

AKASYSTEM

15 AKM 46 POC



278 kW • 30.6 kWh • 666 V • 355 kg*

Typical product configuration.
Appearance and interfaces may vary.

*All technical data depending on HV Fuse, connector, DoD/SOC and cooling.

CERTIFIED ACCORDING TO RAILWAY AND AUTOMOTIVE STANDARDS.

- > Development according to ISO 26262 up to ASIL C / EN 61508 SIL 2 possible
- > Tested safety (USABC, IEC, SAE, EN 50657, EN 50129, UN 38.3) and "real world" experience
- > Multi-level short circuit protection on system level
- > Additional operating safety due to redundant battery management system
- > Suitable for multi-string systems with monitoring on single-string and full system level
- > Protection classes IP67 to IP6K9K possible
- > Robust and proven control unit BMS master (SIL2 compatible hardware)
- > SOC/SOH analysis
- > Single cell voltage monitoring and balancing

SCALABLE. VALIDATED. DURABLE.

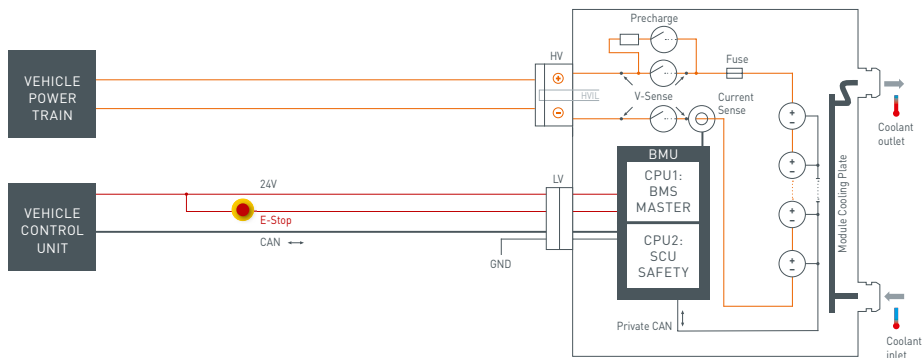
- > High energy and performance density
- > Easy system connectivity / ready-to-install (aligned connection points, standardized CAN bus, optional VDA / SAE cooling connections)
- > Excellent price-performance ratio as a result of the development for serial production
- > Liquid cooling for even temperature distribution
- > Compact and lightweight solution, significant volume reduction due to liquid cooling
- > Long service life due to active and passive thermal management
- > Exceptionally robust, stainless steel battery case
- > Serial production, ISO 9001 compliant
- > Passive cell balancing
- > Maintenance-free operation

ELECTRICAL DATA	AKASYSTEM 15 AKM 46 POC
Cell connection in module	12s1p
Capacity	46 Ah
Energy	30.6 kWh
Technology	Li-Ion NANO NMC
Nominal voltage	666 V
Voltage (max.)	756 V
Voltage (min.)	486 V
Discharging power max. (10s) ^A	278 kW
Charging power max. (10s) ^A	153 kW
Continuous power (RMS)	77 kW
Power consumption in standby mode	7.5 W
Cycle life (at 80% DoD, 25 C°)	> 7,000 cycles

^A Peak rating depending on fuse and cable / connector configuration / SOC and temperature

MECHANICAL DATA	AKASYSTEM 15 AKM 46 NANO NMC
Coolant pressure (max.)	1.0 bar
Coolant pressure loss at nominal throughput and T _{coolant} = 25 °C (water/glycol=50/50) @ throughput quantity	370 mbar @ 1,000 l/h
Operating temperature range during discharging	-15 to 55 °C
Operating temperature range during charging	0 to 45 °C
Protection classes	IP67 (IP6K9K possible)
Weight (incl. contactor box) (min)	355 kg
Dimension (L x W x H) in mm	1,546 x 750 x 216

AKASYSTEM – SAFETY CONCEPT



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HIGH-PERFORMANCE BATTERY SYSTEMS.
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