



ENDIS4.0

Energy Distribution

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The ENDIS-Compact Station CS4000 is a convincing solution for a switching device that can be used at different voltage levels. In addition, the CS4000 has a modular design and can therefore be configured according to customer requirements and adapted to future needs.

Configure everything

The contactors are installed in a freely configurable frame. Special features are:

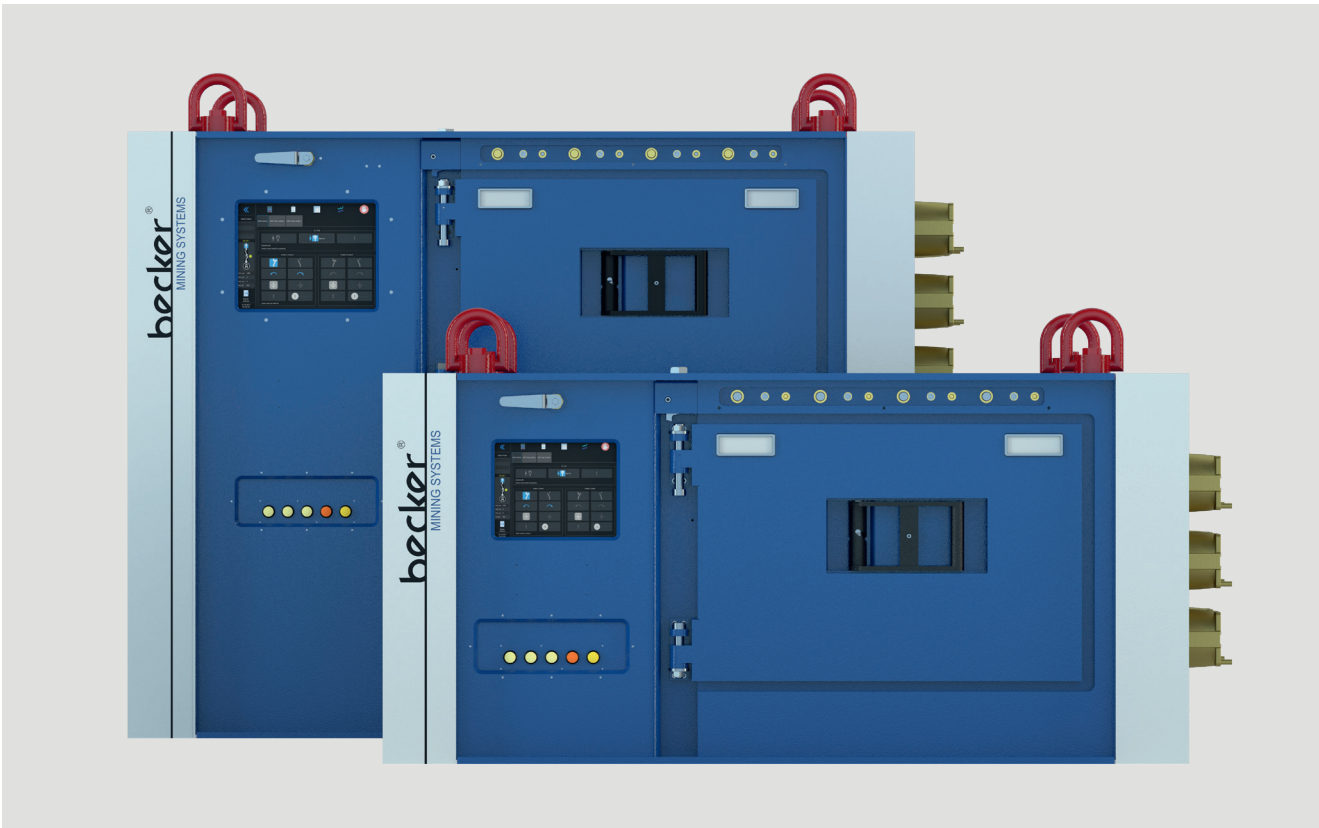
- Contactors are electrically retracted and extended
- Automatic separation of the contactors possible
- Automatic recognition of the plug-in unit, no coding
- Power contacts for 1000 A
- Circuit-breaker up to 1000 A can be integrated
- Embedded arc protection
- Connection of the switching outputs on the accessible rear side
- Universal slots for single contactor, double contactor or lighting plug-in unit
- The energy contacts are interchangeable
- Reversing switch integrated in the contactor

Directly integrated into the Compact Station – without occupying a valuable slot for slide-in modules – is a lighting outlet.

Optionally, a control unit (MMSOF.*) can be integrated into the switching device. External sensors/actuators are then processed via fieldbus interfaces (Promos). Likewise, up to two power supply units of the intrinsic safety „i“ type of protection can be installed.

The intuitively operated 12" or 15" touch screen enables the readout and parameterization of all relevant settings.

The switching states of the slide-in modules and their process variables are also displayed graphically.



Flexible & Modular

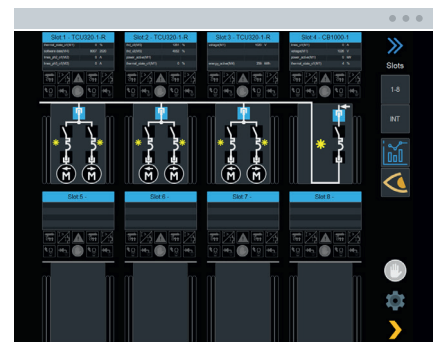
- Standard enclosure for 440 V - 4,160 V
- Two types of enclosures:
- Low profile up to 3 doors
- High profile up to 6 doors
- Compact station with 3 compartments:
- Device compartment
- Display compartment
- IS compartment
- Internal frame for 4 slide-in modules
- The client can complete the compact station:
- Slide-in module
- Connections via connectors or cable glands
- Power connections via connectors or cable glands

Robust & Technically Advanced

- 4 Slots per door for slide-in modules
- Rated voltages: 1.2 kV; 3.3 kV and 4.16 kV
- Dielectric withstand up to 25 kV
- Surge withstand: 40 kV
- Current per output: 500 A
- Total current: 1000 A min. per frame
- Flange for low voltage enclosure on transformer

Smart & Connected

- Touchscreen and industrial PC for control and configuration
- FO switch for control and remote maintenance via Ethernet







Customized Services

We support our customers and partners from initial concept to final commissioning and are also at your side with our cus-

tomized services. Local subsidiaries and distributors ensure fast service support.



Custom System Designs

Every mine is different, so should a system layout be: From energy supply to communication systems and transport solutions. We analyse all the available information and find the best possible solution.



Comprehensive Maintenance & Repair

Not only do we offer year on year support contracts, to keep your operation running - At Becker Mining you can always count on our workshop to overhaul and repair products. No matter how old your products.



Onsite technical assistance

Our technicians can support your team on-site or remotely to get things done right.



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We offer emergency onsite support for our customers. Depending on geographic and travel distance, on-site service can be as quick as 6 hours.



Technical Trainings & Workshops

With your Becker products you can count on technical trainings for all your staff. Depending on your needs we suggest regular workshop onsite and remote to keep technicians up to speed with your Becker products.

Contact Us

Becker Mining Systems accompanies and supports you from the first moment to find the best solution for your needs.

Send an inquiry and contact a sales representative today – we help you and your company to focus on the essentials.

 sales@becker-mining.com

Technical Data

| Modules | Circuit Breaker | High Power Combination Contactor | Twin Contactor Unit | Twin Contactor Drill / Low Power |
|---|-------------------------------|----------------------------------|-----------------------|----------------------------------|
| | CB1000 | HPC500 | TCU | TUD |
| Rated Voltage | 440 V - 4,160 V one module | 440 V - 4,160 V one module | 1,140 V | 230 V |
| Rated Current | 1000 A | 500 A | 2 x 320 A or 2 x 32 A | 2 x 50 A |
| Breaking Capacity | 25 kA at 3.3 kV | 7.5 kA at 3.3 kV | 4 kA at 1.2 kV | |
| Peak Current | 63 kA at 3.3 kV | 11 kA at 3.6 kV | 6 kA at 1.2 kV | |
| Mechanical Life | 30.000 cycles | 1.000.000 cycles | 1.000.000 cycles | |
| Electrical Life | 10.000 cycles | 500.000 cycles at 400 A | 500.000 at 285 A | |
| Features | | | | |
| Overload | ✓ | ✓ | ✓ | ✓ |
| Short Circuit | ✓ | ✓ | ✓ | ✓ |
| Earth fault Lockout | ✓ | ✓ | ✓ | |
| Temperature Monitoring PTC, PT100, T10000 | ✓ | ✓ | ✓ | |
| Quick earth fault tripping | ✓ | ✓ | ✓ | ✓ |
| Power monitoring | ✓ | ✓ | | |
| Pilot circuit (2x) | ✓ | ✓ | ✓ | ✓ |
| Emergency stop | ✓ | ✓ | ✓ | ✓ |
| Machine recognition | ✓ | ✓ | | |
| Loss of vacuum | ✓ | ✓ | | |
| Earth leakage | ✓ | ✓ | ✓ | ✓ |
| High voltage dielectric test | ✓ | ✓ | | |
| Reversing Switch | | ✓ | ✓ | |
| Isolation Monitoring | | | | ✓ |



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