# SOLAHD

# **CVS Hardwired Series – Constant Voltage Transformers**

Superior voltage regulation of  $\pm 1\%$  sets the CVS series apart from other power conditioning technologies on the market. Extremely tight regulation is accomplished by SolaHD's ferroresonant transformer technology. The CVS recreates a well regulated sinusoidal waveform that is well isolated from input disturbances including:

Impulses

Swells

- Brownouts
- Sags
- Severe waveform distortion

No other power conditioning technology provides as complete a solution against these power quality disturbances. The CVS series is ideal for applications where even a small change in voltage level can lead to unscheduled downtime, misoperation, incorrect data or scrapped production.

#### Features

- Superior voltage regulation of ±1%
- Surge protection tested to ANSI/IEEE C62.41, Class A & B Waveform
- Harmonic filtering
- Hardwired
- Acts as a Step-up/Step-down Transformer
- Galvanic isolation provides exceptional circuit protection.
- 25 year typical Mean Time Between Failure
- No maintenance required



## Applications

- Industrial automation and control equipment PLCs
- Analytical laboratory and factory automating equipment
- Photo processing equipment
- Sound/recording systems
- Photographic enlargers
- Broadcast equipment

#### **Related Products**

- On-line UPS (S4K Industrial)
- Surge Protection
- Three Phase Power Conditioners
- Active Tracking® Filters

#### Selection Tables: Single Phase

#### Group 1 – CVS Series, 60 Hz

VA	Catalog Number	Voltage Input	Voltage Output	Height (inch)	Width (inch)	Depth (inch)	Ship Weight (Ibs)	Design Style	Elec Conn
30	23-13-030-2	120	120	7	4	5	9	1	J
60	23-13-060-2	120	120	7	4	5	9	1	J
120	23-22-112-2	120, 240	120	8	4	5	13	1	J
250	23-23-125-8	120, 240, 480	120	11	6	8	29	1	G
500	23-23-150-8	120, 208, 240, 480	120, 240	13	9	7	42	1	Н
1000	23-23-210-8	120, 208, 240, 480	120, 240	17	9	7	65	1	Н
2000	23-23-220-8	120, 208, 240, 480	120, 240	18	13	10	111	1	Н
3000	23-23-230-8	120, 208, 240, 480	120, 240	19	13	10	142	1	Н
5000	23-23-250-8	120, 208, 240, 480	120, 240	28	13	10	222	1	Н
7500*	23-28-275-6	240, 480	120, 240	27	25	9	365	2	J

\* This unit is not CSA Certified.

Contact **Technical Services** at **(800) 377-4384** with any questions. Visit our website at www.solahd.com.

## Specifications

Parameter	Condition	Value		
	Input			
Voltage	Continuous at full load (lower input voltage possible at lighter load)	+10% to -20% of nominal		
5	For temporary surge or sags	+20% to -35% of nominal		
Current <sup>1</sup>	at Full Load & 80% of nominal input voltage	I <sub>in</sub> ≅ (VA/.87)/(V <sub>in</sub> x 80%)		
Frequency	See Operating Characteristics section for details.	60 Hz		
	Output	· ·		
Line Regulation	$V_{in}$ >80% and <110% of nominal	±1%		
Overload Protection	At Nominal Input Voltage	Current limited at 1.65 times rated current		
Output Harmonic Distortion	At Full Load within Input Range	3% total RMS content		
Noise Attenuation	-Common Mode -Transverse Mode	40 dB 40 dB		
	General			
Efficiency	At Full Load	Up to 92%		
Storage Temperature	Humidity <95% non-condensing	-20° to 80°C		
Operating Temperature	Humidity <95% non-condensing	-20° to 50°C		
Audible Noise	Full Resistive Noise	32 dBA to 65 dBA		
Approvals	60 Hz Models	UL1012, CSA <sup>2</sup>		
Warranty	See General Information section for details	10 Years		

#### Notes:

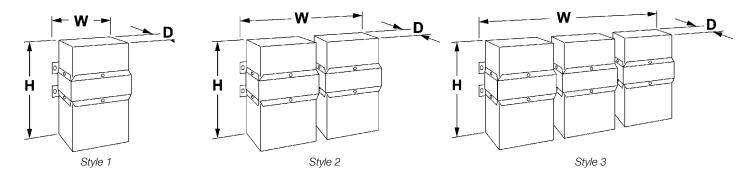
1 - Consult user manual for fuse sizing.

2 - Applies to all models except 23-28-275-6.

3 - It is recommended that the unit run at a minimum of 40-50% load.

See the Operating Characteristics section of this chapter for more information.

#### **Design Styles (CVS and MCR Hardwired)**



These styles are single phase only.