

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 patented 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 $\pm 1\%$
- 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 (lbs) | 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 | H |
| 1000 | 23-23-210-8 | 120, 208, 240, 480 | 120, 240 | 17 | 9 | 7 | 65 | 1 | H |
| 2000 | 23-23-220-8 | 120, 208, 240, 480 | 120, 240 | 18 | 13 | 10 | 111 | 1 | H |
| 3000 | 23-23-230-8 | 120, 208, 240, 480 | 120, 240 | 19 | 13 | 10 | 142 | 1 | H |
| 5000 | 23-23-250-8 | 120, 208, 240, 480 | 120, 240 | 28 | 13 | 10 | 222 | 1 | H |
| 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.solaheviduty.com.

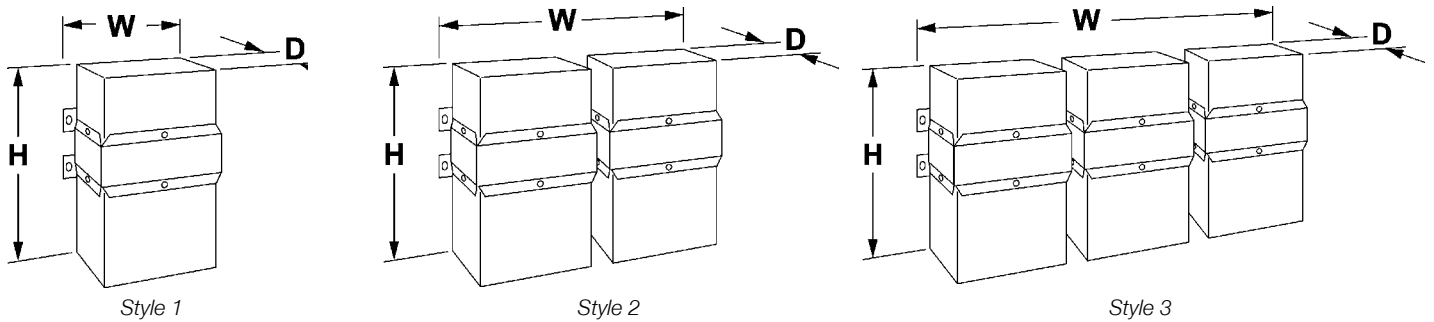
Specifications

| Parameter | Condition | Value |
|-----------------------------------|---|---|
| Input | | |
| Voltage | Continuous at full load (lower input voltage possible at lighter load) | +10% to -20% of nominal |
| | For temporary surge or sags | +20% to -35% of nominal |
| Current¹ | at Full Load & 80% of nominal input voltage | $I_n \cong (VA/.87)/(V_{in} \times 80\%)$ |
| Frequency | See Operating Characteristics section for details. | 60 Hz |
| Output | | |
| Line Regulation | $V_{in} >80\%$ and $<110\%$ of nominal | $\pm 1\%$ |
| 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 | 40 dB |
| | -Transverse Mode | 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 ² |
| 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.