



## **ALTERNATOR SPW10 120AC**

*AC brushless welder*

Technical Data Sheet

# SPW10 120AC

## COMMON DATA

Rated Power at 50Hz	kVA	3.5	
Rated Power at 60Hz	kVA	4.2	
Rated Power Factor		1	
Nominal Temperature	°C	40	
Control System		self excited	
Execution		brushless	
Regulation Type		capacitor	
Insulation Class		H	
Protection		IP21	
Maximum Overspeed	rpm	4500	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m <sup>3</sup> /min	3.7 at 50Hz	4.6 at 60Hz
R.F.I. Suppression		Standard EN55011	

## REGULATION DATA

Regulation		Capacitor	
Capacitor	µF	30	
Voltage Regulation		±5%	

## ALTERNATOR TECHNICAL CHARACTERISTICS

Rotor Winding		with damping cage	
Number of Leads of Stator		2	
Stator Winding Resistance	Ω	0.7 at 20°C	
Rotor Winding Resistance	Ω	4.2 at 20°C	

## STANDARD

References		EN60034-1 ISO8528-3 EN55011	
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## SPW10 120AC

### WELDER TECHNICAL CHARACTERISTICS

No load voltage	$V_{AC}$	52
Welding voltage	$V_{AC}$	20-26
Regulation range	$A_{AC}$	60-120
Max. current at 35%	$A_{AC}$	120
Max. current at 60%	$A_{AC}$	90
Max. current at 100%	$A_{AC}$	70
Stator Winding Resistance	$\Omega$	0.073 at 20°C
Electrodes type		acid; inox; rutile
Electrodes diameter	mm	1-3,25

### MECHANICAL DATA

Bearing non drive end			6204-2Z-C3
Bearing drive end (B3/B14 form)			\
Weight of generator	in B2	kg	\
	in B3/B14	kg	\
	in B3/B9	kg	27.3

### MOMENT OF INERZIA

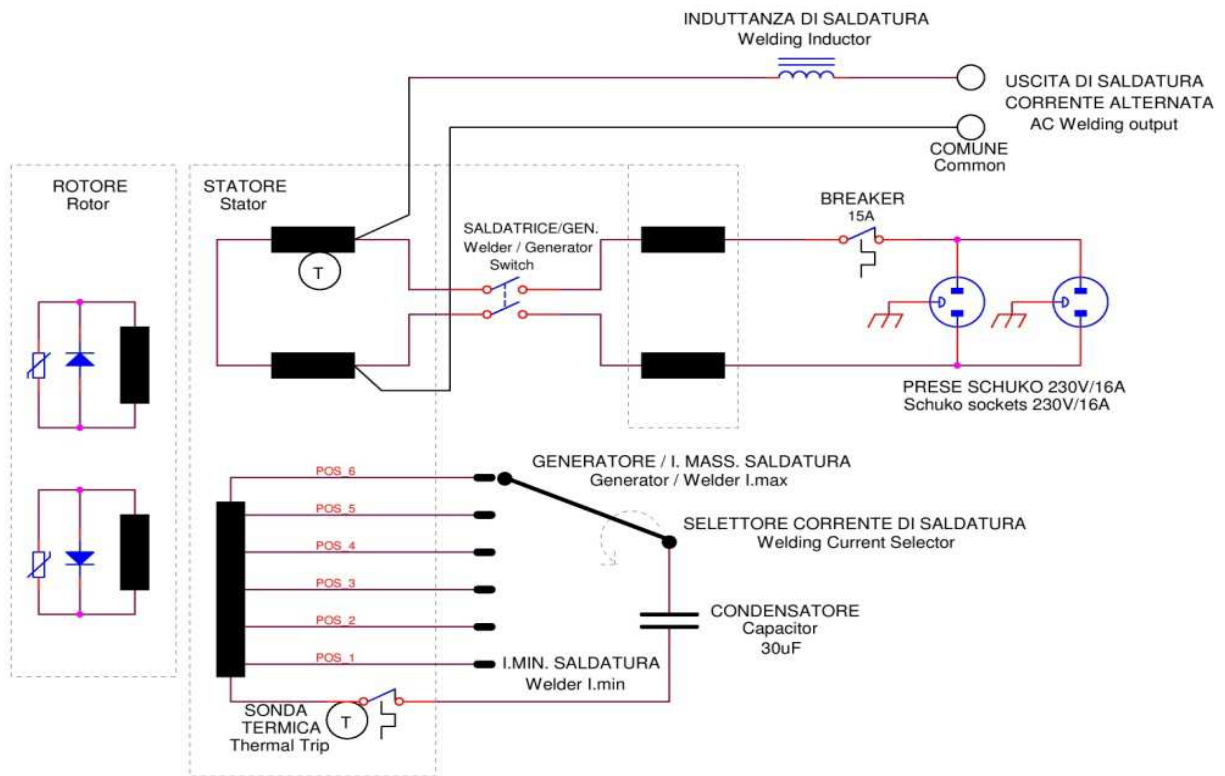
B3/B9	$kg \cdot m^2$	0.014
SAE 7½	$kg \cdot m^2$	\
SAE 8	$kg \cdot m^2$	\
SAE 10	$kg \cdot m^2$	\
SAE 11½	$kg \cdot m^2$	\
SAE 14	$kg \cdot m^2$	\
SAE 18	$kg \cdot m^2$	\
B3/B14	$kg \cdot m^2$	\

# SPW10 120AC

**POWER VARIATION ACCORDING TO TEMPERATURE AND ALTITUDE**

Altitude	Ambient temperature				
	25°C	40°C	45°C	50°C	55°C
< 1000m	1.09	1	0.96	0.93	0.91
1000m - 1500m	1.01	0.96	0.92	0.89	0.87
1500m - 2000m	0.96	0.91	0.87	0.84	0.83
2000m - 3000m	0.9	0.85	0.81	0.78	0.76

**WIRING DIAGRAM**



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