

TECHNICAL SPECIFICATIONS

These technical specifications are subject to change without notice.

PRODUCT DESCRIPTION

The power supply units are intended for uninterrupted power supply of 24 V powered fire protection systems, and meet the requirements of the standards

EN 54-4+A1+A2 and EN 12101-10. The reserve power supply is taken from two 12 V valve regulated batteries with lead/acid cells (Valve Regulated Lead Acid, VRLA). The power supply units are intended for wall mounting.

Table 1: Version overview					
Article	Power supply, (mains unit).	Charging current	License plate	Battery capacity	
			I _{max b}	I _{max a}	
EN54 24V 1.5A MX S	ZSPM-75-05	0.5 A	1.5 A	1.1 A	7-9 Ah
EN54 24V 5.5A MX M	ZSPM-150-10	1.0 A	5.5 A	4.6 A	7-20 Ah
EN54 24V 7.5A MX L	ZSPM-200-33	2.0 A	7.5 A	5.6 A	17-45 Ah

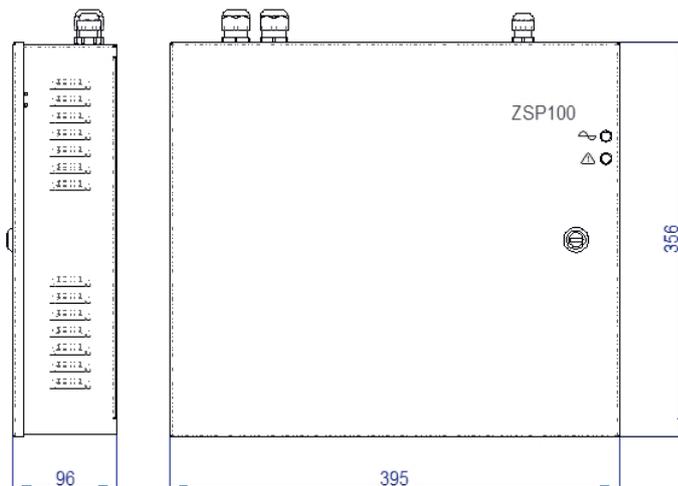


Fig. 1: Product example – EN54 24V 5.5A MX M

The cabinet has knock-out cable entries at the top and on the right side as well as a rectangular opening on the back (side

against the wall) for cabling. Before installing the cabinet, select and determine the routing and location of the cables, break out the cable glands to be used and install the necessary cable glands.

Table 2: Dimensions and weight			
	EN54 24V 1.5A MX S	EN54 24V 5.5A MX M	EN54 24V 7.5A MX L
External dimensions (W x H x D) (mm)	340 x 250 x 80 mm	395 x 356 x 96 mm	455 x 356 x 187 mm
Mounting holes, distance:			
Inside the cabinet (W x H) (mm)	276 x 182 mm	350 x 282 mm	410 x 282 mm
External brackets (W x H) (mm)	276 x 270 mm	350 x 370 mm	410 x 370 mm
Max. weight without batteries (kg)	3.1 kg	4.9 kg	7.6 kg
Max. weight with batteries (kg)	8.4 kg	17.2 kg	36.6 kg
Cable entries on the top	6 pcs. DW20-RM, 1 pc. DW16-RM		
Cable entries on the left side	3 pcs. DW20-RM, 1 pc. DW16-RM	6 pcs. DW20-RM, 1 pc. DW16-RM	



Fig. 2: Product example - installation dimensions for EN54 24V 5.5A MX M

The cabinet must be attached to the wall with 4 screws. Do not use plastic expander plugs. Unscrew the two screws in the bottom of the cabinet, angle the block out slightly and take it out downwards.

Table 3: Electrical and operating environment data	EN54 24V 1.5A MX S / EN54 24V 5.5A MX M	EN54 24V 7.5A MX L
Rated voltage ^{*1)}	110 / 230 V +10/-15%	
Nominal output voltage ^{*2)}	27.1V	
Control range output voltage ^{*3)}	21.0-28.8V	
Quiescent current consumption from batteries	Max. 17mA	Max. 25mA
Power consumption from the mains with charged batteries	About 1.7 W	
Efficiency at rated load with charged batteries	89%	
Max. resistance in the battery circuit, (1.5 A and 5.5 A) ^{*4)}	250 mΩ	100 mΩ
Number of monitored batteries	2	
Number of separately secured outputs	2	5
Ambient temperature in operation	-5 to +55 °C	
Enclosure class according to EN 60529:2003	IP 42	
Functional class according to EN 12101-10:2007	A	
Environmental class according to EN 12101-10:2007	2	
Protection class according to EN 62368-1:2014 +A11:2017	I	

*1) If power supply unit ZSP100 consisting of power supply module ZSPM-150 is to be fed from 110 V mains, the mains voltage switch must be placed in position 115 V (this is not necessary for ZSP100 versions with ZSPM-75, ZSPM-200, ZSPM-320).

*2) Applies to operation in trickle charge mode at 25°C.

*3) The control range extends from the start of the constant current charge to the end of the equalization charge.

*4) Fault indication is triggered when the battery circuit resistance reaches this value. Installation and connection

WARNINGS AND INSTRUCTIONS - READ THIS FIRST!

- Read and follow all warnings and instructions below. Failure to heed the warnings and follow the instructions can result in property damage, electrical accidents, fire or serious personal injury.
- It is forbidden to carry and transport the device with the batteries installed and connected. If this is not followed, serious internal errors may occur and functional safety may be compromised.
- Installation and connection work may only be carried out when the batteries are removed.
- Connect the batteries with the correct polarity - check that the battery polarity corresponds to the marking of the battery terminals.
- Keep the ventilation openings clear. There must be at least 10 cm of free space on both sides of the unit for the unit's ventilation needs to be met. Inadequate ventilation can lead to damage to the device or to shortened battery life.
- The unit must be installed indoors in a non-condensing environment.
- The unit must be connected to a protectively grounded network.
- Check that all connections are made correctly before turning on the unit.
- The device may cause interference in nearby, sensitive radio and TV equipment.
- Service and repair of the device may only be performed by the manufacturer or a service representative authorized by the manufacturer.

This translation is not verified and should be cross referenced with the swedish original before use.

BATTERIES - RECOMMENDED, NOT INCLUDED

7.2 Ah, 12 V AGM battery

Fits in	Number of batteries
EN54 24V 1.5A MX S	2

Battery type	V	Ah
Maintenance-free AGM, lead-acid battery.	12 V	7.2 Ah

10+ Design life * battery

Article number	E-number	Article name	Terminal	Measure. Height width depth	Weight per piece	Make
MT113-12V07-01	5230536	UPLUS 12V 7.2Ah 10+ Design Life battery	Flat pin 6.3 mm	151 x 65 x 100 mm.	2.4 kg	UPLUS

* Design Life is the durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.

20 Ah, 12 V AGM battery

Fits in	Number of batteries
EN54 24V 5.5A MX M	2

Battery type	V	Ah
Maintenance-free AGM, lead-acid battery.	12 V	20 Ah

10+ Design life * battery

Article number	E-number	Article name	Terminal	Measure. Height width depth	Weight per piece	Make
MT113-12V20-01	5230538	UPLUS 12V 20Ah 10+ Design Life battery	M5 Bult	182x77x168 mm	6.0 kg	UPLUS

* Design Life is the durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.

45 Ah, 12 V AGM battery

Fits in	Number of batteries
EN54 24V 5.5A MX S	2

Battery type	V	Ah
Maintenance-free AGM, lead-acid battery.	12 V	45 Ah

10+ Design life * battery

Article number	E-number	Article name	Terminal	Measure. Height width depth	Weight per piece	Make
MT113-12V45-01	5230546	UPLUS 12V 45Ah 10+ Design Life battery	M5 Bult	197x165x170 mm	14.5 kg	UPLUS

* Design Life is the durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.