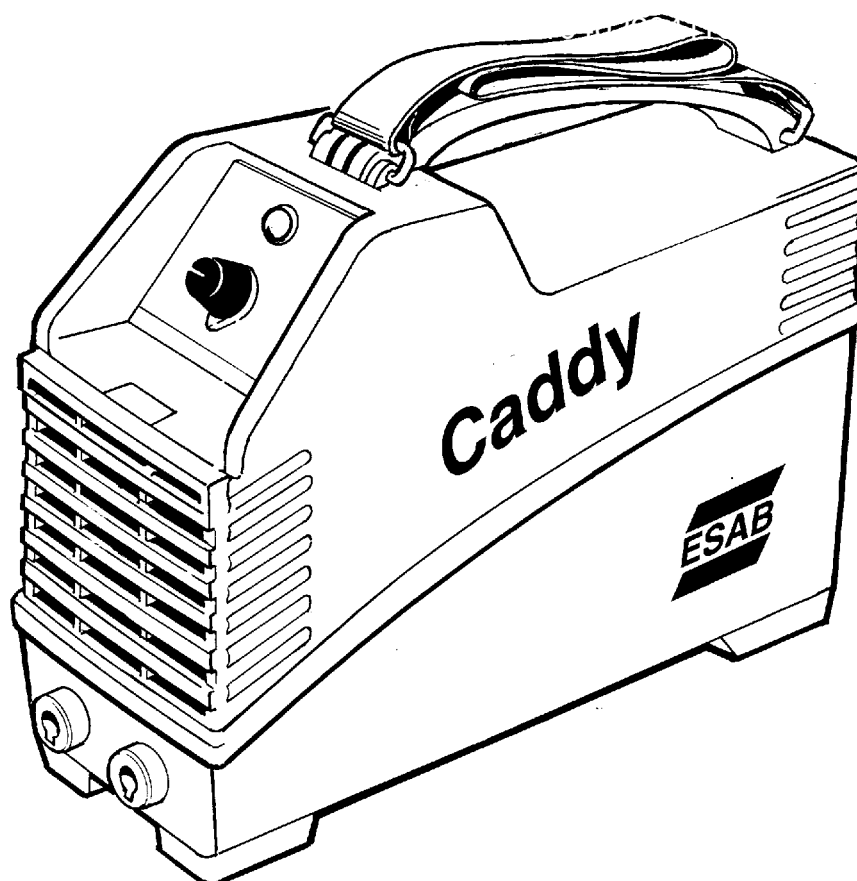




Caddy 110 ***Caddy 150***

LHO 110, LHO 150



**Bruksanvisning
Brugsanvisning
Bruksanvisning
Käyttöohjeet
Instruction manual
Betriebsanweisung
Manuel d'instructions**

**Gebruiksaanwijzing
Instrucciones de uso
Istruzioni per l'uso
Manual de instruções
Οδηγίες χρήσεως
Instrukcja obs³ugi**

SVENSKA	3
DANSK	10
NORSK	17
SUOMI	24
ENGLISH	31
DEUTSCH	38
FRANÇAIS	45
NEDERLANDS	52
ESPAÑOL	59
ITALIANO	66
PORTUGUÊS	73
ΕΛΛΗΝΙΚΑ	80
POLSKI	87
Schema - Skema - Skjema - Johdotuskaavio - Diagram - Schaltplan - Schéma - Esquema - Διάταξεις σύνδεσης - Schemat -	94
Reservdelsförteckning - Reservedelsfortegnelse - Reservedeloversikt - Varaosaluettelo - Spare parts list - Ersatzteilverzeichnis - Liste de pièces détachées - Reserveonderdelenlijst - Lista de repuestos - Esercizio - Lista de peças de reposição - Πίνακας ανταλλακτικών - Części zamiennych	97

Rätt till ändring av specifikationer utan avisering förbehålles.
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1 DIRECTIVE	32
2 SAFETY	32
3 INTRODUCTION	33
3.1 Technical data	33
3.2 Equipment	34
3.3 Field of application	34
4 INSTALLATION	34
4.1 Placing	34
4.2 Connection	34
5 OPERATION	35
5.1 Start-up	35
5.2 Overload protection	35
5.3 Mains voltage compensation	35
5.4 Controls and connections	36
6 MAINTENANCE	36
6.1 Cleaning	36
7 FAULT TRACING	37
7.1 Possible faults and measures to take	37
8 ORDERING OF SPARE PARTS	37
DIAGRAM	94
SPARE PARTS LIST	97

1 DIRECTIVE

DECLARATION OF CONFORMITY

ENGLISH

Esab Welding Equipment AB, S-695 81 Laxå, Sweden, gives its unreserved guarantee that welding power source LHO110/LHO150 having serial number 732 complies with standard EN 60974-1, in accordance with the requirements of directive 73/23/EEA and addendum 93/68/EEA and standard EN 50199 in accordance with the requirements of directive 89/336/EEA and addendum 93/68/EEA.

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2 SAFETY



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!

3 INTRODUCTION

Caddy 110 and Caddy 150 are two rectifying welding power sources based on the inverter technique, intended for welding with coated electrodes (MMA welding). Caddy also has very good TIG welding characteristics.

3.1 Technical data

	Caddy 110	Caddy 150
Performance:		
at 25% duty cycle		150 A/26 V
at 35% duty cycle	110 A/24 V	140 A/25 V
at 60% duty cycle	95 A/24 V	120 A/25 V
at 100% duty cycle	80 A/23 V	100 A/24 V
Setting range	13–110 A	13–150 A
Open circuit voltage	70–90 V	70–90 V
Mains supply:		
voltage	230 V AC	230 V AC
frequency	50/60 Hz	50/60 Hz
fuse	16 A*	16 A*
mains cable, area	3 x 1.5 mm ² **	3 x 1.5 mm ² **
Enclosure class	IP 23	IP 23
Application class	S	S
Dimensions L x W x H	375 x 145 x 280 mm	375 x 145 x 280 mm
Weight	6,7 kg	6,7 kg

*When welding below 100 A a 10 A slow fuse is adequate..

**Power cable ratings complies with Swedish regulations..

Duty cycle

The duty cycle refers to the time in per cent of a ten-minute period that you can weld at a certain load without overloading the welding power source.

Enclosure class

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.

Application class

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

3.2 Equipment

The welding power sources Caddy 110 and Caddy 150 are delivered with:

- Mains cable (3 metres)
- Welding cable with electrode holder (3 metres)
- Return cable with earth clamp (2.5 metres)

3.3 Field of application

Caddy 110 and Caddy 150 both supply direct current, which allows you to weld most alloyed and non-alloyed steels, stainless steels and cast iron.

With the Caddy 110 you can use coated electrodes from 1.6 to 2.5 mm, and with the Caddy 150 coated electrodes from 1.6 mm to 3.25 mm.

Tig-welding

TIG welding is particularly useful when high quality standards are required and when welding thin sheet.

Before using the Caddy for TIG welding it must be equipped with a TIG torch and gas valve, a cylinder of argon, an argon regulator, tungsten electrodes and, if necessary, suitable filler metal.

The best method to use is the touch start, where you gently stroke the tungsten electrode against the workpiece to establish the arc.

4 INSTALLATION

WARNING

This product is intended for repair and maintenance welding
In domestic or office environment this product may cause radio interference.
It is the responsibility of the user to take adequate precautions.

4.1 Placing

Place the machine so that there is nothing to prevent the cooling air from passing through it.

4.2 Connection

4.2.1 Mains connection

The rating plate including connection data is placed on the underside of the welding power source.

Connect the welding power source to an earthed mains terminal.

Make sure the welding power source is connected for the correct mains voltage and properly fused.



- Mains voltage 230 V
- Mains frequency 50–60 Hz
- Fuse, slow rupture 16 A
- Mains cable, area 3 x 1,5 mm²

4.2.2 Connection of welding and return cable

The welding power source has two terminals, one plus and one minus pole, for the connection of the welding and the return cable. Connect the welding cable to the pole indicated on the package of the electrode to be used.

Connect the return cable to the other terminal. Fit the earth clamp of the return cable to the work-piece and make sure there is good contact between the work-piece and the return cable terminal on the welding power source.

5 OPERATION

5.1 Start-up

- Make sure that the cables and the earth clamp are properly connected.
- Start the welding power source by setting the mains switch to position 1.
- Set the welding current, using the knob on the front panel of the power source. Follow the instructions on the electrode package for the recommended welding current.

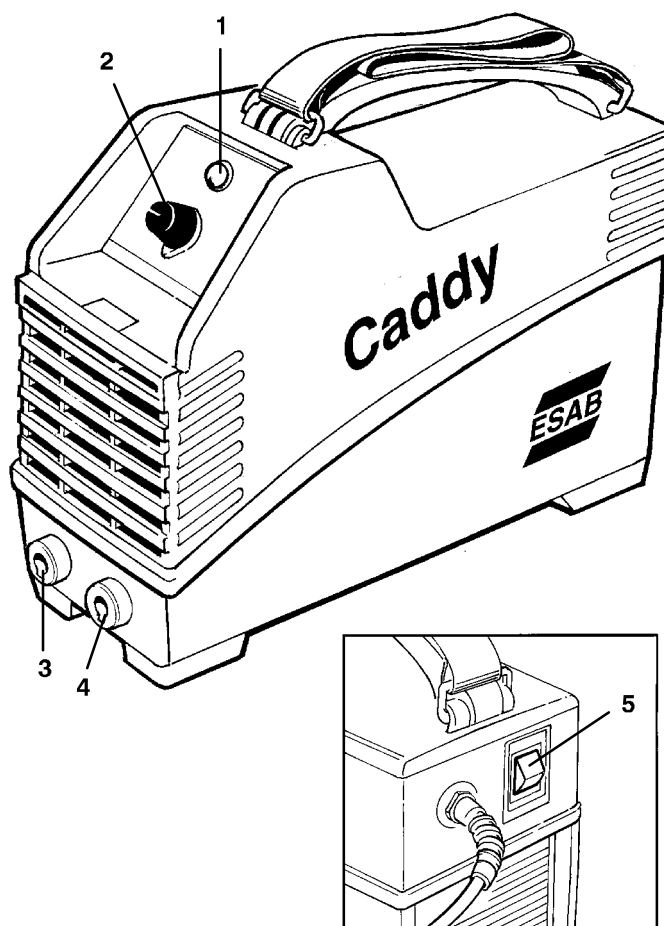
5.2 Overload protection

Caddy 110 and Caddy 150 are provided with a thermal cut-out to prevent overheating of the welding power source. In the event of overload the supply voltage is interrupted and the orange lamp on the front goes on. Resetting takes place automatically as soon as the welding power source has cooled down.

5.3 Mains voltage compensation

Caddy 110 and Caddy 150 both have mains voltage compensation, which means that + 10% fluctuation in the supply voltage produces only + 0.2% variation in the welding voltage.

5.4 Controls and connections



1. Orange indicating lamp (overheating)
2. Knob for adjusting the welding current
3. Terminal, minus pole, for connecting welding or return cable
4. Terminal, plus pole, for connecting welding or return cable
5. Mains switch

6 MAINTENANCE

6.1 Cleaning

Normally it is sufficient to blow the welding power source clean regularly using dry compressed air (reduced pressure), and to clean the filter in the front regularly.

In dusty and dirty environment the welding power source should be cleaned at shorter intervals.

7 FAULT TRACING

7.1 Possible faults and measures to take

Type of fault	Measure
No arc is generated by the welding power source.	<ul style="list-style-type: none"> • Make sure the mains switch is on. • Check that the welding and return cables are properly connected. • Make sure the welding current set is correct.
The welding current is interrupted in the course of welding.	<ul style="list-style-type: none"> • Check if the thermal cut-out has tripped (the orange indicating lamp on the front panel is on). • Check the mains fuse.
The thermal cut-out trips frequently.	<ul style="list-style-type: none"> • Check that the filter is not packed with dust. • Check that the ratings of the welding power source have not been exceeded (overload of the power source).
Poor welding result.	<ul style="list-style-type: none"> • Check that the welding and return cables are properly connected. • Make sure the welding current set is correct. • Check that there is nothing wrong with the electrodes.

8 ORDERING OF SPARE PARTS

When ordering a spare part, please state the type and serial number of the machine as well as number of the spare part, according to the spare parts list.
This will simplify dispatch and ensure you get the right part.