

Menu Parameters

↑ ↓	P.01	Regulator output voltage set value. This parameter sets the desired output voltage from the regulator. Factory value: 220V Setting range: 100V - 260V
↑ ↓	P.02	Regulator output voltage tolerance value. Motor output remains constant when the output voltage is higher than (P.01 - P.02) and less than (P.01 + P.02). It is used in order to prevent the motor from moving continuously in sudden voltage fluctuations. Factory value: 5V Setting range: 1V - 10V
↑ ↓	P.03	Regulator output upper protection voltage. When the regulator output voltage rises above the set regulator output upper protection voltage value, the device de-energised the relay. The OUT led turns off and the ">V" led turns on. Factory value: 240V Setting range: Off - 110V - 270V
↑ ↓	P.04	Regulator output lower protection voltage. When the regulator output voltage falls below the set regulator output lower protection voltage value, the device de-energised the relay. The OUT led turns off and the "<V" led turns on. Factory value: 180V Setting range: Off - 90V - 270V
↑ ↓	P.05	Time to enter voltage protection. The regulator output voltage determines the time to wait for the device to de-energised the relay by entering the protection after the regulator output goes above the upper protection voltage value or goes below the lower protection voltage value. If the voltage is out of normal after the time expires, the relay is de-energised. If the voltage returns to normal within this period, the device does not de-energize the relay. Factory value: 3sec. Setting range: 1sec. - 20sec.
↑ ↓	P.06	Time to step out of voltage protection. The regulator output voltage determines the time to wait for the device to exit the protection (energised the relay) after reaching 5V below the set regulator output upper voltage value or 5V above the lower voltage value. After the time expires, the relay is energised if the voltage is at normal values. If the voltage goes out of normal values within this period, the device does not energise the relay. Factory value: 5sec. Setting range: 1sec. - 20sec.
↑ ↓	P.07	Slow motion area. When the difference between the output voltage (Vout) and P.01 reaches P.02 + P.07 or the difference is lower than this value, the device enters the slow motion field and moves the motor at the slow motion speed value (P.10). Factory value: 10V Setting range: 1V - 30V
↑ ↓	P.08	Slow motion speed value. When the device is in the slow motion area, the motor is moved according to the slow motion speed value until the regulator reaches the set voltage. This value cannot be set higher than the normal motion speed value. Slowest 1 - ... - Fastest 10 Factory value: 2 Setting range: 1 - 10
↑ ↓	P.09	Normal motion speed value. When the device is not in the slow motion range, it moves according to the normal moving speed value.. This value cannot be set lower than the slow motion speed value. Slowest 1 - ... - Fastest 10 Factory value: 8 Setting range: 1 - 10
↑ ↓	P.10	Coal protection time. When the mains voltage is constant, the regulator charcoal column remains stable for a long time, causing copper wires to overheat and damage over time. This parameter determines the maximum time that the coal column will remain constant. After the time is up, the motor is moved up to P1 ± P2 value to change the location of the coal column. If this parameter is set to "0", this feature is disabled. Factory value: 7min. Setting range: 0min. - 60min.
↑ ↓	P.11	Regulator output protection current (overload). When the regulator output current rises above the set regulator output upper protection current value, the device de-energised the relay. The OUT led turns off and the ">A" led turns on. Factory value: 120A Setting range: Off - 1A - 250A
↑ ↓	P.12	Time to enter current protection. The regulator output current determines the time to wait for the device to de-energised the relay by entering the protection after the regulator output goes above the upper protection current value or goes below the lower protection voltage value. If the current is out of normal after the time expires, the relay is de-energised. If the current returns to normal within this period, the device does not de-energize the relay. Factory value: 3sec. Setting range: 1sec. - 20sec.
↑ ↓	P.13	Time to out of current protection. The regulator output current determines the time to wait for the device to exit the protection (energised the relay) after reaching 0.5A below the regulator output protection current value. After the time expires, the relay is energised if the current is at normal values. If the current goes out of normal values within this period, the device does not energise the relay. Factory value: Off. Setting range: Off - 1sec. - 999sec.
↑ ↓	P.14	Automatic reset number for current protection. This parameter determines how many times the device will reset the system after the regulator enters the output upper protection current fault. At the end of this number, the device needs to be reset manually to get out of the current error state. Factory value: Off. Setting range: Off - 1 - 10
↑ ↓	P.15	Opening Time. If the current and voltage values are at normal values when the device is energized, the relay is energized at the end of the time specified here, otherwise the relay does not energize. This time is shown as a countdown on the display when the device is energized. It does not affect regulator control. Factory value: 5sec. Setting range: 1sec. - 60sec.
↑ ↓	P.16	Coal maximum set value. It is the stopping value at the variac endpoint (Maximum) of the coal. When the voltage value of the coal rises above this value, the device stops the motor. Factory value: 230V Setting range: 100V - 300V
↑ ↓	P.17	Coal slow motion area. It is the area where the coal is moved slowly (P.08) so that it does not hit both end points (Min(Neutral) and Maximum(P.16)) at speed. When the coal value reaches P.17 while approaching minimum (neutral) and reaches P.16 - P.17 value while approaching maximum, it starts to move at slow speed value. Factory value: 30 Setting range: 1 - 50
↑ ↓	P.18	Coal hysteresis value. The device does not move the motor until the coal value falls below P.16-P.18 or rises above Min (Neutral)+P.18 after the coal reaches both end points of the variac and stops the motor. It is used to prevent the motor from moving continuously in momentary voltage fluctuations. Factory value: 15 Setting range: 1 - 50
↑ ↓	P.19	Buzzer active/passive. While the buzzer feature is active; In the event of a fault (Voltage and Current) buzzer operates. This feature can be activated/deactivated by pressing the buzzer button on the device for 3 seconds while out of the menu. When the buzzer feature is passive, the buzzer led on the device goes off, while it is active, it lights on. Factory value: on (Active) Setting range: off - on
↑ ↓	P.20	Change password. Determines the password value for entering the menu. When this value is "off", access to the menu is done without password. If a value is entered, this password must be entered to enter the menu. Factory value: off (Passive) Setting range: off - 001 - 999
↑ ↓	P.21	Version information. Shows the software version of the device.
↑ ↓	P.22	Exit the menu. Used to exit the menu.

General


For regulators, it shows mains input/output voltages and regulator output current at the same time. In addition, the regulator controls the servo motor to keep the output voltage constant at the desired value. There is protection and audible alarm depending on regulator output voltage and current.

Device Usage and Principle of Operation

Make the connections of the device according to the connection diagram. When the device is energized, it displays the regulator output voltage on the 1st display, regulator input (mains) voltage on the 2nd display, and output current on the 3rd display. (After counting the opening time.) If the regulator output voltage and current are at normal values, after the opening time, the relay is energised and (Out) LED lights up. If the regulator output voltage and current are not at normal values, the device does not energize the relay and the related error LED lights up.

Note: If the motor is moving in the opposite direction, change the location of motor switch 1 and motor switch 2 connections.

Description of Displays on the Device

- 220** ▶ 1st Display: Indicates the regulator output voltage.
- 223** ▶ 2nd Display: Indicates the regulator input voltage.
- 155** ▶ 3rd Display: Indicates the regulator output current. If the  button is pressed for 3 seconds in the main screen, it shows the output frequency. The "Hz." Led lights up.

RG-72AK Menu Structure

Press the set button for about 5 seconds to enter the menu. Use the up/down buttons to switch between parameters in the menu. To change the parameter, after reaching the desired parameter, press the set button and see that the 2nd display flashes. Then, after entering the value you want to set with the up / down buttons, save the value change by pressing the set button. To exit the menu, go to P.19 (out) and press the set button.

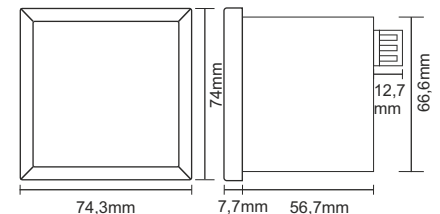
Warnings

- Use the device in accordance with the specified instructions.
- Do not operate the device in wet environment.
- Include a switch or circuit breaker in the assembly.
- Keep the switch and circuit breaker close to the device and easily accessible to the operator.
- Mark the switch and circuit breaker as disconnecting element for the device.

Technical Information

Operating Voltage (Un) :	85V - 240 AC 50/60Hz. (Vin-N)
Operating Power :	<6VA
Voltage Meas. Range :	3V - 300V (Vout-N)
Current Meas. Range :	1A - 250A (CT-300)
Measurement Accuracy :	±%1
Contact :	250V/5A AC (1250VA) (Resistive Load)
Motor Outputs :	24V/2A AC
Operating Temp. :	-20°C.....+55°C
Display :	3x3 Digit LED Display
Connection Type :	Plug-in terminal connection
Cable Diameter :	1,5mm ²
Weight :	<140gr.
Panel Hole Sizes :	68x68mm
Protection Class :	IP41 (Front panel), IP20 (Body)
Operating Altitude :	<2000m

Dimensions



Connection Diagram

