

ABC-170 / ABC-170 CE

Dual Channel Cycling Station with Extended Sink Power



Ideal testing solution for fuel cells

The ABC-170/170CE power processing system is used to meet fuel cell testing and sinking power needs. Originally developed for fuel cell testing applications and for systems that require additional sinking power, Webasto customers have also used this versatile machine to cycle hybrids and batteries.

The ABC-170 offers power from +125kW to - 170kW, with a voltage range of 8 to 445 VDC and a current range of +530ADC to - 640ADC.

Key Features:

- 99% Power Factor
- Energy Returned to the Grid at 92+% Efficiency
- Dual Independently Controlled Channels
- Analog Control Signal
- Automatic Shutdown on Loss of Power (Anti-Islanding)
- Independent Channel Interlock
- Load Disconnect Protection (camlock model only)
- Easy Front Panel Connections
- Emergency Stop Button
- Flexible DC Supply or Load Capabilities
- Fully Programmable Computer Control
- Multiple Control Interfaces/Options: Manual, Remote Operating System (ROS) Software, LabView, CAN and 3rd Party Control Software
- Remote Voltage Sense
- Bi-Directional Load Capability

Technical Specifications

	ABC-170	ABC-170CE
Input Voltage Options	3 Phase, 240VAC	3 Phase, 400, 415 and 480 VAC
Current Draw	340Amps	203, 195, and 170 Amps respectively
Frequency	60Hz (50 Hz available)	50Hz (60 Hz optional)
Isolation transformer	Requires external isolation transformer with 225KVA, 240Vrms secondary	Internal transformer
Power factor	> 99%	> 99%
Harmonic distortion	< 3% THD; IEEE 519 Compliant	< 3% THD; IEEE 519 Compliant
Multiple User Interfaces	Manual; Remote Operation System (ROS); DCOM Driver for LabVIEW; C++ and Visual Basic; CAN	Manual; Remote Operation System (ROS); DCOM Driver for LabVIEW; C++ and Visual Basic; CAN
Current Ripple - Independent & parallel mode	< 0.5Arms	< 0.5Arms
Current Ripple - Max ripple from load	< 15Arms	< 15Arms
Operating Environment - Temperature	0-35°C	0-35°C
Operating Environment - Humidity	5-90% non-condensing	5-90% non-condensing
Weight	1334 lbs (605 kg)	3925 lbs (1780 kg)
Dimensions	46" W x 55" H x 26" D (117cm W x 140cm H x 65cm D)	73"W x 71"H x 30"D (183cm W x 180cm H x 76cm D)



Operating Range

Configuration	Voltage (Vdc)	Current (Amps)	Power (kW)
Independent	+8 to +420	-320 to +265	-170 to +125
Optional Range	+420 to +435	-160 to +160	-70 to +70
	+435 to +445	-90 to +90	-40 to +40
Parallel	+8 to +420	-640 to +530	-170 to +125
Optional Range	+420 to +435	-160 to +160	-70 to +70
	+435 to +445	-90 to +90	-40 to +40

Accuracy & Resolution

Measurement	Accuracy (\pm)	Resolution
Voltage	250mV or 0.15% of the output voltage	20mV
Current Independent (2 channels)	100mA or 0.25% of the reading	20mA
Current External Parallel (1 channels)	200mA or 0.35% of the reading	40mA