

ABC-150

Dual Channel Cycling Station



The original power cycling system

The ABC-150 was originally developed to support the design and development of the drivetrain and subsystems of the GM Impact, the first modern electric car. All Webasto power cycling systems are equipped with a real-time clock on the system's control board that enables measurement of Ah and kWh during cycling. The ABC-150 offers power up to 125kW, with a voltage range of 8 to 445VDC and a current range of ± 530 ADC. The ABC-150 is now the worldwide standard for the testing of advanced batteries, fuel cells, capacitors and other alternative energy technologies in the automotive, aerospace, stationary power and defense industries.

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-150
Input Voltage Options	3 Phase, 240Vrms, +10%/-15%, <5% imbalance
Current Draw	325Amps
Frequency	60Hz (50 Hz available)
Isolation transformer	Requires 150KVA external isolation transformer
Power factor	> 99%
Harmonic distortion	< 3% THD; IEEE 519 Compliant
Multiple User Interfaces	Manual; Remote Operation System (ROS); DCOM Driver for LabVIEW; C++ and Visual Basic; CAN
Current Ripple - Independent & parallel mode	< 0.5Arms
Current Ripple - Max ripple from load	< 15Arms
Operating Environment - Temperature	0-35°C
Operating Environment - Humidity	5-90% non-condensing
Weight	1334 lbs (605 kg)
Dimensions	46" W x 55" H x 26" D (117cm W x 140cm H x 65cm D)

Operating Range

Configuration	Voltage (Vdc)	Current (Amps)	Power (kW)
Independent	+8 to +420	-265 to +265	-125 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	-530 to +530	-125 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