

AKASYSTEM

15 AKM 64 CYC

80 kW (peak) • 32 kW (cont)
42 kWh • 660 V (nom) • 230 kg*

Typical product configuration. Appearance and interfaces may vary.
*All technical data depending on HV Fuse, connector, DoD/SOC, cooling and housing material.



AVAILABLE
2021

CERTIFIED ACCORDING TO AUTOMOTIVE STANDARDS.

- › Development according to ISO 26262 up to ASIL C / EN 61508 SIL 2 possible
- › Tested safety (e.g. ECE R10, UN 38.3, ECE R100) and “real world” experience
- › Multi-level short circuit protection on cell and 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 up to IP6K9K possible
- › Robust and proven control unit BMS master
- › Local and redundant safety control unit in all trays
- › Voltage and temperature monitoring
- › SOC / SOH analysis
- › Multi-core safety CPU with integrated safety control unit

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, IATF 16949 compliant
- › Passive cell balancing

ELECTRICAL DATA	AKASOL SYSTEM 15 AKM 64 CYC	2P AKASOL SYSTEM 15 AKM 64 CYC	3P AKASOL SYSTEM 15 AKM 64 CYC	nP AKASOL SYSTEM 15 AKM 64 CYC
Cell connection in module	12s12p	12s12p	12s12p	12s12p
Capacity	64 Ah	128 Ah	192 Ah	n*64 Ah
Energy	42 kWh	84 kWh	126 kWh	n*42 kWh
Technology	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC
Nominal voltage	660 V	660 V	660 V	660 V
Voltage (max.)	756 V	756 V	756 V	756 V
Voltage (min.)	540 V	540 V	540 V	540 V
Discharging power max. (10s)*	60...80 kW	120...160 kW	180...240 kW	n*60...80 kW
Charging power max. (10s)*	32...48 kW	64...96 kW	96...144 kW	n*32...48 kW
Continuous power (RMS) < 15 min*	32...40 kW	64...80 kW	96...120 kW	n*32...40 kW
Continuous power (RMS) > 15 min*	20...32 kW	40...64 kW	60...96 kW	n*20...32 kW
Power consumption in standby mode	10 W	20 W	30 W	n*10 W
Cycle life**	1,000...3,000 cycles	1,000...3,000 cycles	1,000...3,000 cycles	1,000...3,000 cycles

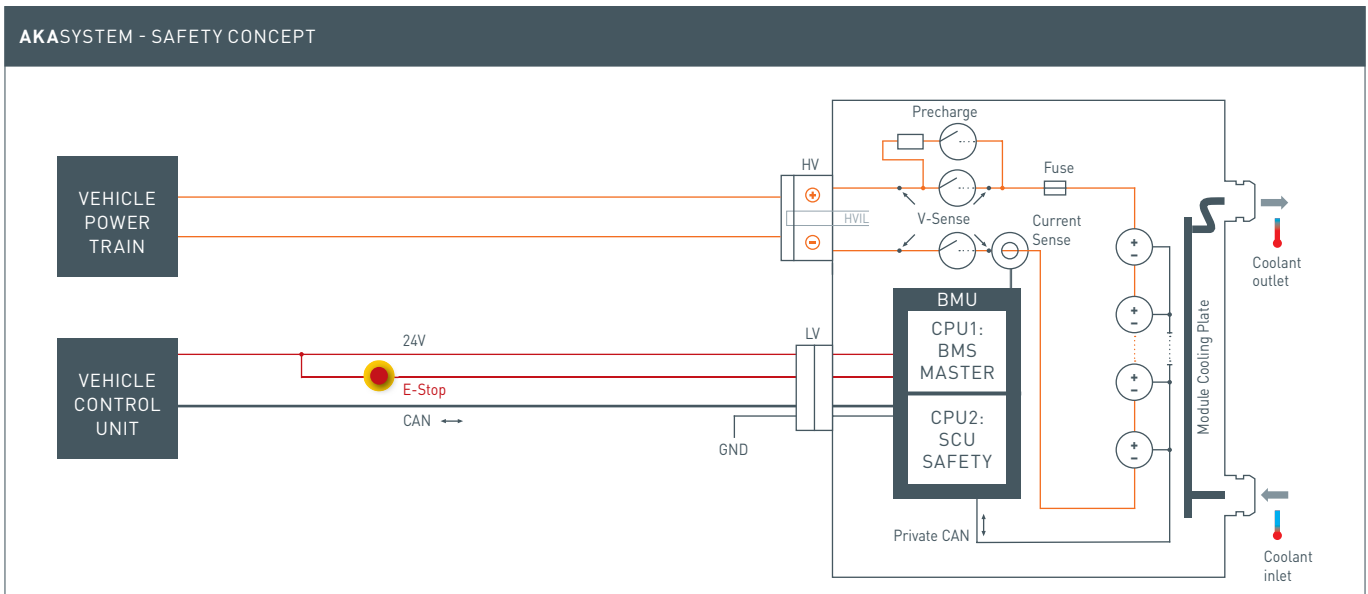
AKASOL SYSTEM n 15 AKM 64 CYC: freely scalable according to your application

* Depending on cable, connector, SOC, temperature and internal fuse type ** Depending on individual use profile, especially DoD, temperature and power

MECHANICAL DATA	AKASOL SYSTEM 15 AKM 64 CYC	2P AKASOL SYSTEM 15 AKM 64 CYC	3P AKASOL SYSTEM 15 AKM 64 CYC	nP AKASOL SYSTEM 15 AKM 64 CYC
Coolant pressure max.	2.5 bar	2.5 bar	2.5 bar	2.5 bar
Coolant pressure drop (Water/glycol=50/50)	<500 mbar @ 200 l/h nom. 25 °C	<500 mbar @ 400 l/h nom. 25 °C	<500 mbar @ 600 l/h nom. 25 °C	<500 mbar @ n*200 l/h nom. 25 °C
Operating temperature range	-25 to 55 °C	-25 to 55 °C	-25 to 55 °C	-25 to 55 °C
Recommended operating temperature	15 to 35 °C	15 to 35 °C	15 to 35 °C	15 to 35 °C
Protection classes	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)	IP67 (IP6K9K possible)
Weight (incl. contactor box) typical***	230...260 kg	460...520 kg	690...780 kg	n*230...n*260 kg
Dimension (L x W x H) in mm (nominal)	1,700 x 700 x 150	1,700 x 700 x 305	1,700 x 700 x 460	1,700 x 700 x n*155

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*** Depending on housing material



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