

MAG V

AC/DC Converter for
Electromagnet loads



varixx

> **VRT AC/DC Converters**

VRT AC/DC converter is a device designed to supply electromagnets loads in an appropriate and controlled mode. This device consists of two three-phase rectifier bridges that convert alternative current from the mains into direct current, appropriated for electromagnets loads.

VRT AC/DC Converters stand out for their ability to adjust the demagnetization time for fine control of the electromagnet. The robustness allows it to operate in dirty and challenging environments, while it’s simple and safe operation requires only one control contact.

In addition, it offers flexibility when customizing output currents and voltages (50 to 300A), making it an ideal choice for supplying reliable and controlled power to electromagnets in various industrial applications.

> **Demagnetization by reversing the polarity of the electric current**

Its operating principle is based on controlling the magnetization and demagnetization of the electromagnet, with the first rectifier bridge having the purpose of magnetizing the electromagnet and the second of demagnetizing it.

Demagnetization takes place by reversing the direction of the electric current and using discharge resistors.

The demagnetization time can be set between 0,4 to 10 seconds.

> **General Information**

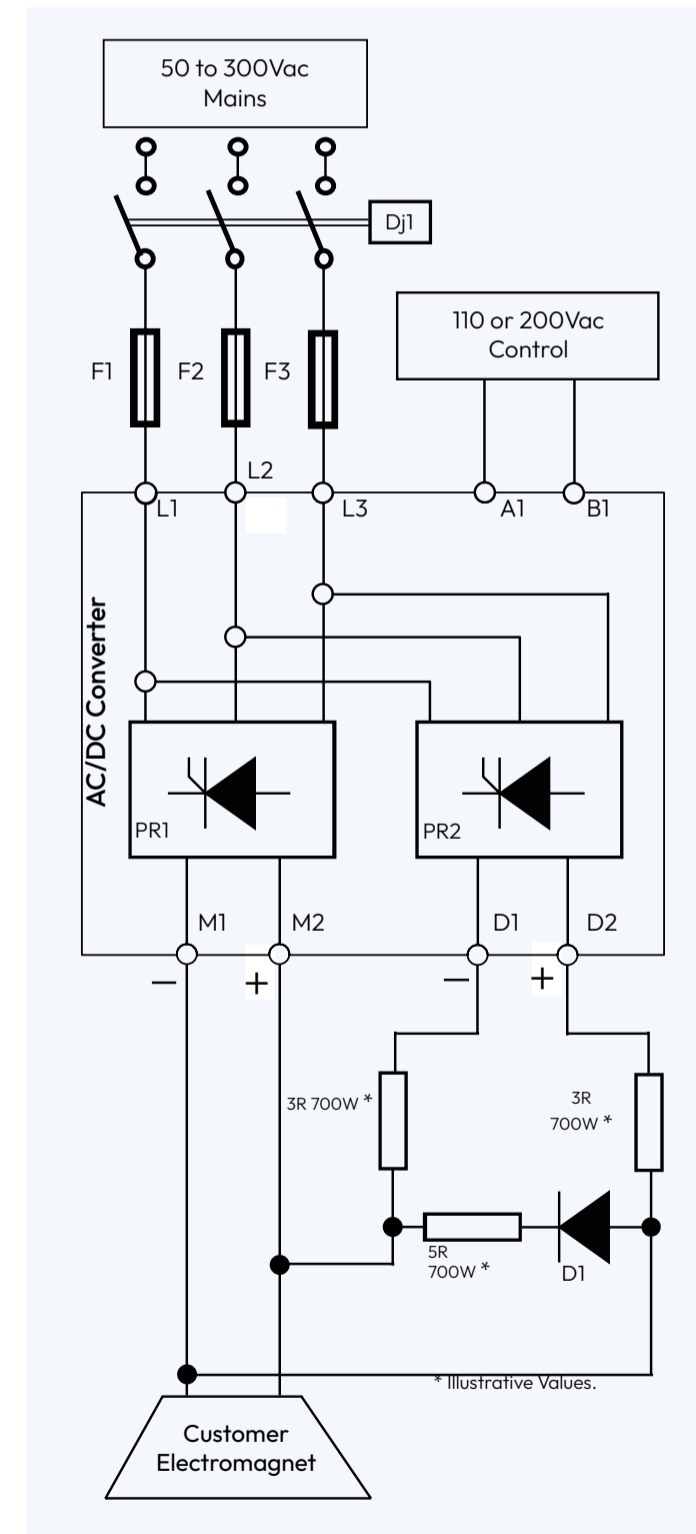
Nominal Currents	50A to 300A
Supply	Complete solution
Maximum Input Voltage	300Vac
Control Voltage	110 or 220Vac
Fan Voltage	110 or 220Vac
Output VCC Voltage	35% higher than the input voltage
Lifespan	More than 200 mi. of maneuvers
Demagnetization Time	0,4 to 10 seconds

> Main Advantages

- High number of maneuvers per hour.
- Very high durability.
- Doesn't require maintenance.
- Doesn't generate noise for PLC or PC.
- Doesn't cause vibrations to other components in the panel.
- Doesn't generate overvoltages on shutdown.
- Silent operation.
- Low power consumption, compatible with PLC output (approximately 15mA).
- Small size and takes up space on the panel.
- The control module is Plug-in type, and is the same for the entire range of converter currents from 50 to 300A.
- The trip modules are the same for the entire range of converter currents from 50 to 300A.

> Mechanical Features

- Base and Side: Steel with highly resistant electrostatic paint.
- Terminal Blocks: High-impact ABS plastic.
- Control Module: High-impact ABS plastic.
- Trigger Module: High-impact ABS plastic.
- Power Connectors: Electrolytic copper busbar.



> Application

The converter can be supplied loose with just the unit or mounted in a panel. When mounted in a panel, it is supplied with the circuit breaker, diode, fuses and resistors shown in the wiring diagram.

Electromagnet Converter - Available Models		
Complete with: B* Command Voltage M** No.of Auxiliary Contacts D* Fan Voltage	Complete the converter model with the informations below:	
VRT-50-B*-M**-D0-D	Auxiliary Contacts	
VRT-75-B*-M**-D*	M00 = 0 NA+0 NF	M11 = 1 NA+1 NF
VRT-100-B*-M**-D*	2 NA	2 NF
VRT-125-B*-M**-D*	Command Voltage	Fan Voltage
VRT-150-B*-M**D*	B4 = 110Vac	D1 = 110Vac
VRT-200-B*-M**D*	B5 = 220Vac	D2 = 220Vac
VRT-250-B*-M**D*	MAXIMUM INPUT VOLTAGE = 300Vac	
VRT-300-B*-M**D*		


> Get to know CM-VRT


Complete AC / DC Converter System for Electromagnet


Equipment designed to supply electrical energy to electromagnets in an appropriate and controlled mode. It consists of two three-phase rectifier bridges that convert alternating current energy from the mains into direct current energy.




> Features

- 

Converter overload
- 

Short-circuit in the converter
- 

Fuse blow indication
- 

Emergency button

Explore technical details of the Mag V AC/DC Converter for Electromagnets loads, our product dedicated to high-capacity industrial applications.

Also, discover all our solutions for Eletromagnet Drives and AC/DC Converters. All these solutions have been designed to meet a wide range of applications in a planned and controlled mode, offering durability and a long lifetime.

☎ +55 (19) 3424 4000

☎ +55 (19) 3301 6900

✉ vendas@varixx.com.br

🌐 www.varixx.com.br

in <https://www.linkedin.com/varixx>

varixx