

Managing DC Energy



Dynamic
Discharge-Manager

DDM 4.0

Dynamic Discharge-Manager DDM 4.0

The perfect supplement for capacitor banks with an energy capacity of up to two megajoules – controlled by one or more Dynamic Storage Manager DSM 4.0. Connected directly to the DC Link the Dynamic Discharge-Manager DDM 4.0 can lead to a safe voltage level of both, the drive controller and the storage units. The residual voltage in the system then is at a voltage level of about ten volts, thus making the system safe to work on. The DDM 4.0 is known for its perfect discharge using a safe braking resistor that is optimally designed with our B3H3.6100-1000IP65.

Smart discharger for large capacities

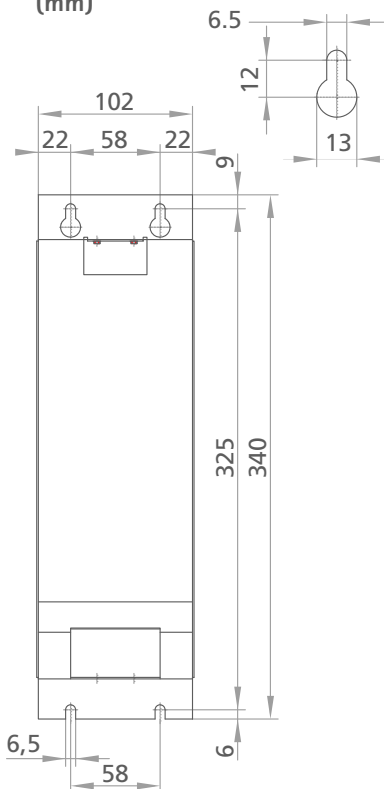
- > ideal for electrolytic capacitors and
- > super capacitors
- > integrated self-monitoring
- > controllable



www.bremsenergie.de/en/products/accessories-for-electronics/ddm-4-0



Installation dimensions and mounting holes (mm)



Environmental conditions

Parameter	Value
Ambient temperature	-10°C to +65°C (transport, storage) 0°C to +40°C (operation)
Relative humidity	<95% (transport, storage) <85% (operation)
Type of cooling	air cooling (convection)
Protection class of the housing	IP20
Degree of contamination of installation location	2

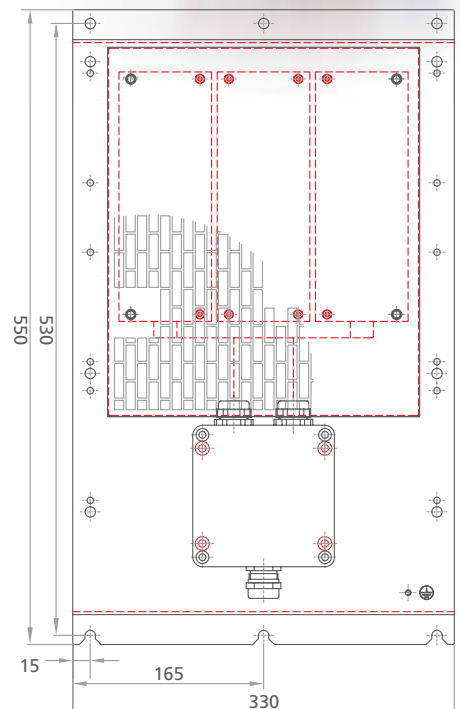
Technical Data DDM 4.0

Parameter	Value
Average discharge power	ca. 3,500 W
Maximum discharging energy	>2,000 kJ
Max. operating voltage	800 VDC
Dimensions mm H x W x D	340 x 102 x 187 mm
Digital I/Os	+
Bus connection	RS422/RS485
Weight	ca. 6.0 kg
Protection class	IP20



Technical Data B3H3.6100-1000IP65

Parameter	Value
Nominal output	3,600 W
Resistance value	11.1 Ohm
Dimensions mm H x W x D	550 x 330 x 150 mm
Weight	ca. 13.0 kg
Protection class	IP65



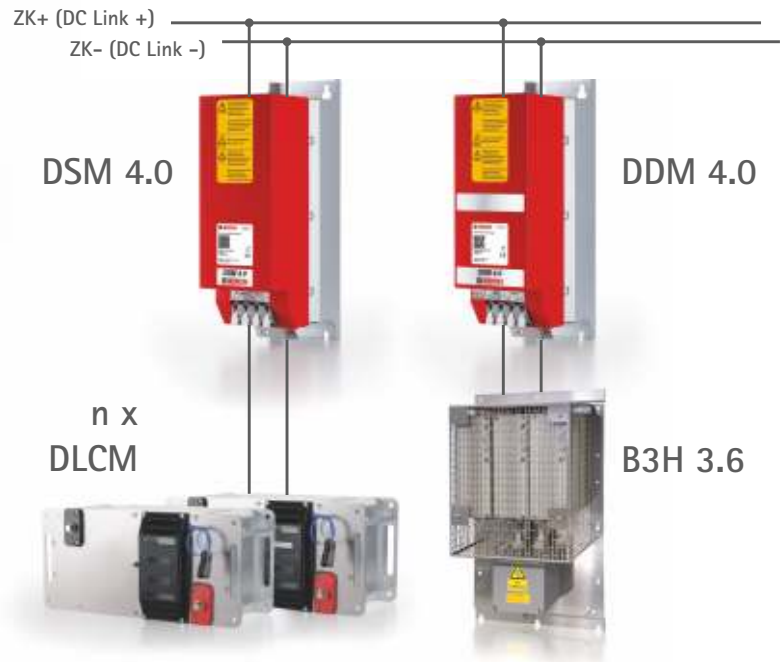


Easy connection

The DDM 4.0 is an active and safe discharger that controls capacities of up to more than two megajoules from a single DC Link.

The connection is made on the front panel of the device.

1. R+ and R- ports under "Load" for connection of the braking resistor
2. The ports under "Drive" for connection of the plus and minus poles of the DC Link of the drive controller
3. Digital interface
4. RS422/RS485 port
5. RS422/RS485 port



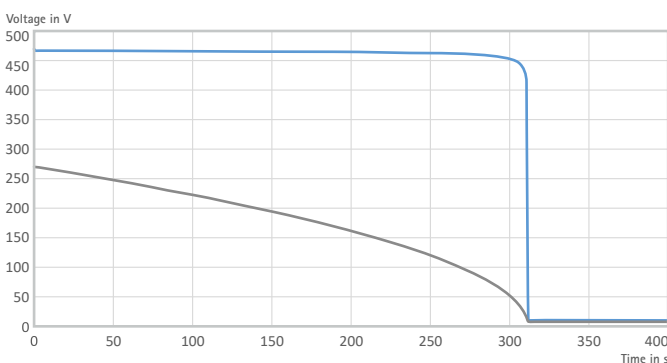
Discharge examples

Case 1

DDM 4.0 in a Dynamic Energy Management System KTS-x2004 with an energy capacity of one MJ, maximum storage voltage 270 VDC, DC Link voltage 470 VDC, room temperature approx. 20°C

Discharge on the DSM 4.0 with DDM 4.0 and B3H3.6100-1000IP65

— Uc = Voltage level energy storage
— Uz = Voltage level DC Link



Discharge duration

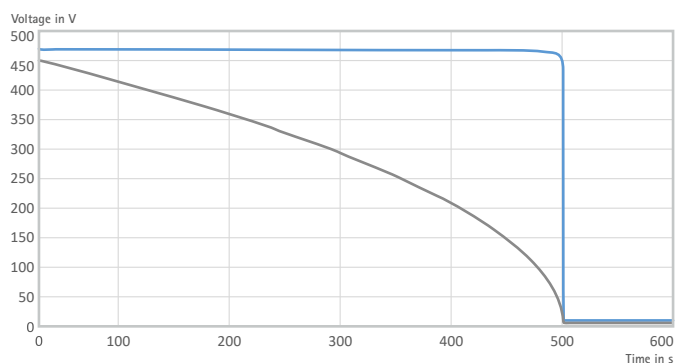
Up to a memory voltage reach of the KTS-x2004 to approx. 10 VDC – approx. 310 s (5 min, 10 s)

Case 2

DDM 4.0 in a Dynamic Energy Management System KTS-x2006 with an energy capacity of 1.68 MJ, maximum storage voltage 450 VDC, DC Link voltage 470 VDC, room temperature approx. 20°C

Discharge on the DSM 4.0 with DDM 4.0 and B3H3.6100-1000IP65

— Uc = Voltage level energy storage
— Uz = Voltage level DC Link



Discharge duration

Up to a memory voltage reach of the KTS-x2006 to approx. 10 VDC – approx. 500 s (8 min, 20 s)

Managing DC Energy

Energy management systems
and safe brake resistors for
electric drive technology

We offer:

- **Tested product quality**
- **Certified processes**
– we undergo regular inspections by third parties
- **Individual application support**
– owing to our modular system we can offer more than 60.000 solutions
- **Machine-specific implementation**
– we match our products with your machines
- **High reaction rate**
– we provide you with a suitable offer in the shortest possible time
- **Short delivery times**
– all components are in stock
- **On-time deliveries every time**
– we deliver on schedule in optimal lot sizes
- **Reliable partner**
– we strive for long-term business relationships
- **Direct customer relationships**

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We look forward to
hearing from you!



Michael Koch GmbH, Zum Grenzgraben 28, D-76698 Ubstadt-Weiher
Phone (+49) 7251 / 96 26 20, Fax (+49) 7251 / 96 26 21
www.brakeenergy.com, mail@brakeenergy.com

Technische Änderungen vorbehalten. MK_PRO_DDM_ENG_R00_0

