Batteriewerk

HIGH-CAPACITY BATTERY SYSTEM

INDIVIDUA 133 400

The Individua battery system is a unique modular system, which allows flexible packaging and is adaptable to customers' requirements and installation space.

HIGH ENERGY BATTERIES
Lightweight package
Automotive OEM cell module origins from large scale series production
Operating temperature range from -40 up to 55 °C
Liquid cooling and heating with homogenous temperature distribution
Cycle life > 3000
15 years calendrical lifespan
IP 6K9K rated aluminum housing
Maintenance-free
EMI compliant

BMS
Advanced Automotive algorithms (SoC, SoH & Power prediction)
Diagnostic event map
ISO26262 ASIL C certified
Clear CAN interface for easy connectivity
BMS tested according to Automotive Standards
Passive cell balancing
Voltage, current, temperature and humidity monitoring

SAFETY CONCEPT
Cell rated < L4 EUCAR Safety level (Mechanical, Thermal and electrical abuse)
Multilayer safety on cell (Fuse & OSD) and system level
Cell module certified according to UN38.3
Emergency stop, emergency input and high voltage interlock
Integrated short-circuit monitored precharge sequence
Insulation monitor according to ISO6469-3
Interchangeable service disconnect with integrated fuse
Membrane with bursting disc integrated in housing

Swiss innovation brought to the point.

We are your specialist in developing and mass production of high voltage batteries for electromobility purposes.

We build custom modular traction batteries for our clients in the European region. We use mass produced high-quality components and cells used in the automotive industry. Our modular system make our batteries flexible to use. Whether for commercial vehicles, supplying ground power for planes, on trains or at sea. System compatibility and our partners allow us to support automakers from preliminary study all the way to series production and service.

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TECHNICAL SPECIFICATIONS

133 kWh
ENERGY

120 Wh/kg
ENERGY DENSITY

1080 kg
WEIGHT

INDIVIDUA 133	
Modules per Pack	8s 4p
Capacity	376 Ah
Nominal voltage	353 V
Maximum voltage	395 V
Minimum voltage	280 V
Discharge capacity (5s)	480 kW
Charging capacity (5s)	400 kW
Internal fuse	4 x 350 A
Interface	CAN 2.0 12 V –24 V

MODULE 4,2	
Cells per module	12s 1p
Capacity	94 Ah
Energy	4.2 kWh
Technology	Li-Ion NCM (nickel-cobalt -manganese)
Nominal voltage	44.2 V
Maximum voltage	49.5 V
Minimum voltage	35 V
Discharge power (5s)	15.5 kW
Charging power (5s)	12.7 kW
Discharge current (RMS)	135 A
Charge current (RMS)	60 A
Internal fuse	380 A
Charging cycles	>3000 (>80 % initial capacity, @ 0.5C/1C, SOC 100 %, 25 °C)
Discharging temperature	Ranging from -25 to 50 °C
Charging temperature	Ranging from -10 to 50 °C