

ACS-HP™ Series

Alpha Modular Switched Mode 125VDC/250VDC Industrial Charging System



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

The Alpha Charging System High Performance Series 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.

| 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@ 175ADC 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 |

| | Standard | XL |
|-------------------------|-------------------------|-------------------------|
| H x W x D (mm): | 1049 x 622 x 597 | 1806 x 700 x 622 |
| H x W x D (mm): | 41.25 x 24.5 x 23.5 | 71.1 x 27.55 x 24.5 |
| Weight (kg/lbs): | 100 / 220 (105A system) | 115 / 253 (105A system) |
| Cabinet: | NEMA 1 (black finish) | NEMA 1 (black finish) |

| Environment | |
|------------------------------|---|
| Standard Temperature: | -40°C to 50°C (-40°F to 122°F) |
| Extended Temperature: | -40°C to 75°C (-40°F to 167°F) |
| Storage Temperature: | -40°C to 85°C (-40°F to 185°F) |
| Humidity: | 0 to 95% RH non-condensing |
| Elevation: | -500 to 2,800m (-1,640 to 9,186ft) to 4,000m (13,124ft) derated to 40°C (104°F) |
| Audible Noise: | <55dBa @ 1m (3ft) |
| Ventilation: | Forced Air / Convection |
| 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 |
| Battery Log: | Battery health history on last 20 discharges, time of discharge and battery capacity |

| 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 High interrupting current input and output breakers | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Up to 10 x 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 (pending) CSAC22.2 No. 60950-1-03 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 |

| Other Models | |
|---|--|
|  <p>ACS XL 125VDC</p> |  <p>ACS 48/125VDC HP-WM</p> |



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