

The ZUP-230V-BM power supply units, adapted to cooperate with the Fire Control panel, are intended for controlling opening of gates which during fire are used to support smoke removal in the building by means of aeration.

They can also be used as independent devices supplying guaranteed voltage of 230V (UPS).

All power supplies can be connected to an external safety switch (EPO), which allows the complete disconnection of 230V voltage, regardless of the operating status of the power supply.

The device has been developed in several versions with a power rating from 400W to 1500W.

The power supply delivers a guaranteed 230V from the mains and after its failure, from its own inverter powered by an internal 24V battery bank.

The 24V voltage can optionally also be used as guaranteed voltage by other, external devices.



CNBOP CERTIFICATE NO. 1438-CPR-0761

Declaration of Performance No. DWU-MX-19

Certificate of Approval No. 4300/2021

CHARACTERISTICS AND MAIN APPLICATIONS

Most fire protection devices supplied with 230V voltage remain stationary during supervision, i.e. they do not consume any power. The organization of the ZUP-230V-BM power supply takes this fact into account and in the event of a mains power failure, the internal inverter is turned off, saving the charge accumulated in the battery bank. This voltage can be restored at any time upon receipt of a fire alarm or other control signal. This allows the supervision time to be extended to 72h while maintaining the readiness to work with full power, despite the use of a battery with a relatively small capacity.

The main application of the ZUP-230V-BM power supply units includes:

- **230V supply for aeration gates of gravity smoke exhaust systems**
- **powering other devices requiring a guaranteed voltage of 230V, and optionally 24Vdc**

STANDARD EQUIPMENT AND FUNCTIONS

- guaranteed 230V output protected by a fuse with an additional relay output (e.g. for a gate controller to raise it)
- full battery support, including protection against deep discharge, temperature dependence of the battery voltage and resistance control of the battery circuit (EN 54-4 standard requirement)
- set of 2x 12V batteries with capacity adapted to power supply requirements (according to the table on page 2)
- light indication of the operating status on the cabinet door and diagnostic indication inside the power supply
- possibility of receiving a fire alarm from CIE through a parameterized line or an ordinary two-state line
- output of external relay indication of PSU failure
- input of a hand switch to open the gate
- internal test button that also allows you to start the power supply from only the batteries, without mains power (cold start)
- optional 24V guaranteed voltage output (ZUP-230V-BM-24V module)
- optional programmable relay module enabling implementation of additional time functions (ZUP-TR module)

COMPLIANCE WITH STANDARDS AND DIRECTIVES

EN 54-4	Fire detection and fire alarm systems. Part 4: Power supplies.
EN 12101-10	Smoke and heat control systems. Part 10: Power Supplies.
EN 62368-1	Information technology equipment. Safety.
2014/35/EU [LVD]	Low-voltage electrical devices.
2014/30/EU [EMC]	Electromagnetic compatibility.
305/2011/EU [CPR]	Harmonised conditions for the marketing of construction products.
2011/65/EU [RoHS 2]	Requirements for the restriction of the use of certain hazardous substances in electrical and electronic equipment, together with the new change introduced by the directive 2015/863 [RoHS 3].



BASIC OPERATING PARAMETERS OF POWER SUPPLIES

Index	Output power 230Vac	Battery capacity	Box Type – Dimensions [mm]	Maximum weight with battery
ZUP-230V-BM-400S	400 W	18 / 22 Ah	S - 272 x 457 x 205	19 kg
ZUP-230V-BM-700S	700 W	18 / 22 Ah		21 kg
ZUP-230V-BM-1000S	1000 W	18 / 22 Ah		22 kg
ZUP-230V-BM-700M	700 W	33 Ah	M - 455 x 406 x 205	31 kg
ZUP-230V-BM-1000M	1000 W	45 Ah		38 kg
ZUP-230V-BM-1500L	1500 W	45 Ah	L - 555 x 456 x 205	41 kg

BASIC ELECTRICAL AND ENVIRONMENTAL PARAMETERS

Power	
Mains supply voltage	230 V -15% +10% 50 Hz
Output 230Vac <i>It has a common neutral N wire with the mains input.</i>	
Output voltage 230Vac: - with the present mains supply (>184V) - in the absence of mains power	equal to the supply voltage 230 V ±10% 50 Hz
Short-circuit protection (fuse)	10AT 5 x 20 mm
Output 24Vdc <i>Option only available for power supplies in M and L boxes</i>	
Rated output voltage 24Vdc at 25°C	27.1 V
Change of the 24Vdc voltage depending on the battery charge level	20.5...28.8 V
Battery pack	
Maximal charging current of battery bank from 18Ah up to 45Ah	2.0 A
Quiescent current consumption from battery: - with inverter running *) - when inverter switched off - after disconnection of the discharged battery	0.59 ... 1.44A 39mA 0.34mA
Environment	
Operating temperature	-5...+40°C
Degree of protection according to EN 60529	IP 30

*) Detailed information concerning parameters as well as dimensions, method of mounting etc. can be found in the Operation Manual of power supply units for fire gates and fire automation systems ZUP-230V-BM.

Usual Order Example

1. Power supply for fire ventilation and automatization **ZUP-230V-BM-1000S** 1 unit

MANUFACTURER

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