Gold Star® Series

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Stick Welding Power Source

Quick Specs

CE

Heavy Industrial Applications
- Steel Erection
- Pipe Welding
- Tank/Pressure Vessel Fabrication
- Maintenance/Repair
- Shipbuilding
- Construction
- Refineries
- Chemical Manufacturing Facilities
- Steel Manufacturing Facilities
- Foundries

Processes
- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc (CAC-A) Cutting and Gouging
- Flux Cored (FCAW)
- MIG (GMAW) Spray Transfer when using a Voltage-Sensing Wire Feeder

Input Power
302/402: 3-Phase Power
452/602: 3-Phase Power
652/852: 3-Phase Power

Rated Output
302/402: 300 A at 32 VDC, 60% Duty Cycle
452/602: 450 A at 38 VDC, 60% Duty Cycle
652/852: 650 A at 44 VDC, 60% Duty Cycle

Weight
302/402: 352 lb (160 kg)
452/602: 404 lb (183 kg)
652/852: 505 lb (229 kg)

The Power of Blue®

Superior arc welding performance with Stick and TIG welding.

Built-in arc control lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.

Hot Start™ makes it easier to start difficult-to-start Stick electrodes such as E-6010 and E-7018.

Simple control panel features single range amperage adjustment. Provides easy, efficient operation.

Optional digital meters for voltage and amperage. Large displays are easy to read, even at 30 ft (9.2 m).

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by ±10%.

14-pin receptacle provides quick, direct connection to Miller 14-pin remote controls and switches.

Gold Star 452/602

115 V duplex receptacle provides 15 amps of auxiliary power.

Power efficient, exceptional value and return on your investment.

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

PC board protection prevents the wire feeder power or other stray voltages (less than 115 VAC) from harming the power source PC board.

Power cord strain relief provided for your convenience at installation.

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

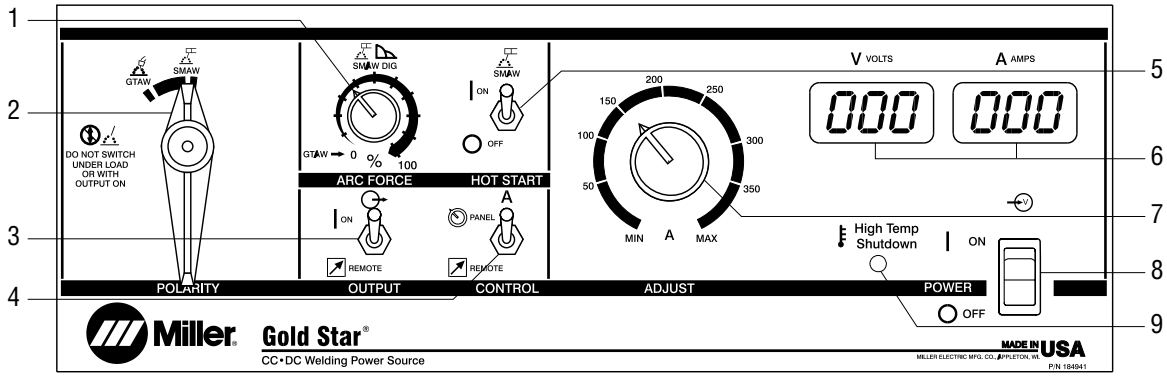
Gold Star® 302/402 Specifications (Subject to change without notice.)

Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	380 V	400 V	440 V	460V	575 V	KVA	KW	Dimensions	Net Weight
300 A at 32 VDC, 60% Duty Cycle	15–395 A	68 VDC	70	61	35	33	31	31	25	24.5	13.8	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 30-1/2 in (775 mm) including strain relief	352 lb (160 kg)

Gold Star 302 and 402 (without CE) certified to both the Canadian and U.S. Standards for welding equipment.

50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1. All CE models conform to the applicable parts of the IEC 60974 series of standards.

Control Panel

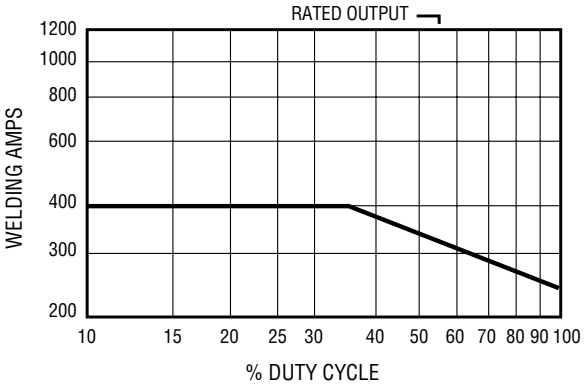


1. Arc Force (DIG) Control
2. Polarity Selector Switch*
3. Output Switch (Contactor)
4. Remote Amperage Control Switch
5. Hot Start Switch
6. Digital Meters (Optional)
7. Amperage Adjustment Control
8. Power Switch with Indicator Light
9. High Temperature Shutdown Light

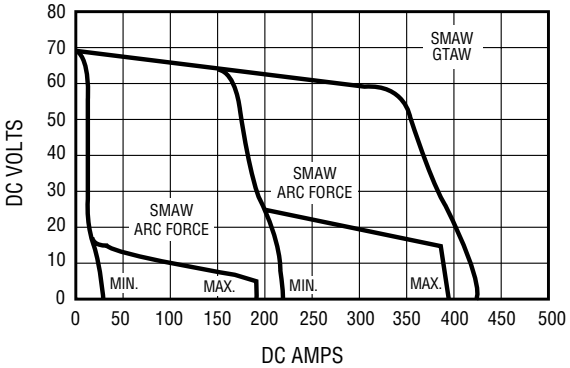
Note: Polarity Selector Switch is not standard on 402 model.

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVE CC



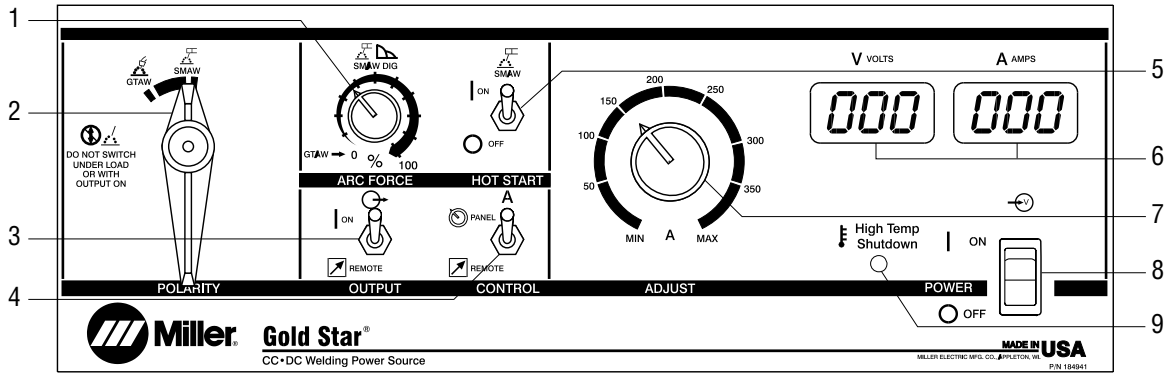
Gold Star® 452/602 Specifications (Subject to change without notice.)

Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
450 A at 38 VDC, 60% Duty Cycle	20–590 A	71 VDC	102	89	54	51	47	45	36	35.5	23.3	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	404 lb (183 kg)

Certified to both the Canadian and U.S. Standards for welding equipment.

50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1. All CE models conform to the applicable parts of the IEC 60974 series of standards.

Control Panel

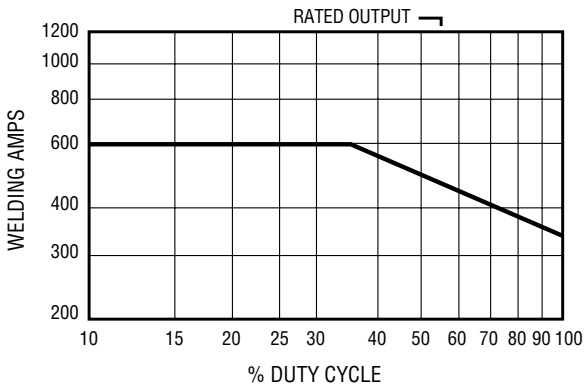


1. Arc Force (DIG) Control
2. Polarity Selector Switch*
3. Output Switch (Contactor)
4. Remote Amperage Control Switch
5. Hot Start Switch
6. Digital Meters (Optional)
7. Amperage Adjustment Control
8. Power Switch with Indicator Light
9. High Temperature Shutdown Light

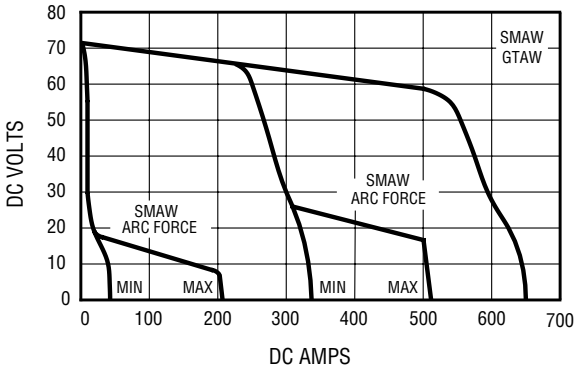
Note: Polarity Selector Switch is not standard on 602 model.

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVE CC



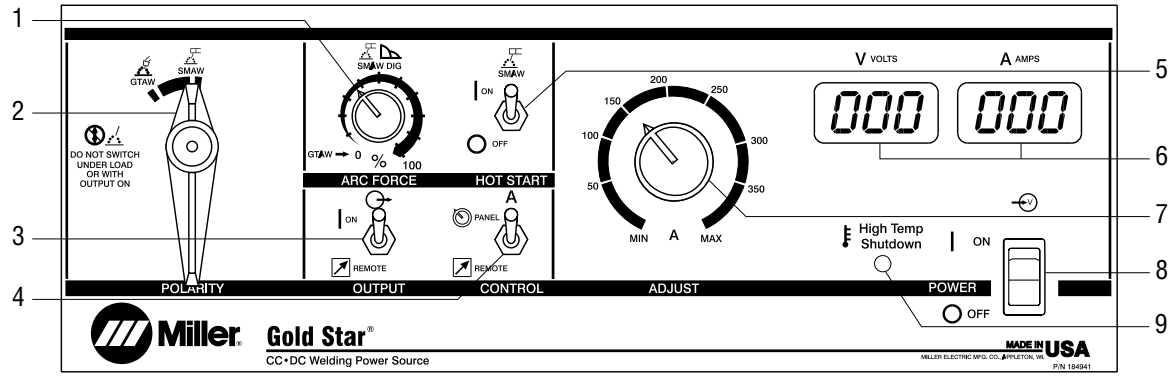
Gold Star® 652/852 Specifications (Subject to change without notice.)

Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
650 A at 44 VDC, 60% Duty Cycle	50–850 A	71 VDC	124	75	71	65	62	50	49.4	36	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	505 lb (229 kg)

Gold Star 652 and 852 (without CE) certified to both the Canadian and U.S. Standards for welding equipment.

50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1. All CE models conform to the applicable parts of the IEC 60974 series of standards.

Control Panel

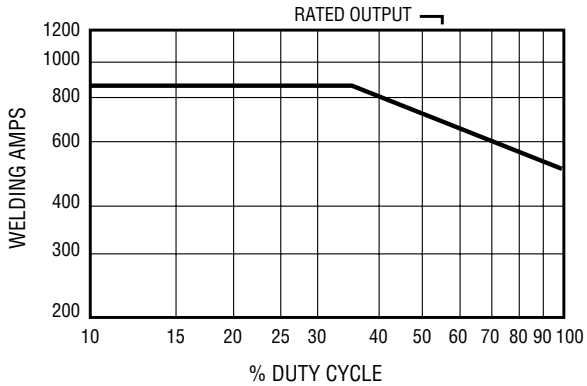


1. Arc Force (DIG) Control
2. Polarity Selector Switch*
3. Output Switch (Contactor)
4. Remote Amperage Control Switch
5. Hot Start Switch
6. Digital Meters (Optional)
7. Amperage Adjustment Control
8. Power Switch with Indicator Light
9. High Temperature Shutdown Light

Note: Polarity Selector Switch is not standard on 852 model.

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVE CC