

EDP-A2 R2.1

MAGNET CONTROLLER

EDP CONCEPTION

EDPCONCEPTION.COM

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Introduction

- **EDP-A2** is electromechanical design controlled by a microprocessor which allows a high working speed and thus allows to increase production.
- The controller is very easy to install. It requires only a few connections.
- The controller fits on almost all of the AC generators (220 to 260 volts ac 1 phase, 170 has 180 volt ac 3 phases) 50 to 65 hertz.

INSTALLATION

Important note: the installation must be performed by a competent person and must be of industrial quality.

Follow the connection instructions.

- 1- You should definitely cancel the machine's automatic idle when the magnet generator is running.
- 2- Attach the case securely and vertically in a place without high vibration such as railings and away from heat sources.
- 3- Follow the connection schematic to the letter and double-check carefully. The controller arrives with 30 feet of control wire and a lamp. Polarities must be respected,
- 4- Active the generator.
- 5- Adjust the revolution or the frequency of the generator according to his nameplate and the voltage is 220-260 volt ac for one phase or 170 to 180 vac for 3-phase. **Important notice.** Force the pumps to work by lightly maneuvering a (joystick) during adjustment.
- 6- Activate the magnet and return to section 5 to finalize the adjustment.

Controller properties

On the front you will find two push buttons UP and DOWN and two lamps X 1 and X 10.

The X 10 lamp flashes to indicate the dozens and X 1 units.

Normal view is the magnet current. So to 52 Amps the X 10 lamp flashes 5 times and the X 1 two times then pause and start again.

Never take the first reading because at each change of function first reading lamp may be false.

UP button is used to load the magnet or to increase the displayed parameter.

DOWN button is used drop the magnet or to decrease the displayed parameter.

Parameterize

To change the doping power setting press 5 sec. on the DOWN button, then the lamps will flash quickly to indicate that you have entered setting mode.

Then use the two button to change the setting. (minimum 1 and maximum 45)

Use the button of the cabin to load and drop magnet to see if the setting is good. In setting mode, the TEST button can also be used to load and drop the magnet.

When the magnet is in load mode the lamps indicate the magnet current .

To accept the parameter press 3 sec. the UP button or press ½ sec. the two button simultaneously. The lamp will go off.

To exit Setup without saving the change, press the button DOWN 3 sec.

A value of 15 is used to disable or re-enable the automatic reload option at sorting.

Read alarm

If an alarm occurs the X 10 lamp lights up and the lamp X 1 as well as that of the cabin connected to the Terminal COM and LAMP will flash.

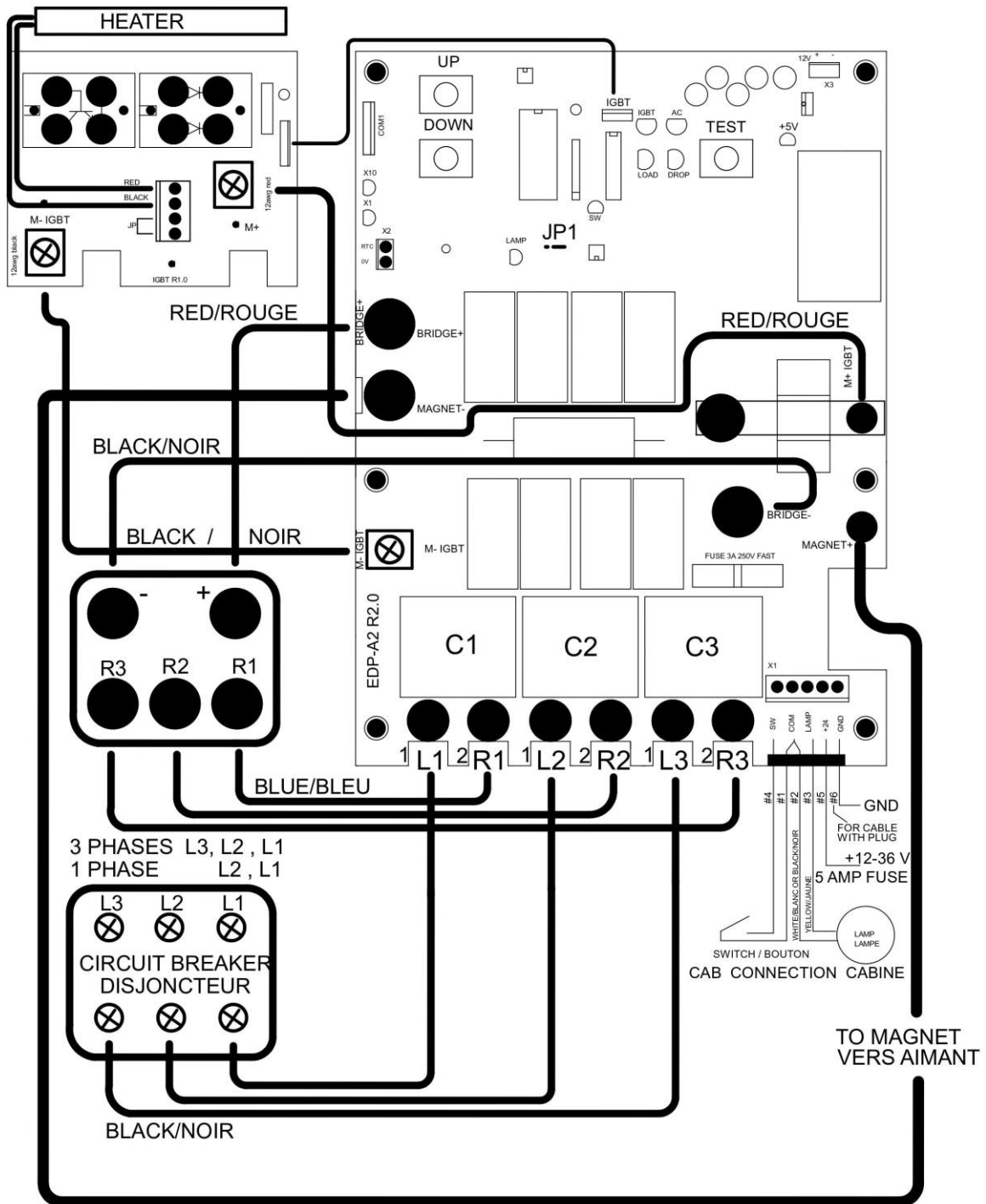
The number of flashes indicates the alarm number.

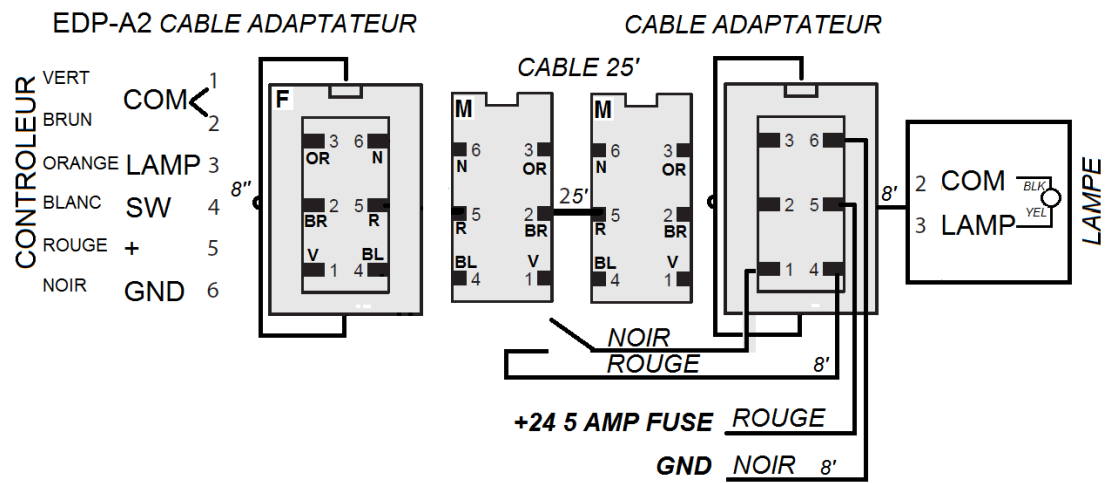
- 1- No load or wire magnet unplugged. Or no voltage from the generator.
- 2- Overload or overload in memory. Cut the supply for 30 seconds. And the alarm will go off.
- 3- Faulty current transformer (CT) or bad connections or send the controller for repair.
- 4- Relay trouble
- 5- Bad IGBT. Change IGBT module. . And call a technician to activate it.
- 10- Over heat
- 11 and more = No load or wire magnet unplugged. Or no voltage from the generator.

- **EDP-A2** is active with less than 15 volts to the (manual) command instead of 230 volts so much safer for the operator.
- If the magnet lead disconnect, the controller automatically cuts the voltage at 0 volt DC in order to protect the operator and equipment.
- The controller offers two dropping modes and a one of loading.

Working with the controller

- 1- To activate the controller you need to activate the generator.
- 2- Press load/drop switch for a period of less than 1 second and the controller will activate the electromagnet.
- 3- Press again for more than 0.5 second and release. The controller will release the steel.
- 4- If you press the switch to release the metal while keeping the switch pressed, release of metal will slow down. (sorting)
- 5- If the sorting is too fast, press and hold the switch for 3 seconds at the time of powering on and the second sorting speed will be activated. Or made parameter 14 to memorize this speed.
- 6- If you hold the switch 2 sec. at the loading , the controller will activate the automatic reloading when the switch is released. On activation the lamp will flash. And will flash one shot every 5 seconds to remind you that the reloading still active.
To disable it, hold the switch 2 sec. when loading, Note. Section 6 is only for small magnet less than 70 amps. If this function does not work, enable parameter 15.





Trouble shooting:

TROUBLE	CAUSES
The main breaker is shutoff	!! Stop the engine before put breaker to on !!
-There is probably a short-circuit on the magnet lead wire. Cut the supply for 30 seconds minimum. Very important to repair before working again with the magnet to protect the contactor of the controller. Unplug the two magnet wires from the controller and check the continuity between the Magnet+ and Magnet- and between the two terminals at the top of the IGBT card (2 white wires) If there is continuity (less than 10 ohms) the controller is bad then send it for repair. If not, try to active the magnet and check if the breaker still on. If yes the magnet lead or the magnet have a problem. If not, the controller have a problem.	
Voltage to low	- RPM /frequency to low - Bad junction. - Bad size of generator - Check brushes - Check fuse
The tension is good but lack of current, or does not lift enough materials	- Bad junction. - Check magnet ohms
The magnet current is too high	- Check magnet ohms - Check magnet isolation.
The output voltage is unstable	- Check if the speed (RPM) of the generator is stable.
Dropping is not constant or bad	- Bad wire between controller and magnet, Rpm unstable. Low voltage.



PRODUCT GUARANTEE

Products manufactured by EDP Conception (hereinafter the "**Manufacturer**") are guaranteed against defects in design, manufacturing, labour and materials for a period of two years from the date of purchase (hereinafter the "**Guarantee Period**"), but only in cases of normal and proper use of the product by the purchaser and if the conditions contained herein are met (hereinafter the "**Guarantee**"). Only products sold by an authorized distributor of the Manufacturer (hereinafter the "**Distributor**"), will be covered by this Guarantee.

The Guarantee is applicable only to the original purchaser of the product and is transferable to a subsequent purchaser only with the written consent of the Manufacturer.

All defective products giving rise to the application of the Guarantee will be replaced or repaired at the expense and at the sole discretion of the Manufacturer at a service center authorized by the Manufacturer (hereinafter the "**EDP Service Center**"). Replacement or repair parts provided by the Manufacturer will be equivalent, in terms of performance and reliability, to the original parts and will remain covered by the Guarantee for the Guarantee Period remaining on the day of pieces replacement.

The Manufacturer provides no guarantee with respect to losses or damages to the product which are attributable to misuse, improper installation of the product, accident, abuse, negligence, misconduct on the part of the purchaser, force majeure, excessive use, unauthorized modification, stress or unusual electrical interference, use in inappropriate environmental conditions, an accessory to the product or any other fault, damage or defect not covered under the terms of the Guarantee.

The Manufacturer is not liable for and provides no guarantee regarding any fault and/or damage arising directly or indirectly from delivery, transportation, removal, relocation, installation, maintenance or repair of the products or accessories thereto made by a Distributor or a service provider other than a EDP Service Center authorized by the Manufacturer. Moreover, all products' accessories are not covered by the Guarantee. The Manufacturer will not assume any responsibility for any damage caused by its products.

To qualify for the Guarantee, the purchaser must return the defective product to the Distributor where the purchase was made, or if it is not an EDP Services Center, in an EDP Service Center authorized by the Manufacturer.

The Manufacturer will not cover costs incurred for transportation or labour (other than the repair itself) during the execution of the Guarantee.

During the period of repair or replacement of the defective product covered by the Guarantee, the Manufacturer will not assume any liability arising directly or indirectly from any damages which may be suffered by the purchaser in connection with the product's unavailability, including any loss of income or enjoyment of the product.

Other than the Guarantee provided for herein, the Manufacturer shall not be liable for any guarantee offered by a third party, with the exception of, and without limiting the generality of the foregoing, any guarantee provided by the legislation in force in the province of Quebec.

The Guarantee offered covers only the repair, replacement or refund of the purchase price to the purchaser, the whole at the sole discretion of the Manufacturer.

The Guarantee will enter into force upon receipt by the Manufacturer a copy of this document duly completed, which must be returned within thirty (30) days from the date of purchase, accompanied by a copy of the purchase invoice, by mail, fax or email at:

Address : 2883, boul. Trudel-Est, C.P. 2035
St-Boniface (Québec) G0X 2L0
Canada

Facsimile : 819.535.6247

Email : info@edpconception.com

Note that the product's serial number is embedded on the right side of the display module.

Beneficiary : _____

Product's name : _____

Product's serial number : _____

Date of purchase (DD/MM/YYYY): ____ / ____ / _____

Signature : _____

If the purchaser fails to return the completed form along with a copy of the original purchase invoice, the Manufacturer will offer a Guarantee limited to two years from the date the product was sold by the Manufacturer to the Distributor.

Service instruction:

Call your EDP authorised dealer to receive a request for service (RS) number before shipping. Be sure to check your entire system before shipping your unit. Units received that are in good working condition will be returned with a service fee to cover inspection and return shipment.

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Important notice:

Security warning

The controller is only a portion of the electro mechanic lifting system and electromagnet therefore precautions must be taken around the system by the user to insure the safety of all users and workers. In this type of system, if the controller fails, as a bad wire, a bad fuse, generator malfunction, etc., these circonstance may cause the load to suddenly drop and cause serious injuries and even death.

EDP CONCEPTION can not be responsible for these accidents.