

# Master catalogue arc equipment

MMA - TIG - MIG/MAG - Plasma cutting

Master catalogue arc equipments 2008 / 2009





OERLIKON is part of the Air Liquide Welding group, one of the major companies of the international welding and cutting technology market.

During 2006, the globally recognised OERLIKON brand, was enlarged to include an even wider range of welding and cutting equipment and tools, in addition to its comprehensive consumables offer.

Based on innovative solutions, such as electrodes with double coatings or high productivity submerged arc welding with flux cored wires, the metallurgical expertise of OERLIKON is acknowledged all around the world, particularly in the most demanding industrial sectors, such as offshore oil and gas, petrochemicals, nuclear power generation...

Additionally, research by CTAS (Technical Centre for Welding Applications for the Air Liquide Welding group), the largest private research and development centre for welding, allows OERLIKON to provide solutions to enable customers to improve their performance and productivity, while enhancing the welders' safety and comfort.

*Demand the Welding Expertise*



**A recognised quality. ISO certification**

In order to permanently provide our customers with quality consumables and equipment, all our production units are ISO certified. For the same reason of quality excellence, to warranty our customers an efficient handling of their orders, sales administration and customer service are also ISO certified.

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# Power sources, general information



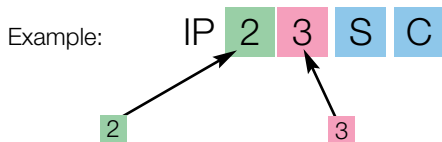
## European CE standards

They guarantee a quality of construction, electrical and mechanical characteristics and a level of safety. All Oerlikon generators have CE certification. They impose construction according to European directives.

- Directive 89/33 EEC imposes limitation of emissions of electromagnetic interferences (EN 60974-10).
- The low voltage directives LVD 73/23/EEC impose manufacturing, safety and performance rules (EN 60974-1; EN 60974-6).

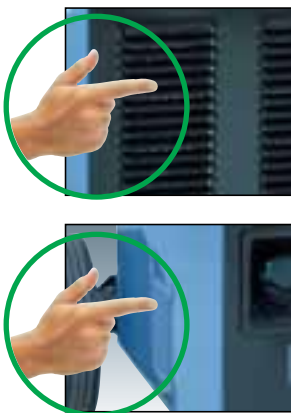
## IP protection class

The first figure indicates the maximum diameter of an object able to penetrate the device and come into contact with a dangerous component. The second figure indicates the level of protection against falling rain.



An object with a diameter of more than 12.5 mm cannot penetrate and make contact with an internal element under dangerous voltage.

The power source is protected against any deterioration caused by water falling in raindrops with a maximum angle of 60° (IP 21: protection against vertical water projections).



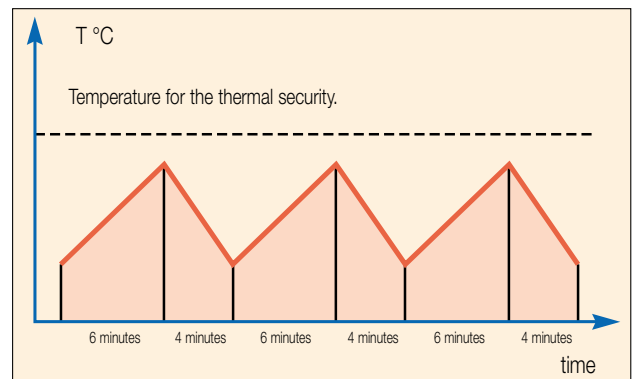
## HF arc striking

System involving a distant striking of the electric arc without contact between the tungsten electrode and the part to be welded.

## Duty cycle

It is defined in the standard EN 60974-1. The duty cycle is the duration of continuous use of a device, based on a time of 10 minutes at a temperature of 40 °C.

*Example: 250 A at 60% means that, with a stabilised cycle and temperature, the power source will be able to deliver 250 A with a working cycle of 6 minutes and 4 minutes of pause (at an ambient temperature of 40 °C).*



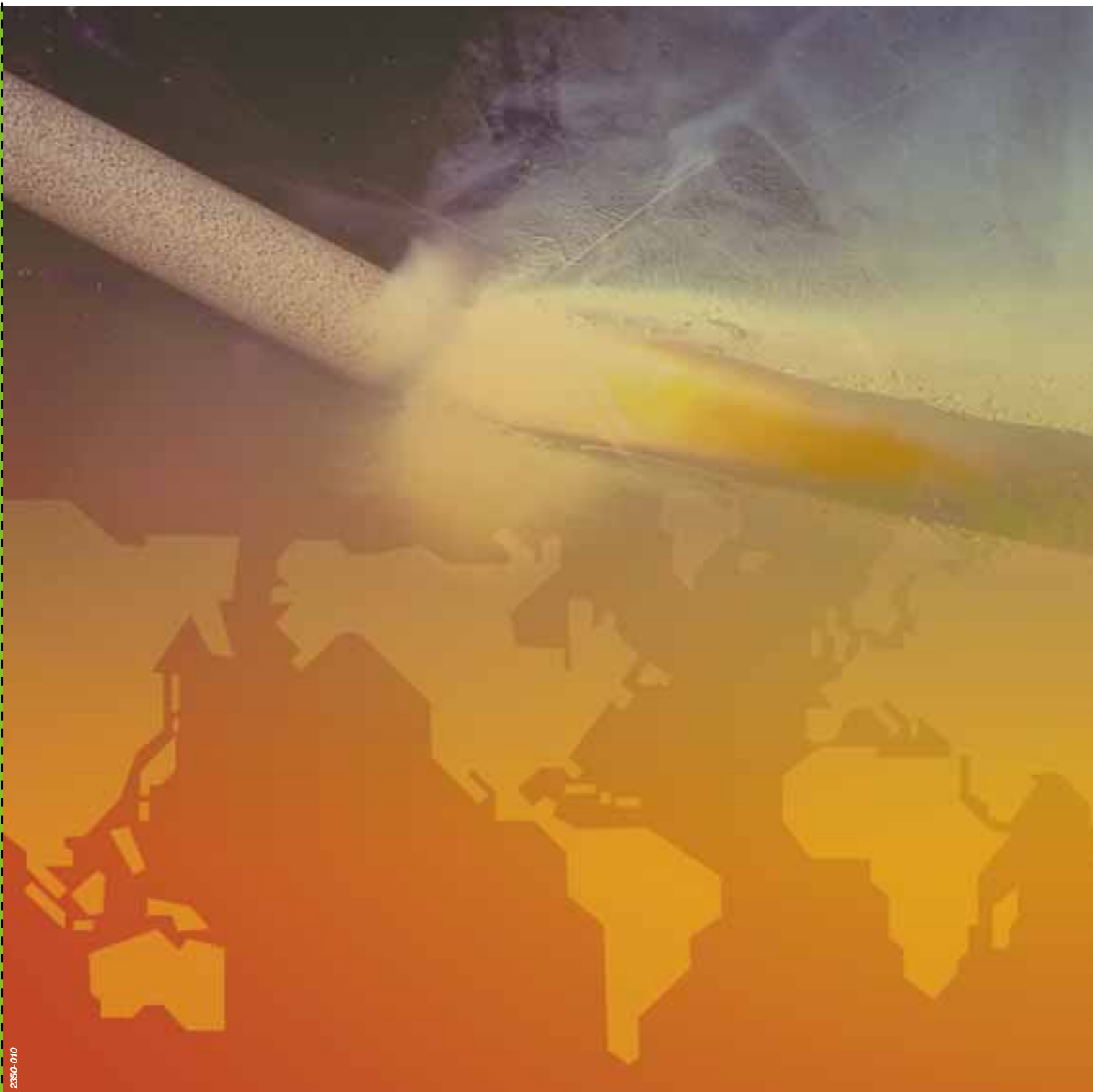
At a duty cycle of 100%, the power source can permanently deliver the corresponding intensity with an ambient temperature of 40 °C.

## Optional information on the degree of protection:

- S** Requires that test for protection against the undesirable effects caused by water ingress, have been carried out with all parts of the equipment off-load.
- C** Pin test: Ø 2.5 mm and 100 mm long pin can not penetrate into any parts, with a primary voltage.

# Chapter 1

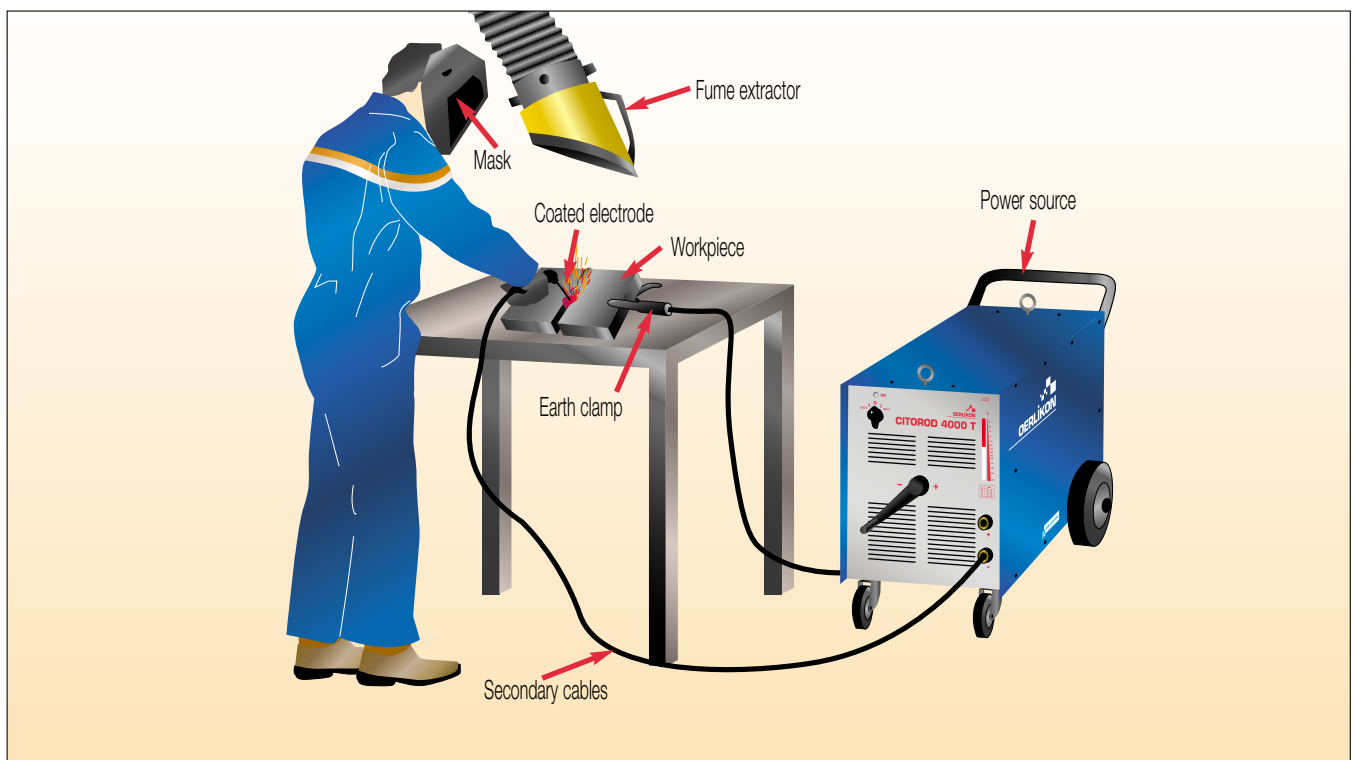
## MMA welding



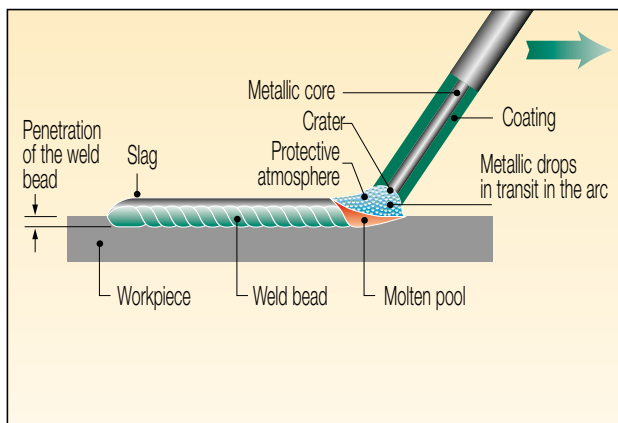
# MMA welding



## Schematic of a manual installation for welding with coated electrodes



### Metal transfer with a coated electrode



### Choice of current intensity

Thicknesses for flat welding, butt welding and fillet welding. (mm)	Electrode diameter (mm)	Average intensity (A)
1.6	1.6	40
2.0	2.0	55
2.0-3.0	2.5	70
3.0-5.0	3.2	110
3.0-10.0	4.0	160
> 8.0	5.0	200
> 10.0	6.3	290



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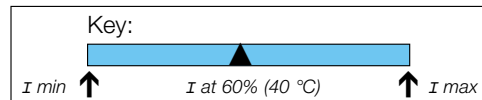


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### Selection guide for MMA power sources

Power supply	Nature of current*		Open circuit voltage (volts)	Setting M = mechanical P = potentiometer	Welding current (Ampere)						Electrode diameter (mm)							Weight (kg)	Name of product
	alternating AC ~	direct DC =			100	200	300	400	500	600	1.6	2.0	2.5	3.2	4.0	5.0	6.3		
Single-phase	✓	-	48	M	[Bar with range 100-200]						■	■	■	■	■	-	-	15	<b>ROKCY 3.2*</b>
Single-phase	✓	-	48	M	[Bar with range 100-200]						■	■	■	■	■	-	-	19	<b>ROKCY 4.0*</b>
Single-phase	✓	-	73	M	[Bar with range 100-200]						-	■	■	■	■	■	-	29	<b>ROKCY 5.0*</b>
Single-phase	-	✓	82	P	[Bar with range 100-200, peak at 150]						■	■	■	■	-	-	-	3.8	<b>MINIARC 3.2i</b>
Single-phase	-	✓	85	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	7	<b>MINIARC 4.0i</b>
Single-phase	-	✓	85	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	9.5	<b>CITOARC 1400i</b>
Single-phase	-	✓	85	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	9.5	<b>CITOARC 1600i</b>
Single-phase	-	✓	108	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	8	<b>CITOARC 1800i**</b>
Single-phase	-	✓	86	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	11	<b>CITOARC 1900i**</b>
Three-phase	-	✓	105	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	-	-	19	<b>CITOARC 2200i**</b>
Three-phase	-	✓	91	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	■	■	29	<b>CITOARC 3500i</b>
Three-phase	-	✓	70	M	[Bar with range 100-200, peak at 150]						-	■	■	■	■	■	-	107	<b>CITOROD 4000 T</b>
Three-phase	-	✓	71	M	[Bar with range 100-200, peak at 150]						-	-	■	■	■	■	■	123	<b>CITOROD 4500 T</b>
Three-phase	-	✓	79	P	[Bar with range 100-200, peak at 150]						■	■	■	■	■	■	■	185	<b>CITOROD 6500 TH**</b>

\* AC: Only for rutile electrodes  
 DC: Suitable for all types of electrodes (rutile, basic, special ...)



\*\* ideal for welding of cellulosic coated electrodes



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# MMA welding sets AC

## Mechanical regulation

Flexible and rugged the ROKCY range of transformers is designed for maintenance and repair applications. High performance and easy to operate, for easy welding with rutile and special electrodes.

1

### ROKCY 3.2

**High performance and easy to use**

**6 product advantages:**

- alternating current welding sets for use with coated electrodes
- easy to use, rugged and powerful
- for repair and maintenance work, small and medium industries, agriculture
- air-cooled
- copper winding
- thermal protection



2006-867

**To order**

- Power source equipped with primary cable L = 2.3 m without plug:  
Cat. no. W 000 236 626
- Add-on:**
- MMA accessories kit 16C25  
Cat. no. W 000 260 680

2

### ROKCY 4.0

**Welding sets for the welding of mild steel**

**5 product advantages:**

- alternating current welding sets for use with coated electrodes
- easy to use, rugged and powerful
- for repair and maintenance work, small and medium industries, agriculture
- air-cooled
- thermal protection



2006-867R

**To order**

- Power source equipped with primary cable L = 2.3 m without plug:  
Cat. no. W 000 236 627
- Add-on:**
- MMA accessories kit 16C25  
Cat. no. W 000 260 680
- Option:**
- Wheel kit  
Cat. no. W 000 305 049

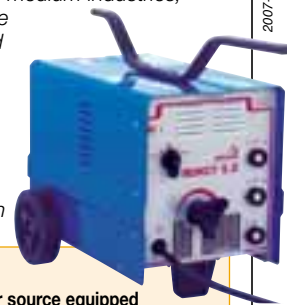
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### ROKCY 5.0

**Ideal for on site and maintenance work**

**7 product advantages:**

- alternating current welding sets for use with coated electrodes
- easy to use, rugged and powerful
- for repair and maintenance work, small and medium industries, agriculture
- air-cooled
- 2 open circuit voltage
- copper winding
- thermal protection



2007-253

**To order**

- Power source equipped with primary cable L = 3.0 m without plug:  
Cat. no. W 000 236 628
- Add-on:**
- MMA accessories kit 16C25  
Cat. no. W 000 011 138

**Technical specifications**

	1 ROKCY 3.2	2 ROKCY 4.0	3 ROKCY 5.0
Power supply single-phase	230 / 400 V ± 10 % 50 Hz	230 / 400 V ± 10 % 50 Hz	230 / 400 V ± 10 % 50 Hz
Primary consumption at I max.	34 A (230 V) - 20 A (400 V)	39 A (230 V) - 23 A (400 V)	62 A (230 V) - 36 A (400 V)
Effective consumption	11.5 A (230 V) - 6.5 A (400 V)	19 A (230 V) - 12 A (400 V)	21.2 A (230 V) - 12.3 A (400 V)
Open circuit voltage	48 V	48 V	52 V / 73 V
Welding current	55 - 160 A	40 - 195 A	50 - 200 A (73 V) / 45 - 215 A (52 V)
Protection class	IP 21	IP 21	IP 21
Insulation class	H	H	H
Electrodes per hour or duty cycle (at 40° C)	14 (3.2 mm) / hour	22 (3.2 mm) / hour	215 A at 10 %
Electrode diameters	1.6 to 4.0 mm	1.6 to 4.0 mm	1.6 to 5.0 mm
Dimensions (L x W x H)	560 x 240 x 445 mm	641 x 240 x 445 mm	360 x 300 x 460 mm
Net weight	15 kg	19 kg	29 kg
Standards	EN 60974-6; EN 60974-10	EN 60974-6; EN 60974-10	EN 60974-1; EN 60974-10



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# Portable rectifier sets Inverter technology

For maintenance and repair work. Weight and size have been reduced while maintaining an excellent welding quality for non-alloyed and stainless steel electrodes from 1.6 to 4.0 mm.

Technical specifications	4 MINIARC 3.2i	5 MINIARC 4.0i
Power supply single-phase	230 V ± 10% 50-60 Hz	230 V ± 10% 50-60 Hz
Primary consumption at I max.	26 A	31 A
Effective consumption	10 A	16 A
Open circuit voltage	82 V	85 V
Welding current	5 - 125 A	5 - 150 A
Protection class	IP 23 S	IP 23 S
Insulation class	H	H
Duty cycle at 100%	60 A	100 A
10 min. cycle at 60%	80 A	120 A
(at 40 °C) at 25%	125 A (at 15%)	150 A
Electrode diameter	1.6 to 3.2 mm	1.6 to 4.0 mm
Dimensions (L x W x H)	300 x 110 x 190 mm	365 x 145 x 230 mm
Net weight	3.8 kg	7.0 kg
Standards	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10

4

## MINIARC 3.2i Ultra-light for fast and high quality work

### 7 product advantages:

- coated electrodes
- Hot start function
- Arc Force function
- anti-sticking device
- rutile, basic, stainless steel and special electrodes up to 3.2 mm
- robust and suitable for outdoor use
- delivered in a suitcase ready to use



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### To order

- Ready to use complete set including:
  - power source,
  - primary cable L = 1.5 m with plug,
  - earth cable L = 2 m with clamp,
  - welding cable L = 3 m with electrode holder
- 1 mask,
- 1 hammer-brush,
- 1 toolcase.

Cat. no. W 000 260 939

### Options:

- MMA accessories kit 16C25  
Cat. no. W 000 260 680
- Torch CITORCH T10V - 5 m  
Cat. no. W 000 266 169
- Maintenance box for CITORCH T10V  
Cat. no. W 000 306 447

5

## MINIARC 4.0i Installation for fast and high quality work with coated electrodes

### 5 product advantages:

- Hot start function
- Arc force function
- anti-sticking device
- rutile, basic, stainless steel and special electrodes up to 4 mm
- robust and suitable for outdoor use



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### To order

- Ready to use complete set including:
  - power source,
  - primary cable L = 3.5 m with plug,
  - earth cable L = 2 m with clamp,
  - welding cable L = 3 m with electrode holder,

Cat. no. W 000 260 940

### Options:

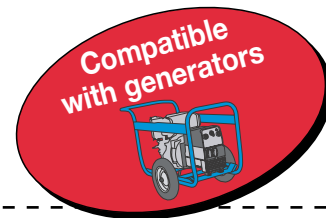
- MMA accessories kit 16C25  
Cat. no. W 000 260 680
- Torch CITORCH T10V - 5 m  
Cat. no. W 000 266 169
- Maintenance box for CITORCH T10V  
Cat. no. W 000 306 447



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# MMA DC inverters



CITOARC machines have been designed to be used in extremely severe conditions. They offer rugged reliability and a high duty cycle for intensive applications. CITOARC rectifier arc inverter technology machines.

**1**

## CITOARC 1400i Indispensable for maintenance professionals or for on-site welding.

### 7 product advantages:

- portable
- very smooth fusion
- Arc Force, Hot Start and Anti-stick functions fully integrated
- easily and quickly connected to a 16 A socket
- TIG option: torch with valve
- MMA package delivered with accessories kit (2 m earth cable with earth clamp and 3 m welding cable with electrode holder)
- thermal protection

### To order

- Power source equipped with primary cable L = 3.5 m with plug:  
Cat. no. W 000 263 681

### Add-on

- MMA accessories kit 25C25+  
Cat. no. W 000 260 683

### Options:

- Torch CITORCH T10V - 5 m  
Cat. no. W 000 266 169
- Maintenance box for CITORCH T10V  
Cat. no. W 000 306 447

### EXPLORER offer

- (in case for worksite):
- Power source equipped with primary cable L = 3.5 m with plug
  - Welding cable L = 2 m with electrode holder
  - Earth cable L = 2 m with clamp  
Cat. n° W 000 265 028



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**2**

## CITOARC 1600i Arc force, Hot start and Anti-stick functions

### 6 product advantages:

- portable
- very smooth fusion
- TIG option: torch with valve
- MMA package delivered with accessories kit (2 m earth cable with earth clamp and 3 m welding cable with electrode holder)
- robust and suitable for outdoor use
- thermal protection

### To order

- Power source equipped with primary cable L = 3 m without plug:  
Cat. no. W 000 263 683

### Add-on

- MMA accessories kit 25C25+  
Cat. no. W 000 260 683

### Options:

- Torch CITORCH T10V - 5 m  
Cat. no. W 000 266 169
- Maintenance box for CITORCH T10V  
Cat. no. W 000 306 447

### EXPLORER offer

- (in case for worksite):
- Power source equipped with primary cable L = 3 m without plug
  - Welding cable L = 2 m with electrode holder
  - Earth cable L = 2 m with clamp  
Cat. n° W 000 265 029



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**3**

## CITOARC 1800i Quality welding with safety

### 8 product advantages:

- portable
- suitable for all types of electrodes, including cellulosic
- Hot-start and Arc-force adjustment
- TIG option: torch with valve
- TIG LIFT with up/down slope functions
- Voltage reduction device built-in (safety)
- digital display for easy setting
- Anti-stick built-in function

### To order

- Power source equipped with primary cable L = 3 m without plug:  
Cat. no. W 000 263 850

### Add-on

- MMA accessories kit 25C50  
Cat. no. W 000 260 684

### Options:

- Torch CITORCH T30V - 5 m  
Cat. no. W 000 266 170
- Maintenance box for CITORCH T30V  
Cat. no. W 000 306 449



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**4**

## CITOARC 1900i High quality and heavy duty

### 9 product advantages:

- portable
- high power
- suitable for welding cellulosic electrodes
- Arc force regulation on front panel
- TIG/MMA selector switch
- TIG lift start
- exceptional starting quality and smooth fusion
- power cooling ventilator
- remote control possibility

### To order

- Power source equipped with primary cable L = 3.4 m :  
Cat. no. W 000 261 755

### Add-on

- MMA accessories kit 25C50  
Cat. no. W 000 260 684

- Remote control with 10 m cable  
Cat. no. W 000 242 069

- Torch CITORCH T30V - 5 m  
Cat. no. W 000 266 170

- Maintenance box CITORCH T30V  
Cat. no. W 000 306 449



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5

## CITOARC 2200i Arc Force, Hot Start and integrated TIG LIFT system

### 10 product advantages:

- suitable for heavy duty welding
- anti-stick built-in function
- digital display for easy welding
- MMA mode / TIG LIFT system
- suitable for all kinds of electrodes, including cellulosic
- remote control unit (option)
- TIG mode with up/down slope functions
- possibility to modify the Hot Start value (in %) and Arc Force
- VRD device (safety)
- alarm indicator

### To order

- Power source equipped with primary cable L = 3 m without plug:  
Cat. no. W 000 263 689
- Add-on**
- MMA accessories kit 35C50  
Cat. no. W 000 011 139
- Remote control with 10 m cable  
Cat. no. W 000 242 069
- Options:**
- Torch CITORCH T30V - 5 m  
Cat. no. W 000 266 170
- Maintenance box for CITORCH T30V  
Cat. no. W 000 306 449
- Power box 230/400 V AC - 20 kVA  
Cat. no. W 000 305 106



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Technical specifications:	1 CITOARC 1400i	2 CITOARC 1600i	3 CITOARC 1800i	4 CITOARC 1900i	5 CITOARC 2200i
<b>Power supply</b>	230 V ± 20% 50-60 Hz single-phase	230 V ± 20% 50-60 Hz single-phase	230 V ± 20% 50-60 Hz single-phase	230 V ± 20% 50-60 Hz single-phase	400 V ± 15% 50-60 Hz three-phase
<b>Primary consumption at 1 max.</b>	28 A	34 A	34 A (MMA) / 22 A (TIG)	20 A (TIG) - 30 A (MMA)	14 A
<b>Effective consumption</b>	16 A	19 A	19 A (MMA) / 12 A (TIG)	16 A (TIG) - 24 A (MMA)	9 A
<b>Open circuit voltage</b>	85 V	85 V	108 V (14 V VRD)	86 V	105 V (14 V VRD)
<b>Welding current</b>	5 - 140 A	5 - 160 A	5 - 160 A	5 - 160 A	5 - 220 A
<b>Protection class</b>	IP 23 S	IP 23 S	IP 23 S	IP 23 S	IP 23 S
<b>Insulation class</b>	H	H	H	H	H
<b>Duty cycle at 100%</b>	100 A	100 A	100 A	130 A	150 A
<b>10 min. cycle at 60%</b>	120 A	120 A	130 A	160 A	190 A
<b>(at 40 °C) at 35%</b>	140 A	160 A (at 30 %)	160 A (at 30 %)	-	220 A (at 40%)
<b>Electrode diameters</b>	1.6 to 3.2 mm	1.6 to 4.0 mm	1.6 to 4.0 mm	1.6 to 4.0 mm	1.6 to 5.0 mm
<b>TIG LIFT start</b>	No	No	Yes	Yes	Yes
<b>Dimensions (L x W x H)</b>	415 x 186 x 315 mm	415 x 186 x 315 mm	400 x 180 x 300 mm	400 x 180 x 300 mm	250 x 470 x 450 mm
<b>Net weight</b>	9.5 kg	9.5 kg	8 kg	11 kg	19 kg
<b>Standards</b>	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10

# MMA rectifiers

## Mechanical regulation

The CITOROD power sources have been designed for demanding applications on site or in workshops. They offer cost effective and ultra-efficient welding for all types of coated electrodes.

Technical specifications	1 CITOROD 4000 T	2 CITOROD 4500 T
Power supply three phase	230/400 V ± 10 % - 50 Hz	230/400 V ± 10 % - 50 Hz
Primary consumption at I max.	57 A (230 V) - 33 A (400 V)	78 A (230 V) - 45 A (400 V)
Effective consumption	34 A (230 V) - 19.5 A (400 V)	53 A (230 V) - 30 A (400 V)
Open circuit voltage	63-70 V	63 - 70 V
Welding current	50 - 325 A	60 - 400 A
Protection class	IP 23 S	IP 23 S
Insulation class	H	H
Duty cycle 10 min. cycle (at 40 °C)	at 100%	190 A
	at 60%	250 A
	at 35%	325 A
Electrode diameter	2.0 to 6.3 mm	2.0 to 6.3 mm
Dimensions (L x W x H)	1080 x 560 x 730 mm	1080 x 560 x 730 mm
Net weight	107 kg	123 kg
Standards	EN 60974-1; EN 60974-10	EN 60974-1; EN 60974-10

1

### CITOROD 4000 T

**Ideal for all types of coated electrodes up to 6.3 mm**

#### 7 product advantages:

- adjustment crank on the front panel
- duty cycle and high power
- silent cooling
- easy handling with large wheels and trolley provided
- refined network balance due to voltage change over rectifier technology
- voltage change over switch - on/off switch
- current output indicator

#### To order

- Power source equipped with primary cable L = 4 m without plug:

Cat. no. W 000 263 692,

#### Add-on:

- MMA accessories kit 50C50

Cat. no. W 000 260 681

#### Options:

- TIG torch with valve CITORCH T30V RS 5 m  
Cat.no. W 000 266 170
- Maintenance box for CITORCH T30V  
Cat. no. W 000 306 449
- TIG box M 200  
Cat. no. W 000 305 050
- TIG torch with trigger CITORCH T 40 EBS 8 m  
Cat. no. W 000 265 521
- Maintenance box for CITORCH T 40 EBS  
Cat. no. W 000 306 450
- MIG wire feeder DEVIDARC  
Cat. no. W 000 305 090
- MIG torch CITORCH M341 3 m  
Cat. no. W 000 345 091
- MIG torch CITORCH M341 4 m  
Cat. no. W 000 345 092



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2

### CITOROD 4500 T

**Ideal for all types of coated electrodes up to 6.3 mm**

#### 7 product advantages:

- robust
- ventilated
- high power
- easy handling with large wheels and trolley provided
- high performance starting due to the high open circuit voltage
- rectifier set with mechanical adjustment
- current output indicator

#### To order

- Power source equipped with primary cable L = 4 m without plug:

Cat. no. W 000 263 697

#### Add-on:

- MMA accessories kit 50C50+

Cat. no. W 000 260 682

#### Options:

- TIG torch with valve CITORCH T30V RS 5 m  
Cat.no. W 000 266 170
- Maintenance box for CITORCH T30V  
Cat. no. W 000 306 449
- TIG box M 200  
Cat. no. W 000 305 050
- TIG torch with trigger CITORCH T 40 EBS 8 m  
Cat. no. W 000 265 521
- Maintenance box for CITORCH T 40 EBS  
Cat. no. W 000 306 450
- MIG wire feeder DEVIDARC  
Cat. no. W 000 305 090
- MIG torch CITORCH M341 3 m  
Cat. no. W 000 305 091
- MIG torch CITORCH M341 4 m  
Cat. no. W 000 305 092



2007-093

# Inverter and thyristor rectifier sets for welding and gouging

CITOARC 3500i and CITOROD 6500 TH, reliability and ruggedness for the most severe conditions. Gouging and also TIG or MIG welding with additional units. Whatever your application, CITOARC and CITOROD machines are the right partner for efficient welding.

Technical specifications		<b>3 CITOARC 3500i</b>
<b>Power supply three phase</b>		400 V $\pm$ 10 % - 50-60 Hz
<b>Primary consumption at I max.</b>		28.5 A
<b>Effective consumption</b>		16.9 A
<b>Open circuit voltage</b>		91.2 V
<b>Welding current</b>		5 - 350 A
<b>Protection class</b>		IP 23 S
<b>Insulation class</b>		H
<b>Duty cycle 10 min. cycle (at 40 °C)</b>	<b>at 100%</b>	250 A
	<b>at 60%</b>	300 A
	<b>at 35%</b>	350 A
<b>Electrode diameter</b>	<b>welding</b>	1.6 to 6.3 mm
	<b>gouging</b>	up to 6.0 mm
<b>Dimensions (L x W x H)</b>		525 x 300 x 390 mm
<b>Net weight</b>		29 kg
<b>Standards</b>		EN 60974-1; EN 60974-10



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## CITOARC 3500i

**Due to the inverter technology, this multi-purpose machine is very compact**

### 12 product advantages:

- refined network balance (+/-10%)
- Hot Start adjustable for instantaneous starting
- integrated Anti-sticking device
- arc dynamism (Arc Force) can be changed for improved weld pool fluidity
- easy to use
- suitable to weld the following types of electrodes: rutile, basic, cast iron and stainless steel
- TIG DC welding possible with TIG Lift starting
- gouging with electrodes up to 6.3 mm diameter
- MIG welding available with additional accessories
- digital meter display as standard
- remote control plug
- reduced open circuit voltage possible



2006-760

### To order

- Power source supplied with wheel kit and fitted primary cable without plug, length 5 m  
Cat. no. W 000 263 469

### Add on:

- MMA accessories kit 50C50+  
Cat. no. W 000 260 682

### Options:

- MMA and TIG B-Box remote control 10 m  
Cat. no. W 000 305 048
- ARCAIR K 200 gouging torch  
Cat. no. W 000 010 999
- CARBONAIR electrode 8 x 305  
Cat. no. W 000 010 445

- TIG torch with valve CITORCH T30V RS 5 m  
Cat. no. W 000 266 170
- Maintenance box for CITORCH T30V RS  
Cat. no. W 000 306 449
- TIG box M200  
Cat. no. W 000 305 050
- TIG torch CITORCH T 40 EBS 8 m  
Cat. no. W 000 265 521
- Maintenance box for CITORCH T 40 EBS  
Cat. no. W 000 306 450
- MIG wire feeder DV 44i-D37 5 m air  
Cat. no. W 000 268 844
- MIG wire feeder DV 44i-D37 10 m air  
Cat. no. W 000 268 845
- MIG wire feeder DV 44i-D37 15 m air  
Cat. no. W 000 268 846

- MIG box for DV 44i D37  
Cat. no. W 000 305 111
- MIG BB-Box remote control for DV 44i-D37 feeders  
Cat. no. W 000 100 120
- MIG torch CITORCH M 341 3 m  
Cat. no. W 000 345 091
- MIG torch CITORCH M 341 4 m  
Cat. no. W 000 345 092
- MIG wire feeder DEVIDARC  
Cat. no. W 000 305 090
- MIG B-Box remote control for DEVIDARC feeder  
Cat. no. W 000 305 048
- Power box 230/400 V AC - 20 KVA  
Cat. no. W 000 305 106

# Inverter and thyristor rectifier sets for welding and gouging



2007-478

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## CITOROD 6500 TH

**Specially designed for welding in the most difficult conditions**

### 11 product advantages:

- CITOROD 6500 TH offers exceptional multi-use flexibility
- characteristics selector CC or CV - MMA / gouging / TIG and MIG
- in MIG mode (CV) CITOROD 6500 TH will provide optimum results with the DEVIDARC add-on unit
- the power unit is oversized allowing a large reserve of power
- even with long lengths of welding cables CITOROD 6500 TH set will remain efficient for all applications
- high network tolerance for working with long primary cables
- welding power, Arc force and Hot Start, adjustable with potentiometers, for better starting even with the most difficult to weld electrodes
- integrated Anti-stick electrode system
- possibility to disengage ventilation for use only when necessary
- trolley system for easy handling (option)
- VRD (Voltage Reduction Device) option provides maximum security with low OCV (Open Circuit Voltage 10 V only)

### To order

- Power source supplied with 2 DINSE plugs to connect welding cables

Cat. no. W 000 264 241

### Add on:

- MMA accessories kit 50C50+  
Cat. no. W 000 260 682
- Primary cable 5 m for input voltages 220/230 V  
Cat. no. W 000 010 104
- Primary cable 5 m for input voltages 380/440 V  
Cat. no. W 000 010 103

### Options:

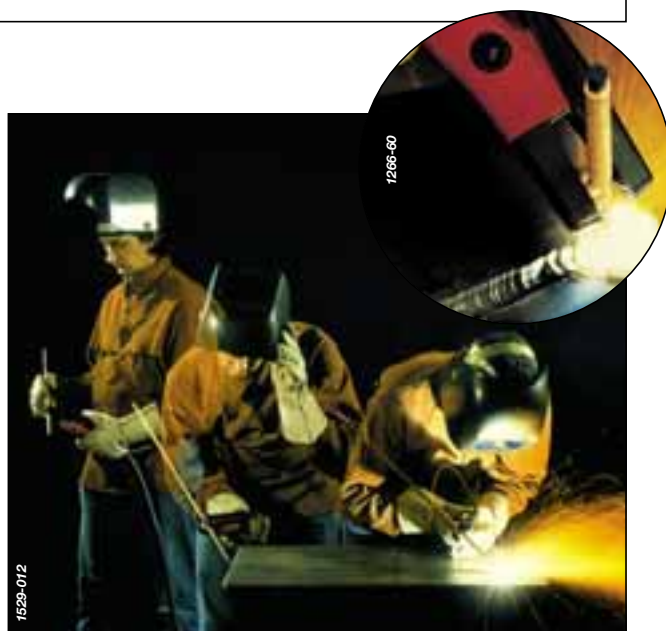
- Wheel kit  
Cat. no. W 000 305 045
- Trolley for worksite  
Cat. no. W 000 305 047
- Analogue ammeter/ voltmeter  
Cat. no. W 000 305 046
- Remote control 10 m  
Cat. no. W 000 305 057
- Remote control extension cable 15 m  
Cat. no. W 000 305 056
- Open circuit voltage reducer (VRD)  
Cat. no. W 000 305 044
- ARCAIR K 4000 gouging torch  
Cat. no. W 000 010 992

- ARCAIR electrode 13x305  
Cat. no. W 000 010 447
- TIG torch with valve CITORCH T30V RS 5 m  
Cat. no. W 000 266 170
- Maintenance box for CITORCH T30V RS  
Cat. no. W 000 306 449
- TIG Box M200  
Cat. no. W 000 305 050
- TIG torch with trigger CITORCH T 40 EBS 8 m  
Cat. no. W 000 265 521
- Maintenance box for CITORCH T 40 EBS  
Cat. no. W 000 306 450

### Technical specifications

### 1 CITOROD 6500 TH

Power supply three phase	230/400/440 V - 50-60 Hz
Primary consumption at I max.	130/73/68 A
Effective consumption	76.9 / 42.2 / 40.2 A
Open circuit voltage	74.5 V
Welding current	30 - 630 A
Protection class	IP 23 S
Insulation class	H
Duty cycle	at 100% 370 A
10 min. cycle	at 60% 470 A
(at 40 °C)	at 35% 630 A
Electrode diameter	welding 1.6 to 6.3 mm
	gouging up to 13.0 mm
Dimensions (L x W x H)	820 x 510 x 570 mm
Net weight	185 kg
Standards	EN 60974-1; EN 60974-10



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### Gouging and bevelling

#### K 2000 TORCH

Cat. no.	W 000 010 999
Current	400 A
Ø electrode	4.0 to 6.3 mm

#### K 4000 TORCH

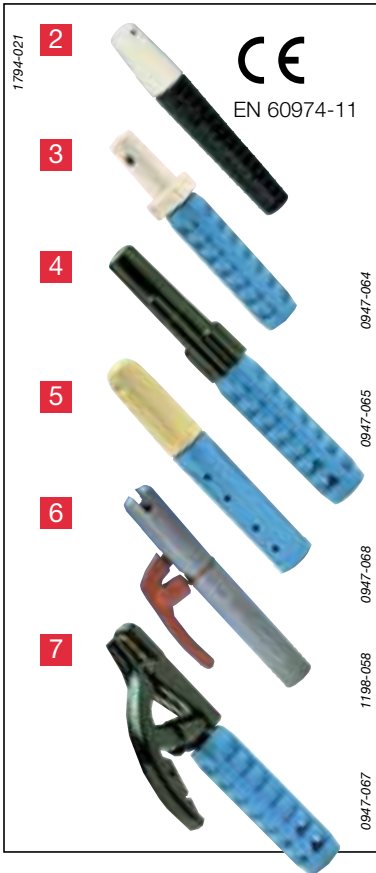
Cat. no.	W 000 010 992
Current	1000 A
Ø electrode	4.0 to 13.0 mm

#### CARBONAIR ELECTRODES

Version	Ø (mm)	L (mm)	Bars	Cat. no.
CARBONAIR	4.0	305	4.0	W 000 010 645
	5.0	305	4.0	W 000 010 443
	6.3	305	4.0	W 000 010 444
	8.0	305	5.5	W 000 010 445
	10.0	305	5.5	W 000 010 446
	13.0	305	5.5	W 000 010 447

Version	Ø (mm)	L (mm)	Bars	Cat. no.
CARBONAIR+ jointed electrodes (no loss)	8.0	355	5.5	W 000 010 448
	10.0	432	5.5	W 000 010 449
	13.0	432	5.5	W 000 010 450
	16.0	432	6.9	W 000 010 451
	19.0	432	6.9	W 000 010 452

# Electrode holders and accessory kits



## Electrode holders

Designation	Description	Electrodes Ø	Cat. no.
<b>Screw type</b>			
<b>2 VESTALETTE</b>	Power* 250 A Maximum section cable 35 mm <sup>2</sup> Weight 320 g	4.0 mm	W 000 010 035
<b>3 STUBBY</b>	Power* 400 A Maximum section cable 70 mm <sup>2</sup> Weight 450 g	6.3 mm	W 000 010 036
<b>4 MASTER</b>	Power* 500 A Maximum section cable 95 mm <sup>2</sup> Weight 530 g	8.0 mm	W 000 010 037
<b>5 VESTALE</b>	Power* 500 A Maximum section cable 95 mm <sup>2</sup> Weight 480 g	8.0 mm	W 000 010 038
<b>Lever type</b>			
<b>6 COBRA</b>	Power* 300 A Maximum section cable 50 mm <sup>2</sup> Weight 405 g	6.3 mm	W 000 010 039
<b>7 TONG GRIP</b>	Power* 400 A Maximum section cable 70 mm <sup>2</sup> Weight 500 g	6.3 mm	W 000 010 040

\* Duty cycle at 35%

## MMA accessory kits

For MMA welding: electrode holder, earth clamp, neoprene cables H01N2D equipped with connectors. Complete range suitable for our whole range of power sources.



Designation*	I max at 35%	Applications	Power sources	Electrode holder	Cable length	Earth clamp	Cable length	Connectors	To order
<b>16C25</b>	200 A	Light duty welding work	MINIARC 3.2i MINIARC 4.0i	HOBBY 200	3 m	HIPPO 200	2 m	9 mm / 16-25 mm <sup>2</sup>	<b>W 000 260 680</b>
<b>25C25</b>	200 A	Professional work	ROKCY 3.2 ROKCY 4.0 ROKCY 5.0	CAIMAN 200	3 m	HIPPO 200	3 m	9 mm / 16-25 mm <sup>2</sup>	<b>W 000 011 138</b>
<b>25C25+</b>	300 A	On site welding up to diameter 4 mm	CITOARC 1400i CITOARC 1600i	SEGURA 300	2 m	HIPPO 400	2 m	9 mm / 16-25 mm <sup>2</sup>	<b>W 000 260 683</b>
<b>25C50</b>	300 A	On site welding up to diameter 4 mm	CITOARC 1800i CITOARC 1900i	SEGURA 300	3 m	HIPPO 400	3 m	13 mm / 35-50 mm <sup>2</sup>	<b>W 000 260 684</b>
<b>35C50</b>	300 A	Intensive on site welding	CITOARC 2200i	SEGURA 300	4 m	HIPPO 400	4 m	13 mm / 35-50 mm <sup>2</sup>	<b>W 000 011 139</b>
<b>50C50</b>	300 A	Intensive welding up to diameter 5 mm	CITOROD 4000 T	SEGURA 400	4 m	HIPPO 400	4 m	13 mm / 35-50 mm <sup>2</sup>	<b>W 000 260 681</b>
<b>50C50+</b>	400 A	Intensive welding up to diameter 6.3 mm	CITOARC 3500i CITOROD 4500 T CITOROD 6500 TH	SEGURA 600	4 m	HIPPO 600	4 m	13 mm / 35-50 mm <sup>2</sup>	<b>W 000 260 682</b>

\* Example 16C25: cable diameter 16 mm<sup>2</sup> and connectors 25 mm<sup>2</sup> (diam. 9 mm).

# Ovens

**On demand: other models**  
 (without thermostat – with thermometer  
 - with different power supply – stainless  
 steel or lacquered finishing)

## WELDRY PW8 and PW 15 Portable quivers

PW8 and PW15 portable quivers are necessary, for electrodes maintenance, near the welding working place. They preserve the electrodes from moisture avoiding hydrogen inclusion in the welding joint.

PW8 and PW15 portable quivers are provided with an handle, useful for moving. they contain also an extractable basket that avoids waste of heat. PW8 and PW15 ovens are provided with build-in adjustable thermostat.

Technical data	WELDRY PW8	WELDRY PW15
Capacity (n. of electrodes)	100 electrodes Ø 3.25 mm	200 electrodes Ø 3.25 mm
Max temperature	180 °C / 200 °C	
Power	0.13 kW	0.275 kW
Capacity	5 kg	10 kg
Power supply	Single-phase 230 V	
Internal size (W x L x H)	72 x 72 x 470 mm	100 x 100 x 470 mm
External size (W x L x H)	140 x 180 x 630 mm	180 x 220 x 630 mm
Weight	5 kg	8 kg
Packaging dimension (W x L x H)	160 x 210 x 640 mm	210 x 240 x 660 mm
Gross weight	6 kg	9 kg
Cat. no.	W 000 120 427	W 000 120 428



## WELDRY MW Holding ovens for MMA electrodes

MW ovens are used for keeping the treatment of electrodes after the drying cycle and before the welding process.

They preserve the electrodes from moisture avoiding hydrogen inclusion in the welding joint.

Equipped with a digital control panel and two adjustable thermoregulators for air and heating elements protection, positioned in front of the oven.



Technical data	WELDRY MEC	WELDRY MEC/1	WELDRY MEC/2
Shelves number	2	4	6
Capacity for each shelf	1500 electrodes	1500 electrodes	1500 electrodes
Temperature regulation thermostat	up to 300 °C		
Power	2.7 kW	2.7 kW	4.5 kW
Capacity (weight and number of electrodes)	135 kg - 3 000 el. Ø 3.25 mm	270 kg - 6 000 el. Ø 3.25 mm	405 kg - 9 000 el. Ø 3.25 mm
Power supply	Single phase 230 V - 50/60 Hz		Three phase 380 V - 50/60 Hz
Internal size (W x L x H)	720 x 510 x 350 mm	720 x 510 x 620 mm	720 x 510 x 890 mm
External size (W x L x H)	810 x 700 x 720 mm	830 x 690 x 1400 mm	820 x 690 x 1310 mm
Weight	90 kg	123 kg	152 kg
Packaging dimension (W x L x H)	850 x 710 x 780 mm	850 x 710 x 1420 mm	840 x 710 x 1330 mm
Gross weight	95 kg	135 kg	160 kg
Cat. no.	W 000 120 430	W 000 120 431	W 000 120 454



## WELDRY CW Re-baking ovens for MMA electrodes

This oven is used for electrode re-baking treatment, heating the electrodes between 350 °C-420 °C for a fixed time. In this way the moisture is removed and a good quality welding without hydrogen intrusion is guaranteed.

Equipped with a digital control panel and two adjustable thermoregulators for air and heating elements protection, positioned in front of the oven, allows to set both drying and keeping cycles.



**On demand: other models**  
(with fan ventilation system)

Technical data	WELDRY CW3	WELDRY CW6	WELDRY CW9
Shelves number	3	6	9
Number of resistances	3	6	9
Capacity (number of electrodes)	4500 electrodes Ø 3.25 mm	9000 electrodes Ø 3.25 mm	13500 electrodes Ø 3.25 mm
Capacity	203 kg	404 kg	608 kg
Temperature regulation thermostat	up to 500 °C		
Power	4.7 kW	9.2 kW	13.7 kW
Power supply	Three-phase 380 V - 50/60 Hz		
Internal size (W x L x H)	560 x 740 x 560 mm	560 x 740 x 980 mm	560 x 740 x 1430 mm
External size (W x L x H)	800 x 880 x 1030 mm	800 x 880 x 1480 mm	800 x 880 x 1880 mm
Weight	140 kg	200 kg	250 kg
Packaging dimension (W x L x H)	820 x 900 x 1050 mm	820 x 900 x 1500 mm	820 x 900 x 1900 mm
Gross weight	150 kg	215 kg	280 kg
Cat. no.	W 000 120 466	W 000 120 467	W 000 120 468

## WELDRY FW Hopper ovens for flux

This model of oven is used for re-baking the submerged arc welding fluxes, heating the flux between 350 °C / 420 °C for a fixed time. The inside tank is stainless steel made to prevent from risk of pollution.

The resistances are positioned inside the hopper for a direct contact to flux in order to obtain an optimal heating.

The build-in digital control equipment with double thermoregulator for air and resistances protection avoids the flux being damaged and allows to set both drying and keeping cycles.



**On demand: other models**  
(without thermostat – with thermometer  
- with different power supply – stainless  
steel or lacquered finishing)

Technical data	WELDRY FW100	WELDRY FW200	WELDRY FW400
Load Capacity	60 kg	160 kg	320 kg
Temperature regulation thermostat	up to 500 °C		
Power	4 kW	4 kW	8 kW
Power supply	Three-phase 380 V - 50/60 Hz		
Internal size (W x L x H)	530 x 390 x 640 mm	690 x 690 x 740 mm	690 x 690 x 740 mm (each tank)
External size (W x L x H)	670 x 709 x 1300 mm	825 x 819 x 1330 mm	1620 x 850 x 1340 mm
Weight	90 kg	116 kg	210 kg
Height of the flap door for flux feeding	a = 500 mm	a = 450 mm	
Gross weight	100 kg	130 kg	225 kg
Cat. no.	W 000 120 469	W 000 120 470	W 000 120 471