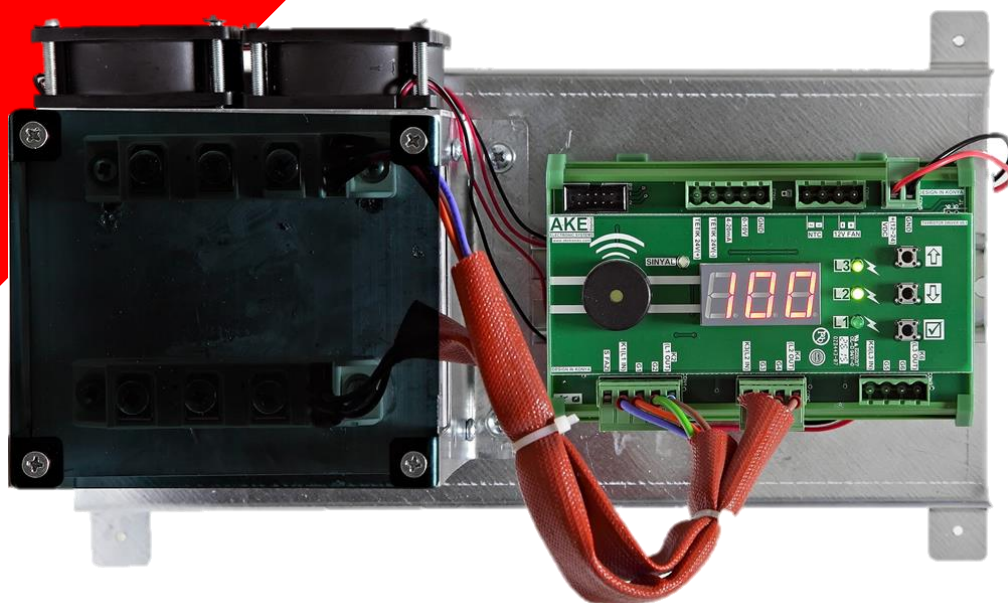
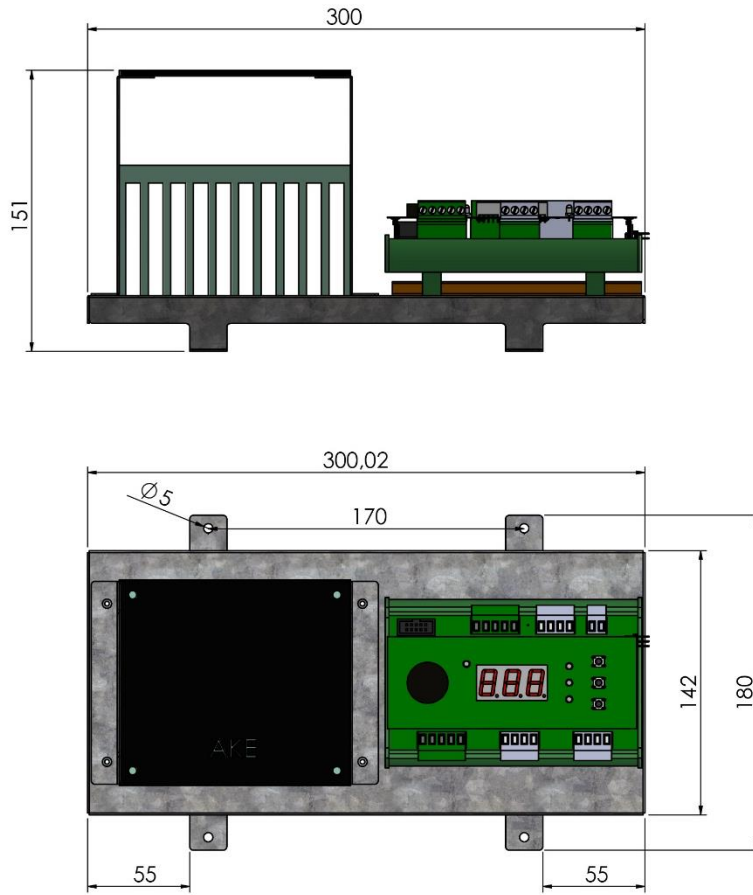


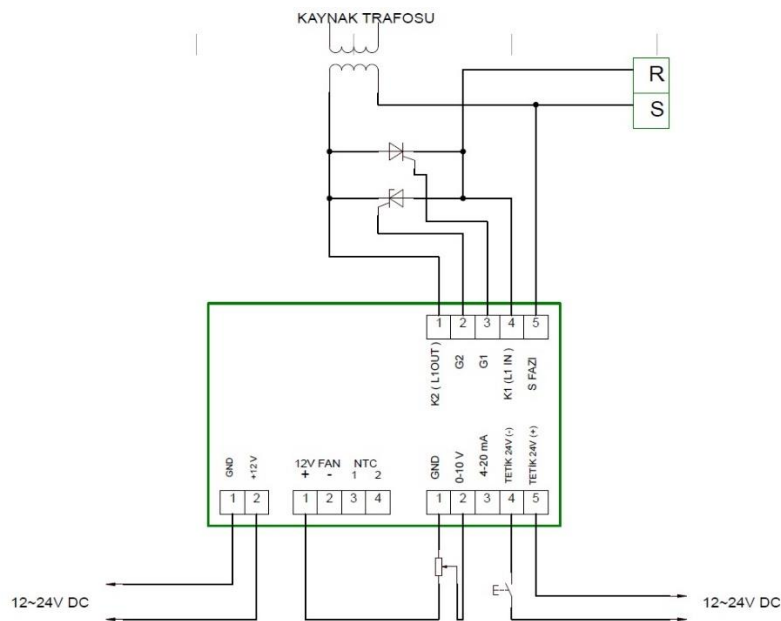
**AKE.100.002.01.01**  
**SOLID STATE RELAY UNIT**  
**USER MANUAL**



## 1.DEVICE DIMENSIONS



## 2.DEVICE CONNECTION DIAGRAM



### 3. CAUTIONS

- Be sure to read the operating instructions before using the appliance and follow the instructions and cautions in the manual when using the appliance. Otherwise the responsibility for accidents and damages that may belong to the buyer.
- Installation and connection of the device should be done by experienced technicians in accordance with the diagram. Otherwise the responsibility belongs to the buyer.
- The operating ambient temperature of the device should be between 0 to 50 °C.
- The supply voltage must be checked before the device is energized.
- Precautions must be taken to prevent liquid flow into the device and metal chips to conduct. Otherwise, there may be accidents such as fire and electric shock.
- In case of any malfunction, do not interfere with the device. If the malfunction continues, notify the service in writing with the explanation.
- Electrical and mechanical precautions must be taken to prevent accidents and damages if the device is broken while being attached to the machine.
- Never remove the warranty label. Otherwise, your device is not covered by the warranty. The appliance must be repaired by authorized service personnel.
- The cables carrying the sensor and input signals to the device shall be prevented from being moved and influenced separately as far as possible from the inductive load cables operating as feed, control, switching.
- Shielded cables should be selected for the cables that carry the sensor and input signals to the device, and the cable shield must be connected to the ground.
- If more than one electronic device is used, separate feeder lines for each device must be towed. Insulation traces and line filters should be used on the supply line where there is excessive electrical noise.
- No control circuit should be connected to the device supply line.
- The appliance should be cleaned with a soft, damp cloth with a front panel. Thinner etc. do not use substances.
- Please do not use high-torque screwdrivers when mounting the device.

## 4. INTRODUCTION

Solid state relay unit is an electronic switching device. It facilitates controlling operation with high switching speed, longer lifetime and operating feature in hard conditions.

### 4.1 STANDARD TECHNICAL SPECIFICATIONS

- 1 unit 3 digit 7 segment display
- 12 VDC operating voltage
- Warning Buzzer System
- 4 units caution led.
- Over Current Controlling (Up to 1000 A)
- 4-20mA, 0-10V, on-off operating options
- Over temperature protection
- Parametric operating order
- Parameter setting system with 3 buttons
- Single Phase or Tri-Phase Controlling Feature
- 85-400VAC controlling voltage

## 5. DEVICE FUNCTIONS

### 5.1 MANUFACTURER PARAMETERS

When the device is energized, the system starts with the operating page. Please touch a button to enter the menu and set up the controller's parameter settings. Firstly, the screen that is indicated below appears ;



Password entry may be done on this screen with the help of the OK button. After notifying the password as 42 and touching the OK button, the user can start parameter settings.

Please use UP/DOWN buttons to switch between values.

#### 5.1.1 CURRENT PARAMETER



Please use UP/DOWN buttons to reach P0 parameter and then touch OK. button to access Current Control Option



In the case of selection of P0.1, Current Setting is adjusted with 0-10V.



In the case of selection of P0.2, Current Setting is adjusted with 4-20mA.



In the case of selection of P0.3 , Current Setting is adjusted with A0 parameter.

### 5.1.2 WELDING TIME PARAMETER



Please use UP/DOWN buttons to reach P1 parameter and then touch OK. button to access Welding Time Parameter



In the case of selection of P1.1, welding time is not fix time. Welding operation is made during triggering signal.



In the case of selection of P1.2, welding time will be the value that can be adjusted with the help of T0 parameter. Trigger signal has to come for initiating welding operation. After initiating welding operation, the welding time will be the value that's adjusted with the help of T0 parameter. Trigger signal should be sent to initiate welding operation again.

**Önemli Not:** Please use password feature to protect current and time values which is mentioned above. Please use L0 parameter to indicate your password.

### 5.1.3 MINIMUM WELDING PARAMETER



Please use UP/DOWN buttons to reach q0 parameter and then touch OK. button to adjust minimum welding parameter.

#### 5.1.4 WELDING MAXIMUM PARAMETER



Please use UP/DOWN buttons to reach q01 parameter and then touch OK. button to adjust maximum welding parameter.

#### 5.1.5 RAMP SETTING



Please use UP/DOWN buttons to reach C0 parameter and then touch OK. button to adjust ramp value between 0 and 100.

### 5.2 USER PARAMETERS

User should randomly touch a button to access setting menu . The L0 parameter is password entrance . User should not manage this page.

#### 5.2.1 WELDING DELAY TIME



T1 parameter provides delaying for T1 time. After the trigger arrives, the welding operation does not start immediately and starts with a delay of T1 times. In this menu, 0.1 second sensitivity can be adjusted. If the arrow key is pressed after the setting is made, it is saved.

#### 5.2.2 KAYNAK SÜRESİ



The user can only see this item if the P1 parameter is set to P1.2. This parameter can set the welding time with 0.1 second precision. If the arrow key is pressed after the setting is made, it is saved.

### 5.2.3 WELDING CURRENT SETTING



The user can only see this item if the P0 parameter is set to P0/3. This parameter can set the welding time with 0.1 second precision. This parameter allows the source current to be set to a value between 0 and 100. If the arrow key is pressed after the setting is made, it is saved.

If the arrow key is pressed after the setting is made, it is saved.

**Not:** After making adjustments in the menu, it returns to the worksheet after a certain period of time on the main menu page. Or if you select the L0 parameter 1 and press the arrow key, it returns to the worksheet.

**Not:** The display flashes on the setting pages. The screen is fixed on the worksheet.

**Not:** The L1 and L2 LEDs are lit when the reference phases of the card arrive. When the trigger comes, the signal is lit.