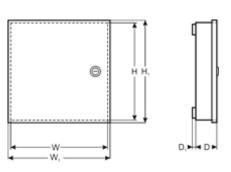


CODE: TYPE: EN54-3A17LCD v.1.1/VII EN54 27,6V/3A/2x17Ah/LCD power supply for fire alarm systems









CE

# "This product is suitable for the systems designed in compliance with the standards EN 54-4 and EN 12101-10"

Requirements	Requirements according to standards	PSU EN54-3A17LCD
External Power Supply failure indication	YES	YES
Two independent power supply outputs protected against short-circuit	YES	YES
Temperature-compensated battery charging	YES	YES
Measurement of the resistance of the battery circuit	YES	YES
Low battery indication	YES	YES
Deep discharge battery protection	YES	YES
Protection against short-circuit of the battery terminals	YES	YES
Blown battery fuse indication	YES	YES
Charging circuit failure indication	YES	YES
Low output voltage indication	YES	YES
High output voltage indication	YES	YES
Indication of power supply failure	YES	YES
Overvoltage protection	YES	YES
Short-circuit protection	YES	YES
Overload protection	YES	YES
Output of collective failure ALARM	YES	YES
EPS technical output	YES	YES
APS technical output	YES	YES
PSU technical output	-	YES
Input of an external failure indication EXTi	-	YES
Controlled relay output EXTo	-	YES
Remote battery test	-	YES
~230 V mains supply voltage measurement	-	YES
LCD optical indication	-	YES
Tamper indicating enclosure opening	-	YES

# EN54/LCD series power supply unit Power supply for fire alarm systems 27,6 V DC



### **PSU features:**

- In accordance with standards: EN 54-4, EN12101-10
- 27,6 V DC/ 3 A uninterruptible power supply
- battery housing for two 17 Ah/12 V batteries
- independently protected outputs AUX1 and AUX2
- high efficiency 84%
- low level of voltage ripple
- microprocessor-based automation system
- intelligent PSU overload protection
- measurement of the resistance of the battery circuit
- automatic temperature-compensated charging
- battery test
- two-stage battery charging process
- accelerated battery charging
- monitoring of the continuity of the battery circuit
- monitoring of the battery voltage
- monitoring of the battery fuse
- monitoring of charging and maintenance of the batteries
- deep discharge battery protection (UVP)
- battery overcharge protection
- battery output protection against short-circuit and reverse connection
- monitoring of the load current
- output voltage control
- fuse monitoring of AUX1and AUX2 outputs
- ~230 V mains voltage measurement
- "SERIAL" communication port with implemented MODBUS RTU protocol
- Power Security" is a free application for remote monitoring of power supplies (for PC and Android Phones)
- remote control (options: WiFi, Ethernet, RS485, USB)
- remote battery test (required additional modules)

- cooperation with optional EN54-LB4 or EN54-LB8 fuse modules
- optical indication of PSU overload OVL
- acoustic indication of failure
- adjustable delay for ~230 V power loss indication
- relay output of collective failure ALARM
- input of collective failure EXTi
- controlled relay output EXTo
- technical inputs/outputs with galvanic isolation
- EPS technical output indicating ~230 V power loss
- PSU technical output indicating PSU failure
- APS technical output indicating battery failure
- internal memory of PSU operating status
- optical indication LCD panel
  - readings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltage
  - failure indication
  - configuration of the PSU settings from the control panel
  - two levels of password protected access
  - operation memory of the PSU
  - failure memory
  - real time clock with battery backup
- protections:
  - SCP short-circuit protection
  - OLP overload protection
  - OHP overheat protection
  - OVP overvoltage protection
  - Surge protection
  - Antisabotage protection (Tamper)
- closing the enclosure lock
- convection cooling
- warranty 5 years from the production date

### **General description**

The buffer power supply has been designed for an uninterrupted supply of fire alarm systems, smoke and heat control systems, fire protection equipment and fire automatics requiring stabilized voltage of 24 V DC (± 15%). The PSU is fitted with two independently protected outputs AUX1 and AUX2, which supply voltage of **27,6 V DC** with a total output current:

Continuous operation Output current Imax a=2 A

#### Instantaneous operation Output current Imax b=3 A

In case of power loss, the PSU switches to battery power, providing uninterruptible power supply. The PSU is enclosed in a metal casing (color: RAL 3001 - red) with battery housing for two 17 Ah/12 V batteries. The PSU works with maintenance-free lead acid batteries made with AGM technology or gel technology.

# EN54/LCD series power supply unit Power supply for fire alarm systems 27,6 V DC

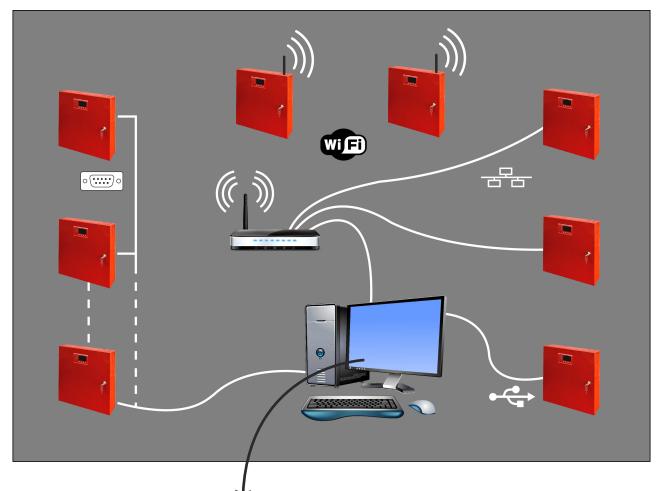


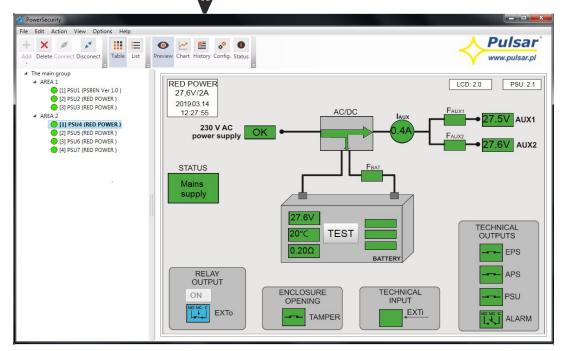
Mains supply         -230 V           Current consumption         0.58 A           Power frequency         60 Hz           Bits power         63 W           Events         22.0 V × 27 K V DC - buffer operation           Day C         22.0 V × 27 K V DC - buffer operation           Day C         22.0 V × 27 K V DC - buffer operation           Day C         20.0 V × 27 K V DC - buffer operation           Day C         20.0 V × 27 K V DC - buffer operation           Day D         20.0 V × 27 K V DC - buffer operation           Current consumption by the PSU         500 MDm           Extern to consumption by the PSU         18 Stam - LCD panel backlight off           Current consumption by the PSU         18 Stam - LCD panel backlight off           Current consumption by the PSU         18 Stam - LCD panel backlight off           Data State y voltage         40mV/C (5 % C + 40 °C)           Dow backey voltage indication         Ubat 2 32 V during battery mole           Oversold protection SCP         F5 A - F <sub>air</sub> melling fuse (failure requires fuse replacement)           Deveload protection OLP         Hardware - Software           Battery orbection OLP         Hardware - Software           Battery orbection OLP         Hardware - Software           Battery orbection OLP         Hardware - Softwa	Functional class EN 12101-10:2007	A
Current consumption         0.56 A           PSUP prover         63 W           PSUP prover         63 W           Efficiency         63 W           Output current         270 W 27 /5 V DC - buffer operation           Maximal resistance of the battery circuit         300 m 0 mm           Ripple voltage         980 / 27 / 27 / 20 C - buffer operation           Maximal resistance of the battery circuit         300 m 0 mm           Ripple voltage         980 / 27 / 27 / 20 C - buffer operation           Maximal resistance of the battery circuit         300 m 0 mm           Ripple voltage         980 / 27 m 2 / 27 / 27 / 20 C - buffer operation           Current consumption by the PSU         14           Confliction of the preserve supply is connected with the communication interface or fus           Battery charging current         1A           Combinition of the preserve supply is connection of the output voltage (ALX+ disconnection), automatic return           Diversidge indication OVP         Unstatery output supple suppl		
Power Insquency         60 Hz           PSU's power         83 W           Efficiency         04%           Output toflage at         22 OV 27 8 V DC - buffer operation           20 Counterent         Continuous operation           Maximal resistance of the battery circuit         300m Ohm           Ripple voltage         Som V por max.           Current consumption by the PSU during battery observations in the Soft A         Continuous operation: max be3 A           Maximal resistance of the battery circuit         300m Ohm         Som V por max.           Current consumption by the PSU during battery voltage indication         Cost A Continuous operation: max be3 A           Statery sharing current         1 A         Cost A Continuous operation: max be3 A           Observoitage protection OVP         Ubset 2-23 V, during battery mode         Cost A Continuous operation: mode operation of the output voltage (AUX+ disconnection).           Destry voltage indication         Ubset 2-23 V, during battery mode         Cost A Continuous operation: mode operation: mode operation of the output voltage (AUX+ disconnection).           Short-circuit protection SCP         F5 A - Facian Facian melting fuse (failure requires fuse replacement)           Overload protection OLP         Hardware: Software           Battery charging indicating collectry failure         F10 A - Facian: Facian melting fuse (failure requires fuse replacement)		
PSUE power         B3 W           Efficiency         64%           Output voltage at         220 V 27.6 V DC - battery-assisted operation           Autom Construction         Continuous operation           Maximal resistance of the battery circuit         200 V 27.6 V DC - battery-assisted operation           Maximal resistance of the battery circuit         200 V 27.6 V DC - battery-assisted operation           Maximal resistance of the battery circuit         200 V 27.6 W DC - battery-assisted operation           Current consumption by the PSU         1 = 65mA - LCD panel backlight off           Current consumption by the PSU         1 = 65mA - LCD panel backlight off           Carton I The power supply is connection backlight off         1 = 65mA - LCD panel backlight off           Statery obtage         400 W VC (5 * C + 40 * C)           Low battery voltage         Admits of the power supply is connection of the output voltage (AUX* disconnection).           Short-Circuit protection SCP         F5.4 - F <sub>pace</sub> , F <sub>pace</sub> tenting fuse (failure requires fuse replacement)           Overviolag protection OVP         U-303 V.0.2 V (2.5) - battery disconnection           Depo discharge battery protection UVP         U-204 V (2.5) - battery disconnection           Park F1, findicating soldballer         -type - electronic, max 50m/30 V OC, galvanic isolation 1500 V <sub>max</sub> - PSP L1, findicating PSU F1, findicating PSU F1, findicating PSU		
Efficiency         B4%           20 Output voltage at         22.0 \rangle 2.7 & V DC - buffer operation           20 Output voltage at         20.0 \rangle 2.7 & V DC - buffer operation           20 Output voltage         20.0 \rangle 2.7 & V DC - buffer operation           Maximal resistance of the battery circuit         20.0 m Dim           Maximal resistance of the battery circuit         20.0 m Dim           Ripple voltage         00m V - pr max.           Current consumption by the PSU         1 = 56m A           Eatrey charging current         1 Adde, additional current consumption should be considered.           Coefficient of temperature compensation of the battery voltage indication         Ubat 2.3 V, during battery mode           Overvoltage protection OVP         additional current consumption should be considered.           Short-circuit protection SCP         F6 A - F <sub>BLC</sub> , F <sub>BLC</sub> meding fuse (failure requires fuse replacement)           Overvoltage protection OVP         additional current consumption should be considered.           Battery visual protection SCP and reverse         F6 A - F <sub>BLC</sub> , meding fuse (failure requires fuse replacement)           Deve discharge 2.0 Additional current constrashows a potential-free status of the control parent         Pote - failure approximately 100 failure indication 1500 V <sub>blc</sub> - APS FLT; indicating battery rescue parameters         Pote - failure modition isolation 1500 V <sub>blc</sub>		
20 °C         20.0 V 27.6 V CC - battery-assisted operation           Maximal resistance of the battery circuit         Continuous operation:         max a=2 A histananeous operation:           Maximal resistance of the battery circuit         300m Orm.           Ripple voltage         00m Orm.           Current consumption by the PSU during battery-assisted operation         14           Current consumption by the PSU during battery-assisted operation         14           Continuous Of the power supply is corrected with the communication interface or tus modela, addinal current consumption should be considered.           Battery charging current         1A           Conficient of themparture compensation of the battery voltage indication         Ubal 2 32 V, during battery mode           Low battery voltage indication         Ubal 2 32 V, during battery mode           Diversidage protection OVP         Hardware - Software           Battery circuit protection SCP         FS A - F <sub>Asco</sub> F-May mething fuse (faluer requires fuse replacement)           Diality connection         VPD - electronic, max COmAGO V C, galvanic is clastion 1500 V <sub>asco</sub> - Pype - electronic, max SOmAGO V C, galvanic is clastion 1500 V <sub>asco</sub> - delay time approximately 104 fm1/0m/300 M (+:SS) - configured from the control paral           - Pype - releating SU Aligner         - Vpp - electronic, max SOmAGO V C, galvanic is clastion 1500 V <sub>asco</sub> - Pype - releating SU Aligner		84%
Dutput current         Continuous operation: Instx H=2 A Instantanceus operation: Instx H=2 A           Maximal resistance of the battery circuit         300m Chm         Imst k=3 A           Maximal resistance of the battery circuit         300m Chm         Imst k=3 A           Current consumption by the PSU during battery-assisted operation         Imst k=3 A         Imst k=3 A           Current consumption by the PSU during battery-assisted operation         Imst k=3 A         Imst k=3 A           Coefficient of temperature compensation of the battery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Coefficient of temperature compensation of the battery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Overvoltage protection OVP         Ubattery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Deep discharge battery voltage indication         Ubattery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Deep discharge battery voltage indication         Ubattery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Deep discharge battery voltage indication         Ubattery voltage indication         Ubattery voltage indication         Ubattery voltage indication           Tablery cinculating battery relation         Ubattery voltag		22,0 V÷ 27,6 V DC – buffer operation
Instantaneous periation:         Imax b=3 A           Maximal resistance of the battery circuit         3000 Ohm           Ripple voltage         80mV p.p. max.           Current consumption by the PSU during battery sociated operation         1 = 65mA           Sociation         1 = 55mA           Description by the PSU during battery voltage battery voltage         40mV/*C (-5*C + 40 *C)           Sociation         40mV/*C (-5*C + 40 *C)           Low battery voltage indication         Ubat 22.3V, during battery mode           Overvoltage protection OVP         U>30.5 V-30.5 V - 8 acconnection of the output voltage (AUX+ disconnection), automatic return           Short-circuit protection SCP         F5 A - F <sub>max</sub> , F <sub>max</sub> metring fuse (failure requires fuse replacement)           Overvolage protection OVP         U>20.2 V ( 2%) - battery disconnection           Battery circuit protection SCP and reverse polarity connection         F6.3 A - F <sub>max</sub> , F <sub>max</sub> metring fuse (failure requires fuse replacement)           - Battery discuting PSU F1; indicating activation resource ponimalely 10c/1mV (10m/30m (ri-5%) – configured from the control polarity connection         Her T; midcating PSU F1; midcating	20 °C	
Maximal resistance of the battery circuit         900m Ohm           Ripple voltage         90m Ohm           Current consumption by the PSU during battery-assisted operation         1 = 56mA           Battery charging current         TAM           Coefficient of temperature compensation of the battery voltage indication         Ubbl < 23 V, during battery mode           Coverficient of temperature compensation of the battery voltage indication         Ubbl < 23 V, during battery mode           Coverficient of temperature compensation of the battery voltage indication         Ubbl < 23 V, during battery mode           Coverficient of temperature compensation of the battery voltage indication         Ubal < 23 V, during battery mode           Overvoltage protection SCP         F5 A - F <sub>EAX</sub> . Facar melting fuse (failure requires fuse replacement)           Overvoltage battery voltage indication         Ubal < 23 V, during battery disconnection           Deep discharge battery voltage indication battery failure - PSP LT; indicating battery relations         F6 A - F <sub>EAX</sub> melting fuse (failure requires fuse replacement)           - PSP LT; indicating battery failure - PSP LT; ind	Output current	
Ripple voltage         BonV p-p max.           Current consumption by the PSU during battery satisfied operation         1 = 65mA - 1.CD panel backlight off Caution 11 He power supply is connected with the communication interface or fuse module, additional current consumption should be considered.           Statery charging surrent         1A           Covervoltage protection OVP         Ubart 22V, during battery mode           Overvoltage protection OVP         Ubart 22V, during battery mode           Short-Circuit protection SCP         F5 A - F <sub>AUX</sub> . F <sub>BUX</sub> metting fuse (failure requires fuse replacement)           Overvoltage protection OLP         Hadware - Software           Battery circuit protection SCP and reverse         F6.3 A - F <sub>BUX</sub> . F <sub>BUX</sub> metting fuse (failure requires fuse replacement)           Overload protection OLP         Hadware - Software           Battery circuit protection SCP and reverse         F6.3 A - F <sub>BUX</sub> . F <sub>BUX</sub> metting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U>20 V (2 2%) - battary disconnection.           Technical outputs:         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>40x</sub> - APS FLT: Indicating AC power failure         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>40x</sub> - SPS FLT: indicating observer failure         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>40x</sub> - SLRARI in indicating occurre failure         - typ		
Current consumption by the PSU during battery-assisted operation         I = 55mA - LCD panel backlight off Caution 1 if the power supply is connected with the communication interface or luss module, additional current consumption should be considered.           Sattery charging current         1A           Confinient of temperature compensation of the California of temperature compensation of the UPu3 C 23 V, during battery mode         UPu3 C 23 V, during battery mode           Overvoltage protection OVP         UPu3 C 23 V, during battery mode         UPu3 C 23 V, during battery mode           Deveload protection OVP         Hardware - Software         F5 A - F <sub>Aux</sub> melting fuse (failure requires fuse replacement)           Deveload protection OLP         Hardware - Software         F5 3 A - F <sub>Aux</sub> melting fuse (failure requires fuse replacement)           Deter discharge battery protection UVP         U-20 V (2 24) - battery disconnection         UPu3 C 24) - battery disconnection           TAMPER coupling indicating PU Juline - PS IF L1; indicating PU Juline - SUP IF - indicating PU Juline         - during time approximately 10s/1mr/10m/30m (r-5%) - configured from the control panel           - ALREM; indicating PU Juline - SUP IF - indicating PU Juline         - type - relax; 1 A@ 30 V DC/50 VAC CAUTION In Fig 2 the set of contacts shows a potential-free status of the relay. which corresponds to power supply failure.           - Vipe - electronic, max 50m A/30 V DC, galvanic isolation 1500 Vwge - ready of palaritic indication         - topp anel           - L2D panel         - topp anel	Maximal resistance of the battery circuit	
Current consumption by the PSU during battery-sessible operation         I = 55mA - LCD panel backlight off Caution II the power supply is connected with the communication interface of fuse module, additional current consumption should be considered.           Battery voltage indication         1 A           Coefficient of temperature compensation of the battery voltage indication         Ubat 420 V (dirsg battery mode)           Overvoltage protection OVP         40mW /C (4 S C + 40 °C)           Battery voltage indication         Ubat 420 V, during battery mode           Overvoltage protection SCP         F5 A - Faust.           Short-circuit protection SCP and reverse polarity connection         F6 A - Faust.           Deep discharge battery voltage indicating enclosure opening         Mcroswitch TAMPER           Technical outputs:         - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - PSP LF1; indicating pattery relative         - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - AVARM; indicating pattery relative         - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - PSP LF1; indicating pattery relative         - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - Vipe - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>ites</sub> - Vipe -	Ripple voltage	
during battery-assisted operation         Caution 1 ff the power supply is connected with the communication interface or fus module, additional current consumption should be considered.           Battery charging current         1 A           Coefficient of temperature compensation of the battery voltage indication         Upin (25 C + C + 0 C)           Low battery voltage indication         Upin (25 C + C + 0 C)           Develoating protection OVP         ubin (22 V, during battery mode           Overolating protection OVP         Hardware - Software           Battery circuit protection SCP and reverse polarity connection         F5 A - F <sub>AUX</sub> , F <sub>AUX</sub> matting fuse (failure requires fuse replacement)           Overolating rotection OVP         U-200 (2 2%) - battery disconnection           Table State of indicating accesses opening discharge battery protection UVP         U-200 V (2 2%) - battery disconnection           Table State of indicating accesses opening discharge battery rainine         - bype - electronic, max StanAr30 V DC, galvanic isolation 1500 V <sub>aug</sub> - PSP LT; indicating polarity rainine         - bype - relectronic, max StanAr30 V DC, galvanic isolation 1500 V <sub>aug</sub> - PSP LT; indicating PSU Juline         - bype - relay: 1 Ag 30 V DC/B0 V AC CAUTON In Fig Z the sch on so potential-free status of the relay. which corresponds to power supply failtre.           EXT technical input         Valage, OFF - 0 - 2 V DC Valage, OFF - 0 - 2 V DC           Optical indication:         - faux	Comment commention booths DCU	
module, additional current consumption should be considered.           Battery charging current         1 A           Coefficient of temperature compensation of the battery voltage         40mW/*C (-5 *C + 40 *C)           Low battery voltage indication         Ubat < 23 V, dining battery mode           Overvoltage protection OVP         automaic return           Short-circuit protection SCP         F.8.4 - F <sub>RAN</sub> Fauge mething fuse (failure requires fuse replacement)           Overvoltage protection OVP         Hardware - Software           Battery circuity protection SCP and reverse         F.6.3 A - F <sub>RAN</sub> mething fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U<200 V (2 ×2) - battery disconnection           TAMPER output indicating enclosure opening         HCroswitch TAMPER           Technical outputs:         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>Ans</sub> - P3D LT; indicating battery failure         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>Ans</sub> - ALRAW; indicating SU Fillione         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>Ans</sub> - ALRAW; indicating SU Fillione         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>Ans</sub> - ALRAW; indication:         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>Ans</sub> - ALRAW; indicating SU Fillione         - type - electronic, max 50mA30		
Battery charging current         1 A           Coefficient of temporature compensation of the battery voltage indication         40mV/*C (-5 °C + 0 °C)           Low battery voltage indication         UBat 23 V, during battery mode           Overvoltage protection OVP         U-30,5 V:0,5 V - disconnection of the output voltage (AUX+ disconnection), automatic return           Short-circuit protection SCP         F5 A - F <sub>axt</sub> , F <sub>aux</sub> melting fuse (failure requires fuse replacement)           Overload protection OLP         Hardware - Software           Battery circuit protection SCP and reverse         F6,3 A - F <sub>axt</sub> , multing fuse (failure requires fuse replacement)           Desp discharge battery protection UVP         U-20 V (12 %) - battery disconnection           TakPER outputs:         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>max</sub> - 4PS FLT; indicating battery failure         - type - electronic, max 50mA30 V DC, galvanic isolation 1500 V <sub>max</sub> - FSU FLT; indicating PSU failure         - type - relax; 1 A@ 30 V DC/50 V AC           EXT0 relay output         I A@ 30 V DC/50 V AC           EXT0 relay output         I A@ 30 V DC/50 V AC           Copical indication:         - type - relax; 1 A@ 30 V DC/50 V AC           Optical indication:         - type - relax; 1 A@ 30 V DC/50 V AC           Coparel         - type - relax; 1 A@ 30 V DC/50 V AC           EXT0 relay output         I A@	during battery-assisted operation	
Coefficient of remperature componentiation of the battery voltage indication         Ubat < 23 V, during battery mode           Low battery voltage indication         Ubat < 23 V, during battery mode           Overvoltage protection OVP         Ubat < 23 V, during battery mode           Short-circuit protection SCP         F5 A - F <sub>AUC</sub> , F <sub>AUC</sub> melling fuse (failure requires fuse replacement)           Overload protection OLP         Hardware - Software           Battery circuit protection SCP and reverse polarity connection         F5 A - F <sub>AUC</sub> , F <sub>AUC</sub> melling fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (± 2%) - battery disconnection           TAMPER output indicating noclosure opening         - fore melling fuse (failure requires fuse replacement)           - PSP LT, indicating battery failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>resc</sub> - PSU LT, indicating pSU failure         - type - relax; 1A@ 30 V DC/50 V AC           EXT technical input         Voltage, OFF - 0-22 V DC           EXT technical input         Voltage, OFF - 0-22 V DC           Current of advance isolation 1500 V <sub>resc</sub> - tope - relax; 1A@ 30 V DC/50 V AC           Current of advance isolation 1500 V <sub>resc</sub> - tope - relax; 1A@ 30 V DC/50 V AC           EXT technical input         Voltage, OFF - 0-22 V DC           Voltage, OFF - 0-22 V DC         - tealings of electrical parame	Battery charging current	
battery voltage		
Low battery voltage indication         Ubat < 23 V. during battery mode		-40mV/ °C (-5 °C ÷ 40 °C)
Overvoltage protection OVP         U>30.5 V-0.6 V - disconnection of the output voltage (AUX+ disconnection), automatic return           Short-circuit protection SCP         F5 A - F <sub>AUX</sub> , F <sub>AUX</sub> melting fuse (failure requires fuse replacement)           Overload protection SCP and reverse polarity connection         Hardware - Software           Deep discharge battery protection UVP         U-20 V (z 2%) - battery disconnection           TAMPER output indicating enclosure opening         Mcrosswich TAMPER           - FS FLT; indicating AC power failure - PS UFLT; indicating battery failure - ALRAM; indicating collective failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>loss</sub> - delay time approximately 103/1m1/0m20m (+/-5%) - configured from the control panel           EXT itechnical input         Voltage, OFF <sup>-</sup> - 07.2 V DC Lavel of galvanic isolation 1500 V <sub>loss</sub> EXT relay output         1 A@ 30 V DC/50 V AC - CAUTIONI In Fj2 the set of contacts shows a polential-free status of the relay. Widinge, OFF <sup>-</sup> - 07.2 V DC Lavel of galvanic isolation 1500 V <sub>loss</sub> EXT relay output         1 A@ 30 V DC/50 V AC - Level of galvanic isolation 1500 V <sub>loss</sub> Getical indication:         - icED on the PCB of the power supply unit, - icLO panel           Costical indication:         - iceD on the PSU edite parameters, including, output edites in the cost with battery backup           Acoustic indication:         - periad parameters, including, re		Ubat < 23 V. during battery mode
Overload protection OVP         automatic return           Short-circuit protection SCP         F5 A - F <sub>ALT</sub> melting fuse (failure requires fuse replacement)           Overload protection OLP         Hardware - Software           Battery circuit protection SCP and reverse polarity connection         F6 A - F <sub>ALT</sub> melting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (± 2%) - battery disconnection           Technical outputs:         - type - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>taxe</sub> - 4PS FLT; indicating battery failure         - type - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>taxe</sub> - FPS LT; indicating PSU failure         - type - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>taxe</sub> - ALARM; indicating collective failure         - type - electronic, max 50m/30 V DC, galvanic isolation 1500 V <sub>taxe</sub> EXT relay output         Voitage , OFT - 10-30 V DC           EXT relay output         1A@ 30 V DC/30 V AC           Current of the power supply unit,         - Current of the power supply unit,           - Low of galvanic isolation 1500 V <sub>taxe</sub> - tupe and the pSU = 6144 values           - Battery and the pSU = 514 values         - talure mano- 2048 verits           - LOB sorem battery         3 V lithium battery, CR2002           - Fause         F 5 A / 250 V           - Fause         F 5 A		
Cvertoad protection OLP         Hardware - Software           Battery circuit protection SCP and reverse polarity connection         F6,3 A - F <sub>BAT</sub> melting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (£ 2%) – battery disconnection           Technical outputs:	Overvoltage protection OVP	
Cvertoad protection OLP         Hardware - Software           Battery circuit protection SCP and reverse polarity connection         F6,3 A - F <sub>BAT</sub> melting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (£ 2%) – battery disconnection           Technical outputs:	Short-circuit protection SCP	
Battery circuit protection SCP and reverse polarity connection         F6.3 A · F <sub>bk1</sub> melting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (z 2%) – battery disconnection           Technical outputs:         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -EPS FLT; indicating battery failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -PS FLT; indicating collective failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -PS FLT; indicating collective failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -STI technical input         Voltage, ON* - 10+30 V DC           Voltage, ON* - 10+30 V DC         CAUTIONI in Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.           EXT technical input         Voltage, ON* - 0+22 V DC           Level of galvanic isolation 1500 V <sub>AB</sub> - tLDD conte           - table pCB of the power supply unit, - toral trans supply voltage/large indication:         - configuration of the PSU setting from the control panel           - table pCB of the power supply unit, - toral trans clock with battery backup         - configuration of the PSU setting from the control panel           - table placebecktic indicator - 75 dB 10,3 m         - configuration of the PSU setting from the control panel           - table place placebecktic indicat	· · · · · · · · · · · · · · · · · · ·	го А - г <sub>AUX1</sub> , г <sub>AUX2</sub> meiting tuse (tailure requires tuse replacement)
Battery circuit protection SCP and reverse polarity connection         F6.3 A · F <sub>bk1</sub> melting fuse (failure requires fuse replacement)           Deep discharge battery protection UVP         U-20 V (z 2%) – battery disconnection           Technical outputs:         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -EPS FLT; indicating battery failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -PS FLT; indicating collective failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -PS FLT; indicating collective failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>bats</sub> -STI technical input         Voltage, ON* - 10+30 V DC           Voltage, ON* - 10+30 V DC         CAUTIONI in Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.           EXT technical input         Voltage, ON* - 0+22 V DC           Level of galvanic isolation 1500 V <sub>AB</sub> - tLDD conte           - table pCB of the power supply unit, - toral trans supply voltage/large indication:         - configuration of the PSU setting from the control panel           - table pCB of the power supply unit, - toral trans clock with battery backup         - configuration of the PSU setting from the control panel           - table placebecktic indicator - 75 dB 10,3 m         - configuration of the PSU setting from the control panel           - table place placebecktic indicat		Hardware - Software
pointly connection         U<20 V (± 2%) - Lattery disconnection           TAMPER output indicating enclosure opening         Microswitch TAMPER           Technical outputs:         - Type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>ass</sub> - PS FLT; indicating battery failure         - Type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>ass</sub> - APS FLT; indicating battery failure         - Type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>ass</sub> - PSU FLT; indicating battery failure         - Type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>ass</sub> - FSU FLT; indicating post failure         - Type - relay; 1 A@ 30 V DC/50 V AC           CAUTIONI In Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to powr supply failure.           - Votage, OPF 0-2V DC         Votage, OPF - 0-2V DC           Votage, OV - 10-30 V DC         Votage, OUPF - 0-2V DC           EXT technical input         - LCD panel           - readings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication           - configuration of the PSU statings from the control panel           - 2 levels of password protected access           - operation memory of the PSU statings from the control panel           - 2 levels of password protected access           - faux         F 6A / 250 V           - Faux	Battery circuit protection SCP and reverse	F6.3.A - Faur melting fuse (failure requires fuse replacement)
TAMPER output indicating enclosure opening         Microswitch TAMPER           Technical outputs:         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>tws</sub> :           - PSP FLT; indicating PSU FLT; indicating pSU failure         - delay time approximately 10s/1m/10m/30m (+/-5%) - configured from the control panel           - APS FLT; indicating PSU FLT; indicating pSU failure         - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>tws</sub> :           - YUB - relay: 1 A@ 30 V DC/50 V AC         CAUTIONI In Fig 2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.           EXTi technical input         Volage, OFF - 0+2 V DC           EXTo relay output         1 A@ 30 V DC/50 V AC           CAUTIONI In Fig 2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.           Volage, OFF - 0+2 V DC         Level of galvanic isolation 1500 V <sub>mos</sub> EXTo relay output         1 A@ 30 V DC /50 V AC           Optical indication:         - LCD panel           0 per ation memory of the PSU - entition the control panel         - LCD panel           0 acoustic indication:         - lecos with battery, backup           - Faw         F 5A / 250 V           - Faw		
Technical output:       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         - APS FLT; indicating AC power failure       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         - APS FLT; indicating PSU failure       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         - SU FLT; indicating oblective failure       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         - XLARM; indicating collective failure       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         EXTi technical input       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         EXTi technical input       - type - electronic, max 50m/X30 V DC, galvanic isolation 1500 V <sub>Mas</sub> :         EXTo relay output       1 A@ 30 V DC /50 V AC         EXTo relay output       1 A@ 30 V DC /50 V AC         EXTo relay output       1 A@ 30 V DC /50 V AC         eradings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication         operation of the PSU settings from the control panel       - tepes of galvanic isolation 1500 V <sub>Mas</sub> Acoustic indication:       - piezoelectric indicator -75 dB /0,3 m         LCD screen battery       3 V illium battery, CR2032         Fuses       F aA / 250 V         F sA / 250 V       F S A / 250 V         F sA / 250 V       F S A / 250		
<ul> <li>- EPS FLT; indicating AC power failure</li> <li>- delay time approximately 10s/1m/10m/30m (+/-5%) – configured from the control panel</li> <li>- super - relay: 1 A@ 30 V DC; galvanic isolation 1500 V<sub>eks</sub></li> <li>- type - relay: 1 A@ 30 V DC; 60 V AC</li> <li>- ATTRNI (indicating PSU failure)</li> <li>- type - relay: 1 A@ 30 V DC; 60 V AC</li> <li>- CutTIONI (in Fig 2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.</li> <li>- Ustage . OFF - 0+2 V DC</li> <li>- Stage . DFF - 0+2 V DC</li> <li>- Stage . DFF - 0+2 V DC</li>     &lt;</ul>		
APS FLT; indicating battery failure         - APS FLT; indicating PSU failure         - SUFLT; indicating PSU failure         - ALARM; indicating collective failure         - type - electronic, max S0mA/30 V DC; go VAC         CAUTIONI In Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.         Voltage , ON <sup>+</sup> - 10-30 V DC         EXTi technical input       Voltage , ON <sup>+</sup> - 10-30 V DC         EXTo relay output       1 A@ 30 V DC /50 V AC         - LEDs on the PCB of the power supply failure.         Optical indication:       - LCD panel         - coustic indication:       - constrained sof electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication         Coustic indication:       - piezoelectric indicator -75 dB /0,3 m         LCD screen battery       3 V lithum battery, CR2032         Fuses:       - Faurs         - Faur       F 5 A / 250 V         - Faur       F 5 A / 250 V         - Faur       F 5 A / 250 V         - Faur       - S A / 250 V         - Faur       F 5 A / 250 V         - Faur       - S A / 250 V         - Faur       - S A / 250 V         - Faur       - S A / 250 V         - Steel plate DCO1 1.2mm, color, RAL 300 communica		
- APS FLT; indicating pattery failure - PSU FLT; indicating PSU failure - ALARM; indicating collective failure       - type - electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>max</sub> - Type - relay: 1 A@ 30 V DC/50 V AC CAUTION! In Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.         EXT itechnical input       Voltage, OPT - 10+30 V DC Ustage, OPT - 10+30 V DC         EXT or relay output       1 A@ 30 V DC /50 V AC         EXTo relay output       1 A@ 30 V DC /50 V AC         EXTo relay output       1 A@ 30 V DC /50 V AC         Optical indication:       - tCD panel         • tcDb so the PCB of the power supply unit, - LCD panel       - tCD panel         • configuration of the PSU settings from the control panel       • 2 levels of password protected access • operation memory of the PSU settings from the control panel         • 2 levels of password protected access       • operation memory of the PSU settings from the control panel         • 2 levels of password protected access       • paration memory of the PSU settings from the control panel         • 2 levels of password protected access       • paration         • Fear       • F6.3 A / 250 V         • Fauxa       F 5 A / 250 V         • Fsates       • T3 / 15 A / 250 V         • Fauxa       F 5 A / 250 V         • States Ther interface: RS485 communication         • Base Therm int	- EPS FLT; indicating AC power failure	
- PSU FLT; indicating PSU failure       - Vpe - relay: 1 A@ 30 V DC/50 V AC         - ALARM; indicating collective failure       - Vpe - relay: 1 A@ 30 V DC/50 V AC         - EXTi technical input       Voltage, ON* - 10*30 V DC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       1 A@ 30 V DC/50 V AC         - CLDs on the PCB of the power supply unit,       - LCDs on the PCB of the power supply unit,         - LCD screen battery       • readings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication         - piezoelectric indicator -75 dB /0.3 m       - 2 levels of password protected access         - equitic indication:       - piezoelectric indicator -75 dB /0.3 m         LCD screen battery       3 V lithum battery, CR2032         Fuses       F 5 A / 250 V         - Faur       F 6 A / 250 V         - Stabs-TTL INTU" interface; USB-TTL communication         - NES485_INTUR" interface; NES485 communication	ADS ELT, indicating bottom, failure	
- ALARM; indicating collective failure       - type - relay: 1 A@ 30 V DC/50 V AC         CAUTIONI In Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.         EXTI technical input       Voltage , OFF - 0+2 V DC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       1 A@ 30 V DC/50 V AC         EXTo relay output       - LEDs on the PCB of the power supply unit, - LCD panel         - LEDs on the PCB of the power supply unit, - LCD panel       - tebs of password protected access         Optical indication:       - configuration of the PSU settings from the control panel         - 2 lavels of password protected access       - operation memory of the PSU - 6144 values         - 6 password protected access       - operation memory of the PSU - 6144 values         - Fax       F 6,3 A / 250 V         - Fax       F 6,3 A / 250 V         - Fax       F 5 A / 250 V		- type – electronic, max 50mA/30 V DC, galvanic isolation 1500 V <sub>RMS</sub>
CAUTIONI In Fig.2 the set of contacts shows a potential-free status of the relay, which corresponds to power supply failure.         EXTI technical input       Voltage _OFF - 0+2 V DC         EXTo relay output       1 AQ 30 V DC /S0 V AC         EXTo relay output       1 AQ 30 V DC /S0 V AC         EXTo relay output       1 AQ 30 V DC /S0 V AC         EXTo relay output       1 AQ 30 V DC /S0 V AC         Optical indication:       - LEDs on the PCB of the power supply unit,         - LCD panel       - readings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltageflaure indication         Optical indication:       - oonfiguration of the PSU settings from the control panel         - 2 levels of password protected access       - operation memory of the PSU of the values         - failume clock with battery backup       - failume clock with battery backup         Acoustic indication:       - piezoelectric indicator - 75 dB /0.3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses:       - Fair       F 6.3 A / 250 V         - Fair       - F 6.3 A / 250 V         - Fair       - F 6.3 A / 250 V         - Fair       - F 8.445 J.NTC "Interface; USB-RS465 communication         - RS445 S.INT VIRT interface; S4455 communication       - USB-RS445 J.NTC "Interface; Escreencomunication         - RS445 S.INT		tune_relay: 1 A@ 20 V/ DC/50 V/ AC
which corresponds to power supply failure.           EXTi technical input         Voltage, OFF - 0-2V VDC Level of galvanic isolation 1500 V <sub>taxs</sub> EXTo relay output         1 AQ2 30 VDC /50 VAC           EXTo relay output         - LEDs on the PCB of the power supply unit, - LCD panel           • creadings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication           • configuration of the PSU settings from the control panel           • 2 levels of password protected access           • operation memory of the PSU – 6144 values           • allure memo - 2048 events           • configuration of the PSU – 6144 values           • allure memo - 2048 events           • real time clock with battery backup           Acoustic indication:           • piezoelectric indicator -75 dB /0.3 m           LCD screen battery           • S V lithium battery, CR2032           Fuses:         • Faxis           • F 5 A / 250 V           • State S, INTR*' interface; IS485 communication           • USB-RS485_INTR*' interface; IS485 communication           • USB-RS485_VIFI W'release communication           • R5485_Ethernet 'INTR*' interface; R5485 communication           • R5485_Etherent'	ALARM, malouting concerve failure	- type – Teldy. TAW 50 V DC/50 V AC
EXTi technical input       Voltage OFF" - 10+30 V DC Voltage OFF" - 0+2 V DC Level of galvanic isolation 1500 V <sub>RMS</sub> EXTo relay output       1 A@ 30 V DC /50 V AC         - LEDs on the PCB of the power supply unit, - LCD panel       - LEDs on the PCB of the power supply unit, - LCD panel         0ptical indication:       - LEDs on the PCB of the power supply voltagefailure indication         0ptical indication:       - configuration of the PSU settings from the control panel         - 2 levels of password protected access       - operation memory of the PSU - 61144 values         - 6 little memo - 2048 events       - eal time clock with battery backup         - 75 dB /0,3 m       - piezoelectric indicator - 75 dB /0,3 m         LCD screen battery       - V lithium battery, CR2032         Fuses:       - Fax         - Fax       - F 63 / 250 V         - Fax       - F 63 / 250 V         - Fax       - F 63 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - Fax       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V       - S 4 / 250 V         - S 4 / 250 V		
EXTi technical input       Voltage OFF <sup>2</sup> - 0+2 V DC         EXTo relay output       1 A@ 30 V DC /50 V AC         EXTo relay output       1 A@ 30 V DC /50 V AC         - LEDs on the PCB of the power supply unit, - LCD panel       - LEDs on the PCB of the power supply unit, - LCD panel         Optical indication:       - eradings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication         Acoustic indication:       - configuration of the PSU estings from the control panel         - 2 levels of password protected access       - operation memory of the PSU - 6144 values         - fauxit       - piezoelectric indicator -75 dB /0.3 m         LCD screen battery       3 Vilthium battery, CR2032         Fuses:       - Fmans         - Fauxit       - F 6.3 A / 250 V         - Fauxit       - F 5 A / 250 V         - Fauxit       - F 5 A / 250 V         - Fauxit       - SA45, JNTR" interface; USB-TTL communication         - RS485, INTR" interface; WFI wireless communication         - USB-FMED, INTR" interface; WFI wireless communication         - RS485-Ethernet INTRE" interface; RS485 communication         - RS485-Ethernet "INTRE" interface; RS485-Sommunication         - RS485-Ethernet "INTRE" interface; RS485-Sommunication         - RS485-Ethernet "INTRE" interface; RS485 communication		
Level of galvanic isolation 1500 V <sub>RMS</sub> EXTo relay output         1 A@ 30 V DC /50 V AC           • LEDs on the PCB of the power supply unit, - LCD panel         • LEDs on the PCB of the power supply unit, - LCD panel           • optical indication:         • configuration of the PSU settings from the control panel           • 2 levels of password protected access         • operation memory of the PSU - 6144 values           • failure memo - 2048 events         • real time clock with battery backup           • calculation:         • piezolectric indicator ~75 dB /0.3 m           LCD screen battery         3 V lithium battery, CR2032           Fuses:         • FMANRS           • Faux         F 6 3 / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • F 5 A / 250 V           • F 5 A / 250 V         • S A / 250 V           • F 5 A / 250 V         • S A / 250 V           • F 5 A / 250 V         • S A / 250 V           • F 5 A / 250 V         • S A / 250 V           • F 5 A / 250 V         • S A / 250 V           • Closing	EXTi technical input	
EXTo relay output       1 A@ 30 VDC /50 VAC         - LEDs on the PCB of the power supply unit,       - LEDs on the PCB of the power supply unit,         - 0 prical indication:       - eradings of electrical parameters, including: voltage, current, resistance of the cricut, mains supply voltagefailure indication         • configuration of the PSU settings from the control panel       - 2 levels of password protected access         • operation memory of the PSU – 6144 values       - failure memo - 2048 events         • failure memo - 2048 events       - failure clock with battery backup         Acoustic indication:       - piezoelectric indicator ~75 dB /0,3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses: - Fear       F 6,3 A / 250 V         • Fear       F 5 A / 250 V         • Fauxa       F 5 A / 250 V		
-LCD panel         • readings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication         • configuration of the PSU settings from the control panel         • configuration of the PSU settings from the control panel         • constitic indication:         • real time clock with battery backup         Acoustic indication:         • piezoelectric indicator ~75 dB /0,3 m         LCD screen battery         SV lithium battery, CR2032         Fuses:       • FMANS         • Fear       F 6,3 A / 250 V         • Fava       F 5 A / 250 V         • FAUX2       F 5 A / 250 V         • FAUX2       - USB-RTL_INTU" interface; USB-TTL communication         • RS445_INTUR" interface; USB-RS485 communication         • RS445_INTUR" interface; USB-RS485 communication         • RS445_WiFi "INTRY" interface; RS485-tehrenet communication         • WHI: "INTW" interface; ISN2-RS485 communication         • RS445-WiFi "INTRY" interface; RS485-tehrenet communication         • RS445-WiFi "INTRY" interface; RS485-tehrenet communication         • RS445-tehrenet "INTRE" interface; RS485-tehrenet communication         • RS445-tehrenet         • RS445-tehrenet         • Piezoelectric inficate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat <t< th=""><th>EXTo relay output</th><th>1 A@ 30 V DC /50 V AC</th></t<>	EXTo relay output	1 A@ 30 V DC /50 V AC
Optical indication: <ul> <li>eadings of electrical parameters, including: voltage, current, resistance of the circuit, mains supply voltagefailure indication</li> <li>configuration of the PSU settings from the control panel</li> <li>2 levels of password protected access</li> <li>operation memory of the PSU - 6144 values</li> <li>failure memo - 2048 events</li> <li>real time clock with battery backup</li> </ul> <li>Acoustic indication:</li> <li>piezoelectric indicator ~75 dB /0,3 m</li> <li>LCD screen battery</li> <li>S V lithium battery, CR2032</li> <li>Fusans</li> <li>F 6,3 A / 250 V</li> <li>F Faar</li> <li>F 6, A / 250 V</li> <li>F Fax</li> <li>F 5 A / 250 V</li> <li>S A / 250 V</li> <li>F 5 A / 250 V</li> <li>S A / 250 V</li>		- LEDs on the PCB of the power supply unit,
optical indication:       circuit, mains supply voltagefailure indication         optical indication:       configuration of the PSU settings from the control panel         2 levels of password protected access       operation memory of the PSU – 6144 values         e real time clock with battery backup       real time clock with battery backup         Acoustic indication:       - piezoelectric indicator ~75 dB /0,3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses:       F <sub>MANS</sub> - F <sub>BAT</sub> F 6,3 A / 250 V         - F <sub>AUX1</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> - USB-TTL ,INTU" interface; USB-TTL communication         - RS485_INTF" interface; WEI wireless communication         - RS485_INTTW" interface; WEI wireless communication         - Battery       - USB-TKL ,INTU" interface; WEI wireless communication         - RS485-WIFI "INTRW" interface; WIFI wireless communication         - RS485-WIFI "INTRW" interface; RS485-WIFI wireless communication         - RS485-WIFI "INTRW" interface; RS485-WIFI wireless communication         - RS485-WIFI "INTRW" interface; RS485-WIFI wireless communication         - RS485-WIFI "INTRW"		
Optical indication: <ul> <li>configuration of the PSU settings from the control panel</li> <li>2 levels of password protected access</li> <li>operation memory of the PSU – 6144 values</li> <li>failure memo - 2048 events</li> <li>real time clock with battery backup</li> </ul> Acoustic indication:         - piezoelectric indicator ~75 dB /0,3 m           LCD screen battery         3 V lithium battery, CR2032           Fuses:         - Fams           - Fear         F (5, A / 250 V)           - Fauxi         - F (5, A / 250 V)           - FAuxi         - F (5, A / 250 V)           - FAuxi         - F (5, A / 250 V)           - FAuxi         - F (5, A / 250 V)           - FAuxi         - S (250 V)           - Visher externation         - USB-R5485, INTUR" interface; USB-R5485 communication           - USB-R5485, INTUR" interface; USB-R5485 communication         - Ethernet, INTE" interface; USB-R5485 communication           - R5485_Filterinet "INTRE" interface; R5485 communication         - R5485-Ethernet "INTRE" interface; R5485-Ethernet communication           - R5485_ViFi 'INTRE" interface; R5485-Communication         - R5485-Ethernet "INTRE" interface; R5485-Communication           - R5485_VIFi Wireless communication         - R5485-Ethernet "INTRE" interface; R5485-Communication           - R5485_VIFi Wireless communication         - R5485-Ethernet "INTRE" inte		<ul> <li>readings of electrical parameters, including: voltage, current, resistance of the</li> </ul>
• 2 levels of password protected access         • operation memory of the PSU - 6144 values         • failure memo - 2048 events         • real time clock with battery backup         Acoustic indication:         • piezoelectric indicator ~75 dB /0,3 m         LCD screen battery         3 V lithium memo - 2048 events         • Fast         • Fast         • Faxt         • Faxt         • Fauxt         • Call the equipment         (not included)         • WFi "INTR" interface; WFi wireless communication         • USB-Fill         • R5485_INTURE" interface; R5485-Communication         • R5485_Ethernet "NINTR" interface; R5485-WFile wireless communication         • USB-Fill         • Fauxt         • Steel plate DC01 1_2mm, color: RAL 3001 (red)         Enclosure       Steel plate DC21 1_2mm, color:		
• operation memory of the PSU – 6144 values         • failure memo - 2048 events         • real time clock with battery backup         Acoustic indication:         - piezoelectric indicator ~75 dB /0,3 m         LCD screen battery         3 V lithium battery, CR2032         Fuses         F <sub>BAT</sub> - F <sub>BAX</sub> - F <sub>BAX</sub> - F <sub>AUX1</sub> - F <sub>AUX2</sub> - F <sub>AUX2</sub> - F <sub>AUX2</sub> - Good file         - Good file         - F <sub>AUX2</sub> - F <sub>AUX2</sub> - State Sign         - USB-TTL _INTU" interface; USB-TTL communication         - R5485_INTE' Interface; R5485 communication         - Bax         - USB-R5485_INTUR' interface; R5485 communication         - Bax         - USB-R5485_INTUR' interface; R5485 communication         - Bax         - Bax         - S485_S-INTE' INTR'' interface; R5485 communication         - Bax         - Bax         - Bax         - Good file         - Closs commonication         - R5485-Ehernet (INTR'') interface; R5485-Communication         - R5485-Ehernet (INTR'') interface; R5485-Ehernet communication	Optical indication:	
• failure memo - 2048 events         • real time clock with battery backup         Acoustic indication:       - piezoelectric indicator - 75 dB /0,3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses:       - F <sub>MAINS</sub> - F <sub>BAT</sub> F (3 A / 250 V)         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> - USB-TTL_INTU" interface; IVSB-TTL communication         - RS485_INTR" interface; RS485 communication         - NUBB-RS485_WIF1 WIR 'Interface; USB-RS485 communication         - USB-RS485_WIF1 Wire'Interface; RS485-WIF1 wireless communication         - WiF1 "INTW" interface; RS485-WIF1 wireless communication         - RS485-WIF1 "INTRW" interface; RS485-WIF1 wireless communication         - WiF1 "INTRW" interface; RS485-VIF1 wireless communication         - RS485-WIF1 WIRTE         - RS485-WIF1 WIRTE		
Acoustic indication:       - piezoelectric indicator ~75 dB /0,3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses:       - Fmanns         - Fear       F 6,3 A / 250 V         - Fauxi       F 5 A / 250 V         - OBB-TTL_INTR" interface; USB-TTL communication         - RS485_NINTCR" interface; USB-RS485 communication         - USB-RS485 _NINTCR" interface; USB-RS485 communication         - USB-RS485 communication         - BS485-Stehernet "INTRE" interface; USB-RS485 communication         - Enclosure         Enclosure         Steel plate DC01 1.2mm, color: RAL 3001 (red)         Enclosure dimensions         W=420 H=420 D+D,=102 + 8 [+/- 2mm]         W=420 H=420 D+D,=102 + 8 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Steel plate DC01 1.2mm, color: RAL 3001 (red)         Enclosure       2x17 Ah/12 V (SLA) max.         Fitting battery       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP		
Acoustic indication:       - piezoelectric indicator ~75 dB /0,3 m         LCD screen battery       3 V lithium battery, CR2032         Fuses:       - F <sub>MAINS</sub> - F <sub>BAT</sub> F 6,3 A / 250 V         - F <sub>AUX1</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - Gational equipment (not included)       - USB-TTL ,INTU" interface; USB-TTL communication         - State       - USB-RS485, [INTR" interface; USB-R5485 communication         - Battery       - USB-RS485, [INTR" interface; USB-R5485 communication         - Battery       - USB-RS485, [INTR" interface; USB-R5485 communication         - Battery       - USB-R5485, [INTR" interface; USB-R5485 communication         - Battery       - USB-R5485, [INTR" interface; R5485 communication         - Battery       - Stell pite DC01 1, 2mm, color: RAL 3001 (red)         Operating conditions       2nd environmental class (EN12101-0.2007 ), -5 °C+75 °C         Enclosure       Steel plate DC01 1, 2mm, color: RAL 3001 (red)         Enclosure dimensions       Wi=425 H;-425 [+/- 2mm]         Wi=425 H;-425 [+/- 2mm]       Wi=425 H;-425 [+/- 2mm]         Virages weight       9,0/10,3 kg         Closing       Certificate of constancy of performance CNBOP-PIB		
LCD screen battery       3 V lithium battery, CR2032         Fuses:       - F <sub>MAINS</sub> - F <sub>BAT</sub> F 6,3 A / 250 V         - F <sub>AUX1</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - Additional equipment (not included)       - USB-TTL "INTU" interface; USB-TTL communication         - USB-R5485 "INTR" interface; INTR" interface; USB-RS485 communication         - USB-R5485 "INTR" interface; R5485 communication         - USB-R5485 "INTR" interface; R5485 communication         - USB-R5485 "INTR" interface; R5485 communication         - NFIF "INTRW" interface; R5485-Ethernet communication         - WIF "INTRW" interface; R5485-VIF wireless communication         - R5485-Ethernet "INTRE" interface; R5485-VIF wireless communication         - R5485-WIF "INTRW" interface; R5485-VIF wireless communication         - R5485-VIF in Wireless communication         Wireles       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Metagross weight       9.0/10.3 kg         Zx17 Ah/12 V (SLA) max.       H         Virging battery       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certific	Acquetic indication:	
Fuses:       - F <sub>MAINS</sub> - F <sub>BAT</sub> F 6,3 A / 250 V         - F <sub>AUX1</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         - Additional equipment (not included)       - USB-TTL _,INTU" interface; IUSB-TTL communication         - USB-R5485_INTUR" interface; S485 communication       - USB-R5485_K345 communication         - USB-R5485_WiFi "INTR" interface; USB-R5485 communication       - USB-R5485_K345 communication         - WiFi "INTY" interface; WiFi wireless communication       - Ethernet _,INTE" interface; R5485-Ethernet communication         - R5485-WiFi "INTRW" interface; R5485-Ethernet communication       - RS485-WiFi "INTRW" interface; R5485-Ethernet communication         - RS485-WiFi "INTRW" interface; R5485-Ethernet communication       - RS485-WiFi "INTRW" interface; R5485-Ethernet communication         - RS485-WiFi "INTRW" interface; R5485-Ethernet communication       - RS485-WiFi "INTRW" interface; R5485-Ethernet communication         - RS485-WiFi "INTRW" interface; R5485-Ethernet communication       - RS485-ViFi "INTRW" interface; R5485-Ethernet communication         - RS485-WiFi "INTRW       2nd environmental class (EN12101-10:2007 ), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+0,=102 + 8 [+/- 2mm]         W=420 H=420 D+0,=102 + 8 [+/- 2mm]       W=420 H=420 D+0,=102 + 8 [+/- 2mm]         Net/gross weight		- prezuerectric indicator ~75 db /0,5 m
- F <sub>BAT</sub> F 6,3 A / 250 V         - F <sub>AUX1</sub> F 5 A / 250 V         - F <sub>AUX2</sub> F 5 A / 250 V         Additional equipment (not included)       - USB-TTL "INTU" interface; USB-TTL communication - RS485 "INTR" interface; S485 communication - USB-RS485 "INTR" interface; USB-RS485 communication - USB-RS485 "INTR" interface; Ethernet communication - WiFi "INTW" interface; WiFi wireless communication - RS485-WiFi "INTRE" interface; RS485-Ethernet communication - RS485-WiFi "INTRE" interface; RS485-WiFi wireless communication - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication - RS485-WiFi WIFI wireless communication - RS485-UIFI wireless communicatio		
- F <sub>AUX1</sub> F 5 Å / 250 V         - F <sub>AUX2</sub> F 5 Å / 250 V         Additional equipment (not included)       - USB-TTL "INTU" interface; USB-TTL communication - USB-RS485 "INTR" interface; USB-RS485 communication - USB-RS485 "INTUR" interface; USB-RS485 communication - USB-RS485 "INTUR" interface; USB-RS485 communication - USB-RS485-Ethernet communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-Ethernet "INTR" interface; RS485-Ethernet communication - RS485-Ethernet "INTRE" INTR" interface; RS485-Ethernet communication - RS485-Ethernet at 20 D+D, = 102 + 8 [+/- 2mm] - Closing     <		
- F <sub>AUX2</sub> F 5 A / 250 V         Additional equipment (not included)       - USB-TTL "INTU" interface; USB-TTL communication - RS485 "INTRU" interface; ISB-RS485 communication - USB-RS485 communication - USB-RS485 communication - Ethernet "INTE" interface; Ethernet communication - WiFi "INTW" interface; WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-Ethernet "INTRE" interface; RS485-WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-WiFi wireless communication - RS485-Ethernet "INTRW" interface; RS485-WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-UFi wireless communication         Operating conditions       2nd environmental class (EM12101-10:2007), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D <sub>1</sub> =102 + 8 [+/- 2mm] W <sub>1</sub> =425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Additional equipment (not included)       - USB-TTL "INTU" interface; USB-TTL communication - RS485 "INTR" interface; RS485 communication - USB-RS485 "INTUR" interface; USB-RS485 communication - Ethernet "INTE" interface; USB-RS485 communication - Ethernet "INTE" interface; RS485-Ethernet communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-WiFi wireless communication         Operating conditions       2nd environmental class (EN12101-10:2007 ), -5 °C+75 °C         Enclosure       Steel plate DC01 1.2mm, color: RAL 3001 (red)         Net/gross weight       9,0/10,3 kg         Virial battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	_	
Additional equipment (not included)       - USB-RS485 "INTUR" interface; USB-RS485 communication - Ethernet "INTE" interface; Ethernet communication - WiFi "INTW" interface; WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication         Operating conditions       2nd environmental class (EN12101-10:2007), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Met/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Additional equipment (not included)       - Ethernet "INTE" interface; Ethernet communication - WiFi "INTW" interface; WiFi wireless communication - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication - RS485-WiFi "INTRW" interface; RS485-Ethernet communication - RS485-WiFi "INTRW" interface; RS485-Ethernet communication - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication - RS485-WiFi "INTRW" interface; RS485-Ethernet communication - RS485-Ethernet "Interface for Communication for the production date - Ethernet substance on table in the mounting surface so that cables can be led.		
(not included)       - Ethernet "INTE" interface; Ethernet communication         - WiFi "INTW" interface; WiFi wireless communication         - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication         - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication         Operating conditions       2nd environmental class (EN12101-10:2007), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D <sub>1</sub> =102 + 8 [+/- 2mm]         W <sub>1</sub> =425 H <sub>1</sub> =425 [+/- 2mm]       W <sub>1</sub> =425 H <sub>1</sub> =425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	Additional equipment	<i>"</i>
- WiFI TIN W Interface; WiFI WiFe uses communication         - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication         - RS485-Ethernet "INTRE" interface; RS485-Ethernet communication         - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication         - RS485-WiFi "INTRW" interface; RS485-Ethernet communication         - RS485-WiFi "INTRW" interface; RS485-Ethernet communication         - RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication         Operating conditions       2nd environmental class (EN12101-10:2007), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D <sub>1</sub> =102 + 8 [+/- 2mm]         W=425 H <sub>1</sub> =425 [+/- 2mm]       W=420 H=420 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max.         400 x 180 x 95mm (WxHxD) max       H ↓         D       Closing         Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
- RS485-WiFi "INTRW" interface; RS485-WiFi wireless communication         Operating conditions       2nd environmental class (EN12101-10:2007 ), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D <sub>1</sub> =102 + 8 [+/- 2mm] W <sub>1</sub> =425 H <sub>1</sub> =425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Operating conditions       2nd environmental class (EN12101-10:2007), -5 °C+75 °C         Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D <sub>1</sub> =102 + 8 [+/- 2mm] W <sub>1</sub> =425 H <sub>1</sub> =425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max       H //         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Enclosure       Steel plate DC01 1,2mm, color: RAL 3001 (red)         Enclosure dimensions       W=420 H=420 D+D_1=102 + 8 [+/- 2mm] W_1=425 H_1=425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max       H D         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificat of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	Operating conditions	
Enclosure dimensions       W=420 H=420 D+D_1=102 + 8 [+/- 2mm] W_1=425 H_1=425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max       H H H D         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
W1=425 H1=425 [+/- 2mm]         Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max       H D         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Net/gross weight       9,0/10,3 kg         Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.		
Fitting battery       2x17 Ah/12 V (SLA) max. 400 x 180 x 95mm (WxHxD) max       H D         Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	Net/gross weight	
Fitting battery       400 x 180 x 95mm (WxHxD) max       Image: Constant of the second		
Closing       Key lock         Certificates, declarations, warranty       Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	Fitting battery	
Closing         Key lock           Certificates, declarations, warranty         Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date           Notes         The enclosure does not adjoin the mounting surface so that cables can be led.		
Certificates, declarations, warranty         Certificate of constancy of performance CNBOP-PIB No 1438-CPR-0385, certificate of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date           Notes         The enclosure does not adjoin the mounting surface so that cables can be led.	Closing	_
Certificates, declarations, warranty       of approval CNBOP-PIB No 2174/2014, CE, RoHS, 5 years from the production date         Notes       The enclosure does not adjoin the mounting surface so that cables can be led.	v	
CE, RoHS, 5 years from the production date           Notes         The enclosure does not adjoin the mounting surface so that cables can be led.	Certificates, declarations, warranty	
		CE, RoHS, 5 years from the production date
	Notes	
Convection cooling.		Convection cooling.

Pulsar

Parameters remote control system.

(additional modules required)





# EN54/LCD series power supply unit Power supply for fire alarm systems 27,6 V DC

Pulsar

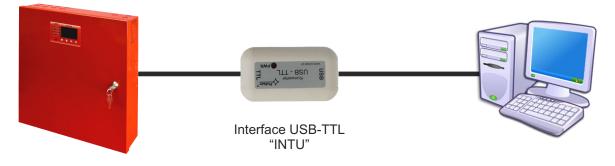
### Remote monitoring (options: Wi-Fi, Ethernet, RS485, USB).

The PSU has been adjusted to operate in a system that requires a remote control of the parameters in a monitoring centre. Transmitting data concerning PSU status is possible due to an additional, external communication module responsible for communication in Wi-Fi, Ethernet or RS485 standard. It is possible to connect the PSU and the computer via the USB –TTL interface.

Different connection topologies, presented later in this chapter, are only a part of possible communication schemes. More examples can be found in the manuals dedicated to individual interfaces.

#### Communication via the USB-TTL interface.

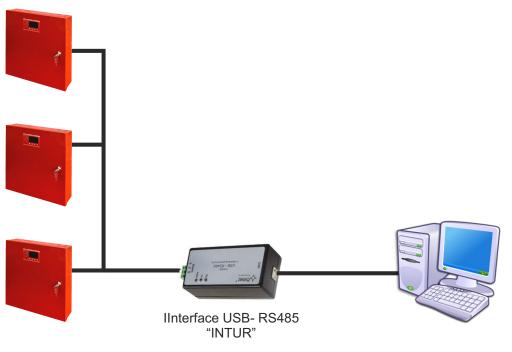
The easiest way of communication between the PSU and the computer is provided by the USB-TTL "INTU" interface. This interface allows direct connection between the computer and the PSU and is recognizable by the operating system as a virtual COM port.



USB-TTL communication using the USB-TTL "INTU" interface.

#### RS485 network communication.

Another type of network communication is the RS485 communication using two-wire transmission path. To achieve this kind of data exchange, the PSU should be equipped with the additional RS485 TTL "INTR" interface, converting data from the PSU into the RS485 standard and the USB-RS485 "INTUR" interface, converting data from the RS485 network to the USB. Offered interfaces are galvanically isolated and protected against surges.



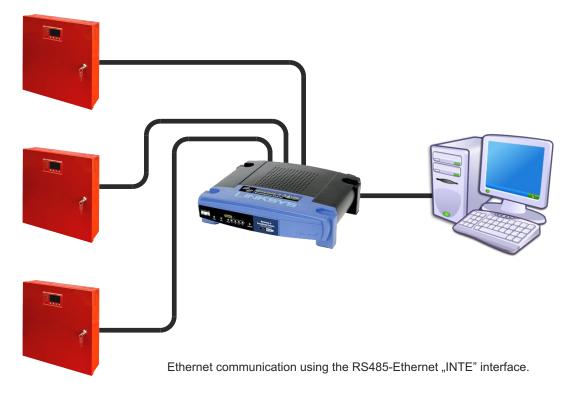
RS485 communication using the "INTR" and "INTUR" interfaces.



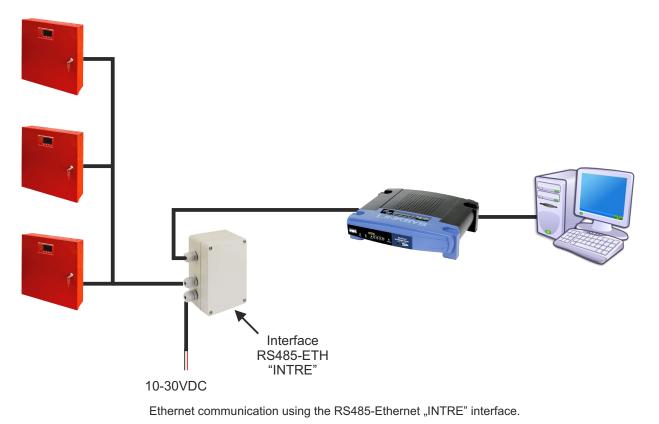
### ETHERNET network communication.

Communication in the Ethernet network is possible due to the additional interfaces: Ethernet "INTE" and RS485-ETH "INTRE", according to the IEEE802.3 standard.

The Ethernet "INTE" interface features full galvanic isolation and protection against surges. It should be mounted inside the enclosure of the PSU.



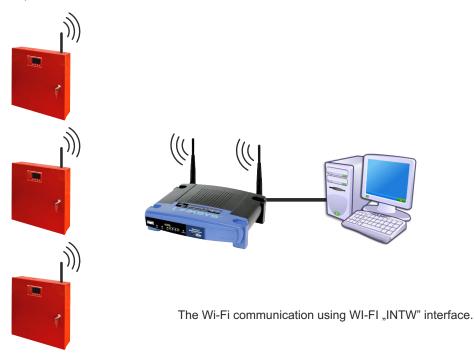
The RS485-ETHERNET "INTRE" interface is a device used to convert signals between the RS485 bus and the Ethernet network. For proper operation, the unit requires an external power supply in the range of 10÷30 V DC e.g. drawn from a PSU of the EN54 series. The physical connection of the interface takes place under galvanic isolation. The unit is mounted in a hermetic enclosure protecting against adverse environmental conditions.



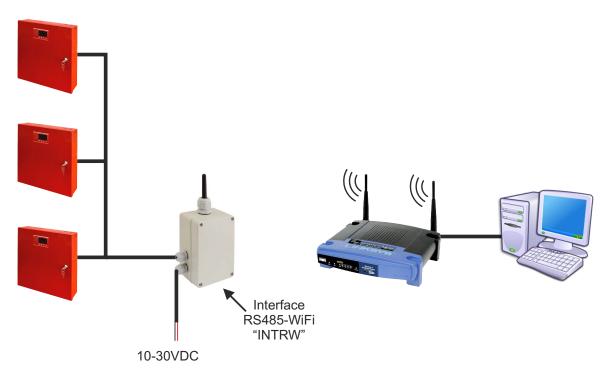
Pulsar

#### The Wi-Fi wireless communication.

The Wi-Fi wireless communication can be implemented on the basis of additional interfaces: WI-Fi 'INTW' and RS485-WiFi, operating within 2,4GHz frequency band, according to the IEEE 802.11 bgn standard. The WiFi 'INTW' interface shall be mounted in a selected location inside the enclosure so that the antenna is exposed to the outside.



The RS485-WiFi "INTRW" interface is a device used to convert signals between the RS485 bus and the WiFi network. For proper operation, the unit requires an external power supply in the range of 10÷30 V DC e.g. drawn from a PSU of the EN54 series. The physical connection of the interface takes place under galvanic isolation. The unit is mounted in a hermetic enclosure protecting against adverse environmental conditions.



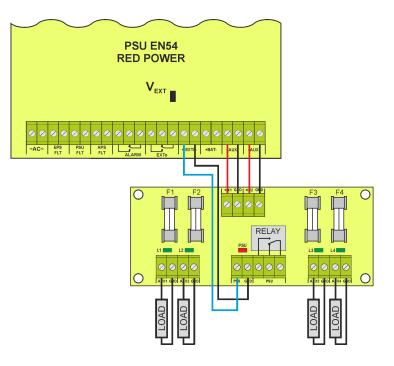
The The Wi-Fi communication using the RS485-WIFI "INTRW" interface.



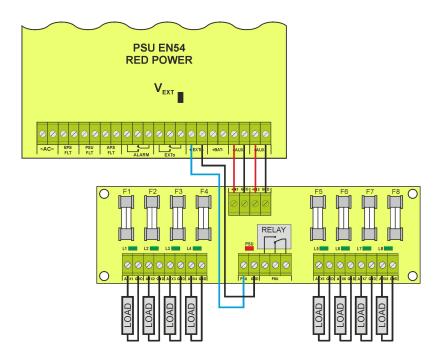
### Fuse modules EN54-LB4 and EN54-LB8

Fuse modules EN54-LB4 and EN54-LB8 allow to connect 4 or 8 receivers to the PSU. Output state is indicated by green LEDs.

Blown fuse signal is transmitted to the input of collective failure EXTi (ALARM) and saved in the internal memory of PSU. The PSU's relay output can also be used for remote control, including external optical indication.



The connection of fuse module: EN54-LB4.



The connection of fuse module: EN54-LB8.