI sensors), form the basis of residual current monitoring units (RCMUs) in photovoltaic inverters compliant with the IEC 62109 (VDE 0126) or UL 1741 standards. With VAC DI sensors, the use of expensive DC-sensitive (type B) RCDs can be avoided. The operating current, conductors and the external test current are routed through the sensor, which thus records the current difference, i.e. the re-



sidual current, in the required range from 30 to 300 mA. Output is a voltage proportional to the differential current. VAC DI sensors offer a range of advanced functions, including sensor core demagnetization which can be triggered by supply voltage or on demand, self-testing with fault signal to detect defects in the magnetic circuit or low supply voltage, and self-testing with an internally generated test current.

New products featured at the 2012 PCIM will include sensors for up to 50 A rated current with extended clearance and creepage distances for system voltage up to 600 V_{rms} and operating voltage up to 1020 V_{rms} (overvoltage category 3 and pollution degree 2). The dimensions of our new range for 1,5-50 A_{rms} were retained thanks to the intelligent design of the primary conductors. Our compact range of sensors is advancing the development of increasingly high voltages for a wide range of applications.

VAC also presents a **new** Sample Kit containing a range of compact sensors to measure AC and DC currents from 2 A to 700 A continuous and +/-1200 A peak. The kit also contains sensors for a +5 volt power supply with voltage output and internal or external reference voltage as well as sensors for +/- 12 ...15 volt power supply with current output.

VACUUMSCHMELZE GmbH & Co. KG

VACUUMSCHMELZE (VAC) with 1,500 employees in Hanau, designs, produces and markets advanced materials, particularly with magnetic, but also with other physical qualities as well as related products. In 1914, the first vacuum furnace laid the foundation for today's VACUUMSCHMELZE. Industrial vacuum melting techniques for alloys have been in operation since 1923.

VAC Group today achieves annual sales of more than 450 million Euros in over 40 countries and is holder of more than 750 patents. The company is among the world's most highly innovative developers of advanced industrial materials.

VAC's range of products comprises a broad array of advanced semi-finished materials and parts, inductive components for electronics, magnets and magnet systems for use in a wide variety of fields and industries spanning watch-making and medical technology, renewable energies, shipbuilding, automotive and aviation. VAC's custom solutions are developed in close collaboration with the customer, reflecting the company's expertise in materials, applications and state-of-the-art production technology.

Find out more at www.vacuumschmelze.com

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