

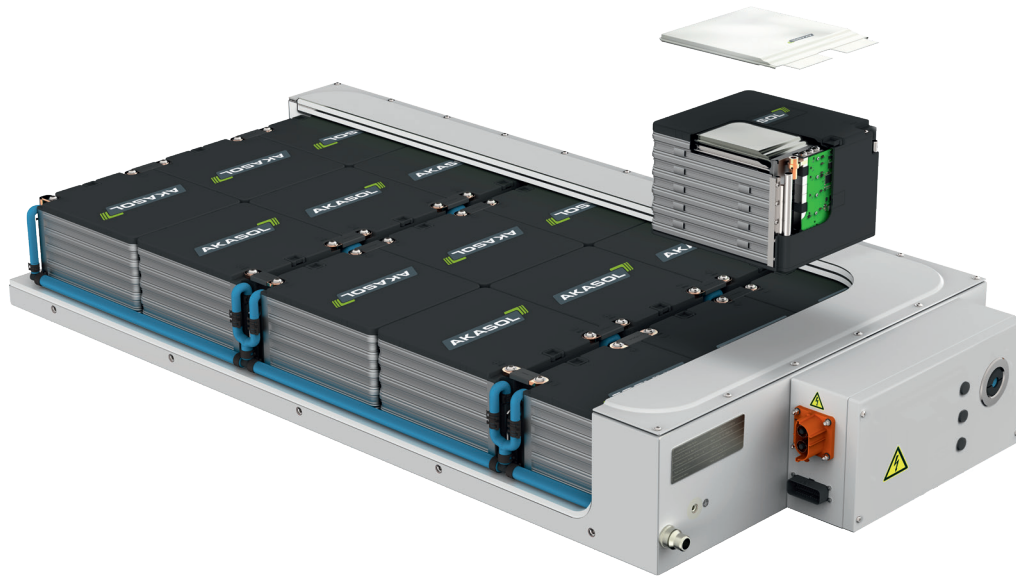
## AKASYSTEM

# 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

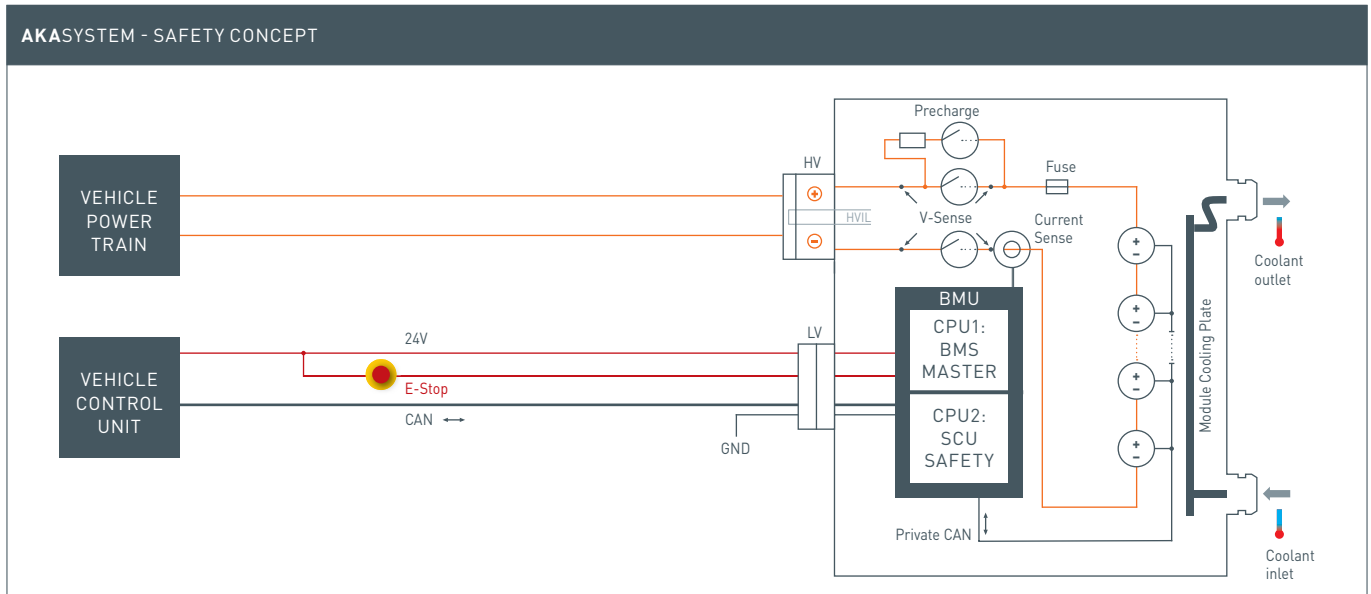
### SCALABLE. VALIDATED. DURABLE.

- > 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)*	278 kW
Charging power max. (10s)*	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

\* 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 Tcoolant = 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



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AKASOL is a leading European developer and manufacturer of high-performance and high-energy lithium-ion battery systems for commercial applications as well as a supplier of Turnkey Solutions. With 30 years of prototyping, engineering and testing experience, AKASOL provides safe, durable and market-ready battery systems in serial for major players in the commercial transport sector.

Configuration and images exemplary. Values depend on SOC, SOH and temperature. Subject to amendment when technical changes and/or innovations are made. No liability for printing errors. Version: September 2020