



TAE

800/1250

Svetslikriktare

Svejseensretter

Likeretter for sveising

Hitsaustasasuuntaaja

Welding rectifier

Schweißgleichrichter

Redresseur de soudage

Lasgelijkrichter

Rectificador de soldadura

Raddrizzatore per saldatura

Rectificador de soldagem

Ανορθωτής συγκόλλησης

**Bruksanvisning
Brugsanvisning
Bruksanvisning
Käyttöohjeet
Instruction manual
Betriebsanweisung**

**Manual d'instructions
Gebruiksaanwijzing
Instrucciones de uso
Istruzioni per l'uso
Manual de instruções
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DIRECTIVE

DECLARATION OF CONFORMITY

ESAB AB, Welding Equipment, 695 81 Laxå, Sweden, gives its unreserved guarantee that welding power source TAE 800/1250 having number 508 complies with standard EN 60974-1, in accordance with the requirements of directive 73/23/EEA and addendum 93/68/EEA.

Laxå 95-10-05

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INTRODUCTION

The TAE 800/1250 "square wave" welding power source has a constant voltage characteristic, is thyristor controlled and is designed for submerged arc welding. It consists of a control unit and fan cooled power unit.

TAE 800/1250 is designed for use in combination with PEG 1 control equipment.

WARNING

This product is intended for industrial use. In a domestic environment this product may cause radio interference. It is the users responsibility to take adequate precautions.



WARNING



ARC WELDING AND CUTTING CAN BE INJURIOUS TO YOURSELF AND OTHERS. TAKE PRECAUTIONS WHEN WELDING. ASK FOR YOUR EMPLOYER'S SAFETY PRACTICES WHICH SHOULD BE BASED ON MANUFACTURERS' HAZARD DATA.

ELECTRIC SHOCK - Can kill

- Install and earth the welding unit in accordance with applicable standards.
- Do not touch live electrical parts or electrodes with bare skin, wet gloves or wet clothing.
- Insulate yourself from earth and the workpiece.
- Ensure your working stance is safe.

FUMES AND GASES - Can be dangerous to health

- Keep your head out of the fumes.
- Use ventilation, extraction at the arc, or both, to keep fumes and gases from your breathing zone and the general area.

ARC RAYS - Can injure eyes and burn skin.

- Protect your eyes and body. Use the correct welding screen and filter lens and wear protective clothing.
- Protect bystanders with suitable screens or curtains.

FIRE HAZARD

- Sparks (spatter) can cause fire. Make sure therefore that there are no inflammable materials nearby.

NOISE - Excessive noise can damage hearing

- Protect your ears. Use ear defenders or other hearing protection.
- Warn bystanders of the risk.

MALFUNCTION - Call for expert assistance in the event of malfunction.

READ AND UNDERSTAND THE INSTRUCTION MANUAL BEFORE INSTALLING OR OPERATING.

PROTECT YOURSELF AND OTHERS!

TECHNICAL DATA	TAE 800	
Maximum load AC	800 A/44 V at 100 % duty cycle 1000 A/44 V at 60 % duty cycle	
Current setting range AC	300 A/28 V - 1000 A/44 V	
Max. open circuit voltage	71 V, according to calculation card	
Open circuit power with only control transformer and fan connected	230 W	
Power factor at 800 A/ Efficiency 44 V	$\lambda = 0,75$ $\eta = 0,86$	
Mains supply	50 Hz	60 Hz
Voltage (V)	400-415/460/500 V	400/460/550 V
Primary current (A)	122/106/98 A	122/106/98 A
Fuse, slow (A)	250/200/200 A	250/200/200 A
Power cable, area (mm ²)	2x70+35/2x50+35/ 2x50+35	2x70+35/2x50+35/ 2x50+35
Enclosure class	IP 23	
Application class	S	
Dimensions LxBxH	774x598x1228	
Weight	495 kg	

TECHNICAL DATA	TAE 1250	
Maximum load AC	1250 A/44 V at 100 % duty cycle 1500 A/44 V at 60 % duty cycle	
Current setting range AC	400 A/28 V - 1500 A/44 V	
Max. open circuit voltage	72 V, according to calculation card	
Open circuit power with only control transformer and fan connected	230 W	
Power factor at 1250 A/ Efficiency 44 V	$\lambda = 0,75$ $\eta = 0,86$	
Mains supply	50 Hz	60 Hz
Voltage (V)	400-415/460/500 V	400/460/550 V
Primary current (A)	212/185/170 A	212/185/170 A
Fuse, slow (A)	250/200/200 A	250/200/200 A
Power cable, area (mm ²)	2x150+95/2x150+95/ 2x95+50/2x95+50	2x150+95/2x95+50/ 2x95+50
Enclosure class	IP 23	
Application class	S	
Dimensions LxBxH	774x598x1228	
Weight	608 kg	

Welding power source complies with IEC 974-1

Power cable rating complies with Swedish regulations.

The symbol **S** indicates that the power source is designed for use in areas where there is an increased electrical hazard.

The **IP** code indicates the enclosure class, i. e. the degree of protection against penetration by solid objects or water.

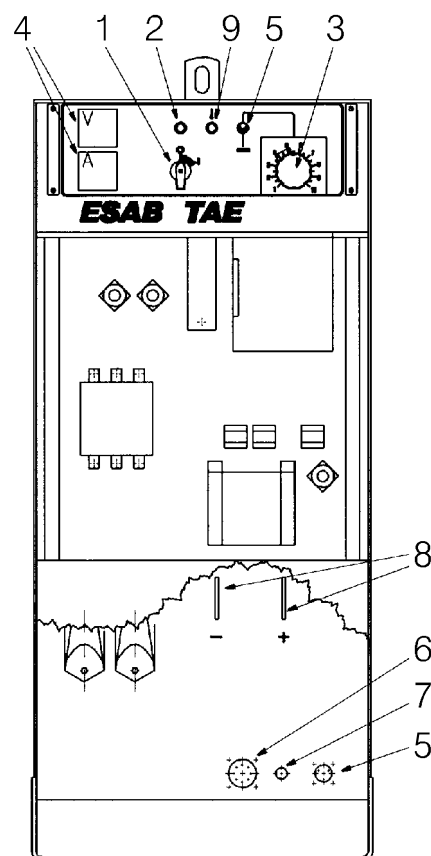
Equipment marked **IP 23** is designed for indoor and outdoor use.

INSTALLATION

1. Installation must be carried out by a qualified electrician.
2. Check that the power source is set up for the **available mains voltage** before connecting it to the supply.
3. If the control voltage is switched between 42 V and 110 V make sure the reversible sign shows the correct voltage.
4. See the technical data for recommended power cable and fuse ratings.
5. Connect the power cable to the power source in accordance with the relevant electrical regulations and fit a suitable fuse to the junction box.
6. Make sure that the flow of cooling air through the power source is not obstructed.

OPERATION

1. Switch switches power on or off. The white lamp (2) lights up and the fan starts.
2. Signal lamp, white, 42–48 V
3. Potentiometer for adjusting welding voltage. Can be controlled remotely using additional servo motor (e.g. from automatic welding machine)
4. Voltmeter och ammeter *optional accessories*
5. Switch and 3 pin socket for remote control unit or pulse unit
6. 8 pin socket for external control 110/42 V AC (allows switching from automatic welding machine, for example)
7. 1 pin socket for meter lead
8. Socket, for connecting wire feed unit
9. Thermal cut-out (overload protection) when the thermal cut-out trips the yellow lamp on the front panel comes on. When the power source has cooled down the thermal cut-out is reset automatically.



MAINTENANCE

Blow the power source clean at least once a year using dry compressed air at reduced pressure. If the power source is used in a dusty or dirty environment it should be blown clean more often.

Spare parts are ordered through your nearest ESAB representative, see back cover. When ordering spare parts, please state machine type and number as well as designation and spare part number as shown in the spare parts list on page 67. This will simplify dispatch and ensure you get the right part.

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