



EDI MXD-5
Power module

User Manual

(V5.0)



Thanks for choosing MICRONIX EDI power supply module. Before you install the product, please read user manual carefully for instructions and precautions.

Precautions

EDI module and power supply module are electronic device. Please take following precautions in use :

1. Regularly check each terminal blocks, ensure reliable connection wiring firm.
2. Repair and replace components must operate by qualified personnel
3. **DO NOT** unplug power supply while EDI module in operation.
4. **DO NOT** put any objects or tools on your EDI module.
5. For the case of oozing or leaking occurred, please stop module operation and contact our service number.

Please refer to EDI Technical Manual for more EDI instructions detail

Catalogue

EDI Power Supply

1. Commutator
 - i. Module connector
 - ii. Power supply
2. Control panel
 - i. MXD-5P

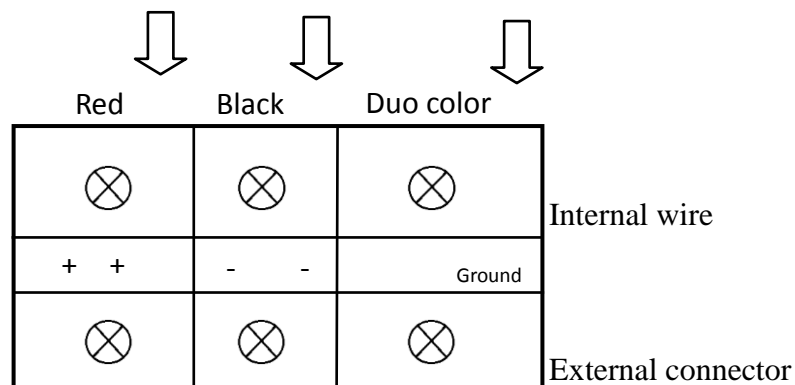
EDI Power Supply

Introduction

MXD-5 is a three phase, direct current power control. It is a power supply for MX series EDI products. MXD-5 is able to provide stable current and voltage, and large capacity for EDI system operation. 1

EDI module connection

The connector boxes at both sides of EDI module is used to connect EDI power rectifier. You may connect the power rectifier to either side of box. The follow is the instruction of connect diagram



1. Power Rectifier

Model : MXD-5

1.1 Product feature

- Easy to install and set up
- Highly stabilized
- Wide adjust range
- Anti-Interference
- Soft start and off with memory function
- build-in current protection function
- Fix current/ voltage mode switch
- Flow rate limited function to protect EDI module
- Stable Voltage output
- self-diagnostic function

1.3 Working parameter

Frequency: 50/60Hz

Input Voltage: Three phase 380V AC $\pm 10\%$

Output Voltage: 0-500VDC

Output Current: 0—10.0A

Capacity: $\leq 10\text{W}$

Operation Temperature: 0-45°C

Storage Temperature: -20°C--70°C

Allowance max humidity: relative humidity < 85%

No condensed dew allowed

Weather Level: DIN IEC60 721-3-3 Level 3K3

Insulation level: DIN VDE 0110-1(HD 625.1 S:1996)

Pollution Class: 2 IP : EN60529 IP00

Protection level: DIN VDE 0160 Part one , 1

Contact protect level: DIN VDE 0160 part 100 (VBG4) and DIN VDE 113 part 5

Working Altitude: $\leq 3000\text{m}$ (rated output decrease 1% for every 100m above.

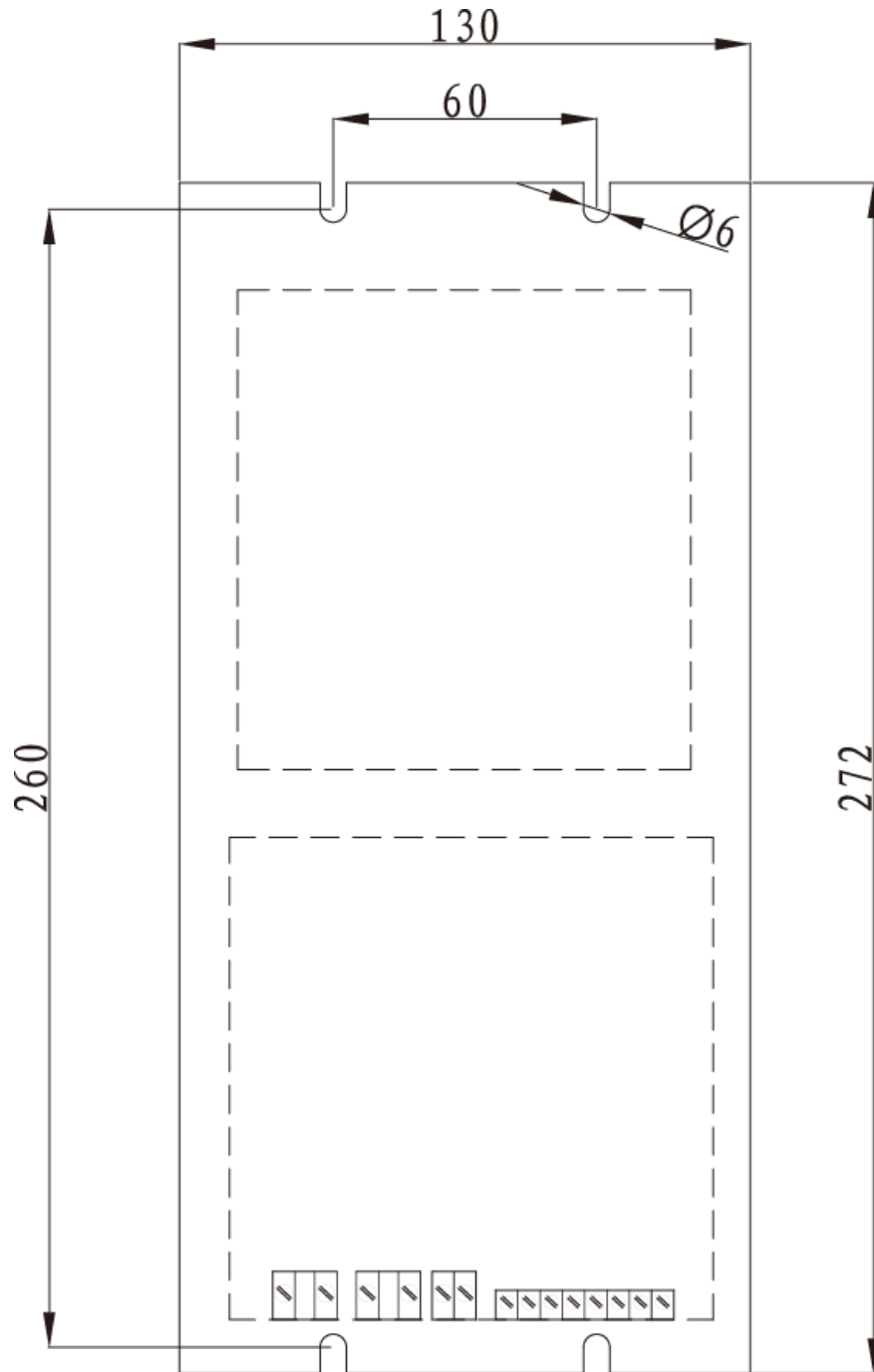
Warning: Extra cooling fan is recommended for environment temperature higher than 40°C

1.3 Dimension

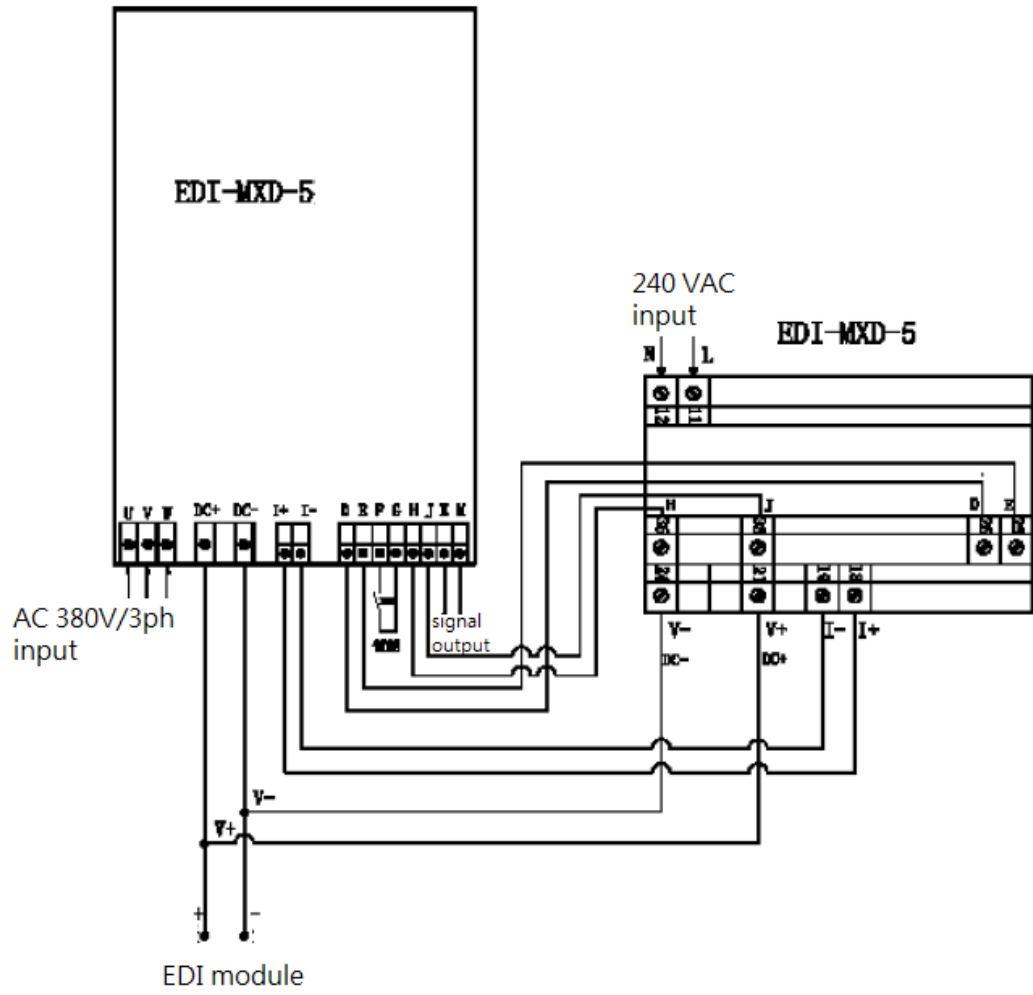
Diameter of commutator : W 130 × D 272×H 75(mm)

Installation : W 60 × D 260 (mm)

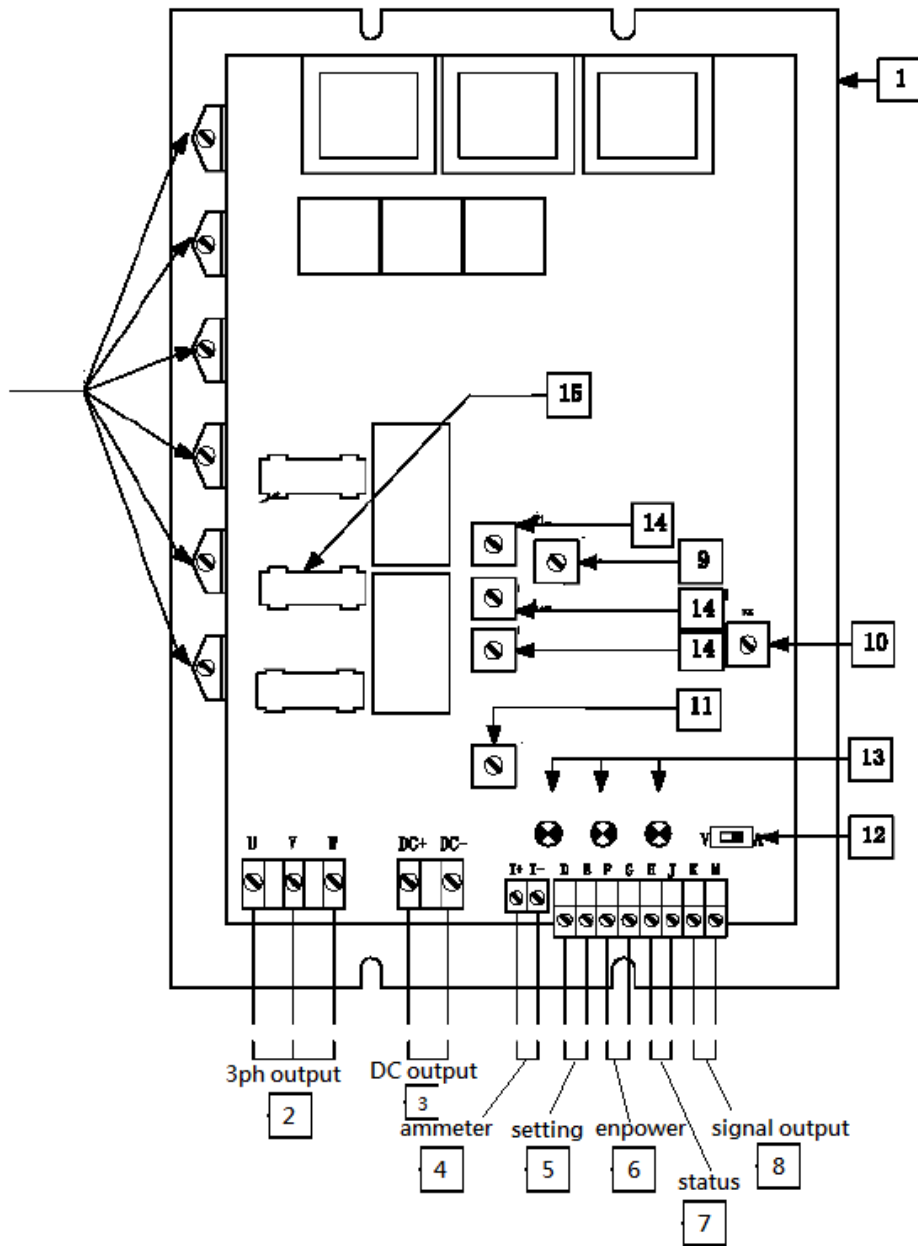
Weight : \cong 1.4Kg



1.4 Wiring Diagram



1.5 Rectifier Connectors Diagram



1. Power Rectifier
2. Three phases, AC380V input.
3. DC+ output to EDI module positive. (0-10A/500VDC)
DC-output to EDI module negative. (0-10A/500VDC)
4. Output to control panel (current) (0-75mV/0-10A) , I+ to the positive (+) , I- to the negative (-)
5. Output to control panel (voltage) (D to 0-10VDC), E to the ground
6. Empower non-electrical switch
Connected= Working
Disconnect = Stand by
7. Operation, ON/OFF output
Connected = Working
Disconnect = Stand by
8. Signal Output, user may connect external flow rate controller, alarm, or PLC switch.
9. Signal output switch.
Clockwise: increase
Counterclockwise: decrease
10. Maximum output current setting potentiometer.
Clockwise: increase
Counterclockwise: decrease
11. Zero adjuster
Clockwise: increase
Counterclockwise: decrease
12. Power rectifier working mode
A = Fix current
V = Fix voltage
13. Internal indicator
Operation indicator on (green): normal working
Phase indicator (red): 3 phase input power error
Power indicator (green): power ON
14. 3 phases input balance adjust
15. Fuse, 500MA. DS2 phases indicator ON if fuse is burned.

Monitor Control Panel



2.2.1 MXD-5P user manual

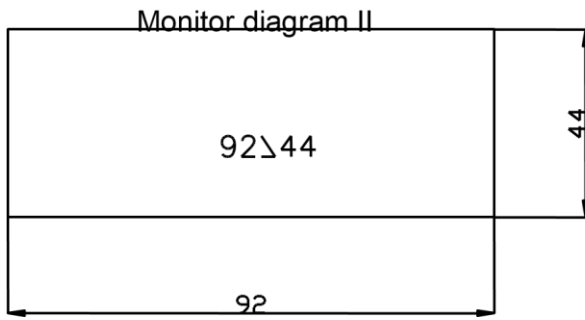
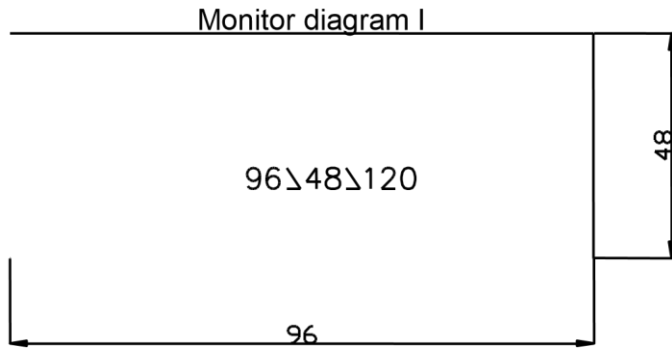
MXD-5P is the controller for MXD-5 power rectifier, which is used to adjust the DC output. User may simply press up/down arrow on the panel to adjust current/voltage output

1、Installation size

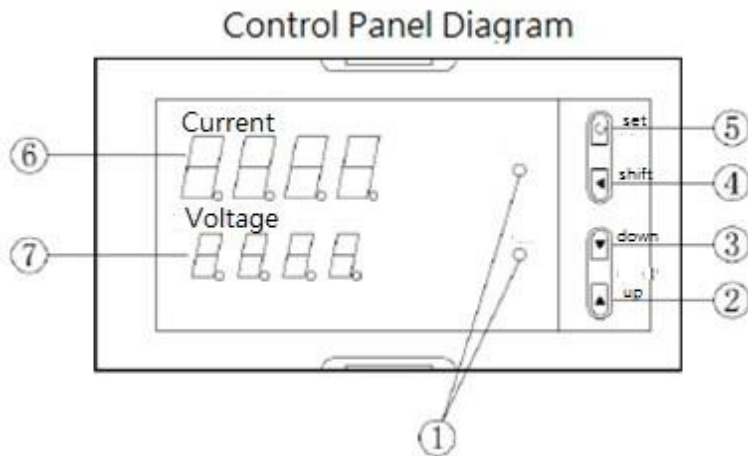
Diameter : W96×D48×L120(mm)





Installation : W92×D44 (mm)

Weight : ≒0.5Kg



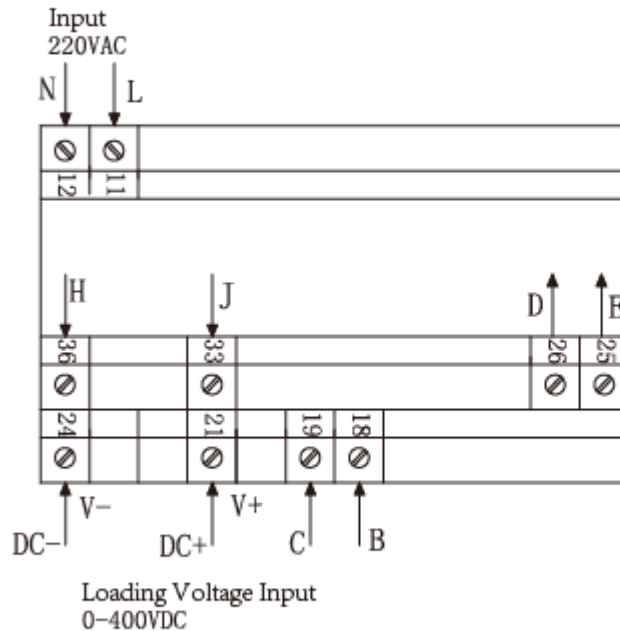
2 、 Control Panel Manual



- ① Power Indicator (Green): ON – working
Status Indicator (Red): ON – no single
- ②  UP----- Increase
- ③  DOWN--- Decrease
- ④  Enter----- Enter the current value
- ⑤  Set----- Press to enter setting screen (set and lock by factory setting)
- ⑥ Current check----- Demonstrate instant working current
- ⑦ Voltage check----- Demonstrate instant working voltage




2.2.2 Control panel connector instruction

Monitor Wiring Diagram



Please connect to power rectifier according to diagram alphabet
Warning: Misconnection might damage whole system

Operation Instruction:

1. System will run self-diagnosis for 2-5 sec every time it re-connect to power rectifier, and then shows 00 or last operation parameter
2.  Working current (I) increase.
3.  Working current (I) decrease
4.  Decimal place setting up. Long press (2 sec) to return to previous Manu
5. Connection 11, 12 for external power supply, 220-240VAC
6. Connection K, M are output signal (ON/OFF), which can be used for alarm or PLC control signal or other external working station.
7. Status indicator: Indicates EDI system malfunction. Please refer to Appendix I
8. Power indicator: Turns ON when EDI power rectifier is powered.

APPENDIX I

Panel Indicator	Possible Cause	Solution
Power indicator OFF	EDI power supply unplugged Misconnected power supply which might cause damage on equipment.	Check power plug REQUIRED input: 220~240VAC
Status indicator ON	- EDI operation flow rate under minimal setting - EDI module offline - Rectifier connection F, G offline - Connector loose	- Recalibrate setting - Check connections

Micornix and Hantech will NOT notice for new updates or supports free updates.

3. EDI Power Rectifier Warning

1. Please connect all wires according to user manual.
2. Please use correct AC/ DC input voltage for power rectifier.
3. DC +/- connection must be connected correctly.
4. EDI power rectifier should have some distance to other strong power source. Connection cable between power sources to rectifier to monitor should be as short as possible. (recommended: <2.0m)
5. EDI module should installed in clean area to avoid dust or other pollution sources.