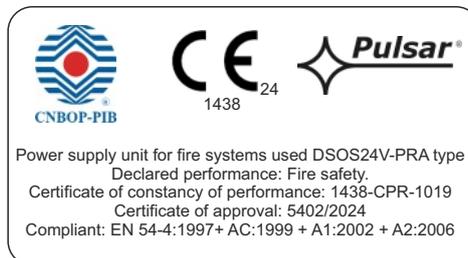


EN

CODE: **DSOS24V-PRA** v.1.0/1

NAME: **Firefighter's microphone power supply for VAS 24V Praesensa system**



### Features:

- Conformity with EN 54-4:1997+AC:1999+A1:2002+A2:2006, and pt. 12.2 according to Decree of the Ministry of Internal Affairs and Administration of 20.06.2007 (Journal of Laws No. 143, item 1002), as amended on 27.04.2010.
- Power supply for call station of DSO system, e.g. PRA-CSLW, PRA-CSLD and four PRA-CSLW, PRA-CSLD extensions by BOSCH
- 48 V DC uninterruptible power supply
- Recommended batteries 2x 17Ah /12V
- Built in DC/DC converter 24V/48V
- Low ripple voltage
- Microprocessor based automation system
- Measurement of resistance of battery circuit
- Automatic temperature compensation of battery charging
- Battery test
- Two-phase battery charging
- The accelerated battery charging function
- Battery circuit continuity control
- Battery voltage control
- Battery fuse status control
- Battery charging and maintenance control
- Deep discharge battery protection (UVP)
- Battery overcharge protection
- Battery output protection against short circuit and reverse connection
- Output voltage control
- Technical outputs – relay type
- Common failure output ALARM
- EPS technical output indicating 230 V AC power loss
- LED optical indication
- Protections:
  - SCP short circuit protection
  - OLP overload protection
- Convection cooling
- Warranty – 3 years

### DESCRIPTION

DSOS24V-PRA is designed for uninterruptible power supply of call stations (firefighter's microphone) used in DSO (Voice Alarm Systems) requiring stabilized voltage of 48 V DC (-5%/+5%).

In case of lack of main power, battery back-up is activated immediately. Power supply unit is placed in metal enclosure (color red RAL 3001) with space for 2x 17Ah/12V batteries. Power supply unit uses maintenance – free, AGM or gel batteries (17Ah/12V).



TECHNICAL DATA	
Supply voltage	~230 V AC
Current consumption	0,34 A @230 V AC
Power frequency	50 Hz
Output power PSU	14,4 W
Efficiency	82%
Rated voltage	48 V DC (-5%/+5%)
Output current	300 mA
Maximal resistance of battery circuit	300 mΩ
Ripple voltage	50 mV p-p max.
Current consumption by PSU during battery-assisted operation	80 mA
Battery charging current	0,8 A
Coefficient of temperature compensation of battery voltage	-36 mV/°C (-5°C – 40°C)
LoB low battery voltage indication	U <sub>bat</sub> < 23 V, during battery operation
Over voltage protection (OVP)	U > 32 V ±2 V, automatic recovery
Short-circuit protection SCP	F 4 A - F <sub>AUX1</sub> , F <sub>AUX2</sub> fuse (in case of a failure, fuse-element replacement required)
Overload protection OLP	105-150% PSU power, automatically recovered
Battery circuit protection SCP and reverse polarity connection	F 5 A - F <sub>BAT</sub> fuse (in case of a failure, fuse-element replacement required)
Deep discharge protection UVP	U < 20 V (± 2%) – disconnection of the batteries
Technical outputs: - EPS FLT; output indicating AC power failure - ALARM; indicating common failure	- type – relay: 1 A@ 30 V DC /50 V AC - 10s time lag. - type – relay: 1 A@ 30 V DC /50 V AC
Optical indication: - AC; a diode indicating AC power status  - DC; a diode indicating power status at the PSU output - FAILURE; a diode indicating failure	- green, normal status: permanently illuminated, failure: off - green, normal status: permanently illuminated, failure: off - yellow, normal status: failure: off, failure: permanently illuminated
Fuses: - F <sub>BAT</sub> - F <sub>AUX1</sub> - F <sub>AUX2</sub>	F 5 A/250 V F 4 A/250 V F 4 A/250 V
Operating temperature:	-5°C...+40°C
Enclosure:	Steel sheet DC01 1mm, color RAL 3001 (red)
Dimensions:	800 x 253 x 270 (WxHxD) [mm] (+/- 2)
Recommended batteries:	2x 17Ah / 12V (SLA)
Net/gross weight:	12,1 / 13,1 [kg]
Certification, Declaration, warranty:	CE, 3 years
Notes:	Convection cooling

