



SPECIFICATIONS - 2416SRF

SuperchargerPlus

Totally Automatic Switch-Mode Battery Chargers

"Suitable for Gel, Sealed & Wet Lead Acid Batteries"

- Summary:** **24 V, 8 Amp Constant Current**
(equivalent to 16A tapered charger in charging time)
- Automatic Cut-off and then true Float. Can be left connected indefinitely without harming the battery.
 - **UL , CSA, TUV, GS, KEMA, European Standard EN60335 Part 2.29 and CE European EMC Directive) Listed.**
 - **Input 115/230 VAC** - Suitable for U.S., Canada, Japan, Europe.
 - Suitable for On-board (internal) & Off-board (external) Applications.
 - Increases battery life by de-sulfating the battery.
 - Many advance features described in this spec.
 - **Very small size and very light weight.**
 - **0.5 seconds time delay for output ON.**

Explanation of the Features:

The advance technology of the OEM Battery Chargers supplied by Soneil is fundamentally different from other battery chargers. The conventional linear battery charger is an electrical device whereas the 2416SRF is a light weight sophisticated electronic device.

1. **Switch-Mode Technology:**

Most of the battery chargers use linear technology, which convert the 115/230 VAC to 24 VDC at 60/50 Hz. This requires a large transformer which has the disadvantage of lower efficiency resulting in higher heat generation, larger size and weight.

Soneil's Battery Charger transforms the 115/230 VAC into 24 VDC at 100,000 Hz (3333 times faster than conventional charger) which requires a much smaller transformer and this results in a unit of smaller size, low weight and improved efficiency.

The 2416SRF uses sophisticated electronic circuitry with microchip. All present day computers use switch-mode technology.

2. **International Safety Approvals & Listing:**

UL, CSA (ULc), TUV, GS, KEMA, European Standard EN60335 Part 2.29 and CE (European EMC Directive) approvals in a single charger.

3. **Input Requirements:** Dual Voltage - Switch selectable

- a) 115 VAC (range 90 - 130 VAC) or
230 VAC (range 180 - 260 VAC)
- b) 47 - 63 Hz

Input AC tolerance +/- 20%. This means 2416SRF will operate satisfactorily in areas where the input voltage is low.

This charger is also **suitable for every part of the world** including **Japan** where input is 100 VAC.

4. **Output:**

8 Amps Constant Current @ 24 Volts DC
(Equivalent to 16 Amps tapered in charging time)

- a) Line Regulation @ Full Load 2%
- b) Load Regulation @ 115/230 VAC 3%

c) **Ripple Voltage:** Very low

The peak to peak ripple voltage into a resistive load is less than 200mV for the output voltage above 24 VDC.

interference with TV, radio, computer or other equipment.

The charger is in compliance with CE (European EMC Directive). . Meets EN55022, EN50081-1& -2, EN60555 -2 & -3, EN 50082 -1, IEC 801 -2, -3 & -4.

14. **Ground leakage current:**

The ground leakage current is 87 microAmp, which complies with the requirements.

15. **Time Delay of 0.5 seconds:**

The model 2416SRF has a 0.5 seconds delay before the charging starts after the AC power has been turned **ON**.

16. **On-board Feature:** Option

The model has a third output wire which provides an interlock signal that will prohibit the operation of the vehicle's motor controller whenever the charger is plugged to an AC source.

Interlock signal: The interlock signal is an open circuit output, leakage less than 5 microAmp or less, when the charger is not connected to an AC source. This signal will be less than 50 mV DC while sinking 10 mA when the charger is connected to an AC source.

17. **Size:** **Very Small** Length - 7.625"
Width - 3.625"
Height - 2.625"

Very Light Weight 2.75 lbs.

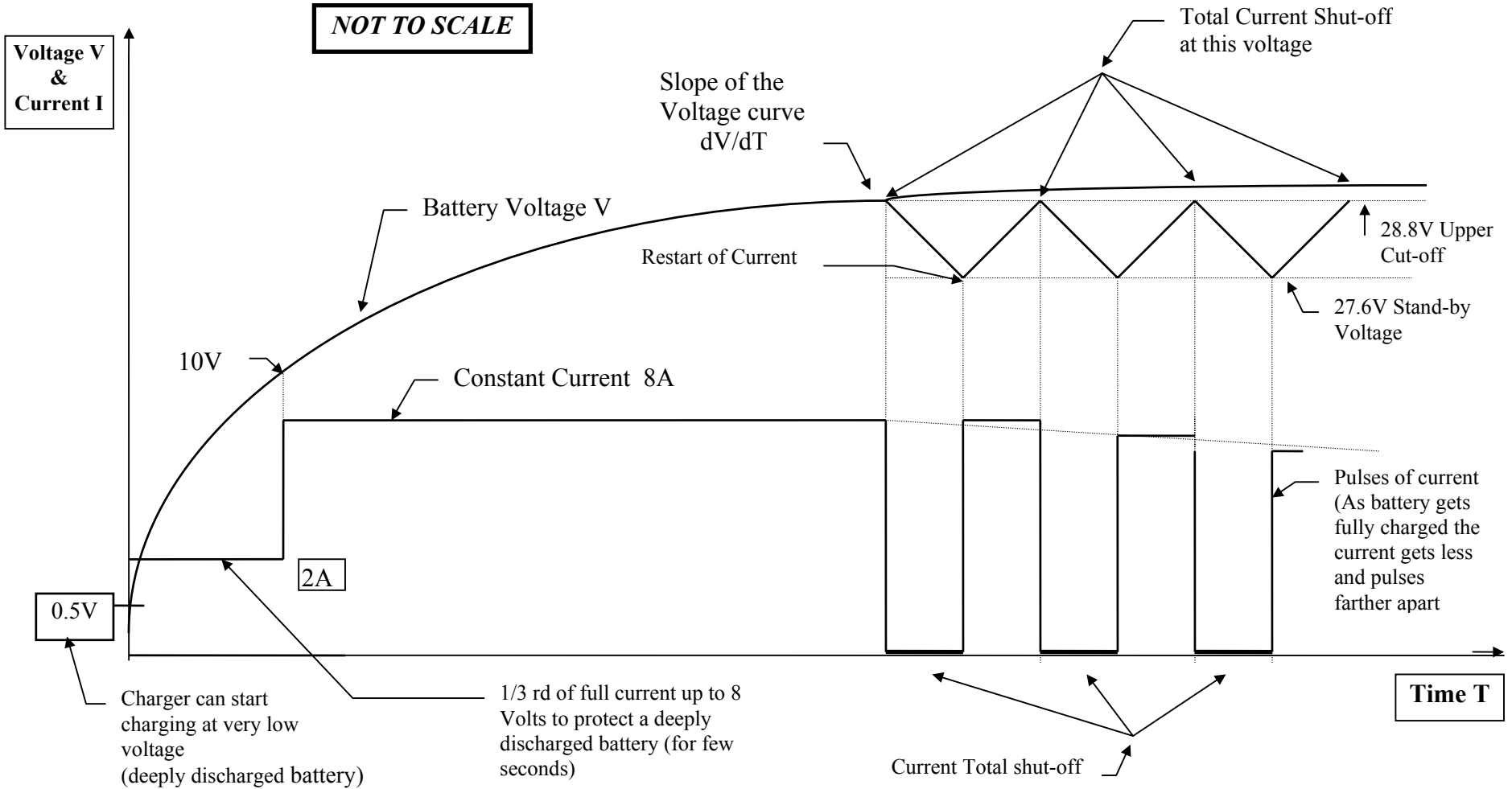
Very nice looking **metal case with black matte finish.**

Ref: 2416SRF.081600

CHARGING CURVE

MODEL 2416SRF

SONEIL 24V/8A CONSTANT CURRENT CHARGER



Ref: Curve2416SRF.110101