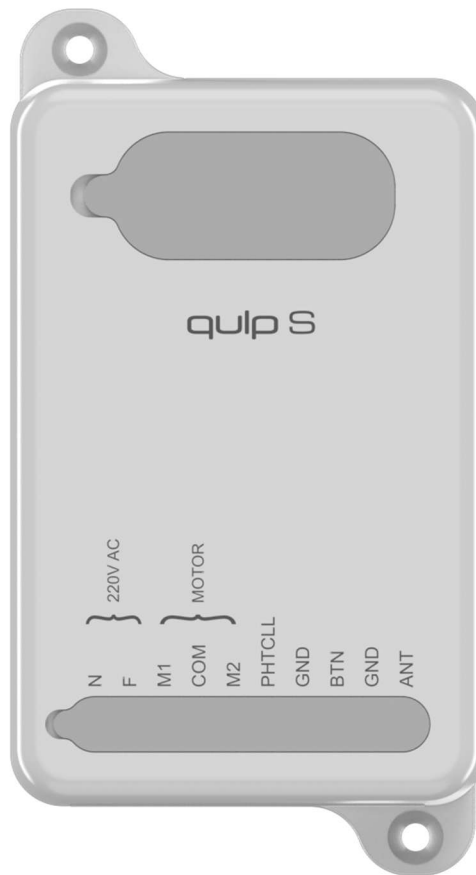


QULP-S

Photocell-Compatible Motor Control Board



KONTAL

CE



Before using your device, be sure to read the user manual. Carefully follow the instructions step by step, paying attention to the installation, electrical connection, and initial start-up sections. After this stage, the product owner/user must keep this user manual in a known and visible place for the entire service life of the product.

- Store the product in a dry environment. Otherwise, a malfunction may occur in the product.
- For products that operate with batteries or rechargeable batteries, the batteries are not covered by the warranty. Likewise, faults caused by battery discharge or leakage in products that have reached the end of their shelf life are not covered by the warranty.
- All service and repair procedures may only be performed by Kontal Elektronik's technical service. The product must not be tampered with by any other person.
- The operating voltage of each product is indicated on its label. Do not power the product from any source other than this voltage value.



- ✓ Using the product in a manner that does not comply with the items stated above may cause fire, serious personal injury, or damage to the product or the structure it is installed in. Kontal Elektronik San. ve Tic. Ltd. Şti. accepts no responsibility for such situations caused by the user.
- ✓ This symbol will be used for important points in the following sections.



- ✓ Do not touch the product's power supply points with bare hands.
- This symbol will be used for warnings related to voltage in the following sections.



- This symbol on the label indicates that the product's supply voltage is DC.



- This symbol on the label indicates that the product has reinforced insulation.



- This symbol on the product or its packaging indicates that this product must not be treated as normal household waste. Instead, it must be handed over to the applicable collection points for the recycling of electronic equipment. Improper disposal of the product may lead to negative consequences for the environment and human health.



- Responsibility for this document and its revisions, and its legal ownership, belong to KONTAL ELEKTRONİK SAN. VE TİC. LTD. ŞTİ. Unauthorized modification or alteration of this document is prohibited.



- Make sure the system is properly grounded to ensure the product operates correctly.

1.DESRIPTION

Qulp S is a control unit designed to safely and conveniently control 220V AC tubular and shutter motor systems. **Qulp series remote controls** offer wireless control, and an external button input allows manual control. Thanks to its compatibility with the MEF safety photocell, it stops the motor the instant an obstacle is detected, ensuring maximum operating safety.

1.1 Box Contents

1x Qulp-S Shutter Motor Control Board	1x Qulp-S User Manual 1x 8cm Internal Wire Antenna
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**For custom orders, the box contents may vary depending on the project or customer request.*

2.TECHNICAL SPECIFICATIONS

Model	Qulp-S
Product Code	K144-01
Operating Voltage	220V AC
Operating Current	10mA @ 220V AC
Operating Frequency	868.35MHz
Operating Modes (Adjustable)	Step by Step – Open/Close – Press & Hold
Operating Temperature	-20 °C +55 °C
Contact Type	220V AC
Contact Capacity	250V AC 10A
Relay Engagement Time(Adjustable)	5-300sec
Remote Control Capacity	500
Weight	217g
Dimensions (Width x Length x Height)	72 x 132 x 35mm

3. Qulp-S – USER SETTING COMPONENTS

BUTTON 1: This component allows you to set the relay engagement time of the control board.

BUTTON 2: This component allows you to register Qulp series remote controls to the control board and set its automatic closing time.

JMP 1: This component allows you to enable/disable the control board's remote learning / automatic learning modes.

DIP SWITCH: This component allows you to enable/disable the control board's photocell and automatic closing modes.



Always disconnect the power to the device before making electrical connections. Otherwise, electric shock or device malfunction may occur.



Never touch the connection points after the power connections of the product have been made!



The fuses on the product have been positioned in the design so that you can easily access and replace them whenever necessary.

4. Qulp – S – CONTROL BOARD

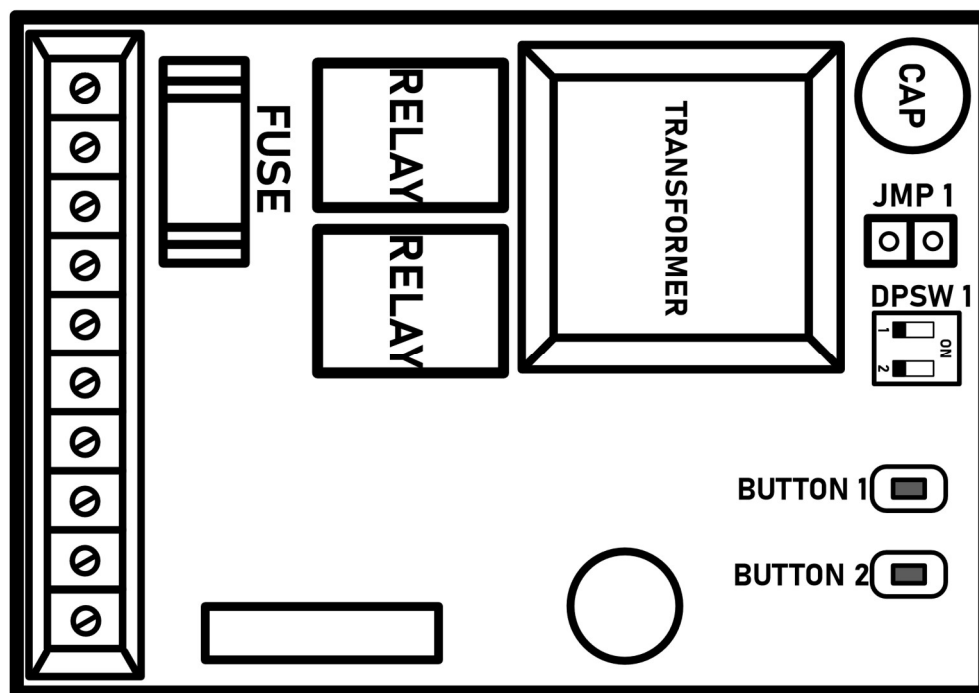


Figure 4.1 Qulp-S Control Board



To perform the steps below, you must connect an MEF safety photocell to the product. If you will not be using a safety photocell, you must set DIP switch No. 1 to the ON position. Otherwise, you will not be able to perform any of the steps described below!

5. Qulp-G – Adding / Deleting a Remote Control

5.1 Adding a Remote Control



To register a new remote control to the control board, QULP series remote controls must be programmed with the QULP-X programming device.

Step 1: Press and hold BUTTON 2 on the control board until a beep sounds from the buzzer. (1/2 sec)

Step 2: When the buzzer beeps, release the button, then **press/release** the relevant buttons of the remote controls you wish to register. On each successful remote registration, the control board's buzzer will give **2 short beeps**. The control board remains in learning mode for 10 seconds; if no new remote control is registered during this time, it will exit learning mode after 10 seconds and return to normal operating mode. The control board can register up to **500 QULP** series remote controls.

5.2 Remote Learning Mode *(Only for Kontal-Coded QULP Series Remote Controls!)*



For this feature to be used, JMP1 must be active.

This allows you to add a new remote control to the system via an existing remote control, without opening the board's cover.

Step 1: On any remote control already registered to the control board, press **buttons 1 and 2** at the same time. When the remote control's LED lights up steadily, release your fingers, then, in order, **press button 1 seven times and button 2 three times**. (When the LED on the control board turns on and the buzzer starts beeping, this means the mode has been entered.)



Channel Matching Requirement

When registering a new remote control, the same button/channel used on the old remote control must be selected.

- **Example:** If you registered the old remote control using button 1, you must also register the new remote control by pressing and releasing button 1. If a different button is used, the system will not save the new remote control.

Step 2: Press/release **the corresponding channel** on the new remote control you want to register (**you must use the same channel you used for the old remote control**). On each successful remote registration, the control board's buzzer will give **2 short beeps**. The control board remains in learning mode for 10 seconds; if no new remote control is registered during this time, it will exit learning mode after 10 seconds and return to normal operating mode. The control board can register up to **500 QULP** series remote controls.

5.3 Automatic Learning Mode

(Only for Remote Controls Programmed with the QULP-X Device!)



For this feature to be used, JMP1 must be active.

In this mode, you can register QULP series remote controls that are not yet defined on the control board but share the same manufacturer code as a remote control already defined on it, simply by pressing/releasing their relevant buttons, without having to access the control board directly. On each successful remote registration, the control board's buzzer will give **2 short beeps**. The control board can register up to **500 QULP** series remote controls.

5.4 Deleting a Remote Control

Step 1: Disconnect the control board's power, then reconnect the power while holding down the LEARN button.

Step 2: The buzzer on the board will beep; keep holding the button until the sound stops. When the sound stops, release the button; once the buzzer then beeps twice, all remote controls will have been deleted.

6. Qulp-S – OPERATING MODES

6.1 Step-by-Step Mode

This is the default mode of the control board. In this mode, using only 1 button of the remote control, you can perform both open–stop and close–stop actions.

6.2 Open – Close Mode

In this mode, when a trigger is sent to the control board from a registered remote control, the relevant (i.e. registered) button of the remote control triggers the system in the opening direction, while the next button triggers it in the closing direction.

To switch to this mode, follow the steps below;

Step 1: Press and hold BUTTON 2 on the control board for approximately 10 seconds.

Step 2: After 10 seconds, when the control board beeps 4 times, its operating mode will have changed. After this warning, release the button. If you want to switch back to the previous mode (Step-by-Step), repeat the same steps again.

6.3 Press & Hold Mode

To use this mode, press and hold the relevant button of the remote control registered to the control board for approximately 1.5 seconds; at the end of this time, the remote control will send a press-and-hold signal to the control board, allowing you to run the system for as long as you keep the button

pressed. No configuration is required to switch to this mode - you can simply control the control board's output by holding down the registered remote control for 1.5 seconds or for as long as you wish.

7. Qulp-S SETTING THE RELAY ENGAGEMENT TIME

Step 1: Disconnect the device's power.

Step 2: Reconnect power to the device while holding down BUTTON 1 on the device.

Step 3: Release the button when the LED on the device lights up steadily and 3 short beeps are heard from the buzzer. *(The buzzer will continue to beep once per second.)*

Step 4: Press/release BUTTON 1 to enter the relay engagement time setting mode.



If BUTTON 1 is not pressed within 10 seconds, the system will exit without entering the time-setting mode. Button No. 2 is for the automatic closing time.

Step 5: At this point, the motor will start running in the closing direction. When the desired running time has elapsed, press button No. 1 again. The motor stops and the elapsed time is stored in memory as the relay engagement time.



If no setting is made, the system's default relay engagement time is 2.5 minutes; when the board is reset to factory settings, this time automatically reverts to 1.5 minutes. For manual time settings, the system only accepts values between 5 seconds and 5 minutes (300 seconds); times below or above these limits are not stored in memory. To change the time again, the setting steps must be repeated from the beginning. Additionally, if the photocell detects an obstacle while the door is moving in the closing direction during installation, the motor stops for safety, and the elapsed time until the obstacle was detected is automatically saved as the new relay engagement time.

8. Qulp-S - SETTING THE AUTOMATIC CLOSING TIME



For this feature to be used, DIP switch No. 2 must be in the OFF position.

Step 1: Disconnect the device's power.

Step 2: Reconnect power to the device while holding down BUTTON 1 on the device.

Step 3: Release the button when the LED on the device lights up steadily and 3 short beeps are heard from the buzzer. *(The buzzer will continue to beep once per second.)*

Step 4: Press/release BUTTON 2 to enter the automatic closing time setting mode.

Step 5: When the desired automatic closing time has elapsed (e.g. 20 sec) **press button No. 2 again.** The buzzer stops and the elapsed time is saved as the automatic closing time.



Time Limits and Default Setting: If no manual setting is made, the default automatic closing time is 20 seconds. A time between at least 5 seconds and at most 2 minutes (120 seconds) can be set on the system. Values outside this range are not stored in memory.

9. Qulp-S – DIP SWITCH FUNCTIONS

DIP SWITCH NO	DIP SWITCH POSITION	FUNCTION
1	ON	Photocell input is disabled
	OFF	Photocell input is enabled.
2	ON	Automatic closing is disabled.
	ON	Automatic closing is enabled.

10. Qulp-S – INSTALLATION

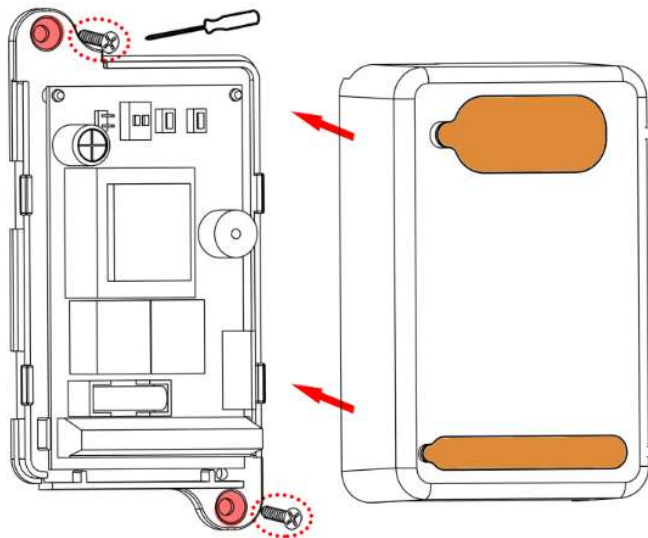


Figure 10.1 Qulp-S Screwing to a Flat Surface

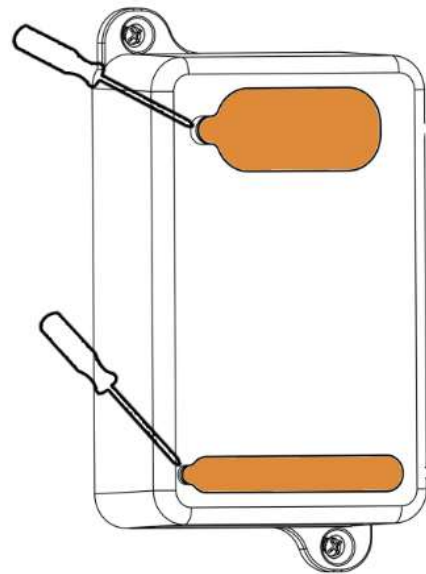


Figure 10.2 Qulp-S Removing the Front Rubber Parts

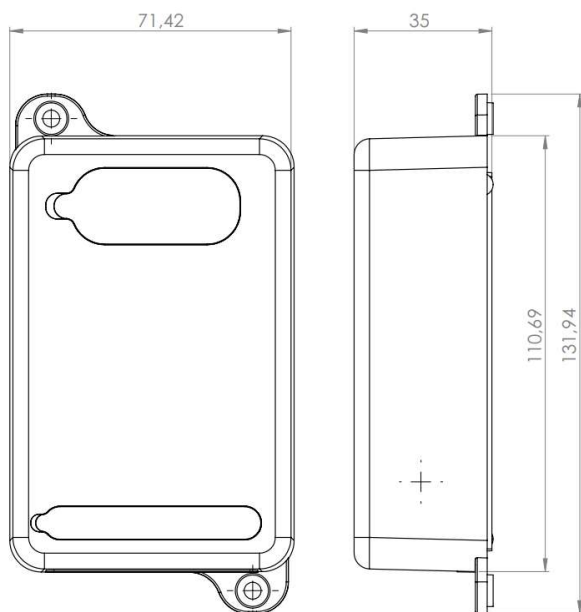
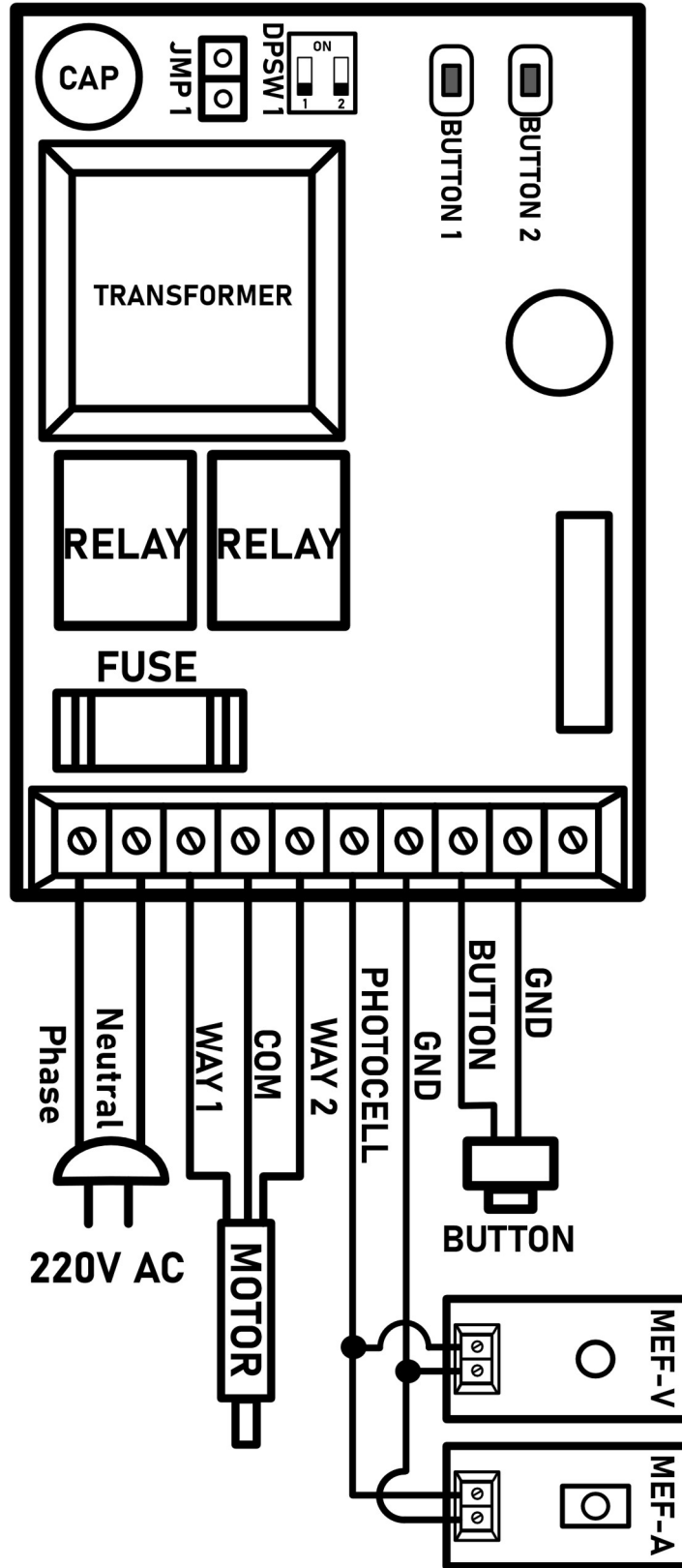


Figure 10.3 Qulp-S Dimensions (Unit: mm)

11. Qulp-S WIRING DIAGRAM



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