



DELLNER BUBENZER

MONITORING & CONTROL SYSTEMS

**BRAKE CONTROL UNIT
BCMS-X**

**PRODUCT DATA SHEET
CATALOG**



WELCOME TO DELLNER BUBENZER



DELLNER BUBENZER is a global leader in the design and manufacture of braking systems. Our unrivaled braking equipment offers customized stop-action solutions for a wide variety of industries from sea to sky, and everything in between.

For decades DELLNER BUBENZER products have been recognized worldwide as innovative braking solutions that are precision engineered to meet the highest quality standards.

GLOBAL STRENGTH, LOCAL COMMITMENT

Our global team of experts instill trust in our customers, develop and innovate with the latest technology, and provide strength in our product and personalized service.

Anchored by integrity and committed to sustaining our industry-leading product offering, our diverse community of extremely talented people around the world are committed to serving local customers.

The performance of our products and the satisfaction of our customers is our priority. DELLNER BUBENZER customers trust our commitment to excellence and recognize the value of our investment in our **Worldwide Service Network**.



PREVENTATIVE SERVICE

INSPECTION &
MAINTENANCE

REPAIRS

TRAINING



REACTIVE SERVICE

TECHNICIANS
ON CALL

24/7 TECHNICAL
SUPPORT



LIFE CYCLE MANAGEMENT

CUSTOMIZED
SERVICE CONTRACTS

RETROFITTING

ORIGINAL
SPARE PARTS

THE HIGHEST STANDARDS FOR MAXIMUM PERFORMANCE

DELLNER BUBENZER's innovative braking solutions and products are meticulously tested at our state-of-the-art research and development center. Our rigorous testing process proves and validates our research while ensuring maximum effectiveness, efficiency, and our shared client commitment to safety.

DELLNER BUBENZER's product standards are beyond meeting the Association for Iron & Steel Technology (AIST) criteria and the rigid requirements of Deutsches Institut für Normung e.V. (DIN). With a wide range of high capacity and high performance disc and drum brakes designed to operate in severe duty applications, our research, development, and testing center continuously validates our product performance and integrity.

Our commitment to research, development, and testing is the trustworthy foundation of DELLNER BUBENZER.



ENGINEERING

- ▶ DELLNER BUBENZER's trusted team of expert engineers rely on decades of experience to deliver superior products and braking systems for a multitude of industry-specific applications.
- ▶ From full braking system design to the assessment and optimization of existing solutions, DELLNER BUBENZER's engineers offer a full suite of services including 3D conceptualization, technical documentation, customized testing, and development of prototypes.



BRAKING SYSTEM DESIGN

- ▶ DELLNER BUBENZER's provides turn-key solutions for complete braking system design for static and dynamic applications.
- ▶ Upon review of input data, our engineers and product specialists evaluate system requirements, determine quantity, size and distribution of system components, perform 3D modeling for system design and/or adjustments, and deliver a complete global FEM model to ensure proper load management and system performance.



CLIMATE TESTING

- ▶ All products designed and manufactured by DELLNER BUBENZER endures in-depth climate and pressure performance testing to satisfy a stringent set of requirements for optimal performance, durability and safety.
- ▶ DELLNER BUBENZER conducts performance testing on one of the industry's largest test benches to ensure each product is prepared to meet the most rigorous demands within the world's harshest climates.



Brake Control Unit BCMS-X

METHOD

The BCMS-X is a micro-controller-based monitoring and switching device for spring applied brakes of the SFB, KFB, and TS series. Through measurement and analysis of current and voltage of the outgoing 2-wire, the switching status and the wear status of up to 12 electromagnetic spring-applied brakes can be evaluated simultaneously. The brakes are switched by using two internal electronic semiconductor switches. Basically, the brakes are switched by fast excitation, so the DC coil of the connected brakes will be energized at double nominal DC voltage. After that, the BCMS-4 switches to holding current operation, thereby saving electrical energy.

APPLICATIONS

- Container cranes
- Ship winches
- Automatic racking systems
- Conveyor belts
- General electrical drives
- Offshore jacking up platform ships

MAIN FEATURES

- Profinet interface
- USB service interface
- Color Touch display
- Real time clock for log messages
- Modular concept with single brake modules can handle 1 up to 12 brakes
- Supply voltages up to 480 V AC 50/60 Hz
- Minimal configuration and implementation effort.
- No micro- or proximity switches required for the brake (much lower amount of wiring)
- Components such as contactors, power rectifier, suppressor to be omitted (space and cost savings)
- Through the use of plug-in terminals a prior installation of the connecting cables is possible (saves time)
- Normal maintenance intervals are not required on our brakes (extreme reduction of maintenance costs)
- Due to the 12-channel version up to 12 spring applied brakes can be operated simultaneously
- Certified safety through professional association
- In conjunction with a superior safety PLC operation by security classification DIN EN ISO 13849-1 PL d, Cat 3 is possible
- Internal 2-channel safety logic in redundant design
- Providing I / O diagnostic outputs for integration into PLC digital outputs 24V or Profinet
- Quick releasing and closing of the brakes
- Overcurrent trip to protect the brakes
- Wire break recognition
- Minimize the power dissipation of the brakes by regulation the holding current.
- Internal menu structure
- Representation of the status wear
- User interface USB for connection and intervention in the menu structure. Visualization via PC-based terminal program
- Manual operation of the menu structure. The operating status and diagnostic messages are be visualized and displayed at the unit itself via the segment display
- Display of friction pad wear condition in percent
- “One solution, one source”
- Energy saving
- EMC compatibility
- DIN rail mounting



**DELLNER
BUBENZER**