

DC ALARM	MODEL 10AS
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BEFORE USE

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

■ PACKAGE INCLUDES:

- Signal conditioner(1)
- Mounting screw (M3.5 × 10).....(2)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

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

POINTS OF CAUTION

■ POWER INPUT RATING & OPERATIONAL RANGE

- Locate the power input rating marked on the product and confirm its operational range as indicated below:
24V DC rating: 24V ±10%, approx. 80mA with dual alarm

■ GENERAL PRECAUTIONS

- Before you remove the unit or mount it, turn off the power supply and input signal for safety.

■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the unit inside proper housing with sufficient ventilation.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -5 to +55°C (23 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

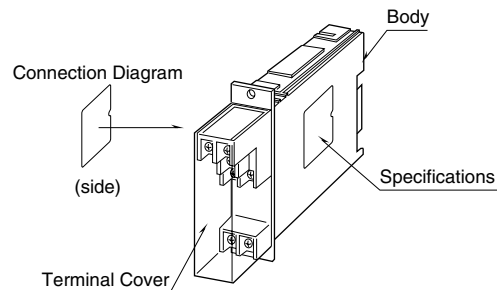
■ WIRING

- Do not install cables 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.
- Be sure to put the terminal cover on while the power is supplied.

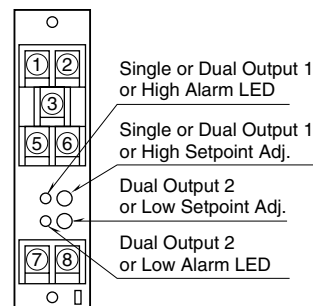
■ AND

- 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.

COMPONENT IDENTIFICATION



■ FRONT PANEL CONFIGURATIONS



• Single Alarm Trip

Simulate an input for the desired setpoint, then turn the top mounted screw driver adjustment slowly clockwise until the output relay trips.

• Dual Alarm Trip

Set the Dual Output 1 setpoint in the same manner as configuring the single alarm trip using the upper adjustment. Then, repeat the procedure to set the Dual Output 2 setpoint using the lower adjustment.

• Hi/Lo Alarm Trip

Lo Setpoint: Simulate an input for the desired setpoint, then turn the screw driver adjustment slowly counterclockwise until the output relay trips.

Hi Setpoint: Simulate an input for the desired setpoint, then turn the screw driver adjustment slowly clockwise until the output relay trips.

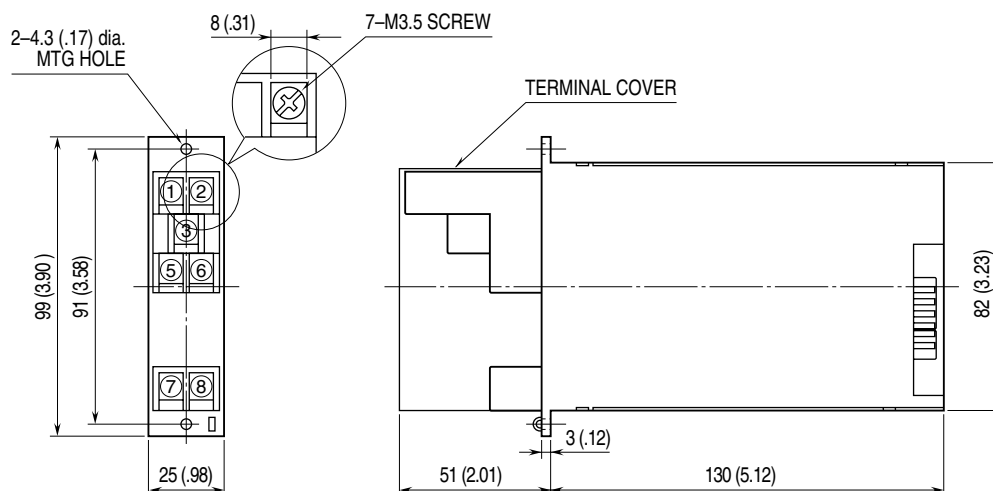
INSTALLATION

Use Standard Rack (model: 10BXx).

TERMINAL CONNECTIONS

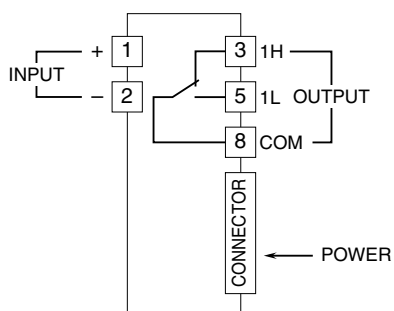
Connect the unit as in the diagram below or refer to the connection diagram on the side of the unit.

EXTERNAL DIMENSIONS unit: mm (inch)

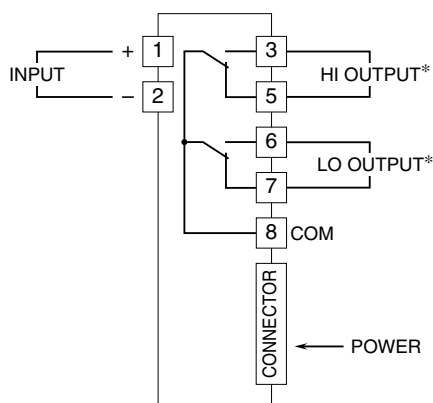


CONNECTION DIAGRAM

SINGLE ALARM



DUAL ALARM



Relay actions are determined by output codes.

*With code 3, 4 (dual alarm), Output 1 is assigned to Hi, while Output 2 is assigned to Lo terminals.

The diagram illustrates relay actions for the output code 5 or 8.

WIRING INSTRUCTIONS

SCREW TERMINAL

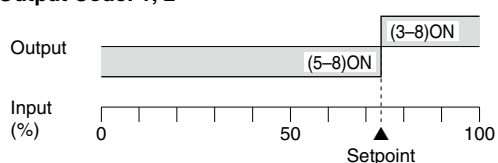
Torque: 0.8 N·m

CHECKING

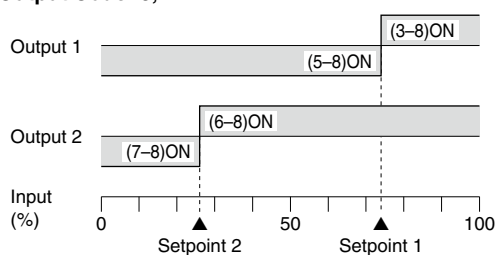
- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Power input voltage: Check voltage supplied to the rack (model: 10BXx). For the DC power source, be sure that the ripple level is within 10% p-p.
- 3) Input: Check that the input signal is within 0 – 100% of the full-scale.
- 4) Alarm operations: Check the alarm operations referring to the figure below.
- 5) Output load: Check that the output load is 380V AC/120VA or 125V DC/30W at the maximum. For maximum relay life with inductive load, external protection is recommended.

Alarm Trip Operation Terminal No. in parentheses

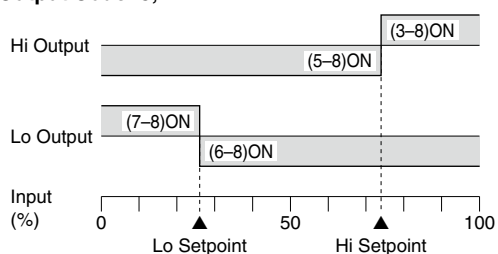
• Output Code: 1, 2



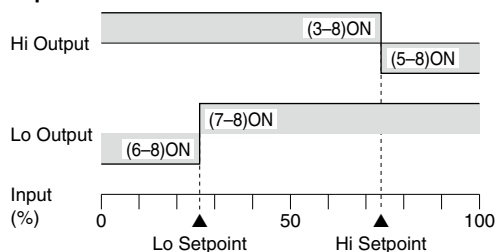
• Output Code: 3, 4



• Output Code: 5, 7



• Output Code: 8



Trip Operation in Power Failure

- Output code 1: Terminals 3 – 8 turn ON
- Output code 2: Terminals 5 – 8 turn ON
- Output code 3: Terminals 3 – 8, 6 – 8 turn ON
- Output code 4: Terminals 5 – 8, 7 – 8 turn ON
- Output code 5, 8: Terminals 3 – 8, 7 – 8 turn OFF
- Output code 7: Terminals 3 – 8, 7 – 8 turn ON

MAINTENANCE

Regular calibration procedure is explained below:

■ CALIBRATION

Warm up the unit for at least 10 minutes.

• Hi Setpoint

Increase the input signal from a value lower than the setpoint and check that the trip point remains within the accuracy described in the data sheet.

• Lo Setpoint

Decrease the input signal from a value higher than the setpoint and check that the trip point remains within the accuracy described in the data sheet.

When the trip points are shifted, please contact our sales office or representatives.

LIGHTNING SURGE PROTECTION

We offer a series of lightning surge protector for protection against induced lightning surges. Please contact us to choose appropriate models.