



DEHN protects.

Universal power quality measuring devices
from Bender GmbH & Co. KG

Customer



The Power in Electrical Safety

Bender GmbH & Co. KG

Project overview

Sector

Power supply/power quality

Application

Permanent monitoring of the power quality and detection of all relevant data for energy management

Hardware

DEHNrail

DEHNpatch

BLITZDUCTOR®

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Bender GmbH & Co. KG

Bender GmbH & Co. KG is a globally active company with an annual turnover of 100 million euros, employing about 700 people. Bender is represented in over 70 countries around the world, with its own companies in 12 countries. Production is at two sites in Germany. The medium-sized company with headquarters and innovation centre in Gruenberg is 100 per cent in family ownership and is currently actively run by the third generation. The company focuses on technologies for safe handling of electricity to ensure personal protection and safe operation of machines, installations and systems.

Challenge

System downtimes and premature material fatigue – frequently caused by power quality problems – are costly. To assert a claim for damages, evidence may have to be provided that the permitted limit values are adhered to. This can be ensured by certified power quality analysers such as LINETRAXX® PEM735 from Bender which measure and display electrical quantities of electrical power networks. This device measures currents and voltages, energy consumption and power and displays the individual current/voltage harmonics for assessing the power quality. These and other digital measuring devices for power supply systems must be protected from failure and destruction caused by surges (resulting from, for example, thunderstorms, switching operations, tripping of fuses, earth faults and short-circuits, etc.).

Solution

In addition to the protection components which are already used in a switchgear assembly, additional surge protection components from DEHN are specifically used for the digital measuring devices. In this context, all injection paths are protected by surge arresters for power supply systems and for information and communication systems: BLITZDUCTOR® or DEHNpatch arresters are used depending on the communication standard used. To round off the protection concept, the supply voltage is protected by DEHNrail surge arresters.



Benefits of the DEHN solution

- ➔ Maximum system availability
- ➔ Surge protection for different interfaces/signals of information and communication systems
- ➔ Space-saving DIN rail mounting