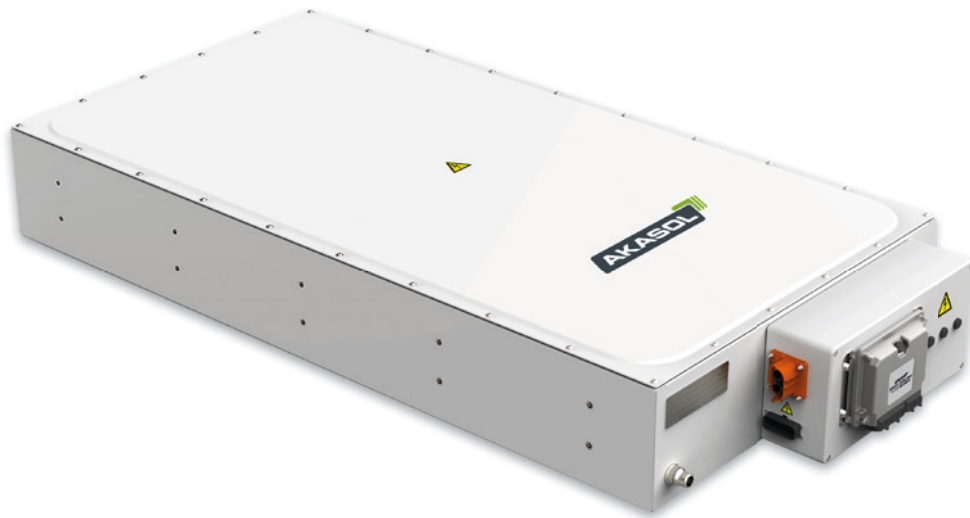


# AKASYSTEM 15 AKM

**406 kW • 30.6 kWh • 666 V • 372 kg (NANO)\***  
**270 kW • 35.3 kWh • 666 V • 353 kg (NMC)\***

Typical product configuration. Appearance and interfaces may vary.

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



## CERTIFIED ACCORDING TO AUTOMOTIVE STANDARDS.

- › Development according to ISO 26262 up to ASIL C / EN 61508 SIL 2 possible
- › Tested safety (USABC, IEC, SAE, 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 full monitoring on single-string and full system level
- › Protection classes IP67 to IP6K9K possible
- › Robust and proven control unit BMS master (SIL2 compatible hardware)
- › Local and redundant safety control unit in all trays
- › Voltage and temperature monitoring
- › SOC/SOH analysis

## SCALABLE. VALIDATED. DURABLE.

- › Freely scalable system with any number of AKAMODULEs
- › Flexible Packaging (conversion design, purpose design)
- › 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, maintenance-free operation
- › Serial production, EMI compliant
- › Passive cell balancing

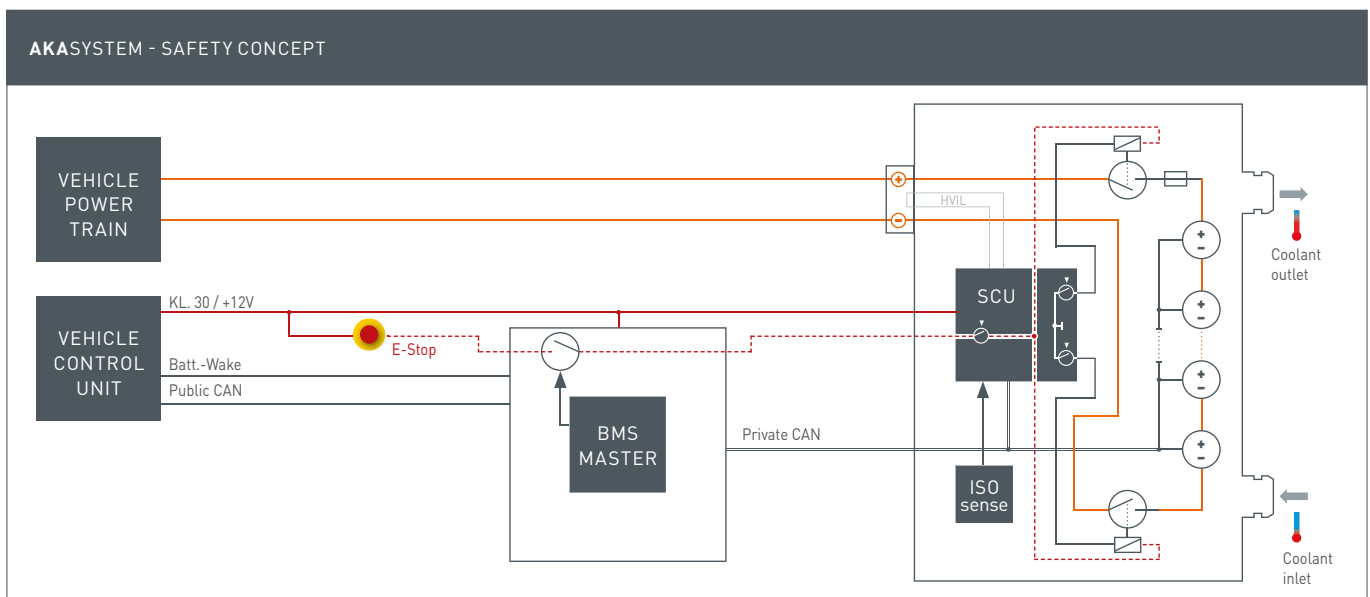


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storage solution

ELECTRICAL DATA	AKASYSTEM 15 AKM 53 NMC			AKASYSTEM 15 AKM 46 NANO NMC		
	12s1p	6s2p	4s3p	12s1p	6s2p	4s3p
Cell connection in module	12s1p	6s2p	4s3p	12s1p	6s2p	4s3p
Capacity	53 Ah	106 Ah	159 Ah	46 Ah	92 Ah	138 Ah
Energy	35.3 kWh	35.3 kWh	35.3 kWh	30.6 kWh	30.6 kWh	30.6 kWh
Technology	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC	Li-Ion NANO	Li-Ion NANO	Li-Ion NANO
Nominal Voltage	666 V	333 V	222 V	666 V	333 V	222 V
Voltage max.	756 V	378 V	252 V	756 V	378 V	252 V
Voltage min.	486 V	243 V	162 V	486 V	243 V	162 V
Discharging power max. (10s)*	270 kW	266 kW	178 kW	406 kW	266 kW	178 kW
Charging power max. (10s)*	106 kW	106 kW	106 kW	153 kW	153 kW	153 kW
Continuous power (RMS)	60 kW	60 kW	60 kW	77 kW	77 kW	77 kW
Internal HV-Fuse	300 A	400 A	500 A	300 A	400 A	500 A
Power consumption in standby mode	7.5 W	7.5 W	7.5 W	7.5 W	7.5 W	7.5 W
Cycle life (at 80% DoD, 25C°)	> 3,100 cycles	> 3,100 cycles	> 3,100 cycles	> 6,800 cycles	> 6,800 cycles	> 6,800 cycles

\*peak rating depending on fuse and cable / connector configuration

MECHANICAL DATA	AKASYSTEM 15 AKM 53 NMC			AKASYSTEM 15 AKM 46 NANO NMC		
	12s1p	6s2p	4s3p	12s1p	6s2p	4s3p
Coolant pressure max.	1.0 bar	1.0 bar	1.0 bar	1.0 bar	1.0 bar	1.0 bar
Coolant pressure loss at nominal throughput and Tcoolant = 25°C (Water/glycol=50/50) @ throughput quantity	500 mbar @ 600 l/h	500 mbar @ 600 l/h	500 mbar @ 600 l/h	500 mbar @ 600 l/h	500 mbar @ 600 l/h	500 mbar @ 600 l/h
Operating temperature range during discharging	-15 to 55 °C	-15 to 55 °C	-15 to 55 °C	-15 to 55 °C	-15 to 55 °C	-15 to 55 °C
Operating temperature range during charging	0 to 45 °C	0 to 45 °C	0 to 45 °C	0 to 45 °C	0 to 45 °C	0 to 45 °C
Protection classes	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)
Weight (incl. contactor box)	353 kg	353 kg	353 kg	372 kg	372 kg	372 kg
Dimension (L x W x H) in mm	1,546 x 750 x 216	1,546 x 750 x 216	1,546 x 750 x 216	1,546 x 750 x 216	1,546 x 750 x 216	1,546 x 750 x 216



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