Gold City ®

Elettronica

Migliorare la qualità del Lavoro, per migliorare la qualità della Vita

R20001

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DIGITAL RECTIFIER WITH AMPERMINUTEMETER 10VOLT-10AMPERE 40 VOLT-2AMPERE
(REL.0 13/03/09)

FEATURES HARDWARE

-Housing: Sheet steel, painted. Dimensions 145x90 mm L209
-Display: 64x128 graphic. Blue background white letters
-Power   230 Vac-Supply Changes permitted + / - 10% of rated voltage.Consumption 100Watts
-Transformer 7VA with voltage of 2500 Volt insulation constructed in accordance with
              CEI 14-6 and VDE 0551
Calibration: Digital with buttons on the front
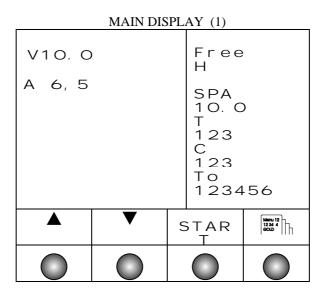-CE: Declaration of Conformity CEI50081-1 and IEC 50082-2 and IEC 50082-1

FEATURES

The rectifier can operate at voltage or current priorities. It can work in a "free" to "time" or "click".
Adjustments for low power can operate in a mode that allows a more stable and precise adjustment. In the
current priority is possible to limit the voltage supplied.
It 'ran a tote and a unit counter part. Option setting ramps work.

Option can be enabled with PT100 temperature control and power unit for a heater 220Volt / 3AMax.

DESCRIPTION OF CONTROLS

MAIN DISPLAY (1)

V 1 O. O A 6, 5		F r e e H S P A 1 O. O T 1 2 3 C 1 2 3 T o 1 2 3 4 5 6
▲	▼	STAR T	Menu 12 12 34 4 GOLD
⬤	⬤	⬤	⬤

With the arrow you can change the value of set-point current or voltage

With the S T A R T button is controlled rectifier driving. With the rectifier on the march will show the message STOP to S T O P the rectifier

Free Time Hits indicates the operating mode

H L indicates the available power

SPA indicates the operation current control

SPV indicates the operating voltage control
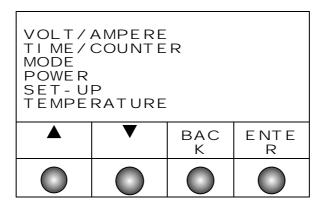
T indicates the long-running power rectifier Free

C indicates the count shots

To indicate the totalizer of the shots

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PRESS THE BOTTON Menu 12 12 34 4 GOLD **THE DISPLAY SHOWS**

<u>SETTINGS VISUALIZATION(2)</u>

VOLT / AMPERE			
TIME / COUNTER			
MODE			
POWER			
SET - UP			
TEMPERATURE			
▲	▼	BACK	ENTER
◯	◯	◯	◯

With the arrow buttons to select the desired function

With the BACK button to return to the display (1)

With the ENTER key is accessed:

Volt / Amp: Allows you to select the operation in volts or amps

COUNTER-TIME: Set the time of operation, the unit counter or reset the unit counter and totalizer

MODE: Lets you choose the free running, time or shots

POWER: Allows you to adjust the controls depending on power output

SET_UP: Lets you enter menu setting password

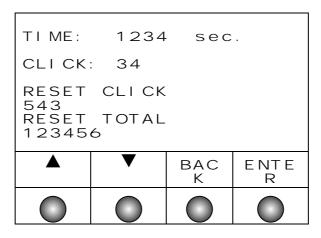 TEMPERATURE: Set the temperature control bath (if enabled)

With the BACK button to return to the display (1)

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```
           WORKING  MODE

VOLT
AMPERE


     Vmax. 3, 0  in  Ampere
┌─────────┬─────────┬─────────┬─────────┐
│    ▲    │    ▼    │  BAC    │  ENTE   │
│         │         │   K     │   R     │
├─────────┼─────────┼─────────┼─────────┤
│   ◯     │   ◯     │   ◯     │   ◯     │
└─────────┴─────────┴─────────┴─────────┘
```

You click operation Volt or Ampere.
Operating Amps you can set the maximum volt rectifier that can reach
With the back button the display returns to the display (1)

```
TIME:    1234   sec.

CLICK:   34

RESET  CLICK
543
RESET  TOTAL
123456
┌─────────┬─────────┬─────────┬─────────┐
│    ▲    │    ▼    │  BAC    │  ENTE   │
│         │         │   K     │   R     │
├─────────┼─────────┼─────────┼─────────┤
│   ◯     │   ◯     │   ◯     │   ◯     │
└─────────┴─────────┴─────────┴─────────┘
```

Allows you to set the lighting time of the rectifier if the same is set with operation time
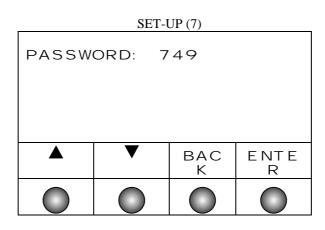It allows you to set the shots power rectifier if the same set-running shots

MODE (5)

```
FREE               CLIK


TIME               PROG

┌─────────┬─────────┬─────────┬─────────┐
│    ▲    │    ▼    │  BAC    │  ENTE   │
│         │         │   K     │   R     │
├─────────┼─────────┼─────────┼─────────┤
│   ◯     │   ◯     │   ◯     │   ◯     │
└─────────┴─────────┴─────────┴─────────┘
```

Allows you to set the operating mode of the rectifier
Free: The rectifier works with start and stop
Time: The rectifier part with the start and stop automatically when the time
Click: The rectifier part with the start and stop at the end of the shots
Prog. The rectifier works with the recipe ramps set (if enabled)

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POWER (6)

```
 _____
|                                       |
| S E L E C T   P O W E R                |
|                                       |
|                                       |
|                                       |
|_____ _|
| HI GH  |        |        | L OW        |
|  ( )   |  ( )   |  ( )   |  ( )        |
|_____|_____|_____|_____|
```

Allows you to set the output power from the rectifier. With low power are unable to obtain a more precise control but with little power available (max. 10W)
After choosing the power the display returns to the display (1)

SET-UP (7)

```
 _____
|                                       |
| P A S S W O R D :    7 4 9             |
|                                       |
|                                       |
|                                       |
|_____ _|
|   ▲    |   ▼    | BAC    | E NT E      |
|        |        |  K     |   R         |
|  ( )   |  ( )   |  ( )   |  ( )        |
|_____|_____|_____|_____|
```

Provides access to various configuration and calibration of rectifier

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SET-UP

PASS   30

Parametro	Display	Descrizione	Limiti
Decimal Volt	P1	0 = No decimal (999) 1 = A decimal (99,9) 2 = Two decimal places (9.99)	0-2
Volt full scale	P2	And 'the value that shows the instrument with the input voltage to 10.0 Volts	0-200
Decimal Ampere	P3	No decimal (999) 1 = A decimal (99,9) 2 = Two decimal places (9.99) 3 = Three decimal places (9.999)	0-3
Ampere full scale	P4	And 'the value of the size of the rectifier	0-9999
Pulse Divider	P5	Determines the scale of the unit counter. (See Calculation pulse divider). NB The display of the shots is in A *min at least one decimal place	1-9999
Stability of the value in amperes	P6	Indicates the average stabilization of reading. The higher the value introduced and becomes more stable reading	0-99
Stability of the value Volt	P7	Indicates the average stabilization of reading. The higher the value introduced and becomes more stable reading	0-99
Forcing range of zero value in amperes	P8	Indicates the band around the zero point where the viewer is forced to zero	0-99
Forcing strip of zero value in Volt	P9	Indicates the band around the zero point where the viewer is forced to zero	0-99
Load resistance	P10	Value of load resistance	0-99
Enabling temperature	P11	0 = The temperature control is not abilitato1 = The temperature control is enabled	0-1

TARATURE   RADDRIZZATORE

PASS   12

Parametro	Descrizione	Limiti
P1	It 's the maximum power that can supply the rectifier	0-100
P2	And 'the unit with an error proportional gain	0-1,00
P3	It's the ford full	0-9,99
P4	It 's the range of error in bits which is blocked by the integral time	0-10
P5	It's off-set the value of analog output	0-100
P6	Delta temperature	0-10
P7	Proportional gain temperature	0-99
P8	Gain derived temperature	0-99.9
P9	Time ignition heating set-point below 40 degrees	0-9,9

Password
45 amps 0-60mV acquisition
78 acquisition Volt 1-10V
Setting ignition SCR 55 (0-100%) 110V (15-70) 220 (10-50)
72 Linearization temperature

DIVIDER PULSE CALCULATION

The maximum current (full scale of the instrument) are counted 600 shots per second, with divider = 1.
To calculate the divisor to be introduced, the formula is: DIV = $\dfrac{36000 \times CP}{CS \times FS}$

dove: DIV= Divide by introducing
CP= Current fixed
FS= Full scale current (maximum current shunt)
CS= Call meter to be reached in 1 minute (5.0 shots = 50 shots)

Example: If I have a galvanic bath for 5 Amps. and I want to get shots in one minute 5.0 I introduce the value of DIV:

$$\frac{36000 \times 5}{50 \times 5} = 720$$

F.S. Ampere	DIVISORE		F.S. Ampere	DIVISORE
1,000A	3600		6,000A	600
2,000A	1800		7,000A	514
3,000A	1200		8,000A	450
4,000A	900		9,000A	400
5,000A	720		10,00A	360

5 POLE TERMINAL CONNECTIONS FOR TEMPERATURE

Morsetto	MORSETTIERA 5 POLI	DESCRIZIONE
1	RISCALD.1	Contact a zero crossing SCR heating
2	RISCALD.2	Contact a zero crossing SCR heating
3	PT100 +	Connecting termorestistace PT100
4	PT100 +	Connecting termorestistace PT100
5	PT100 -	Connecting termorestistace PT100

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CODICE DI ORDINAZIONE

| R | 2 | 0 | 0 | 0 | 1 |

The format	Kind of hardware	Code of hardware	Code of software

PROPERTIES 'OF INFORMATION

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