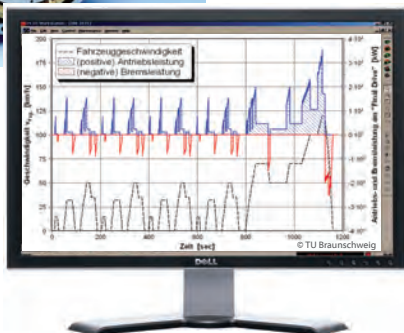


Battery Emulator

Regenerative Series



- Programmable High Current and Voltage Source and Sink
- For Automotive Test Bench Lines and other hardware-in-the-loop applications
- Emulates Batteries of Any Technology
- Available DC Outputs: 600/800/1000 Volts
- Expandable to 1500 A or 400 kW
- High Dynamic IGBT Power Circuits
- Sinusoidal Mains Regeneration
- Value: Modular and scalable system and optional components
- Advanced Thermal Management Allows Side-By-Side Placement
- Cabinet conveniently sized to fit through standard doors
- Large read-outs, lights and push-buttons for easy and safe operation
- Controlled by Battery Manager or CAN-Bus Supervising



■ TECHNICAL DATA

Battery Emulator

	BE 300-600	BE 300-800	BE 200-1000
■ DC DATA			
Voltage 2Q	50 – 600V	50 – 800V	50 – 1000V
Voltage 4Q	-600 – 600V	-800 – 800V	–
Current	± 300A [cont.] ± 400A [peak ⁽¹⁾]	± 300A [cont.]	± 200A [cont.]
Power	± 80kW [cont.] ± 135kW [peak ⁽¹⁾]	± 80kW [cont.]	± 80kW [cont.]
Accuracy	< ± 0.1% full scale		
Resolution I, U	±20mA / ±40mV		
Data acquisition rate	1ms		
Transient time U (10 – 90% I)	≤ 3 ms (0 – 1 Ω)		
Current ripple	≤ 1A _{pp} (1Ω, 300A)		
DC output contactor	yes		

Other current and voltage ranges available on request.

■ AC DATA

Mains connection	380, 400, 480V ± 10%, 50 – 60Hz ± 3Hz (3-phase)
Rated power-factor	> 0.98
Max. efficiency	92%
Galvanic isolation to mains	yes
AC mains contactor	yes

■ COOLING, ENVIRONMENTAL CONDITIONS

Cooling	forced venting, front to top
Ambient operating temp.	10 – 40°C (50 – 104°F)
Humidity	< 70%, non-condensing

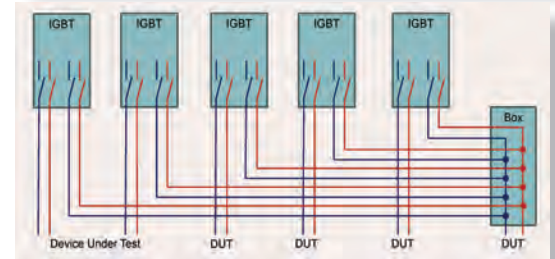
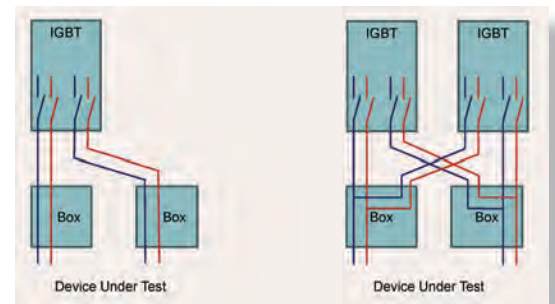
■ GENERAL DATA

Protection level	IP20
Dimensions H x W x D	1995 x 800 x 870 mm
Weight	ca. 900kg
Colour	RAL 7016 Anthracite grey

■ OPTIONS & ACCESSORIES

Additional CAN busses for BMS integration, external CAN control etc.
Additional Voltage, Temperature, and analog I/Os
Digital I/Os for auxiliary devices, RS-232, RS-485, etc.
Cabinet Castors
Second set of DC Output Contactors
Paralleling of Units or Single/Parallel Changeover
Connection Boxes located in Test Chamber
Second Voltage Measuring Range 100 V
Second Current Range 40A with low ripple ⁽²⁾
AC Input Voltage on request (specify as required)
AC Input Energy Panel for 2–5 power circuits, 160/240/320/400 kW
DC Output Panel for 2–5 power circuits, 600/900/1200/1500 A
Dual mode operation EVT/BE
Water Cooling with Air-Water Heat Exchanger
External/Internal Isolation Fault Monitor changeover

⁽¹⁾ 30 sec very 15 min. ⁽²⁾ Accuracy 0.2%_{FS} = 80mA Design and specifications are subject to change without notice.



Optional Paralleling of Power Circuits and DC Connection Boxes



CAN Temperature Logger



Safety Monitoring Device for Voltage and Temperature

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