



# SERIES M-9005D

## 1" Three-Phase Motor Protectors

Sang Mao



### Specifications

- Protects motors : 3/4 HP To 5 HP
- Operating temperature : 90°C~150°C
- Operating tolerance :  $\pm 5^\circ\text{C}$
- Resume temperature tolerance :  $\pm 12^\circ\text{C}$
- Trip time :  $10 \pm 5$  seconds  
(Customization as per request)
- Input power : 220-240VAC / 440-480 VAC
- Contacts Type: Normally Close
- Reset type : Automatic or Manual reset
- Base type : Eared or Round
- Terminal type : Plate、Hook、 Stub

### Features

- Three-Phase Type Motors
- Normally closed contacts type
- Solution to Motor Overheat and Locked rotor.
- Temperature and Current Dual Protection
- Used In Single and Dual Voltage Type Motors
- Variety mounting and terminal options.

### Application

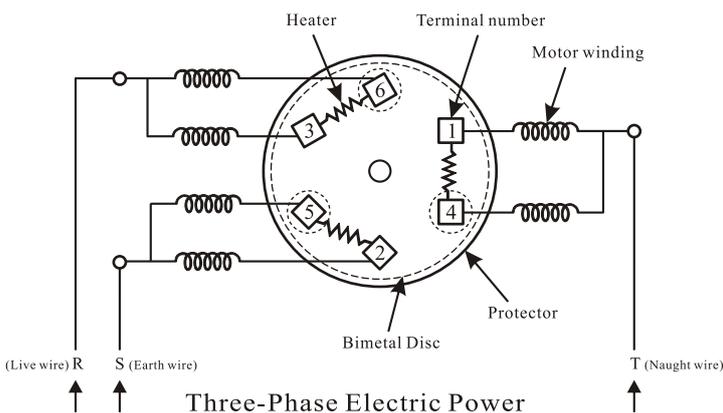
- Industrial machinery motors
- Water pump
- Refrigerator compressor
- Air conditioning fan
- Agricultural equipment
- Heating appliances

### Approvals

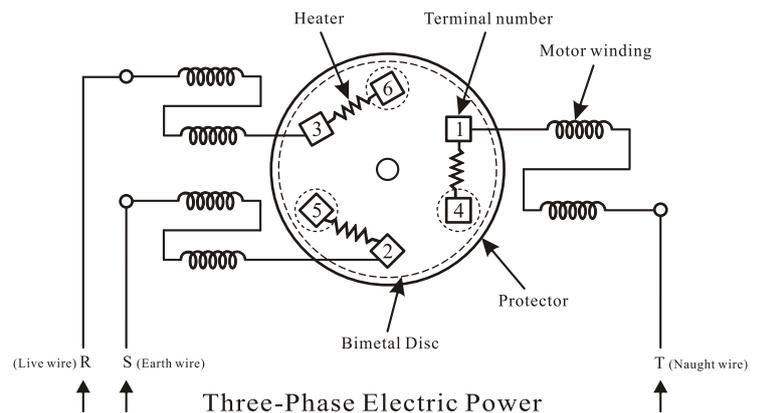
UL approval : 3/4 - 3 HP , 220-240 / 440-480 VAC , 90 °C- 135°C. (File No.: E125871)

### Circuit Connection

#### Low Voltage



#### High Voltage



# Dimensional Drawings (1" Three-Phase Motor Protectors)

<p>Eared Base Manual Reset</p>		<p>Eared Base Auto Reset</p>	
<p>Round Base Manual Reset</p>		<p>Round Base Auto Reset</p>	

Dimension in mm

## Terminal Type

Plate	Hook	Stub

# Type Code Structure

**95**

**A**

**E**

**M**

**A**

**F**

**1**

**1**

**A**

**06**

Item: M-9005

Type: **A** = 3/4" Single-Phase

**B** = 3/4" Three-phase

**C** = 1" Single-Phase

**D** = 1" Three-phase

Base: **E** = Eared **R** = Round

Reset: **M** = Manual Reset **A** = Auto Reset

Operation Temperature:

Automatic Reset	
Open $\pm 5^{\circ}\text{C}$	Close $\pm 12^{\circ}\text{C}$
<b>A:</b> 90 $^{\circ}\text{C}$	57 $^{\circ}\text{C}$
<b>B:</b> 105 $^{\circ}\text{C}$	61 $^{\circ}\text{C}$
<b>C:</b> 105 $^{\circ}\text{C}$	69 $^{\circ}\text{C}$
<b>D:</b> 105 $^{\circ}\text{C}$	78 $^{\circ}\text{C}$
<b>E:</b> 120 $^{\circ}\text{C}$	61 $^{\circ}\text{C}$
<b>F:</b> 120 $^{\circ}\text{C}$	69 $^{\circ}\text{C}$
<b>G:</b> 120 $^{\circ}\text{C}$	78 $^{\circ}\text{C}$
<b>H:</b> 120 $^{\circ}\text{C}$	92 $^{\circ}\text{C}$
<b>I:</b> 135 $^{\circ}\text{C}$	61 $^{\circ}\text{C}$
<b>J:</b> 135 $^{\circ}\text{C}$	69 $^{\circ}\text{C}$
<b>K:</b> 135 $^{\circ}\text{C}$	78 $^{\circ}\text{C}$
<b>L:</b> 135 $^{\circ}\text{C}$	92 $^{\circ}\text{C}$
<b>M:</b> 135 $^{\circ}\text{C}$	102 $^{\circ}\text{C}$
<b>N:</b> 150 $^{\circ}\text{C}$	78 $^{\circ}\text{C}$
<b>O:</b> 150 $^{\circ}\text{C}$	102 $^{\circ}\text{C}$
<b>P:</b> 150 $^{\circ}\text{C}$	115 $^{\circ}\text{C}$

Manual Reset	
Open $\pm 5^{\circ}\text{C}$	Close $\pm 12^{\circ}\text{C}$
<b>S:</b> 90 $^{\circ}\text{C}$	54 $^{\circ}\text{C}$
<b>T:</b> 105 $^{\circ}\text{C}$	63 $^{\circ}\text{C}$
<b>U:</b> 105 $^{\circ}\text{C}$	74 $^{\circ}\text{C}$
<b>V:</b> 120 $^{\circ}\text{C}$	74 $^{\circ}\text{C}$
<b>W:</b> 135 $^{\circ}\text{C}$	96 $^{\circ}\text{C}$
<b>Y:</b> 150 $^{\circ}\text{C}$	96 $^{\circ}\text{C}$
Remark: -20 $^{\circ}\text{C}$ No Reset	

Terminal Type: **F** = 2 Fast Clip ( for 3/4" & 1" Single-Phase )

**G** = 3 Fast Clip ( for 3/4" & 1" Single-Phase )

**P** = 3 Plate **Q** = 6 Plate **S** = 2 Stub **T** = 3 Stub

**H** = 2 Hook **I** = 3 Hook **J** = 6 Hook

Electrical Ratings: **1** = 110-120 VAC **2** = 220-240 VAC **3** = 440-480 VAC

**4** = 110-120 / 220-240 VAC **5** = 220-240 / 440-480 VAC

Ambient Temperature: **1** = 0 $^{\circ}$  ~ 10 $^{\circ}$  **2** = 11 $^{\circ}$  ~ 20 $^{\circ}$  **3** = 21 $^{\circ}$  ~ 30 $^{\circ}$  **4** = 31 $^{\circ}$  ~ 40 $^{\circ}$

**5** = 41 $^{\circ}$  ~ 50 $^{\circ}$  **6** = 51 $^{\circ}$  ~ 60 $^{\circ}$  **7** = 61 $^{\circ}$  ~ 70 $^{\circ}$  **8** = 71 $^{\circ}$  ~ 80 $^{\circ}$

**9** = OVER 81 $^{\circ}$

Full Load Current:

<b>A:</b> 1A	<b>J:</b> 10A	<b>S:</b> 19A	<b>1:</b> 27-28A
<b>B:</b> 2A	<b>K:</b> 11A	<b>T:</b> 20A	<b>2:</b> 29-30A
<b>C:</b> 3A	<b>L:</b> 12A	<b>U:</b> 21A	<b>3:</b> 31-32A
<b>D:</b> 4A	<b>M:</b> 13A	<b>V:</b> 22A	<b>4:</b> 33-34A
<b>E:</b> 5A	<b>N:</b> 14A	<b>W:</b> 23A	<b>5:</b> 35-36A
<b>F:</b> 6A	<b>O:</b> 15A	<b>X:</b> 24A	<b>6:</b> 37-38A
<b>G:</b> 7A	<b>P:</b> 16A	<b>Y:</b> 25A	<b>7:</b> 39-40A
<b>H:</b> 8A	<b>Q:</b> 17A	<b>Z:</b> 26A	<b>8:</b> 41-42A
<b>I:</b> 9A	<b>R:</b> 18A		<b>9:</b> 43-44A

Lock Load Current (Customization as per request)