BARGRAPH INDICATOR

MODEL **48V**

BEFORE USE ....

Thank you for choosing us. Before use, check the contents of package you received as outlined below. If you have any problems or questions on the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

Bargraph indicator..... (1)

■ MODEL NO.

Check that model No. described on the specification label is exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation and connection.

POINTS OF CAUTION

■ POWER INPUT RATINGS

• Operational range & power consumption: Check the power rating for the unit on the specification label.

AC Ratings

Rating 85 – 132V AC: 85 – 132V, 47 – 63 Hz

Rating 170 – 264V AC: 170 – 264V, 47 – 63 Hz

Approx. 3.5VA (48V-1) or 5.5VA (48V-2)

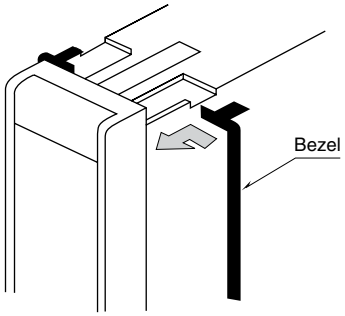
DC Rating

Rating 24V DC: 24V ±15%,

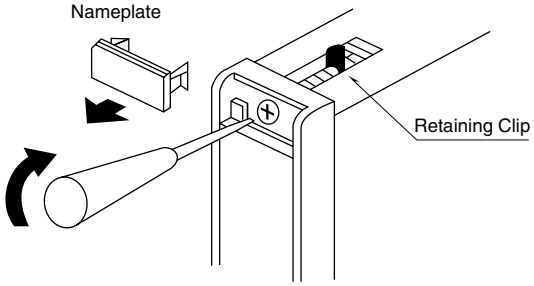
approx. 2W (48V-1) or 4W (48V-2)

■ INSTALLATION

• A bezel is provided in the pocket inside the package. Push the bezel in behind the front side of the unit as illustrated below.



• When installing the meter into a panel, first remove the nameplates at the top and bottom of the front panel. Turn the screws behind these nameplates clockwise until the retaining clips come up and are fixed.
Turning the screws counterclockwise loosen the retaining clips.
• The acrylic front cover and scaleplate can be removed when you remove the nameplates.



■ ENVIRONMENT

• Indoor use
• When heavy dust or metal particles are present in the air, install the unit inside proper housing and ventilate it.
• Do not install the unit where it is subjected to continuous vibration. Do not apply physical impact to the unit.
• Environmental temperature must be within 0 to 50°C (32 to 122°F) with relative humidity within 40 to 80% RH in order to ensure adequate life span and operation.
• Be sure that the ventilation slits are not covered with cables, etc. With the vertical mounting, leave at least 5 cm (2 in.) both at the top and bottom of the unit; with the horizontal mounting, leave at least 2.5 cm (1 in.) at the both sides of the unit.

■ WIRING

• Do not install cables (power supply, input and output) close to noise sources (relay drive cable, high frequency line, etc.).
• Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

■ AND ....

• The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.

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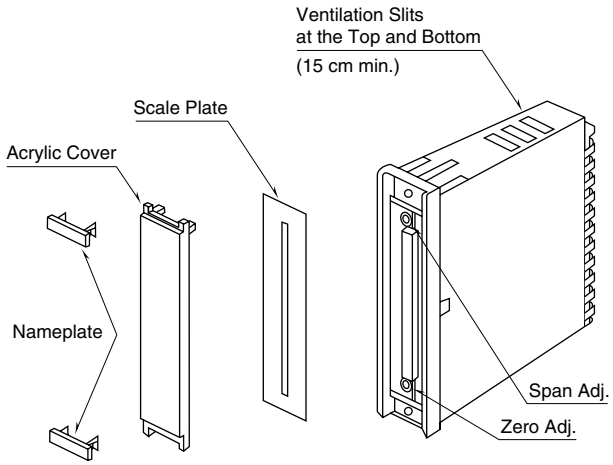
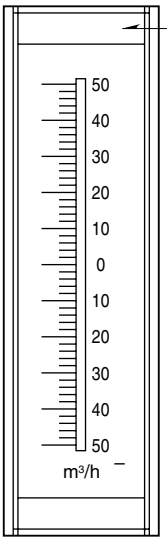
COMPONENT IDENTIFICATION



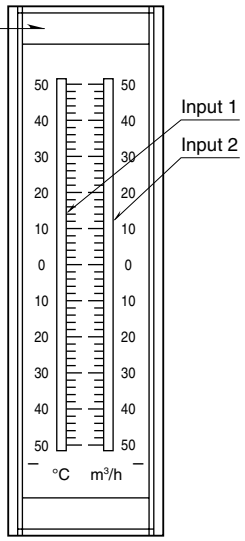
■ FRONT PANEL CONFIGURATIONS

■ VERTICAL MOUNTING

• Single

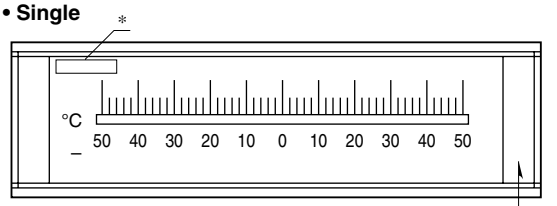


• Dual

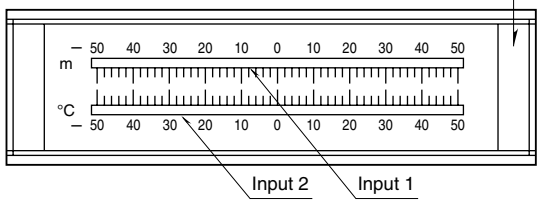


■ HORIZONTAL MOUNTING

• Single



• Dual



*Engineering units longer than 3 characters are indicated here.

Remark: If there is only one engineering unit with dual bargraph type, the position and maximum number of characters for single bargraph type are applied.

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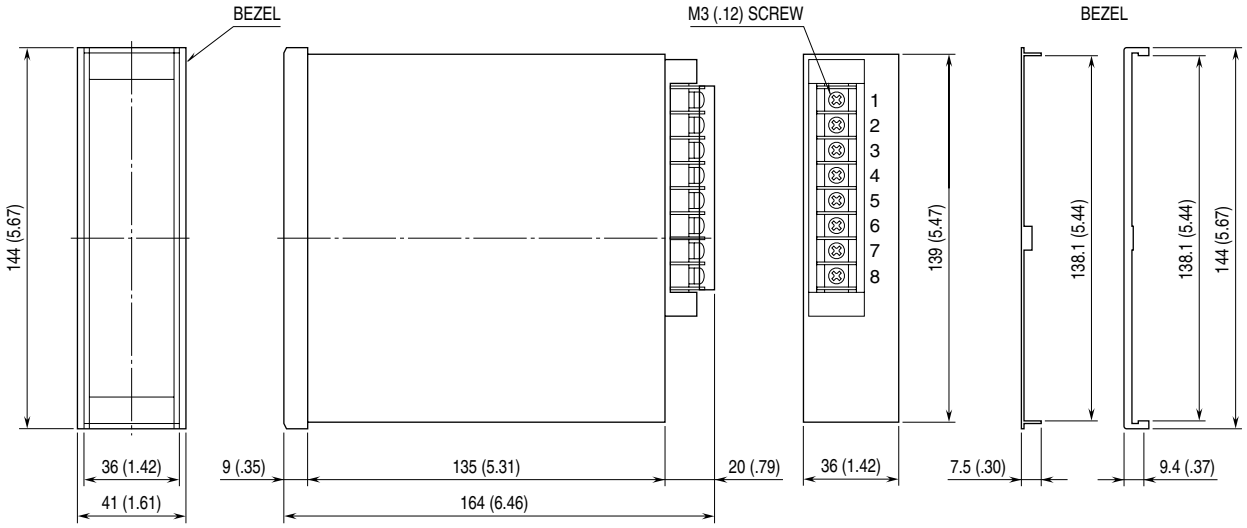
INSTALLATION mm (inch)

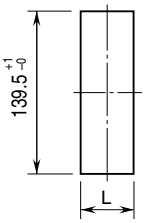
■ EXTERNAL DIMENSIONS



■ PANEL CUTOUT

■ VERTICAL MOUNTING

Panel thickness: 1.6 – 5.5 mm

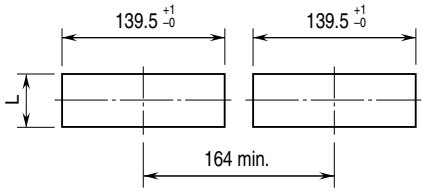


$L = (38 \times n)^{+1}_{-0}$
(n: number of units)

Note 1. A bezel is required between units for high-density mounting.
Note 2. Observe at the minimum of 5 cm above and below the units for heat dissipation.

■ HORIZONTAL MOUNTING

Panel thickness: 1.6 – 5.5 mm



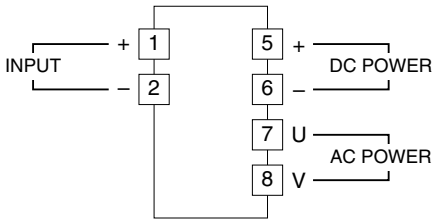
$L = 38 \times (n-1) + 36.5^{+1}_{-0}$
(n: number of units)

Note 1. A bezel is required between units for high-density mounting.

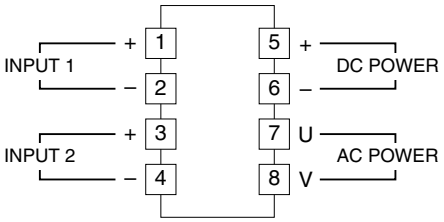
TERMINAL CONNECTIONS

Refer to the connection diagrams below.

■ 48V-1



■ 48V-2



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CALIBRATION PROCEDURE

This unit is calibrated at the factory to meet the ordered specifications, therefore you usually do not need any calibration. For matching the indication to a receiving instrument or in case of regular calibration, adjust the output as explained in the following.

■ HOW TO CALIBRATE THE OUTPUT INDICATION

Use a signal source and measuring instruments of sufficient accuracy level. Turn the power supply on and warm up for more than 10 minutes.

1) ZERO: Apply 0% input and adjust output indication to 0%.
2) SPAN: Apply 100% input and adjust output indication to 100%.
3) Check ZERO adjustment again with 0% input.
4) When ZERO value is changed, repeat the above procedure 1) – 3).

MAINTENANCE

Regular checking procedure is explained below:

■ CHECKING

Warm up the unit for at least 10 minutes. Apply 0%, 25%, 50%, 75% and 100% input signal. Check that the output indication for the respective input signal remains within accuracy described in the data sheet. When the output is out of tolerance, recalibrate the unit according to the "CALIBRATION PROCEDURE" explained earlier.

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