



MMA DC IGBT Inverter



PI 250 E

PI 350 E

PI 500 E

Main Applications

- Installations and outfitting
- Repair and maintenance
- Chemical and process industry
- Construction
- Ship building

Advantageous

- Advanced MMA, the easy way, Migatronik PI are user friendly welding machines, which meet every need for MMA and TIG welding. High performance inverter machines for precision welding in mild steel, stainless steel, aluminum and other high-alloy materials. Migatronik PI machine can be applied for any type of welding operation : repair, assembly, construction, industry and etc. Migatronik's PI machines combine proven inverter technology with new control and communication options. These features optimize welding performance and make the most advanced functions easy to use
- 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 work-piece) 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 arc power function is used to stabilize the arc in MMA welding. This can be achieved by increasing welding current during the short circuits. The additional current ceases when the short circuit is no longer present
- Fan reduced noise and energy consumption, Migatronik PI was developed with respect for both environment and work environment. The infinitely variable fan operates precisely and adapts automatically to the actual load / cooling requirement of the machine. The results are reduced noise level, energy consumption and dust intake and longer life of the machine
- Gouging for Thick Material, Pi 500 features gouging function for gouging root passes or locating lack of fusion
- All PI MMA machines are supplied as standard with TIG LIFTIG® function (ignition without HF) for TIG welding in electrically sensitive environments
- Robust and reliable welding quality, All Pi machines are delivered with coated PCB's and carry Eurocodes calibration certificate



Buttons Explanation :

- LIFTIG Ignition Mode
- Hot Start Function
- Arc Power Function
- Internal / External Adjustment

MMA	PI 250 E	PI 350 E	PI 500 E
Electrode range	1.6 - 6.0 mm	1.6 - 8.0 mm	1.6 - 10.0 mm
Material thickness	1 - 14 mm	1 - 18 mm	1 - 20 mm

TIG	PI 250 E	PI 350 E	PI 500 E
Tungsten range	1.6 - 4.0 mm	1.6 - 4.0 mm	1.6 - 4.0 mm
Material thickness	1 - 8 mm	1 - 10 mm	1 - 12 mm

Specifications			
Welding range	5 - 250 A	5 - 350 A	5 - 500 A
Open circuit voltage	95 V	95 V	95 V
Duty cycle at 35 % (40°C)	250 A	-	-
Duty cycle at 40 % (40°C)	-	350 A	500 A
Duty cycle at 60 % (40°C)	190 A / 27.6 V	325 A	400 A
Duty cycle at 100 % (40°C)	150 A / 26.0 V	280 A	330 A
Input power at 60 %	9.0 KVA	16.0 KVA	23.0 KVA
Input current at 60 %	7.1 A	17.1 A	22.5 A
Input phase	3 Phase	3 Phase	3 Phase
Main voltage, Tolerance	400 V, ± 15 %	400 V, ± 15 %	400 V, ± 15 %
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power factor	0.90	0.80	0.80
Index protection	IP 23 S	IP 23 S	IP 23 S
Insulation class	H	H	H
Cooling	F	F	F
Dimensions (L x W x H)	520 x 220 x 360 mm	640 x 250 x 550 mm	640 x 250 x 550 mm
Weight	20 Kg	30 Kg	33 Kg

Item Code	Item Name	MoQ
135.02.001.1	PI 250 E - MMA Package	1 Set
	• PI MMA Control Panel with LIFTIG® ignition	
135.02.002.1	PI 350 E - MMA Package	1 Set
135.02.002.2	PI 350 E - Mig Mag Package	1 Set
135.02.002.3	PI 350 E - Inner Shield Package	1 Set
	• PI MMA Control Panel with LIFTIG® ignition	
135.02.003.1	PI 500 E - MMA Package	1 Set
135.02.003.2	PI 500 E - Mig Mag Package	1 Set
135.02.003.3	PI 500 E - Inner Shield Package	1 Set
	• PI MMA Control Panel with LIFTIG® ignition	



Item Code	Item Name	MoQ							
			135.02.001.1	135.02.002.1	135.02.002.2	135.02.002.3	135.02.003.1	135.02.003.2	135.02.003.3
Standard Accessories									
135.02.001	MMA DC IGBT Inverter - PI 250 E	1 Unit	•						
135.02.002	MMA DC IGBT Inverter - PI 350 E	1 Unit		•	•	•			
135.02.003	MMA DC IGBT Inverter - PI 500 E	1 Unit					•	•	•
235.02.002	Plug to Electrode Holder 400 A, 50 mm2 at 5 m	1 Set	•	•					
235.03.005	Plug to Ground Clamp 600 A, 50 mm2 at 5 m	1 Set	•	•					

Optional Accessories for GMAW / MIG MAG

208.04.004	Plug to Ground Clamp 600 A, 70 mm2 at 5 m	1 Set			•	•	•	•	•
208.04.005	Plug to Ground Clamp 600 A, 70 mm2 at 10 m	1 Set			•	•	•	•	•
Optional Accessories for TIG									
102.03.001.1	Arc Feed 300 - Standard Package	1 Set			•	•		•	
102.03.002.1	Arc Feed 300 RC - Standard Package	1 Set			•	•		•	
203.04.001	Mig Torch - Ergoplus 36 at 3 m Long	1 Set			•			•	
203.04.002	Mig Torch - Ergoplus 36 at 4 m Long	1 Set			•			•	
203.04.003	Mig Torch - Ergoplus 36 at 5 m Long	1 Set			•			•	
201.23.003	CO2 Heater 220V Regulator	1 Pcs			•			•	
201.23.004	CO2 Fin Type Regulator	1 Pcs			•			•	

Optional Accessories for TIG

208.17.006	Tig Torch - WP 17 V-25-2 at 8 m	1 Set	•	•			•		
208.17.007	Tig Torch - WP 26 V-25-2 at 8 m	1 Set	•	•			•		
201.23.001	Argon Gas Regulator	1 Pcs	•	•			•		



Material	Thickness mm	Tungsten Ø mm	Welding Current A	Alumina Ceramic Nozzle
Steel / Stainless Steel	1.0	1.6	10 - 60	4
	1.5	1.6	40 - 80	5
	2.0	1.6	70 - 120	5
	3.0	1.6 - 2.4	90 - 150	6
Copper	4.0	2.4	140 - 180	7
	1.0	1.6	60 - 80	4
	1.5	1.6	100 - 150	5
	3.0	2.4	150 - 180	6

Item Code	Item Name	MoQ	135.02.001.1	135.02.002.1	135.02.002.2	135.02.002.3	135.02.003.1	135.02.003.2	135.02.003.3
General Accessories									
208.18.001	Torch Holder - TIG	1 Pcs	•				•		
208.18.002	Torch Holder - MIG	1 Pcs		•	•	•			
201.22.009	Welding Helmet - Solarmatic Blue	1 Pcs	•	•	•	•	•	•	•
201.22.010	Welding Helmet - Solarmatic Red	1 Pcs	•	•	•	•	•	•	•
201.22.011	Welding Helmet - Solarmatic Green	1 Pcs	•	•	•	•	•	•	•
208.03.001	Plug to Electrode Holder 600 A, 70 mm2 at 5 m	1 Set		•	•		•		
208.03.002	Plug to Electrode Holder 600 A, 70 mm2 at 10 m	1 Set		•	•		•		
208.03.003	Plug to Electrode Holder 600 A, 70 mm2 at 20 m	1 Set		•	•		•		
208.03.004	Plug to Electrode Holder 600 A, 70 mm2 at 30 m	1 Set		•	•		•		
208.03.005	Plug to Electrode Holder 400 A, 50 mm2 at 5 m	1 Set	•						
208.03.006	Plug to Electrode Holder 400 A, 50 mm2 at 10 m	1 Set	•						
208.03.007	Plug to Electrode Holder 400 A, 50 mm2 at 20 m	1 Set	•						
208.04.007	Plug to Ground Clamp 400 A, 50 mm2 at 5 m	1 Set	•						
208.04.008	Plug to Ground Clamp 400 A, 50 mm2 at 10 m	1 Set	•						
208.04.005	Plug to Ground Clamp 600 A, 70 mm2 at 10 m	1 Set		•					
201.23.001	Plug to Ground Clamp 600 A, 70 mm2 at 5 m	1 Set		•					
315.01.002.1	Metallotion Protec CE 15 L at 20 ltr Package	1 Liter			•			•	
336.01.001	Antispatter Spray - Distac Weld 400 ml - Siliconi	1 Can			•			•	
336.01.001	Antispatter Spray - Distac Weld 400 ml - Siliconi	1 Can			•			•	
336.01.001	Antispatter Spray - Distac Weld 400 ml - Siliconi	1 Can			•			•	

