Arco Technologies inc

Arco Technologies

Advanced Energy Systems

Powering the future

DATA SHEET

FH-M

Fuel cell system for material handling trucks

FAST REFUELING

In just 3 minutes, trucks are refueled instead of the 12-15 minutes required for battery swaps.

DIRECTLINK ™

HYDROREC ™

Typical application areas

Specifically developed for demanding forklift applications, the Arco Technologies inc high-power systems are the most advanced, integrated and completely automatic fuel cell power units. Available with a nominal voltage of 48V and 80V, the Arco power system has everything required for an easy plug and play operation. Starting an Arco power system is easy as turning a key. Once placed in the forklift and connected to the plug, the automatic control unit will start delivering power accordingly to the load request.

FH-M advantages

• Productivity

The Arco FH-M power system maintains constant power, enabling your vehicle to operate at full speed during the entire shift. In contrast, conventional forklifts experience a 14% speed reduction over the latter half of their battery charge.

• Lower total cost of ownership

The Arco FH-M power system eliminates battery changes, charging, and management during operation. These units surpass lead-acid batteries in runtime and refuel in just 3 minutes, significantly minimizing vehicle and personnel downtime, enabling continuous forklift operation over three shifts.

• Zero Emissions

• More commercial space

Hydrogen refueling stations replace extensive battery charging rooms, liberating valuable warehouse space, equivalent to approximately 7% of the total area, for inventory management and revenue-generating operations.

• Transparent transition

The Arco FH-M power system seamlessly fits into the space occupied by DIN batteries on forklift trucks, offering a straightforward and cost-effective solution for professionals to adopt, enhancing operational efficiency and sustainability.

FH model	FH-48	FH-80
Nomial voltage	48 VDC	80 VDC
Operating voltage limits	42-54 VDC	67-86 VDC
Peak output current (5 minutes)	852 A	
Regeneration current	400 A	
Max continuous power output	12 kW	20 kW
Hydrogen storage	0,8 kg	1,8 kg
Refueling time	3 min	
Working temperature	0-40 °C	
Dimensions L-W-H	830-630-630	1028-713-785
Weight	610 kg	1300kg
Receptacle	SAE J2600 H35	
Nominal pressure	350 bar	
Coolant	Ethylen Glicol Di Water 50%	
Power connection	DIN 320	

Arco Technologies general description

Arco Technologies is at the forefront of the clean energy sector and in promoting a low-carbon transition through its proton exchange membrane (PEM) cells and, more recently, anion exchange membrane (AEM) electrolyzers. With over 20 years of experience in hydrogen-related electrochemical technologies, we have developed expertise in all aspects, from electrodes to stacks and system equipment, making us experts in system integration as well. In addition to offering a portfolio of standardized products, we develop custom solutions for clients and provide support during the integration phase.

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