

# A7 MIG Welder



## BENEFITS

- Quick and easy integration with any robot brand with modern fieldbus hardware modules.
- Access to the power source from an external computer via ethernet with a regular web browser. No extra programs needed. Enables radical savings in setup time, as well as quick and easy parameter configuration, system management, and monitoring throughout the equipment's life cycle.
- Increased productivity and a short payback period thanks to the Wise software and a wide range of available functions. Wise processes are fine-tuned and pre-set to optimize productivity with welding speeds typically used in automated welding. The same equipment can be used for a wide variety of welding tasks and applications.
- A comprehensive, completely balanced package from one supplier results in significant savings in time and effort when integrating the arc-welding package with the robot application.
- Suitable for any industry using robotic welding for thin and thick mild steel, stainless steel, and aluminum components.
- Enhanced arc ignition functionality (Touch Sense Ignition) delivers minimum spatter and stabilizes the arc immediately after ignition.
- The robust wire feeding casing with integrated wire feeder controller electronics enables faster and more accurate control with better resistance to external interference.
- An integrated gas-flow sensor in the wire feeder enables the shielding gas flow to be monitored closer to the arc by default – no need for additional sensors.
- Search voltage level for the system can be set up freely from web browser interface

## TECHNICAL SPECIFICATIONS

### A7 Power Source 350

Product code	6201350	6201450
Connection voltage 1~ 50/60 Hz	N/A	N/A
Connection voltage 3~ 50/60 Hz	400 V, -15 %...+20 %	400 V, -15 %...+20 %
Fuse (delayed)	25 A	35 A
Minimum generator power	35 kVA	35 kVA
Welding range	20 A / 12 V - 350 A / 46 V	20 A / 12 V - 450 A / 46 V
Output 60% ED	350 A	450 A
Output 100% ED	330 A	350 A
Mains connection cable	4G6 (5 m)	4G6 (5 m)
Supply current (maximum)	23 A	32 A

### A7 Power Source 450

**A7 Power Source 350****A7 Power Source 450**

Supply current (effective)	21 A	25 A
Idle power	25 W	25 W
Power factor at max. current	0.85	0.88
No-load voltage (peak)	U <sub>0</sub> = 80 V - 98 V	U <sub>0</sub> = 80 V - 98 V
Open circuit voltage (average)	85 V -103 V	85 V -103 V
Efficiency (100 % duty cycle)	87 %	87 %
Minimum short circuit power S <sub>sc</sub> of supply network	5.5 MVA	5.5 MVA
Max apparent power	22 kVA	22 kVA
Power supply for cooling unit	24 V DC / 50 VA	24 V DC / 50 VA
Power supply for auxiliary unit	50 V DC / 100 W	50 V DC / 100 W
Operating temperature range	-20 ... +40 °C	-20 ... +40 °C
External dimensions LxWxH	610 × 240 × 520 mm	610 × 240 × 520 mm
Weight (no accessories)	40.2 kg	40.2 kg
Degree of protection	IP23S	IP23S
Weight (with connection cable)	42.6 kg	42.6 kg
EMC class	A	A
Storage temperature range	-40 ... +60 °C	-40 ... +60 °C
Temperature class	155 (F)	155 (F)

**A7 Wire Feeder 25****A7 Wire Feeder 25 -PP**

Product code	6203510	6203502
Wire feed mechanism	4-roll, two motors	4-roll, two motors
Wire feed speed adjustment	0.5 – 25 m/min	0.5 – 25 m/min
Gun connection	Euro	PP
Filler wire sizes (Fe solid)	0.8 – 1.6 mm	0.8 – 1.6 mm
Filler wire sizes (Fe cored)	1.0 – 1.6 mm	1.0 – 1.6 mm
Filler wire sizes (Ss)	0.8 – 1.6 mm	0.8 – 1.6 mm
Filler wire sizes (Al)	1.0 – 2.4 mm	1.0 – 2.4 mm
Filler wire sizes (CuSi)	0.8 – 1.2 mm	0.8 – 1.2 mm
Operating voltage (safety voltage)	50 V DC	50 V DC
Operating temperature range	-20 ... +40 °C	-20 ... +40 °C
External dimensions LxWxH	380 × 250 × 170 mm	380 × 250 × 170 mm
Weight (no accessories)	7.8 kg	7.8 kg
Degree of protection	IP21S	IP21S
EMC class	A	A
Storage temperature range	-40 ... +60 °C	-40 ... +60 °C

**A7 Cooler****A7 Cooler**

Product code	6068220 Cooling liquid - 10 liter can - SP9810765
Operating voltage (safety voltage)	400 V -15 ...+20 %

**A7 Cooler**

Maximum pressure	0.4 Mpa
External dimensions LxWxH	570 x 230 x 280 mm
Weight (no accessories)	11 kg
Degree of protection	IP23S
Tank volume	~3 l
EMC class	A
Cooling power	1 kW
Storage temperature range	-40 ...+60 °C
Operating temperature	-20 ...+40 °C
Flow sensor type	[l/min]

**A7 Cooler****Welding gun cleaning station**

Product code	SP600674 Equipped with wire cutter, gas nozzle inside reamer and anti-spatter spray unit; order code includes reamer setup for both gas and water cooled nozzles.
Operating voltage	10 to 30 V DC
Weight	22 kg
Nominal pressure	6 bar 88 psi
Nominal flow	Approx. 500 l/min
Operating pressure	6 – 8 bar / 88 - 116 psi
Nominal rotational speed	800 rpm
Max. Wire size	1.6mm (by 6 bar 7 88 psi air pressure)
Ambient temperature	+5° to +50°C
Protection	IP 21
5/2 way valves	
Rated voltage	24 V DC
Power consumption	4.5 W (EACU)
Permitted residual ripple	Vpp < 10%
Continuous current	Max. 200 mA
Current consumption	approx. 4 mA (24 V)
Voltage drop	approx 1.2 V (200 mA)