

**Matrix RT**  
**External Battery Module (EBM)**  
**240VDC**  
**(MXRBP10K )**  
**Battery Installation Guide**

# BATTERY INSTALLATION

---

## 1. Instructions

### Safety Instructions

- Installation or battery replacement must be performed by professional technical personnel.
- **CAUTION:** To reduce the risk of fire, replace with the same number and type of battery.
- **CAUTION:** Risk of electric shock, Battery circuit is not isolated from AC input, hazardous voltage may exist between battery terminals and ground. Test before touching.
- Do not dispose of batteries in a fire. The batteries may explode.
- Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
- A battery can present a risk of electrical shock and high short circuit current. the following precautions should be observed when working on batteries:
  1. Remove watches, rings, or other metal objects.
  2. Use tools with insulated handles.
  3. Wear rubber gloves and boots.
  4. Do not lay tools or metal parts on top of batteries.
  5. Disconnect charging source prior to connecting or disconnecting battery terminals.

### Disposing of The Product

- The BATTERY BOX contains internal material that (in case of dismiss / disposal) are considered TOXIC and HAZARDOUS WASTE, such as electronic circuit boards and batteries. Treat these materials according to the applicable laws referring to qualified service personnel. Their proper disposal contributes to respect the environment and human health.
- The replaced batteries must be sent to a specialist disposal company by means of recycling (batteries are classified by law as “toxic waste”)

### Environmental Protection

- No hazardous materials such as CFC, HCFC or asbestos are used in this product.
- When evaluating packaging, the choice of material has been made favoring recyclable materials.
- For correct disposal, please separate and identify the type of material of which the packaging is made in the table below. Dispose of all material in compliance with standards in force in the country in which the product is used.

Packaging Part	Material
Pallet	Plywood
Protective corner Board	Cardboard
Packaging belt	High strength polyester
Protective film	Polyethylene film
Carton	Cardboard
Protective PE form	EPS
Protective bag	HD Polyethylene

# BATTERY INSTALLATION

## 2. Battery Installation

2.1). Take out the front panel, take out the top cover by removing screws on top & rear & side according to Fig 2-1:



Fig 2-1

2.2). Put the battery into the chassis refer to Fig 2-2:



Fig 2-2

2.3). Connect the battery with W11, W12, W13, W14, W15, W16 refer to Fig 2-3:

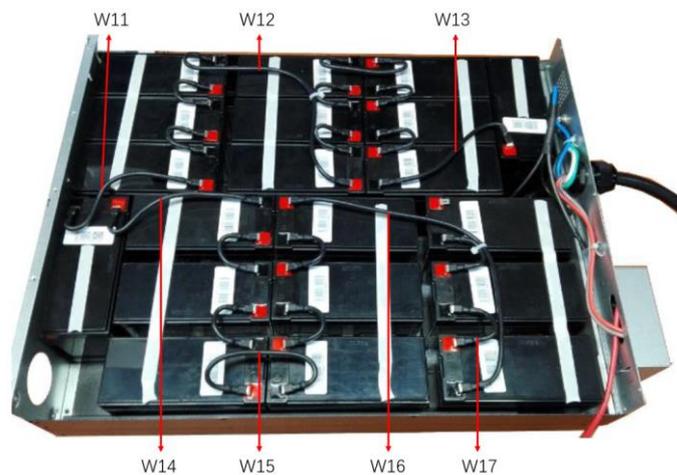


Fig 2-3

# BATTERY INSTALLATION

2.4). Install the battery plastic cover and connect the battery wire +, then connect the battery wire - refer to Fig 2-4:

Battery Wire -    Battery Wire +

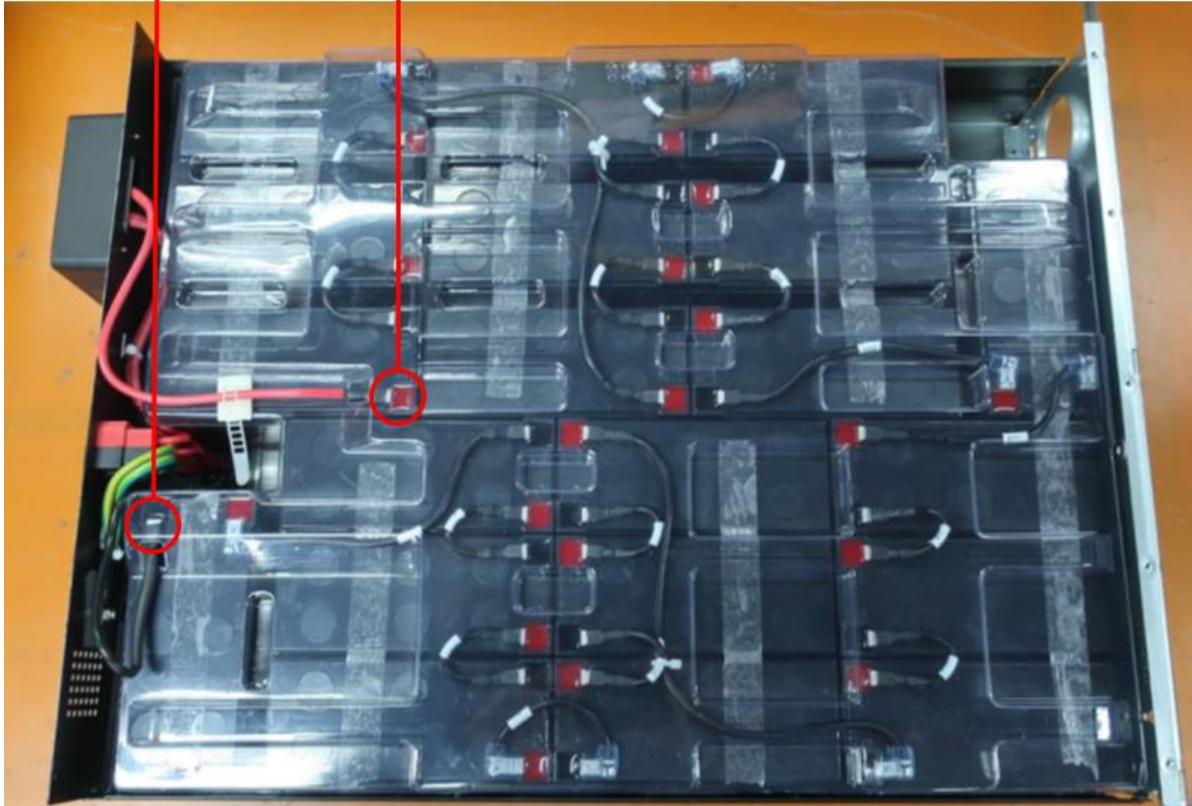


Fig 2-4

2.5). Install the top cover with screws refer to Fig 2-5:

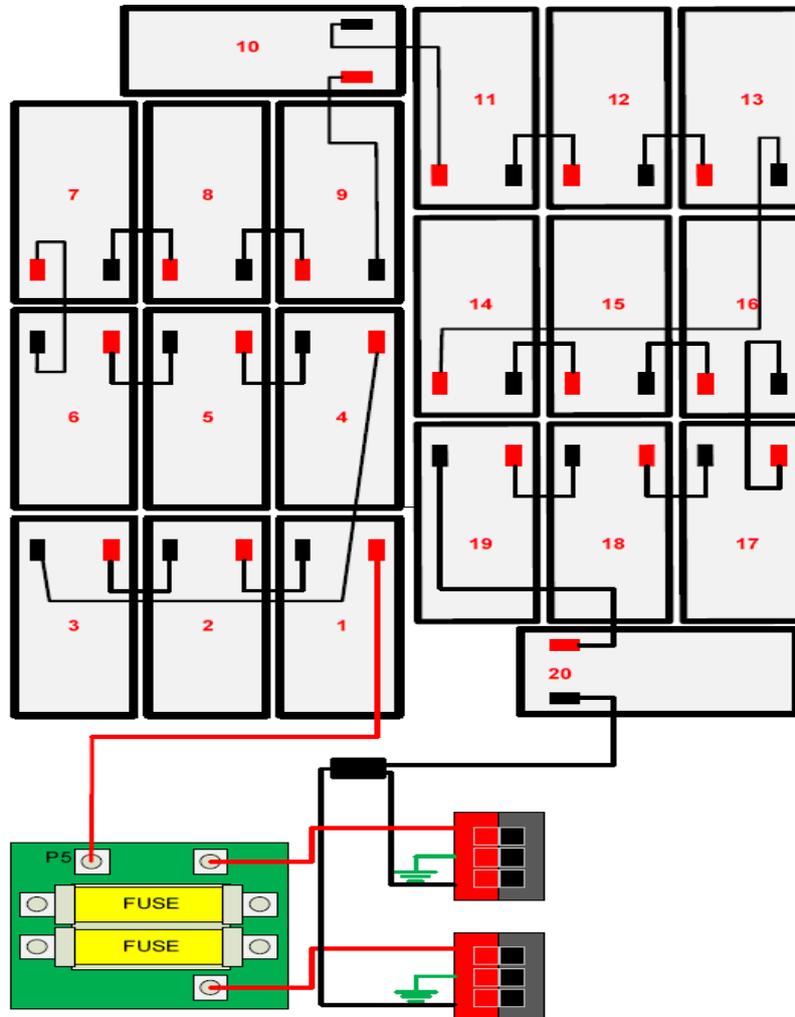


Fig 2-5

# INTERNAL WIRING DIAGRAM

## 3.Internal wiring diagram

### 20 RT EBM internal wiring diagram



#### Battery wire list:

Model	Number of the Wire	Quantity	Wire Specification	Wire Length(mm)
MATRIX RT Battery Cabinet 240VDC	W11	1	10 AWG BLK	140
	W12	1	10 AWG BLK	300
	W13	1	10 AWG BLK	180
	W14	1	10 AWG BLK	160
	W15	2	10 AWG BLK	105
	W16	1	10 AWG BLK	330
	W17	12	10 AWG BLK	70
	Battery wire +	1	10 AWG RED	300
	Battery wire -	1	10 AWG BLK	220

# SPECIFICATION

---

## 4. Specification

### Battery configuration

Nominal Voltage: 240Vdc

Maximum battery space: 1 string 20 Batteries 9Ah

### Dimensions and weights

Model p/n	Description	Net weight (kg)	Gross weight (kg)	Outline dimension (L*W*H/mm)	Packaging dimension (L*W*H/mm)
MXRBP10K ( 9000-00408AH1 )	MATRIX RT EBM 240V without Battery, max 20batt. 9Ah	10,5	14,9	559*438*129	790*572*343
MXRBP10K-207	MATRIX RT EBM 240V with 1string 20 x 12V/7Ah battery	56,1	60,4	559*438*129	790*572*343
MXRBP10K-209 ( 9000-00408AH2 )	MATRIX RT EBM 240V with 1string 20 x 12V/9Ah battery	60,5	64,9	559*438*129	790*572*343