

AKASYSTEM

15 OEM 50 PRC



**150 kW (peak) • 50 kW (cont)
33 kWh • 655 V (nom) • 254 kg***

Typical product configuration.
Appearance and interfaces may vary.

*All technical data depending on temperature, DoD/SOC and housing material.

CERTIFIED ACCORDING TO AUTOMOTIVE STANDARDS.

- > Tested safety (e.g. ECE R10, UN 38.3, ECE R100, DNV-GL) 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 and 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 equal 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

THE E IN MOBILITY



100	04 0123
10	01 8995

ELECTRICAL DATA	AKASYSTEM 15 OEM 50 PRC	2P AKASYSTEM 15 OEM 50 PRC	3P AKASYSTEM 15 OEM 50 PRC	nP AKASYSTEM 15 OEM 50 PRC
Cell connection in module	12s1p	12s1p	12s1p	12s1p
Capacity ^A	50 Ah	100 Ah	150 Ah	n*50 Ah
Energy ^A	33 kWh	66 kWh	99 kWh	n*33 kWh
Technology	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC
Nominal voltage ^A	655 V	655 V	655 V	655 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) ^B	150 kW	300 kW	450 kW	n*150 kW
Charging power max. (10s) ^B	100 kW	200 kW	300 kW	n*100 kW
Continuous power discharge (RMS) ^B	50 kW	100 kW	150 kW	n*50 kW
Continuous power charge ^B	45 kW	90 kW	135 kW	n*45 kW
Internal HV-Fuse	200 A	2 x 200 A	3 x 200 A	n*200 A
Power consumption in standby mode	8 W	16 W	24 W	n*8 W
Cycle life ^C	> 3,000 cycles	> 3,000 cycles	> 3,000 cycles	> 3,000 cycles

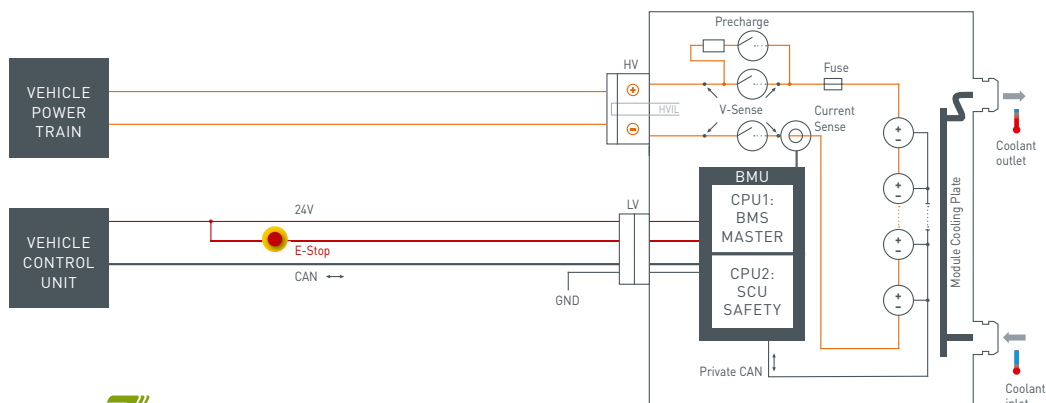
AKASYSTEM n 15 OEM 50 PRC: freely scalable according to your application

A 0.33C reference discharge cycle **B** Depending on SOC and temperature **C** Depending on individual use profile, especially DoD, temperature and power

MECHANICAL DATA	AKASYSTEM 15 OEM 50 PRC	2P AKASYSTEM 15 OEM 50 PRC	3P AKASYSTEM 15 OEM 50 PRC	nP AKASYSTEM 15 OEM 50 PRC
Coolant pressure max.	1.5 bar	1.5 bar	1.5 bar	1.5 bar
Typical 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	-30 to 60 °C	-30 to 60 °C	-30 to 60 °C	-30 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	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K
Weight (incl. contactor box) typical ^D	254 kg	508 kg	762 kg	n*254 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

AKASYSTEM n 15 OEM 50 PRC: freely scalable according to your application **D** Depending on housing material

AKASYSTEM – SAFETY CONCEPT



AKASOL Inc.
HEADQUARTERS & GIGAFACTORY 2

1400 E. 10 Mile Road | Suite 150
Hazel Park | MI 48030
T +1 -248-703-5956 | info@akasol.com
www.akasol.com

HIGH-PERFORMANCE BATTERY SYSTEMS.
MADE IN GERMANY WITH 30 YEARS OF EXPERIENCE.

AKASOL is a leading German developer and manufacturer of high-performance and high-energy lithium-ion battery systems for e-mobility applications as well as turnkey solutions. With more than 30 years of experience AKASOL provides the technically most mature and foremost technologies for traction battery systems in buses, commercial vehicles, rail and industrial vehicles, as well as in ships and boats – from prototype to serial production.