**PM6 LEGACY™ LIMIT CONTROLLER**

for configurations:

PM6(L,M)__A__G__

QUICK START GUIDE

1 - MOUNT TO PANEL

1. Make the panel cutout using the measurements in figure 1.
2. Remove the green terminal connectors and the mounting collar assembly.
3. Insert the controller into the panel cutout from the front.
4. Orient the collar base so the flat side faces front and the screw openings are on the sides (see figure 2), then slide the base over the back of the controller.
5. Slide the mounting bracket over the controller with the screws aligned to the collar base. Push the bracket gently but firmly until the hooks snap into the slots in the case.
6. Tighten the two #6-19 x 1.5 in. screws with a phillips screwdriver until the device is flush to the panel (1 to 4 in-lbs torque).
7. Reinstall the terminal connectors to their original locations. (Or first connect field wiring as indicated in this guide and then reinstall the connectors).

NOTE: Mounting requires access to the back of the panel.

2 - CONNECT THE SENSOR INPUT

Connect your sensor as indicated in the diagram for your sensor input. Figure 4 is an example illustrating the connection shown for a Thermocouple.

3 - WIRE OUTPUT 1

Refer to the wiring diagram for your configuration code and connect to the slots indicated.

PM6(L,M)_E__-__A__G__

Form C Relay
5A @240 VAC or 30 VDC

PM6(L,M)_C__-__A__G__

Switched DC or Open Collector

4 - WIRE OUTPUT 2

PM6(L,M)_E__-__A__G__

Form A Relay

5 - CONNECT POWER

Connect the power source for your configuration code:

PM6__[1,2,3,4]__

1 or 2:120-240 V (ac)
3 or 4: 24 V (ac or dc)

CAUTION
Do not connect high voltage to a controller that requires low voltage.

6 - CE DECLARATION OF CONFORMITY

Declaration of Conformity - Series G2.20051-PM6

100% American Manufacturing Company

Full name: Watlow

Address: 1241 Bundy Blvd. Winona, MN 55987 USA

Manufacturer: Watlow

Signature of Authorized Representative

Date: June 30, 2020

Model: PM6

Type of Product: Limit Controller

Model Description: PM6 LEGACY

Rating: 24 V (dc) 2480.0 Hz

Rated Power Consumption: 10 VA maximum PM3, PM6 Models.

Rated Voltage: 0 to 10V or 0 to 10V@ 20kΩ

CAUTION: This equipment not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Technical Requirements: The equipment meets the essential requirements of the following European Union Directives by using technical specifications in the form of standards and/or technical reports or technical specifications that have been notified by the country of origin.

- **EN 61326-1:2013** Electrical equipment for measurement, control and laboratory use – EMC requirements
- **EN 301 489-1 V2.1.1** ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: General requirements
- **EN 301 489-17 V3.1.1** ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonized Standard covering the essential requirements of article 3.2 of the R&TTE Directive
- **EN 61010-1:2010** Safety Requirements of electrical equipment for measurement, control and laboratory use.
- **IEC 61000-4-2:2008** Electrostatic discharge immunity
- **IEC 61000-4-3:2008** Conducted disturbance immunity
- **IEC 61000-4-4:2012** Radiated immunity
- **IEC 61000-4-5:2014 +A1/2017** Surge immunity
- **IEC 61000-4-6:2010** Power frequency magnetic field immunity
- **IEC 61000-4-11:2012** Conducted power frequency magnetic field immunity
- **IEC 61000-4-20:2012** Transient immunity
- **IEC 61000-4-21:2010** Voltage dips, short interruptions and voltage swell immunity
- **IEC 61000-4-30:2010** Immunity to conducted disturbances induced by radio-frequency fields
- **IEC 61000-4-31:2013 + A1/2017** Immunity to radiated disturbances
- **EN 61000-3-11:2006** Harmonic current emissions
- **EN 61000-3-2:2013** Voltage fluctuations and flicker in public supply networks
- **EN 61000-3-3:2013 + A1/2017** Voltage fluctuations and flicker in public distribution networks
- **EN 61000-3-31:2013 + A1/2017** Voltage fluctuations and flicker in public supply networks
- **EN 61326-1:2013** Electrical equipment for measurement, control and laboratory use – EMC requirements
- **EN 61000-6-4:2018** Industrial Immunity
- **EN 61000-6-2:2014** Industrial Emission

**Declaration of Conformity**

This document is intended to be used by manufacturers declaring conformity of electrical equipment to a harmonized standard or technical specification and is not intended to be used in the context of a CE marking.

**CAUTION**

- Do not connect high voltage to a controller that requires low voltage.
- Any changes to this equipment that are not specifically approved by Watlow will invalidate compliance with the Directives.

**Signature of Authorized Representative**

**Place of Issue**

**Date**

June 30, 2020
For assistance contact Watlow: www.watlow.com +1-(507)-494-6650 wintechsupport@watlow.com

Pages, Menus and Keypad Basics:
NOTE: You must read and understand the role of each key on your keypad before proceeding.
See Panel 7 - Keyboard Overview:
These instructions are not inclusive. This Quick Start Guide (QSG) is meant to be a quick reference to show you how to navigate to frequently used areas of the controller. As an example; setting process outputs are not documented in this QSG. Refer to the User's Guide for more detailed instructions.
NOTE: These diagrams may vary depending on the controller programming.

Introduction to the Operations & Setup Pages:
Upon power up, the display will default to Home. The upper red row displays process value (PV). The lower green row displays limit status. The Setup Page is a collection of menus having parameters changed typically one time when the controller is first installed or each time hardware changes occur. The Operation Page is a collection of menus having parameters changed more frequently.
Menus in each page contain common parameters that affect a particular function of the controller. Example: Analog Input, Limit, Outputs and Alarms are commonly used functions. Parameters are grouped for each function.

10 - SET LIMIT
Start from Home. Press to 6 seconds to enter Setup Page.
Select Limit Menu.
Both, High, Low Select limit sides.
Enter degrees. Set the maximum value of what the limit trip points can be.
Enter degrees. Set the minimum value of what the limit trip points can be.
If high limit low limit (L.LS) select tc. If thermocouple select tc.
If high limit low limit (L.LS) select rtd. If 3 leaded rtd, select rtd.
Return Home.

11 - SET OUTPUTS
Start From Home. Press to 6 seconds to enter Setup Page.
Select Output Menu.
Both, High, Low Select limit trip points.
Return Home.

12 - SET ALARM
Start from Home. Press to 6 seconds to enter Setup Page.
Select Alarm Menu.
Sub menu 1 to 4. Select which alarm.
Exit degrees. Select low set point.
Close on alarm. Open on alarm, select alarm logic.
Both, high, low select alarm sides.

13 - SET ALARM SET POINTS
Start from Home. Press to 3 seconds to enter Operations Page.
Select Alarm Menu.
Sub menu 1 to 4. Select which alarm.
Enter degrees. Select low set point.
Enter degrees. Select high set point.
Return Home.
Alarm High 1 Active

14 - MESSAGES
Alternates
Limit High Trip In Progress
No Limit Condition
Alternates
Output 2 Opens On Limit Condition
Sensor Failure Sensor Out Of Range
Alternates
Limit And Alarm Outputs Opens On Error Conditions