

## AKASYSTEM

# 9 AKM 150 CYC



**98 kW (cont) • 98 kWh •  
665 V (nom) • 560 kg\***

Typical product configuration.  
Appearance and interfaces may vary.

AVAILABLE  
2022

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

### CERTIFIED ACCORDING TO AUTOMOTIVE STANDARDS.

- › Development according to ISO 26262
- › Tested safety (e.g. ECE R10, UN 38.3, ECE R100) and "real world" experience
- › Protection classes IP67, IP6K9K
- › Marine certifications (e.g. DNV, ISO 62619 / 62620)
- › Serial production, IATF 16949 compliant
- › 21700 standard battery cells
- › Includes robust and proven control unit (BMU) with redundant safety system (SCU)
- › Multi-level short circuit protection on system level
- › Voltage and temperature monitoring
- › SOC / SOH analysis

### SCALABLE. VALIDATED. DURABLE.

- › Freely scalable system with any number of AKASYSTEMs
- › Ultra high energy and high energy density
- › Easy system connectivity
- › Excellent price-performance ratio
- › High cycle life
- › Maintenance-free operation
- › Active and passive thermal management
- › Liquid cooling
- › Passive cell balancing
- › Robust stainless steel battery case
- › Suitable for multi-string systems with monitoring on single-string and full system level
- › Designed especially for long-distance traffic

ELECTRICAL DATA	AKASYSTEM 9 AKM 150 CYC	2P AKASYSTEM 9 AKM 150 CYC	3P AKASYSTEM 9 AKM 150 CYC	nP AKASYSTEM 9 AKM 150 CYC
Cell connection in module	20s30p	20s30p	20s30p	20s30p
Capacity	148 Ah	296 Ah	444 Ah	n*148 Ah
Energy	98 kWh	196 kWh	294 kWh	n*98 kWh
Technology	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC
Nominal voltage	665 V	665 V	665 V	665 V
Voltage (max.)	756 V	756 V	756 V	756 V
Voltage (min.)	520 V	520 V	520 V	520 V
Discharging power (cont.) <sup>A</sup>	98 kW	196 kW	294 kW	n*98 kW
Charging power (cont.) <sup>A</sup>	80 kW	160 kW	240 kW	n*80 kW
Power consumption in standby mode	10 W	20 W	30 W	n*10 W
Cycle life (depending on DoD, T, power) <sup>B</sup>	4,000 cycles	4,000 cycles	4,000 cycles	4,000 cycles

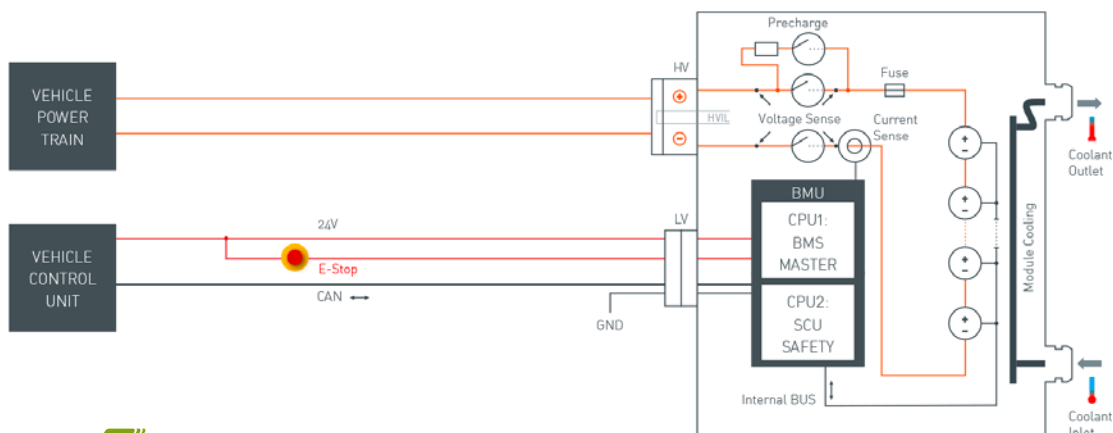
<sup>A</sup> Depending on SOC and temperature

<sup>B</sup> Depending on SOH and individual use profile, especially DoD, temperature and power

MECHANICAL DATA	AKASYSTEM 9 AKM 150 CYC	2P AKASYSTEM 9 AKM 150 CYC	3P AKASYSTEM 9 AKM 150 CYC	nP AKASYSTEM 9 AKM 150 CYC
Coolant pressure max.	1.5 bar	1.5 bar	1.5 bar	1.5 bar
Coolant pressure drop (water/glycol=50/50)	400 mbar @ 600 l/h nom. 25 °C	400 mbar @ 1,200 l/h nom. 25 °C	400 mbar @ 1,800 l/h nom. 25 °C	400 mbar @ n*600 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	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K
Weight (incl. contactor box)	560 kg	1,120 kg	1,680 kg	n*560 kg
Dimension (L x W x H) in mm (nominal)	1,720 x 700 x 300	2* (1,720 x 700 x 300)	3* (1,720 x 700 x 300)	n* (1,720 x 700 x 300)

AKASYSTEM 9 AKM 150 CYC: freely scalable according to your application.

## AKASYSTEM - SAFETY CONCEPT



AKASOL AG  
NEW HEADQUARTERS & GIGAFACORY 1

Kleyerstrasse 20  
64295 Darmstadt | Germany  
Tel.: +49 6151 800500 | 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.