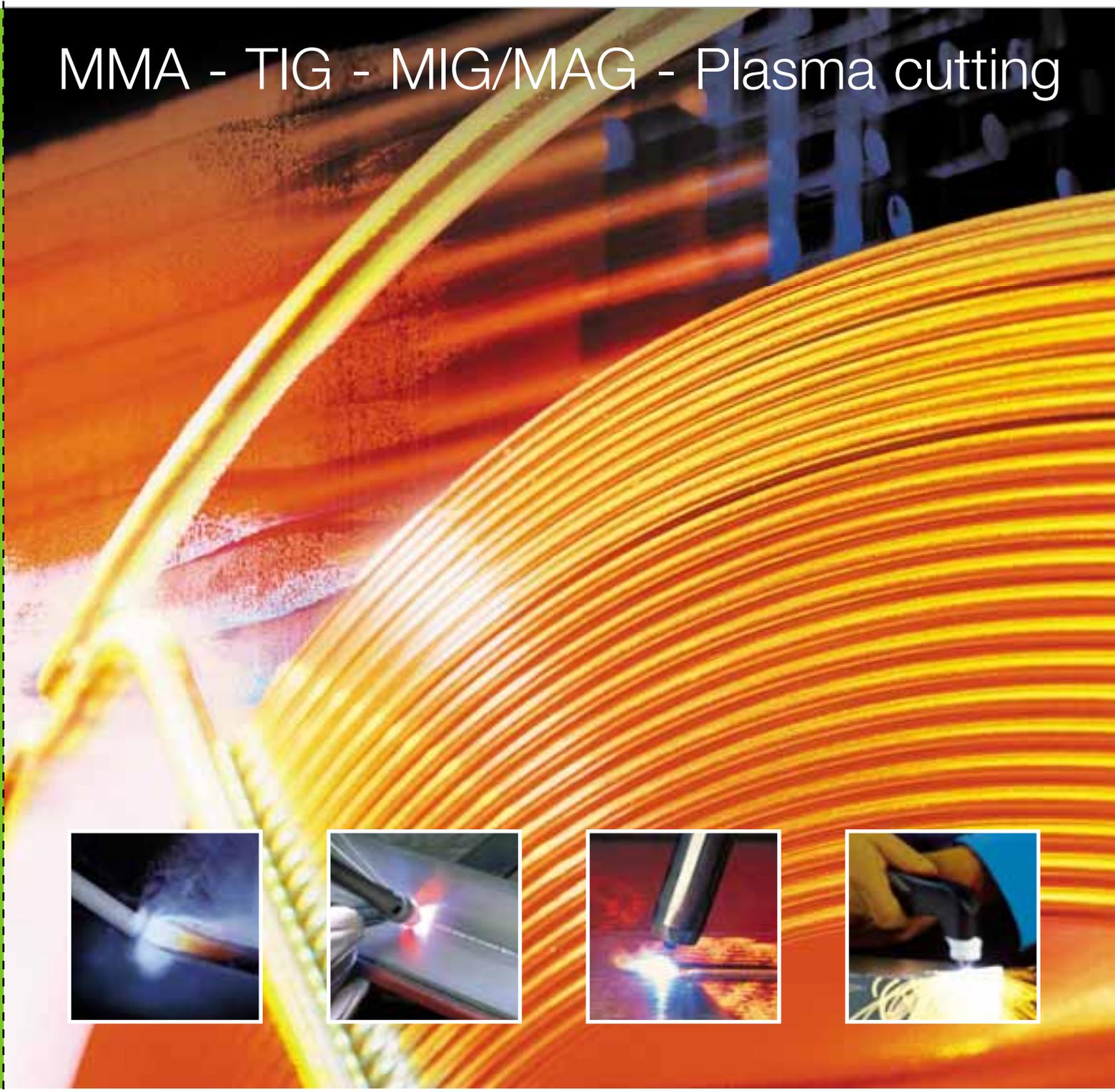




Master catalogue arc equipment

MMA - TIG - MIG/MAG - Plasma cutting





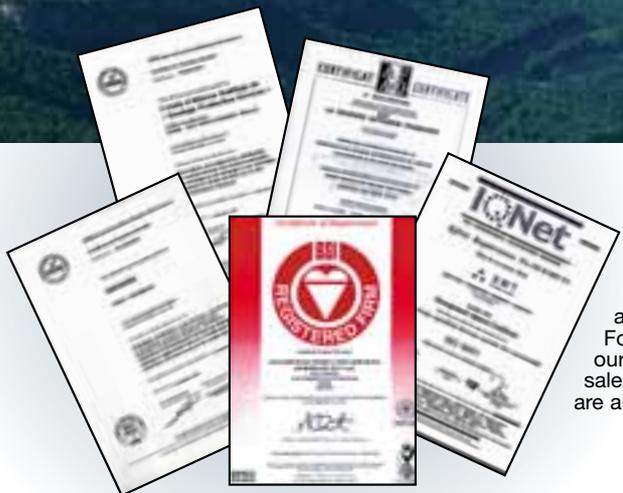
OERLIKON is part of the Air Liquide Welding group, one of the major companies of the international welding and cutting technology market.

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.

2006-937

2008-204

2008-205

2008-206

Summary

CHAPTER 1

MMA welding

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Power sources, general information

2350-010

2350-011

2350-012

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;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.

Example: IP **2** **3** S C

2

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

3

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).



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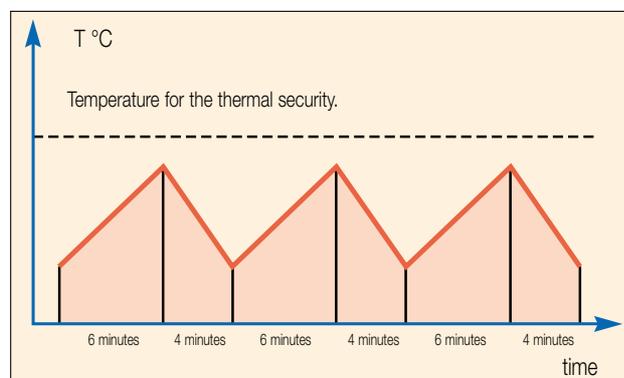
HF arc striking

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

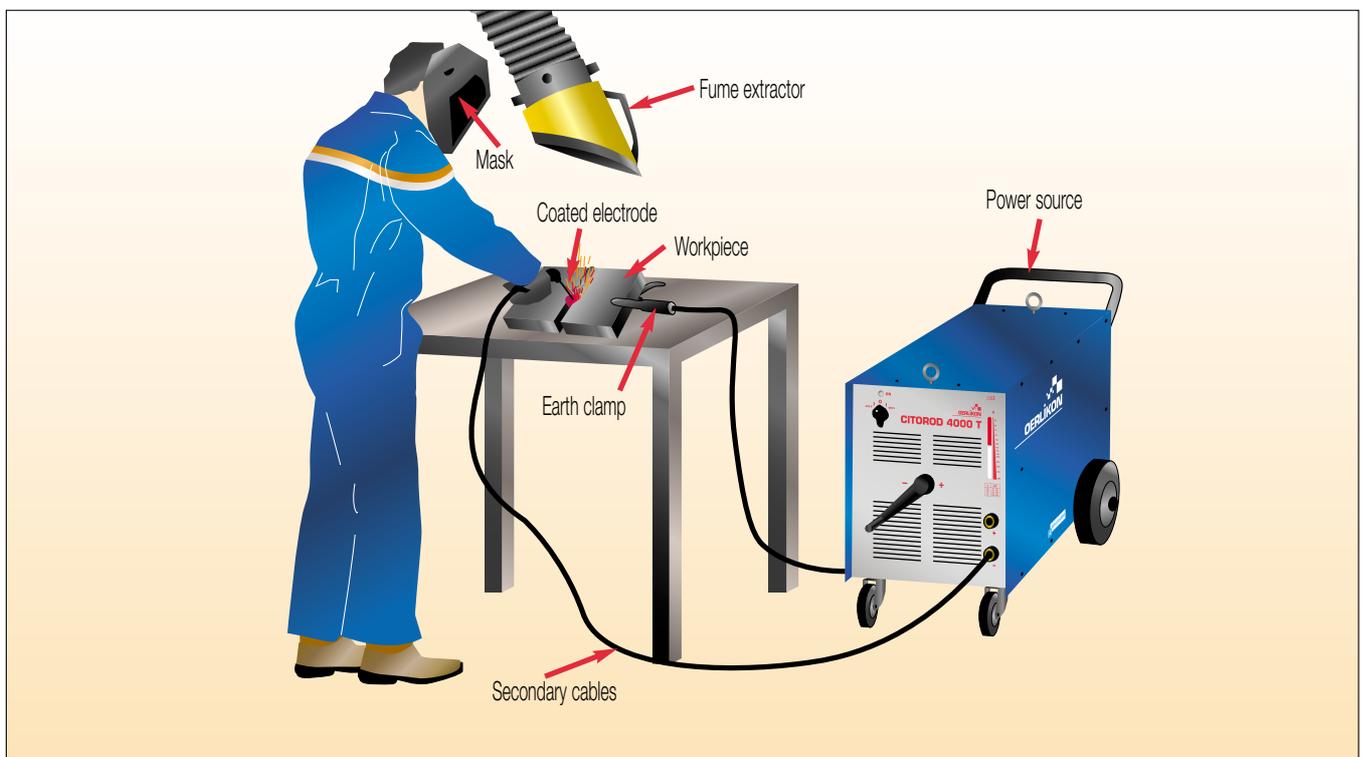
MMA welding



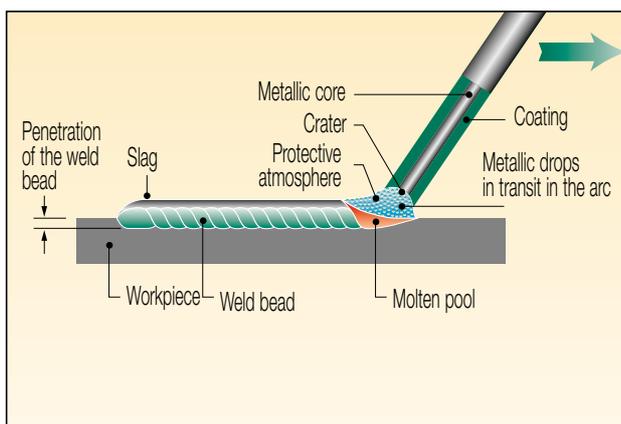
MMA welding



Schematic of a manual installation for welding with coated electrodes



Metal transfer with a coated electrode

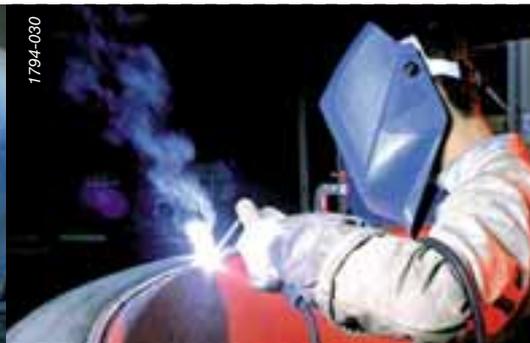


Choice of current intensity

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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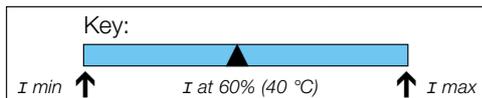
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Selection guide for MMA power sources

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 triangle at ~150A]						■	■	■	■	■	-	-	15	ROKCY 3.2*
Single-phase	✓	-	48	M	[Bar with triangle at ~180A]						■	■	■	■	■	-	-	19	ROKCY 4.0*
Single-phase	✓	-	73	M	[Bar with triangle at ~220A]						-	■	■	■	■	■	-	29	ROKCY 5.0*
Single-phase	-	✓	82	P	[Bar with triangle at ~120A]						■	■	■	■	-	-	-	3.8	MINIARC 3.2i
Single-phase	-	✓	85	P	[Bar with triangle at ~150A]						■	■	■	■	■	-	-	7	MINIARC 4.0i
Single-phase	-	✓	85	P	[Bar with triangle at ~180A]						■	■	■	■	■	-	-	9.5	CITOARC 1400i
Single-phase	-	✓	85	P	[Bar with triangle at ~200A]						■	■	■	■	■	-	-	9.5	CITOARC 1600i
Single-phase	-	✓	108	P	[Bar with triangle at ~150A]						■	■	■	■	■	-	-	8	CITOARC 1800i**
Single-phase	-	✓	86	P	[Bar with triangle at ~180A]						■	■	■	■	■	-	-	11	CITOARC 1900i**
Three-phase	-	✓	105	P	[Bar with triangle at ~250A]						■	■	■	■	■	-	-	19	CITOARC 2200i**
Three-phase	-	✓	91	P	[Bar with triangle at ~300A]						■	■	■	■	■	■	-	29	CITOARC 3500i
Three-phase	-	✓	70	M	[Bar with triangle at ~250A]						-	■	■	■	■	■	-	107	CITOROD 4000 T
Three-phase	-	✓	71	M	[Bar with triangle at ~400A]						-	-	■	■	■	■	■	123	CITOROD 4500 T
Three-phase	-	✓	79	P	[Bar with triangle at ~550A]						■	■	■	■	■	■	■	185	CITOROD 6500 TH**

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



** ideal for welding of cellulosic coated electrodes



0823-032



0008-018

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

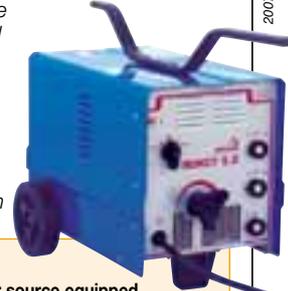
- Power source equipped with primary cable L = 2.3 m without plug:
Cat. no. W 000 236 627
- Add-on:**
- MMA accessories kit 16C25
Cat. no. W 000 260 680
- Option:**
- Wheel kit
Cat. no. W 000 305 049

3

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; 10	EN 60974-6; 10	EN 60974-1; 10



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; 10	EN 60974-1; 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



2006-805

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



2006-595

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:

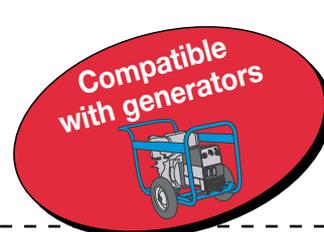
- **MMA accessories kit 16C25**
Cat. no. W 000 260 680
- **Torch CITORCH T10V - 5 m**
Cat. no. W 000 266 169
- **Maintenance box for CITORCH T10V**
Cat. no. W 000 306 447



0266-430

1

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



2006-907

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



2006-907R

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 25C25+
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



2007-268

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



2006-912

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



2007-058



1794-030

Technical specifications:	1 CITOARC 1400i	2 CITOARC 1600i	3 CITOARC 1800i	4 CITOARC 1900i	5 CITOARC 2200i
Power supply	230 V ± 20% 50-60 Hz single-phase	400 V ± 15% 50-60 Hz three-phase			
Primary consumption at 1 max.	28 A	34 A	34 A (MMA) / 22 A (TIG)	20 A (TIG) - 30 A (MMA)	14 A
Effective consumption	16 A	19 A	19 A (MMA) / 12 A (TIG)	16 A (TIG) - 24 A (MMA)	9 A
Open circuit voltage	85 V	85 V	108 V (14 V VRD)	86 V	105 V (14 V VRD)
Welding current	5 - 140 A	5 - 160 A	5 - 160 A	5 - 160 A	5 - 220 A
Protection class	IP 23 S	IP 23 S	IP 23 S	IP 23 S	IP 23 S
Insulation class	H	H	H	H	H
Duty cycle at 100%	100 A	100 A	100 A	130 A	150 A
10 min. cycle at 60% (at 40 °C)	120 A	120 A	130 A	160 A	190 A
at 35%	140 A	160 A (at 30 %)	160 A (at 30 %)	-	220 A (at 40%)
Electrode diameters	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
TIG LIFT start	No	No	Yes	Yes	Yes
Dimensions (L x W x H)	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
Net weight	9.5 kg	9.5 kg	8 kg	11 kg	19 kg
Standards	EN 60974-1; 10	EN 60974-1; 10	EN 60974-1; 10	EN 60974-1; 10	EN 60974-1; 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	190 A	265 A
10 min. cycle	250 A	345 A
(at 40 °C)	325 A	400 A (at 45%)
Electrode diameter	2.0 to 6.3 mm	2.0 to 6.3 mm
Dimensions (L x W x H)	1 080 x 560 x 730 mm	1 080 x 560 x 730 mm
Net weight	107 kg	123 kg
Standards	EN 60974-1; -10	EN 60974-1; -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 000 167 678
- 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 000 100 078
- MIG torch CITORCH M341 3 m
Cat. no. W 000 261 559
- MIG torch CITORCH M341 4 m
Cat. no. W 000 261 561



2007-194

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 000 167 678
- 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 000 100 078
- MIG torch CITORCH M341 3 m
Cat. no. W 000 261 559
- MIG torch CITORCH M341 4 m
Cat. no. W 000 261 561



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



1266-60

1

3

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 000 261 559
- MIG torch CITORCH M 341 4 m
Cat. no. W 000 261 561
- MIG wire feeder DEVIDARC
Cat. no. W 000 100 078
- 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

1

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

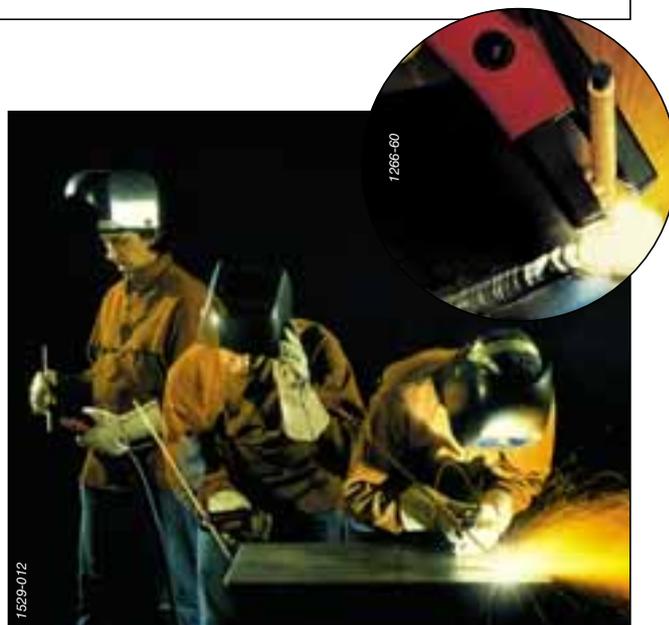
- Maintenance box for CITORCH T 40 EBS

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
Standards	EN 60974-1;-10
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



1529-012

1266-60

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

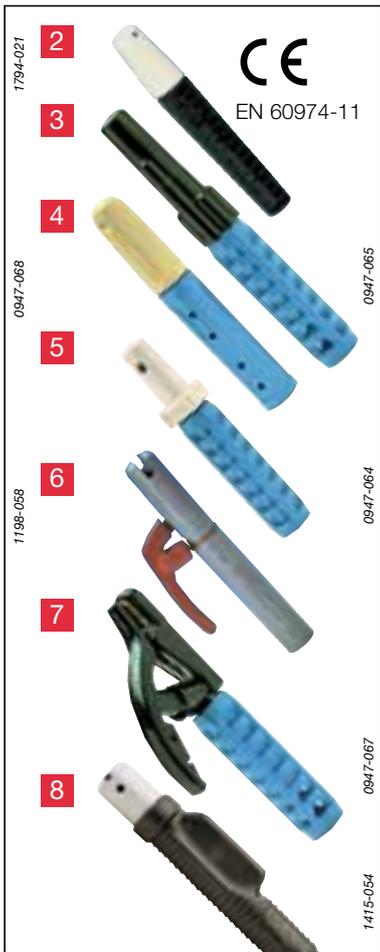
Cat. no.	W 000 010 992
Current	1000 A
Ø electrode	4.0 to 13.0 mm

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.
Screw type			
2 VESTALETTE	Power* 250 A Maximum section cable 35 mm ² Weight 320 g	4.0 mm	W 000 010 035
3 STUBBY	Power* 400 A Maximum section cable 70 mm ² Weight 450 g	6.3 mm	W 000 010 036
4 MASTER	Power* 500 A Maximum section cable 95 mm ² Weight 530 g	8.0 mm	W 000 010 037
5 VESTALE	Power* 500 A Maximum section cable 95 mm ² Weight 480 g	8.0 mm	W 000 010 038
Lever type			
6 COBRA	Power* 300 A Maximum section cable 50 mm ² Weight 405 g	6.3 mm	W 000 010 039
7 TONG GRIP	Power* 400 A Maximum section cable 70 mm ² Weight 500 g	6.3 mm	W 000 010 040
8 ARC 500	Power* 500 A Maximum section cable 95 mm ² Weight 540 g	6.3 mm	40 658 014

* 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:
16C25	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 ²	W 000 260 680
25C25	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 ²	W 000 011 138
25C25+	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 ²	W 000 260 683
25C50	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 ²	W 000 260 684
35C50	300 A	Intensive on site welding	CITOARC 2200i	SEGURA 300	4 m	HIPPO 400	4 m	13 mm / 35-50 mm ²	W 000 011 139
50C50	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 ²	W 000 260 681
50C50+	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 ²	W 000 260 682

* Example 16C25: cable diameter 16 mm² and connectors 25 mm² (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 d x l)	72 x 72 x 470 mm	100 x 100 x 470 mm
External size (w x d x l)	140 x 180 x 630 mm	180 x 220 x 630 mm
Weight	5 kg	8 kg
Packaging dimension (w x d x l)	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 d x l)	720 x 510 x 350 mm	720 x 510 x 620 mm	720 x 510 x 890 mm
External size (w x d x l)	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 d x l)	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



2350-088

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)	4 500 electrodes Ø 3,25 mm	9 000 electrodes Ø 3,25 mm	13 500 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 d x l)	560 x 740 x 560 mm	560 x 740 x 980 mm	560 x 740 x 1430 mm
External size (w x d x l)	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 d x l)	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.



2350-093



2350-094



2350-095

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 d x l)	530 x 390 x 640 mm	690 x 690 x 740 mm	690 x 690 x 740 mm
External size (w x d x l)	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

Chapter 2

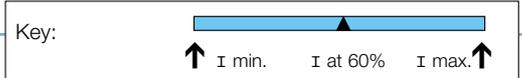
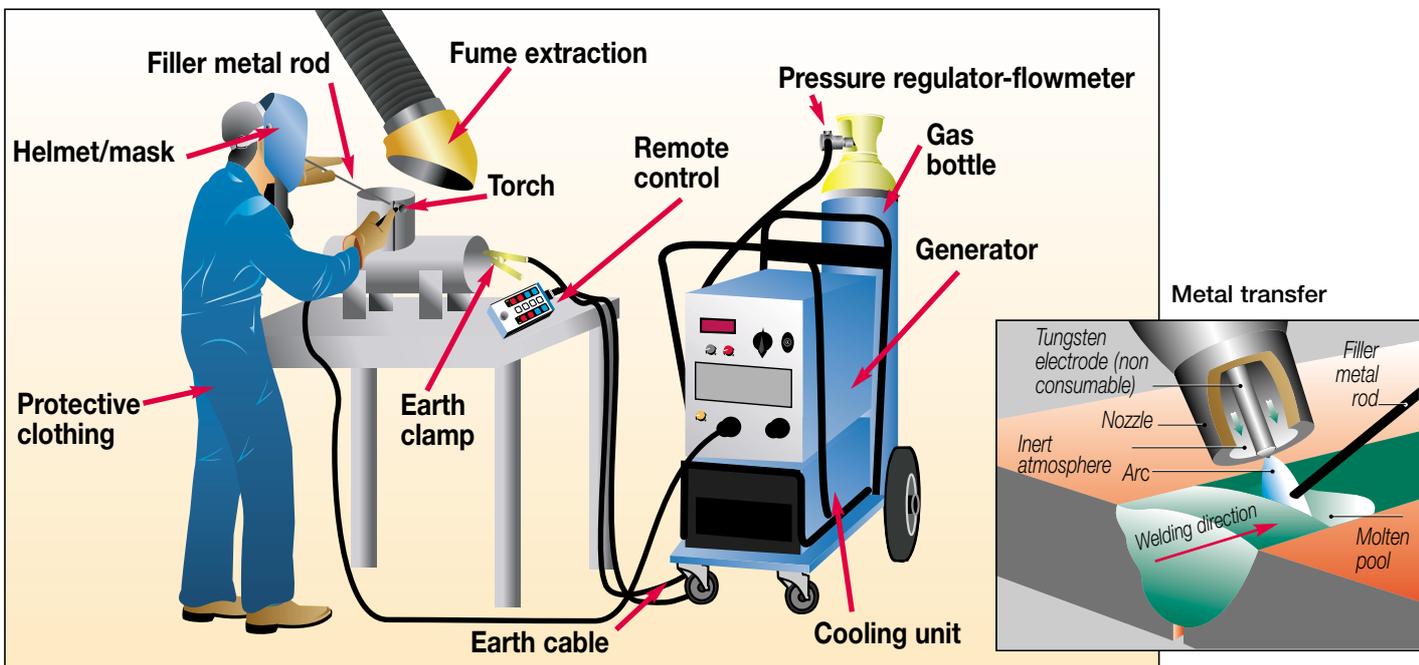
TIG welding



TIG welding

TIG welding overview and selection guide

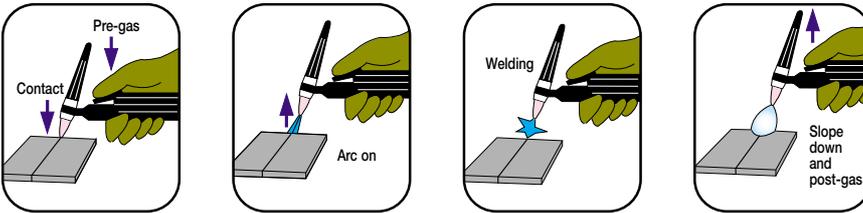
Scheme of a manual installation for TIG welding



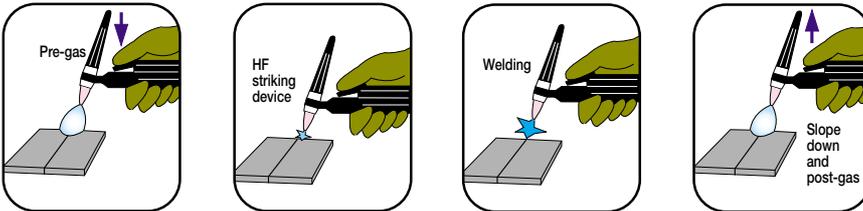
Choice criteria for TIG power sources

Power supply	Nature of current		PAC striking	HF striking	Welding current (Ampere)				Simple cycle	Complete cycle	Pulse mode	Weight (kg)	Name of product
	alternating AC ~	direct DC =			100	200	300	400					
Single-phase	-	✓	-	✓	[Bar with triangle at ~150]				✓	-	no	10	CITIG 1500 DC
Single-phase	-	✓	✓	✓	[Bar with triangle at ~180]				-	✓	yes	10	CITIG 1700 DC
Single-phase	-	✓	✓	✓	[Bar with triangle at ~220]				-	✓	yes	18	CITIG 2200 DC
Three-phase	-	✓	✓	✓	[Bar with triangle at ~250]				-	✓	yes	16,5	CITIG 2300 DC
Single-phase	-	✓	✓	✓	[Bar with triangle at ~280]				-	✓	yes	15	CITOTIG 200 DC
Three-phase	-	✓	✓	✓	[Bar with triangle at ~320]				-	✓	yes	22/32	CITOTIG 300/300 W DC
Three-phase	-	✓	✓	✓	[Bar with triangle at ~350]				-	✓	yes	33	CITOTIG 400 W DC
Three-phase	-	✓	-	✓	[Bar with triangle at ~380]				✓	-	no	104	CITOTIG TH 250 DC
Three-phase	-	✓	-	✓	[Bar with triangle at ~400]				✓	-	no	159	CITOTIG TH 350/350 W DC
Three-phase	-	✓	✓	✓	[Bar with triangle at ~420]				-	✓	yes	99	CITOTIG 350 W DC
Single-phase	✓	✓	-	✓	[Bar with triangle at ~150]				✓	-	yes	22	CITIG 1500 AC/DC
Single-phase	✓	✓	✓	✓	[Bar with triangle at ~180]				-	✓	yes	30	CITOTIG 200 AC/DC
Single-phase	✓	✓	✓	✓	[Bar with triangle at ~220]				-	✓	yes	50	CITOTIG 200 W AC/DC
Three-phase	✓	✓	✓	✓	[Bar with triangle at ~250]				-	✓	yes	39	CITOTIG 250 AC/DC
Three-phase	✓	✓	✓	✓	[Bar with triangle at ~280]				-	✓	yes	65	CITOTIG 250 W AC/DC
Three-phase	✓	✓	✓	✓	[Bar with triangle at ~320]				-	✓	yes	74	CITOTIG 350 W AC/DC
Three-phase	✓	✓	✓	✓	[Bar with triangle at ~400]				-	✓	option	149	CITOTIG 500 W AC/DC

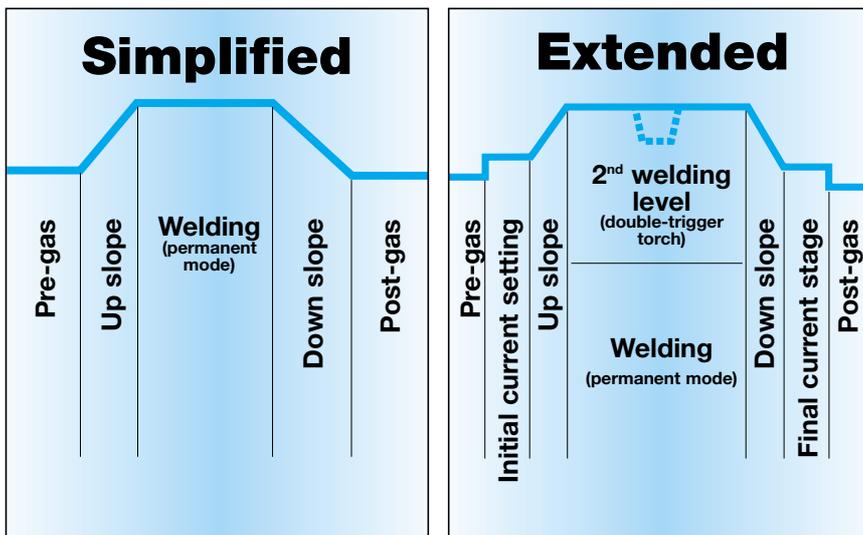
PAC SYSTEM arc striking device



HF arc striking device



TIG welding cycles



TIG welding glossary

European CE standards

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

- Directive 89/336 imposes limitation of emissions of electromagnetic interferences.
- The low voltage directives impose manufacturing, safety and performance rules.

EN 60974-1, device capacities are given according to a welding current delivered at a given duty cycle.

Duty cycle

It is defined in the standard. 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. A duty cycle of 100 A at 60% means that over a period of 10 minutes, it is possible to weld continuously for 6 minutes, followed by a stop of 4 minutes. A duty cycle of 100 A at 100% means that the source is designed to deliver 100 A continuously.

Pre-gas

Used to purge the torch pipes before welding in order to start welding in an atmosphere of protective gas.

Preheating stage

Allows positioning on the joint and preheating of the metal to be welded.

Up slope

Makes it possible to reach the welding current level progressively.

Down slope

Avoids the crater (shrinkage cavity) at the end of the bead when welding stops.

End setting

Allows slower cooling of the weld pool and selection of a "lighted arc" welding cycle, which is very useful when welding in position.

CITOSTEP

Used to adjust two distinct current levels via a signal from the torch trigger.

Post-gas

Protects the weld pool and tungsten electrode during cooling.

Balance

Allows welding using alternating current (light alloys) to favour cleaning or penetration.

Pulsed system

Avoids collapse of the weld pool during welding of thin thicknesses by time phasing the welding current between a high value (hot time) and a low value (cold time).

Clamping

Saves time during spot welding operations by avoiding having to go through the whole welding cycle.

HF arc striking

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

Arc striking on contact

System involving striking of the electric arc as soon as the torch is raised after contact has been made between the part and the tungsten electrode. This mode is particularly useful when operating in environments that are sensitive to high-frequency interference.

Square waves

In alternating current, the square form of current wave ensures excellent arc stability and avoids arc disruption when the current changes direction.

IP protection class

The first figure indicates the maximum diameter of an object able to penetrate the device and come in contact with a dangerous component. The second figure indicates the level of protection against falling rain. Example: IP 23 - the "2" indicates that an object with a diameter greater than 12.5 mm may not be introduced into the device - the "3" indicates that it is not damaged by rainfall at an angle of 60°.

CITIG DC ranges

Single or three-phase portable inverters for MMA and TIG DC high quality work on non-alloyed or stainless steels.

1

CITIG 1500 DC

5 product advantages:

- HF striking
- simple welding cycle: pre-gas, slope-down and post-gas adjustable on the front panel
- MMA or TIG DC modes
- 2T-4T modes
- over heating thermal protection



2006-421

To order

- **Standard equipment:**
 - 1 CITIG 1500 DC
 - 1 primary cable L = 3.5 m with SCHUKO plug
 - 1 earth cable L = 3 m with earth clamp and DINSE connector
 - 1 equipped gas hose L = 3 m
- **Add-ons:**
 - CITORCH T 20 EB C5B 5 m torch
Cat. no. W 000 265 529
 - CITORCH T 20 EBS 5 m torch
Cat. no. W 000 265 546
 - Accessory kit MMA 25C50
Cat. no. W 000 260 684
- **Options:**
 - Maintenance box for:
 - CITORCH T 20
Cat. no. W 000 306 448

2

CITIG 1700 DC

9 product advantages:

- pulsed TIG current
- complete welding cycle
- digital display of the parameters
- MMA or TIG DC modes
- HF-PAC arc striking
- 2T-4T modes
- choice of two current levels
- over heating thermal protection
- suitable for outdoor use



2006-833

To order

- **Standard equipment:**
 - 1 CITIG 1700 DC
 - 1 primary cable L = 4.4 m
 - 1 equipped gas hose L = 2 m
- **Add-ons:**
 - CITORCH T 20 EB C5B 5 m torch
Cat. no. W 000 265 529
 - CITORCH T 20 EBS 5 m torch
Cat. no. W 000 265 546
 - Accessory kit MMA 25C50
Cat. no. W 000 260 684
- **Options:**
 - Maintenance box for:
 - CITORCH T 20
Cat. no. W 000 306 448
 - Remote control
Cat. no. W 000 242 069
 - Foot pedal
Cat. no. W 000 241 602

Technical specifications:	1 CITIG 1500 DC	2 CITIG 1700 DC	3 CITIG 2200 DC	4 CITIG 2300 DC	
Power supply	230 V (± 10%) 50-60 Hz single-phase	230 V (± 10%) 50-60 Hz single-phase	230 V (± 10%) 50-60 Hz single-phase	400 V (+ 10% -15%) 50-60 Hz three-phase	
Primary consumption at I max.	20 A	22 A	16 A (PFC)	9.6 A	
Effective consumption	12 A	13 A	13 A	5 A	
Open circuit voltage	85 V	85 V	97 V	80 V	
Welding current	5 - 150 A	5 - 160 A	5 - 220 A	5 - 220 A	
Protection class	IP 23	IP 23	IP 23	IP 23C	
Insulation class	H	H	H	H	
Duty cycle	at 100%	100 A	110 A	150 A	110 A
10 min. cycle	at 60%	120 A	140 A	180 A	145 A
(at 40 °C)	at 30%	150 A (at 35%)	160 A (at 35%)	220 A (at 25%)	220 A (at 25%)
Electrode diameter max.	4.0 mm	4.0 mm	5.0 mm	5.0 mm	
Dimensions (L x W x H)	420 x 175 x 300 mm	420 x 180 x 300 mm	460 x 330 x 450 mm	472 x 152 x 385 mm	
Net weight	10 kg	10 kg	18 kg	16.5 kg	
Standards	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10	
Torch types	C5B - S families				

3**CITIG 2200 DC****11 product advantages:**

- MMA or TIG DC modes
- complete welding cycle
- pulsed TIG current
- choice of two current levels
- digital display of the parameters
- HF-PAC arc striking
- 2T-4T modes
- max input current < 16 A
- over heating thermal protection
- robust and light
- suitable for outdoor use



2006-842

To order

- **Standard equipment:**

- 1 CITIG 2200 DC
 - 1 primary cable L = 3.5 m
 - 1 equipped gas hose L = 2 m
- Cat no. W 000 260 969

- **Add-ons:**

- CITORCH T 30 EB C5B 5 m torch
Cat. no. W 000 265 531
- CITORCH T 30 EBS 5 m torch
Cat. no. W 000 265 523
- Accessory kit MMA 35C50
Cat. no. W 000 011 139

- **Options:**

- Maintenance box for:
 - CITORCH T 30
Cat. no. W 000 306 449
- Remote control
Cat. no. W 000 242 069
- Foot pedal
Cat. no. W 000 241 602

4**CITIG 2300 DC****7 product advantages:**

- complete welding cycle, pre-gas, slope-down and post-gas adjustable
- pulsed TIG current
- MMA or TIG DC modes
- HF-PAC arc striking
- 2 current levels with CITOSTEP function
- 2T-4T, spot mode
- suitable for on-site operations



2006-634

To order

- **Standard equipment:**

- 1 CITIG 2300 DC
 - 1 primary cable L = 3 m with SCHUKO plug
 - 1 earth cable L = 3 m with earth clamp and DINSE connector
 - 1 equipped gas hose L = 3 m
- Cat no. W 000 265 134

- **Add-ons:**

- CITORCH T 30 EB C5B 5 m torch
Cat. no. W 000 265 531
- CITORCH T 30 EBS 5 m torch
Cat. no. W 000 265 523
- Accessory kit MMA 35C50
Cat. no. W 000 011 139

- **Options:**

- Maintenance box for:
 - CITORCH T 30
Cat. no. W 000 306 449
- Remote control
Cat. no. W 000 263 312
- Foot pedal
Cat. no. W 000 263 314
- Power box 230/400 V
50/60 Hz - 20 kVA
Cat. no. W 000 305 106



1794-031

2

CITOTIG DC range

Single or three-phase portable inverters for MMA and TIG DC high quality work on non-alloyed or stainless steels.

1

CITOTIG 200 DC

12 product advantages:

- complete welding cycle, pre/post-gas, up/down slope current setting
- MMA or TIG DC modes
- pulsed and synergic pulsed TIG current
- 2T-4T and spot mode selection
- HF-PAC arc striking
- digital meter
- electric generator compatibility
- 9 welding program memory
- 2 current levels with the CITOSTEP function
- durable steel cabinet
- suitable for on-site operations
- protection against dust and spatter

To order

• Standard equipment:

- 1 CITOTIG 200 DC
- 1 equipped primary cable L = 3 m with plug
- 1 earth cable L = 3 m with earth clamp and DINSE connector
- 1 equipped gas hose L = 1.5 m

• Add-ons:

- CITORCH T 30 EB C5B 5 m torch
Cat. no. W 000 265 531
- Accessory kit MMA 35C50
Cat. no. W 000 011 139

• Options:

- Maintenance box for:
 - CITORCH T 30
Cat. no. W 000 306 449
- Trolley
Cat. no. W 000 263 310
- Remote control
Cat. no. W 000 263 311
- Foot pedal
Cat. no. W 000 263 313



2006-656

2 3

CITOTIG 300 / 300 W DC

15 product advantages:

- thermal safety indicator
- supply voltage defect indicator
- complete welding cycle, pre/post-gas up/down slope current with setting
- MMA or TIG DC modes
- pulsed and synergic pulsed TIG current
- 2T-4T and spot mode selection
- HF-PAC arc striking
- digital display
- electric generator compatibility
- built-in cooling unit (300 W)
- 9 welding program memory
- 2 current levels with the CITOSTEP function
- durable steel cabinet
- suitable for on-site operations
- protection against dust and spatter

To order

• Standard equipment:

- CITOTIG 300 DC
Cat. no. W 000 262 994
- CITOTIG 300 W DC
Cat. no. W 000 265 600
with COOLERTIG
(with equipped primary cable L = 3 m + earth cable L = 3 m + earth clamp and DINSE connector + 1 equipped gas hose L = 1.5 m)

• Add-ons:

- CITORCH T 40 EB C5B 5 m torch
Cat. no. W 000 265 533
- CITORCH T 10 W EB C5B 5 m torch
Cat. no. W 000 265 537 (for 300 W)
- Accessory kit MMA 50C50:
Cat. no. W 000 260 681

• Options:

- Maintenance box for:
 - CITORCH T 40
Cat. no. W 000 306 450
 - CITORCH T 10
Cat. no. W 000 306 447
- (for 300 W)
- Trolley
Cat. no. W 000 263 310
- Remote control
Cat. no. W 000 263 311
- Foot pedal
Cat. no. W 000 263 313
- COOLERTIG
Cat. no. W 000 263 453
- Power box 230/400 V
50/60 Hz - 20 kVA
Cat. no. W 000 305 106
- FREEZCOOL 9.6 L
Cat. no. W 000 010 167



2006-646

2006-671



3551-046

4

CITOTIG 400 W DC**11 product advantages:**

- built-in cooling unit
- digital display and supply voltage defect indicator
- complete welding cycle, pre/post-gas up/down slope current with setting
- MMA or TIG DC 2T-4T and spot mode selection
- pulsed and synergic pulsed TIG current
- HF-PAC arc striking
- electric generator compatible
- 9 welding program memory
- 2 current levels with the CITOSTEP function
- durable steel cabinet
- protection against dust and spatter

To order

- **Standard equipment:**
 - CITOTIG 400 W DC with COOLERTIG
Cat. no. W 000 265 520
(with equipped primary cable
L = 3 m + earth
cable L = 3 m + earth
clamp and DINSE connector
+ equipped gas hose L = 1.5 m)
- **Add-ons:**
 - CITORCH T 30 W EB C5B 5 m torch
Cat. no. W 000 265 539
 - CITORCH T 10 W EB C5B 5 m torch
Cat. no. W 000 265 537
 - Accessory kit MMA 50C50+
Cat. no. W 000 260 682
- **Options:**
 - Maintenance box for:
CITORCH T 10
Cat. no. W 000 306 447

- CITORCH T 30
Cat. no. W 000 306 449
- Trolley
Cat. no. W 000 263 310
- Remote control
Cat. no. W 000 263 311
- Foot pedal
Cat. no. W 000 263 313
- Power box 230/400 V
50-60 Hz - 20 KVA
Cat. no. W 000 305 106
- FREEZCOOL 9.6 L
Cat. no. W 000 010 167



2006-689



2

Technical specifications:	1 CITOTIG 200 DC	2 CITOTIG 300 DC	3 CITOTIG 300 W DC	4 CITOTIG 400 W DC	
Power supply	230 V ($\pm 10\%$) 50-60 Hz single-phase	400 V (+ 20% -15%) 50-60 Hz three-phase	400 V (+ 20% -15%) 50-60 Hz three-phase	400 V (+ 20% -15%) 50-60 Hz three-phase	
Primary consumption at I max.	28 A	12.1 A	12.1 A	19.9 A	
Effective consumption	15 A	6.6 A	6.6 A	10.9 A	
Open circuit voltage	80 V (40 V)	80 V	80 V	80 V	
Welding current	5 - 200 A	5 - 300 A	5 - 300 A	5 - 400 A	
Protection class	IP 23C	IP 23C	IP 23C	IP 23C	
Insulation class	H	H	H	H	
Duty cycle	at 100%	130 A	200 A	200 A	220 A
10 min. cycle	at 60%	150 A	230 A	230 A	285 A
(at 40 °C)	at 30%	200 A	300 A	300 A	400 A
Electrode diameter max.	4.0 mm	5.0 mm	5.0 mm	6.0 mm	
Dimensions (L x W x H)	410 x 180 x 390 mm	500 x 180 x 390 mm	499 x 180 x 650 mm	500 x 180 x 650 mm	
Net weight	15 kg	22 kg	32 kg	33 kg	
Standards	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10	
Torch types	C5B family	C5B family	C5B family	C5B family	

CITOTIG TH power sources and

Your welding partner in workshops or on-site. Powerful, rugged and easy to use power sources. HF striking and excellent stability. Good welding performance in MMA mode.

1

CITOTIG TH 250 DC

11 product advantages:

- user-friendly front panel
- simple welding cycle
- MMA or TIG DC modes
- 2T-4T mode selection
- HF arc striking
- thermal protection
- functional cabinet and recessed front panel
- bottle holder optional
- for welding with all types of electrodes
- digital display (U/I)
- slinging rings



2006-498

To order

- **Standard equipment:**
 - 1 CITOTIG TH 250 DC
 - 1 equipped primary cable L = 5 m
 - 1 ground cable L = 5 m equipped with clamp
 - 1 gas hose L = 3 m
 - 1 quick gas coupling
 - Cat. no. W 000 263 324
- **Add-ons:**
 - CITORCH T 40 EB C5B 5 m torch
 - Cat. no. W 000 265 533
 - CITORCH T 40 EB S 8 m torch
 - Cat. no. W 000 265 521
 - Accessory kit MMA 35C50
 - Cat. no. W 000 011 139
- **Options:**
 - Maintenance box for:
 - CITORCH T 40
 - Cat. no. W 000 306 450
 - Remote control:
 - Cat. no. W 000 147 816
 - Foot pedal: Cat. no. W 000 147 817
 - Cylinder support:
 - Cat. no. W 000 147 824

2

CITOTIG TH 350 / 350 W DC

11 product advantages:

- user-friendly front panel
- MMA or TIG DC modes
- 2T-4T mode selection
- HF arc striking
- thermal protection
- functional cabinet and recessed front panel
- water cooled version
- coolant flow fault protection (TH 350 W DC)
- for welding with all types of electrodes
- digital display (U/I)
- slinging rings



2006-517

To order

- **Standard equipment:**
 - 1 CITOTIG TH 350 DC
 - 1 equipped primary cable L = 5 m
 - 1 ground cable L = 5 m equipped with clamp
 - 1 gas hose L = 3 m
 - 1 quick gas coupling
 - 1 built-in cooling unit for the water cooling version
 - Cat. no. W 000 263 325 (air version)
 - Cat. no. W 000 263 325 + W 000 148 804 (for 350 W water version)
- **Add-ons:**
 - CITORCH T 40 EB S 8 m torch
 - Cat. no. W 000 265 521
 - CITORCH T 40 EB C5B 5 m torch
 - Cat. no. W 000 265 533
 - CITORCH T 10 W EB C5B 5 m torch
 - Cat. no. W 000 265 537
 - CITORCH T 10 W EB S 8 m torch
 - Cat. no. W 000 265 518
 - Accessory kit MMA 50C50
 - Cat. no. W 000 260 681
- **Options:**
 - Maintenance box for:
 - CITORCH T 40
 - Cat. no. W 000 306 450
 - CITORCH T 10 W
 - Cat. no. W 000 306 447
 - Remote control:
 - Cat. no. W 000 147 816
 - Foot pedal:
 - Cat. no. W 000 147 817
 - FREEZCOOL 9.6 L
 - Cat. no. W 000 010 167k



2006-522

d CITOTIG 350 W DC

Powerful, compact welding installation with inverter technology. Multi-purpose power source, recommended for workshop use for welding non-alloyed and stainless steel.

3 CITOTIG 350 W DC

13 product advantages:

- user friendly front panel
- multi-purpose installation:
TIG DC / pulsed TIG / coated electrodes
- complete TIG welding cycle
- 100 program memory
- break down of each program into 16 sectors
- TIG with HF or PAC system hot start
- digital display
- built-in cooling unit
- numerical control of the process
- chaining with the second trigger
- printer connection output
- fault display
- control by automatic interface



2006-767

To order

• Standard equipment:

- 1 CITOTIG 350 W DC
- 1 primary cable L = 5 m
- 1 ground cable L = 5 m equipped with clamp,
- 1 tube 2 m equipped with gas,
- 1 quick action coupling
- 1 cooling unit
- 1 LIQUISAF can
Cat. no. W 000 263 326

• Add-ons:

- CITORCH T 30 W EB C5B 8 m torch
Cat. no. W 000 265 540
- CITORCH T 30 W EB C5B 5 m torch
Cat. no. W 000 265 539
- CITORCH T 10 W EB C5B 5 m torch
Cat. no. W 000 265 537
- CITORCH T 10 W EB C5B 8 m torch
Cat. no. W 000 265 538

- Accessory kit MMA 50C50
Cat. no. W 000 260 681

• Options:

- Remote control
Cat. no. W 000 305 112
- Pulsed remote control
Cat. no. W 000 305 064
- Foot pedal
Cat. no. W 000 305 065
- Auto interface box:
Cat. no. W 000 305 066
- Maintenance box for:
 - CITORCH T 30
Cat. no. W 000 306 449
 - CITORCH T 10 W
Cat. no. W 000 306 447
- FREEZCOOL 9,6 L
Cat. no. W 000 010 167
- Power box 230/400 V – 3 ph –
50/60 Hz – 20 KVA
Cat. no. W 000 305 106



2000-173

2

Technical specifications:	1 CITOTIG TH 250 DC	2 CITOTIG TH 350 / 350 W DC	3 CITOTIG 350 W DC
Power supply three-phase	230/400 V ± 10% 50-60 Hz	230/400 V ± 10% 50-60 Hz	400 V ± 10% 50-60 Hz
Primary consumption at I max.	35 A (230 V) 20 A (400 V)	61 A (230 V) 35 A (400 V)	21.7 A
Effective consumption	20.7 A (230 V) - 11.8 A (400 V)	33.4 A (230 V) - 20.7 A (400 V)	10.9 A
Open circuit voltage	97 V	103 V	98.8 V
Welding current	7 - 250 A	5 - 350 A	4 - 350 A
Protection class	IP 23S	IP 23S	IP 23S
Insulation class	H	H	H
Duty cycle at 100%	140 A	200 A	220 A
10 min. cycle at 60%	180 A	260 A	260 A
(at 40 °C) at 35%	250 A	350 A (at 30%)	350 A (at 20 %)
Electrode diameter max.	5.0 mm	6.3 mm	6.3 mm
Dimensions (L x W x H)	650 x 460 x 720 mm	990 x 660 x 990 mm	1 090 x 610 x 97 mm
Net weight	104 kg	159 kg	99 kg
Standards	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10
Torch types	C5B - S families	C5B - S families	C5B family

AC/DC inverters range

Technical specifications:	1 CITIG 1500 AC/DC	2 CITOTIG 200/200 W AC/DC
Power supply single-phase	230 V ± 10% 50-60 Hz	230 V ± 10% 50-60 Hz
Primary consumption at I max.	23 A	29.5 A
Effective consumption	13 A	16.2 A
Open circuit voltage	82 V	70 V DC
Welding current	5 - 150 A	3 - 200 A (DC) - 10 - 200 A (AC)
Protection class	IP 23	IP 23C
Insulation class	H	H
Duty cycle at 100%	80 A	150 A
10 min. cycle at 60%	100 A	-
(at 40 °C) at 30%	150 A	200 A
Electrode diameter max.	2.4 mm	4.0 mm
Dimensions (L x W x H)	430 x 220 x 250 mm	540 x 260 x 510 mm
Net weight	22 kg	30 kg (50 kg water cooled)
Standards	EN 60974-1; -10	EN 60974-1; -10
Torch types	C5B - S families	C5B family

1

CITIG 1500 AC/DC

8 product advantages:

- user-friendly front panel
- AC/DC welding currents
- MMA or 2T-4T TIG and spot mode selection
- pulsed TIG DC
- AC with variable frequencies and adjustment of the balance cleaning time/penetration
- robust
- simple welding cycle
- HF arc striking



2006-400

To order

- **Standard equipment:**
 - 1 CITIG 1500 AC/DC
 - 1 equipped primary cable L = 3 m long with SCHUKO plug
 - 1 earth cable L = 3 m equipped with earth clamp and DINSE connector,
 - 1 equipped gas hose L = 2 m long
- Cat. no. W 000 260 970
- **Add-ons:**
 - CITORCH T 20 EB S 5 m torch
 - Cat. no. W 000 265 546
 - CITORCH T 20 EB C5B 5 m torch
 - Cat. no. W 000 265 529
 - Accessory kit MMA 25C50
 - Cat. no. W 000 260 684
- **Options:**
 - Maintenance box for:
 - CITORCH T 20
 - Cat. No. W 000 306 448

2

CITOTIG 200/200 W AC/DC

13 product advantages:

- AC/DC welding currents
- complete welding cycle: pre/post gas - up/down slope current with setting
- MMA or 2T-4T TIG modes and spot mode selection
- pulsed and synergic pulsed TIG current
- HF-PAC arc striking
- digital display
- 9 program memory
- electric generator compatible
- thermo-switched ventilation
- suitable for maintenance and on-site work
- TIG AC with Cerium (pointed) or pure (ball) tungsten electrodes
- CITOSTEP function (2 welding current levels)
- built-in cooling unit + trolley + FREEZCOOL 5 L for 200 W AC/DC version



2006-686

To order

- **Standard equipment:**
 - 1 CITOTIG 200 AC/DC
 - Cat no. W 000 262 996 or
 - 1 CITOTIG 200 W AC/DC + cooling unit + trolley
 - Cat no. W 000 270 071
 - 1 equipped primary cable L = 3 m with plug
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose L = 1.5 m
- **Add-ons:**
 - CITORCH T 30 EB C5B 5 m torch
 - Cat. no. W 000 265 531
 - CITORCH T 10 W EB C5B 5 m torch
 - Cat. no. W 000 265 537
 - Accessory kit MMA 35C50
 - Cat. no. W 000 011 139
- **Options:**
 - Maintenance box for:
 - CITORCH T 30
 - Cat no. W 000 306 449
 - Maintenance box for CITORCH T 10 W
 - Cat. no. W 000 306 447
 - Trolley for air cooler version
 - Cat. no. W 000 263 308
 - Remote control
 - Cat no. W 000 263 312
 - Foot pedal
 - Cat. no. W 000 263 314
 - FREEZCOOL 9,6 L
 - Cat no. W 000 010 167
 - Water safety board
 - Cat no. W 000 265 148



2563-007

3 4

CITOTIG 250 / 250 W AC/DC

13 product advantages:

- user-friendly front panel
- using AC: adjustment of the balance cleaning time/penetration
- complete welding cycle: pre/post gas - up/down slope current with setting
- MMA or 2T-4T TIG modes and spot mode selection
- pulsed and synergic pulsed TIG current
- HF, PAC arc striking
- supply voltage fault indicator
- digital display and 9 program memory
- electric generator compatible
- built-in cooling unit (250 W)
- CITOSTEP function (2 welding current levels)
- TIG AC with Cerium (pointed) or pure (ball) tungsten electrodes
- thermo-switched ventilation

To order

- **Standard equipment:**
 - CITOTIG 250 AC/DC
Cat. no. W 000 265 363
 - CITOTIG 250 W AC/DC + cooling unit
Cat. no. W 000 262 999
(with equipped primary cable L = 3 m + earth cable L = 3 m with clamp and DINSE connector + equipped gas hose 1,5 m)
- **Add-ons:**
 - CITORCH T 40 EB C5B 5 m torch
Cat. no. W 000 265 533
 - CITORCH T 10 W EB C5B 5 m torch
Cat. no. W 000 265 537 (250 W)
 - Accessory kit MMA 50C50
Cat. no. W 000 260 681
- **Options:**
 - Maintenance box for:
 - CITORCH T 40
Cat. no. W 000 306 450
 - CITORCH T 10 W
Cat. no. W 000 306 447
 - Trolley
Cat. no. W 000 263 309
 - Remote control
Cat. no. W 000 263 312
 - Foot pedal
Cat. no. W 000 263 314
 - FREEZCOOL 9.6 L
Cat. no. W 000 010 167



2006-727

2006-696



1015-024

2

Technical specifications:	3 CITOTIG 250 AC/DC	4 CITOTIG 250 W AC/DC
Power supply three-phase	230/400/460 V (± 10%) 50-60 Hz	230/400/460 V (± 10%) 50-60 Hz
Primary consumption at I max.	18.8 A (230 V) 10.8 A (400 V) 9.4 A (460 V)	18.8 A (230 V) 10.8 A (400 V) 9.4 A (460 V)
Effective consumption (400 V)	9.1 A	9.1 A
Open circuit voltage	70 V (DC)	70 V (DC)
Welding current	3 to 250 A (DC) 10 to 250 A (AC)	3 to 250 A (DC) 10 to 250 A (AC)
Protection class	IP 23C	IP 23C
Insulation class	H	H
Duty cycle at 100%	220 A	220 A
10 min. cycle at 60%	250 A (70%)	250 A (70%)
(at 40 °C) at 35%	-	-
Electrode diameter max.	5.0 mm	5.0 mm
Dimensions (L x W x H)	690 x 260 x 550 mm	690 x 260 x 830 mm
Net weight	39 kg	65 kg
Standards	EN 60974-1; -10	EN 60974-1; -10
Torch types	C5B family	C5B family

AC/DC inverters range

Technical specifications:	1 CITOTIG 350 W AC/DC	2 CITOTIG 500 W AC/DC
Power supply three-phase	400 V (± 10%) 50-60 Hz	230/400 V (± 10%) 50-60 Hz
Primary consumption at I max.	16.9 A	48 A (230 V) 36 A (400 V)
Effective consumption (400 V)	13.1 A	21.3 A
Open circuit voltage	70 V (DC)	100 V
Welding current	3 to 350 A (DC) 10 to 350 A (AC)	4 to 500 A (DC) 4 to 500 A (AC)
Protection class	IP 23C	IP 23
Insulation class	H	H
Duty cycle at 100%	280 A	400 A
10 min. cycle at 60% (at 40 °C)	350 A	450 A
	-	500 A
Electrode diameter max.	5.0 mm	6.3 mm
Dimensions (L x W x H)	690 x 260 x 870 mm	960 x 590 x 1 170 mm
Net weight	74 kg	149 kg
Standards	EN 60974-1; -10	EN 60974-1; -10
Torch types	C5B family	C5B family

1

CITOTIG 350 W AC/DC

13 product advantages:

- built-in cooling unit
- user-friendly front panel
- using AC: adjustment of the balance cleaning time/penetration
- complete welding cycle: pre/post gas - up/down slope current with setting
- MMA or 2T-4T TIG modes and spot mode selection
- pulsed and synergic pulsed TIG current
- HF, PAC arc striking
- supply voltage fault indicator
- digital display and 9 program memory
- electric generator compatible
- CITOSTEP function (2 welding current levels)
- TIG AC with Cerium (pointed) or pure (ball) tungsten electrodes
- thermo-switched ventilation

To order

- **Standard equipment:**
 - 1 CITOTIG 350 W AC/DC:
 - 1 equipped primary cable L = 3 m
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 1,5 m
 - 1 coolertig
- Cat. no. W 000 263 000
- **Add-ons:**
 - CITORCH T 35 W EB C5B 5 m torch
Cat. no. W 000 266 167
 - CITORCH T 10 W EB C5B 5 m torch
Cat. no. W 000 265 537
 - Accessory kit MMA 50C50
Cat. no. W 000 260 682
- **Options:**
 - Maintenance box for:
 - CITORCH T 35 W
Cat no. W 000 306 450
 - CITORCH T 10 W
Cat no. W 000 306 447
 - Trolley
Cat. no. W 000 263 309
 - Remote control
Cat no. W 000 263 312
 - Foot pedal
Cat no. W 000 263 314
 - Power box 230/400 V – 3 ph
50/60 Hz – 20 KVA
Cat no. W 000 305 106
 - FREEZCOOL 9,6 L
Cat no. W 000 010 167



2006-707

2006-705

2

CITOTIG 500 W AC/DC

11 product advantages:

- user-friendly front panel
- complete welding cycle: 2T-4T, up/down slope, pre/post gas
- multi-process unit: AC/DC TIG, spot and pulsed TIG with a remote controller DC+, DC- or AC in MMA mode
- AC/DC TIG with a single cerium electrode with sharpened point
- AC noise reduction with a range of different wave forms
- numerical control of the process with DSP (Digital Signal Processor) function
- 15 program memory
- compact installation with integrated cooling unit
- CITOSTEP function (2 welding current levels)
- TIG AC with Cerium (pointed) or pure (ball) tungsten electrodes
- thermo-switched ventilation

To order

- **Standard equipment:**
 - 1 CITOTIG 500 W AC/DC
 - 1 equipped primary cable L = 5 m
 - 1 earth cable equipped with a screw clamp 4 m long
 - 1 equipped gas hose L = 3 m long
 - 1 built-in cooling unit
 - 1 can of 5 litres cooling liquid
- Cat. no. W 000 263 717
- **Add-ons:**
 - CITORCH T 35 W EB C5B 5 m torch
Cat. no. W 000 266 167
 - CITORCH T 40 W EB C5B 5 m torch
Cat. no. W 000 265 541
 - Accessory kit MMA 50C50+
Cat. no. W 000 260 682
- **Options:**
 - Maintenance box for:
 - CITORCH T 35 W
Cat. no. W 000 306 450
 - CITORCH T 40 W
Cat. no. W 000 306 451
 - Remote control: current - frequency - balance
Cat. no. W 000 305 052
 - Remote control: pulsed current - basic current - frequency cycle
Cat. no. W 000 305 053
 - Remote control pedal
Cat. no. W 000 305 054
 - FREEZCOOL 9,6 L
Cat. no. W 000 010 167



2006-510

MICROPLASMA and TIG process

Manual and automatic welding applications

For the manual or automatic assembly of thin section precious metals, 0.05 to 1.0 mm. (stainless steels, Inconel, titanium, silver and gold alloys).

Electric component industries, electronics, small containers, metallic filters and tool repair.

Medical sector, watchmakers, goldsmiths.

5

PLASMAFIX 51:



2007-469

Product features:

- User friendly front panel.
- Multilingual display.
- Totally programmable welding cycles.
- 100 program memory.
- Use-friendly configuration.
- Printing of programs.
- Also for TIG welding.
- RS 232 equipped for coupling a P.C. or printer
- Liquid cooling
- Tungsten electrodes: Ø 1.0 or 1.6 mm, 75 or 150 mm long,
- 4 m harness.

6

REFRIJET 51:



- Cooling unit.
Cat. no. W 000 141 376.

3638-038

5 - PLASMAFIX 51

Primary power supply:

• power supply (V)	230-400-440 V - 50-60 Hz. Three-phase
• cos φ	0.91
• max. primary power (phased)	6 A (under 400 V)

Secondary:

• PLASMA smoothed and pulsed	mini 80 m A - maxi 50 A at 100%
• TIG smooth and pulsed	mini 0.8 A - maxi 50 A at 60%
• open circuit voltage	106 V
• pulse frequency	1 Hz to 10 kHz

Other characteristics:

• front programming	keys and code
• display	LCD
• cooling	cooling unit outside power source
• HF source	integrated
• main and annular gas circuit	integrated
• back shielding gas circuit	option
• protection class	IP 23
• weight	95 kg
• dimensions (L x W x H)	650 x 360 x 750 mm

6 - REFRIJET 51 cooling unit.

Cooling by liquid in a closed circuit of the SP 45 torch and the power source

PLASMAFIX 51:

• power supply	230 V / 50-60 Hz
• capacity	6 l
• power consumption	2 200 W at 20 °C
• weight	36 kg
• dimensions (L x W x H)	720 x 360 x 340 mm
• FREEZCOOL 9.6 L	Cat. no. W 000 010 167

To order

- PLASMAFIX 51 (power source only)
Cat. no. W 000 141 373
- Package for manual application (ready to use)
Cat. no. W 000 141 374
- Package for automatic application (ready to use)
Cat. no. W 000 141 377

Options

- **Trolley**
Cat. no. W 000 141 375,
for the following equipment:
- PLASMAFIX 51,
- REFRIJET 51,
- 2 gas cylinders.
- **Double footpedal remote control**
(replaces the torch trigger)
Cat. no. W 000 141 369
- **Trigger and current adjustment pedal**
Cat. no. W 000 174 102.
- **Back weld gas protection device**
Cat. no. W 000 141 419
(add a pressure regulator).
- **P.C. software for Windows 3.1, 95 and 98**
for PLASMAFIX 51
Cat. no.
W 000 141 379
- **+ TIG adaptor**
Cat. no. W 000 141 342

Installation
on trolley



2007-472

2

MICROPLASMA and TIG process

Torches and wear parts

		To order
Torch SP 45 Automatic		W 000 174 278
Torch SP 45 Manual		W 000 174 268
Thoriated tungsten electrode (2%)	Ø 1.0 mm	W 000 141 298
	Ø 1.6 mm	W 000 142 436
Constricting nozzles	Ø 0.6 mm	W 000 141 333
	Ø 0.8 mm	W 000 141 318
	Ø 1.0 mm	W 000 141 319
	Ø 1.2 mm	W 000 141 320
	Ø 1.5 mm	W 000 141 321
	Ø 1.8 mm	W 000 141 322
Alumina nozzles	Ø 7.0 mm	W 000 141 327
	Ø 9.0 mm	W 000 141 328
	Ø 11 mm	W 000 141 329

SP45 torch maintenance kit



Cat. no. W 000 141 296, contains:

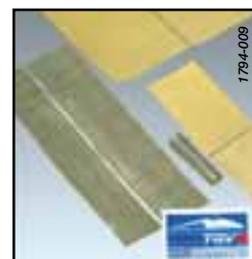
- 2 constricting nozzles Ø 0.8 mm,
- 2 constricting nozzles Ø 1.0 mm,
- 2 constricting nozzles Ø 1.2 mm,
- 2 constricting nozzles Ø 1.5 mm,
- 2 constricting nozzles Ø 1.8 mm,
- 2 electrode holders Ø 1.0 mm,
- 2 electrode holders Ø 1.6 mm,
- 1 alumina nozzle Ø 7 mm,
- 1 alumina nozzle Ø 9 mm,
- 1 alumina nozzle Ø 11 mm,
- 2 electrode centring cases Ø 1.0 mm,
- 2 electrode centring cases Ø 1.6 mm,
- 2 electrode centres Ø 1.0 mm,
- 2 electrode centres Ø 1.6 mm,
- 2 nozzle joints,
- 2 cap joints,
- 1 electrode positioning template,
- 5 electrodes Ø 1.0 mm,
- 5 electrodes Ø 1.6 mm.

Welding lathe



Power supply	230 V - 50 Hz*
Rotation speed	0.1 - 11 rpm
Concentricity of tail stock	± 0.02 mm
Tail stock force	1 950 Ncm
Central axis	166 mm
Maximum distance between points	500 mm
Maximum admissible diameter	320 mm
Drilling of plug	Ø 48 mm
• with axis 3 bits	Ø 20/32/42 mm
• with fastening holders	Ø 16 mm
Weight	150 kg

* For version 60 Hz and for other dimensions contact ALW.



CITORCH T torches

An extensive and a full range for worksite or workshop applications. It is possible to choose the product according to the application and user requirements. The CITORCH torches are delivered ready for use. The choice is based on the type of handle, a round handle or an ergonomic handle and on the type of connection.

CITORCH T standard torches.

Flexible and easy to use torch handles. Easy maintenance. Woven sheath. Flexible harness. High mechanical strength.

Air-cooled torches

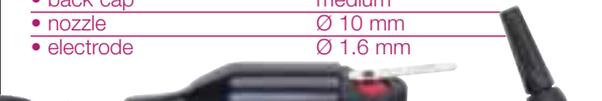


CITORCH T 5		2158-005
Duty cycle 35%: 125 A		
Fitted as standard:		
• back cap	medium	
• nozzle	Ø 10 mm	
• electrode	Ø 1.6 mm	



Torch CITORCH T 5 with handle RL

CITORCH T 10 and CITORCH 10 F + 10 V		0254-012
Duty cycle 35%: 125 A		
Fitted as standard:		
• back cap	medium	
• nozzle	Ø 10 mm	
• electrode	Ø 1.6 mm	



Torch CITORCH T 10 with handle RL

CITORCH T 20		0254-015
Duty cycle 35%: 150 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 10 mm	
• electrode	Ø 2.0 mm	



Torch CITORCH 20 with handle RL

CITORCH T 30 and 30 V		0254-018
Duty cycle 35%: 200 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 12 mm	
• electrode	Ø 2.4 mm	



Torch CITORCH T 30 with handle EB

CITORCH T 40		2158-014
Duty cycle 35%: 250 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 12 mm	
• electrode	Ø 2.4 mm	



Torche CITORCH T 40 with handle RL

Water-cooled torches

CITORCH T 5 W		2158-005
Duty cycle 100%: 160 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 12 mm	
• electrode	Ø 3.2 mm	



Torch CITORCH T 5 W with handle RL

CITORCH T 10 W - T 10 W F		0254-007
100%: 250 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 12 mm	
• electrode	Ø 3.2 mm	



Torch CITORCH T 10 W with handle EB

CITORCH T 30 W		0254-017
Duty cycle 100%: 350 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 15 mm	
• electrode	Ø 4.0 mm	



Torch CITORCH T 30 W with handle EB

CITORCH T 35 W		2000-365
Duty cycle 100%: 350 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 15 mm	
• electrode	Ø 4.8 mm	



Torch CITORCH T 35 W with handle EB

Recommended for aluminium welding

CITORCH T 40 W		0254-011
Duty cycle 100%: 450 A		
Fitted as standard:		
• back cap	long	
• nozzle	Ø 14 mm	
• electrode	Ø 4.8 mm	



Torch CITORCH T 40 W with handle EB

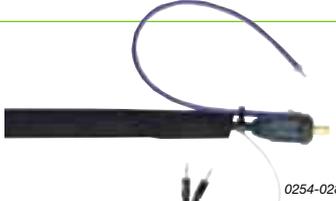


Connection

Choice of connections

S

- Power: 1/4 turn
- Gas: threaded (M12x100) or quick-fit (Ø 4 mm) connectors
- Trigger: 2 banana plugs



0254-028

C5B

- Power: 1/4 turn
- Gas: threaded (M12x100) or quick-fit (Ø 4 mm) connectors
- Trigger: 5 pin connectors



0254-027

V

- Torch with valve for arc welding sets
- Power: 1/4 turn 25mm²/ Ø 9 mm for CITORCH T 10 and 50 mm²/ Ø 13 mm for CITORCH T 30
- Gas: gas hose 6.3x11
- Trigger: no power control



0254-025

CC5B

- Power: 1/4 turn
- Gas: hollow central connectors
- Trigger: 5 pin connectors



0254-030

Choice of torch handles

V Round handle for torch with valve (V)  0254-004

RL Round handle with lever  0254-012

EB Ergonomic handle with single button.  0254-010

EBB Ergonomic handle with double button*.  0254-008

* The double button handle is used on inverter sets. Stepping the weld current down at the end of the welding cycle closes the crater cleanly.



Torch		RL S	EB S	EB C5B	EBB CC5B	V	EBB C5B
CITORCH T 5	5 m	-	W 000 265 543	W 000 265 525	-	-	-
CITORCH T 10	5 m	W 000 262 053	W 000 265 544	W 000 265 527	W 000 142 733	-	-
	8 m	W 000 262 054	W 000 265 545	W 000 265 528	W 000 142 734	-	-
CITORCH T 10 F	5 m	-	-	W 000 265 526	-	-	-
CITORCH T 20	5 m	W 000 262 055	W 000 265 546	W 000 265 529	W 000 142 735	-	-
	8 m	W 000 262 056	W 000 265 524	W 000 265 530	W 000 142 736	-	-
CITORCH T 30	5 m	-	W 000 265 523	W 000 265 531	W 000 142 737	-	W 000 266 163
	8 m	-	W 000 265 522	W 000 265 532	W 000 142 738	-	W 000 266 164
CITORCH T 40	8 m	-	-	W 000 265 533	W 000 142 739	-	-
	5 m	-	W 000 265 521	W 000 265 534	-	-	-
CITORCH T 10 V	5 m	-	-	-	-	W 000 266 169	-
CITORCH T 30 V	5 m	-	-	-	-	W 000 266 170	-
CITORCH T 5 W	5 m	-	-	W 000 265 535	-	-	-
	8 m	-	-	-	-	-	-
CITORCH T 10 W	5 m	W 000 262 057	W 000 265 518	W 000 265 537	W 000 142 571	-	W 000 266 165
	8 m	W 000 262 058	W 000 265 517	W 000 265 538	W 000 142 572	-	W 000 266 166
CITORCH T 10 W F	5 m	-	-	W 000 265 536	-	-	-
CITORCH T 30 W	5 m	-	-	W 000 265 539	W 000 142 573	-	-
	8 m	-	W 000 265 516	W 000 265 540	W 000 142 574	-	-
CITORCH T 35 W	5 m	-	-	W 000 266 167	-	-	-
	8 m	-	W 000 265 515	W 000 266 168	-	-	-
CITORCH T 40 W	5 m	-	-	W 000 265 541	W 000 142 575	-	-
	8 m	-	W 000 265 514	W 000 265 542	W 000 142 576	-	-

Accessories and wear parts for CITORCH T torches

Option for welding where access is difficult.

CITORCH T 40 W
6
 A - insulating nut
 Cat. no. W 000 306 452
 B - O-ring
 Cat. no. W 000 306 453
 C - water distributor
 Cat. no. W 000 306 454

6 and 10 choice of nozzle

Welding current (A)	70	70	120	200	350
Diameter (mm)	6	8	10	12	15

Ø mm		CITORCH T					
		5 / 5 W	10/10V/10F/ 10W/10WF	20	30 / 30 W	35 W / 40	40 W
1 Back cap	short	-	W 000 265 603	W 000 265 605	W 000 265 605	W 000 265 606	W 000 265 607
	medium	-	W 000 265 608	-	-	-	-
	long	-	W 000 265 610	W 000 265 611	W 000 265 611	W 000 265 612	W 000 265 613
2 Back cap O-ring		-	W 000 265 616	W 000 265 622	W 000 265 622	W 000 265 623	W 000 265 624
3 Sealing ring		W 000 265 628	W 000 265 629	W 000 265 630	W 000 265 630	W 000 265 631	-
4 Electrode collet	1.0	W 000 265 632	W 000 265 633	W 000 265 634	W 000 265 635	W 000 265 636	-
	1.6	W 000 265 637	W 000 265 638	W 000 265 639	W 000 265 640	W 000 265 641	-
	2.0	-	W 000 265 642	W 000 265 643	W 000 265 644	W 000 265 645	-
	2.4	W 000 265 653	W 000 265 654	W 000 265 655	W 000 265 656	W 000 265 657	W 000 265 658
	2.5	-	W 000 265 659	W 000 265 660	W 000 265 661	-	-
	3.2	-	W 000 265 662	W 000 265 663	W 000 265 664	W 000 265 665	W 000 265 666
	4.0	-	-	-	W 000 265 667	W 000 265 668	W 000 265 669
	4.8	-	-	-	-	W 000 265 670	W 000 265 671
5 Collet body	all diameter	-	W 000 265 672	W 000 265 673	W 000 265 674	W 000 265 675	W 000 265 677
	1.0	W 000 265 678	-	-	-	-	-
	1.6	W 000 265 692	-	-	-	-	-
	2.4	W 000 265 693	-	-	-	-	-
6 Nozzle	6	W 000 265 694	W 000 265 695	W 000 265 696	W 000 265 697	W 000 265 697	-
	8	W 000 265 699	W 000 265 700	W 000 265 701	W 000 265 702	W 000 265 702	-
	10	W 000 265 703	W 000 265 704	W 000 265 705	W 000 265 706	W 000 265 706	-
	12	-	W 000 265 707	W 000 265 708	W 000 265 709	W 000 265 709	W 000 265 710
	15	-	-	-	W 000 265 711	W 000 265 711	W 000 265 712
7 Sealing ring		-	W 000 265 713	W 000 265 714	W 000 265 714	W 000 265 715	-
8 Collet body		-	W 000 265 716	-	W 000 265 717	W 000 265 718	-
9 Filter		-	W 000 265 719	W 000 265 720			
10 Nozzle	8	-	W 000 265 721	W 000 265 722	W 000 265 722	W 000 265 722	-
	10	-	W 000 265 723	W 000 265 724	W 000 265 724	W 000 265 724	-
	12	-	W 000 265 725	W 000 265 726	W 000 265 726	W 000 265 726	-
	15	-	-	W 000 265 727	W 000 265 727	W 000 265 727	-



WTT torches

Air-cooled torches

Using electrodes form 1.0 to 3.2 mm.

WTT 9
 Duty cycle 35%: 125 A
 Fitted as standard:

- back cap medium
- nozzle Ø 10 mm
- electrode Ø 1.6 mm



Torch WTT 9 with handle R

2008-255

WTT 17
 Duty cycle 35%: 150 A
 Fitted as standard:

- back cap long
- nozzle Ø 10 mm
- electrode Ø 2.0 mm



Torch WTT 17 with handle RL

2008-263

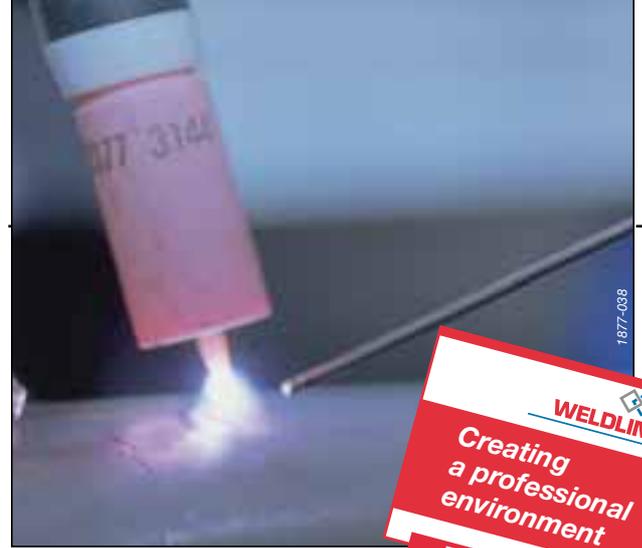
WTT 26
 Duty cycle 35%: 200 A
 Fitted as standard:

- back cap long
- nozzle Ø 12 mm
- electrode Ø 2.4 mm



Torch WTT 26 with handle EB

2008-269



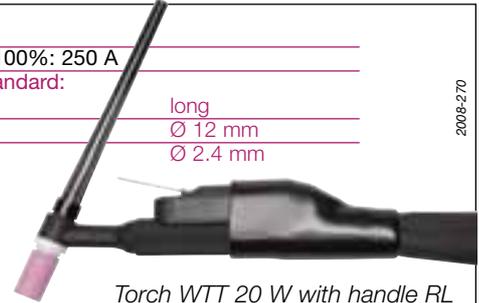
WELDLINE
 Creating a professional environment
 For more choice
www.weldline-alw.com

Water-cooled torches

Using electrodes form 1.0 to 4.0 mm.

WTT 20 W
 Duty cycle 100%: 250 A
 Fitted as standard:

- back cap long
- nozzle Ø 12 mm
- electrode Ø 2.4 mm



Torch WTT 20 W with handle RL

2008-270

WTT 18 W
 Duty cycle 100%: 320 A
 Fitted as standard:

- back cap long
- nozzle Ø 12 mm
- electrode Ø 2.4 mm



Torch WTT 18 W with handle EB

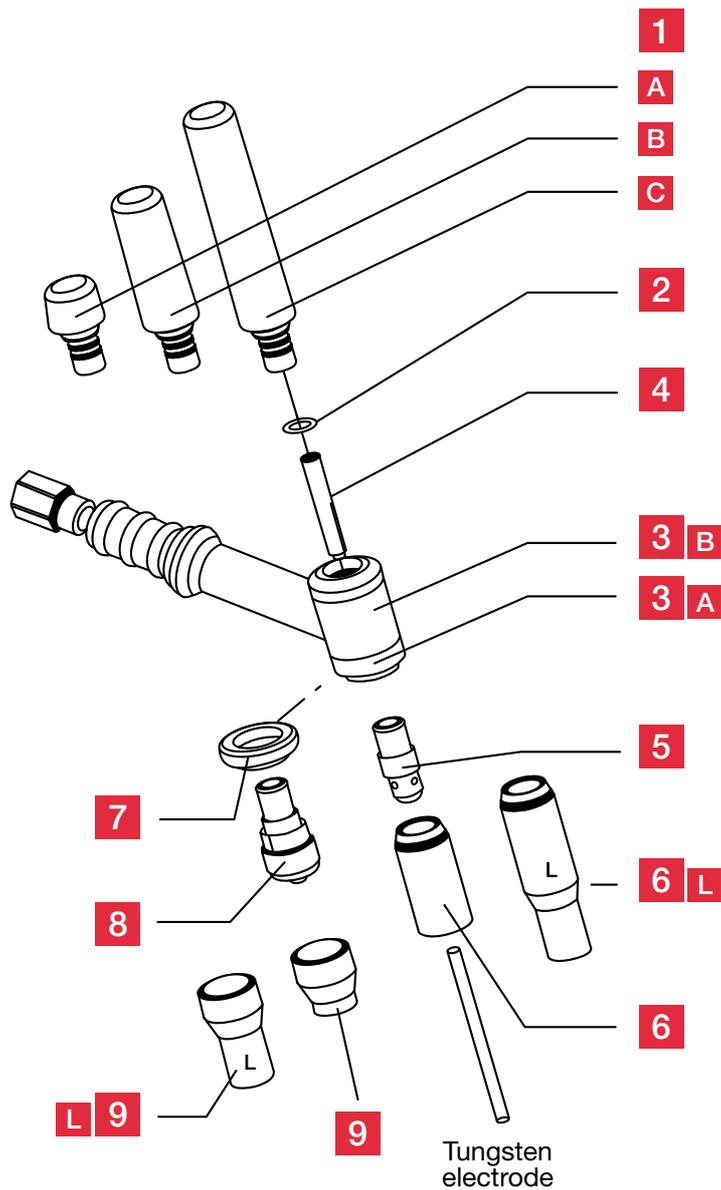
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Torch		Cooling	R V*	RL S*	RL C5B*	EB S*	EB C5B*
WTT9	4 m	Air	W 000 266 434	W 000 306 115	W 000 306 125	W 000 266 572	W 000 306 105
	8 m	Air	-	W 000 306 116	W 000 306 126	W 000 266 571	W 000 306 106
WTT17	4 m	Air	W 000 266 574	W 000 306 117	W 000 306 127	W 000 266 570	W 000 306 107
	8 m	Air	-	W 000 306 118	W 000 306 128	W 000 266 569	W 000 306 108
WTT26	4 m	Air	W 000 266 573	W 000 306 119	W 000 306 129	W 000 266 568	W 000 306 109
	8 m	Air	-	W 000 306 120	W 000 306 130	W 000 266 567	W 000 306 110
WTT18 W	4 m	Water	-	W 000 306 123	W 000 306 133	W 000 266 564	W 000 306 113
	8 m	Water	-	W 000 306 124	W 000 306 134	W 000 266 563	W 000 306 114
WTT20 W	4 m	Water	-	W 000 306 121	W 000 306 131	W 000 266 566	W 000 306 111
	8 m	Water	-	W 000 306 122	W 000 306 132	W 000 266 565	W 000 306 112

* For choice of torch handles and connections, please report to page 34.

TIG torches wear parts

	Ø mm	WTT 9 V WTT 20 W	WTT 17 V WTT 26 V WTT 18 W
1 Back cap	A short	W 000 306 398	W 000 306 399
	B medium	W 000 306 400	-
	C long	W 000 306 402	W 000 306 403
2 Back cap O-ring		W 000 306 404	W 000 306 405
3 A Sealing ring		W 000 306 396	W 000 306 397
3 B Insulating ring		W 000 270 780	W 000 306 395
4 Collet	1.0	W 000 306 406	W 000 306 411
	1.6	W 000 306 407	W 000 306 412
	2.0	W 000 306 408	W 000 306 413
	2.4	W 000 306 409	W 000 306 414
	3.2	W 000 306 410	W 000 306 415
	4.0	-	W 000 306 416
5 Collet body	1.0	W 000 306 376	W 000 306 380
	1.6	W 000 306 377	W 000 306 381
	2.0	W 000 306 378	W 000 270 781
	2.4	W 000 306 455	W 000 306 382
	3.2	W 000 306 379	W 000 306 383
	4.0	-	W 000 306 384
6 Nozzle	6.4	W 000 306 417	W 000 306 423
	8.0	W 000 306 418	W 000 306 424
	9.6	W 000 306 419	W 000 306 425
	11.2	W 000 306 420	W 000 306 426
	12.8	W 000 306 421	W 000 306 427
	16.0	W 000 306 422	W 000 306 428
	19.2	-	W 000 306 461
6 L Long nozzle	4.8	W 000 306 456	-
	6.4	W 000 306 457	W 000 306 462
	8.0	W 000 306 458	W 000 306 463
	9.6	W 000 306 459	W 000 306 464
	11.2	-	W 000 306 465
7 Gas L sealing ring		-	W 000 306 466
8 G.L. collet body	1.0	W 000 306 385	W 000 306 389
	1.6	W 000 306 386	W 000 306 390
	2.0	W 000 306 460	-
	2.4	W 000 306 387	W 000 306 391
	3.2	W 000 306 388	W 000 306 392
	4.0	-	W 000 306 393
9 Gas L nozzle	6.4	W 000 306 429	W 000 306 434
	8.0	-	W 000 306 435
	9.6	W 000 306 431	W 000 306 436
	11.2	W 000 306 432	W 000 306 437
	12.8	W 000 306 433	W 000 306 438
	16.0	-	W 000 306 438
9 L Long GL nozzle	8.0	-	W 000 306 467
	9.6	-	W 000 306 468
	11.2	-	W 000 306 469
	12.8	-	W 000 306 470



2

Tungsten electrodes



0254-084

Comparison of electrode properties*

Electrode type	Metal type	Arc stability	Arc striking	Durability	Thermal resistance	
Pure tungsten	Light alloys	**	*	*	*	*** Excellent
Tungsten thorium	Steels and inox	*	***	**	**	** good
Tungsten cerium	Steels and inox	**	*	**	**	* Average
Tungsten lanthanum	All	**	***	***	***	

* Colour code is in accordance to the requirements DIN/EN 26848 and printed on the electrode end.

11 WELDLINE tungsten electrodes

Pure tungsten

Ø mm	Current (A) DC welding	Cat. no.	
		Length 150 mm	Length 175 mm
1.0	10-50	W 000 010 009	-
1.6	40-80	W 000 010 010	W 000 010 375
2.0	60-110	W 000 010 011	W 000 010 376
2.4	70-120	W 000 010 012	W 000 010 377
3.0	90-180	W 000 010 013	-
3.2	90-180	W 000 010 014	W 000 010 378
4.0	160-240	W 000 010 015	W 000 010 379



2277-036



Tungsten with oxide additives: lanthanum, thorium and cerium

Ø mm	Current (A) DC welding	Cat. no. thorium		Cat. no. cerium		Cat. no. lanthanum	
		Length 150 mm	Length 175 mm	Length 150 mm	Length 175 mm	Length 150 mm	Length 175 mm
1.0	10-80	W 000 010 002	W 000 010 029	W 000 010 022	-	W 000 010 373	-
1.6	50-120	W 000 010 003	W 000 010 030	W 000 010 023	W 000 010 380	W 000 010 016	W 000 010 385
2.0	90-190	W 000 010 004	W 000 010 390	W 000 010 024	W 000 010 381	W 000 010 017	W 000 010 386
2.4	100-230	W 000 010 005	W 000 010 031	W 000 010 025	W 000 010 382	W 000 010 018	W 000 010 387
3.0	170-300	W 000 010 006	-	W 000 010 026	-	W 000 010 019	-
3.2	170-300	W 000 010 007	W 000 010 032	W 000 010 027	W 000 010 383	W 00 0010 020	W 000 010 388
4.0	260-450	W 000 010 008	W 000 010 374	W 000 010 028	W 000 010 384	W 000 010 021	W 000 010 389

Accessories

Maintenance box

A comprehensive kit for all your applications. The box includes for each torch: complete sets of electrode collets, nozzles, back caps and a collet body.



Citorch 5/5W	W 000 306 446
Citorch T 10/10F/10V/10W	W 000 306 447
Citorch T 20	W 000 306 448
Citorch T 30/30W	W 000 306 449
Citorch T 40/35W	W 000 306 450
Citorch T 40W	W 000 306 451

Extension assemblies

The extension harnesses are 15 m long and fitted with quick-fit connectors and "banana" and "5-pin" type trigger plugs. The connectors are protected by a leather cover with "velcro" fasteners.

For torches with separate gas pipe (S or C5B):

- air-cooled version W 000 143 238
- water-cooled version W 000 143 239



For torches with central gas pipe (CC5B):

- air-cooled version W 000 143 240
- water-cooled version W 000 143 241

Adapters

Torch with central gas to power supply with separate gas.



Cat. no. W 000 142 708

Torch with separate gas to power supply with central gas.



Cat. no. W 000 142 709

CITORCH T 10 V on power source with 50 mm² socket.



Cat. no. W 000 306 139

Sharpening machine TIG-SHARP tungsten electrode



Longitudinal sharpening, precise and symmetrical angle.

Individual case including:

- sharpening machine,
- a square for blocking in fixed position on a bench,

- a standard blue head for electrode \varnothing 1.6 / 2.0 / 2.4 / 3.2,
- an aspiration nozzle connecting to the aspiration system for extracting tungsten dust,
- electrode holder, assembling/disassembling of tools.

Cat. no. W 000 011 035

Technical characteristics:

- Supply voltage: 220-230 V
- Frequency: 50-60 Hz
- Power: 400 W
- Amperage: 1.8 A
- Rotating speed: 30 000 tr/min
- Weight: 1.85 kg
- Conformance to CE standard

Options:

- Red head for electrodes \varnothing 1.0/4.0/4.8/6.0
Cat. no. W 000 011 037
- Diamond disc replacement **Cat. no. W 000 011 036**

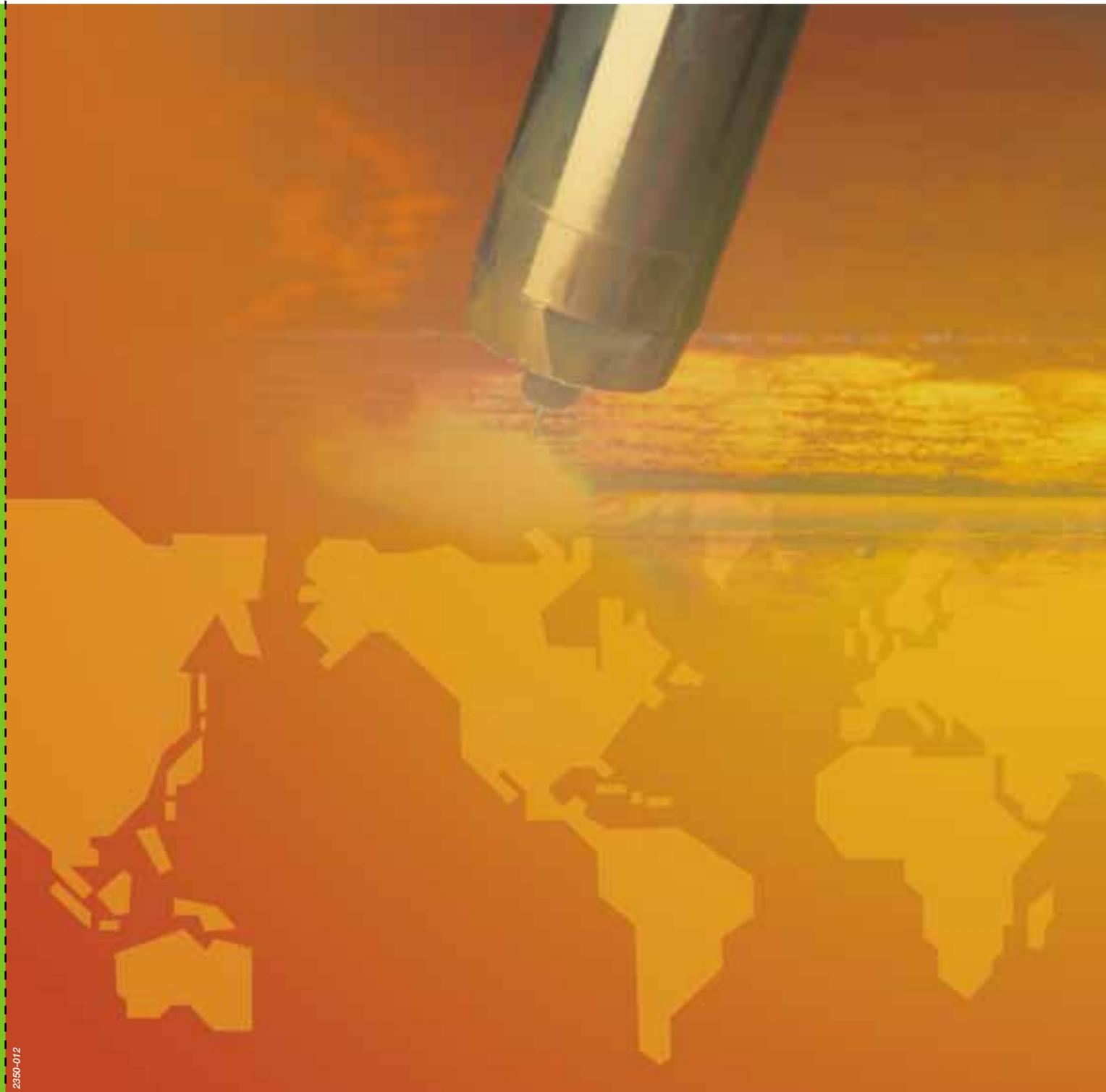
TIG POINT

Chemical sharpening of tungsten electrodes.
Cat. no. W 000 011 101



Chapter 3

MIG/MAG welding

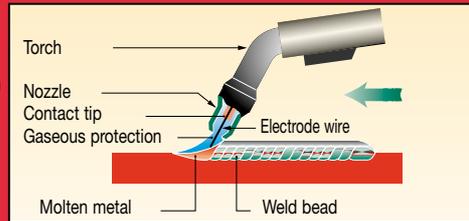


MIG/MAG welding

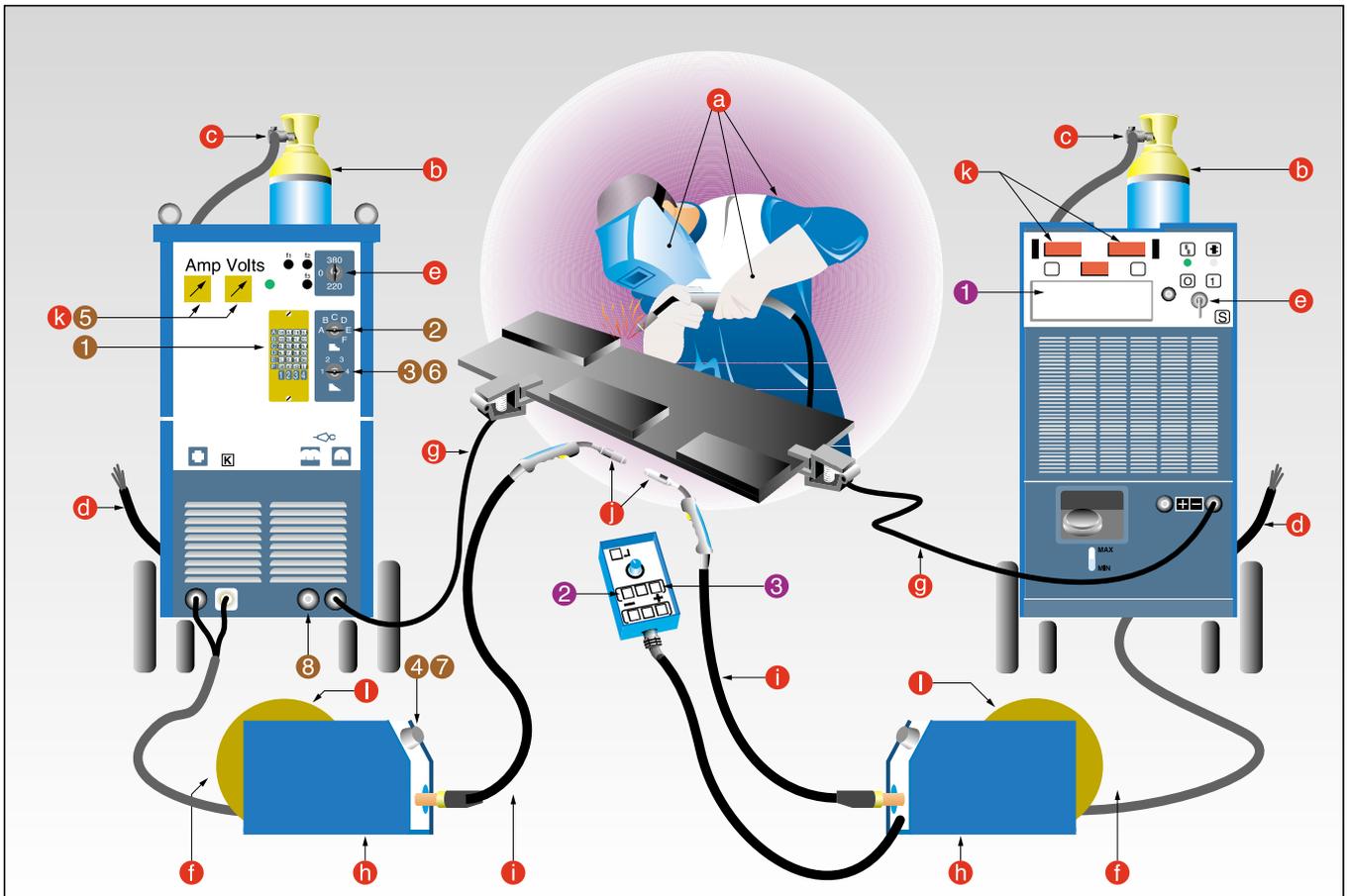


2000-489

The transfer of metal



MIG/MAG welding overview and selection guide



CLASSICAL SET

Setting by stepped increments

Sequence of setting:

- 1 - Approximate determination of arc voltage
- 2 - Approximate setting of arc voltage
- 3 - Fine setting of arc voltage
- 4 - Wire speed setting
- 5 - I and V meters while welding (an option with certain sets)
- 6 - Arc voltage correction
- 7 - Wire speed control correction
- 8 - Selection of the inductance

a - Welder's protection

b - Gas

c - Pressure regulator/flowmeter

d - Primary power supply

e - On/off switch

f - Harness and sheath

g - Earth cable + clamp

h - Wire feeder

i - Torch cable

j - Torch

k - Display of parameters

l - Wire reel

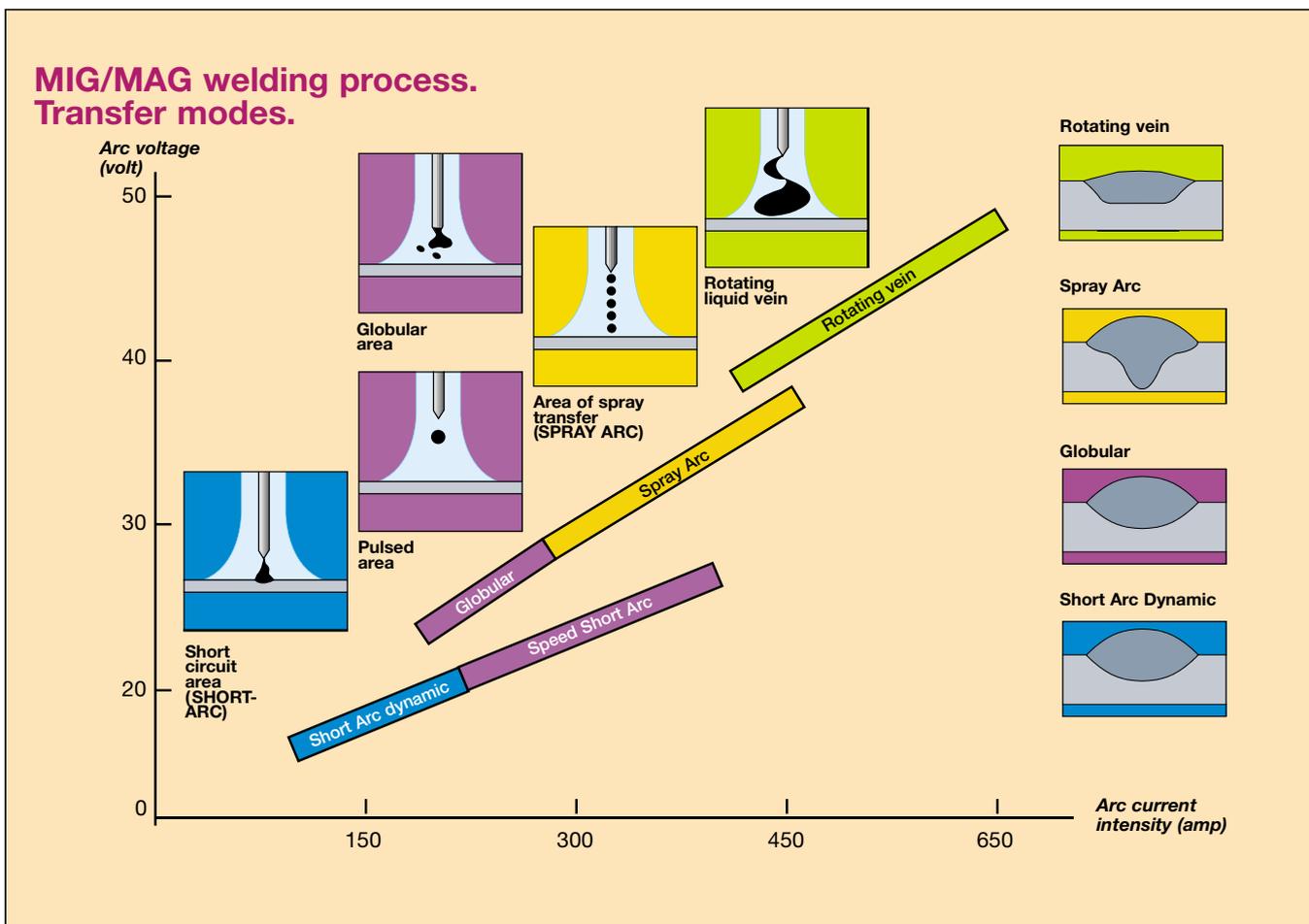
SYNERGIC SET

Setting by single button

Sequence of setting:

- 1 - Pre-display:
 - wire type
 - gas
 - wire diameter
 - with or without pulse
- 2 - Wire speed setting (approximate welding current is displayed)
- 3 - Fine adjustment of the arc length (using arc voltage)

MIG/MAG welding



Selection criteria for MIG/MAG power sources

Name of product	Power supply	Setting mode		Complementary processes		Welding current (Ampere)						
		switch	continuous	MMA	pulsed MIG	100	200	300	400	500	600	
MINICITO 1700	Single-phase	✓	-	-	-	▲						
MINICITO 2000i	Single-phase	-	✓	✓	-	▲						
CITOLINE 1700 M	Single-phase	✓	-	-	-	▲						
CITOLINE 2000 M	Single-phase	✓	✓	✓	✓	▲						
CITOLINE 2500 M / MS	Single-phase	✓	✓	✓	✓	▲						
CITOLINE 2000 T	Three-phase	✓	-	-	-	▲						
CITOLINE 2500 T	Three-phase	✓	-	-	-	▲						
CITOLINE 3000 T	Three-phase	✓	-	-	-	▲						
CITOLINE 3500 T	Three-phase	✓	-	-	-	▲						
CITOLINE 3000 TS	Three-phase	✓	✓	✓	✓	▲						
CITOLINE 3500 TS	Three-phase	✓	-	-	-	▲						
CITOLINE 4500 TS / TSW	Three-phase	✓	-	-	-	▲						
CITOMAG 400 S (W) / S MV (W)	Three-phase	-	✓	-	-	▲						
CITOMAG 500 S (W)	Three-phase	-	✓	-	-	▲						
CITOMIG 300 XP / XP S	Three-phase	✓	-	-	-	▲						
CITOMIG 400 XP / XP W	Three-phase	✓	-	-	-	▲						
CITOMIG 400 XP S / XP SW	Three-phase	✓	-	-	-	▲						
CITOMIG 500 XP S / XP SW	Three-phase	✓	-	-	-	▲						
CITOPULS MX 320 / MXW 320	Three-phase	-	✓	✓	✓	▲						
CITOPULS MXW 420	Three-phase	-	✓	✓	✓	▲						
CITOWAVE MXW 280	Three-phase	-	✓	✓	✓	▲						
CITOWAVE MXW 400	Three-phase	-	✓	✓	✓	▲						
CITOWAVE MXW 500	Three-phase	-	✓	✓	✓	▲						



MIG/MAG welding

MIG: Metal Inert Gas

MIG welding uses a continuous electrode for filler metal and an externally supplied inert gas for shielding.

MAG: Metal Active Gas

MIG welding uses a continuous electrode for filler metal and an externally supplied active gas for shielding.

MIG pulse: the current varies during welding, the power source provides a very accurate "shape wave". The pulse is above all used for steel, stainless steel and light alloys.

MIG Synergic:

The welding parameters are programmed in the power source set for a common evolution depending on a predefined law. One simple setting is needed which facilitates the use of these machines and improves the welding quality.

2 times mode:

The welding starts when the trigger of the torch is pulled and stops when the trigger is released.

4 times mode:

The pre-gas starts when the trigger is pulled and the welding starts when the trigger is released. With the next pull on the trigger, the welding stops and the post gas stays active until the trigger is released.

Spot mode

The power source starts to weld when the trigger is pulled. The welding stops automatically after a pre-set delay.

Intermittence mode

This a point mode which is repeatable. If the pulled trigger is maintained, welding will be repeated after another interval time (can be adjusted).

Speed regulation:

The welding wire is electronically regulated which ensures a constant feed of the wire.

Burn back:

This solves the problem of wire sticking in the molten pool on completion of the arc weld cycle.

Soft start:

Firstly the wire advances slowly just up to the short circuit point and the arc starts. The value of the wire speed is programmed in the set up.

OPTI' system:

Optimisation of welding parameters depending on needs of the welder (available only on CITOMAG installations).

A.N.D

Device avoiding arc ruptures (available only on CITOMAG installations).

Arc progressive extinction or crater filler

Allows correct finishing of the weld with the suppression of the crater at the end of the welding due to a progressive extinction of the arc (CITOPULS -CITOWAVE) or by levels (on CITOMAG installations).

Protection against Ball effect

At the end of the welding cycle in short arc circuit transfer, this device avoids the formation of the ball at the end of the wire. This contributes greatly to arc striking (on CITOMAG - CITOPULS and CITOWAVE installations).



Selection criteria for MIG/MAG power sources

Name of product	Wire diameter (mm)															Wire feeder		Weight (kg)	
	Steel and stainless steel					Aluminium					Cored wire					Number of rollers	Built-in		
	0.6	0.8	1.0	1.2	1.6	0.8	1.0	1.2	1.6	2.4	0.8	0.9	1.0	1.2	1.6				2.4
MINICITO 1700	■	■	-	-	-	-	-	-	-	-	-	-	■	-	-	-	2	yes	27
MINICITO 2000i	■	■	■	-	-	-	■	-	-	-	-	-	■	-	-	-	2	yes	29
CITOLINE 1700 M	■	■	■	-	-	-	■	-	-	-	-	-	■	-	-	-	2	yes	38.5
CITOLINE 2000 M	■	■	■	-	-	-	■	-	-	-	-	-	■	-	-	-	4	yes	52
CITOLINE 2500 M / MS	■	■	■	-	-	-	■	■	-	-	-	-	■	■	-	-	4	yes/no	86
CITOLINE 2000 T	■	■	■	-	-	-	■	-	-	-	-	-	■	-	-	-	4	yes	71
CITOLINE 2500 T	■	■	■	-	-	-	■	■	-	-	-	-	■	■	-	-	4	yes	80
CITOLINE 3000 T	-	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	yes	96
CITOLINE 3500 T	-	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	yes	116
CITOLINE 3000 TS	-	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	no	120
CITOLINE 3500 TS	-	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	no	125
CITOLINE 4500 TS / TSW	-	■	■	■	-	-	■	■	■	-	-	-	■	■	■	-	4	no	135
CITOMAG 400 S (W) / S MV (W)	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	-	4	no	143
CITOMAG 500 S (W)	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	■	4	no	200
CITOMIG 300 XP / XP S	■	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	yes/no	101
CITOMIG 400 XP / XP W	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	-	4	yes/no	161
CITOMIG 400 XP S / XP SW	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	-	4	yes/no	161
CITOMIG 500 XP S / XP SW	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	■	4	no	201
CITOPULS MX 320 / MXW 320	■	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	no	75/91
CITOPULS MXW 420	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	-	4	no	91
CITOWAVE MXW 280	■	■	■	■	-	-	■	■	-	-	-	-	■	■	-	-	4	yes	76
CITOWAVE MXW 400	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	-	4	no	91
CITOWAVE MXW 500	-	■	■	■	■	-	■	■	■	-	-	-	■	■	■	■	4	no	91

MINICITO and CITOLINE M

The MINICITO 1700 and the MINICITO 2000i are portable MIG/MAG units for the welding of solid wires and flux-cored wires.

With the CITOLINE range, an extremely stable arc will be obtained due to the self-regulation of the wire feed speed, the 4 roller feeding system (2 rollers for CITOLINE 1700 M) and voltage regulation.

Single-phase range

1

MINICITO 1700

7 product advantages:

- polarity reversal
- "on site" concept
- suitable for welding with self shielded flux-cored wires (without gas)
- delivered ready to use
- 2 roller plate
- 4 step voltage adjustment
- 1 choke output



2007-231

To order

- **Standard equipment:**
 - 1 power source
 - 1 earth cable L = 3 m with clamp
 - 1 primary cable L = 2.4 m with SCHUKO plug
 - 1 spool adapter for 1 kg reels
 - 1 accessory kit for solid wires 0.6-0.8 mm
- **Add-ons:**
 - Torch 141 3 m
 - Cat. no. W 000 266 435

2

MINICITO 2000i

8 product advantages:

- Multi-processes: MIG / TIG / MMA
- digital display
- 9 stored welding programs
- possibility to memorise another 11 welding programs
- polarity reversal
- suitable for welding with self-shielded flux-cored wires (without gas)
- 2T/4T and spot modes
- 2 roller plate



2007-665

To order

- **Standard equipment:**
 - 1 power source
 - 1 connected primary cable L = 4 m
 - 1 earth cable L = 4 m with clamp
 - 1 equipped gas hose 2 m
 - 1 accessory kit for solid wire 0.6 - 0.8 mm
 - 1 additional roller kit 1.0 - 1.2 mm
- **Add-ons:**
 - WMT 25 A torch 3 m
 - Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
 - Cat. no. W 000 010 603
- **Option:**
 - 15 kg spool support
 - Cat. no. W 000 253 322

Inverter technology

3

CITOLINE 1700 M

12 product advantages:

- specialised for thin sheet
- user-friendly front panel
- 2T and spot modes
- European connector
- 2 roller plate
- 6 step voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for 15 kg reels
- polarity reversal
- 1 choke output



2007-124

To order

- **Standard equipment:**
 - 1 power source with wheels
 - 1 cylinder holder
 - 1 connected primary cable L = 2.3 m with SCHUKO plug
 - 1 earth cable with clamp (not mounted)
 - 1 equipped gas hose 2 m
 - 1 accessory kit for solid wires 0.6-0.8 mm
 - 1 additional rollers kit 1.0 - 1.2 mm
 - 1 metallic spool adapter
- **Add-ons:**
 - WMT 15 A torch 3 m
 - Cat. no. W 000 010 600
 - WMT 15 A torch 4 m
 - Cat. no. W 000 010 601

Technical specifications:	1 MINICITO 1700	2 MINICITO 2000i	3 CITOLINE 1700 M
Power supply single-phase	230 V ± 10% - 50-60 Hz	230 V ± 10% - 50-60 Hz	230 V ± 10% - 50-60 Hz
Primary consumption at I max.	21 A	35 A	24 A
Effective consumption	11 A	21 A	7.5 A
Open circuit voltage	18 - 32 V	70 V (MMA) - 50 V (MIG) - 25 V (TIG)	18 - 32 V
Welding current	30 - 140 A	20 - 180 A (MMA) / 30 - 200 A (MIG) / 5 - 200 A (TIG)	30 - 170 A
Protection class	IP 21	IP 23	IP 21
Insulation class	H	H	H
Duty cycle at 100%	60 A	115 A (MMA) - 125 A (MIG, TIG)	60 A
10 min. cycle at 60%	75 A	140 A (MMA) - 155 A (MIG, TIG)	75 A
(at 40 °C) at 35%	120 A (at 25%)	180 A (at 40% MMA) - 200 A (MIG, TIG)	140 A (at 18%)
Number of rollers	2	2	2
Wire diameters	0.6 - 0.8 mm	0.6 - 1.0 mm	0.6 - 1.0 mm
Dimensions W x H x L)	260 x 430 x 400 mm	235 x 470 x 570 mm	440 x 670 x 750 mm
Net weight	27 kg	29 kg	38.5 kg
Standards	EN 60974-1;-10	EN 60974-1;-10	EN 60974-1;-10
Torch types	Direct connection	WMT family	WMT family

3

CITOLINE M/MS ranges

1

CITOLINE 2000 M

10 product advantages:

- user-friendly front panel
- 2T/4T and spot modes
- 4 roller plate
- polarity reversal
- suitable for welding with self shielded flux-cored wires without gas
- 8 step voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- 1 choke output



2007-587

To order

- **Standard equipment:**
 - 1 power source with wheels
 - 1 cylinder holder
 - 1 connected primary cable L = 3.4 m with plug
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8 mm
 - 1 metallic spool adapter
- **Add-ons:**
 - WMT 25 A torch 3 m
 - Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
 - Cat. no. W 000 010 603
- **Options:**
 - A-V digital kit
 - Cat. no. W 000 264 869
 - Torch arm rest
 - Cat. no. W 000 261 845

2

CITOLINE 2500 M

10 product advantages:

- user-friendly front panel
- 2T/4T and spot modes
- 4 roller plate
- polarity reversal
- suitable for welding with self shielded flux-cored wires without gas
- 12 step fine voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- 1 choke output



2007-169

To order

- **Standard equipment:**
 - 1 power source with wheels
 - 1 cylinder holder
 - 1 connected primary cable L = 4 m
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8-1.0 mm
 - 1 metallic spool adapter
- **Add-ons:**
 - WMT 25 A torch 3 m
 - Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
 - Cat. no. W 000 010 603
- **Options:**
 - A-V digital kit
 - Cat. no. W 000 264 869
 - Torch arm rest
 - Cat. no. W 000 261 845

3

CITOLINE 2500 MS

11 product advantages:

- power source with pivot foot to allow easy installation of the wire feeder
- separate wire feeder with digital display
- kit accessory for solid wires 0.8 - 1.2 mm
- 2T/4T and spot modes
- 4 roller plate
- 12 step fine voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- inclined wire feeder front panel for a complete view
- 1 choke output



2007-172

To order

- **Standard equipment:**
 - 1 power source with handle and wheels to move easily in the working area
 - 1 cylinder holder
 - 1 connected primary cable L = 4 m
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 metallic spool adapter
- **Add-ons:**
 - Wire feeder DV 4004 CTL 5 m
 - Cat. no. W 000 262 182
 - Wire feeder DV 4004 CTL 10 m
 - Cat. no. W 000 262 183
 - WMT 25 A torch 3 m
 - Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
 - Cat. no. W 000 010 603
- **Options:**
 - A-V digital kit for power source
 - Cat. no. W 000 264 869
 - Torch arm rest
 - Cat. no. W 000 261 846

Technical specifications:

	1 CITOLINE 2000 M	2 CITOLINE 2500 M	3 CITOLINE 2500 MS
Power supply single-phase	230 V ± 10% - 50 Hz	230 V ± 10% - 50 Hz	230 V ± 10% - 50 Hz
Primary consumption at I max.	32 A	54 A	54 A
Effective consumption	14.3 A	29.6 A	29.6 A
Open circuit voltage	18 - 35 V	20 - 53 V	20 - 53 V
Welding current	35 - 180 A	32 - 250 A	32 - 250 A
Protection class	IP 23	IP 23	IP 23
Insulation class	H	H	H
Duty cycle at 100%	85 A	140 A	140 A
10 min. cycle at 60%	110 A	180 A	180 A
(at 40 °C) at 35%	180 A (at 20%)	250 A (at 30%)	250 A (at 30%)
Number of rollers	4	4	4
Wire diameters	0.6 - 1.0 mm	0.8 - 1.0 - (1.2) mm	0.8 - 1.0 - (1.2) mm
Dimensions (W x H x L)	500 x 870 x 950 mm	500 x 870 x 950 mm	500 x 870 x 950 mm
Net weight	52 kg	86 kg	86 kg
Standards	EN 60974-1;-10	EN 60974-1;-10	EN 60974-1;-10
Torch types	WMT family	WMT family	WMT family

CITOLINE T range

Basic equipment, compact version (T):

- units with digital display as standard on CITOLINE 3000 T / 3500 T, optional for CITOLINE 2000 M / 2500 M / 2000 T / 2500 T,
- units equipped with cooled wire feed and purge gas functions.

4

CITOLINE 2000 T

11 product advantages:

- user-friendly front panel
- specialised for thin sheets
- 2T/4T and spot modes
- 4 roller plate
- inversion of polarity
- 7 step voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- 1 choke output

To order

- **Standard equipment:**
 - 1 power source with wheels
 - 1 ergonomic lower cylinder holder
 - 1 upper cylinder support with torch
 - 1 connected primary cable L = 3 m with plug
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8-1.0 mm
 - 1 metallic spool adapter
- **Add-ons:**
 - WMT 25 A torch 3 m
Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
Cat. no. W 000 010 603
- **Options:**
 - A-V digital kit
Cat.no. W 000 264 869
 - Torch arm rest
Cat.no. W 000 261 845



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5

CITOLINE 2500 T

11 product advantages:

- user-friendly front panel
- specialised for thin sheets
- 2T/4T and spot modes
- 4 roller plate
- inversion of polarity
- 10 steps voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- 2 choke outputs

To order

- **Standard equipment:**
 - 1 power source with wheels
 - 1 ergonomic lower cylinder holder
 - 1 upper cylinder support with torch rest
 - 1 connected primary cable L = 3 m with plug
 - 1 earth cable L = 3 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8-1.0 mm
 - 1 metallic spool adapter
- **Add-ons:**
 - WMT 25 A torch 3 m
Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
Cat. no. W 000 010 603
- **Options:**
 - A-V digital kit
Cat.no. W 000 264 869
 - Torch arm rest
Cat.no. W 000 261 845



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Technical specifications:	4 CITOLINE 2000 T	5 CITOLINE 2500 T
Power supply three-phase	230 /400 V ± 10% - 50 Hz	230 /400 V ± 10% - 50 Hz
Primary consumption at I max.	19 - 11 A	27 - 16 A
Effective consumption	10.4 - 6 A	14.8 - 8.5 A
Open circuit voltage	18 - 35 V	18 - 40 V
Welding current	27 - 200 A	35 - 250 A
Protection class	IP 23	IP 23
Insulation class	H	H
Duty cycle at 100%	110 A	140 A
10 min. cycle at 60%	140 A	170 A
(at 40 °C) at 35%	200 A (at 30%)	250 A (at 30%)
Number of rollers	4	4
Wire diameter	0.6 - 1.0 mm	0.8 - 1.0 - (1.2) mm
Dimensions (L x W x H)	500 x 870 x 950 mm	500 x 870 x 950 mm
Net weight	71 kg	80 kg
Standards	EN 60974-1;-10	EN 60974-1;-10
Torch types	WMT family	WMT family

CITOLINE T range

Basic equipment, compact version (T):

- units with digital display as standard on CITOLINE 3000 T / 3500 T, optional for CITOLINE 2000 M / 2500 M / 2000 T / 2500 T,
- units equipped with cooled wire feed and purge gas functions.

6

CITOLINE 3000 T

11 product advantages:

- user-friendly front panel
- digital meter
- 2T/4T and spot modes
- 4 roller plate
- inversion of polarity
- 2 x 7 step / voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- 2 choke outputs



2007-179

To order

• Standard equipment:

- 1 power source with wheels
- 1 ergonomic lower cylinder holder
- 1 upper cylinder support with torch rest
- 1 connected primary cable L = 3 m with plug
- 1 earth cable L = 3 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long
- 1 accessory kit for solid wires 0.8-1.0 mm
- 1 metallic spool adapter

- Add-ons:
 - WMT 25 A torch 3 m
Cat. no. W 000 010 602
 - WMT 25 A torch 4 m
Cat. no. W 000 010 603
 - WMT 36 A torch 3 m
Cat. no. W 000 010 605
 - WMT 36 A torch 4 m
Cat. no. W 000 010 606

- Options:
 - Torch arm rest
Cat.no. W 000 261 845

7

CITOLINE 3500 T

11 product advantages:

- user-friendly front panel
- digital meter
- 2T/4T and spot modes
- 4 roller plate
- inversion of polarity
- 3 x 7 step / voltage adjustment
- 3 choke outputs
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas



2007-185

To order

• Standard equipment:

- 1 power source with wheels
- 1 ergonomic lower cylinder holder
- 1 upper cylinder support with torch rest
- 1 connected primary cable L = 4 m with plug
- 1 earth cable L = 4 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long
- 1 accessory kit for solid wires 0.8 -1.2 mm
- 1 metallic spool adapter

- Add-ons:
 - WMT 36 A torch 3 m
Cat. no. W 000 010 605
 - WMT 36 A torch 4 m
Cat. no. W 000 010 606

- Options:
 - Torch arm rest
Cat.no. W 000 261 845

Technical specifications:	6 CITOLINE 3000 T	7 CITOLINE 3500 T
Power supply three-phase	230/400 V ± 10% - 50 Hz	230/400 V ± 10% - 50 Hz
Primary consumption at I max.	33 - 19 A	41.5 - 24 A
Effective consumption	19.5 - 11.3 A	25 - 14.2 A
Open circuit voltage	18 - 45 V	18 - 45 V
Welding current	35 - 300 A	35 A - 350 A
Protection class	IP 23	IP 23
Insulation class	H	H
Duty cycle at 100%	180 A	210 A
10 min. cycle at 60%	230 A	270 A
(at 40 °C) at 35%	300 A	350 A
Number of rollers	4	4
Wire diameter	0.8 - 1.2 mm	0.8 - 1.2 mm
Dimensions (L x W x H)	620 x 940 x 1 000 mm	620 x 940 x 1 000 mm
Net weight	96 kg	116 kg
Standards	EN 60974-1;-10	EN 60974-1;-10
Torch types	WMT family	WMT family

CITOLINE TS range

Basic equipment, separate version (TS):

- wire feeders with harness of length 5 or 10 m (other lengths on demand),
- wire feeder with harness 10 m and cooling unit for the water cooled version of CITOLINE 4500 TS (W).

1

CITOLINE 3000 TS

13 product advantages:

- power source with self / protected safety switch
- pivot foot to allow easy installation of the wire feeder
- separate wire feeder with digital display
- 1 accessory kit for solid wires 0.8-1.2 mm
- 2T/4T and spot modes
- 4 roller
- 2 x 7 step / voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- inclined wire feeder front panel for a complete view
- 2 choke outputs

To order

Standard equipment:

- 1 power source with handle and wheels
- 1 ergonomic lower cylinder holder
- 1 upper cylinder support with torch rest
- 1 connected primary cable L = 3 m long
- 1 earth cable L = 5 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long
- 1 metallic spool adapter

Add-ons:

- Wire feeder DV 4004 CTL 5 m
Cat. no. W 000 262 182
- Wire feeder DV 4004 CTL 10 m
Cat. no. W 000 262 183
- Weldline WMT 25 A torch 3 m
Cat. no. W 000 010 602
- WMT 25 A torch 4 m
Cat. no. W 000 010 603
- WMT 36 A torch 3 m
Cat. no. W 000 010 605
- WMT 36 A torch 4 m
Cat. no. W 000 010 606

Options:

- A-V digital kit for power source
Cat.no. W 000 264 869
- Torch arm rest
Cat.no. W 000 261 846



2007-182

2

CITOLINE 3500 TS

13 product advantages:

- power source with self protected safety switch
- pivot foot to allow easy installation of the wire feeder
- separate wire feeder with digital display
- 1 accessory kit for solid wires 0.8-1.2 mm
- 2T/4T and spot modes
- 4 roller
- 3 x 7 step voltage adjustment
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- inclined wire feeder front panel for a complete view
- 3 choke outputs

To order

Standard equipment:

- 1 power source with handle and wheels
- 1 ergonomic lower cylinder holder
- 1 upper cylinder support with torch rest
- 1 connected primary cable L = 3 m long
- 1 earth cable L = 5 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long
- 1 metallic spool adapter

Add-ons:

- Wire feeder DV 4004 CTL 5 m
Cat. no. W 000 262 182
- Wire feeder DV 4004 CTL 10 m
Cat. no. W 000 262 183
- WMT 36 A torch 3 m
Cat. no. W 000 010 605
- WMT 36 A torch 4 m
Cat. no. W 000 010 606

Options:

- A-V digital kit for power source
Cat.no. W 000 264 869
- Torch arm rest
Cat.no. W 000 261 846



2007-598

Technical specifications:

	1 CITOLINE 3000 TS	2 CITOLINE 3500 TS
Power supply three-phase	230 /400 V ± 10% - 50 Hz	230/400 V ± 10% - 50 Hz
Primary consumption at I max.	34 - 19.5 A	42 - 24 A
Effective consumption	20.1 - 11.5 A	25 - 14.2 A
Open circuit voltage	18 - 42 V	18 - 45 V
Welding current	35 - 300 A	35 - 350 A
Protection class	IP 23	IP 23
Insulation class	H	H
Duty cycle at 100%	180 A	210 A
10 min. cycle at 60%	230 A	270 A
(at 40 °C) at 35%	300 A	350 A
Number of rollers	4	4
Wire diameter	0.8 - 1.2 mm	0.8 - 1.2 mm
Dimensions (L x W x H)	500 x 865 x 900 mm	500 x 865 x 900 mm
Net weight	120 kg	125 kg
Standards	EN 60974-1;-10	EN 60974-1;-10
Torch types	WMT family	WMT family

3

CITOLINE TS

3

CITOLINE 4500 TS (W)

13 product advantages:

- power source with self protected safety switch
- pivot foot to allow easy installation of the wire feeder
- separate wire feeder with digital display
- 1 accessory kit for solid wires 0.8-1.2 mm
- 2T/4T and spot modes
- 4 roller
- 3 x 10 step voltage adjustment
- 3 choke outputs
- burn back time
- slope up wire speed
- thermal protection
- suitable for welding with self shielded flux-cored wires without gas
- inclined wire feeder front panel for a complete view

To order

• Standard equipment:

- 1 power source with handle and wheels
 - 1 ergonomic lower cylinder holder
 - 1 upper cylinder support with torch rest
 - 1 connected primary cable L = 4 m
 - 1 earth cable L = 5 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 metallic spool adapter
- Cat. no. W 000 261 975

• Add-ons:

Accessories for air cooled set

- Wire feeder DV 4004 CTL 5 m
Cat. no. W 000 262 182
- Wire feeder DV 4004 CTL 10 m
Cat. no. W 000 262 183
- Weldline WMT 36 A torch 3 m
Cat. no. W 000 010 605
- Weldline WMT 36 A torch 4 m
Cat. no. W 000 010 606

Accessories for water cooled set

- Wire feeder (heavy duty)
DV 4004 CTL W - 42 V - 10 m
Cat. no. W 000 271 010
- Wire feeder DV 4004 CTLW 10 m
Cat. no. W 000 262 184
- Cooler unit
Cat. no. W 000 262 188
- WMT 500 A torch 3 m
Cat. no. W 000 010 608
- WMT 500 A torch 4 m
Cat. no. W 000 010 609

• Options:

- A-V digital kit for power source
Cat. no. W 000 264 869
- Torch arm rest
Cat. no. W 000 261 846
- Anti freeze liquid 1 L
Cat. no. W 000 227 236



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Wire feeder wear parts

MINICITO 2000i (feeder 2 rollers)

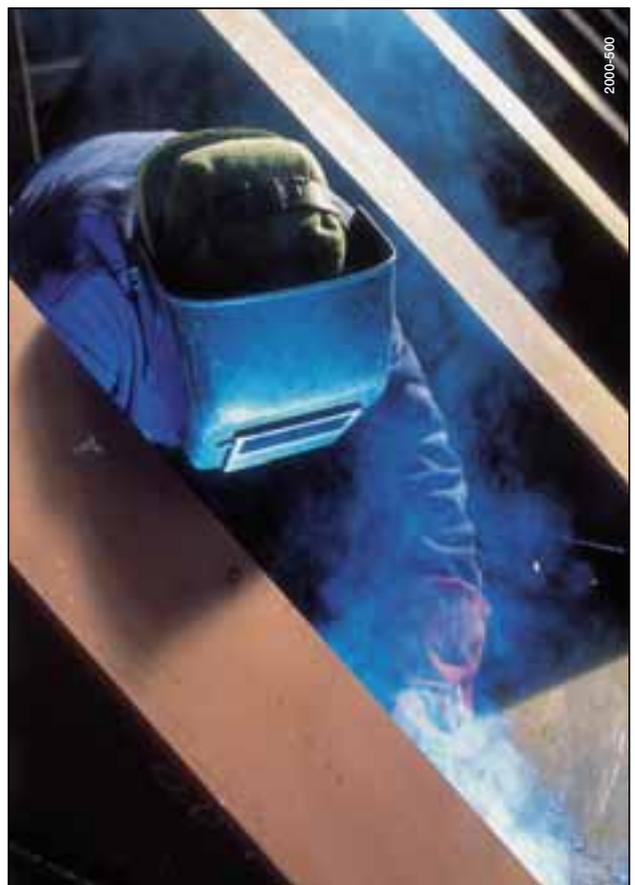
Rollers for solid wires	Ø 0.6 - 0.8 mm	W 000 352 037
	Ø 1.0 - 1.2 mm	W 000 352 036
Rollers for aluminium wire	Ø 1.0 - 1.2 mm	W 000 270 323
Rollers for flux cored wire	Ø 1.0 - 1.2 mm	W 000 270 320
Entry wire guide		W 000 227 907

MINICITO 1700 - CITOLINE 1700 M (feeder 2 rollers)

Entry wire guide		W 000 233 472
A Roller for solid wires	Ø 0.6 - 0.8 mm	W 000 232 110
	Ø 1.0 - 1.2 mm	W 000 232 112

CITOLINE RANGE COMPACT / SEPARATE (feeder 4 rollers)

Entry wire guide		W 000 233 472
Middle wire guide		W 000 252 183
Exit wire guide		W 000 269 661
B Kit 2 Rollers for solid wire	Ø 0.6 mm	W 000 050 096
	Ø 0.8 mm	W 000 050 097
	Ø 1.0 mm	W 000 050 098
	Ø 1.2 mm	W 000 050 099
B Kit 2 Rollers for aluminium wire	Ø 1.6 mm	W 000 218 767
	Ø 0.8 mm	W 000 050 100
	Ø 1.0 mm	W 000 050 101
B Kit 2 Rollers for flux-cored wires	Ø 1.2 mm	W 000 050 102
	Ø 1.0 - 1.2 mm	W 000 264 870
	Ø 1.4 - 1.6 mm	W 000 265 883



2000-500

Technical specifications:		3 CITOLINE 4500 TS / TS W
Power supply three-phase		230/400 V ± 10% - 50 Hz
Primary consumption at I max.		60 - 34.5 A
Effective consumption		35.5 - 20.5 A
Open circuit voltage		19 - 54 V
Welding current		51 - 450 A
Protection class		IP 23
Insulation class		H
Duty cycle	at 100%	270 A
10 min. cycle	at 60%	345 A
(at 40 °C)	at 35%	450 A
Number of rollers		4
Wire diameter		0.8 - 1.2 - (1.6) mm
Dimensions (L x W x H)		610 x 915 x 1 030 mm
Net weight		135 kg
Standards		EN 60974-1;-10
Torch types		WMT family

CITOMAG 400 S (W)

MIG/MAG welding installations, continuous adjustment with separate wire feeder for intensive industrial work.

4

CITOMAG 400 S (W)

17 product advantages:

- simple to use
- synergic and manual adjustment
- digital display and pre-setting
- wire feeder 4 rollers
- purge gas
- wire feed advance without power
- 2T/4T/modes
- built-in crater filler function
- pre gas, burn back and post gas times adjustment
- arc extinction device
- adjustable voltage striking
- arc dynamics adjustment
- missing phase detector
- disengageable fan
- inversion of polarity
- 2 lifting eyes
- reliability and robustness



To order

- **Standard equipment:**
 - 1 power source with handle wheels and cylinder holder
 - 1 connected primary cable L = 5 m
 - 1 earth cable L = 5 m with clamp
 - 1 equipped gas hose 2 m
 - Cat. No. W 000 261 979
- **Add-ons:**
- **Accessories for air cooled sets:**
 - DV44i feeder D37 with harness 5 m air
 - Cat. No. W 000 268 844
 - with harness 10 m air
 - Cat. No. W 000 268 845
 - with harness 15 m air
 - Cat. No. W 000 268 846

- CITORCH M 341 torch with cable 3 m air
- Cat. No. W 000 261 559
- with cable 4 m air
- Cat. No. W 000 261 561
- with cable 5 m air
- Cat. No. W 000 261 562

Accessories for water cooled sets:

- DV44i feeder D37 with harness 5 m water
- Cat. No. W 000 268 847
- with harness 10 m water
- Cat. No. W 000 268 848
- with harness 15 m water
- Cat. No. W 000 268 849
- CITORCH M 241W torch with cable 3 m water
- Cat. No. W 000 261 570
- with cable 4 m water
- Cat. No. W 000 261 571
- with cable 5 m water
- Cat. No. W 000 261 572
- Cooler unit
- Cat. No. W 000 305 009
- **Options:**
 - Sling arm
 - Cat. No. W 000 305 061
 - BB Box remote control, 2 buttons,
 - Cat. No. W 000 305 112
 - Feeder pivot
 - Cat. No. W 000 305 010
 - Torch arm boom
 - Cat. No. W 000 261 846
 - FREEZE COOL 20 L
 - Cat. No. W 000 010 168

Technical specifications:	4 CITOMAG 400 S (W)	5 CITOMAG 400 S MV (W)	6 CITOMAG 500 S (W)
Power supply three-phase	230/400 V ± 10% 50-60 Hz	220 to 240/380/400/415/440 V ± 10% 50-60 Hz	220 to 240/380/400/415/440 V ± 10% 50-60 Hz
Primary consumption at I max.	51.4 A (230 V) - 29.5 A (400 V)	51.4 A (230 V) - 29.5 A (400 V)	77.6 A (230 V) - 44.6 A (400 V)
Effective consumption	32.2 A (230 V) - 18.3 A (400 V)	32.2 A (230 V) - 18.3 A (400 V)	60.1 A (230 V) - 34.5 A (400 V)
Open circuit voltage	38.9 - 48.2 V	38.9 - 48.2 V	61 V
Welding current	50 - 400 A	50 - 400 A	40 - 520 A
Protection class	IP 23	IP 23	IP 23
Insulation class	H	H	H
Duty cycle	270 A	270 A	370 A
10 min. cycle	350 A	350 A	520 A
(at 40 °C)	400 A	400 A	-
Number of rollers	4	4	4
Wire diameter	0.8 - 1.2 mm	0.8 - 1.2 mm	0.8 - 1.6 mm
Dimensions (L x W x H)	1 015 x 530 x 830 mm	1 015 x 530 x 830 mm	1 120 x 712 x 1 330 mm
Net weight	137 kg	143 kg	185 kg
Standards	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10
Torch types	CITORCH M family	CITORCH M family	CITORCH M family

CITOMAG 400 S MV (W) and 500 S (W)

MIG/MAG welding installations, continuous adjustment with separate wire feeder for intensive industrial work.

5

CITOMAG 400 S MV (W)

18 product advantages:

- simple to use
- synergic and manual adjustment
- digital display and pre-setting
- wire feeder 4 rollers
- purge gas
- wire feed advance without power
- 2T/4T/modes
- built-in crater filler function
- pre gas, burn back and post gas times adjustment
- arc extinction device
- adjustable voltage striking
- arc dynamics adjustment
- missing phase detector
- disengageable fan
- inversion of polarity
- 2 lifting eyes
- reliability and robustness
- multi-voltage



2008-040R

To order

• Standard equipment:

- 1 power source with handle wheels and cylinder holder
 - 1 connected primary cable L = 5 m
 - 1 earth cable L = 5 m with clamp
 - 1 equipped gas hose 2 m
- Cat. No. W 000 261 978

• Add-ons:

Accessories for air cooled sets:

- DV44i feeder D37 with harness 5 m air
Cat. No. W 000 268 844
- DV44i feeder D37 with harness 10 m air
Cat. No. W 000 268 845
- DV44i feeder D37 with harness 15 m air
Cat. No. W 000 268 846
- CITORCH M 341 torch with cable 3 m air
Cat. No. W 000 261 559
- CITORCH M 341 torch with cable 4 m air
Cat. No. W 000 261 561
- CITORCH M 341 torch with cable 5 m air
Cat. No. W 000 261 562

Accessories for water cooled sets:

- DV44i feeder D37 with harness 5 m water
Cat. No. W 000 268 847
- DV44i feeder D37 with harness 10 m water
Cat. No. W 000 268 848
- DV44i feeder D37 with harness 15 m water
Cat. No. W 000 268 849
- CITORCH M 241W torch with cable 3 m water
Cat. No. W 000 261 570
- CITORCH M 241W torch with cable 4 m water
Cat. No. W 000 261 571
- CITORCH M 241W torch with cable 5 m water
Cat. No. W 000 261 572
- Cooler unit
Cat. No. W 000 305 009

• Options:

- Sling arm
Cat. No. W 000 305 061
- BB Box remote control, 2 buttons,
Cat. No. W 000 305 112
- Feeder pivot
Cat. No. W 000 305 010
- Torch arm boom
Cat. No. W 000 261 846
- FREEZECOOL 20 L
Cat. No. W 000 010 168

6

CITOMAG 500 S (W)

18 product advantages:

- simple to use
- synergic and manual adjustment
- digital display and pre-setting
- wire feeder 4 rollers
- purge gas
- wire feed advance without power
- 2T/4T/modes
- built-in crater filler function
- pre gas, burn back and post gas times adjustment
- arc extinction device
- adjustable voltage striking
- arc dynamics adjustment
- missing phase detector
- disengageable fan
- inversion of polarity
- 2 lifting eyes
- reliability and robustness
- multi-voltage



2008-042

To order

• Standard equipment:

- 1 power source with handle wheels and cylinder holder
 - 1 connected primary cable L = 5 m
 - 1 earth cable L = 5 m with clamp
 - 1 equipped gas hose 2 m
- Cat. No. W 000 261 980

• Add-ons:

Accessories for air cooled sets:

- DV44i feeder D37 with harness 5 m air
Cat. No. W 000 268 844
- DV44i feeder D37 with harness 10 m air
Cat. No. W 000 268 845
- DV44i feeder D37 with harness 15 m air
Cat. No. W 000 268 846
- CITORCH M 441 torch with cable 3 m air
Cat. No. W 000 261 563
- CITORCH M 441 torch with cable 4 m air
Cat. No. W 000 261 564
- CITORCH M 441 torch with cable 5 m air
Cat. No. W 000 261 568

Accessories for water cooled sets:

- DV44i feeder D37 with harness 5 m water
Cat. No. W 000 268 847
- DV44i feeder D37 with harness 10 m water
Cat. No. W 000 268 848
- DV44i feeder D37 with harness 15 m water
Cat. No. W 000 268 849
- CITORCH M 341W torch with cable 3 m water
Cat. No. W 000 261 573
- CITORCH M 341W torch with cable 4 m water
Cat. No. W 000 261 574
- CITORCH M 341W torch with cable 5 m water
Cat. No. W 000 261 575
- Cooler unit
Cat. No. W 000 305 009

• Options:

- Sling arm
Cat. No. W 000 305 061
- BB Box remote control, 2 buttons
Cat. No. W 000 305 112
- Feeder pivot
Cat. No. W 000 305 010
- Torch arm boom
Cat. No. W 000 261 846
- FREEZECOOL 20 L
Cat. No. W 000 010 168

CITOMIG XP air/water cooled: compact range

The CITOMIG XP range are conventional switch based MIG-MAG welding installations with help system setting (ESP). These units are equipped with digital wire speed regulation, maintaining a constant value in the wire-feed supply regardless of variations in resistance. This characteristic produces a perfectly stable arc for top-quality weld beads in terms of defects and surface appearance.

1

CITOMIG 300 XP

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- inversion of polarity
- 12 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-358

To order

- **Standard equipment:**
 - 1 power source with wheels, cylinder support and handle
 - 1 connected primary cable L = 5 m long
 - 1 earth cable L = 5 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8 - 1.2 mm
Cat. no. W 000 260 959
- **Add-ons:**
 - CITORCH M 241 torch 3 m
Cat. no. W 000 261 556
 - CITORCH M 241 torch 4 m
Cat. no. W 000 261 557
- **Options:**
 - Torch arm boom
Cat. No. W 000 261 845

2

CITOMIG 400 XP

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- inversion of polarity
- 3 x 10 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-285

To order

- **Standard equipment:**
 - 1 power source with wheels, cylinder support, handle and 4 lifting eyes
 - 1 connected primary cable L = 5 m long
 - 1 earth cable L = 5 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8 - 1.6 mm
Cat. no. W 000 260 961
- **Add-ons:**
 - CITORCH M 341 torch 3 m
Cat. no. W 000 261 559
 - CITORCH M 341 torch 4 m
Cat. no. W 000 261 561
- **Options:**
 - Torch arm boom
Cat. No. W 000 261 845

3

CITOMIG 400 XP W

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- inversion of polarity
- 3 x 10 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-285

To order

- **Standard equipment:**
 - 1 power source with wheels, cylinder support, handle and 4 lifting eyes
 - 1 connected primary cable L = 5 m long
 - 1 earth cable L = 5 m with clamp and DINSE connector
 - 1 equipped gas hose 2 m long
 - 1 accessory kit for solid wires 0.8 - 1.6 mm
 - 1 built-in cooling unit
Cat. no. W 000 260 962
- **Add-ons:**
 - CITORCH M 341 W torch 3 m
W 000 261 573
 - CITORCH M 341 W torch 4 m
W 000 261 574
 - CITORCH M 441 W torch 3 m
W 000 261 576
 - CITORCH M 441 W torch 4 m
W 000 261 577
- **Options:**
 - Torch arm boom
Cat. No. W 000 261 845
 - FREEZE COOL (20 L)
Cat. No. W 000 010 168

Technical specifications:

	1 CITOMIG 300 XP	2 CITOMIG 400 XP / 3 XP W
Power supply	230 / 400 V ± 10% - 50 Hz three-phase	230 / 400 V ± 10% - 50 Hz three-phase
Primary consumption at I max.	27.7 - 16 A	47 - 27 A
Effective consumption	19.5 - 11.3 A	29.7 - 17.1 A
Open circuit voltage	16.5 - 35.8 V	16.6 - 45.8 V
Welding current	30 - 280 A	28 - 380 A
Protection class	IP 23	IP 23
Insulation class	H	H
Duty cycle at 100%	200 A	280 A
10 min. cycle at 60%	240 A	320 A
(at 40 °C) at 50%	270 A	380 A (at 40 %)
Number of rollers	4	4
Wire diameter	0.8 - 1.2 mm	0.8 - 1.6 mm
Dimensions (L x W x H)	780 x 390 x 825 mm	925 x 580 x 1 060 mm
Net weight	98 kg	161 kg
Standards	EN 60974-1; -10	EN 60974-1; -10
Torch types	CITORCH M family	CITORCH M family

3

CITOMIG XP air/water cooled: compact range

4

CITOMIG 300 XP S

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- 1 accessory kit for solid wires 0.8 - 1.2 mm
- 12 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-357

To order

• Standard equipment:

- 1 power source with wheels, cylinder support and handle
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long

• Add-ons:

- Wire feeder DV 4004 XP 5 m air
Cat. no. W 000 260 999
- Wire feeder DV 4004 XP 10 m air
Cat. no. W 000 261 000
- CITORCH M 241 torch 3 m
Cat. no. W 000 261 556
- CITORCH M 241 torch 4 m
Cat. no. W 000 261 557

• Options:

- Torch arm boom
Cat. No. W 000 261 846

5 6

CITOMIG 400 XP S / 400 S W

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- 1 accessory kit for solid wires 0.8 - 1.6 mm
- 3 x 10 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-288

To order

• Standard equipment:

- 1 power source with wheels, cylinder support, handle and 4 lifting eyes
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long

• Add-ons:

Accessories for air cooled sets

- Wire feeder DV 4004 XP 5 m air
Cat. no. W 000 260 999
- Wire feeder DV 4004 XP 10 m air
Cat. no. W 000 261 000
- CITORCH M 341 torch 3 m
Cat. no. W 000 261 559
- CITORCH M 341 torch 4 m
Cat. no. W 000 261 261

Accessories for water cooled sets

- Wire feeder DV 4004 XP - 5 m water
Cat. no. W 000 261 001
- Wire feeder DV 4004 XP - 10 m water
Cat. no. W 000 261 002
- CITORCH M 341 W torch 3 m
Cat. no. W 000 261 573
- CITORCH M 341 W torch 4 m
Cat. no. W 000 261 574
- CITORCH M 441 W torch 3 m
Cat. no. W 000 261 576
- CITORCH M 441 W torch 4 m
Cat. no. W 000 261 577

• Options:

- Torch arm boom
Cat. No. W 000 261 846
- FREEZECOOL (20 L)
Cat. No. W 000 010 168

7 8

CITOMIG 500 XP S / 500 S W

11 product advantages:

- user-friendly front panel
- pre-gas, post-gas and burn-back times adjustment
- ESP mode to adjust the welding parameters easily
- digital display
- 2T/4T, spot and intermittent modes
- 4 roller plate
- 1 accessory kit for solid wires 1.0 - 1.2 mm
- 3 x 10 step voltage adjustment
- disengageable ventilation
- wire feeding regulation system
- system for "spatter reduction"



2006-787

To order

• Standard equipment:

- 1 power source with wheels, cylinder support, handle and 4 lifting eyes
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp and DINSE connector
- 1 equipped gas hose 2 m long

• Add-ons:

Accessories for air cooled sets

- Wire feeder DV 4004 XP 5 m air
Cat. no. W 000 260 999
- Wire feeder DV 4004 XP 10 m air
Cat. no. W 000 261 000
- CITORCH M 441 torch 3 m
Cat. no. W 000 261 563
- CITORCH M 441 torch 4 m
Cat. no. W 000 261 564

Accessories for water cooled sets

- Wire feeder DV 4004 XP 5 m water
Cat. no. W 000 261 001
- Wire feeder DV 4004 XP 10 m water
Cat. no. W 000 261 002
- CITORCH M 441 W torch 3 m
Cat. no. W 000 261 576
- CITORCH M 441 W torch 4 m
Cat. no. W 000 261 577

• Options:

- Torch arm boom
Cat. No. W 000 261 846
- FREEZECOOL (20 L)
Cat. No. W 000 010 168

Technical specifications:	4 CITOMIG 300 XP S	5 CITOMIG 400 XP S / 400 XP S W	7 CITOMIG 500 XP S / 500 XP S W
Power supply	230 / 400 V ± 10% - 50 Hz three-phase	230 / 400 V ± 10% - 50 Hz three-phase	230 / 400 V ± 10% - 50 Hz three-phase
Primary consumption at I max.	27.7 - 16 A	47 - 27 A	63.3 - 36.6 A
Effective consumption	19.5 - 11.3 A	29.7 - 17.1 A	44.7 - 25.9 A
Open circuit voltage	16.5 - 35.8 V	16.6 - 45.8 V	15.8 - 50.4 V
Welding current	30 - 270 A	28 - 380 A	16 - 480 A
Protection class	IP 23	IP 23	IP 23
Insulation class	H	H	H
Duty cycle at 100%	200 A	280 A	350 A
10 min. cycle at 60%	240 A	320 A	410 A
(at 40 °C) at 50%	270 A	380 A (at 40 %)	480 A
Number of rollers	4	4	4
Wire diameter	0.8 - 1.2 mm	0.8 - 1.6 mm	0.8 - 1.6 mm
Dimensions (L x W x H)	780 x 390 x 825 mm	925 x 580 x 1 060 mm	925 x 580 x 1 060 mm
Net weight	98 kg	161 kg	201 kg
Standards	EN 60974-1; -10	EN 60974-1; -10	EN 60974-1; -10
Torch types	CITORCH M family	CITORCH M family	CITORCH M family

The new generation of CITOPULS power sources

The CITOPULS range has been designed for all applications requiring very high quality welding for all thicknesses and all materials used in the main industrial sectors. The direct adjustment of the parameters on the front panel makes the utilisation of the power source much easier for the operator. A set up program allows numerous adjustments of the welding cycles, the welding modes and processes, to ensure the optimum use of these power sources.

CITOPULS range

Product advantages:

- **Regulation and numerical controls:** total control of power supply wave forms for an improvement of the processes, and of the thicknesses, and exact parameter reproduction
- **Increased power (Voltage/Current):** increases the arc rigidity with pulsed mode, which improves penetration and allows a good fusion of "hard-to-weld" wires
- **More processes:** Soft current, Speed Short Arc™ (SSA™), pulsed and MMA
- **More memory:** 99 welding programs on CITOPULS MX (W) 320 and 121 welding programs on CITOPULS MXW 420 for all welding applications
The remote control box also allows memorisation of 10 programs
- **More cycles:** 2T/ 4T/ Spot weld/Cold Double Pulse current (CDP)
- **More options:** large options offer in order to make the welding process easier and safer
- **Potentiometer torch**



1 CITOPULS MX 320



To order:

• Standard equipment air cooled

- 1 power source
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp
- 1 equipped gas hose 2 m long

Cat. no. W 000 055 002

• Add-ons:

- Wire feeder DMY 4000 CDR
Cat. no. W 000 257 873
- Reinforced wire feeder DMY 4000 WKS
Cat. no. W 000 267 594
- Harness air cooled L = 2 m for steel
Cat. no. W 000 055 088
L = 5 m for steel
Cat. no. W 000 055 089
L = 10 m for steel
Cat. no. W 000 055 090
- CITORCH M 341 torch 3 m
Cat. no. W 000 261 559
- CITORCH M 341 torch 4 m
Cat. no. W 000 261 561
- CITORCH M P 341 torch 3 m
Cat. no. W 000 255 647
- CITORCH M P 341 torch 4 m
Cat. no. W 000 255 646

• Options:

- Workshop trolley for power source



Cat. no. W 000 055 046

- Pivot standard (requires power source workshop trolley)
Cat. no. W 000 055 048
- Workshop trolley for DMY 4000 feeder
Cat. no. W 000 055 050
- Wire feed suspension support
Cat. no. W 000 055 101
- CITO-JOB remote control
Cat. no. W 000 055 079
- Power box 230/400 V 3ph - 50/60 Hz - 20 kVA
Cat. no. W 000 305 106
- Push-pull control card
Cat. no. W 000 055 061
- Push-pull torch CITORCH MPP 352 - 8 m
Cat. no. W 000 267 609
- Workshop trolley for DMY 4000 WKS feeder
Cat. no. W 000 267 595

Technical specifications:	1 CITOPULS MX 320
Power supply three-phase	400 V ± 10% - 50/60 Hz
Primary consumption at I max.	25.9 A
Effective consumption	25.9 A
Open circuit voltage	113 V
Welding current	20 - 320 A
Protection class	IP 23 S
Insulation class	H
Duty cycle at 100%	320 A
10 min. cycle at 60%	-
(at 40 °C) at 45%	-
Number of rollers	4
Wire diameter	0.6 - 1.2 mm
Dimensions (L x W x H)	845 x 380 x 855 mm
Net weight	75 kg
Standards	EN 60974-1;-10
Torch types	CITORCH M and MP families



The new generation of CITOPULS power sources

CITOPULS range

2

CITOPULS MXW 320



2006-106

To order:

• Standard equipment water cooled:

- 1 power source
- 1 connected primary cable L = 5 m
- 1 earth cable L = 5 m with clamp
- 1 equipped gas hose 2 m long

Cat. no. W 000 055 003

• Add-ons:

- Wire feeder DMY 4000
Cat. no. W 000 257 873
- Reinforced wire feeder DMY 4000 WKS
Cat. no. W 000 267 594
- Harness water cooled
L = 2 m for steel
Cat. no. W 000 055 091
L = 5 m for steel
Cat. no. W 000 055 092
L = 10 m for steel
Cat. no. W 000 055 093
L = 15 m for steel
Cat. no. W 000 055 094
L = 2 m for aluminium
Cat. no. W 000 055 095
L = 10 m for aluminium
Cat. no. W 000 055 096
L = 15 m for aluminium
Cat. no. W 000 055 097
- CITORCH M 341 W torch 3 m
Cat. no. W 000 261 573
- CITORCH M 341 W torch 4 m
Cat. no. W 000 261 574

- CITORCH M P 341W torch 3 m
Cat. no. W 000 261 583
- CITORCH M P 341W torch 4 m
Cat. no. W 000 261 584
- FREEZCOOL (10 L cans)
Cat. no. W 000 010 167

• Options:

- Workshop trolley for power source
Cat. no. W 000 055 046
- Pivot standard (requires power source workshop trolley)
Cat. no. W 000 055 048
- Workshop trolley for DMY 4000 feeder
Cat. no. W 000 055 050
- Wire feed suspension support
Cat. no. W 000 055 101
- CITO-JOB remote control
Cat. no. W 000 055 079
- Push-pull control card
Cat. no. W 000 055 061
- Push-pull torch
CITORCH MPP 451 W - 8 m
Cat. no. W 000 267 608
- Workshop trolley for DMY 4000 WKS feeder
Cat. no. W 000 267 595

3

CITOPULS MXW 420



2007-891

DMY 4000 WKS

To order:

• Standard equipment water cooled:

- 1 power source
- 1 connected primary cable L = 5 m
- 1 earth cable L = 5 m with clamp
- 1 equipped gas hose 2 m long

Cat. no. W 000 257 776

• Add-ons:

- Wire feeder DMY 4000
Cat. no. W 000 257 873
- Reinforced wire feeder DMY 4000 WKS
Cat. no. W 000 267 594
- Harness water cooled
L = 2 m for steel
Cat. no. W 000 055 091
L = 5 m for steel
Cat. no. W 000 055 092
L = 10 m for steel
Cat. no. W 000 055 093
L = 15 m for steel
Cat. no. W 000 055 094
L = 2 m for aluminium
Cat. no. W 000 055 095
L = 10 m for aluminium
Cat. no. W 000 055 096
L = 15 m for aluminium
Cat. no. W 000 055 097
- CITORCH M 441 W torch 3 m
Cat. no. W 000 261 576
- CITORCH M 441 W torch 4 m
Cat. no. W 000 261 577

- CITORCH M P 441 W torch 3 m
Cat. no. W 000 255 644
- CITORCH M P 441 W torch 4 m
Cat. no. W 000 255 645
- FREEZCOOL (10 L cans)
Cat. no. W 000 010 167

• Options:

- Workshop trolley for power source
Cat. no. W 000 055 046
- Pivot standard (requires power source workshop trolley)
Cat. no. W 000 055 048
- Workshop trolley for DMY 4000 feeder
Cat. no. W 000 055 050
- Wire feed suspension support
Cat. no. W 000 055 101
- CITO-JOB remote control
Cat. no. W 000 055 079
- Push-pull control card
Cat. no. W 000 055 061
- Push-pull torch
CITORCH MPP 451 W - 8 m
Cat. no. W 000 267 608
- Workshop trolley for DMY 4000 WKS feeder
Cat. no. W 000 267 595

Technical specifications:	2 CITOPULS MXW 320	3 CITOPULS MXW 420
Power supply three-phase	400 V ± 10% - 50/60 Hz	400 V ± 10% - 50/60 Hz
Primary consumption at I max.	25.9 A	36.4 A
Effective consumption	25.9 A	26.7 A
Open circuit voltage	113 V	113 V
Welding current	20 - 320 A	20 - 420 A
Protection class	IP 23 S	IP 23 S
Insulation class	H	H
Duty cycle at 100%	320 A	350 A
10 min. cycle at 60%	-	400 A
(at 40 °C) at 45%	-	420 A
Number of rollers	4	4
Wire diameter	0.6 - 1.2 mm	0.8 - 1.6 mm
Dimensions (L x W x H)	845 x 380 x 855 mm	845 x 380 x 855 mm
Net weight	91 kg	91 kg
Standards	EN 60974-1;-10	EN 60974-1;-10
Torch types	CITORCH M and MP families	CITORCH M and MP families

The new generation of CITOWAVE power sources

User-friendliness and high levels of performance make CITOWAVE the ideal partner for all manual, automatic and robotic welding applications. A wide graphic screen allows the operator to navigate easily around a menu bar for adjusting the various parameters of the unit.

CITOWAVE range

Product advantages:

- **Control of aluminium welding (Spray Modal™):** special welding transfer which provides reduced porosity and increases the penetration
- **Regulation and numerical controls:** total control of wave shape to improve the welding processes ensuring a good reproduction of parameters
- **Advanced torch "DIGITAL":** a range of ergonomic torches with the possibility on the handle to
 - select the program number
 - adjust the wire feed speed
 - adjust the arc length
- **Increased power (Voltage/Current):** increases the arc rigidity with pulsed mode, which improves penetration and allows a good fusion of "hard-to-weld" wires
- **More processes:** Soft current, Pulsed, SSA, SSP, SM, CDP, MIG brazing, MMA, and PR Spray
- **More memory:** 115 welding programs on CITOWAVE MX 280 and 153 welding programs on CITOWAVE MX 400/500 for all welding applications. The power sources also allow memorization of 100 programs, selectable from the wire feeder, remote control and CITORCH M E family
- **More controls:** parameters monitoring, indication of defects, parameter blocking on several levels, printing, 99 programs, calibration...
- **More cycles:** 2T/ 4T/ Spot weld/Cold Double Pulse current (CDP)
- **More options:** large options offer in order to make the welding process easier and safer

1 CITOWAVE MX 280



To order:

- **Standard equipment air cooled:**
 - 1 power source
 - 1 connected primary cable L = 5 m long
 - 1 earth cable L = 5 m with clamp
 - 1 equipped gas hose 2 m long
 - 1 built-in wire feed 4 rollers
 Cat. no. W 000 055 013
- **Add-ons:**
 - CITORCH M 341 torch 3 m
Cat. no. W 000 261 559
 - CITORCH M 341 torch 4 m
Cat. no. W 000 261 561
 - CITORCH M E 341 torch 3 m
Cat. no. W 000 255 640
 - CITORCH M E 341 torch 4 m
Cat. no. W 000 255 641
- **Options:**
 - Workshop trolley for power source
Cat. no. W 000 055 046
 - CITO-JOB remote control
Cat. no. W 000 055 079
 - Power box 230/400 V
3ph - 50/60 Hz - 20 kVA
Cat. no. W 000 305 100
 - Push-pull control card
Cat. no. W 000 055 061
 - Push-pull torch
CITORCH MPP 352 - 8 m
Cat. no. W 000 267 609

Technical specifications:	1 CITOWAVE MX 280
Power supply three-phase	400 V ± 10% - 50/60 Hz
Primary consumption at I max.	21.4 A
Effective consumption	21.4 A
Open circuit voltage	113 V
Welding current	20 - 280 A
Protection class	IP 23 S
Insulation class	H
Duty cycle at 100%	280 A
10 min. cycle (at 40 °C) at 60%	-
Number of rollers	4
Wire diameter	0.6 - 1.2 mm
Dimensions (L x W x H)	845 x 380 x 855 mm
Net weight	76 kg
Standards	EN 60974-1;-10
Torch types	CITORCH M and ME families



The new generation of CITOWAVE power sources

CITOWAVE range

2

CITOWAVE MXW 400



To order:

- **Standard equipment water cooled:**

- 1 power source
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp
- 1 equipped gas hose 2 m long

Cat. no. W 000 257 777

- **Add-ons:**

- Wire feeder DMX 5000
Cat. no. W 000 257 782
- Harness water cooled
L = 5 m for steel
Cat. no. W 000 055 092
L = 10 m for steel
Cat. no. W 000 055 093
L = 15 m for steel
Cat. no. W 000 055 094
L = 10 m for aluminium
Cat. no. W 000 055 096
L = 15 m for aluminium
Cat. no. W 000 055 097
- CITORCH M 341 W torch 3 m
Cat. no. W 000 261 573
- CITORCH M 341 W torch 4 m
Cat. no. W 000 261 574
- CITORCH M E 341 W torch 3 m
Cat. no. W 000 261 581

- CITORCH M E 341 W torch 4 m
Cat. no. W 000 261 582
- FREEZCOOL (10 L cans)
Cat. no. W 000 010 167

- **Options:**

- Workshop trolley for power source
Cat. no. W 000 055 046
- Pivot standard
(requires power source workshop trolley)
Cat. no. W 000 055 048
- Workshop trolley for wire feeder
Cat. no. W 000 055 050
- Wire feed suspension support
Cat. no. W 000 055 101
- CITO-JOB remote control
Cat. no. W 000 055 079
- Push-pull control card
Cat. no. W 000 055 061
- Push-pull torch
CITORCH MPP 451 W - 8 m
Cat. no. W 000 267 608

3

CITOWAVE MXW 500



To order:

- **Standard equipment water cooled:**

- 1 power source
- 1 connected primary cable L = 5 m long
- 1 earth cable L = 5 m with clamp
- 1 equipped gas hose 2 m long

Cat. no. W 000 055 022

- **Add-ons:**

- Wire feeder DMX 5000
Cat. no. W 000 257 782
- Harness water cooled
L = 5 m for steel
Cat. no. W 000 055 092
L = 10 m for steel
Cat. no. W 000 055 093
L = 15 m for steel
Cat. no. W 000 055 094
L = 10 m for aluminium
Cat. no. W 000 055 096
L = 15 m for aluminium
Cat. no. W 000 055 097
- CITORCH M 441 W torch 3 m
Cat. no. W 000 261 576
- CITORCH M 441 W torch 4 m
Cat. no. W 000 261 577
- CITORCH M E 441 W torch 3 m
Cat. no. W 000 255 643

- CITORCH M E 441 W torch 4 m
Cat. no. W 000 255 642
- FREEZCOOL (10 L cans)
Cat. no. W 000 010 167

- **Options:**

- Workshop trolley for power source
Cat. no. W 000 055 046
- Pivot standard
(requires power source workshop trolley)
Cat. no. W 000 055 048
- Workshop trolley for wire feeder
Cat. no. W 000 055 050
- Wire feed suspension support
Cat. no. W 000 055 101
- CITO-JOB remote control
Cat. no. W 000 055 079
- Push-pull control card
Cat. no. W 000 055 061
- Push-pull torch
CITORCH MPP 451 W - 8 m
Cat. no. W 000 267 608

Technical specifications:	2 CITOWAVE MXW 400	3 CITOWAVE MXW 500
Power supply three-phase	400 V ± 10% - 50/60 Hz	400 V ± 10% - 50/60 Hz
Primary consumption at I max.	34.5 A	45.2 A
Effective consumption	26.7 A	35 A
Open circuit voltage	113 V	113 V
Welding current	20 - 400 A	20 - 500 A
Protection class	IP 23 S	IP 23 S
Insulation class	H	H
Duty cycle		
10 min. cycle	at 100% 350 A	450 A
(at 40 °C)	at 60% 400 A	500 A
Number of rollers	4	4
Wire diameter	0.8 - 1.6 mm	0.8 - 1.6 mm
Dimensions (L x W x H)	845 x 380 x 855 mm	845 x 380 x 855 mm
Net weight	91 kg	91 kg
Standards	EN 60974-1;-10	EN 60974-1;-10
Torch types	CITORCH M and ME families	CITORCH M and ME families

MIG/MAG welding new processes

Processes advantages for a perfect assembly:

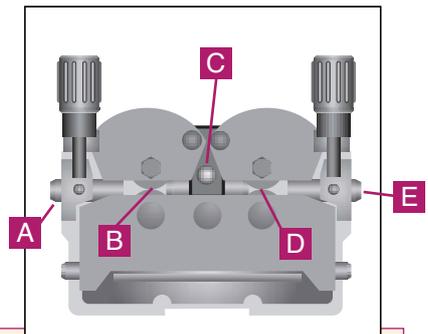
This new generation of power sources provides new welding methods able to meet quality and productivity levels to answer the needs of the main industrial sectors (especially road and rail transport, automotive industry and shipbuilding).

Process	Definition	Customer advantages	Power source
Speed Short Arc™ (SSA)	The Speed Short Arc™ allows a high travel speed due to a rigid arc and a cold regime. It is very effective for welding thin steel plates, working in position and in closed angle and filling bevels. The SSA™ is used for short circuit welding though the normal globular regime travel speed domain.	<ul style="list-style-type: none"> • Increase in travel speed • Reduced distortion (thin steel sheets) • Suited to welding in position • Tolerance and usability 	CITOWAVE CITOPULS
Spray Modal™ (SM)	Spray Modal™ is a process that strongly reduces micro porosity and increases penetration. It can be used in all positions and is particularly effective on aluminium sheets greater than 3 mm. Spray-MODAL™ uses a low-frequency modulated current which has the effect of removing hydrogen bubbles from the weld pool before solidification.	<ul style="list-style-type: none"> • Reduces porosity • Increases penetration • All-position welding • Higher travel speed 	CITOWAVE
Soft Silence Pulse™ (SSP)	The Soft Silence Pulse™ is a quieter pulsed mode mainly intended for stainless steel welding applications. The SSP™ produces a softer but very stable arc with good wetting of the weld bead. This waveform significantly reduces spatter and gives a very fine appearance to the weld bead.	<ul style="list-style-type: none"> • Reduction of noise • Good wetting of the weld bead • Reduction of spatter • Good weld bead appearance 	CITOWAVE
Cold Double Pulse™ (CDP)	The Cold Double Pulse™ produces very high quality welds on thin material while avoiding distortion. CDP™ gives a TIG appearance to the weld and is very effective on very thin aluminium or stainless steel sheet (< 2 mm). The operating technique is made easier due to good control of the weld pool even on badly-prepared sheets. This sequencer mode automatically chains hot arc and cold arc regimes together.	<ul style="list-style-type: none"> • Effective on thin sheets • Reduces distortion • Easy operating technique • TIG appearance weld bead 	CITOPULS CITOWAVE

Options and parts for CITOWAVE and CITOPULS

Length	Air harnesses	Water harnesses	Water harnesses for aluminium
2 m	W 000 055 088	W 000 055 091	W 000 055 095
5 m	W 000 055 089	W 000 055 092	-
10 m	W 000 055 090	W 000 055 093	W 000 055 096
15 m	-	W 000 055 094	W 000 055 097
25 m	-	-	W 000 055 098

Options	CITOPULS	CITOWAVE
• Workshop trolley for power sources	W 000 055 046	W 000 055 046
• Workshop trolley for wire feeder	W 000 055 050	W 000 055 050
• Pivot stand (requires power source workshop trolley)	W 000 055 048	W 000 055 048
• Wire feed suspension cradle	W 000 055 101	W 000 055 101
• CITO-JOB remote control (digital display)	W 000 055 079	W 000 055 079
• Torch with potentiometer CITORCH M P	See page 60	-
• Torch with integrated adjustment and display CITORCH M E	-	See page 60



Wire feeder wear parts DV 44i / D37 - DV 4004 XP - DMY 4000 - DMY 4000 WKS - DMX 5000

Wire Ø	A	B D	C	E	
	Entry wire guide	Rollers	Middle wire guide	Exit wire guide	Alukit
Steel	W 000 305 150	W 000 160 942	-	W 000 255 654	-
		W 000 267 599	W 000 267 598	W 000 162 834	W 000 241 685
			W 000 160 945	-	W 000 241 682
		-	-	-	-
Alu	-	W 000 260 185	-	-	W 000 255 648
		W 000 260 186	-	-	W 000 255 649
		W 000 260 187	-	-	W 000 255 650
Cored wire	W 000 305 150	-	W 000 162 834	W 000 255 655	-
		W 000 266 330	-	W 000 241 682	-
		W 000 257 395	W 000 266 331	W 000 257 397	W 000 257 396

CITORCH M / M E / M P

Main features:

- Regular wire feeding with minimum friction
- Adjustable Stick-out option
- High intensities option
- Limited number of spare and wear parts



- 1 Ergonomic handle
- 2 Simple trigger
- 3 Handle spring
- 4 Insulated and reinforced neck
- 5 One piece nozzle
- 6 Alloyed copper contact tip
- 7 Extra flexible coaxial cable with ultra-resistant elastomer outer
- 8 Back connector spring

CITORCH M	241	341	441	241W	341W	441W
	Air cooling			Water cooling		
Duty cycle	60%			100%		
	270 A	350 A	450 A	270 A	370 A	450 A
Wire diameter	0.8-1.0 (1.2) mm	(0.8) 1.0-1.2 (1.6) mm	1.0-1.6 mm	0.8-1.0 (1.2) mm	(0.8) 1.0-1.2 (1.6) mm	1.0-1.6 mm
Options	Stick-out setting High current alum.liner	Stick-out setting High current alum.liner High-current nozzle + contact tip	Stick-out setting High current alum.liner High-current nozzle + contact tip	Stick-out setting High current alum.liner	Stick-out setting High current alum.liner	Stick-out setting High current alum.liner

To order

3 m cable	W 000 261 556	W 000 261 559	W 000 261 563	W 000 261 570	W 000 261 573	W 000 261 576
4 m cable	W 000 261 557	W 000 261 561	W 000 261 564	W 000 261 571	W 000 261 574	W 000 261 577
5 m cable	W 000 261 558	W 000 261 562	W 000 261 568	W 000 261 572	W 000 261 575	W 000 261 578

A range of torches with integrated adjustments:

Advantages CITORCH M E / P

- Setting directly on torch
- Adjustment during welding
- Parameters reading (on **CITORCH M E**)
- Easy to use

Type	CITORCH M E for CITOWAVE: integrated adjustment and display				CITORCH M P for CITOPULS: integrated adjustment			
	241	341	341 W	441 W	341	341 W	441 W	
Duty cycle	60%	270 A	350 A	-	-	350 A	-	-
	100%	-	-	350 A	450 A	-	350 A	450 A
Wire diameter	0.8 - 1.0 mm possible (1.2)	1.0 - 1.2 mm possible (0.8 and 1.6)	1.0 - 1.2 mm possible (0.8 and 1.6)	1.0 - 1.6 mm	1.0 - 1.2 mm possible (0.8 and 1.6)	1.0 - 1.2 mm possible (0.8 and 1.6)	1.0 - 1.6 mm	
Standard lengths	3 m	W 000 261 579	W 000 255 640	W 000 261 581	W 000 255 643	W 000 255 647	W 000 261 583	W 000 255 644
	4 m	W 000 261 580	W 000 255 641	W 000 261 582	W 000 255 642	W 000 255 646	W 000 261 584	W 000 255 645
Cooling		air	air	liquid	liquid	air	liquid	liquid

Feature benefits of CITORCH M E

- Easy access to the regulation buttons
- Possible adjustment of parameters in semi-synergic mode
- Display 3 digits with 3 indicators for visualisation of selection

CITORCH M E

- 1 Display for parameters setting
- 2 Regulation + & -: to adjust the welding intensity and the wire feeding speed
- 3 Welding program selection -/+



CITORCH M P with potentiometer

- 2 separate adjustments: wire feeding speed and welding intensity



Wear parts for CITORCH torches



CITORCH M	Contact tip (mm)	1 Contact tip	Nozzle (mm)	2 Nozzle	3 Tip holder	4 Internal liner			
						3 m	4 m	5 m	
141T	Steel	0.6	W 000 264 806	11,0	W 000 265 920	-	W 000 265 911	W 000 265 912	-
		0.8	W 000 264 912	11,0	W 000 265 920	-	W 000 265 913	W 000 265 914	-
		1.0	W 000 264 928	14,0	W 000 265 920	-	W 000 265 913	W 000 265 914	-
181	Steel	0.8	W 000 264 929	12,0	W 000 354 408	W 000 345 335	W 000 345 374	W 000 345 375	-
		1.0	W 000 264 930	14,0	W 000 354 409	W 000 345 335	W 000 345 374	W 000 345 375	-
	Aluminium	1.0	40 006 486	12,0	40 008 035	W 000 345 335	W 000 345 386	W 000 345 385	-
		-	-	14,0	40 008 036	-	-	-	-
241-241 W	Steel	0.8	W 000 264 929	12,0	W 000 354 409	W 000 345 335	W 000 010 730	W 000 010 731	W 000 010 732
		1.0	W 000 264 930	12,0	40 008 035	W 000 345 335	W 000 010 730	W 000 010 731	W 000 010 732
		1.2	W 000 264 931	14,0	40 008 036	W 000 345 335	W 000 010 733	W 000 010 734	W 000 010 735
	Aluminium	1.0	W 000 264 932	12,0	40 008 035	W 000 345 335	W 000 010 736	W 000 010 737	W 000 010 738
		1.2	W 000 264 936	14,0	40 008 036	W 000 345 335	W 000 010 736	W 000 010 737	W 000 010 738
341-341 W	Steel	0.8	W 000 234 580	14,0	W 000 345 421	W 000 345 341	W 000 010 730	W 000 010 731	W 000 010 732
		1.0	40 006 493	16,0	W 000 345 422	W 000 345 341	W 000 010 730	W 000 010 731	W 000 010 732
		1.2	40 006 494	16,0	W 000 345 422	W 000 345 341	W 000 010 733	W 000 010 734	W 000 010 735
		1.6	W 000 234 583	14,0	W 000 345 421	W 000 345 341	W 000 010 867	W 000 010 868	W 000 010 869
	Aluminium	1.0	40 006 494	16,0	W 000 345 422	W 000 345 341	W 000 010 736	W 000 010 737	W 000 010 738
		1.2	40 006 496	16,0	W 000 345 422	W 000 345 341	W 000 010 736	W 000 010 737	W 000 010 738
441-441 W	Steel	1.0	W 000 236 756	16,0	W 000 345 423	W 000 345 347	W 000 010 733	W 000 010 734	W 000 010 735
		1.2	W 000 256 757	16,0	W 000 345 423	W 000 345 347	W 000 010 733	W 000 010 734	W 000 010 735
		1.6	W 000 256 758	19,0	W 000 345 428	W 000 345 347	W 000 010 867	W 000 010 868	W 000 010 869
	Aluminium	1.0	40 006 490	16,0	W 000 345 423	W 000 345 347	W 000 010 736	W 000 010 737	W 000 010 738
		1.2	40 006 492	16,0	W 000 345 423	W 000 345 347	W 000 010 736	W 000 010 737	W 000 010 738
		1.6	40 006 986	19,0	W 000 345 428	W 000 345 347	W 000 010 745	W 000 010 746	W 000 010 747

WMT torches



A complete range of MIG-MAG torches

Product advantages:

- wear parts compatible with the most common standard in Europe
- easily pivoting handle
- complete range



WMT 15A
 Duty cycle at 60 %
 180 A (CO₂)
 Original equipment:
 • Steel wire 0.8 mm
 • nozzle Ø 12.5 mm
 Air cooled
 Suitable wire diameter:
 • 0.6 to 1.0 mm
 Automation, welding
 in restricted areas.

2004-616

To order

3 m	4 m	5 m
W 000 010 600	W 000 010 601	-



WMT 36A
 Duty cycle at 60 %
 340 A (CO₂)
 Original equipment:
 • Steel wire 1.2 mm
 • nozzle Ø 16 mm
 Air cooled
 Suitable wire diameter:
 • 0.8 to 1.6 mm
 Boiler making, tack welding,
 metal frame.

2004-620

To order

3 m	4 m	5 m
W 000 010 605	W 000 010 606	W 000 010 607



WMT 25A
 Duty cycle at 60 %
 230 A (CO₂)
 Original equipment:
 • Steel wire 1.0 mm
 • nozzle Ø 14 mm
 Air cooled
 Suitable wire diameter:
 • 0.8 to 1.2 mm
 Steel work, metallic joinery.

2004-619

To order

3 m	4 m	5 m
W 000 010 602	W 000 010 603	W 000 010 604



WMT 500 W
 Duty cycle at 100 %
 500 A (CO₂)
 Original equipment:
 • Steel wire 1.2 mm
 • nozzle Ø 16.5 mm
 water cooling
 Suitable wire diameter:
 • 0.8 to 1.6 mm
 Intensive welding, boiler
 making, tack welding,
 metal frame.

2004-625

To order

3 m	4 m	5 m
W 000 010 608	W 000 010 609	W 000 010 610



2570-028

Wear parts for WMT torches



Wear parts	Diameter (mm)		WMT				
			15A	25A	36A	500 W	
1 Contact tip	Steel	0.6	W 000 010 820	-	-	-	
		0.8	W 000 010 821	W 000 010 826	W 000 010 834	-	
		1.0	W 000 010 822	W 000 010 827	W 000 010 835	-	
		1.2	-	W 000 010 828	W 000 010 836	-	
		1.6	-	-	W 000 010 837	-	
	Aluminium	1.0	-	W 000 010 850	W 000 010 853	-	
		1.2	-	W 000 010 851	W 000 010 854	-	
		1.6	-	-	W 000 010 855	-	
2 Nozzle			W 000 010 786	W 000 010 790	W 000 010 794	W 000 010 797	
Spring nozzle			W 000 010 789	W 000 010 793	-	-	
3 Isolating diffuser			-	-	W 000 010 780	W 000 010 783	
4 Isolating ring			-	-	-	W 000 010 748	
Internal liner	Steel	0.6 - 0.8	3 m	W 000 010 730			
			4 m	W 000 010 731			
			5 m	-	W 000 010 732	W 000 010 732	W 000 010 732
		1.0 - 1.2	3 m	W 000 010 733			
			4 m	W 000 010 734			
			5 m	-	W 000 010 735	W 000 010 735	W 000 010 735
		1.6	3 m	-	-	W 000 010 867	W 000 010 739
			4 m	-	-	W 000 010 868	W 000 010 740
			5 m	-	-	W 000 010 869	W 000 010 741
	Teflon	1.0 - 1.2	3 m	-	W 000 010 736	W 000 010 736	W 000 010 736
			4 m	-	W 000 010 737	W 000 010 737	W 000 010 737
			5 m	-	W 000 010 738	W 000 010 738	W 000 010 738
		1.6	3 m	-	-	W 000 010 745	W 000 010 745
			4 m	-	-	W 000 010 746	W 000 010 746
			5 m	-	-	W 000 010 747	W 000 010 747

3

Chapter 4

Plasma cutting



Plasma cutting

Primary power supply cable connection:

Single-phase 230 V = connection between phase and neutral

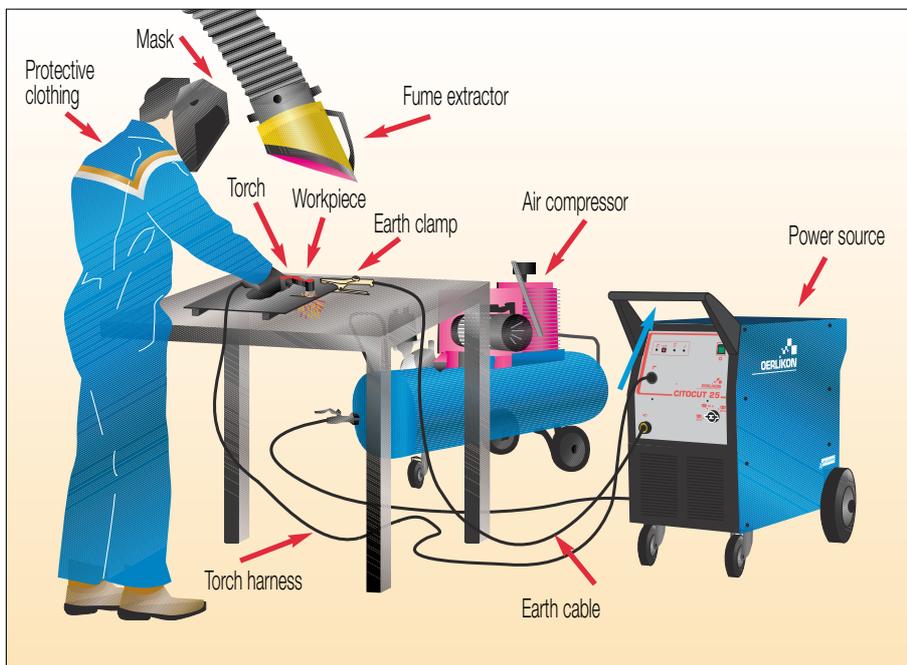
400 V = connection between 2 phases

Three-phase 400 V = connection between 3 phases

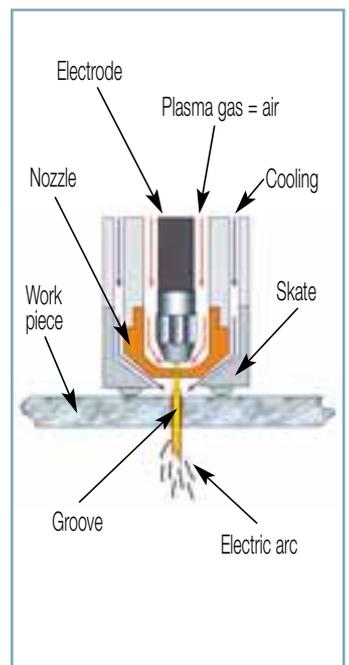
230 V = connection between 3 phases

Plasma cutting overview and quick choice criteria

Always connect the earth cable. Refer to technical instructions.

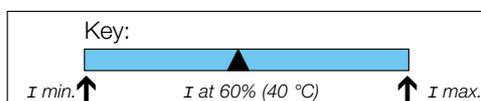


Cutting operation



Choice criteria for plasma power sources

Name of product	Power supply	Cutting capacity		Cutting current							Torch	Number of setting positions (range)	Weight (kg)		
		Quality	Separation	20	40	60	80	100	120	140					
CITOCUT KOMPRESSOR	Single-phase	4 mm	6 mm	■									CITORCH P 5	∞	12
CITOCUT 10i	Single-phase	8 mm	10 mm	■▲									CITORCH P 10	∞	8
CITOCUT 20i	Three-phase	20 mm	25 mm	■▲	■								CITORCH P 25	∞	25
CITOCUT 25	Three-phase	20 mm	25 mm	■▲	■▲	■							CITORCH P 25	3	80
CITOCUT 40i	Three-phase	35 mm	40 mm	■▲	■▲	■▲	■						CITORCH P 45	∞	35
CITOCUT 40	Three-phase	35 mm	40 mm	■▲	■▲	■▲	■▲	■					CITORCH P 40	4	125
NERTAJET 50	Three-phase	40 mm	50 mm	■▲	■▲	■▲	■▲	■▲	■				Z 5.0	5	260



A complete range of heavy duty plasma cutters from the plasma process specialists. The OERLIKON plasma range has global recognition as the solution for all on-site applications with a range of machines which are simple, robust and ready to use. The inverter microprocessor controlled units provide excellent cut quality due to OERLIKON patented consumables.

Plasma Cutting Glossary

The principles of plasma cutting

Plasma cutting can be used for all conductive materials.

The plasma jet is formed due to an electric arc created between an electrode and the work piece to be cut.

Distance cutting

With short nozzles and skirts, special adaption for rectilinear cutting guided with a gauge.

Drag cutting

With a thin and long nozzle, it allows a very precise cut following a layout, and ideal angle cutting avoiding arc interruptions.



Portable installations

CITOCUT Kompressor with CITORCH P 5 torch and wear parts

Cutting capacity:

- Severance cut: 6 mm
- Quality cut: 4 mm

The portable solution with built-in compressor for manual plasma cutting

9 product advantages:

- Cut up to 6 mm (severance cut on carbon steel)
- Light weight: easy to transport
- Drag cutting
- Low air and current consumption
- Cutting capacity without earth cable, up to 2 mm sheet thickness
- Cuts all metals
- Arc pilot without high frequency (HF)
- Digital parameter display
- High operator safety due to the new CITORCH P 5 torch

	Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
Standard model	230 V ± 10% 1 ph 50-60 Hz	16 A	11 A	300 V	10 - 20 A	20 A (50%)	built-in compressor	IP 23	H	410 x 180 x 310 mm	12 kg	EN 60974-1; -7; -10
110 V model	110 V 1 ph 50-60 Hz	29 A	13 A	240 V	10 - 20 A	20 A (20%)	built-in compressor	IP 23	H	440 x 185 x 310 mm	12 kg	EN 60974-1; -7; -10

To order

• Standard model ready to use:

- 1 CITOCUT Kompressor (230 V 1 ph) with 3 m primary cable
- 1 CITORCH P 5 cutting torch 4 m
- 1 earth cable 3 m with clamp
- 1 set of wear parts

Cat. no. W 000 260 941

• 110 V model ready to use:

- 1 CITOCUT Kompressor (110 V 1 ph) with 3 m primary cable
- 1 CITORCH P 5 cutting torch 4 m
- 1 earth cable 3 m with clamp
- 1 set of wear parts

Cat. no. W 000 264 805



To order

• Accessories:

- FASHION goggles Cat. no. W 000 011 061
- PROTECT COMFORT T9 gloves Cat. no. W 000 010 425
- PROTECT COMFORT T1 gloves Cat. no. W 000 010 426

• Option:

- Compass Cat. no. W 000 302 512

CITORCH P 5 torch for drag cutting

Maximum current at 60%: 20 A

Plasma gas: air



Wear parts for CITORCH P 5 torch

To order

• Air-cooled 4 m torch:

- CITORCH P 5 Cat. no. W 000 302 645

• Wear parts:

- 1 Torch body Cat. no. W 000 266 530
- 2 FL electrode Cat. no. W 000 302 589
- 3 L 0.65 nozzle Cat. no. W 000 302 628
- 4 TN skirt Cat. no. W 000 302 632
- 5 Wrench Cat. no. W 000 302 612

CITOCUT 10i with CITORCH P 10 torch and wear parts

Cutting capacity:
• Severance cut: 10 mm
• Quality cut: 8 mm

The high-tech portable solution for manual plasma cutting

11 product advantages:

- Compact and light for easy transportation
- Severance cut up to 10 mm (carbon steel)
- Cutting capacity up to 2 mm without earth cable
- Drag cutting
- Digital parameter display
- Increased safety due to the new CITORCH P 10 torch
- Arc pilot without high frequency (HF)
- Cuts all metals
- Torch with double action trigger
- Reliable, robust and ergonomic
- Low air and current consumption

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
230 V ± 10% 1 ph 50-60 Hz	23 A	14 A	300 V	10 - 30 A	30 A (35%) 25 A (60%) 20 A (100%)	4 bars 100 l/min.	IP 23	H	380 x 150 x 310 mm	8 kg	EN 60974-1; -7; -10

To order

• Installation ready to use including:

- 1 CITOCUT 10i with 3 m primary cable
- 1 CITORCH P 10 cutting torch 5 m
- 1 earth cable 3 m with clamp
- 1 set of wear parts
- 1 air hose 5 m

Cat. no. W 000 261 819



To order

• Accessories:

- FASHION goggles
Cat. no. W 000 011 061
- PROTECT COMFORT T9 gloves
Cat. no. W 000 010 425
- PROTECT COMFORT T1 gloves
Cat. no. W 000 010 426

• Option:

- Compass
Cat. no. W 000 302 512

CITORCH P 10 torch for drag cutting

Maximum current at 35%: 30 A

Plasma gas: air



Drag cutting



Wear parts for CITORCH P 10 torch

To order

• Air-cooled 5 m torch:

- CITORCH P 10 Cat. no. W 000 302 646

• Wear parts:

- 1 Torch body Cat. no. W 000 266 531
- 2 FL electrode Cat. no. W 000 302 589
- 3 FL 0.8 nozzle (0.5 mm to 10 mm)
Cat. no. W 000 302 586
- 4 TN skirt Cat. no. W 000 302 632
- 5 Wrench Cat. no. W 000 302 612

Portable installations

Cutting capacity:
 • Severance cut: 25 mm
 • Quality cut: 20 mm

CITOCUT 20i with CITORCH P 25 and wear parts

Quality and reliability

9 product advantages:

- Unequalled quality cut on 20 mm thickness
- Powerful - maximum cut up to 25 mm (carbon steel)
- Digital parameter display
- 3 cutting modes (drag/distance/grid) and gouging
- Compact and portable solution

- Kit for automatic application (option)
- Striking with blow-back (without HF)
- Primary autolink system
- Auto restart
- Reliable, robust and ergonomic
- Torch with double action trigger

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
230 V 400 V ± 10% 3 ph (autolink) 50-60 Hz	20.9 A - 400 V 32 A - 230 V	16.2 A (400 V) 24.8 A (230 V)	310 V 250 V	20 - 65 A	65 A (60%) 50 A (100%) 40 A (100%)	5 bars 180 l/min.	IP 23 S	H	435 x 235 x 380 mm	25 kg	EN 60974-1; -7; -10

To order

- Installation ready to use including:
 - 1 CITOCUT 20i with 6 m primary cable
 - 1 CITORCH P 25 cutting torch 5 m
 - 1 earth cable 3 m with clamp
 - 1 air hose 5 m
 - 1 set of wear parts
- Cat. no. W 000 262 494**



To order

- Accessories:
 - FASHION goggles Cat. no. W 000 011 061
 - PROTECT COMFORT T9 gloves Cat. no. W 000 010 425
 - PROTECT COMFORT T1 gloves Cat. no. W 000 010 426
- Options:
 - Kit auto Cat. no. W 000 265 597
 - Compass Cat. no. W 000 302 512

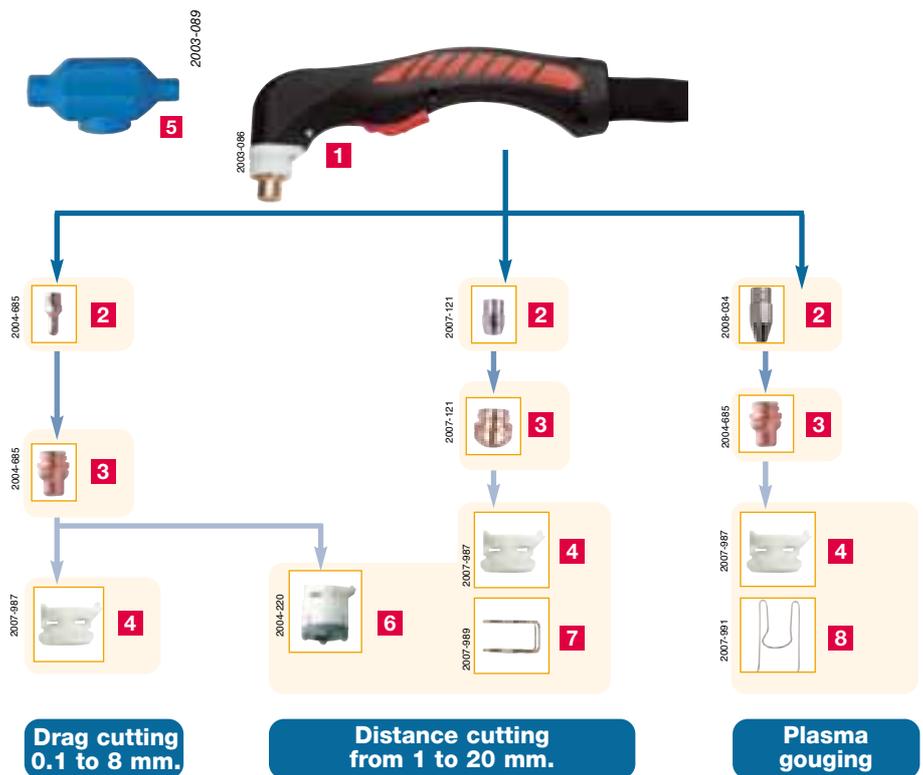
CITORCH P 25 for drag and distance cutting

Maximum current at 60%: 65 A
 Plasma gas: air

Wear parts for CITORCH P 25

To order

- Air-cooled torch:
 - CITORCH P 25 - 5 m Cat. no. W 000 302 647
 - CITORCH P 25 - 12 m Cat. no. W 000 302 648
- Wear parts:
 - 1 Torch body Cat. no. W 000 266 531
 - 5 Wrench Cat. no. W 000 302 612
- Wear part for drag cutting:
 - 2 FL electrode Cat. no. W 000 302 589
 - 3 Nozzle L 1.0 Cat. no. W 000 302 587
 - 3 Nozzle L 1.2 Cat. no. W 000 302 588
 - 4 TN skirt Cat. no. W 000 302 632
- Wear part for distance cutting:
 - 2 C electrode Cat. no. W 000 302 593
 - 3 Nozzle C 1.0 Cat. no. W 000 302 584
 - 3 Nozzle C 1.2 Cat. no. W 000 302 585
 - 4 TN skirt Cat. no. W 000 302 632
 - 6 TI skirt Cat. no. W 000 302 590
 - 7 Skate 60 A Cat. no. W 000 302 598
- Wear part for plasma gouging:
 - 2 L electrode Cat. no. W 000 270 041
 - 3 Nozzle G 2.0 Cat. no. W 000 302 527
 - 4 TN skirt Cat. no. W 000 302 632
 - 8 Skate for gouging 60 A Cat. no. W 000 302 531



CITOCUT 40i with CITORCH P 45 and wear parts

Cutting capacity:
 • Severance cut: 40 mm
 • Quality cut: 35 mm

Quality and reliability

12 product advantages:

- Powerful - maximum cut up to 40 mm (carbon steel)
- Digital parameter display
- 3 cutting modes (drag/distance/grid) and gouging
- Compact
- Reliable and robust for heavy duty use
- Kit for automatic application (option)
- Trolley optional
- Auto restart
- Clean starting, no high frequency (HF)
- Drag cutting, up to 10 mm sheet with reduced fume emission
- Quick connection torch with patented consumables parts
- Industrial application

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
400 V ±10% 3 ph 50-60 Hz	40.3 A	31.2 A	458 V	10 - 120 A	120 A (60%) 100 A (100%)	5 bars 200 l/min.	IP 23 S	H	720 x 310 x 430 mm	35 kg	EN 60974-1; -7; -10

To order

• Installation ready to use including:

- 1 CITOCUT 40i with primary cable 6 m
- 1 CITORCH P 45 cutting torch 6 m
- 1 earth cable 3 m with clamp
- 1 set of wear parts
- 1 air hose 5 m

Cat. no. W 000 262 495



To order

• Accessories:

- FASHION goggles Cat. no. W 000 011 061
- PROTECT COMFORT T9 gloves Cat. no. W 000 010 425
- PROTECT COMFORT T1 gloves Cat. no. W 000 010 426

• Options:

- Trolley - Cat. no. W 000 265 598
- Kit auto - Cat. no. W 000 265 597
- Compass - Cat. no. W 000 302 512

CITORCH P 45 for drag and distance cutting

Maximum current at 60%: 120 A
 Plasma gas: air

To order

- Air-cooled 6 m torch: CITORCH P 45 Cat. no. W 000 302 649
- Air-cooled 15 m torch: CITORCH P 45 Cat. no. W 000 302 650
- Wear parts:
 - 1 Torch body Cat. no. W 000 266 535
 - 5 Wrench Cat. no. W 000 302 612
- Wear part for drag cutting:
 - 2 FL electrode Cat. no. W 000 302 589
 - 3 Nozzle FL 0.65 Cat. no. W 000 302 628
 - 3 Nozzle FL 0.8 Cat. no. W 000 302 586
 - 3 Nozzle L 1.0 Cat. no. W 000 302 587
 - 3 Nozzle L 1.2 Cat. no. W 000 302 588
 - 4 Drag skirt 120 A Cat. no. W 000 302 521
- Wear part for distance cutting:
 - 2 C electrode Cat. no. W 000 302 593
 - 3 Nozzle C 1.0 Cat. no. W 000 302 584
 - 3 Nozzle C 1.2 Cat. no. W 000 302 585
 - 3 Nozzle C 1.4 Cat. no. W 000 302 525
 - 3 Nozzle C 1.6 Cat. no. W 000 270 006
 - 4 Distance skirt Cat. no. W 000 302 520
 - 5 Skate 120 A Cat. no. W 000 302 518

Wear parts for CITORCH P 45



- Wear part for plasma gouging:
 - 2 L electrode Cat. no. W 000 270 041
 - 3 Nozzle G 2.2 Cat. no. W 000 302 529
 - 4 Skirt for gouging 120 A Cat. no. W 000 302 536
 - 5 Skate for gouging 120 A Cat. no. W 000 302 533

On site and workshop installations

Cutting capacity:

- Severance cut: 25 mm
- Quality cut: 20 mm

CITOCUT 25 with CITORCH P 25 torch and wear parts

Work of high quality and precision

9 product advantages:

- Universal cutting installation for all metals
- Very fast quality cutting up to 25 mm
- 3 ranges of power setting: range 1 from 0,5 to 12 mm range 2 from 3 to 20 mm, range 3 from 8 to 25 mm
- Torch wear parts optimisation device

- Simple and multi-use, for drag and distance cutting
- Reliable and robust for heavy duty use
- Torch with double trigger for safety
- Multi voltage installation
- Fitted wheels

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
220 V 230 V 380 V 400 V ±10% 3 ph 50-60 Hz	49 A (220 V) 47 A (230 V) 28.5 A (380 V) 27 A (400 V)	31 A (220 V) 29.5 A (230 V) 18 A (380 V) 17 A (400 V)	232 V	30 - 50 - 80 A	80 A (40%) 50 A (80%) 30 A (100%)	5 bars 180 l/min.	IP 23	H	500 x 855 x 755 mm	80 kg	EN 60974-1; -7; -10

To order

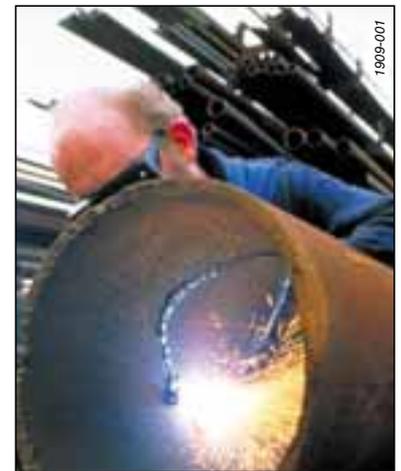
• Installation ready to use including:

- 1 CITOCUT 25 three-phase 230/400 V with primary cable 6 m
- 1 cutting torch length 5 m
- 1 earth cable 3 m with clamp
- 1 air hose 5 m
- 1 set of wear parts

Cat. no. W 000 261 829

• Options:

- Compass
Cat. no. W 000 302 512



CITORCH P 25 for drag and distance cutting

Maximum current at 60%: 80 A
Plasma gas: air

To order

• Air-cooled torch:

- CITORCH P 25 - 5 m
Cat. no. W 000 302 677

• Wear parts:

- 1 Torch body Cat. no. W 000 266 531
- 5 Wrench Cat. no. W 000 302 612

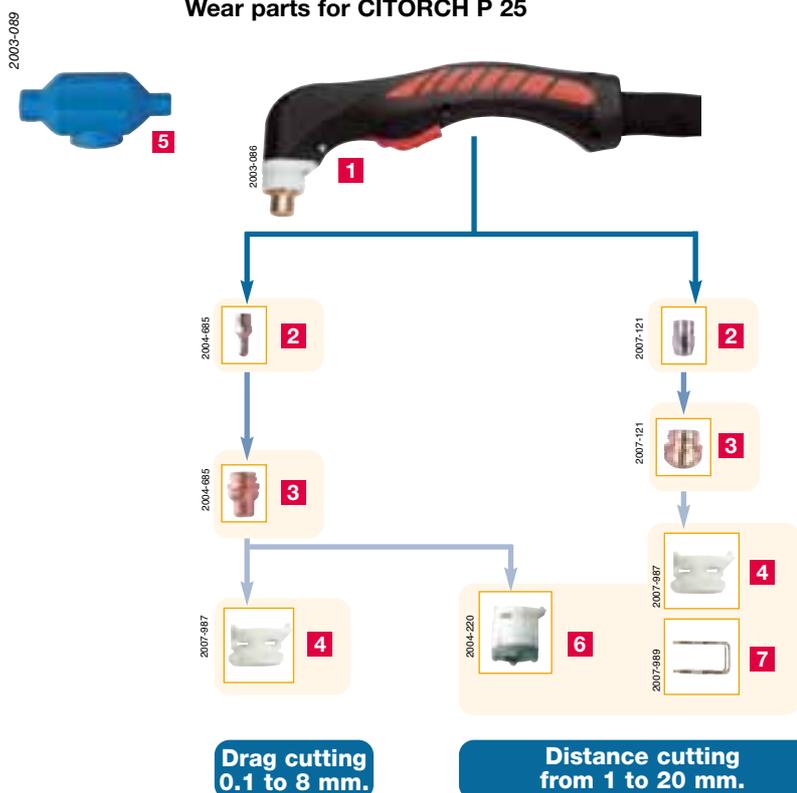
• Wear part for drag cutting:

- 2 FL electrode Cat. no. W 000 302 589
- 3 Nozzle L 1.2 Cat. no. W 000 302 588
- 4 TN skirt Cat. no. W 000 302 632

• Wear part for distance cutting:

- 2 C electrode Cat. no. W 000 302 593
- 3 Nozzle C 1.0 Cat. no. W 000 302 584
- 3 Nozzle C 1.2 Cat. no. W 000 302 585
- 3 Nozzle C 1.4 Cat. no. W 000 302 525
- 5 TN skirt Cat. no. W 000 302 632
- 4 TI skirt Cat. no. W 000 302 590
- 6 Skate 60 A Cat. no. W 000 302 598

Wear parts for CITORCH P 25



Drag cutting
0.1 to 8 mm.

Distance cutting
from 1 to 20 mm.

Cutting capacity:
 • Severance cut: 40 mm
 • Quality cut: 35 mm

CITOCUT 40 with CITORCH 40 torch and wear parts

Work of high quality and precision

9 product advantages:

- More power to cut large thicknesses up to 40 mm sheet
- Delivered complete with torch maintenance kit
- Torch wear parts optimisation device
- Simple and multi-use. The ideal tool for drag and distance cutting
- Multi-voltage installations

- Starting with blow-back (without HF)
 - Reliable and robust for a heavy duty use
 - Torch with patented wear parts
- 4 ranges of power setting:
- range 1: 0.5 to 15 mm
 - range 2: 3 to 25 mm
 - range 3: 8 to 35 mm
 - range 4: 8 to 40 mm
- Fitted wheels

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
220 V 230 V 380 V 400 V ±10% 3 ph 50-60 Hz	74 A (220 V) 71 A (230 V) 42 A (380 V) 40 A (400 V)	52 A (220 V) 50 A (230 V) 30 A (380 V) 28 A (400 V)	232 V	35 - 120 A	120 A (50%) 85 A (75%) 50 A (100%)	5 bars 200 l/min.	IP 23	H	500 x 855 x 705 mm	125 kg	EN 60974-1; -7; -10

To order

- Installation ready to use including:

- 1 CITOCUT 40 with primary cable 6 m
- 1 cutting torch length 6 m
- 1 earth cable 3 m with clamp
- 1 air hose 5 m

Cat. no. W 000 261 828

• Option:

- Compass
Cat. no. W 000 302 512



CITORCH P 40 for drag and distance cutting

Maximum current at 60%: 120 A

Plasma gas: air

To order

- Air-cooled 6 m torch:
- CITORCH P 40 Cat. no. W 000 302 651

- Air-cooled 15 m torch:
- CITORCH P 40 Cat. no. W 000 302 652

• Wear parts:

- 1 Torch body Cat. no. W 000 266 535
- 5 Wrench Cat. no. W 000 302 612

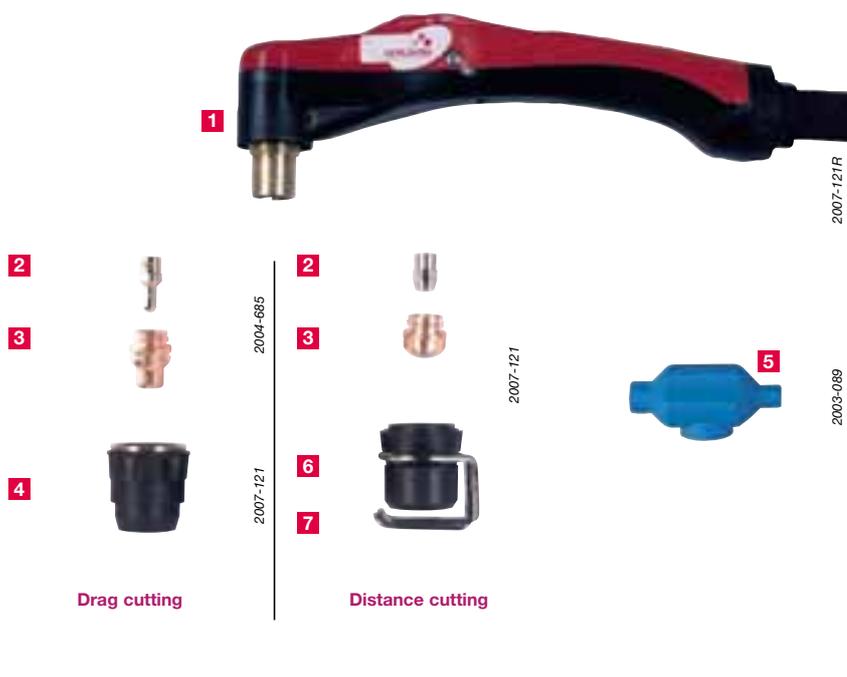
• Wear part for drag cutting:

- 2 FL electrode Cat. no. W 000 302 589
- 3 Nozzle L 1.0 Cat. no. W 000 302 587
- 3 Nozzle L 1.2 Cat. no. W 000 302 588
- 4 Drag skirt 120 A Cat. no. W 000 302 521

• Wear part for distance cutting:

- 2 C electrode Cat. no. W 000 302 593
- 3 Nozzle C 1.4 Cat. no. W 000 302 525
- 3 Nozzle C 1.6 Cat. no. W 000 270 006
- 3 Nozzle C 1.8 Cat. no. W 000 302 522
- 6 Distance skirt Cat. no. W 000 302 520
- 7 Skate 120 A Cat. no. W 000 302 518

Wear parts for CITORCH P 40



On site and workshop installation

Cutting capacity:
 • Severance cut: 50 mm
 • Quality cut: 40 mm

NERTAJET 50 with Z 5.0 torch and wear parts

Work of high quality and precision with contact cutting

10 product advantages:

- Multi-voltage three-phase
- Intensive work
- 100% duty cycle
- Well suited for stainless steels and light alloys with Ar/H₂ up to 50 mm
- Plasma gouging
- Manual or automatic applications

- Assistance gas use possible to improve quality cutting in large thickness
- Water cooled torches
- Chopper (secondary power transitions) technology.
- 5 ranges of power setting:
 - range 1: 0.5 to 6 mm
 - range 2: 2 to 13 mm
 - range 3: 4 to 25 mm
 - range 4: 8 to 35 mm
 - range 5: 10 to 50 mm

Power supply	Primary consumption (I max.)	Effective consumption	Open circuit voltage	Cutting current	Duty cycle 10 min. cycle (at 40 °C)	Air pressure and flowrate	Protection index	Insulation class	Dimensions (l x w x h)	Net weight	Standards
230 V 400 V 415 V 440 V ±10% 3 ph 50-60 Hz	108.8 A (230 V) 62.6 A (400 V) 60.3 A (415 V) 56.9 A (440 V)	108.8 A (230 V) 62.6 A (400 V) 60.3 A (415 V) 56.9 A (440 V)	356 V	20 - 150 A	150 A (100%)	6 bars 170 l/min.	IP 23 S	H	1 170 x 710 x 1 200 mm	260 kg	EN 60974-1; -7; -10

To order

- 1 NERTAJET 50 three-phase 50/60 Hz,

Cat. no. W 000 305 077

• Installations ready to use:

- Package "air" including:

- power source
- 1 torch 6 m
- 3 m earth cable with clamp
- 1 air hose 5 m
- 1 set of wear parts
- 1 protection kit

Cat. no. W 000 305 078

- Package "Ar/H₂ and N₂" including :

- power source
- 1 torch 6 m
- 3 m earth cable with clamp
- 5 m air hose
- 1 set of wear parts
- 1 protection kit

Cat. no. W 000 305 079



To order

• Option:

- Compass
Cat. no. W 000 302 512

Wear parts for Z 5.0 torch

• Wear parts:

- 1 Torch body Cat. no. W 000 302 513
- 2 Immersion tube Cat. no. 04 091 202
- 7 Electrode key Cat. no. 04 091 203
- 8 Hexagonal key Cat. no. 04 089 240

• Wear parts for distance cutting:

- 3 Argon Hydrogen electrode Cat. no. W 000 325 065
- 4 Compressed air electrode Cat. no. W 000 325 063
- 5 Nozzle Ø 1.0 40 A Cat. no. W 000 325 067
- 5 Nozzle Ø 1.2 60 A Cat. no. W 000 325 069
- 5 Nozzle Ø 1.6 100 A Cat. no. W 000 325 072
- 5 Nozzle Ø 1.8 150 A Cat. no. W 000 325 073
- 6 P flat skirt Cat. no. W 000 302 516

• Wear parts for gouging (air, N₂, Ar/Ar₂):

- 9 Argon Hydrogen electrode Cat. no. W 000 325 065
- 10 Nitrogen electrode Cat. no. W 000 325 064
- 10 Compressed air electrode Cat. no. W 000 325 063
- 11 Gouging nozzle Cat. no. W 000 302 515
- 12 C Conical skirt Cat. no. W 000 302 517

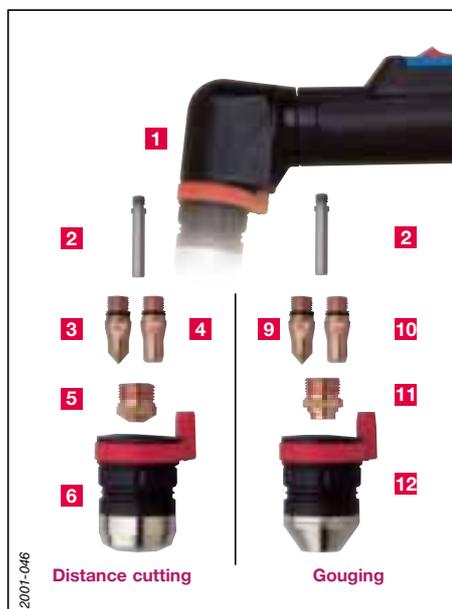
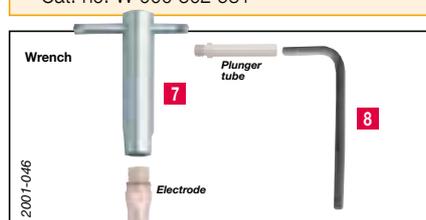
Torch for distance cutting and gouging

Maximum current at 100%: 150 A

Plasma gas: air, Nitrogen, Ar/H₂

To order

- Primary cable 5 m for input voltage 230 V:
- Cat. no. W 000 010 104
- Primary cable 5 m for input voltage 400/440 V:
- Cat. no. W 000 010 103
- Water-cooled 6 m torch:
- Cat. no. W 000 302 580
- Water-cooled 15 m torch:
- Cat. no. W 000 302 581





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