

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.

Applications

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

Features

- Superior voltage regulation of $\pm 1\%$
- Surge protection tested to ANSI/IEEE C62.41, Class A & B waveform
- Harmonic filtering

Selection Tables: Single Phase

Group 1 – CVS Series, 60 Hz

| VA | Catalog Number | Voltage Input | Voltage Output | Height in (mm) | Width in (mm) | Depth in (mm) | Ship Weight lbs (kg) | Design Style | Elec Conn |
|--------|----------------|--------------------|----------------|----------------|---------------|---------------|----------------------|--------------|-----------|
| 30 | 23-13-030-2 | 120 | 120 | 7.00 (177.8) | 4.00 (101.6) | 5.00 (127.0) | 9.0 (4.08) | 1 | J |
| 60 | 23-13-060-2 | 120 | 120 | 7.00 (177.8) | 4.00 (101.6) | 5.00 (127.0) | 9.0 (4.08) | 1 | J |
| 120 | 23-22-112-2 | 120, 240 | 120 | 8.00 (203.2) | 4.00 (101.6) | 5.00 (127.0) | 13.0 (5.90) | 1 | J |
| 250 | 23-23-125-8 | 120, 240, 480 | 120 | 11.00 (279.4) | 6.00 (152.4) | 8.00 (203.2) | 29.0 (13.15) | 1 | G |
| 500 | 23-23-150-8 | 120, 208, 240, 480 | 120, 240 | 13.00 (330.2) | 9.00 (228.6) | 7.00 (177.8) | 42.0 (19.05) | 1 | H |
| 1000 | 23-23-210-8 | 120, 208, 240, 480 | 120, 240 | 17.00 (431.8) | 9.00 (228.6) | 7.00 (177.8) | 65.0 (29.48) | 1 | H |
| 2000 | 23-23-220-8 | 120, 208, 240, 480 | 120, 240 | 18.00 (457.2) | 13.00 (330.2) | 10.00 (254.0) | 111.0 (50.35) | 1 | H |
| 3000 | 23-23-230-8 | 120, 208, 240, 480 | 120, 240 | 19.00 (482.6) | 13.00 (330.2) | 10.00 (254.0) | 142.0 (64.41) | 1 | H |
| 5000 | 23-23-250-8 | 120, 208, 240, 480 | 120, 240 | 28.00 (711.2) | 13.00 (330.2) | 10.00 (254.0) | 222.0 (100.70) | 1 | H |
| 7500 * | 23-28-275-6 | 240, 480 | 120, 240 | 27.00 (685.8) | 25.00 (635.0) | 9.00 (228.6) | 365.0 (165.56) | 2 | J |

* This unit is  Listed only.



- 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

Certifications and Compliances

-  Listed
 - UL 1012
 - CSA C22.2 No. 66
- RoHS Compliant

Related Products

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

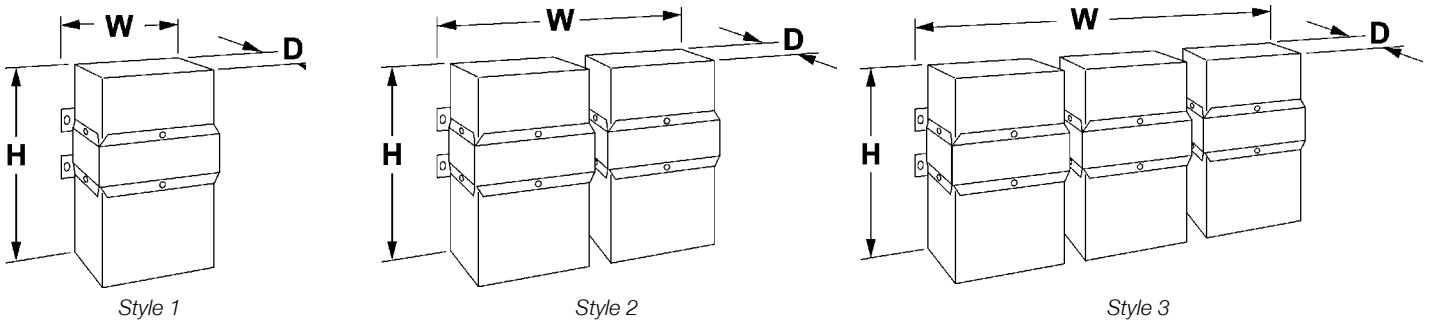
Specifications

| 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 |
| Current ¹ | 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 ² | | |
| 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 |
| Warranty | 10 year limited warranty | |

Notes:

- 1 - Consult user manual for fuse sizing.
- 2 - It is recommended that the unit run at a minimum of 40-50% load.
See the Operating Characteristics section for more details.

Design Styles (CVS and MCR Hardwired)



These styles are single phase only.