

## Datasheet

### On/Off Temperature Controller, 76 x 34.5mm, PTC Input, 230 V ac Supply

RS Stock number [798-3498](#)



#### **ESM-3710 77 x 35 DIN Size Digital, ON / OFF Temperature Controller**

- 3 Digits Display
- NTC Input or,  
PTC Input or,  
J type thermocouple Input or,  
K type thermocouple Input or,  
2-Wire PT 100 Input or,  
2-Wire PT 1000 Input (It must be determined in order)
- ON/OFF temperature control
- Selectable heating or cooling function
- Selection of operation with hysteresis
- Adjustable temperature offset
- Set value low limit and set value high limit boundaries
- Relay or SSR driver output
- Operation selection of compressor operates continuously, stops or operates periodically in case of probe defect
- Compressor protection delays
- Password protection for programming mode

## ABOUT INSTRUCTION MANUAL

Instruction manual of ESM-3710 Temperature Controller consists of two main sections. Explanation of these sections are below. Also, there are other sections which include order information and technical specifications of the device. All titles and page numbers in instruction manual are in "**CONTENTS**" section. User can reach to any title with section number.

### Installation:

In this section, physical dimensions of the device, panel mounting, electrical wiring, physical and electrical installation of the device to the system are explained.

### Operation and Parameters:

In this section user interface of the device, accessing to the parameters, description of the parameters are explained.

Also in these sections, there are warnings to prevent serious injury while doing the physical and electrical mounting or using the device.

Explanation of the symbols which are used in these sections are given below.



This symbol is used for safety warnings. User must pay attention to these warnings.



This symbol is used to determine the dangerous situations as a result of an electric shock. User must pay attention to these warnings definitely.



This symbol is used to determine the important notes about functions and usage of the device.

**1.Preface**

ESM-3710 series temperature controllers are designed for measuring and controlling temperature. They can be used in many applications with their On / Off control form, heating and cooling control form and easy-use properties. Some application fields which they are used are below:

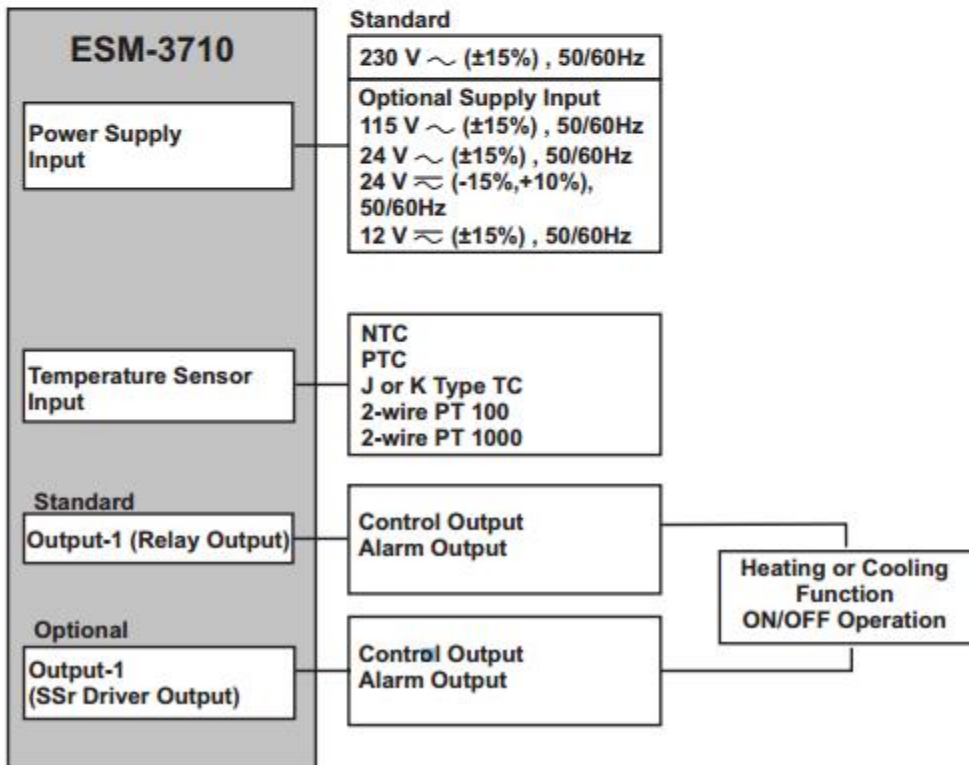
**Application Fields**

- Glass
- Plastic
- Petro-Chemistry
- Textile
- Automotive
- Machine production industries

**Applications**

- Heating
- Baking Ovens
- Incubators
- Storages
- Air Conditioning

**1.1 General Specifications**



## 2. Installation



Before beginning installation of this product, please read the instruction manual and warnings below carefully.

In package ,

- One piece unit
- Two pieces mounting clamps
- One piece instruction manual

A visual inspection of this product for possible damage occurred during shipment is recommended before installation. It is your responsibility to ensure that qualified mechanical and electrical technicians install this product.

If there is danger of serious accident resulting from a failure or defect in this unit, power off the system and separate the electrical connection of the device from the system.

The unit is normally supplied without a power supply switch or a fuse. Use power switch and fuse as required.

Be sure to use the rated power supply voltage to protect the unit against damage and to prevent failure.

Keep the power off until all of the wiring is completed so that electric shock and trouble with the unit can be prevented.

Never attempt to disassemble, modify or repair this unit. Tampering with the unit may result in malfunction, electric shock or fire.

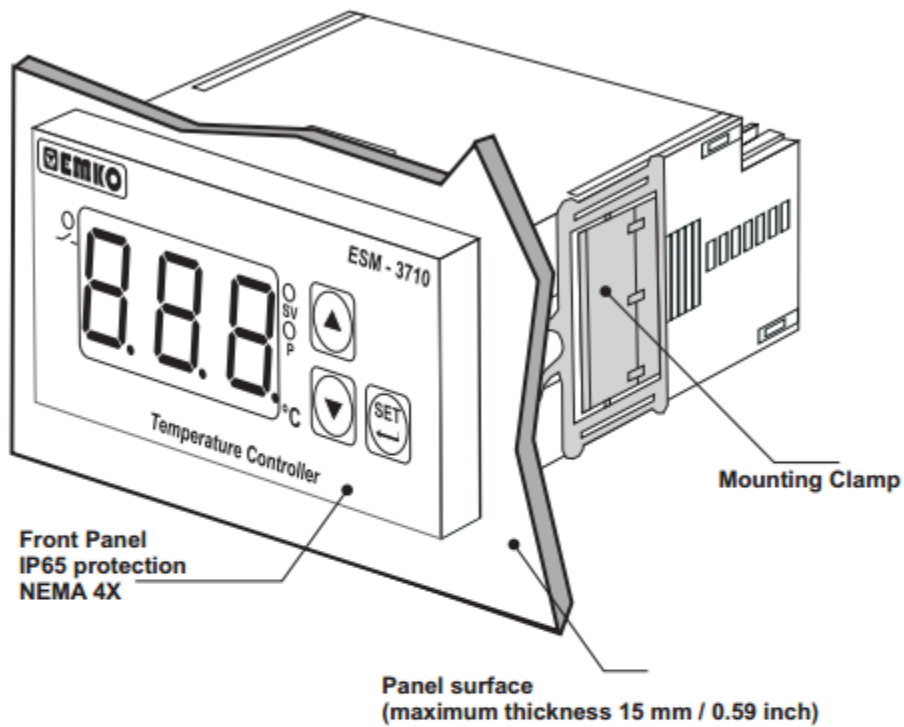
Do not use the unit in combustible or explosive gaseous atmospheres.

During the equipment is putted in hole on the metal panel while mechanical installation some metal burrs can cause injury on hands, you must be careful.

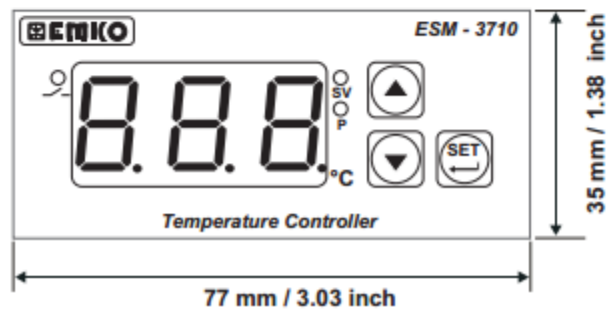
Montage of the product on a system must be done with it's fixing clamps. Do not do the montage of the device with inappropriate fixing clamp. Be sure that device will not fall while doing the montage.

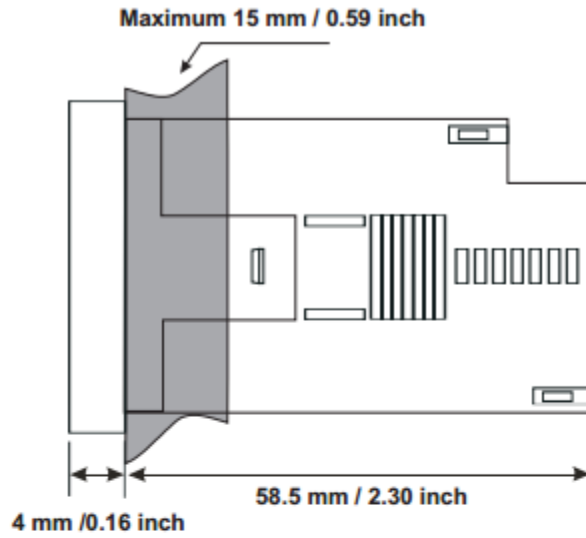
It is your responsibility if this equipment is used in a manner not specified in this instruction manual.

2.1 General Description

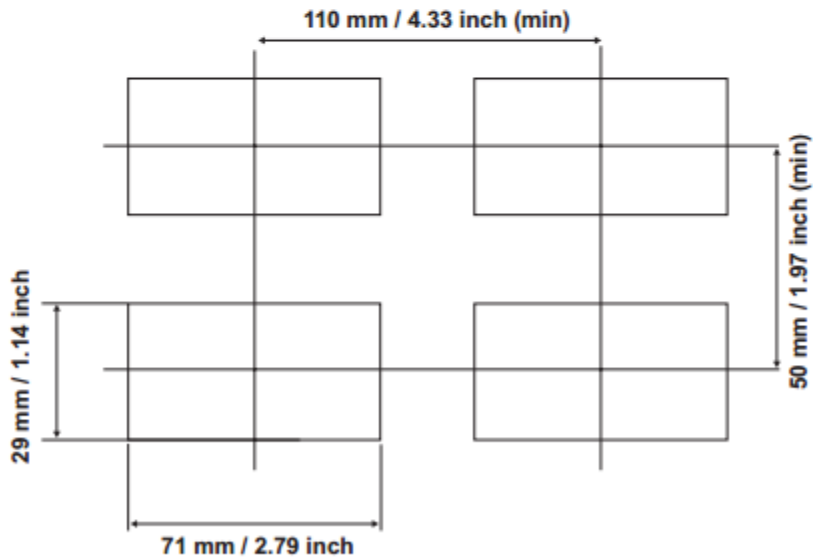


2.2 Front View and Dimensions of ESM-3710 Temperature Controller





**2.3 Panel Cut-Out**



## 2.4 Environmental Ratings

### Operating Conditions



**Operating Temperature** : 0 to 50 °C



**Max. Operating Humidity** : 90% Rh (non-condensing)



**Altitude** : Up to 2000 m.



**Forbidden Conditions:**

Corrosive atmosphere

Explosive atmosphere

Home applications (The unit is only for industrial applications)