



an EnerSys® company

ACS-HP 125VDC

Modular Switched-Mode Industrial Charging System



- Complete communication, system monitoring and control package
- Reduced operating costs: unity power factor with efficiency >93%
- Wide input range: 187 to 312VAC single-phase or 208 to 480VAC three-phase
- High power density with a small overall footprint
- Expandable to 175A output capacity; power options to 800A available

The Alpha® High Performance Charging System provides excellent reliability and ultimate efficiency in meeting power requirements for many types of system applications.

The ACS-HP series is designed to charge all types of stationary batteries (flooded lead acid, VRLA and NiCad) for industrial, utility, petrochemical and fire/utility applications. Available in standard and XL cabinet configurations, the ACS-HP series includes advanced features such as a full graphic LCD touchscreen and browser accessible GUI for advanced control and convenience and event logging.

ACS-HP 125VDC Specifications

Electrical Input	
Nominal Voltage:	208 to 250VAC (single-phase), 208 to 480VAC (three-phase)
Operating Voltage:	187 to 312VAC
Extended Voltage:	187 to 90VAC (derated)
Phase:	Single or three
Frequency:	45 to 70Hz
Current:	23A module-nom. (130A max @ 175VDC output)
Power:	4,400W continuous/module
Power Factor:	>0.99 (50 to 100% load)
THD:	<5%
Efficiency:	>93%

Electrical Output	
Voltage:	90 to 160VDC
Current:	35A module-nom. (200A max @ 110VDC)
Load Regulation:	Static <±0.5%
Line Regulation:	Static <±0.1%
Transient Response:	<±5% for 40 to 90% load step, 30ms recovery time
Ripple:	±30m Vrms battery eliminator

Mechanical	Standard	XL
Dimensions H × W × D (in/mm):	43 × 24 × 27.5 / 1083 × 606 × 699	71 × 27.9 × 24.5 / 1800 × 708 × 625
Weight (kg/lbs):	220 / 100 (105A system)	253 / 115 (105A system)
Cabinet:	NEMA 1 (black finish)	NEMA 1 (black finish)

Environment	
Standard Temperature:	-40° to 50°C (-40° to 122°F)
Extended Temperature:	-40° to 75°C (-40° to 167°F)
Storage Temperature:	-40° to 85°C (-40° to 185°F)
Humidity:	0 to 95% non-condensing
Elevation:	-500 to 2,800m (-1,640 to 9,186ft) to 4,000m (13,124ft) derated to 40° (104°F)
Audible Noise:	<55dBa @ 1m (3ft)
Ventilation:	Forced air
MTBF:	>350,000 hours

Standard Functions	
Control Functions:	<ul style="list-style-type: none"> • Automatic, scheduled or manual float charging (adjustable) • Automatic, scheduled or manual equalize charging (adjustable) • High/low voltage alarm setting (adjustable) • Charge current limit (adjustable) • Automatic or manual battery testing • Battery capacity and runtime prediction • Temperature compensation
Daily Statistics:	<ul style="list-style-type: none"> • Minimum, maximum and average on input channels with date and time stamp • Battery current, rectifier current and AC mains voltage for prior 90 days
Event Log:	On all events such as alarms, power on, any change of state of the digital inputs or other miscellaneous events

Standard Features	
<ul style="list-style-type: none"> • Full graphic LCD touch screen with virtual alphanumeric and numeric keyboards • Modbus Protocol • Reverse polarity protection • Current limit protection • Common Form C alarm relay contacts • AC failure alarm • Charger failure alarm • DC output failure alarm 	<ul style="list-style-type: none"> • High interrupting current input and output breakers • Access GUI user interface via Internet browser through Ethernet port or RS-232 craft port on CXS controller • AC and DC surge suppression • Soft start protection • High voltage shutdown • High/low voltage alarm • Positive/negative ground fault alarm • Battery temperature compensation probe (12ft)

Options
<ul style="list-style-type: none"> • Low voltage disconnect • DC output panel • Up to 10 × 2 pole, 5-60A breakers (10kA IC) with alarm monitoring • DNP3 level 2

Standards and Certifications	
Safety:	<ul style="list-style-type: none"> • EN 60950 • UL 60950-1 and UL 1012 • CSAC22.2 No. 60950-1-07 • CE EN 60950, CB Scheme • Telcordia (Bellcore) GR-1089-CORE
EMC:	<ul style="list-style-type: none"> • EN 55022 (CISPR 22) • EN 61000-3-2 EN 61000-3-3 • EN 61000-4-2 EN 61000-4-3 • EN 61000-4-4 EN 61000-4-5 • EN 61000-4-6 EN 61000-4-11 • ETS 300 019-1-1 ETS 300 019-1-2 • ETS 300 753 IEC60950 • ICES-003 Class B FCC Part 15 Class B • FCC Part 68



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Alpha Technologies Services, Inc. USA: 3767 Alpha Way, Bellingham, WA 98226 Canada: 7700 Riverfront Gate, Burnaby, BC V5J 5M4
 Toll Free North America: +1 800 322 5742 Outside US: +1 360 647 2360 Technical Support: +1 800 863 3364
 For more information visit www.alpha.com

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