



Thank you for choosing our Autonics product. Please read the following safety considerations before use.

Safety Considerations

- Please observe all safety considerations for safe and proper product operation to avoid hazards. Safety considerations are categorized as follows: Warning, Caution, and symbols used on the product and instruction manual.

- 1. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. 2. The unit must be installed on a device panel before use. 3. Do not connect, repair, or inspect the unit while connected to a power source. 4. Do not disassemble or modify the unit. 5. Check the terminal numbers before connecting the power source and measurement input.

Caution

- 1. Do not use the unit outdoors. 2. When connecting the power input or relay output, make sure to use AWG20(0.50mm²) and tighten the terminal screw bolt above 0.74 to 0.90N·m. 3. Do not use loads beyond the rated switching capacity of the relay contact. 4. Do not use water or oil-based detergent when cleaning the unit. 5. Do not use the unit where flammable or explosive gas, humidity, direct sunlight, radiant heat, vibration, and impact may be present.

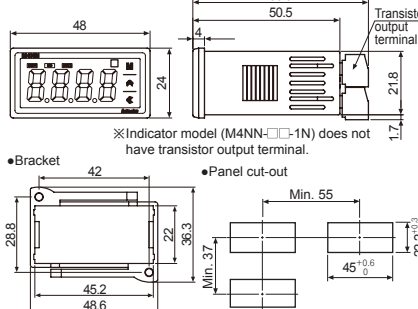
Ordering Information

Table with columns: Item, Digit, Size, Type, Control output, Power supply, Input, and Description. Includes model M4NN-DV-1N as an example.

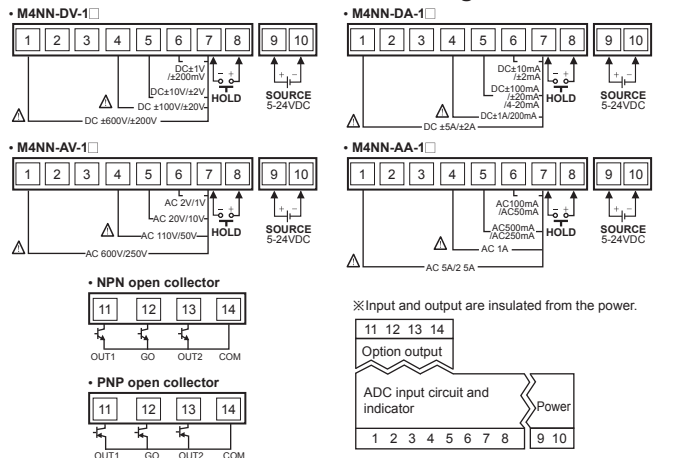
Unit Descriptions

- 1. Measured value display. 2. MODE key. 3. Up key. 4. Shift key. 5. OUT1(RED): OUT1 output indicator of preset. 6. GO(GREEN): GO output indicator of preset. 7. OUT2(RED): OUT2 output indicator of preset. 8. Unit sticker.

Dimension



Connections And Insulated Block Diagram



Monitoring Max./Min. Value [PA 0 group]

It monitors Max./Min. value of display value based on current display value and then displays the data in HPEL mode and LPEL mode of parameter 0 group.

Minus Input Display Setting [PA1 group]

- When minus input is unnecessary, or when display 0 not to display minus input due to display minus input due to unstable input value around 0, set FF this minus input display function.

AC Frequency Measurement [PA1 group]

It measures input signal frequency when it is an AC input. It uses fixed decimal point by setting parameter 1 group, measured range can be changed by setting and measured range of decimal point position is as below chart.

Error Display

Table with columns: Display, Description, and Error code. Lists error messages like HHHH, LLLL, dHH, dLL and their meanings.

Specifications

Table of specifications for M4NN-DV, M4NN-DA, M4NN-AV, and M4NN-AA models, including power supply, input range, accuracy, and environmental conditions.

Prescale [PA1 group]

Diagram and text explaining the prescale function for high/low limit values, including input and display value graphs.

Error Correction [PA1 group]

It corrects display value error of measurement input. High limit error correction function is available as 'Gradient correction' and low limit error correction function is available as 'Zero adjustment'.

Gradient Correction [PA1 group]

Diagram and text explaining the gradient correction function to adjust display value by adjusting gradient, including a graph of input vs. display value.

Power Factor [PF] Display [PA1 group]

This function displays LEAD and LAG by analog output signal from the power factor transducer. It is available to accept several outputs of the power factor transducer by high/low-limit.

Diagram and text explaining the power factor display function, including LEAD and LAG graphs and measurement details.

Input Type And Range [PA 1 group]

Table showing input type, measured input range, display range, and input impedance for various models.

Display Cycle Delay [PA 2 group]

In some applications the measured input may fluctuate which in turn causes the display to fluctuate. By adjusting the display cycle delay function time at d1.5.

Zero Adjustment

Diagram and text explaining the zero adjustment function, including a flowchart and key sequence instructions.

Initialization

Diagram and text explaining the initialization function, including a flowchart and key sequence instructions.

Preset Output Mode [PA 2 group]

Table showing preset output modes (oFF, HI, Lo, HL, G) and their corresponding output operations and display values.

Parameter 0 Group

Diagram and text explaining the Parameter 0 group settings, including high/low limit preset and deviation correction.

Parameter 2 Group

Diagram and text explaining the Parameter 2 group settings, including preset output mode, hysteresis, and monitoring delay time.

Parameter 1 Group

Diagram and text explaining the Parameter 1 group settings, including measured input type, decimal point position, and AC/DC voltage/current.

Factory Default

Table showing factory default values for various parameters across different models.

Caution During Use

- 1. Please separate the unit wiring from high voltage lines or power lines to prevent inductive noise. 2. Install a power switch or circuit breaker to control the power supply. 3. The power switch or circuit breaker should be installed where it is easily accessible by the user.

Major Products

- Photoelectric Sensors, Temperature Controllers, Fiber Optic Sensors, Temperature/Humidity Transducers, SSR/Power Controllers, Door Side Sensors, Counters, Area Sensors, Panel Meters, Pressure Sensors, Tachometer/Pulse/Rate/Meters, Rotary Encoders, Display Units, Connectors/Cables, Control Switches/Lamps/Buzzers, Switching Mode Power Supplies, Stepper Motors/Drivers/Motion Control, I/O Terminal Blocks & Cables, Field Network Devices, Graphic/Logic Panels, Laser Marking System (Fiber, Co2, Nd:Yag), Laser Welding/Cutting System.

RusAutomation logo and contact information for the company.