BVS INDUSTRY ELECTRONICS
QUALITY MAKES THE DIFFERENCE

FORMING ON SITE

Preventive moulding of your assemblies ensures operational safety!

24 MONTHS WARRANTY*

Have your bearing assemblies regularly formed on site before use!

Forming your inverters has always been an integral part of our cleaning and inspection services. However, we now also offer this service for your stored inverters on site with our newly developed forming case!

Stored converters (such as frequency converters, rectifiers, inverters and power converters, etc.) are considered critical spare parts. They are often stored for several years and **must be fully functional when in use.**

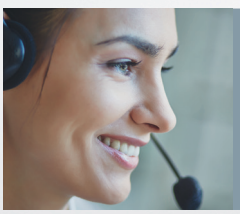
The problem: Degeneration of the oxide layer
The oxide layer, which acts as an insulating layer (dielectric) in the DC link capacitors, degrades over time without a permanently applied voltage. The oxide degeneration reduces the insulation voltage and can lead to defects in the dielectric. If such an inverter is put back into operation, a **short circuit** can occur at these points, which in the worst case can lead to **the capacitor bursting** or **exploding**. The resulting damage is often immense and ranges from defects in neighbouring components to completely destroyed assemblies. This can lead to a **prolonged failure of the system**.

A: Oxide layer thickness, B: Stress-free time (in years), C: Probability of failure

The solution: Regular moulding!
With conventional forming, the voltage applied is increased in stages. With the **BVS gentle process**, the voltage is adjusted in relation to the **continuous status analysis** of the characteristic values of the DC link capacitors. In doing so, we ensure that the formation only stops when the specifications are back within their tolerances. **We adhere to DIN EN 60384-4**.

Your advantages with BVS:

- Electrical status analysis of the DC link capacitors
- Condition-orientated forming in accordance with DIN EN 60384-4
- Gentle process
- Continuous monitoring during the forming process
- Immediate discharge of the assembly in the event of emergencies and automatic switch-off
- BVS test seal and log of the entire forming job



Available for you around the clock
24/7 Hotline: **+49 6181 95404-200**
Fax: **+49 6181 95404-5**
E-mail: **info@bvs-electronics.com**
Web: **www.bvs-electronics.com**

Rexroth Bosch Group Service Point | Lenze Performance Partner Distribution | SEW EURODRIVE Service Partner | EcoXpert Certified by Schneider Electric EcoXpert Partner | 24 MONTHS WARRANTY*

BVS Electronics GmbH
Repair | Sales | Service
Electronics for **CNC, PLC & robots** and **renewable energies**
Margarete-von-Wrangell-Str. 18 · 63457 Hanau

Quality makes the difference.

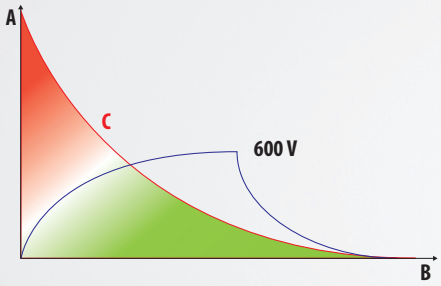
*Please refer to our general terms and conditions for warranty details.

QM/UM-D: FL 5.3.2.172v1

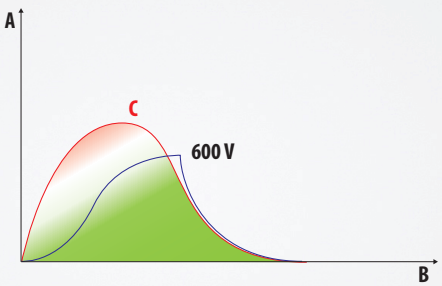
BVS INDUSTRY ELECTRONICS
QUALITY MAKES THE DIFFERENCE

FORMING ON SITE

Conventional moulding



The BVS protection procedure



A: Capacitor load, B: Time, C: Current

In conventional forming, an initially s**harply increasing voltage** is applied to the module, which gradually flattens out before the operating voltage (600V in this example) is reached. As a result, the current flowing at the beginning shoots straight up. **The load on the capacitors** is **too high** if an insulation layer has already been overlaid too much.

In the BVS gentle process, t**he voltage is increased so carefully in slowly increasing and then decreasing waves** that even superimposed insulation layers can regenerate, as the current load only increases slowly. We only apply a full load to the assembly once the forming process has been completed in order to test the full load capacity of the capacitors.

Our moulding at your premises in two steps:

❶ **The forming of your inverters** is carried out with the help of our self-developed forming case and using our self-developed BVS gentle process. **Two devices can be formed at the same time**.

❷ The formed inverter is given the **BVS test seal**, on which the last and next upcoming formation is marked. In addition, you will receive a report on the formations carried out as part of the entire order.

BVS ELECTRONICS
QUALITY MAKES THE DIFFERENCE

Last formation

1	2	3	4	5	6
7	8	9	10	11	12
2021	2022	2023	2024		

24/7-Hotline: +49 6181 95404-200

Next Formation

1	2	3	4	5	6
7	8	9	10	11	12
2023	2024	2025	2026		

info@bvs-electronics.com

Your advantages with BVS:

- Electrical status analysis of the DC link capacitors
- Condition-orientated forming in accordance with DIN EN 60384-4
- Gentle process
- Continuous monitoring during the forming process
- Immediate discharge of the assembly in the event of emergencies and automatic switch-off
- BVS test seal and log of the entire forming job

Rexroth Bosch Group Service Point | Lenze Performance Partner Distribution | SEW EURODRIVE Service Partner | EcoXpert Certified by Schneider Electric EcoXpert Partner | 24 MONTHS WARRANTY BVS

BVS Electronics GmbH
Repair | Sales | Service
Electronics for **CNC, PLC & robots** and **renewable energies**
Margarete-von-Wrangell-Str. 18 · 63457 Hanau

Quality makes the difference.