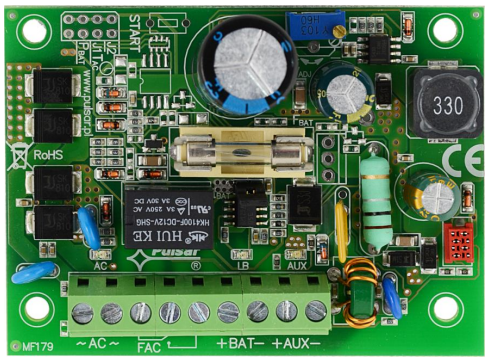
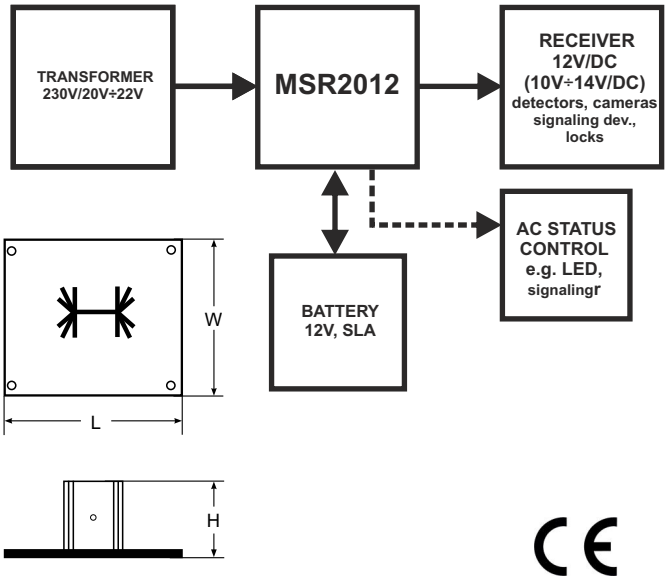
EN**

CODE: **MSR 2012** v.1.0/III

TYPE: **MSR 13,8V/2A Buffer switch mode power supply module with technical output FAC.**





CE

Features:

- DC 13,8V/2A uninterruptible power supply
- high efficiency 83%
- low voltage ripple
- battery charging and maintenance control
- battery output full protection against short-circuit and reverse polarity connection
- jumper selectable battery charge current 0,2A/0,5A
- LED indication
- FAC indication of the AC power collapse
- protections:
  - SCP short-circuit protection
  - OLP overload protection
  - OHP overheat protection
  - overvoltage protection
- warranty – 5 year from the production date

DESCRIPTION

A buffer PSU module is intended for an uninterrupted supply to devices requiring stabilised voltage of **12V DC (+/-15%)**. The PSU module provides voltage of **13,8V DC** with current capacity:

1. Output current 2A + 0,2A battery charge
2. Output current 1,7A + 0,5A battery charge

Total device current + battery: 2,2A max.

In case of power failure, a battery back-up is activated immediately.

MSR series power supply module

Buffer switch mode power supply module 13,8V DC with technical output

SPECIFICATIONS	
Mains supply	20V÷22V AC 50VA min. (e.g. AWT5161820, AWT037)
Current up to	2,5A max.
Power	34W
Efficiency	83%
Output voltage	11V ÷ 13,8V DC – buffer operation 10V ÷ 13,8V DC – battery-assisted operation
Output current	**2A + 0,2A battery charge** **1,7A + 0,5A battery charge**
Voltage adjustment range	12V ÷ 14,5V DC
Ripple	40 mV p-p max.
Battery charging current	0,2A / 0,5A - I_{BAT} jumper selectable
Short-circuit protection SCP	Electronic - current limitation and/or activation of the F_{BAT} melting fuse in the battery circuit (failure requires fuse replacement). Automatic return.
Overload protection OLP	110% ÷ 150% (@25ºC) of module power supply - limitation with the PTC automatic fuse, manual restart (the fault requires disconnection of the DC output circuit)
Battery circuit SCP and reverse polarity protections	3,15A - current limitation, F_{BAT} fuse (failure requires replace of the fuse-element)
Technical outputs: - FAC; indicates AC power failure	- R-relay type, 1A@ 30VDC/50VAC max. time lag about 10s
LED indication	Yes – LEDs
Operating conditions	2nd environmental class, -10°C ÷ +40°C
Dimensions	L=85, W=63, H=40 [+/- 2mm]
Net/gross weight	0,08kg / 0,13kg
Fixation	Dowel pins x4 (PCB fi=4,2 mm)
Declarations, warranty	CE, RoHS, 5 year from the production date
Connectors	Outputs: Φ0,41÷1,63 (AWG 26-14) Battery output BAT: 6,3F-2,5, 30cm