

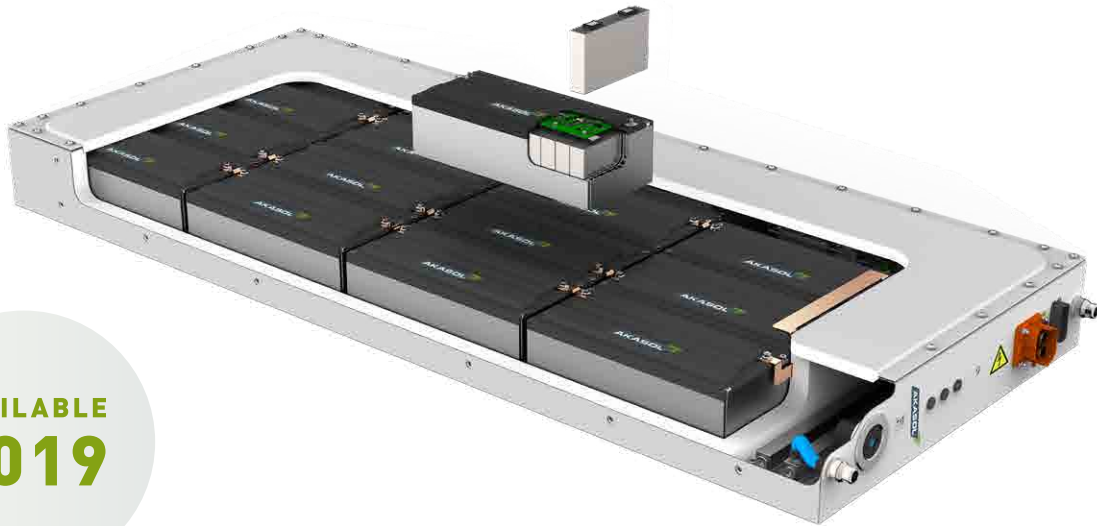
AKASYSTEM

15 OEM 50 PRC

150 kW (peak) • 50 kW (cont)
33 kWh • 661 V (nom) • 254 kg*

Typical product configuration. Appearance and interfaces may vary.

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



AVAILABLE
2019

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
- › Robust and proven control unit BMS master (integrated multi-core safety CPU)
- › SOC / SOH analysis
- › Single cell voltage monitoring and balancing

SCALABLE. VALIDATED. DURABLE.

- › Freely scalable system with any number of OEM SYSTEMs
- › 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, IATF 16949 compliant
- › Passive cell balancing
- › Maintenance-free operation

ELECTRICAL DATA	AKASOL SYSTEM 15 OEM 50 PRC	2P AKASOL SYSTEM 15 OEM 50 PRC	3P AKASOL SYSTEM 15 OEM 50 PRC	nP AKASOL SYSTEM 15 OEM 50 PRC
Cell connection in module	12s1p	12s1p	12s1p	12s1p
Capacity	50 Ah	100 Ah	150 Ah	n* 50 Ah
Energy	33 kWh	66 kWh	99 kWh	n* 33 kWh
Technology	li-ion NMC	li-ion NMC	li-ion NMC	li-ion NMC
Nominal voltage	661 V	661 V	661 V	661 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)*	75...150 kW	150...300 kW	225...450 kW	n* 75...150 kW
Charging power max. (10s)*	40...70 kW	80...140 kW	120...210 kW	n* 40...70 kW
Continuous power (RMS) < 15 min*	50...75 kW	100...150 kW	150...225 kW	n* 50...75 kW
Continuous power (RMS) > 15 min*	37...50 kW	75...100 kW	112...150 kW	n* 37...50 kW
Internal HV-Fuse	200 A	2x200 A	3x200 A	n* 200 A
Power consumption in standby mode	8 W	16 W	24 W	n* 8 W
Cycle life (depending on DoD, T, power)**	1,600 - 3,000 cycles	1,600 - 3,000 cycles	1,600 - 3,000 cycles	1,600 - 3,000 cycles

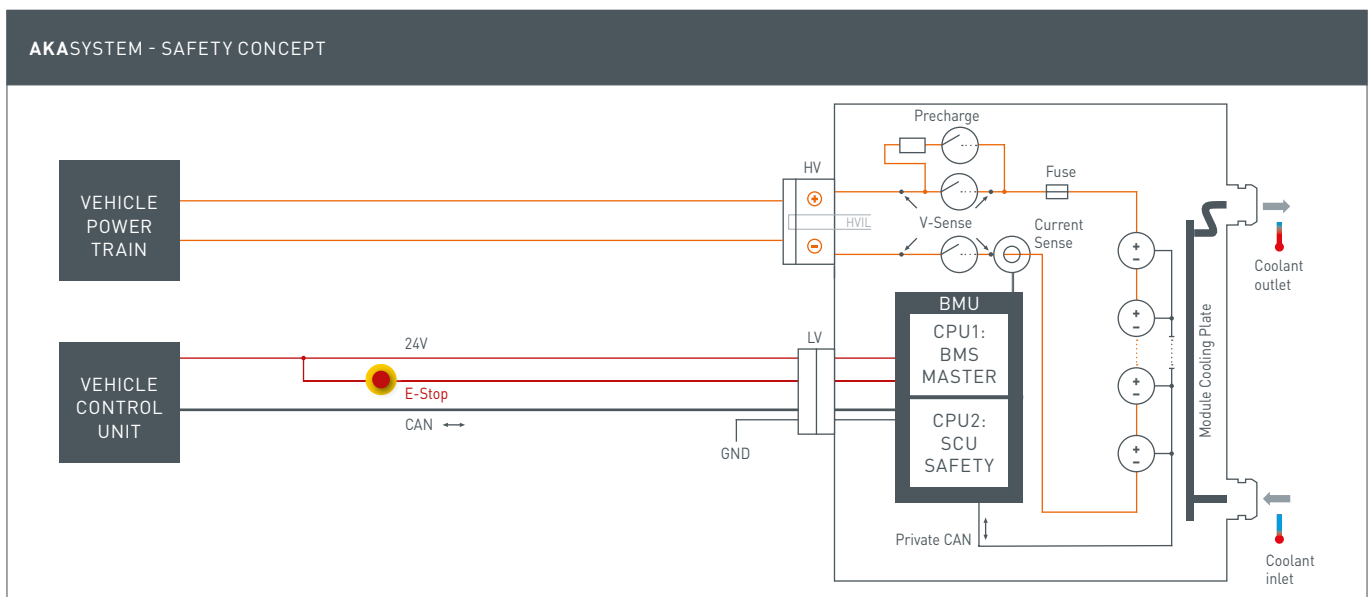
AKASOL SYSTEM n 15 OEM 50 PRC: freely scalable according to your application

*peak rating depending on fuse and cable / connector configuration ** long life cell

MECHANICAL DATA	AKASOL SYSTEM 15 OEM 50 PRC	2P AKASOL SYSTEM 15 OEM 50 PRC	3P AKASOL SYSTEM 15 OEM 50 PRC	nP AKASOL SYSTEM 15 OEM 50 PRC
Coolant pressure max.	2.5 bar	2.5 bar	2.5 bar	2.5 bar
Coolant pressure drop (Water/glycol=50/50)	<400 mbar @ 300 l/h nom. 25 °C	<400 mbar @ 600 l/h nom. 25 °C	<400 mbar @ 900 l/h nom. 25 °C	<400 mbar @ n* 300 l/h nom. 25 °C
Operating temperature range	-25 to 60 °C	-25 to 60 °C	-25 to 60 °C	-25 to 60 °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...254 kg	460...506 kg	690...759 kg	n*230...n* 253 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

AKASOL SYSTEM n 15 OEM 50 PRC: freely scalable according to your application

***depending on housing material



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HIGH-PERFORMANCE BATTERY SYSTEMS.
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