

TAF 801 / 1251

Square wave AC power sources for submerged arc welding

The AC power sources TAF 801 and TAF 1251 are using a unique square wave technology suitable for a wide range of AC welding applications.

- Capacity for continuous welding
- Pre-setting of arc voltage
- Reliable square wave striking
- Arc voltage or current Feed Back
- Optimized open circuit voltage
- Compensation of mains voltage fluctuation
- Voltage drop compensation for long welding cables
- High power factor ensuring low power consumption
- Designed and built for convenient servicing
- Safety control voltage 42 V
- Prepared for Scott connection of two power sources

Excellent welding properties

The ESAB Square wave AC power sources convert the secondary voltage from a sinus wave, via a thyristor controlled rectifier bridge, to a square wave arc voltage with excellent arc strike characteristics and with good welding properties. Submerged arc welding with heavy solid wires requires a power source of high capacity. The TAF square wave power sources, make use of the advantages of alternating current:

- No arc blow
- High productivity using Multi-electrode system



Communication

The power sources are designed to be used with the fully digital PEK controller.

Communication is vital in automation applications. Therefore the power source is prepared for communication using most standard protocols like TCP/IP (LAN), CAN or even straight communication with a PLC.

Optional communication modules might be needed depending on type of used protocol.

Technical data	TAF 801	TAF 1251
Voltage, 1 ph, 50 Hz, V	400/415/500	400/415/500
Voltage, 1 ph, 60 Hz, V	400/440/550	400/440/550
Maximum load at 100% duty cycle, A/V	800/44	1250/44
60% duty cycle, A/V	1000/44	1500/44
Setting range, A/V	300/28-800/44	400/28-1250/44
Open circuit voltage, V	71	72
Open circuit power, W	230	230
Efficiency	0.86	0.86
Power factor	0.75	0.76
Enclosure class	IP 23	IP 23
Application class	S	S
Dimensions LxWxH, mm	774x598x1428	774x598x1428
Weight, kg	495	608
Ordering information	0460 516 880	0460 517 880

These welding power sources comply with the requirements of EN 60974-1 and IEC 974-1

The symbol **S** indicates that the welding power source may be used in areas with an increased electrical hazard, i.e. areas where the electrical hazard is increased due to damp and/or the proximity to earthed metal objects.

Ordering information

PEK

Control cable 15 m	0460 910 881
Control cable 25 m	0460 910 882
Control cable 35 m	0460 910 883
Control cable 50 m	0460 910 884



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