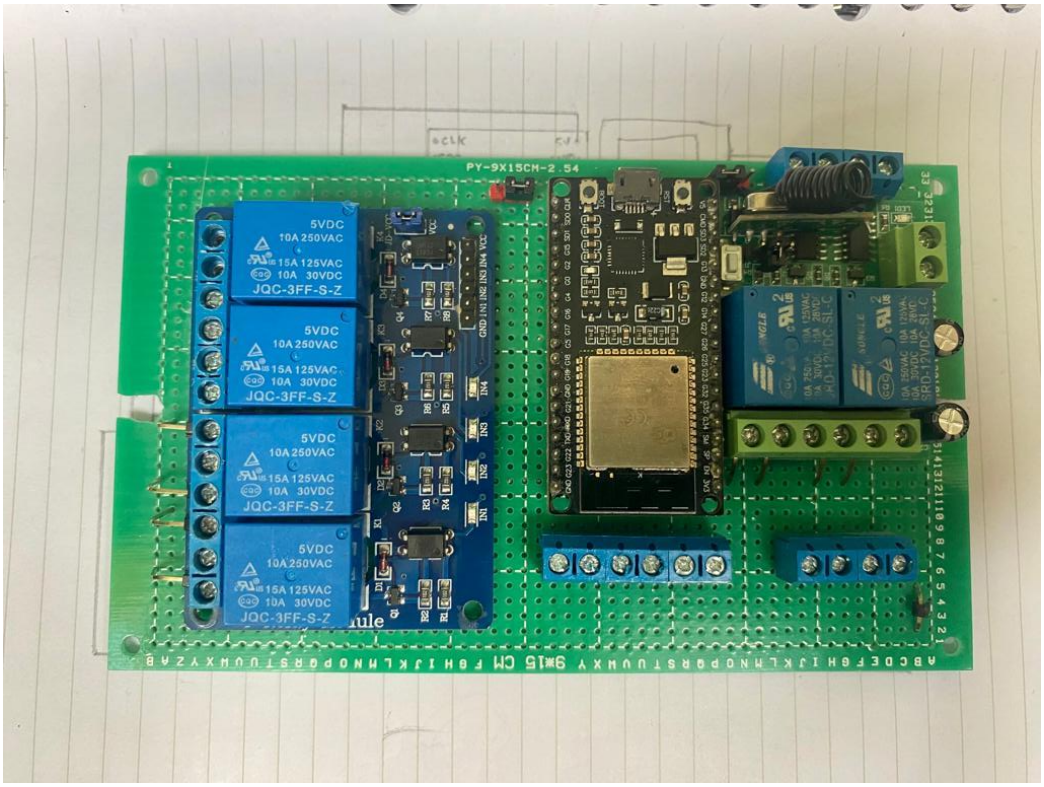
LAMPIRAN

1. Proses pemasangan penguncian pagar

2. Pemasangan ESP-32, driver relay, modul relay


PY-9X15CM-2.54
5VDC
10A 250VAC
15A 125VAC
10A 30VDC
JQC-3FF-S-Z
5VDC
10A 250VAC
15A 125VAC
10A 30VDC
JQC-3FF-S-Z
5VDC
10A 250VAC
15A 125VAC
10A 30VDC
JQC-3FF-S-Z
5VDC
10A 250VAC
15A 125VAC
10A 30VDC
JQC-3FF-S-Z

PROGRAM RANGKAIAN KESELURUHAN

```
#define BLYNK_TEMPLATE_ID "TMPL6B3nMfrzT"
#define BLYNK_TEMPLATE_NAME "Quickstart Template"
#define BLYNK_PRINT Serial

#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27, 16, 2);

#include <WiFi.h>
#include <WiFiClient.h>
#include <BlynkSimpleEsp32.h>

#include <ESP32_Servo.h>
Servo myservo;
int pos = 60;

//variabel untuk koneksi ke blynk
char auth[] = "Cw7QLJTXjgC10CvarzAkiwlS4GtAqmTg";
char ssid[] = "ML LUTFI";
char pass[] = "okmaju6571";

WidgetLCD LCD(V2);

//pin relay motor
#define BUKA 0
#define TUTUP 4

//setting remote
int Rbuka = 27 ;
int Rtutup = 14 ;
int bUKA, tUTUP;

//setting limit switch
int LBuka = 32;
int LTutup = 25;
int Limit_Buka;
int Limit_Tutup;

int Tbuka, Ttutup, Servo;
BLYNK_WRITE(V0)
{Tbuka = param.asInt();}
```

```
BLYNK_WRITE(V1)
{Ttutup = param.asInt();}
BLYNK_WRITE(V3)
{Servo = param.asInt();}

void setup()
{
  Serial.begin(115200);
  pinMode(Rbuka, INPUT_PULLUP);
  pinMode(Rtutup, INPUT_PULLUP);
  pinMode(LBuka, INPUT_PULLUP);
  pinMode(LTutup, INPUT_PULLUP);
  pinMode(BUKA, OUTPUT);
  pinMode(TUTUP, OUTPUT);
  pinMode(0, OUTPUT);
  pinMode(4, OUTPUT);
  digitalWrite(BUKA, HIGH);
  digitalWrite(TUTUP, HIGH);
  digitalWrite(15, HIGH);
  digitalWrite(2, HIGH);
  digitalWrite(0, HIGH);
  digitalWrite(4, HIGH);
  delay(10);
  myservo.attach(13);
  myservo.write(pos);
  lcd.begin();
  lcd.backlight();
  lcd.setCursor(0,0);
  lcd.print("TUGAS AKHIR");
  lcd.setCursor(0,1);
  lcd.print("PAGAR 0TOMATIS");
  Blynk.begin(auth, ssid, pass, "blynk.cloud", 80);
  delay(1000);
  lcd.clear();
}

void loop()
{
  Blynk.run();
  remote();
  LCD.print(0,0," PAGAR OTOMATIS");
  if (Tbuka == HIGH){
    myservo.write(0);
    digitalWrite(BUKA, LOW);
    digitalWrite(TUTUP, HIGH);
```

```
    LCD.print(0,1," PAGAR TERBUKA ");
    Limit_Buka = digitalRead(LBuka);
    if (Limit_Buka == 0){
      Tbuka = 0;
      Blynk.virtualWrite(V0, 0);
      digitalWrite(TUTUP, HIGH);
      digitalWrite(BUKA, HIGH);
      myservo.write(60);
      Serial.println("pagar b stop");
    }
  }

  else if (Ttutup == HIGH){
    myservo.write(0);
    digitalWrite(TUTUP, LOW);
    digitalWrite(BUKA, HIGH);
    LCD.print(0,1," PAGAR TERTUTUP");
    Limit_Tutup = digitalRead(LTutup);
    if (Limit_Tutup == 0){
      Ttutup = 0;
      delay(5000);
      myservo.write(60);
      Blynk.virtualWrite(V1, 0);
      digitalWrite(TUTUP, HIGH);
      digitalWrite(BUKA, HIGH);
      Serial.println("pagar t stop");
    }
  }

  else if ( Ttutup == LOW && Tbuka == LOW){
    digitalWrite(TUTUP, HIGH);
    digitalWrite(BUKA, HIGH);
  }

}

void remote(){
  int bUKA = digitalRead(Rbuka);
  int tUTUP = digitalRead(Rtutup);

  if(bUKA == LOW){
    digitalWrite(BUKA, LOW);
    digitalWrite(TUTUP, HIGH);
    Serial.println("pintu terbuka");
  }
```

```
  if(tUTUP == LOW){
    digitalWrite(TUTUP, LOW);
    digitalWrite(BUKA, HIGH);
    Serial.println("pintu tertutup");
  }
}
```