

# A2 Welding Controller PEI

- User-friendly
- SAW and MIG/MAG process
- Scratch and direct start methods
- Adjustable burn-back time
- Metric and Inch

**A2 welding controller (PEI) is the control system for ESAB A2 tractors and A2 welding heads. The controller is connected to the power source by a control cable and can be connected to ESAB LAF 631 and LAF 1251.**

The supply to the control system is 42 Volt and is obtained through the control cable from the power source. When the feed voltage to the power source is switched on, the system is ready to use.

A2 welding controller can be used with all ESAB's A2 Automats and A2 motors.

One of the most important advantages with the A2 welding controller is that it is suitable for both Submerged-Arc Welding and Gas Metal Arc Welding. The control system is very easy to use with a minimum of training.

The user set the travel speed, voltage and wire speed by the three turning knobs. The user can then during welding read the actual weld speed, voltage and current on the digital displays. The travel speed and wire speed can be pre-set.



Welding direction is easy to change with a switch on the front panel. Manual moving of the wire up and down and the travel back and forward is also easily operated from the front of the controller.

The type of weld start is easily changed between scratch start and direct start. When choosing scratch start the wire feeder and the travel start at the same time. With direct start the travel starts when the arc is stroked.

To get good weld stops with different types of wire, diameter and material, the burn-back time can easily be adjusted.

## Technical data

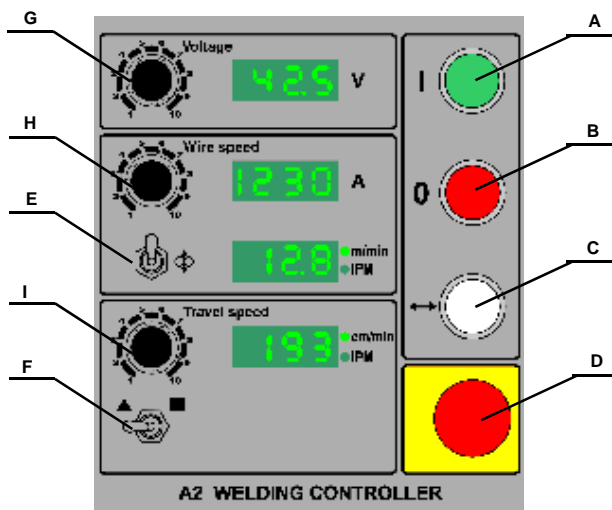
Supply voltage from the power source	42V AC 50/60 Hz
Power consumption	max 700 VA
Motor connection adjusted for ESAB's A2 motors	42V DC, 3.5 A P100% 4.5 A P60%
Speed control	Internal EMF-adjustment
Welding speed	0.1-2.0 m/min, 4-80 IPM (depending on travel carriage)
Max travel speed	2 m/min, 80 IPM
Wire feed speed, consumable wire	0.5-16.2 m/min, 20-640 IPM (depending on wire feed unit)
Burn-back time	0-2.0 s
Pre-gas flow time	0.5 s
Post-gas flow time	1.0 s
Connection to power source	Burndy contact 23-poles
Control cable	max 100 m

Welding voltage control	0-10 V DC
Gas valve/Auxiliary	1A 42V AC
Flow guard	NO Contact / PNP OC
Limit switches	NO Contact / PNP OC
External current shunt	1000A / 60 mV 1500A / 60 mV 600A / 100 mV 750A / 100 mV
Operating temperature	-10°C - +40°C
Weight	6.2 kg
Dimensions	197 x 227 x 220 mm
Enclosure class	IP 23
Norms	EN 50199, EN 60974-1

## Ordering information

A2 Welding Controller 0449 330 880

Control cable, L = 15 m	0449 500 880
Control cable, L = 25 m	0449 500 881
Control cable, L = 35 m	0449 500 882
Control cable, L = 50 m	0449 500 883
Control cable, L = 75 m	0449 500 884
Control cable, L = 100 m	0449 500 885



Mark	Function	Ref
I	Welding on	A
0	Welding off Travel off	B
↔	Travel on	C
⊗	Emergency stop	D
⊕	Inching	E
■ ▲	Travel direction	F
Voltage	Voltage adjustment	G
Wire speed	Wire speed adjustment	H
Travel speed	Travel speed adjustment	I

## REAR PANEL

Start method adjustment

Direct  
Scratch  
Ext.

Burn-back time (s) adjustment



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