

Selection Tables: Single Phase

Group 3 – MCR Series, 60 Hz Only



VA	Catalog Number	Voltage Input	Voltage Output	Height (inch)	Width (inch)	Depth (inch)	Ship weight (lbs)	Design Style	Elec Conn
500	63-31-150-8	600	120, 208, 240	13	9	7	38	1	B
1000	63-32-210-8	600	120, 208, 240	17	9	7	62	1	B
2000	63-32-220-8	600	120, 208, 240	18	13	10	109	1	B
3000	63-32-230-8	600	120, 208, 240	19	13	10	142	1	B
5000	63-29-250-8	208, 240, 480, 600	120, 208, 240	28	13	10	221	1	A
7500	63-29-275-8	208, 240, 480, 600	120, 208, 240	27	25	10	360	2	A
10000	63-29-310-8	208, 240, 480, 600	120, 208, 240	28	25	10	441	2	A
15000	63-29-315-8	208, 240, 480, 600	120, 208, 240	28	38	10	706	3	A

Group 4 – MCR Series, 50 Hz Only (±5% output voltage regulation)



VA	Catalog Number	Voltage Input	Voltage Output	Height (inch)	Width (inch)	Depth (inch)	Ship weight (lbs)	Design Style	Elec Conn
120	63-23-612-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	9	6	8	24	1	C
250	63-23-625-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	11	6	8	27	1	C
500	63-23-650-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	13	9	7	40	1	C
1000	63-23-710-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	18	9	7	64	1	C
2000	63-23-720-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	18	13	10	113	1	C
3000	63-23-730-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	27	13	10	162	1	C
5000	63-23-750-8	110, 120, 220, 240, 380, 415	110, 120, 220, 240	30	13	10	266	1	C
7500	63-28-775-8	220, 240, 380, 415	110, 120, 220, 240	28	26	10	393	2	C1
10000	63-28-810-8	220, 240, 380, 415	110, 120, 220, 240	30	26	10	490	2	C2
15000	63-28-815-8	220, 240, 380, 415	110, 120, 220, 240	30	38	10	776	3	C2

Specifications

Parameter	Condition	Value
<b>Input</b>		
<b>Voltage</b>	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
<b>Current</b> <sup>1</sup>	at Full Load & 80% of nominal input voltage	$I_{in} \cong (VA/89)/(V_{in} \times 80\%)$
<b>Frequency</b>	See Operating Characteristics section for details.	50 Hz or 60 Hz depending on model
<b>Output</b>		
<b>Line Regulation</b>	$V_{in} > 80\%$ and $< 110\%$ of nominal	± 5% for 50 Hz units, ± 3% for 60 Hz units
<b>Overload Protection</b>	At Nominal Input Voltage	Current limited at 1.65 times rated current
<b>Output Harmonic Distortion</b>	At full load within input range	3% total RMS content
<b>Noise Attenuation</b>	Common Mode	120 dB
	Transverse Mode	60 dB
<b>General</b>		
<b>Efficiency</b>	At Full Load	Up to 92%
<b>Storage Temperature</b>	Humidity <95% non-condensing	-20° to +85°C
<b>Operating Temperature</b>	Humidity <95% non-condensing	-20° to 50°C
<b>Audible Noise</b>	Full Resistive Noise	35 dBA to 65 dBA
<b>Approvals</b>	60 Hz Models	UL1012, CSA evaluated by UL
	50 Hz Models	CE (EMC & LVD)
<b>Warranty</b>	See General Information section for details	10 + 2 Years

Notes: 1 - Consult user manual for fuse sizing.  
 2 - It is recommended that the unit run at a minimum of 40-50% load.

Contact **Technical Services** at (800) 377-4384 with any questions.  
 Visit our website at [www.solaheviduty.com](http://www.solaheviduty.com).

## MCR Hardwired Series – Power Line Conditioning with Voltage Regulation

The MCR Hardwired Series provides excellent noise filtering and surge protection to safeguard connected equipment from damage, degradation or misoperation. Combined with the excellent voltage regulation inherent to SolaHD's patented ferroresonant design, the MCR can increase the actual Mean Time Between Failure (MTBF) of protected equipment. The MCR is a perfect choice where dirty power, caused by impulses, swell, sags, brownouts and waveform distortion can lead to costly downtime because of damaged equipment.



### Related Products

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

### Selection Tables: Single Phase

#### Group 2 – MCR Series, 60 Hz Only



VA	Catalog Number	Voltage Input	Voltage Output	Height (inch)	Width (inch)	Depth (inch)	Ship Weight (lbs)	Design Style	Elec Conn
120	63-23-112-4	120, 208, 240, 480	120	9	4	5	15	1	D
250	63-23-125-4	120, 208, 240, 480	120	10	6	8	27	1	D
500	63-23-150-8	120, 208, 240, 480	120, 208, 240	13	9	7	37	1	E
750	63-23-175-8	120, 208, 240, 480	120, 208, 240	14	9	7	52	1	E
1000*	63-23-210-8	120, 208, 240, 480	120, 208, 240	17	9	7	62	1	E
1500*	63-23-215-8	120, 208, 240, 480	120, 208, 240	17	13	9	95	1	E
2000*	63-23-220-8	120, 208, 240, 480	120, 208, 240	18	13	9	109	1	E
3000*	63-23-230-8	120, 208, 240, 480	120, 208, 240	19	13	9	142	1	E
5000*	63-23-250-8	120, 208, 240, 480	120, 208, 240	28	13	9	222	1	E
7500**	63-28-275-8	208, 240, 480	120, 208, 240	27	26	9	362	2	F
10000**	63-28-310-8	208, 240, 480	120, 208, 240	28	26	9	446	2	F
15000**	63-28-315-8	208, 240, 480	120, 208, 240	28	38	10	710	3	F

\* Canadian option: cULus certified units must be ordered by changing "-8" (UL only) to "-C8".

\*\* UL Listed Only. Use Group 3 for cULus.

### Features

- $\pm 3\%$  output voltage regulation
- Noise attenuation
  - 120 dB common mode
  - 60 dB transverse mode
- Surge protection tested to ANSI/IEEE C62.41 Class A & B Waveform:
  - <10 V let through typical
- Acts as a step-up or step-down transformer
- Harmonic filtering
- Hardwired
- Galvanic isolation provides exceptional circuit protection.
- 25 year typical MTBF
- No maintenance required

### Applications

- Industrial automation and control equipment PLCs
- Machine tools
- Computer loads and electronic equipment
- Robotics
- Semiconductor fabrication equipment

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