CONTROL UNIT



Control knob

All parameters are set by the use of only one control knob.

This control knob is positioned in the right side of the control panel. The digital display shows the value of the parameter being set. The unit of measurement of the parameter is shown on the right side of the digital display.

A parameter can be selected by means of the relative keypad in the relevant section. A bright indication light indicates the parameter selected. The control knob is then used for setting a new value.

Welding current/Arc voltage

The key pad can be used to display the welding current. Adjustable from 5A to 500A depending on the model. After the welding process has stopped, the adjusted current is shown on the display. During welding, however, the actual welding current is shown.

Press the key for 3 seconds to display the arc voltage. Press again "A" to display the welding current.

• A

Units for parameters

Units of measurement of the selected parameter.

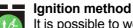
Welding voltage indicator
The welding voltage indicator is illuminated for reasons of safety and in order to show if there is voltage at the output taps.

Overheating error indicator
The overheating indicator is illuminated if

The overheating indicator is illuminated if welding is interrupted due to overheating of the machine.

Mains error indicator

The mains error indicator is illuminated if the mains voltage is more than 15% lower than the rated voltage.

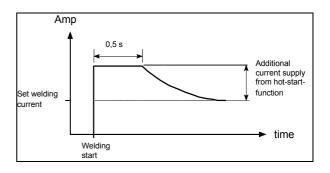


It is possible to weld in TIG by LIFTIG ignition. The procediment LIFTIG is active when the indicator is illuminated.

In LIFTIG ignition the TIG arc is ignited after making contact between the workpiece and the tungsten electrode, after which the trigger is activated and the arc is established by lifting the electrode from the workpiece.

Hot start

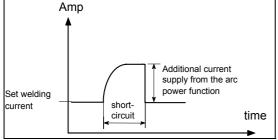
Hot start is a function that helps to establish the arc at the beginning of MMA welding. This can be achieved by increasing welding current (when the electrode is applied to the workpiece) in relation to the set value. This increased start amp is maintained for half a second, after which it decreases to the set value of welding current.



The hot start value reflects the percentage value by which initial current is increased, and can be set between 0% and 100%.

Arc-power The arc power function is used to stabilise the arc in MMA welding. This can be acheived by increasing welding current during the short-circuits. The additional current ceases when the short circuit is

no longer present. Amp



Arc power can be adjusted between 0 and 100% of the welding current setting.

If the welding current is set to 40A and arc E.g. power to 50% the additional current is 20A eguals 60A when doing arc power. If the arc power is set to 100% the additional current is 40A equals 80A when doing arc power.

Internal/external adjustment

It is possible to choose between internal and external adjustment. The external adjustment is active when the indicator is illuminated.

Anti-freeze

This machine is provided with an anti-freeze control. The anti-freeze-control reduces the current when the electrodes stick to the weld piece. This makes it easier to break off the electrode and welding can continue.

TECHNICAL DATA

Power source:	PI 250 MMA	PI 350 MMA	PI 350 MMA CELL	PI 500 MMA
Mains voltage (50Hz-60Hz)	3x400 V ±15%	3x400 V ±15%	3x400 V ±15%	3x400 V ±15%
Fuse	10 A	25 A	16 A	32 A
Mains current, effective	7.1 A	17.1 A	15,4 A	22.5 A
Power, (100%)	4.9 kVA	11.9 kVA	10.7 kVA	15.5 kVA
Power, max	9.0 kVA	16.0 kVA	13.2 kVA	23 kVA
Open circuit power	35 W	40 W	40 W	40 W
Efficiency	0.87	0.8	0.79	0.90
Permitted load:				
Duty cycle 40° 100%	150 A	280 A	250 A	330 A
Duty cycle 40° 60%	190 A	325 A	275 A	400 A
Duty cycle 40° 40%	-	350 A	-	-
Duty cycle 40° 35%	250 A	-	300 A	500 A
Duty cycle 20° 100%	170 A	340 A	300 A	400 A
Duty cycle 20° 60%	210 A	-	-	500 A
Open circuit voltage	95 V	95 V	95 V	95 V
Current range	5-250 A	5-350 A	5-300 A	5-500 A
¹ Application class	S	S	S	S
² Protection class (IEC 529)	IP 23	IP 23	IP 23	IP 23
Standards	EN/IEC60974-1 EN/IEC60974-10 (Class A)			
Dimensions (hxwxl)	360x220x520 mm	550x250x640 mm	550x250x640 mm	550x250x640 mm
Weight	20 kg	30 kg	31 kg	33 kg

Function:	Proces		
Arc-power	Electrode	0-100 %	
Hot-start	Electrode	0-100 %	
Anti-freeze	TIG/Electrode	always on	
TIG-ignition	TIG	LIFTIG	

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¹ S The machine meets the standards which are demanded of machines working in areas where there is an increased risk of electric shock Equipment marked IP23 is designed for indoor and outdoor applications