# Behlman Power Products

## Inverter

## ACDC-1250

## FEATURES


- **1250 Watts of AC Power**
- **Sine wave output**
- **AC and DC inputs with bypass**
- **Low output THD**
- **Unique overload protection**
- **Status and alarms**
- **Isolated Output from both AC and DC inputs via transformer**
- **Inverter output in sync with input AC line (when present)**

## UNINTERRUPTIBLE POWER USING YOUR BATTERIES AND/OR AC SOURCE

Behlman's new and improved Gen 2 ACDC-1250 Inverter delivers 1250 Watts of clean, regulated AC power in a 5.25" high rack mount chassis. It was designed to operate reliably in a utility or industrial environment where power surges and transients are a concern. In the event of loss of AC input the ACDC will automatically switch to your DC source in ZERO time. *The ACDC is factory set for AC as the primary input or you can order the Option D1 for DC primary input operation mode.* The ACDC Inverter continuously conditions the incoming power, providing a high-quality sine wave output with very little distortion. The ACDC is rated in watts, the amount of power we can deliver, unlike most inverters that are specified in Volt-Amps (VA). similar to a UPS (Uninterruptible Power Source). Similar units rated at 1250 VA would only supply 875 watts at .7 pf.

The ACDC Inverter has all the features our customers have come to expect from Behlman; a clean regulated sine wave output with excellent line and load regulation, high efficiency and low harmonic distortion in a compact enclosure. The ACDC Inverter contains a unique overload protection system that folds back the voltage to maintain maximum rated current without distorting the output waveform. The unit has LED indicators on the front panel and status and alarm contacts on the rear. These contacts can be utilized by a Supervisory Control And Data Acquisition (SCADA) system. In the event of an inverter failure the unit has an automatic bypass that switches in zero time to ensure that the output power is maintained.

The ACDC Inverter is ideal for use in substations and utilities where sensitive station electronics require clean, surge protected and regulated AC.

## INPUT

**Voltage:**

**AC:** 120VAC +/- 10%, single-phase, 47-63 Hz

**DC:** 48 VDC +/- 20% or 125 VDC +/- 20%
Maximum DC burden (full load):
40 amps DC @ 38 VDC
15 amps DC @ 100 VDC

## OUTPUT

| | |
|---|---|
| **Power:** | 1250 VA |
| **Voltage:** | 120 VAC +/- 5%, 60 Hz, isolated |
| **Current:** | 10.4 Amps |
| **Crest Factor:** | 3:1 |
| **Power Factor:** | 100% of rated output into any power factor load |
| **Distortion:** | Less than 3% THD typical |
| **Line Regulation:** | +/- 0.3% for +/- 10% line change |
| **Load Regulation:** | +/- 1.0%, no load to full load |
| **Efficiency:** | 80% typical |
| **Switch-over time:** | Zero, AC-DC, or DC-AC |

## PROTECTIVE CIRCUITS

| | |
|---|---|
| **Input:** | Main circuit breaker |
| **Constant Current:** | Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform |
| **Short Circuit:** | Short circuit overload electronically latches output open to protect load... power restored by cycling input power |
| **Thermal:** | Internal temperature sensor shuts off output to prevents heat damage |
| **Bypass:** | If unit fails, the AC input will be routed to the output |

## CONTROLS / INDICATORS

| | |
|---|---|
| **Power On/Off:** | Circuit breaker |
| **Indicators:** | AC present, DC present, AC output and System OK |
| **Bypass Fuse:** | 15 Amps |

## ALARM CONTACTS

**Contact closures:** AC IN, DC IN, AC OUT, SYS OK
**Contact rating:** DC = 2A @ max.32VDC
AC = 0.5A @ 125VAC

## MECHANICAL & ENVIRONMENTAL

| | |
|---|---|
| **Dimensions:** | High-strength rack-mount chassis 19”W X 5.25”H X 19”D (48.3 cm X 13.3 cm X 48.3 cm) |
| **Weight:** | 65 lbs (29.5kgs) |
| **Input Connections:** | Barrier strip on rear |
| **Output Connections:** | Four NEMA 5-15 receptacles on rear |
| **Alarms Connections:** | Barrier strip on rear |

| | |
|---|---|
| **Operating Temperature:** | -4° to 131° F (-20° to 55° C) |
| **Humidity:** | Up to 95% non-condensing |
| **SWC:** | Designed to meet IEEE C37.90.1 |
| **Fast transient:** | Designed to meet IEEE C37.90.1 |
| **EMI:** | Designed for immunity to conducted & radiated EMI |
| **RFI:** | Designed to meet IEEE C37.90.2-1997 |

## OPTIONS: *Contact factory for additional options*

**D1:** DC preferred. In the event the DC voltage goes below an acceptable value the input will switch to AC
**TB:** Barrier strip on rear in place of NEMA 5-15 receptacles


## MODEL SELECTION GUIDE

**ACDC-1200-125-D1**

DC Inputs — DC preferred

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