## 30 WATTS

12 V (Adj. 10 to 15 V )
2,5 A


## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 10 to 15 V . Delivered to $12 \mathrm{~V} \pm 1 \%$
- Regulation : < 25 mV for a load variation from 0 to $100 \%$
$<5 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
- Ripple
$<3 \mathrm{mV}$ rms including:
$<3 \mathrm{mV}$ peak to peak of the switching signal
$<8 \mathrm{mV}$ peak to peak of the signal at 100 Hz
< 10 mV peak to peak of switching spikes
- Dynamic regulation : <1\% for a load variation from 10 to $90 \%$
- Indicator : green power-on LED indicator.

Current

- Max I

3 A to 10 V
2,5 A to 12 V
2 A to 15 V

## Power

- Max output power : 30 W.
- Efficiency : > $80 \%$ at the full power ( 30 W in ouptut)


## Protection

- Agains short circuit, by current limit.
- Agains overcurrent on main input, by fuse.
- Against transient pulse on the primary by varistor.


## Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV) according to EN 61010-1.
- EMC : Complies with EN 61326-1, performance criteria B, and EN 55011, ISM Group I, Class B.
- Protection level : IP 30.
- Input voltage : 190 to 264 Volts, $50 / 60 \mathrm{~Hz}$.
- Mains input

C8 socket with CEI320 C7 removable cable
(2 poles double insulation).

- Power consumption : 37 W max.
- ON/OFF control : toggle switch
- Dielectric strength : 3000 VAC between input and output.
- Presentation
polycarbonate case screenprinted.


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## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 10 to 15 V .
- Regulation : < 15 mV for a load variation from 0 to $100 \%$
$<2 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
- Ripple
$<3 \mathrm{mV}$ rms including:
$<3 \mathrm{mV}$ peak to peak of the signal at 100 KHz
$<5 \mathrm{mV}$ peak to peak of the signal at 100 Hz
< 12 mV peak to peak of switching spikes
- Hold-up time
- Indicator

25 ms at half load and 12 ms at full load ( 198 V line input).
green power-on LED indicator.
Overheat or overcurrent red LED "status" indicator.

## Current

- Max I

5,5 A in short circuit condition.
5 A from 10 to 12 V
4 A to 15 V

## Power

- Max output power : 60 W.


## Protection

- Agains short circuit protection, by current limit.
- Against overtemperature by thermal shutdown.
- Agains overcurrent on main inpout, by fuse.


## Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV) according to EN 61010-1.
- EMC : Complies with EN 61326-1, performance criteria B, and EN 55011, ISM Group I, Class B.
- Protection level

IP 30.

- Input voltage
- Mains input

190 to 264 Volts, $50 / 60$ Hz.
: C8 socket with CEI320 C7 removable cable
(2 poles double insulation).

- Power consumption: 74 W max.
- ON/OFF control : toggle switch
- Dielectric strength

3000 VAC between input and output.

- Presentation


## EAN CODE :3760244880161

PRECISE: Output ripple < 3 mV rms.
COMPLIANT : EN 61000-3-2 Built in actif power corrector (PFC).
PRACTICAL: Output voltage adjustable from 10 to 15 V .

- ON/OFF switch, power-on and output fault indicators.

PROTECTED: Short circuit protection.

- Temperature controlled fan cooling.


## 120 WATTS <br> 12 V (Adj. 10 to 15 V <br> 10 A



## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 10 to 15 V .
- Regulation : < 25 mV for a load variation from 0 to $100 \%$.
$<1 \mathrm{mV}$ for a line variation from - 10 to $+10 \%$.
- Ripple
: < 3 mV rms including:
$<5 \mathrm{mV}$ peak to peak of the signal at 100 kHz
$<5 \mathrm{mV}$ peak to peak of the signal at 100 Hz
< 40 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator
green power-on LED indicator.
"status, output fault" red LED.


## Current

- Max I
: 10,5 A in short circuit condition.
10 A from 10 to 15 V


## Other specifications

- Safety
- EMC
- Protection level
- Input voltage
- Mains input
(2 poles double insulation).
- Power consumption : 170 W max.
- Power factor : 0.99 (built with PFC).
- ON/OFF control : toggle switch
- Dielectric strength : 3000 VAC between input and output.
- Presentation : metal case with epoxy finish.


## Power

- Max output power : 150 W.


## Protection

- Against short circuit by current limit.
- Agains overcurrent on main input, by fuse.
- Against overload by voltage limit to 17 V .



## 300 WATTS

12 V (Adj) 10 to 15 V 25 A


## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 10 to 15 V with fine adjustment.
- Regulation $\quad:<70 \mathrm{mV}$ for a load variation from 0 to $100 \%$.
- Ripple
$<1 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
< 3 mV rms including:
$<8 \mathrm{mV}$ peak to peak of the signal at 100 kHz
$<3 \mathrm{mV}$ peak to peak of the signal at 100 Hz
< 50 mV peak to peak of switching spikes
- Internal resistance : < $4 \mathrm{~m} \Omega$.
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator : green power-on LED indicator. overheat or overvoltage red LED indicator.


## Current

- Max I
:25,5 A in short circuit condition. 25 A from 10 to $12 \mathrm{~V}, 20 \mathrm{~A}$ at 15 V .


## Power

- Output power : 300 W from 12 to $15 \mathrm{~V}, 250 \mathrm{~W}$ to 10 V .


## Paralleling mode

- Load share controller (1 wire) on 2 mm safety sockets.


## Protections

- Against short circuits by current regulation.
- Against overcurrent on main input, by internal fuse.
- Against output overload by voltage limiting to 17 V .
- Against overheat by controlled fan.


## Other specifications

- Safety
- EMC
- Protection level
- Input voltage
- Mains input
- Power consumption
- Power factor
- ON/OFF control
- Dielectric strength : 3000 VAC between input and output.
- Presentation : metal case with epoxy finish.


## 30 WATTS

24 V (Adj. 20 to 30 V )
1,25 A


## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 20 to 30 V . Delivered to $24 \mathrm{~V} \pm 1 \%$
- Regulation : < 20 mV for a load variation from 0 to $100 \%$
$<5 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
- Ripple
$<3 \mathrm{mV}$ rms including:
$<3 \mathrm{mV}$ peak to peak of the switching signal
$<4 \mathrm{mV}$ peak to peak of the signal at 100 Hz
$<15 \mathrm{mV}$ peak to peak of switching spikes
- Dynamic regulation : <0,5\% for a load variation from 10 to $90 \%$
- Indicator : green power-on LED indicator.

Current

- Max I

1,5 A to 20 V
1,25 A to 24 V
1 A to 30 V

## Power

- Max output power : 30 W.
- Efficiency : >82\% at the full power (30 W in ouptut)


## Protection

- Againt short circuit protection, by current limit.
- Agains overcurrent on main input, by fuse.
- Against transient pulse on the primary by varistor.


## Other specifications

- Safety
- EMC : Complies with EN 61326-1, performance criteria B, and EN 55011, ISM Group I, Class B.
- Protection level

IP 30.

- Input voltage
- Mains input
to 264 Volts, 50/60 Hz.
: C8 socket with CEI320 C7 removable cable
(2 poles double insulation).
- Power consumption : 35 W max.
- ON/OFF control : toggle switch
- Dielectric strength : 3000 VAC between input and output.
- Presentation


## 60 WATTS

5 V to 29 V
2,5 A to 24 V
$3,5 \mathrm{~A}$ to 12 V
4 A to 5 V
and lead-acid battery
charger 12 V or 24 V

## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : ajustable from 5 to 29 V by 12 -position switch, and fine adjustment
switch positions $\quad: 6,8,10,12,14,16,18,20,22,24,26,28$ Volts
fine adjustment range : $\pm 1$ Volt, whatever the switch setting
12 and 24 V lead-acid battery charger positions identified by two LED indicators
- Accuracy
$: \pm 1 \%$
- Regulation
- Ripple
$<50 \mathrm{mV}$ at 5 V a 4 A and $<10 \mathrm{mV}$ at 29 V a 2,1 A for a load variation from 0 to $100 \%$.
$<1 \mathrm{mV}$ at 29 V a 2, 1 A and $<4 \mathrm{mV}$ at 5 V a 4 A for a line change from -10 to $+10 \%$.
< 3 mV rms including:
$<3 \mathrm{mV}$ peak to peak of the 100 kHz signal
< 4 mV peak to peak of the 100 kHz signal
$<10 \mathrm{mV}$ peak to peak of switching transients
- Internal resistance
- Hold-up time
- Indicators

Current

- Max I

25 ms at half load and 12 ms at full load.
(190 V line input)
Green LED indicator: "power supply operating" Yellow LED indicator: " 12 V and 24 V charger position" Red LED indicator: "Status, output fuse broken"

4,2 A in short circuit condition
4 A to 5 V
3,5 A to 12 V
2,5 A to 24 V
2,1 A to 29 V

## Charger of the batterie

- Rated capacity of the lead-acid batteries with elctrolyte free: 35 Ah for 12 V and 20 Ah for 24 V .
- Minimum capacity of the lead-acid batteries sealed: 10 Ah for 12 V and 7 Ah for the 24 V .
(In all the cases, to refer to the note of the batteries manufacturer)



## Power

- A linear function of voltage from 60 W to 20 W (29 to 5 Volts).


Protection

- Short circuit protection, by current limit.
- Against overcurrent on main input, by fuse.
- Battery reverse polarity protection by output fuse.


## Other specifications

- Safety
- EMC
- Protection level
- Input voltage
- Mains input
: Classe II, double insulation, according to EN 61010-1 and EN 60335-2-29.
: Complies with EN 61326-1, performance criteria B, and EN 55011, ISM Group I, Class B.
: IP 30.
: 190 to 264 Volts, $50 / 60 \mathrm{~Hz}$.
: C8 socket with CE1320 C7 removable cable (2 poles double insulation).
- Power consumption : 71 W max.
- ON/OFF control : toggle switch
- Dielectric strength : 3000 VAC between input and output.
- Presentation : Polycarbonate case.



## 120 WATTS

24 V (Adj. 20 to 29 V ) 5 A


## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage
- Regulation : adjustable from 20 to 29 V .
- Ripple
: < 20 mV for a load variation from 0 to 100\%.
$<1 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
: $<3 \mathrm{mV}$ rms including:
$<5 \mathrm{mV}$ peak to peak of the signal at 100 kHz
$<3 \mathrm{mV}$ peak to peak of the signal at 100 Hz
< 40 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator : green power-on LED indicator.
"status, output fault" red LED.


## Current

- Max I
: 5,5 A in short circuit condition.
5 A from 20 to 29 V


## Power

- Max output power : 150 W.


## Protection

- Short circuit protection, by current regulation.
- Agains overcurrent on main input, by fuse.
- Output overload protection by voltage limit to 33 V .


## Other specifications

- Safety
: Classe II, double insulation, according to EN 61010-1.
- EMC
- Protection level
- Input voltage
- Mains input
: Complies with EN 61326-1, performance criteria B, and EN 55011, ISM Group I, Class B.
: IP 30.
: 190 to 264 Volts, $50 / 60 \mathrm{~Hz}$.
: C8 socket with CEI320 C7 removable cable
(2 poles double insulation).
- Power consumption : 170 W max.
- ON/OFF control : toggle switch
- Power factor $: 0.99$ (built with PFC).
- Dielectric strength : 3000 VAC between input and output.
- Presentation : metal case with epoxy finish.

PRECISE :Output ripple < 3 mV rms.
COMPLIANT : EN 61000-3-2 Built in actif power corrector (PFC).
PRACTICAL: Output voltage adjustable from 20 to 30 V .
15 A at 20 V and 10 A at 30 V .
POWERFUL : to cumulate $n+1$ (Parallel active mode).
PROTECTED : against short circuit.
QUIET :Temperature controlled fan cooling.

## 300 WATTS <br> 24 V (Adj. 20 to 30 V <br> 12,5 A



## Specifications

## Voltage

- Floating outputs on 4 mm safety sockets.
- Output voltage : adjustable from 20 to 30 V with fine adjustment.
- Regulation
- Ripple
- Internal resistance
- Hold-up time
- Indicator
: $<40 \mathrm{mV}$ for a load variation from 0 to $100 \%$.
$<1 \mathrm{mV}$ for a line variation from -10 to $+10 \%$.
$<3 \mathrm{mV}$ rms including :
$<5 \mathrm{mV}$ peak to peak of the signal at 100 kHz
$<3 \mathrm{mV}$ peak to peak of the signal at 100 Hz
$<40 \mathrm{mV}$ peak to peak of switching spikes
$<4 \mathrm{~m} \Omega$.
25 ms at half load and 12 ms at full load (190 V line input).
green power-on LED indicator. overheat or overvoltage red LED indicator.


## Other specifications

- Safety
: Class II, double insulation, complies with EN 61010-1.
- EMC

Complies with EN 61326-1 performance criteria B, and EN 55011, ISM Group I, Class B.

- Protection level : IP 30.
- Input voltage : 190 to 264 Volts, $50 / 60 \mathrm{~Hz}$.
- Mains input
: C8 socket with CEI320 C7 removable cable
(2 poles double insulation).
- Power consumption : 360 W max.
- ON/OFF control : toggle switch
- Power factor : 0.99 (built with PFC).
- Dielectric strength : 3000 VAC between input and output.
- Presentation : metal case with epoxy finish.


## Current

- Max I
: $15,5 \mathrm{~A}$ in short circuit condition.
15 A at $20 \mathrm{~V}, 12,5 \mathrm{~A}$ at $24 \mathrm{~V}, 10 \mathrm{~A}$ at 30 V .


## Power

- Constant output power : 300 W from 20 to 30 V .


## Paralleling mode

- Load share controller (1 wire) on 2 mm safety sockets.


## Protections

- Against short circuits, by current regulation.
- Against overcurrent on main input, by internal fuse.
- Against output overload, by voltage limit to 33 V .
- Against overheat by controlled fan.

