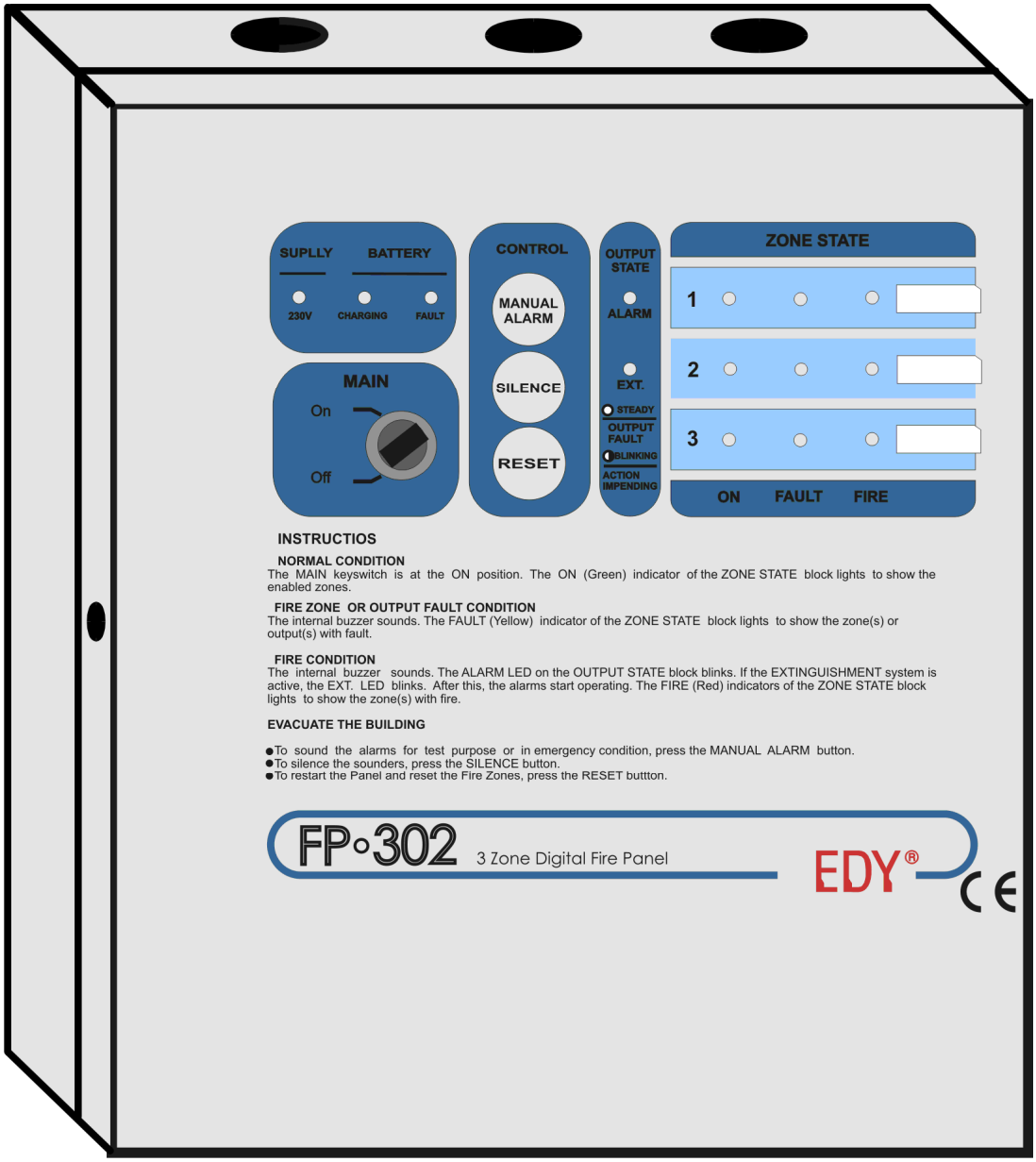
FP 302

Fire Detection Panel



Installation / Operating Instructions

The family of fire detection panels is consisted of 2 types, FP-202 2 zone, and FP-302 3 zone. The FP-3 with 3 zones.

- 2 batteries 12V 2.4Ah, provided with charge and protection circuit.
- Alarm output with open circuit and adjustable delay time (ALARM) control.
- Automatic extinguisher output with open circuit and adjustable delay time (EXT.) control.

EDY ΗΛΕΚΤΡΟΝΙΚΑ ΣΥΣΤΗΜΑΤΑ

FP 302

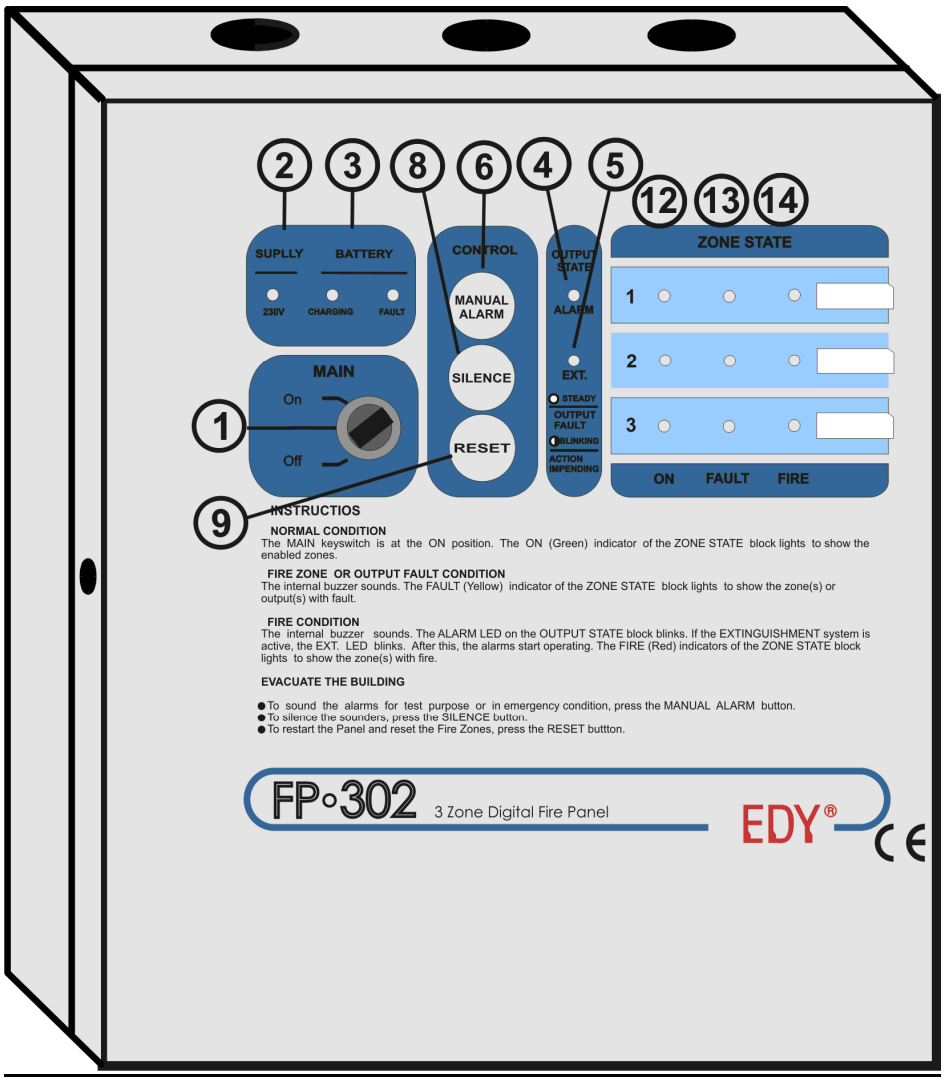
INSTALLATION

For mounting the Fire Panel to the wall, the panel provides mounting holes. Remove the screw on the side of the panel door and open it, gaining access to the interior.

WIRING

Connect the Mains Power Supply 230V A.C. after having finished all the other connections.
On the upper side of the panel there are holes for the wiring to pass through.
The cables used in the connections must have a minimum conductor diameter size 1mm^2.
There are resistors 4K7 / 0.5W installed on the zone connection terminals (ZONE1, ZONE2, ZONE3) and outputs connection terminals (ALARM, EXT.OUT). This terminal resistor must be removed and installed on the last device (siren, detector e.t.c.) of each circuit.
The main supply power cable must include an earth conductor.

Control keyboard and indication Leds



FP 302

1. MAIN ON/OFF - Key switch
It is the master switch of the Fire Panel.
ON state: the “ON” green led, of the zones that are enabled, lights and the Fire Panel is in normal operation.
OFF state: the zones are disabled and the control keyboard does not work, but the battery control / charge function remains active.

2. SUPPLY 230V
The **green led** lights, indicating mains supply functioning.

3. BATTERY - Battery charge indicator.
CHARGING The **green led** flashes, indicating the function of the battery charging circuit.
FAULT The **red led** lights, indicating that the battery voltage drops below 20% of the rated value, or the fuse is blown. At the same time the buzzer sounds.

4. ALARM - yellow led
This indicator blinks when any zone is in ALARM condition.
In case that the alarm output circuit is open, the led Alarm lightes and the buzzer sounds.

5. **EXT**. - yellow led
This indicator blinks when the extinguisher system is about to be activated.
In case that the alarm output circuit is open, the led Alarm lightes and the buzzer sounds.

6. BUTTON: MANUAL ALARM
The pressing of this button activates the alarm output (ALARM) of the panel and the ALARM led (4) blinks and the buzzer sounds.

8. BUTTON: SILENCE - Μπουτόν, σίγηση συναγερμού
The pressing of this button disables the alarm output (ALARM) of the panel.
CAUTION: the automatic extinguishing function is NOT CANCELED.

9. BUTTON: RESET
The pressing of this button shuts down the power of the zones for 1 second, the buzzer sounds and all the indicators light up. After this the Fire Panel enters normal operation.

12. ON
The **green led** lights, when the zone is enabled.

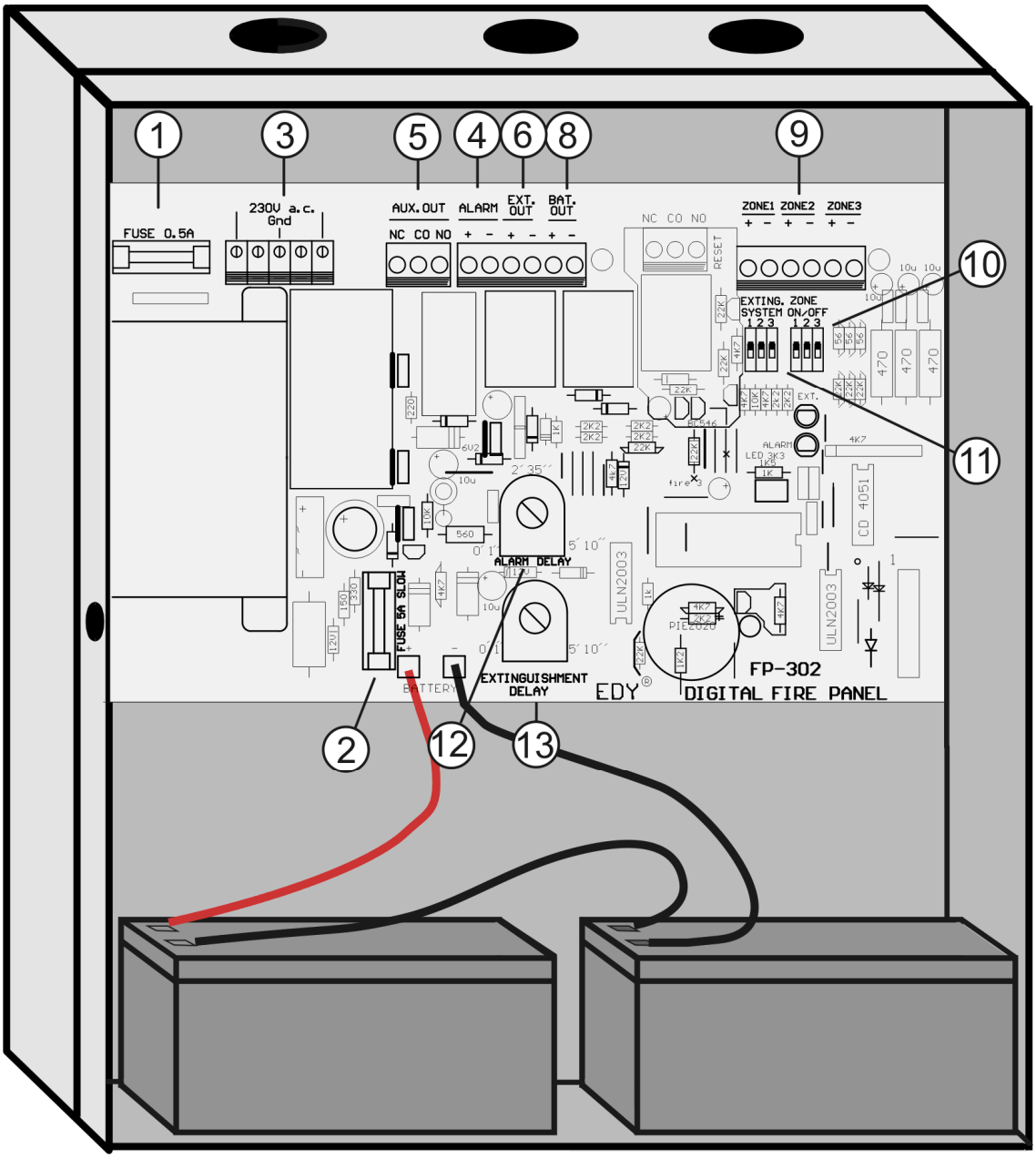
13. FAULT
The **yellow led** lights, in case of an open or short circuit condition in the zone.

14. FIRE
The **red led** lights, when the zone is in ALARM condition.

EDY

FP 302

Schematic diagram of the Fire Panel FP-302



1. FUSE 0.5A / 250V
Internal slow-blow glass fuse 5x20mm 0.5A.

2. FUSE - T5A/250V
Internal slow-blow glass fuse 5x20mm 5A.
It protects the low voltage circuit board (battery) from short circuit, overload and incorrect battery polarity.

3. 230V - **Terminal block**
Mains voltage connection terminal block (230V AC).

4. ALARM - General alarm output (contact relay)
This terminal provides 24V DC for connecting sirens, when there is an ALARM condition. Maximum current 5A.
In case that the alarm output circuit is opened, the led MANUAL ALARM flashes and the buzzer sounds.
By default it has a pre-installed terminal resistor (4K7). This resistor must be removed and installed on the last siren of the line.
When the extinguishing output is about to be activated, the ALARM output is repeatedly activated and deactivated to indicate this state.

5. AUX. - Auxiliary alarm output (contact relay)
It is an additional voltage free relay contact.
Maximum current 5A.

6. EXT. OUT - Auto extinguishing output (contact relay)
This terminal provides 24V DC for connecting actuators or electro valves, when there is an extinguishing condition. Maximum current 5A.
In case that the extinguishing output circuit is opened, the led EXT. MUTE flashes and the buzzer sounds. By default it has a pre-installed terminal resistor (4K7). This resistor must be removed and installed on the last device of the line.

8. BAT. OUT - Battery voltage auxiliary.
This terminal provides 24V DC, when the MAIN switch is ON. It is used to power

9. ZONE 1, ZONE 2 - Fire Alarm Connection Terminals
To each zone are connected the detectors and the call points of the installation. By default it has a pre-installed terminal resistor (4K7). This resistor must be removed and installed on the last device of the line. If a zone is no used, disabled it and let the terminal resistor be connected on the zone.

10. ZONE ON / OFF - (Dip switches)
These dip switches enable / disable the zones.

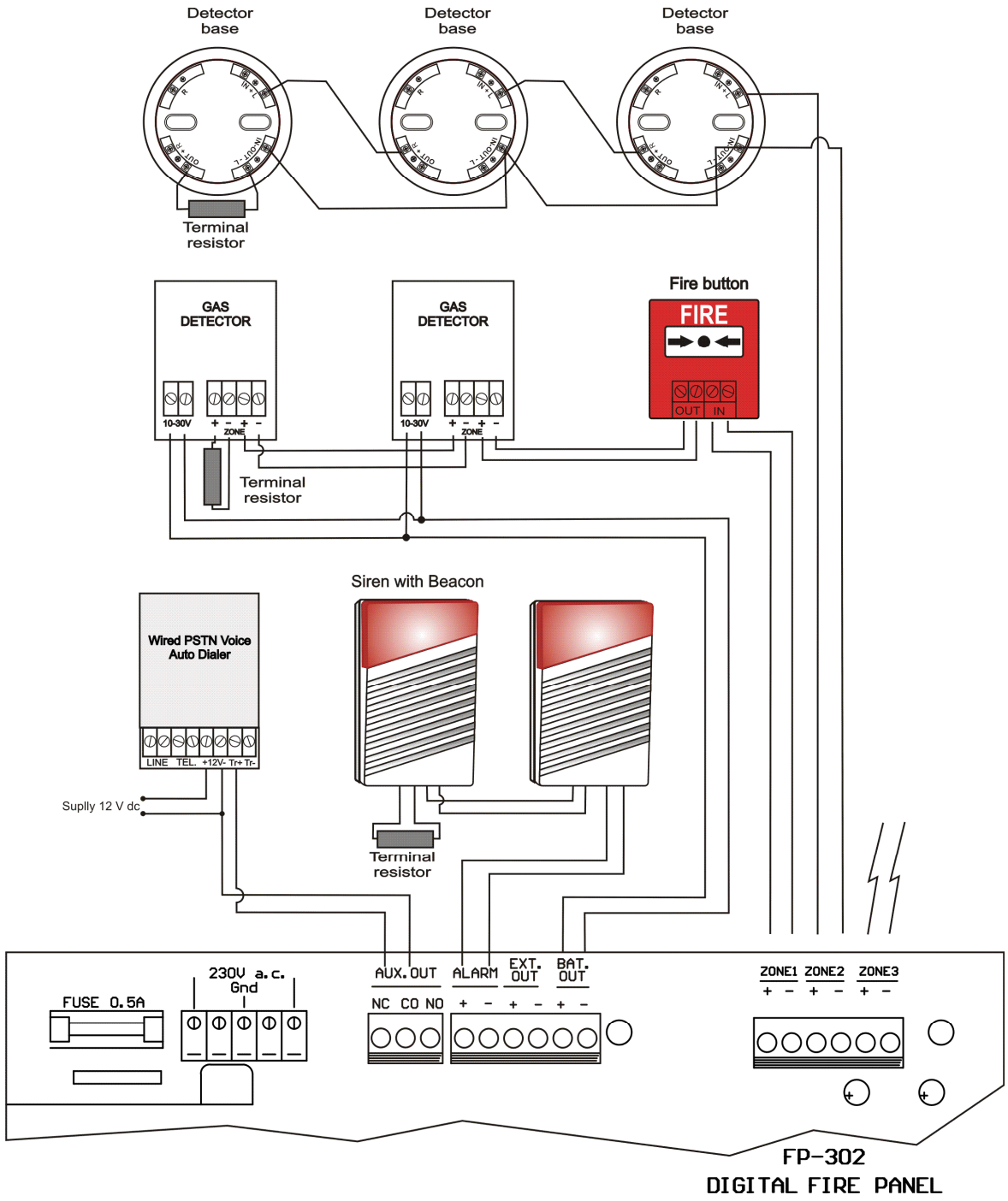
11. EXTING. SYSTEM ON / OFF – (Dip switches)
They are used to activate the automatic extinguishing system. When all dip switches are set on “OFF” position (down), the extinguishing system is out of order. When there is a fire alarm condition for all the zones that are specified by the dip switches, the extinguishing system is activated. For example, if the switches 1 and 2 are set on the “ON” position, the extinguishing system will be activated when there is a fire alarm condition in zones 1 and 2 **both**.

12. ALARM DELAY - Trimmer alarm delay setting
We can adjust the Delay Alarm, between the alarm activation of a zone and the activation of the ALARM output (sirens), by using this trimmer.

13. EXTINGUISHMENT DELAY - Trimmer Extinguishing delay setting
It adjusts the time elapsed between the activation of the ALARM output (sirens) and the extinguishing system activation.

FP 302

Connections



FP 302

TECHNICAL CHARACTERISTICS

INDICATORS	"SUPPLY - 230V~" - mains supply functioning indicator "BATTERY - CHARGING" - Battery charge indicator "BATTERY - FAULT" - low battery indicator ***** "OUTPUT STATE - ALARM" - constant light: the alarm output circuit is open * blinking light: imminent siren activation * "OUTPUT STATE - EXT." - constant light: the extinguishing output circuit is open * blinking light: imminent extinguishing activation ***** "ZONE STATE - ON" - enabled zone indicator "ZONE STATE - FAULT" - open or short circuit condition in the zone indicator * "ZONE STATE - FIRE" - zone in ALARM condition indicator * *** is accompanied by an audible signal (buzzer)**
OPERATIONS	"MAIN - ON/OFF" - key switch: function control "CONTROL-MANUAL ALARM" - pushbutton: start the manual alarm "CONTROL - SILENCE" - pushbutton: silence the alarm "CONTROL - RESET" - pushbutton: reset the Fire Panel
INTERIOR SETTINGS	"ALARM DELAY" - trimmer: 0'1" - 5'10" alarm delay setting "EXTINGUISHMENT DELAY" - trimmer: 0'1" - 5'10" extinguishing delay setting "EXTING. SYSTEM" - dip switches: extinguishing ON / OFF "ZONE ON/OFF" - dip switches: enable / disable the zones

ZONE NUMBER	3
ZONE VOLTAGE	23V
ALARM ZONE minimum current	8 mA
ALARM ZONE maximum current	50 mA
SHORT CIRCUIT ZONE current	>40 mA
OPEN CIRCUIT ZONE current	<4 mA
TERNINAL RESISTOR ZONE / OUTPUT	4K7 / 0.5W
MAXIMUM NUMBER OF DETECTORS PER ZONE	30 pieces

OUTPUTS	"ALARM" - alarm output: relay contact 24V DC max. 5A "AUX. OUT" - alarm output: voltage free relay contact max. 5A "EXT. OUT" - extinguishing output: relay contact 24V DC max. 5A "BAT. OUT" - auxiliary voltage output: relay contact 24V DC max. 5A
BATTERY	Lead acid sealed battery 2x12 V, 2.4Ah
CHARGING	300mA, 16 h
PROTECTIONS	230V: slow blow glass fuse 5x20mm 1A / 250V Battery: slow blow glass fuse 5x20mm 5A / 250V. Battery protection from: short circuit, faulty connection, overcharging, full discharge.
AUTONOMY	72h stand by
OPERATION VOLTAGE	230Va.c.
POWER SUPPLY	27,6V / 600mA max
DIMENSIONS	270mm x 235mm x 85mm
CONSTRUCTION MATERIAL	Metallic box with electrostatic paint

EDY

FP 302

EDY **ΗΛΕΚΤΡΟΝΙΚΑ ΣΥΣΤΗΜΑΤΑ**

ΠΡΩΤΟΓΕΝΟΥΣ 69 ΑΝΩ ΤΟΥΜΠΑ
ΤΗΛ.- FAX 948256
ΤΚ 54351 ΘΕΣΣΑΛΟΝΙΚΗ