

# WARRANTY CARD

DATE OF PURCHASE	
SHIPPING ADDRESS	
SIGNATURE / STAMP	
DAMAGE DESCRIPTION	
SERVICE COMMENTS	

FILL IN IF NEEDED

(\*) Cross incorrect

I agree to pay the cost of inverter repair due to:

\* expiration of the warranty period / \* warranty void

Before proceeding with the repair, service will inform by phone about the exact costs of the repair.

Please attach a copy of the purchase document (receipt or invoice) to the complaint.

The full regulations of service repairs can be found on our website [www.voltpolska.pl](http://www.voltpolska.pl)

## Proper disposal of the product (waste electrical and electronic equipment)

The marking placed on the product or in the texts related to it indicates that it should not be disposed of with other household waste at the end of its useful life. To avoid harmful effects to the environment and human health from uncontrolled disposal, please separate this product from other types of waste and recycle responsibly to promote the reuse of material resources as a continuing practice. For information on where and how to recycle this product in an environmentally safe manner, residential users should contact the retailer where they purchased the product, or their local government authority. Business users should contact their supplier and check the terms and conditions of their purchase contract. The product should not be disposed of with other commercial waste.



# PRODUCT MANUAL

version 2025.03.06

THREE PHASE SERVO MOTOR  
HIGH PRECISION AUTOMATIC STABILIZER

AVR PRO 3-F  
10.000VA 3% SERVO

**VOLT**  
**POLSKA**

VOLT POLSKA Sp. z o.o.  
ul. Świemirowska 3  
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# INTRODUCTION

Congratulations on choosing a VOLT brand device. This manual is an integral part of the device. It contains important information regarding safety, use, and disposal. Before use, please familiarize yourself with all safety and operating information. The manual should be kept in an easily accessible place. The device should be used only according to the instructions and for the applications specified in it. If the product is given to another person, make sure the manual is included with the device. We do not take responsibility for accidents or damage resulting from using the equipment contrary to the rules described in the manual. The manual is subject to change.

# INTRODUCTION

Thank you for purchasing the automatic 3 phase AVR voltage stabilizer

Please read the instruction manual before operating it.

Please read the instruction manual of the device before starting it up for the first time. The most current version of the manual is always available on our website [www.voltpolska.pl](http://www.voltpolska.pl) on the sub-page of the respective product. We recommend that you check whether it differs from the paper version included in the box. The current AVR stabilizer manual is always available at

[www.voltpolska.pl](http://www.voltpolska.pl)

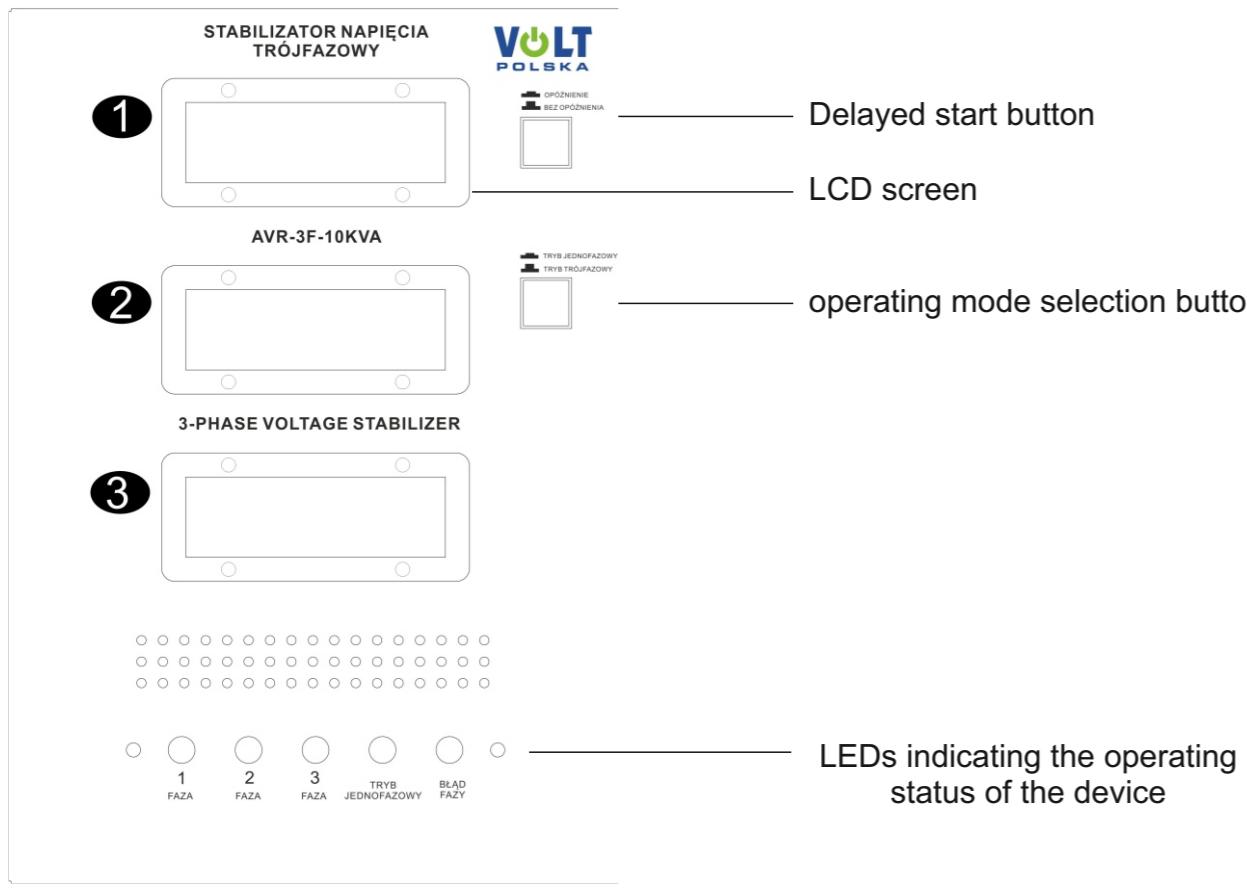
## TECHNICAL SPECIFICATION

STABILIZER MODEL	AVR PRO 3-F 3% SERVO			
Rated power	10.000VA	15.000VA	25.000VA	30.000VA
Input voltage range	225V - 450V			
Input voltage range for 1 phase	130V - 260V			
Minimum starting voltage	225V ±5V			
Output voltage range	400V			
Phases	1 faza / 3 fazy			
AVR stabilization precision	±3%			
Efficiency	<98%			
Stabilization control	Servo motor			
Transformer	Toroidal transformer			
Indicator	Wyświetlacz LCD			
Operating frequency	50/60Hz			
Start delay switch	6s / 180s			
Mode change switch	1 phase / 3 phase			
Housing/case	Steel case			
Dimensions	545x230x397mm	545x230x430mm	541x302x427mm	
Net weight	30kg	33kg	38kg	53kg

## TECHNICAL SPECIFICATION

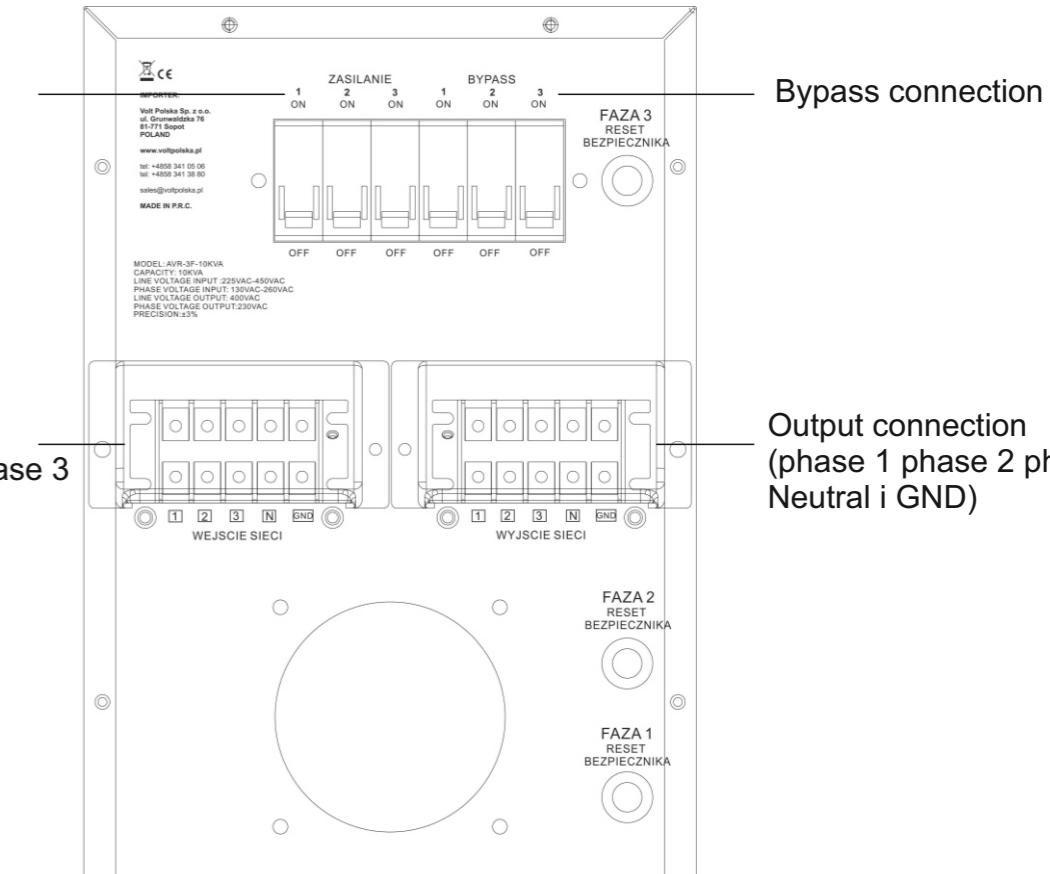
MODEL	AVR PRO 3-F 3% SERVO
Delay	6s / 180s, set by button
Start of cooling	At 30% of rated power
Cooling shutdown	At 20% of rated power
AVR stabilization precision	±3 (normal) ±4(max)
Minimum output voltage	295V ±5V
Electrical strength of cables	1500VAC 50Hz / 5mA up to 1 minute
Motherboard	Built in high speed 10-bit processor
Cooling	3 FAN 90x90x25
Operating temperature	0-45°C
Case type	Steel case

# CONSTRUCTION OF AVR CONTROLLER



# CONSTRUCTION OF AVR CONTROLLER

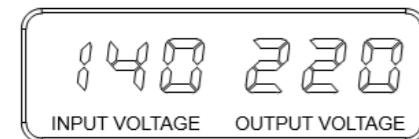
Power connection



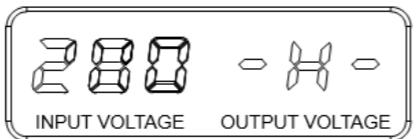
# INSTRUCTION MANUAL

## Display

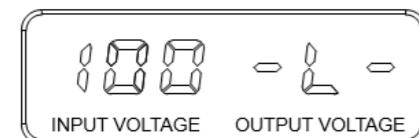
The display shows the current status of the device. Here are 5 possible layouts on the display in single phase mode: Normal operating status, output operating status, output low voltage status, output high voltage status, high temperature status, delay status.



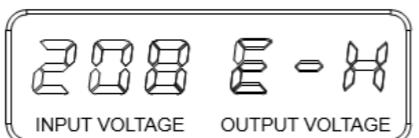
Normal working status



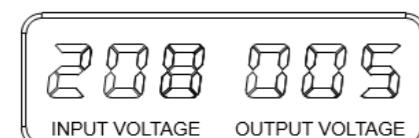
Over voltage protection status



Under voltage protection status



Over heat protection status



Time delay protection status

# INSTRUCTION MANUAL

## Wskaźniki LED

### LED indicators

LED 1,2 and 3 lights up green - Phases 1, 2 and 3 are connected / working normally

LED 1, 2 and 3 not lit - Phases 1, 2 and 3 are not working / not connected

LED yellow, "Single-phase mode" - When lit in yellow, 1 phase is working. When off, 3 phases are operating

LED red "Phase error" - indicates a device error

## Switches

Button "Delayed / No Delay" (6s / 180s) - AVR controller is equipped with delayed start function to protect and proper operation of appliances containing compressors, which should not be restarted immediately after switching them off ( e.g. refrigerators, freezers, etc.).

"Single-phase mode / three-phase mode" button - selection of regulator operation

## Specifications of the circuit breaker

10KVA- 7A/10A/250V \* 3

# INSTRUCTION MANUAL

## CONTROL

### Operation in three-phase mode:

The input connection strip ( terminal ) requires the phase wires to be connected in "star" arrangement ( 3 phase wires plus neutral wire). It is forbidden to connect the phase wires in a "triangle" arrangement ( three phase wires without a neutral wire).

In connecting the phases, it is important to maintain the correct order. Phase 1 to 1, 2 to 2, and 3 to 3. Otherwise, the protection system may shut down the device.

The "bypass" switch is a bypass switch for stabilizer operation. When the AVR is operating normally, the bypass switch should be turned off. When the unit is faulty, turn off the POWER switch (OFF), and turn on the BYPASS switch (ON). The unit will supply power directly from the grid bypassing the AVR electronics.

When you press the delay button on the front panel, the device will delay the start by 180 seconds, until the output signal is given. The default time is 6 seconds.

"Single-phase mode / three-phase mode" button is used to select the operation mode. By default, the device is set in three-phase mode. Pressing the button will switch the device to single-phase mode.

# INSTRUCTION MANUAL

In three-phase mode, the AVR will equalize the input voltage that is too high or too low, and give the output voltage after stabilization. If in this mode any of the phases does not work correct or is not connected, the device will protect itself and will not give voltage to the output.

In single-phase mode, each phase can operate independently of each other, for example, a malfunction of phase 2 will not affect the operation of phase 1. The input voltage of each phase is stabilized with 3% precision. The maximum power on each phase is about 1/3 of the maximum nominal power of the AVR (10KW).

### Notes and safety rules

Make sure that the sequence of phases on the terminals is correct, and that all phases are connected, and that the wires are in working order and do not have any mechanical damage (such as broken wire insulation)

In three-phase mode , any incorrect phase connection, may cause the device to not work.

The GND wire for input and output must be connected for the device to be properly protected.

The input and output voltage of 400V is a very high voltage. Therefore, only a suitably qualified person can operate the device with the power off. Once properly connected, the terminals should be covered and the device should be placed out of reach of the public.

The device is also under high voltage during a fault. When the three-phase switch is turned off, only a qualified person may undertake servicing of the device.