epic power

Lifting the world with power electronics

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Main activity:

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Design, manufacture and commercialization of **high efficient bidirectional DC/DC converters**

for

Energy Storage Systems

- Ultracapacitors
- Batteries
- Hydrogen Electrolysers
- Hybridation of technologies

DC grids

- DC transformer

Battery-driven automation drives

- Elevators
- Automatic guided vehicles
- Ships and sailing vessels

General purpose DC/DC converters

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Bidirectional

Isolated

High-efficiency SiC Mosfet

Soft-start

Range of converters

	EPC-2k2-324	EPC-2k2-624	EPC-3k5-648	EPC-5k5-648	EPC-4k8-6125
Low side: Input / Output Voltage	21 - 29 Vdc	21 - 29 Vdc	42 - 58 Vdc	42 - 58 Vdc	110 - 165 Vdc
High side: Input / Output Voltage	330 Vdc (up to 450 Vdc)	600 Vdc (up to 800 Vdc)	600 Vdc (up to 800 Vdc)	600 Vdc (up to 800 Vdc)	600 Vdc (up to 800 Vdc)
Nominal power	2.2 kW	2.2 kW	3.5 kW	5.5 kW	4.8 kW
Maximum Power	2.6 kW	2.6 kW	4.2 kW	6.5 kW	4.8 kW
Scalability	Up to your requirements (parallelizable)				
Efficiency	> 98%				

i.e. 5k5 -648

Converter power-wall: up to any power

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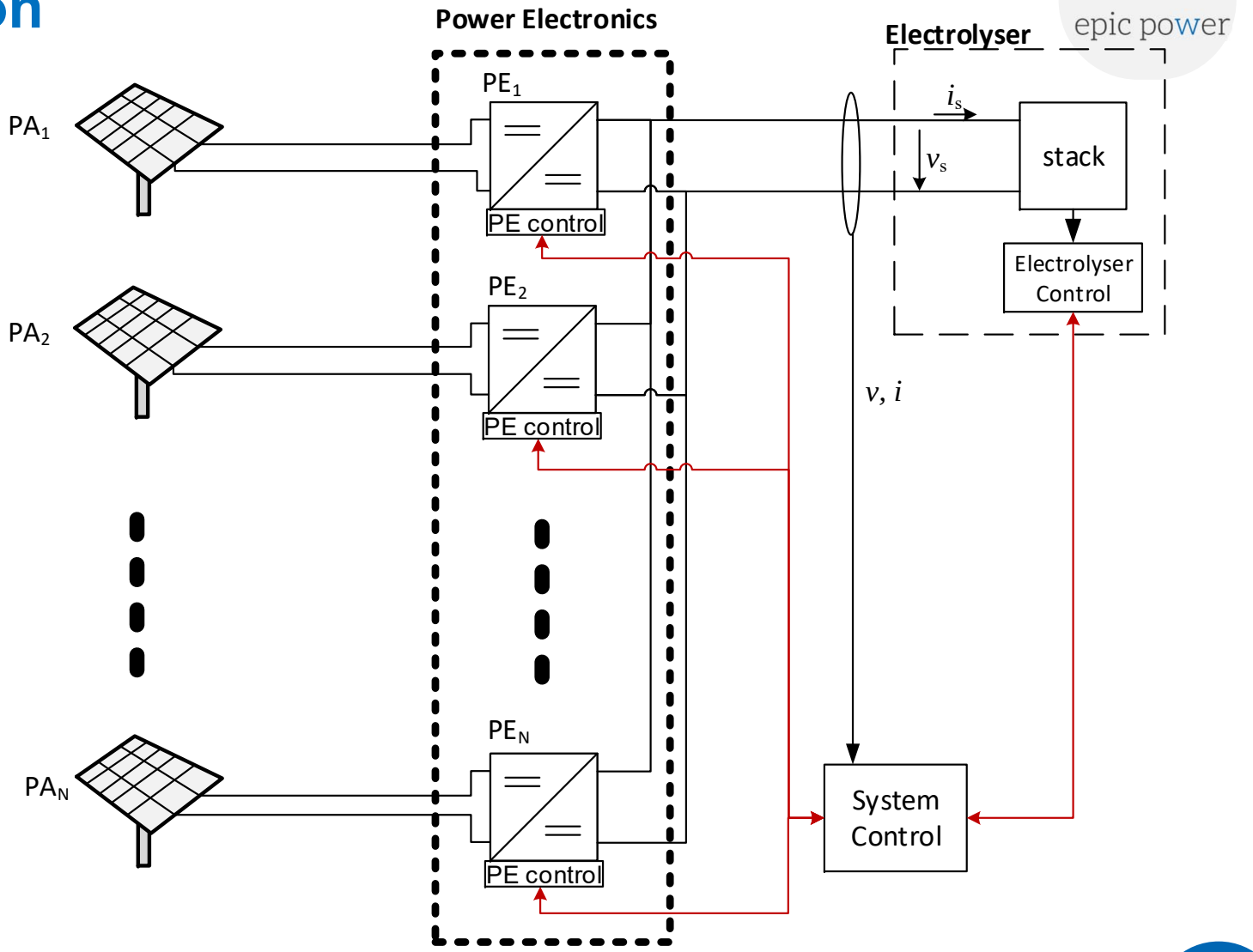
Flexibitility	Any power application
Redundancy	One brick can be substituted or added in operation
Easy to configure	Simple installation Soft-start Self-powered CAN bus
AI smart systems	Adaptative SoC SoH, optimized endurance

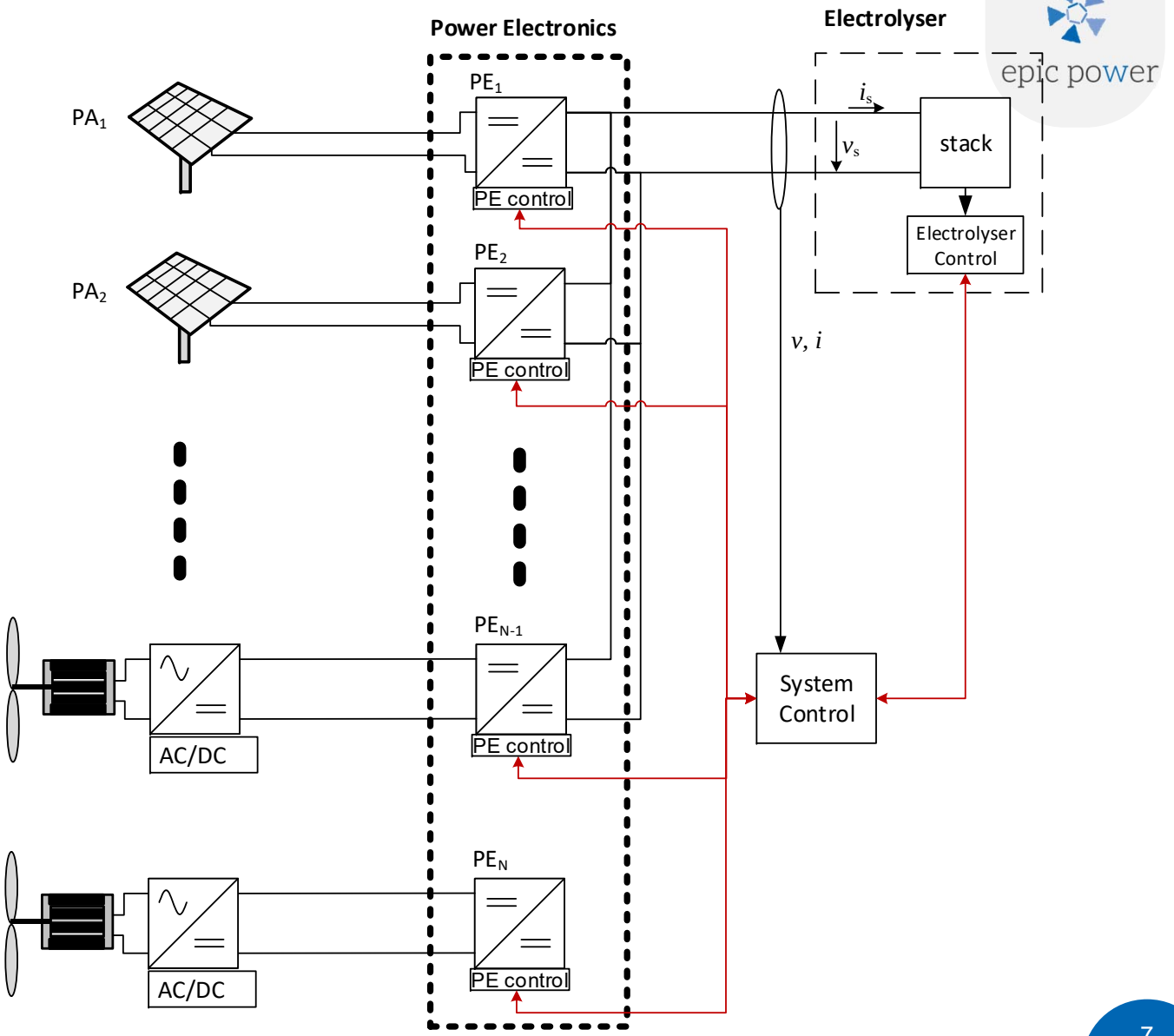
Hydrogen generation

Scalable	Any power requirements
Robustness	One brick can be substituted or added in operation
Soft start	Improves lifetime
On grid / Off grid	MPPT direct PV to stack

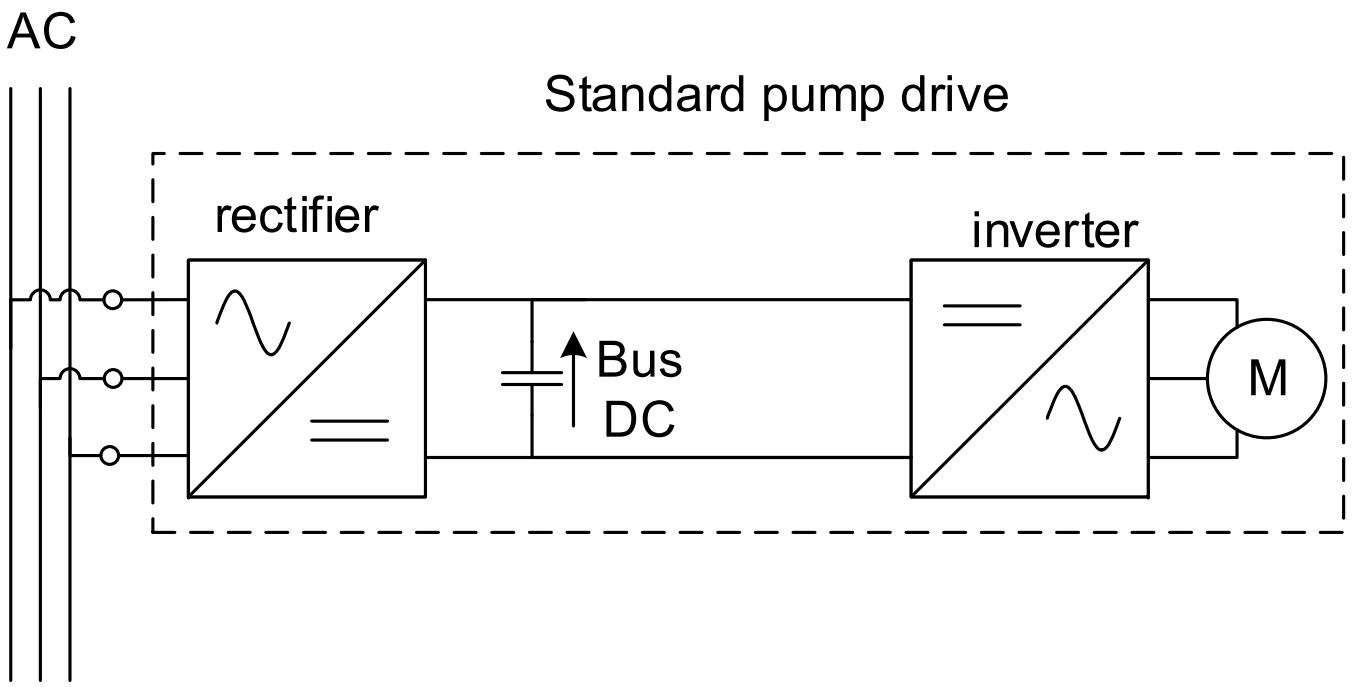
Hydrogen generation



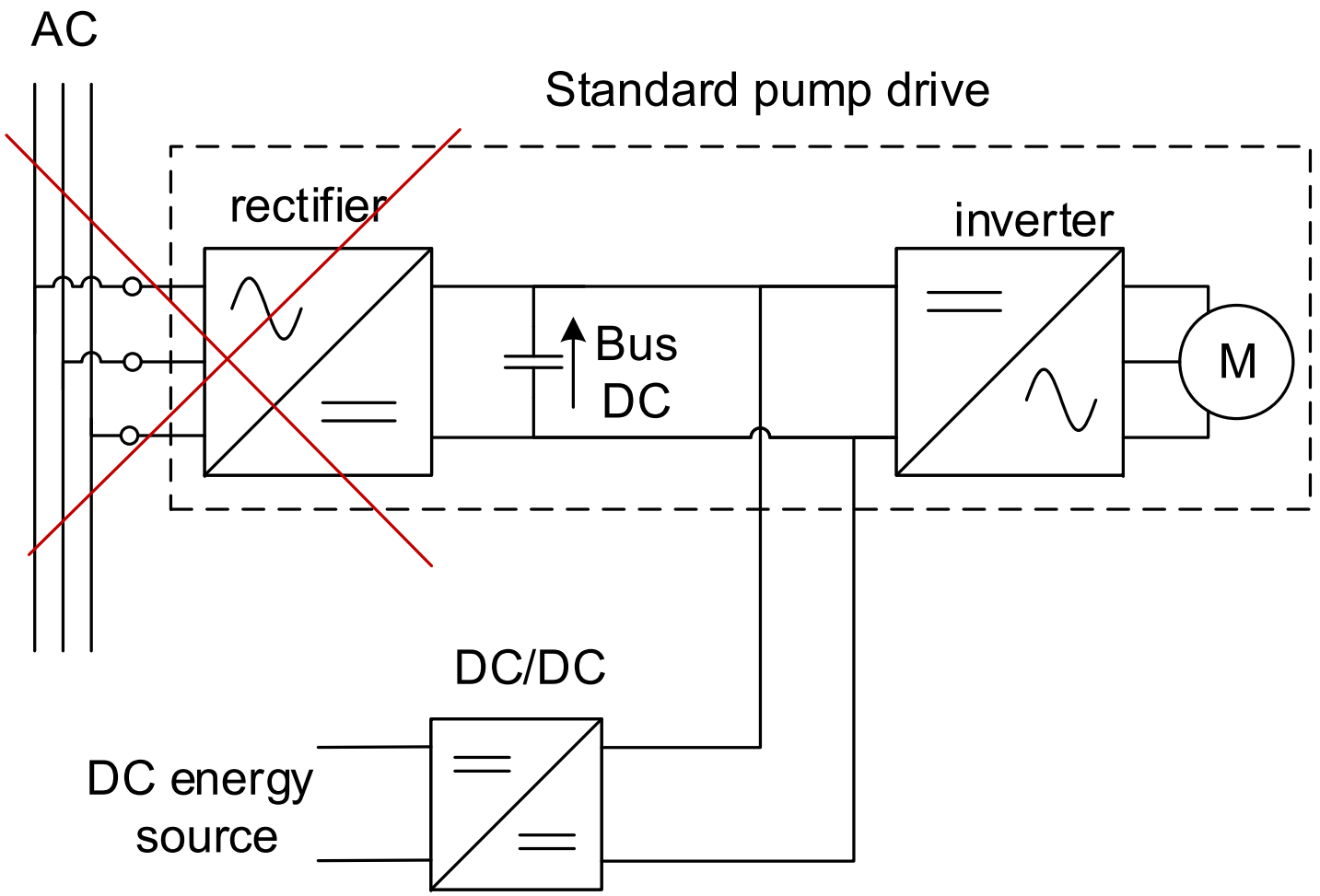
Hydrogen generation



Hydrogen generation: BoP



Hydrogen generation: BoP



R&D capabilities

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Research

- Efficient conversion w. SiC resonant
- Magnetic components
- Advanced control techniques
- Motor vector control

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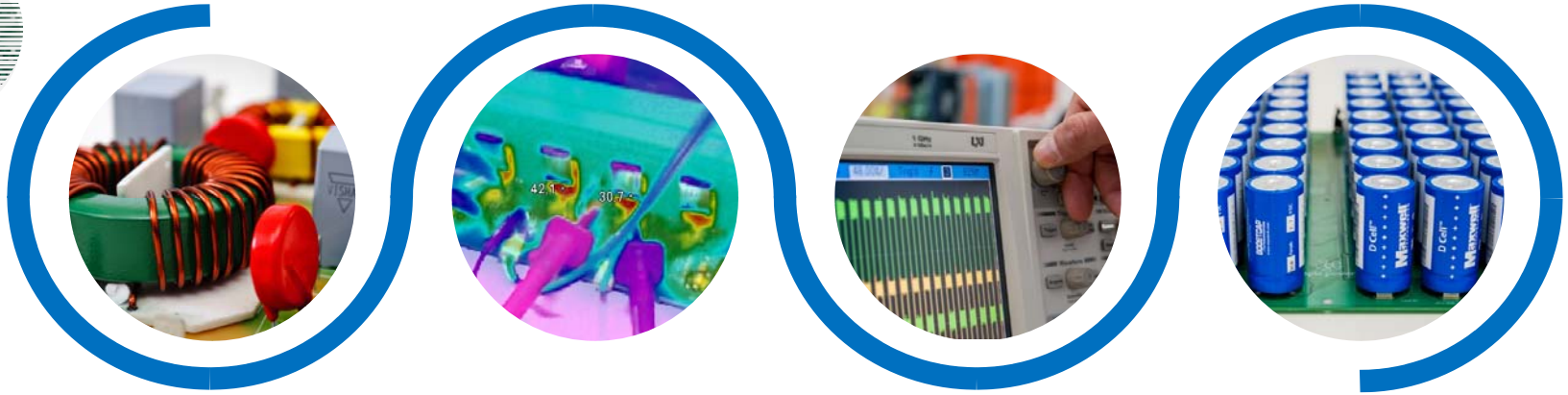
Development

- Industrialization
- Budgeting and purchasing
- Production of small / medium series
- Robustness
- Safety and regulations



Some figures

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7 years
innovating

79	14	27	1069
CUSTOMERS	COUNTRIES	ENGINEERING PROJECTS	INSTALLATIONS MADE