

**Standard Features**

- Kohler automatic battery chargers feature two charging modes to keep lead-acid and nickel-cadmium batteries fully charged without overcharging. The battery charger automatic float-to-equalize operation maintains battery voltage with no manual intervention.
- Temperature compensation feature prevents overcharging or undercharging battery at high/low ambient temperatures.
- Current-limiting circuitry prevents battery charger from overload at low battery voltage and during a short circuit. The ten amp DC current limit allows the battery charger to remain connected to the battery during engine cranking.
- Battery charger complies with NFPA 110 code requirements when equipped with optional alarm circuit board. Alarm board features low battery voltage, high battery voltage, and battery charger malfunction alarm contacts.

**Specifications**

Loose Battery Charger Kit No.	Installed Battery Charger Kit Nos.	NFPA 110 Alarm Outputs	Output		Number of Cells	
			Voltage	Amps	Lead Acid	Ni-Cd
PAD-292862	—	No	12	10	6	9
PAD-292863	GM39705-KA1, GM42342-KA1	Yes				
PAD-292864, GM78809-KP2	GM28562-KA2, -KA4, -KA6, -KA8, GM51537-KA2, GM78809-KA2, GM87550-KA1	No	24		12	18
PAD-292865, GM78809-KP1	GM28562-KA1, -KA3, -KA5, -KA7, GM51537-KA1, GM78809-KA1, GM87550-KA2	Yes				
<b>AC Input Voltage, Frequency</b>			120/240 VAC, 50/60 Hz			
<b>DC Voltage Regulation</b>			±1%			
<b>Weight</b> (battery charger without mounting brackets)			11.8 kg (26 lb.)			
<b>Dimensions, L x D x H</b> (battery charger without mounting brackets)			271 x 143 x 422 mm (10.67 x 5.63 x 16.63 in.)			

**Note:** Installed battery charger kits are available on selected generator set models. See your authorized distributor for availability.

## Automatic Float to Equalize

When the battery loses its charge, the battery charger operates in the High Rate Constant Current Mode until the battery voltage rises to the preset equalize level.

At the preset equalize level, the battery charger switches to the constant voltage Equalize Mode until the current required to maintain this voltage drops to 50% of the battery charger's high rate current.

The battery charger then switches to the lower constant voltage Float Mode when the battery nears full charge. The battery charger continues to operate in this mode until AC input power disconnects or the current required to maintain the battery at the float voltage setting exceeds 6 amps.

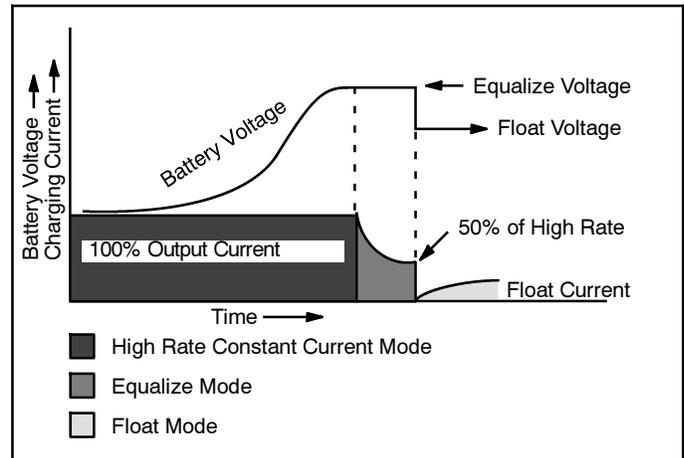


Figure 1

## Temperature Compensation

The battery charger compensates for battery temperature using a negative temperature coefficient. The battery charger provides temperature compensation of  $-2 \text{ mV}/^\circ\text{C}$  per cell over the ambient temperature range of  $-40^\circ\text{C}$  up to  $60^\circ\text{C}$ . The temperature compensation automatically adjusts the float and equalize voltage settings to prevent the battery from overcharging at high ambient temperatures and undercharging at low ambient temperatures.

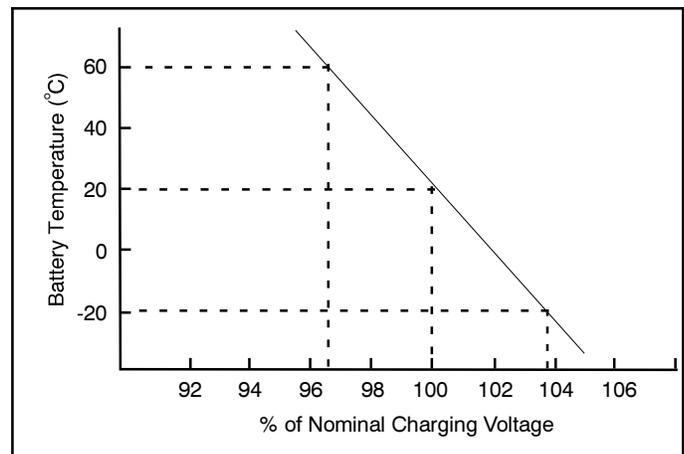
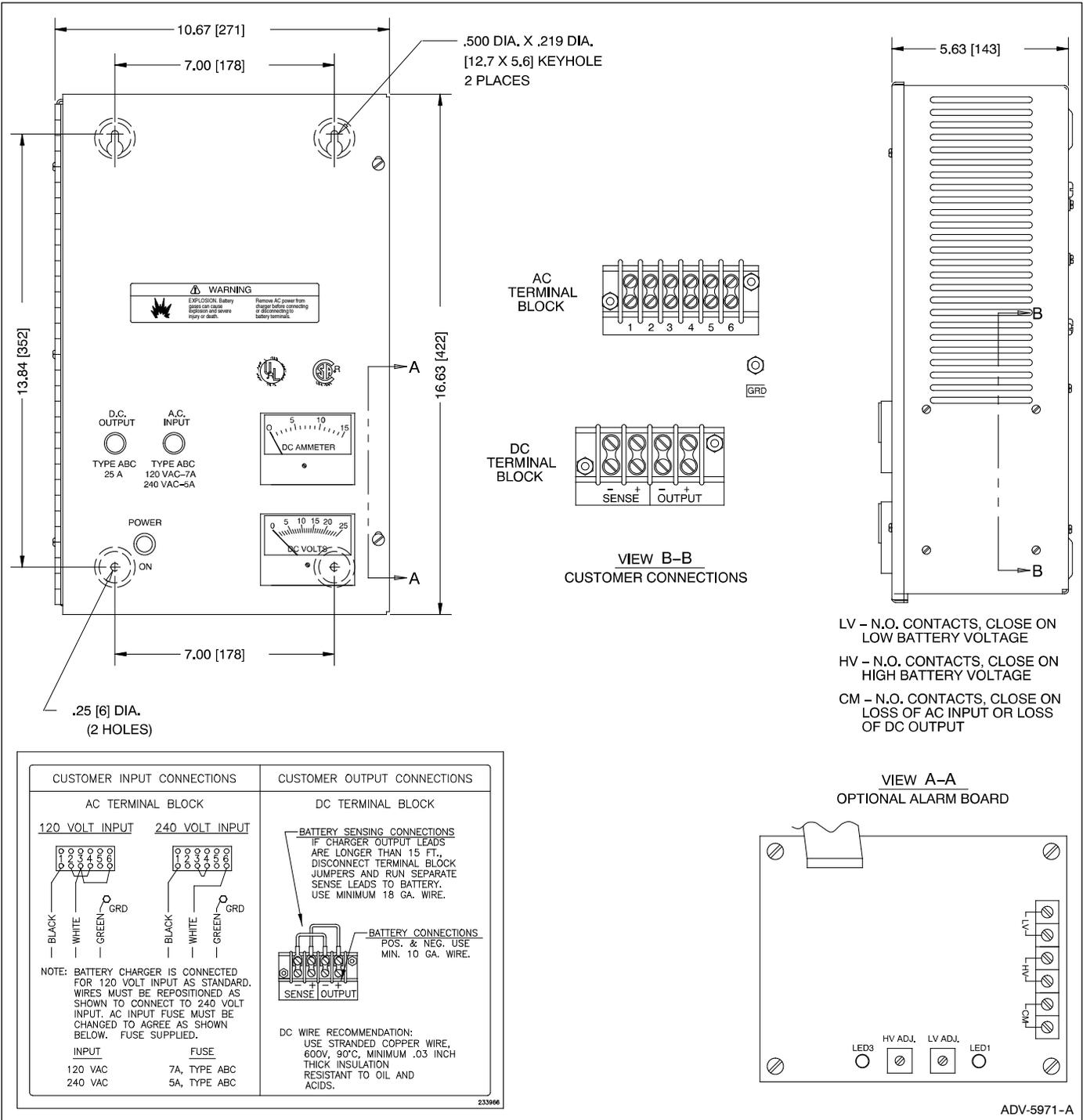


Figure 2

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## Standard Features

- **Ammeter and voltmeter** indicate battery charging rate with 5% full-scale accuracy. POWER ON lamp indicates battery charger is operating.
  - **AC input and DC output fuses** prevent battery charger damage from abnormal overload and short-circuit conditions.
  - **Operational temperature range** is from  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ) to  $60^{\circ}\text{C}$  ( $140^{\circ}\text{F}$ ). Battery charger float and equalize voltage automatically adjust throughout the temperature range.
  - **Reverse polarity protection circuitry** prevents battery charger from energizing if improperly connected.
  - **Internal terminal blocks** for AC input and DC output/sensing lead connections.
  - **DC voltage regulation** of  $\pm 1\%$  from no load to full load and AC input line voltage variations of  $\pm 10\%$ .
  - **UL-1012 listed/CSA certified.**
  - **Wall-mount, slotted enclosure** with knockouts for customer conduit installation.
  - **Reconnection blocks** allow operation at 120 or 240 volts AC, single phase, 50 or 60 hertz.
  - **Battery charger circuitry protected** from AC line and DC load voltage spikes and transients.
  - **Terminal block** for remote battery sensing leads.
  - **Automatic float-to-equalize operation** with individual potentiometer adjustments. Charge up to 12 lead-acid or 18 nickel-cadmium battery cells.
  - **No adjustments are necessary** for lead-acid or nickel-cadmium batteries.
  - **Oversized transformer and SCR heatsink** allow constant current charging at 10 amps up to the equalize voltage setting for fastest battery charging.
- Note:** The battery charger will discharge the engine starting battery(ies) when the battery charger is connected to the battery(ies) and is not connected to an AC power supply. To prevent engine starting battery(ies) discharge, install battery charger relay kit GM39659.



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