

# SWITCHPAC

## Switch Mode Power Supplies

SW- series



 **OLTRONIX**

Industrial Power Supplies b.v.

## Switch Mode Power Supplies



### Application

Industrial electronics and automatic control  
power engineering  
uninterruptible power systems  
cooperating with a battery bank  
fire protection automation and signalling  
telecommunications  
security systems

### Supplementary built-in functions

The basis of the SW series is a universal single output power supply which can be modified with supplementary built-in functions in order to create:

a UPS system; cooperation with a battery  
battery power supply with enhanced diagnostics and indication (EN 54-4 compliant)  
parallel operation  
additional outputs

### Characteristic features

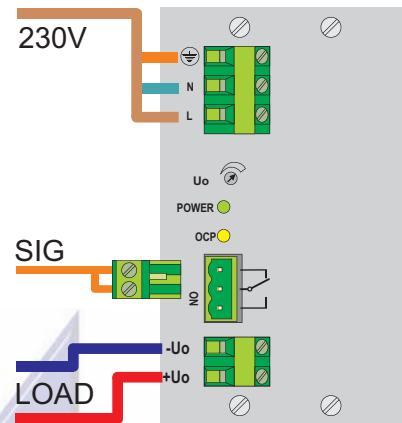
powered by either AC or DC  
modular construction with ability to mount on a DIN rail, Euro cassette or in a 19" industrial rack  
easy to modify into the desired execution, including the ability to mount a PCB to realize a requested function.  
a function requested by the customer

## Basic model - single output universal power supply

### Features and functions of all models

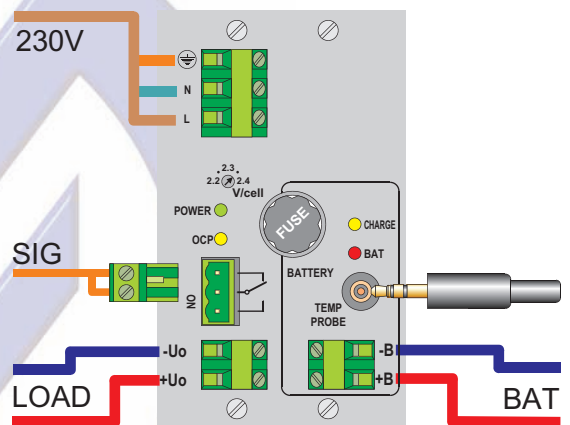
- input voltage: 230 VAC or 220 VDC
- visual indication of correct operation and current limitation
- relay indication (three dry contacts) of correct operation
- all inputs and outputs on the front panel
- three position switch of the output voltage is available on the bottom shield: basic voltage, floating mode voltage for a VRLA battery and voltage to charge a classical lead-acid battery \*)
- additional  $\pm 5\%$  adjustment of the output voltage, available on the front panel

\*) this function cannot be considered as a UPS system



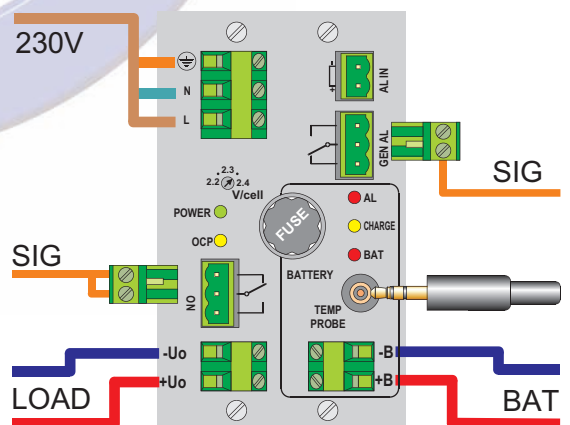
## Power supply to cooperate with a battery

- terminal to connect a battery
- floating mode with temperature compensation of the charging voltage (the temperature probe in the set)
- equalizing mode
- visual indication of charging, battery mode and low battery
- protection of the battery bank against too low discharge
- fused battery circuit
- four position switch of the charging current, available on the top shield of the casing
- tuning of the floating mode voltage (V/cell), available on the front panel
- common bus with negative polarity



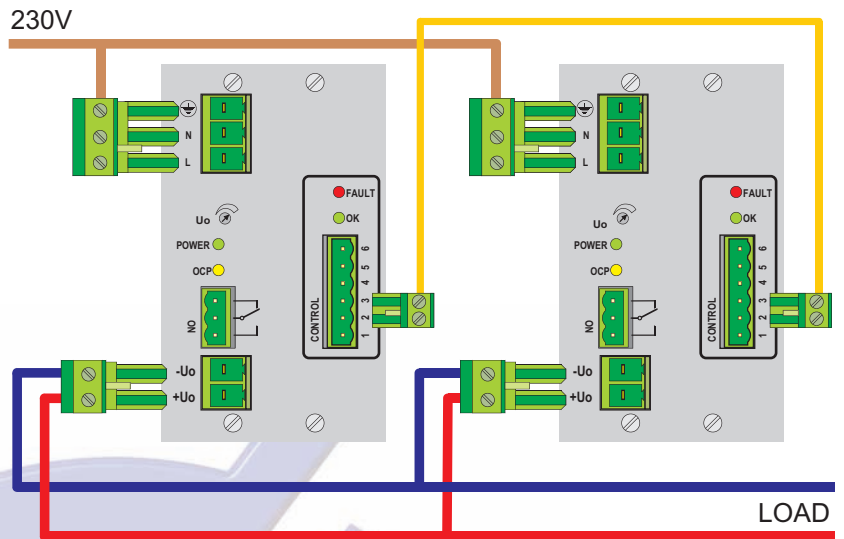
## Battery power supply with enhanced diagnostics and indication (EN 54-4 compliant)

- terminal to connect a battery
- floating mode with temperature compensation of the charging voltage (the temperature probe in the set)
- equalizing mode
- visual indication of charging, battery mode, low battery and failed battery test
- visual and relay indication of all alarm states
- protection of the battery bank against too low discharge
- fused battery circuit
- four position switch of the charging current, available on the top shield of the casing
- output of the common alarm (three dry contacts are available)
- tuning of the floating mode voltage (V/cell), available on the front panel
- common bus with negative polarity
- input of an external alarm (the common bus as a reference)



## Power supply to work in parallel

- ability of cooperation up to 10 units without usage of additional external circuits (eg. or-ing diodes) to increase power or reliability (redundancy)
- load current equally distributed among cooperating units
- ability of hot swap \*)
- visual signaling of incorrect and correct parallel work
- control socket
- ability to connect an external system to control voltage (e.g. a potentiometer or active temperature probe)



\*) without an active system to limit the transient output current.

## Supplementary outputs

- supplementary outputs of voltages other than the basic one - in the given example they are +5V and  $\pm 15V$ , made available in a form of a single socket
- supplementary visual indication of the presence of the supplementary voltages
- the outputs of the supplementary voltages could be galvanically isolated from the output of the basic voltage
- the outputs of the supplementary outputs could be mutually galvanically isolated

## Supplementary function according to user's specification

We offer the possibility to mount, inside the unit, a PCB of dimensions 85 x 60mm and maximal width of 15-30 mm with an appropriate adjustment of the front panel. In this way the power supply becomes a customer's device - eg. controller - with the power supply.

## Supplementary options

- Euro cassette
- 19" cabinet
- cassette for battery bank
- batteries

## Other possible versions on request

- input voltage of 115VAC (110VDC)
- untypical output voltages up to 60V
- no PFC
- other special requests

## Type designation

Example: SW 300B 24V 12A

300	type
B	model ( S=standard, B=UPS, P=according EN54-4, R=parallel)
24V	nominal output voltage
12A	maximal output current

## Input

Frequency	47...53 Hz
Power factor	0.95
Input voltage	184...253 VAC 165...297 VDC *)

\*) for types SW 151, 201, 301 = 187V

## Output

	SW 151	SW 200/201	SW 300/301	SW 400	SW 600
	Maximal output current (power)				
12 V	10A - (125W)	12A - (150W)	16A - (200W)	24A - (300W)	33A - (400W)
24 V	6A - (150W)	8A - (200W)	12A - (300W)	16A - (400W)	24A - (600W)
48 V	3A - (150W)	4A - (200W)	6A - (300W)	8A - (400W)	12A - (600W)

## Specification

	SW 151	SW 200/201	SW 300/301	SW 400	SW 600
Regulation	0,50%	0,50%	0,50%	0,50%	0,50%
Output voltage:					
12 V	12 VDC ±5% for models S and R, 10...14.4 VDC for models B and P				
24 V	24 VDC ±5% for models S and R, 20.2...28.8 VDC for models B and P				
48 V	48 VDC ±5% for models S and R, 40...57.6 VDC for models B and P				
Efficiency	75% up to 85%, depending on model				
Temp comp coeff	-4.5 mV/ °C/Cell				
Temp range floating mode	-5...+35 °C				
Working temp range	-33...+70 °C				
Protection	IP20				

## General

	SW 151	SW 200/201	SW 300/301	SW 400	SW 600
Hotswap *)	yes	yes	yes	yes	yes
PFC (power factor corr)	no	yes/no	yes/no	yes	yes
Over voltage protection	yes	yes	yes	yes	yes
Temp probe **)	NTC	NTC	NTC	NTC	NTC
Cooling	convection	convection	forced	forced	forced

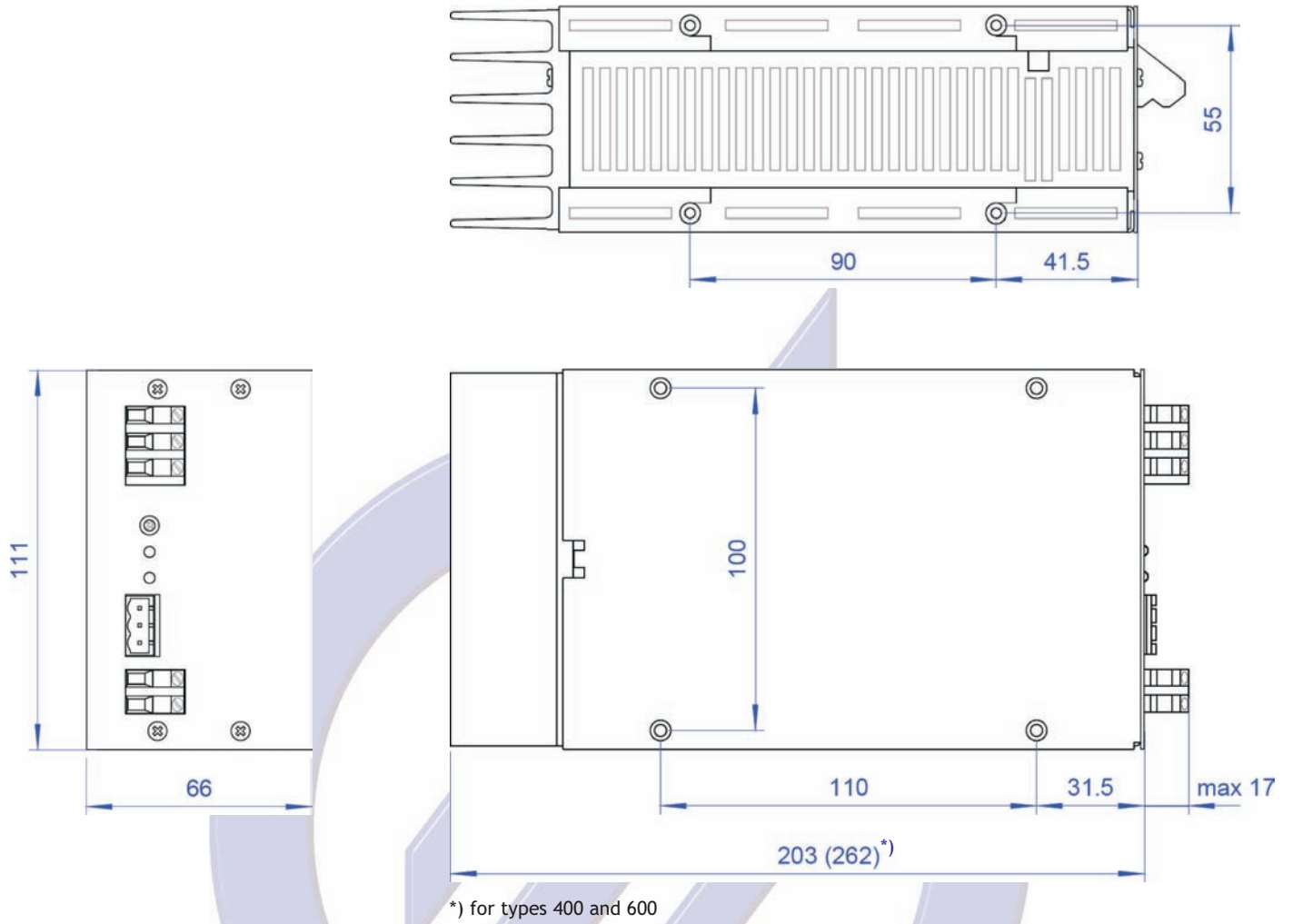
\*) only for model R

\*\*) for models B and P

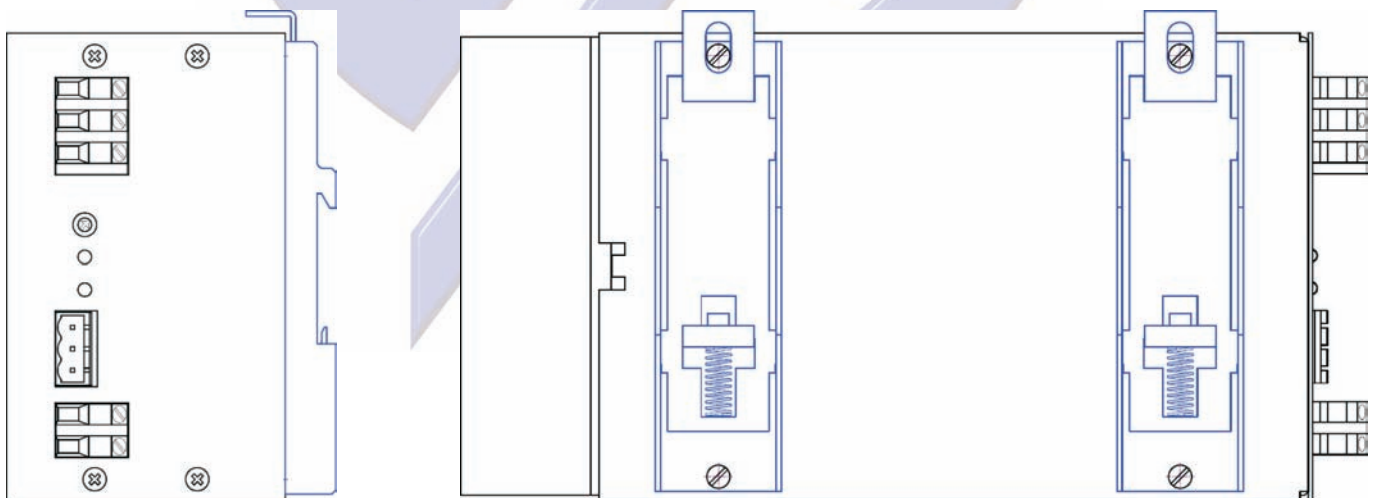
## Dimensions

	SW 151	SW 200/201	SW 300/301	SW 400	SW 600
Dimensions [mm]	66 x 111 x 203	66 x 111 x 203	66 x 111 x 262	67 x 111 x 262	68 x 111 x 262
Weight	1.2 kg	1.3 kg	1.3 kg	1.7 kg	1.7 kg

## Dimensions of power supplies of construction types 151, 200, 201, 300, 301, 400 and 600



## Mounting on a DIN rail





**OLTRONIX**

Industrial Power Supplies b.v.

Oltronix Industrial Power Supplies b.v.

Euroweg 15

NL-9351 EM LEEK

the Netherlands

Tel.: +31 (0)594 512 700

Fax: +31 (0)594 518 864

[info@oltronix.nl](mailto:info@oltronix.nl)

[www.oltronix.nl](http://www.oltronix.nl)