

MMBOX168

Mine Box Instruction Manual





矿箱技术参数

Technical Parameters of Mine Box

箱体重量: 约 2.0 吨

Box weight: about 2.0 tons

颜色: 白色

Color: white

外形尺寸: 5700*4200*2200mm (L*W*H)

Dimensions: 5700*4200*2200mm (L*W*H)

内部尺寸: 5500*2000*2000mm (L*W*H)

Internal size: 5500*2000*2000mm (L*W*H)

额定功耗: 3250W (-5%--+5%) X168 台

Rated power consumption: 3250W (-5%--+5%) X168 units

矿机容量: S19 系列矿机为 168台, 兼容阿瓦隆A841、1246、15、11、9 系列 等矿机 (出厂默认最优适配 S19 系列矿机)

Mining machine capacity: S19 series mining machines are 168 units, compatible with Avalon A841, 1246, 15, 11, 9 series mining machines (the Factory deFault is optimally adapted to S19 series mining machines)

认 证： 矿箱通过CSA整箱认证，配电柜、PDU、电缆电线等主要部件通过UL认证
CertiFication: The mining box has passed CSA FCL certiFication, and the main components such as power distribution cabinets, PDUs, cables and wires have passed UL certiFication

高度拼装： 建议不超过 2 层

Highly assembled: no more than 2 layers are recommended

长度拼装： 无要求，根据具体场地确定

Length assembly: no requirement, determined according to the speciFic site

排布方式： 进风口相对。建议间距：9 米，变压器位于进风口侧

出风口相对。建议间距：6 米，变压器位于进风口侧

每列集装箱，每组之间的间距：2.5 米（以上尺寸作为建议）

Arrangement: The air inlets are opposite. Recommended spacing: 9 meters, the transFormer is located on the side oF the air inlet

The air outlets are opposite. Recommended spacing: 6 meters, the transFormer is located on the side oF the air inlet

Each row oF containers, the spacing between each group: 2.5 meters (the above dimensions are recommended)

产品内部布局展示

Product Internal Layout Display



货架展示

Shelf display

根据矿机外观尺寸，订制机架层数及宽度。

According to the appearance size of the miner, the number and width of the rack can be customized.

1. 箱内放置型号S 19矿机，货架为6层。每层可以摆放矿机28台。整箱共摆放168台矿机。

The model S19 mining machine is placed in the box, and the shelf is 6 Floors. 28 miners can be placed on each Floor. A total of 168 mining machines are placed in the whole box.

2. 机架长度5500mm，宽度400mm，每层间距300mm。

The length of the Frame is 5500mm, the width is 400mm, and the distance between each layer is 300mm.

3. 机架主管由30*30mm镀锌方管焊接而成，中间网格由直径4.5mm圆钢焊接组成。机架每层可承重量约500kg。

The main Frame of the Frame is welded by 30*30mm galvanized square pipe, and the middle grid is welded by round steel with a diameter of 4.5mm. Each layer of the rack can bear a weight of about 500kg.

4. 备注：最底层机架为可移动机架方便地板安装。

Remarks: The bottom rack is a movable rack For Floor installation.



网线展示

Network Cable Display

1. **网线材质：** 全新 PVC CAT5 无氧铜。

型 号： 外径 0.55mm, 内径 8*7*0.12mm。

1. Network cable material: brand new PVC CAT5 oxygen-free copper. Model: outer diameter 0.55mm, inner diameter 8*7*0.12mm.

2. 矿箱采用无氧铜网线，网线抗氧化程度约 15 年，网线水晶头抗氧化程度约 5-8 年。
The mine box adopts oxygen-free copper network cable, the anti-oxidation degree of the network cable is about 15 years, and the anti-oxidation degree of the crystal plug of the network cable is about 5-8 years.

3. 每台矿箱根据摆放矿机数量，分布同等数量的网线，每根网线两端编号相同。一端连接交换机，另一端连接矿机。

According to the number of mining machines placed in each mine box, the same number of network cables are distributed, with the same number at both ends of each network cable. One end is connected to the switch, and the other end is connected to the miner.

4. 网线用扎带固定在货架上，方便以后网线的更换。

The network cable is fixed on the shelf with a cable tie to facilitate the replacement of the network cable in the future.

5. 矿箱内预留 168 条网线，每层 28 条。

There are 168 network cables reserved in the mine box, 28 on each floor.



配电柜 Distribution Cabinet

矿箱用电需求

Mobile mining box electricity demand

配电柜主开关容量: 1200A

Main switch capacity of power distribution cabinet: 1200A

额定电流: 1000A

Rated current: 1000A

输入电压: 380V~480V AC 50/60HZ

Input voltage: 380V~480V AC 50/60HZ

运行功率: 505KW~649KW

Operating power: 505KW~649KW

2500KVA 变压器: 可以支持 4 台 Liwei Mine Box 工作 (以运行 168 台 S19 矿机为例)

2500KVA transformer: It can support 4 Liwei Mine Box work (take running 168 S19 miners as an example)



风机安装指南

Fan Installation Guide

技术参数如下图：

型号 规格	风叶 直 径 (mm)	风 叶 转 速 (r/min)	电 机 转 速 (r/min)	风量 (m3/h)	全压 (Pa)	噪音 (DB)	输入 功率 (W)	额定 电压 (V)	高 (mm)	宽 (mm)	厚 (mm)
FBD-900	750	616	1400	22200	65	≤70	550	380/480	900	900	400

The technical parameters are as Follows:

Model SpeciFi- cation	Wind LeaF Diameter (mm)	Wind LeaF Rotating Speed (r/min)	Motor Rotating Speed (r/min)	Air Volume (m3/h)	Full Pres- sure (Pa)	Noise (DB)	Enter Power (W)	Rated Voltage (V)	high (mm)	width (mm)	thick (mm)
FBD-900	750	616	1400	22200	65	≤70	550	380/480	900	900	400



风机安装方法：

Fan installation method:

1. 风机安装前请在需要安装的地方预留合适

大小的安装孔，并保持底部平整。

Before installing the Fan, please reserve a suitable size installation hole in the place where it needs to be installed and keep the bottom Flat.

2. 把风机安放在预留的安装孔处，保

证安装水平，上下垂直后，把风机的四边固定牢固。

Place the Fan in the reserved installation hole to ensure that the installation is level, and after the up and down is vertical, Fix the Four sides of the Fan Firmly.

3. 安装中务必注意不要使四个边框挤压变形。

Be careful not to squeeze and deform the Four Frames during installation.

4. 将三相四线电源接至风机处，保证电缆够粗，接线时接牢固，防止缺相。

Connect the three-phase Four-wire power supply to the Fan, ensure that the cable is thick enough, and connect firmly when wiring to prevent phase loss.

5. 接通电源试验风机是否是正转，运转是否正常平稳。

Connect the power to test whether the Fan is rotating Forward and running normally and smoothly.

6. 使用中不得向里伸手或其他物体。

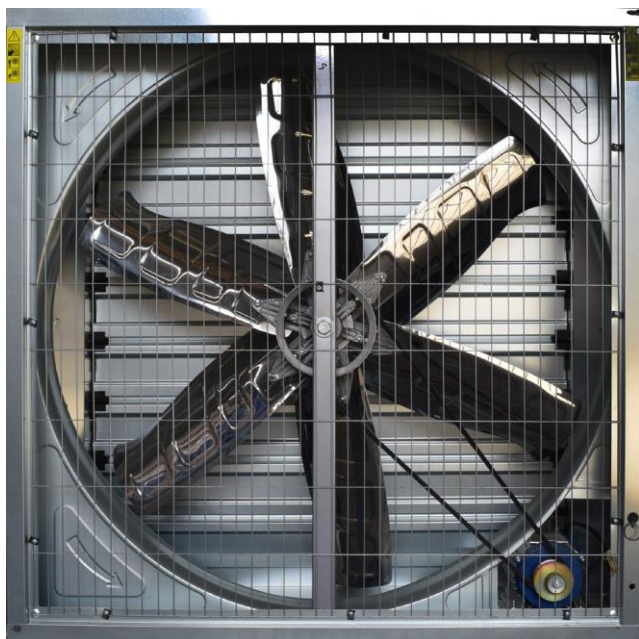
Do not stretch your hands or other objects inside during use.

7. 使用一段时间后，要定期清理风机上的杂物，避免腐蚀性物品弄到风机上。

After using for a period of time, clean up the sundries on the Fan regularly to avoid corrosive materials on the Fan.

8. 如产生故障，请勿带电作业，并请人员拆开检查维修，或者咨询生产厂家。

If there is a malfunction, please do not work with electricity, and ask personnel to disassemble it for inspection and maintenance or consult the manufacturer.



注意事项：

Precautions:

1. 外壳或电机外壳应可靠接地，不能用接零代替接地。

The housing or the motor housing should be grounded reliably, and zero connection cannot be used instead of grounding.

2. 禁止反向运转，禁止超额定电流运行，禁止缺相运行。

It is Forbidden to run in reverse, run overrated current, and run without phase.

3. 风机轴承加油次数不少于1000小时/次。

The reFueling Frequency of the Fan bearing is not less than 1000 hours/time.

4. 禁止在运转中维修风机。

It is Forbidden to repair the Fan during operation.



雨棚展示 Canopy Display

1 一篷多用。挡雨遮阳篷新颖设计，防雨、遮阳、挡风、挡风沙。减少矿箱受外接环境影响，使矿箱使用寿命更长。

One canopy is multi-purpose. The rain-proof awning has a novel design, which is rain-proof, sun-shading, wind-proof and sand-proof. Reduce the impact of the external environment on the mine box and make the life of the mine box longer.

2 技术创新：采用镀锌板材制作，其轻质、高强、防腐、高强度，是普通塑料板材料的几倍。

Technological innovation: It is made of galvanized sheet, which is lightweight, high-strength, anti-corrosion, and high-strength, which is several times that of ordinary plastic sheet materials.

3 人性化设计、安装简单。

Humanized design and simple installation.



移动矿箱注意事项:

Points For attention when Moving the Mine Box

1. 移动矿箱需在平整地面放置，建议抬高地面100--200mm，水平度 $\pm 1^\circ$ 度。

The mobile ore box must be placed on a Flat ground. It is recommended to raise the ground by 100-200mm with a level of ± 1 degree.

2. 如需叠加两层，地面需要按 12 吨荷载做硬化地面。

IF two layers need to be superimposed, the ground needs to be hardened with a load of 12 tons.

3. 客户需准备 5-10 吨吊车装卸 移动矿箱。

The customer needs to prepare a 5-10-ton crane For loading and unloading mobile ore boxes.

4. 楼梯、走道板、变压器、电缆、桥架、电缆分接箱、交换机、矿机等箱外设施，不含在移动矿箱产品内。

Stairs, walkway boards, transformers, cables, bridges, cable junction boxes, switches, mining machines and other Facilities outside the box are not included in the mobile mining box products.

5. 环境要求：温度： $-25^\circ\text{C} \sim 45^\circ\text{C}$ ；湿度10%RH~90%RH；高湿地区环境温

度要求不高于 40℃，环境温度<0℃时，需关闭进出风，内部加热至>0℃时，才可启动矿机。

Environmental requirements: temperature: $-25^{\circ}\text{C}\sim 45^{\circ}\text{C}$; humidity 10%RH~90%RH; high-humidity area environment temperature requirement is not higher than 40℃, when the environment temperature is less than 0℃, the air inlet and outlet must be closed. The miner can be started only when it is heated to >0℃.

移动式集成配电箱使用注意事项：

Precautions For the use of mobile integrated distribution boxes:

本产品使用前，请仔细阅读以下注意事项，防止因不当使用造成的产品损坏和人身财产安全损失。

Before using this product, please read the following precautions carefully to prevent product damage and personal or property safety losses caused by improper use.

1. 外观检查

当移动式集成配电箱到达现场时，应全面检查产品包装和箱体外观，确保包装完好，箱体没有严重变形和破损。如果箱体有脱焊、脱胶、破损、严重变形等情况，请予以修复后再投入使用。

Visual inspection

When the mobile integrated distribution box arrives at the site, the product packaging and the appearance of the box should be thoroughly inspected to ensure that the packaging is intact, and the box is not severely deformed or damaged. If the cabinet is unsoldering, degumming, damaged, severely deformed, etc., please repair it before putting it into use.

2. 供电系统检查

产品接通电源前，请先检查电源系统所有线路和元器件的外观没有破损，断裂、腐蚀、过热变色或其他任何异常情况，并检查接线螺钉，确保紧固。本型号配电箱总漏电保护器为380V电源，运行时需要确保正确的连接和安装，同时设置了3处防火和1处零线，在使用过程中，客户不得以任何形式修改供电系统，严禁在开总电源时带动矿机，以免遭受不必要的电击，如果您无视这条规定，因此造成的损失责任自负。电气系统的缺陷必须立即修复更换，严禁使用有缺陷电气元器件。

Power supply system inspection

Before the product is connected to the power supply, please check that the appearance of all circuits and components of the power system is not damaged, broken, corroded, overheated or discolored or any other abnormal conditions, and check the wiring screws to ensure that they are tight. The total leakage protector of the distribution box of this model is a 380V power supply. It is necessary to ensure the correct

connection and installation during operation. At the same time, 3 Fire protection and 1 neutral line are set. During use, the customer shall not modify the power supply system in any Form. It is strictly Forbidden to drive the mining machine when the main power is turned on, so as to avoid unnecessary electric shock. IF you ignore this rule, you will be responsible For the loss caused by it.

3. 安装注意事项

箱体在整个安装过程中必须保持垂直， 避免倾斜。 本产品应放置在平整场地上， 倾斜度不应大于2度。矿箱安装后，矿机运行前，应装备防雷设备。安装需要经过限流型过流保护器件才能给你们设备供电。

Precautions For installation

The cabinet must be kept vertical during the entire installation process to avoid tilting. This product should be placed on a Flat ground with an inclination is not greater than 2 degrees. After the mine box is installed, the mine machine should be equipped with lightning protection equipment before the operation. Installation requires a current-limiting type overcurrent protective devices to power your equipment.

4. 安全操作

再开始接入矿机之前，必须切断电路并在整个过程中保持切断，同时必须遵守5个安全准则：安全隔离、防止重合闸、确保电路切断、接地和断路、遮盖或隔离临近带电部位。

重新启动电源时，应关闭矿机电源方可开机，开机时应按照以下顺序送电：先送主开关，然后按次序向每组送电。矿箱内矿机使用时尽量在4个PUF中均衡使用，保持用电平衡。

矿箱运行时，请检查各组矿机的运行情况，并需要根据出风口的大小对箱内的温度进行适当的调节，温度下降可以适当减停几台风机。同时需要对排风系统和供水系统予以检查，安装电源时注意风机是否倒转。对于供水系统，当室外空气温度大于35度时，水帘必须通水，普通工业用水即可，一小股水流用来滴注，当水帘受潮面积大于50%-80%。注意水流量减少，禁止水流量在1.5个大气压以上的供水。如果雨水较大，漏水孔需开大，防止水溅入箱体中损坏机器。

Safe operation

Before starting to connect to the miner, the circuit must be cut off and kept cut off during the whole process. At the same time, the 5 safety rules must be observed. Full criteria: safe isolation, preventing reclosing, ensuring that the circuit is cut off, grounded and disconnected, covering or isolating adjacent live parts.

When restarting the power, you should turn off the power of the miner to start the machine. When starting, the power should be sent in the following order: First send the main switch, and then send power to each group in order. When using the mining ma-

chine in the mine box, try to use it evenly among the 4 PUFs to keep the electricity balance.

When the mine box is running, please check the operation of each group of mining machines and adjust the temperature in the box appropriately according to the size of the air outlet. The temperature drop can appropriately reduce and stop several Fans. At the same time, it is necessary to check the exhaust system and water supply system and pay attention to whether the Fan is reversed when installing the power supply. For the water supply system, when the outdoor air temperature is greater than 35 degrees, the water curtain must pass water, and ordinary industrial water is sufficient. A small stream of water is used for dripping. When the damp area of the water curtain is greater than 50%–80%. Pay attention to the reduction of water flow and prohibit water supply with water flow above 1.5 atmospheric pressure. If the rain is heavy, the leak hole needs to be opened to prevent water from splashing into the box and damaging the machine.

5. 维护

对设备的维护保养是确保设备运行正常和安全的必要措施。这些工作，例如替换熔断器等，必须由受过培训的合适人员在遵守安全准则的情况下实施。在运行中，如遇紧急情况可启动急停按钮，急停后整个矿箱属无电状况。矿机电缆插头使用插座专用的插头配件（创力达公司也可代为采购）。

Maintenance

The maintenance of equipment is a necessary measure to ensure the normal and safe operation of the equipment. These tasks, such as replacing the Fuse, must be carried out by appropriately trained personnel in compliance with safety guidelines. During operation, in case of emergency, the emergency stop button can be activated. After the emergency stop, the entire mine box is in a non-electric state. Please install the socket for on-site maintenance and maintenance by the owner. The cable plug of the miner uses the socket-specific plug accessories (Chuanglida can also purchase on behalf of it).

6. 备注

本移动矿箱出厂前经过通电检测，为合格产品，可能会因长途运输和海运，使得电气等配件有可能会有松动，使用前应有专业电力工程师检测后再行使用。

Remarks

This mobile mining box has undergone power-on inspection before leaving the Factory. It is a qualified product. The electrical accessories may be loose due to long-distance transportation and sea transportation. It should be tested by a professional electric engineer before use.

注：客服微信：1878 8865 555（北京时间：8:00—22:00）

Note: Customer Service Wechat: 18788865555 Beijing time: 8:00 am to 22:00 pm