

OMRON

MODEL H5CX-BWSD

Digital Timer

English INSTRUCTION MANUAL

Thank you for purchasing this OMRON product. Please read this instruction MANUAL, and thoroughly familiarize yourself with the functions and characteristics of the product before use. Please retain this MANUAL for future reference.

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1617254-0B

SAFETY PRECAUTIONS

Definition of Precautionary Information

CAUTION Indicates information that, if not heeded, could result in relatively serious or minor injury, damage to the product, or faulty operation.

Precautionary Information

CAUTION

- Tighten the terminal screws securely. The recommended tightening torque is 0.5 N·m. Loose screws may result in fire or malfunction.
- Do not use the product where flammable or combustion gasses are present.
- Never disassemble, repair, or modify the product. This may cause electric shock, fire or malfunction.
- Do not allow metal fragments or lead wire scraps to fall into this product. This may cause electric shock, fire or malfunction.
- Use the rated power for the timer. When the power for input device and that for the timer are both not installed, the internal elements may be damaged due to a sneak current from the AC power.

PRECAUTIONS IN USING THE PRODUCT

When the product is used under the circumstances or environments below, ensure adherence to limitations of the ratings and functions. Also, take countermeasures for safety precautions.

- Use under circumstances or environment which are not described in the instruction manual.
- Use for tractor power control, railway, aircraft, vehicle, incinerator, medical equipment, entertainment equipment, safety device, etc.
- Use for applications where death or serious property damage is possible and extensive safety precautions are required.

NOTICE

Please comply strictly with the following instructions which are intended to ensure safe operation of the controller.

1. Environmental Considerations

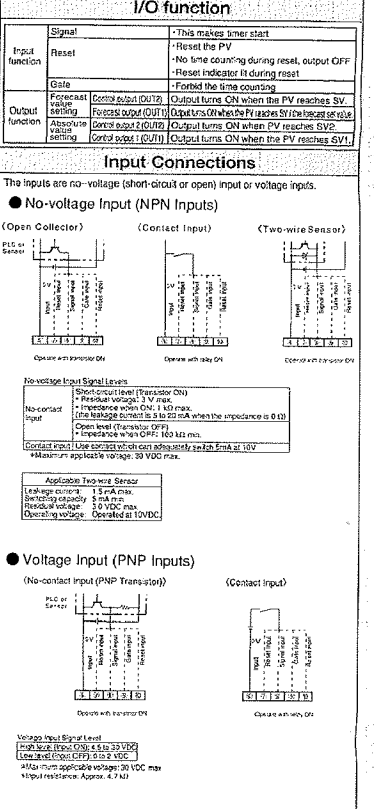
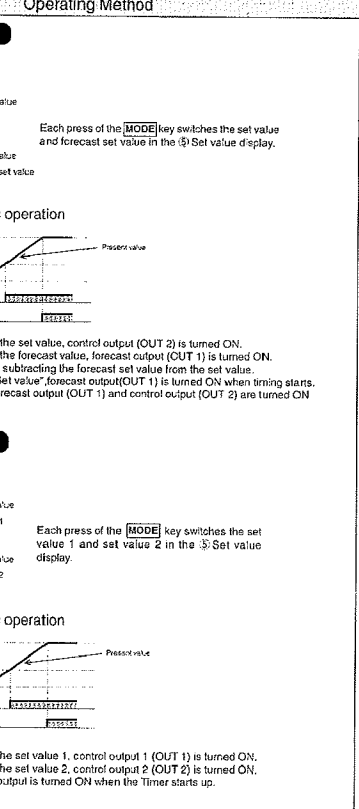
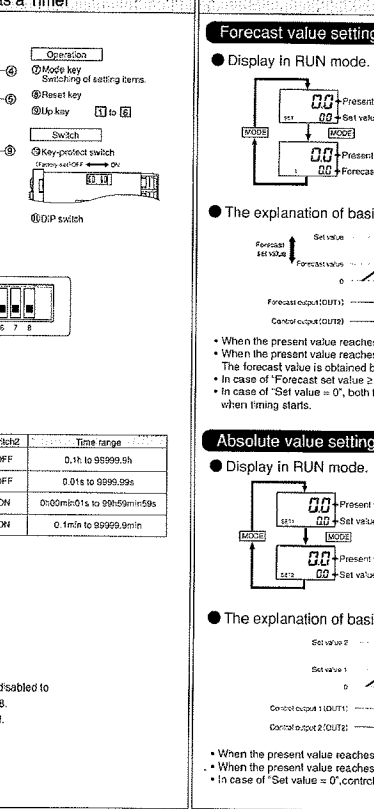
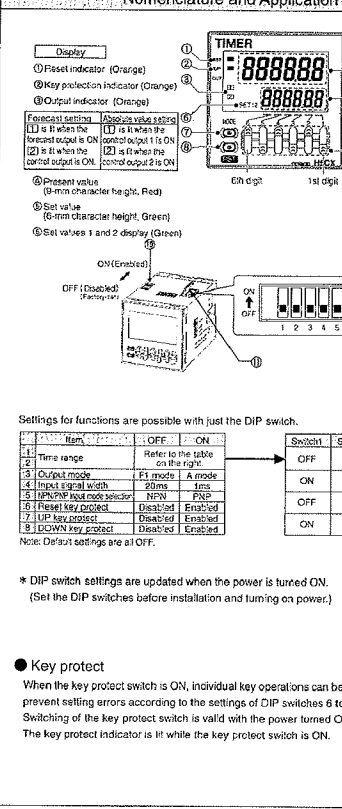
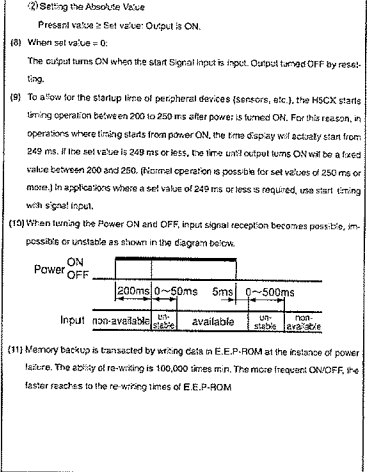
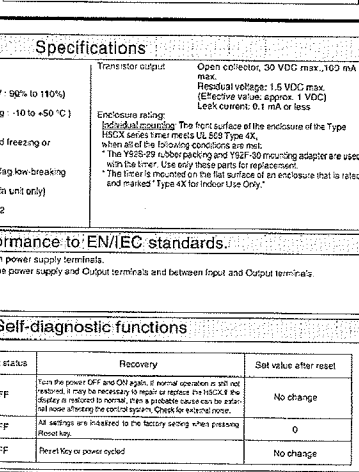
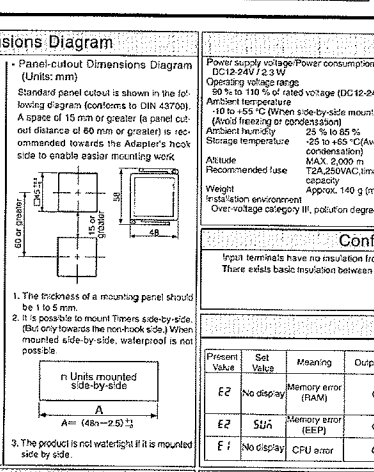
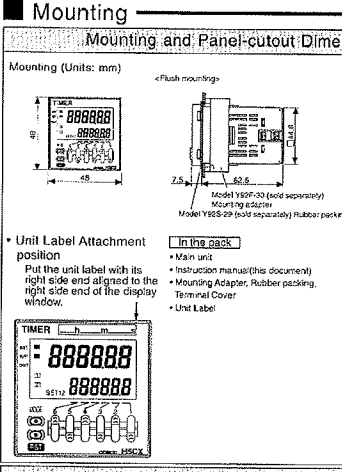
- Do not use in locations affected by excessive vibration or shock, or in locations subject to exposure to water or oil.
- Do not use this equipment in dusty environments or expose it to corrosive gases or direct sunlight.
- Wire signal lines and power lines separately to reduce the influence of noise.
- Do not install the H5CX close to sources of excessive static electricity (e.g., forming compounds, powders, or fluid materials being transported by gravity).
- To prevent damage to the exterior of the timer, it must not be exposed to organic solvents (e.g., Paint thinner or benzene), strong alkalies, or strong acids.

2. Usage Considerations

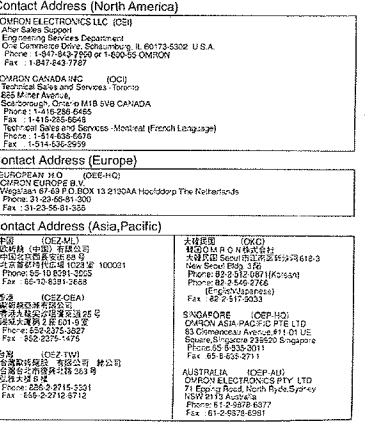
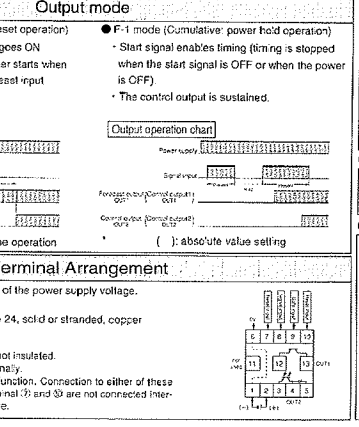
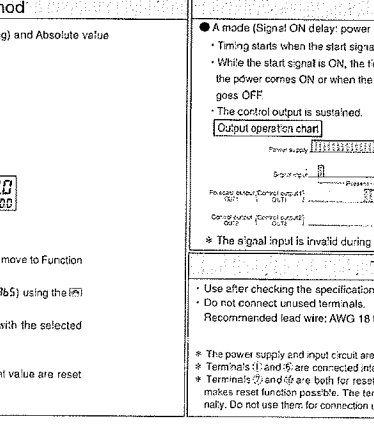
- Slow the speed of temperature. If the H5CX has been stored at a temperature of about -10 °C, allow the H5CX to stand at room temperature for at least 3 hours before use.
- Locations subject to temperatures or humidity outside the range specified in the specifications.
- Application of voltages other than the rated voltage may seriously damage the internal elements.
- The H5CX's panel surface is water resistant (conforming to NEMA4 and IP66). In order to prevent the internal circuit from water penetration through the space between the timer and operating panel, attach a waterproof packing in the space and be sure to secure it by tightening screws of the Y52F-30 flush-mounting adapter.

NOTICE

- Be sure to wire the timer with the correct polarity.
- Apply the power through a relay or switch so that the voltage reaches the rated supply voltage immediately. If the voltage increase gradually, the recycle power function does not properly or output may fluctuate.
- When power is supplied, an inrush current (approx. 6 A) will flow for a short time. If the power supply capacity is too small, the H5CX may not operate. Make sure that a power supply of a sufficiently large capacity is used.
- Always maintain the power supply voltage within specifications.
- When mounting on a panel, tighten the two screws alternately and evenly. If the screws are not tightened evenly, water may penetrate inside of the panel.
- Do not install the H5CX in the following places:
 - Locations subject to condensation as a result of high humidity.
 - Locations subject to severe changes in temperature.
- Output will turn ON if the set value is changed as follows during operation:
 - Setting the Forecast Value:
Present value \geq Set value; Output 2 is ON
Output 1 is ON
 - Setting the Absolute Value:
Present value \geq Set value; Output is ON.
- When set value = 0:
 - The output turns ON when the start signal input is input. Output turned OFF by reset.
 - To allow for the start time of peripheral devices (sensors, etc.), the H5CX starts timing operation between 200 to 250 ms after power is formed ON. For this reason, in operations where timing starts from power ON, the time display will actually start from 249 ms. If the set value is 249 ms or less, the time until output turns ON will be a fixed value between 200 and 250. (Normal operation is possible for set values of 250 ms or more.) In applications where a set value of 249 ms or less is required, use start timing with signal input.
 - (10) When turning the Power ON and OFF, input signal reception becomes possible, impossible or unstable as shown in the diagram below.



- Turn on the power by pressing [RST] and [ON] keys simultaneously to move to Function setting mode.
- Select the forecast value setting (F5) or absolute value setting (R5) using the [F1] key.
- By turning OFF the power and then ON again, the timer starts with the selected setting method.
- Output is turned OFF in the Function setting mode.
- When the setting method is switched, the set value and the present value are reset (0) and the output is turned OFF.



形 H5CX-BWSD デジタルタイマー

取扱説明書

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安全上のご注意

- 警告表示の意味
注意
警告表示
端子には規定トルク (0.5 N・m程度) で締めてください。ネジがゆるむと、発火および過熱の恐れがあります。

ご使用に際してのお願い

- 次に示す条件や環境で使用する場合は、定格、性能に對して余裕を持った使い方やフェールセーフなどの安全対策への配慮いただくことが、当装置の信頼性を確保するために必要となります。

お願い

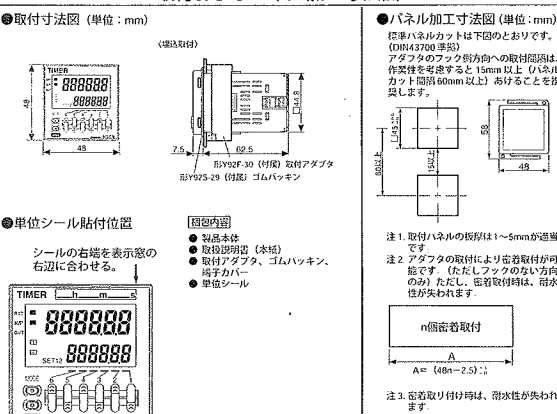
- 以下に示す項目は、安全を確保するために必ず守ってください。
1. 環境上のお問い合わせ
2. 使用上のお願い

正しい使い方

- (1) 端子の極性は、誤配線のないように入力線に注意してください。
(2) 電源電圧はスイッチ、リレー等の接続を介して一気に印加してください。

取付方法

取付およびパネル加工寸法図



仕様

Table with specifications: 電源電圧/消費電力, 動作電圧, 動作電流, 動作時間, etc.

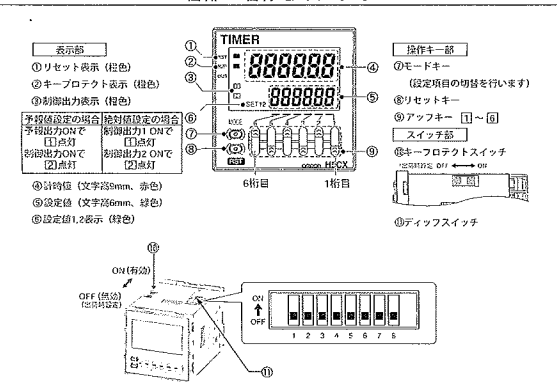
EN/IEC 規格対応について

電源-入力端子線は非絶縁です。電源-出力端子線は基礎絶縁です。

自己診断機能

自己診断機能表: 項目, 設定値, 異常表示, 出力状態, 復帰方法とその他, 復帰時の設定

各部の名称とはたらき



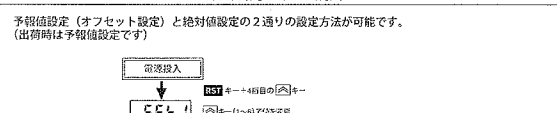
操作方法

予報値設定の場合
●運転モードでの表示
●基本動作の説明
●絶対値設定の場合
●運転モードでの表示
●基本動作の説明

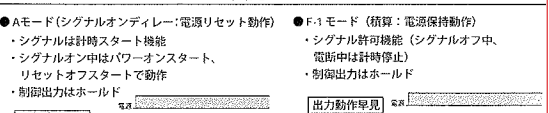
入出力機能

シグナル, リセット, ゲート, 出力機能
●無電圧入力 (NPN 入力)
●絶圧入力 (PNP 入力)

設定方法の選択



出力モード



- ① RSTキーと□4 (4桁目の□)キーを同時に押し下しながら電源を投入することで、機能設定モードに移行します。
② □4キーで予報値設定 (dPSt) と絶対値設定 (dAS) を選択します。

- Aモード (シグナルオンディレー:電源リセット動作)
●F1モード (積算:電源保持動作)
端子配置

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