

デジタルタイマ

H5CX-AD-N



商品概要

Digital Timer, Standard Type, 1 tier, Contact output (Time-limit contact: SPDT), 24 VAC/12 to 24 VDC, Terminal block models

販売状況 2025/11/10 00:00 情報更新

販売状況	受注終了
受注終了日	2025年9月

推奨代替品の最新情報につきましては、当社Webサイト(www.fa.omron.co.jp)の「生産終了品/推奨代替品」をご覧ください。 在庫状況/標準価格の最新情報につきましては、当社Webサイト(www.fa.omron.co.jp)の「在庫状況/標準価格 照会」をご覧ください。

情報更新: 2024/12/23

詳細情報

Ratings/Performance

24 VAC (50/60 Hz) Rated supply voltage 12 to 24 VDC (Ripple 20% max.) Operating voltage range 85 to 110% of rated supply voltage (90% to 110% at 12 to 24 VDC) Power consumption Approx. 5.1 VA/Approx. 2.4 W Time ranges (Number of ranges) 0.001 to 9.999 s Time ranges 0.01 to 99.99 s 0.1 to 999.9 s 1 to 9999 s 0.1 to 999.9 min 1 to 9999 min 0.1 to 999.9 h 1 to 9999 h 1 s to 99 min 59 s 1 min to 99 h 59 min Input method No-voltage (NPN)/Voltage (PNP) input (selectable) Solid state input Short-circuit (ON) impedance: $1\,\mathrm{k}\Omega$ max. (Leakage No-voltage input current (0 Ω): Approx. 12 mA) Short-circuit (ON) residual voltage: 3 V max. Open circuit impedance: 100 kΩ min. (The DC voltage must be 30 VDC max.) Contact input Use contact which can adequately switch 5 mA at Applicable two-wire sensor Leakage current: 1.5 mA max. Switching capacities: 5 mA min. Residual voltage: 3.0 VDC max. Operating voltage: 10 VDC Voltage input High level: 4.5 to 30 VDC Low level: 0 to 2 VDC (Input resistance 4.7 $k\Omega$) A: Signal ON delay (I) Output modes A-1:Signal ON delay (II) A-2: Power ON delay (I) A-3: Power ON delay (II) b: Repeat cycle (I) b-1: Repeat cycle (II) d: Signal OFF delay E: Interval F: Cumulative Z: ON/OFF-duty adjustable flicker S: Stopwatch toff: Flicker OFF start (I) ton: Flicker ON start (I) toff-1: Flicker OFF start (II) ton-1: Flicker ON start (II) Control output (Contact output) Time-limit SPDT Resistive load: 5 A at 250 VAC/30 VDC ($\cos \phi = 1$) Minimum applicable load: 10 mA at 5 VDC (failure level: P Reference value)

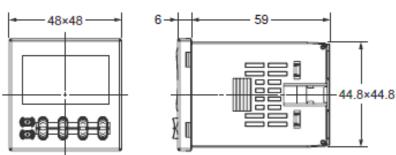
Reset system	Power reset (depending on output mode)/Automatic reset (depending on output mode)/External reset/Manual reset	
Power reset	Minimum power-opening time: 0.5 s (except for A-3, b1, F, ton-1 and toff-1 mode)	
Timer mode	Elapsed time (UP) and remaining time (DOWN) (selectable)	
Display method	7-segment negative transmissive LCD 4 digit	
Character height	Present value: 12 mm (Red, green or orange programmable) Set value: 6 mm (green)	
Key protect method	Key protect Switch	
Memory backup method	EEP-ROM (number of writes: 100,000 min., that can store data for 10 years min.)	
Ambient temperature (Operating)	-10 to 55 °C (with no freezing or condensation) When mount timer side by side: -10 to 50 °C (with no freezing or condensation)	
Ambient temperature (Storage)	-25 to 70 °C (with no freezing or condensation)	
Ambient humidity (Operating)	25 to 85 %	
Accuracy of operating time	Power-ON start: $\pm 0.01\% \pm 0.05$ s max. (The values are based on the set value.) Signal start: $\pm 0.005\% \pm 0.03$ s max. (The values are based on the set value.)	
Setting error	Power-ON start: $\pm 0.01\% \pm 0.05$ s max. (The values are based on the set value.) Signal start: $\pm 0.005\% \pm 0.03$ s max. (The values are based on the set value.)	
Influence of voltage	Power-ON start: $\pm 0.01\% \pm 0.05$ s max. (The values are based on the set value.) Signal start: $\pm 0.005\% \pm 0.03$ s max. (The values are based on the set value.)	
Influence of temperature	Power-ON start: $\pm 0.01\% \pm 0.05$ s max. (The values are based on the set value.) Signal start: $\pm 0.005\% \pm 0.03$ s max. (The values are based on the set value.)	
Insulation resistance	Between current carrying terminals and exposed non-current carrying metal parts: 100 M Ω min. (at 500 VDC) Between non-continuous contacts: 100 M Ω min. (at 500 VDC)	
Dielectric strength	Between current carrying metal parts and non- current carrying metal parts: 2000 VAC 50/60 Hz 1 min Between control output, and power supply/input circuit: 2000 VAC 50/60 Hz 1 min Between non-continuous contacts: 1000 VAC 50/60 Hz 1 min	
Impulse withstand voltage	Between power terminals: 1.0 kV Between current carrying terminals and exposed non-current carrying metal parts: 1.5 kV	
Noise immunity	Between power terminals: ±1.5 kV Between input terminals: ±600 kV square-wave noise by noise simulator, pulse width: 100 ns/1 μs, 1-ns rise	

Static immunity	Mulfunction: 8 kV, Destruction: 15 kV
Vibration resistance	Destruction: 10 to 55 Hz, 0.75 mm single amplitude each in 3 directions for 2 h Malfunction: 10 to 55 Hz 0.35 mm single amplitude each in 3 directions for 10 min
Shock resistance	Destruction: 300 m/s ² , 3 times each in 3 axes each directions Malfunction: 100 m/s ² , 3 times each in 6 directions
Life expectancy	Electrical: 100,000 operations min. (5 A at 250 VAC resistive load at 1800 operations/h, 23 °C) Mechanical: 10 million operations min. (under no load at 1,800 operations/h, 23 °C)
Degree of protection	Only panel surface: IEC IP66, UL508 Type 4X (indoors) (when using the Y92S-29 Waterproof Packing and Y92F-30 Flush Mounting Adapter)
Mounting method	Flush mounting
External connection method	Screw terminal
Case color	Black (Munsell N1.5)
Attachment	Flush mounting adapter, waterproof packing, label for DIP switch settings, terminal covers
Accessory (sold separately)	Soft Cover: Y92A-48F1 Hard Cover: Y92A-48 Flush mounting adapter: Y92F-30/Y92F-45/Y92F-38 Waterproof packing: Y92S-29 Replacement Front Panel: Y92P-CXT4S/Y92P- CXT4G/Y92P-CXT4B
Weight	Main Unit: Approx. 115 g

Dimensions 情報更新: 2024/12/23

H5CX-AD-N/-ASD-N (Flush Mounting Models)



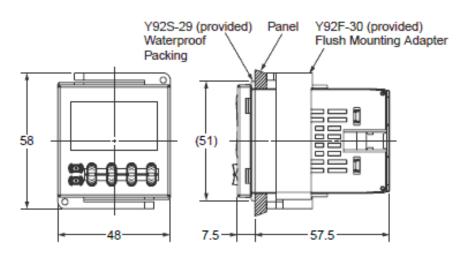


Note: M3.5 terminal screw (effective length: 6 mm)

Dimensions with Flush Mounting Adapter

H5CX-AD-N/-ASD-N (Provided with Adapter and Waterproof Packing)

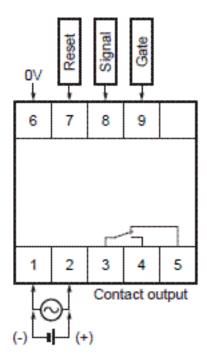




情報更新: 2024/12/23

Terminal arrangement

H5CX-A-N/-AD-N



Terminals 1 and 6 of the H5CX-AD-N are connected internally.

Input connections

No-voltage Inputs (NPN Inputs)

Open Collector Voltage Output Contact Input DC Two-wire Sensor PLC or input input Reset input Signal input 0 V for inputs 0 V for inputs Gate H5CX-A□ H5CX-A H5CX-A□ 8 H5CX-A□ H5CX-A11 H5CX-A11E H5CX-A11 6 5

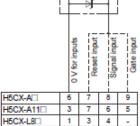
H5CX-L8□ 1 Note: Operate with transistor ON

Note: Operate with transistor ON

H5CX-L8□

Note: Operate with relay ON

H5CX-L8□



情報更新: 2024/12/23

Note: Operate with transistor ON

No-voltage Input Signal Levels

No-contact input (The leakage current is approx. 12 mA when the impedance is 0Ω .)
Open level Transistor OFF • Impedance when OFF: 100 kΩ min.
Contact input Use contacts which can adequately switch 5 mA at 10 V

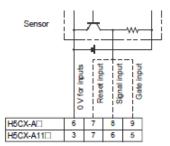
Note: The DC voltage must be 30 VDC max.

Applicable Two-wire Sensor

- · Leakage current: 1.5 mA max.
- Switching capacity: 5 mA min.
- Residual voltage: 3.0 VDC max.
- Operating voltage: 10 VDC

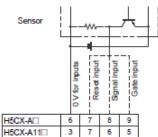
Voltage Inputs (PNP Inputs)

No-contact Input (NPN Transistor)



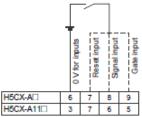
Note: Operate with transistor OFF

No-contact Input (PNP Transistor)



Note: Operate with transistor ON

Contact Input



Note: Operate with relay ON

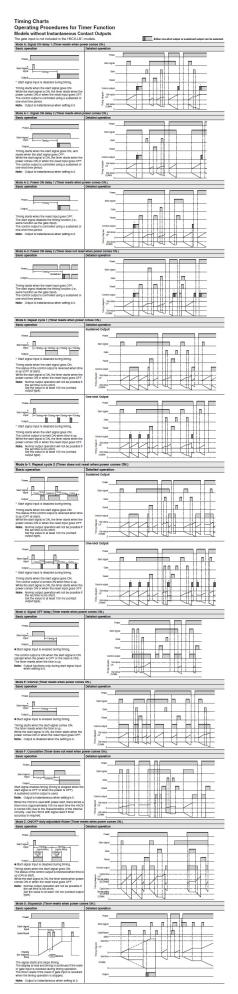
Voltage Input Signal Levels

High level (Input ON): 4.5 to 30 VDC Low level (Input OFF): 0 to 2 VDC

The DC voltage must be 30 VDC max. Input resistance: Approx. 4.7 $k\Omega$

Operating chart

情報更新: 2024/12/23

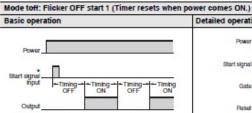


Timing Charts

Operating Procedures for Twin Timer Function

Models without Instantaneous Contact Outputs

The gate input is not included in the H5CX-L8□ models.

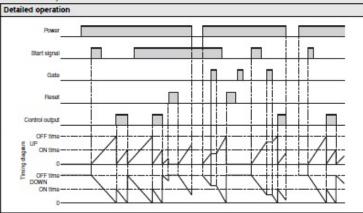


Start signal input is disabled during timing.

Timing starts when the start signal goes ON.
The status of the control output is reversed when time is

up (OFF at start).
While the start signal is ON, the timer starts when the power comes ON or when the reset input goes OFF.

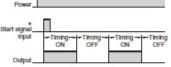
Note: Normal output operation will not be possible if the set time is too short. Set the value to at least 100 ms (contact output



Mode ton: Flicker OFF start 1 (Timer resets when power comes ON.)



Basic operation



* Start signal input is disabled during timing.

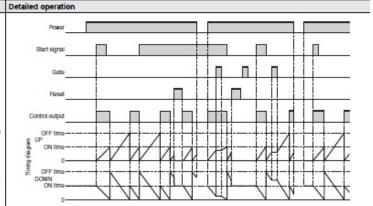
Timing starts when the start signal goes ON. The status of the control output is reversed when time is

up (ON at start).

While the start signal is ON, the timer starts when the power comes ON or when the reset input goes OFF.

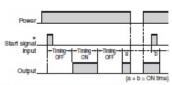
Note: Normal output operation will not be possible if

the set time is too short. Set the value to at least 100 ms (contact output



Mode toff-1: Flicker OFF start 2 (Timer does not reset when power comes ON.)

Basic operation



Start signal input is disabled during timing.

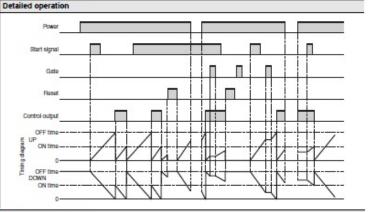
Timing starts when the start signal goes ON. The status of the control output is reversed when time is up (OFF at start).

While the start signal is ON, the timer starts when the

power comes ON or when the reset input goes OFF.

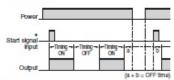
Note: Normal output operation will not be possible if the set time is too short.

Set the value to at least 100 ms (contact output type).



Mode ton-1: Flicker ON start 2 (Timer does not reset when power comes ON.)

Basic operation

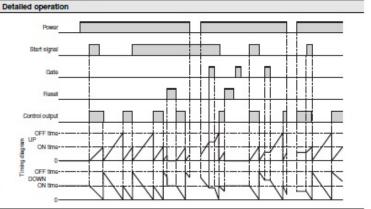


Start signal input is disabled during timing.

Timing starts when the start signal goes ON. The status of the control output is reversed when time is up (ON at start).

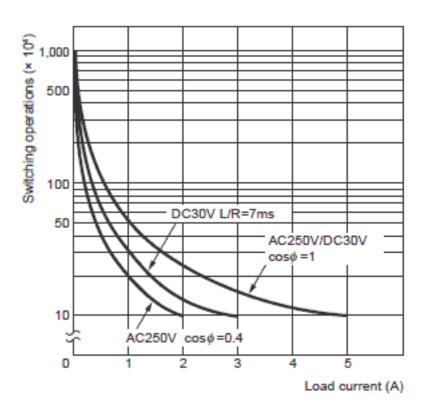
While the start signal is ON, the timer starts when the power comes ON or when the reset input goes OFF.

Note: Normal output operation will not be possible if the set time is too short. Set the value to at least 100 ms (contact output type).



Electrical life ff報更新: 2024/12/23

Life-test Curve (Reference Values)



A maximum current of 0.15 A can be switched at 125 VDC (cos\phi =1) and a maximum current of 0.1 A can be switched if L/R is 7 ms. In both cases, a life of 100,000 operations can be expected.

RoHS/REACH対応状況

情報更新: 2025/11/06

H5CX-AD-NのRoHS対応状況については、営業部門もしくは販売店にお問い合わせください。

注意事項 • 凡例

"対応済み"で記載される商品であっても、流通在庫等で未対応品が混在する可能性があります。 非含有品が必要な際は、弊社営業部門もしくは販売店へお問い合わせください。

※1 対応状況

・ 📵 対応済み :EU RoHS指令(10物質)の非含有に対応した製品が提供可能な商品です。

対応予定 : EU RoHS指令 (10物質) の非含有に対応した製品に切り替える予定のある商品です。
 対応予定なし : EU RoHS指令 (10物質) の非含有に非対応の商品で、対応品を出す予定はありません。
 調査・確認中 : EU RoHS指令 (10物質) の非含有の対応状況を調査中または確認中の商品です。

・非該当品 :ライセンス料など無形物で、有害物質有無と関係のない商品です。

仕入先様の事情により、非含有部品としていたものが、含有品と判明した場合などやむを得ず変更することがあります。

* EU RoHS指令(10物質):

鉛(Pb) 1000ppm以下、水銀(Hg) 1000ppm以下、カドミウム(Cd) 100ppm以下、六価クロム(Cr(VI)) 1000ppm以下、ポリ臭化ビフェニル類(PBB) 1000ppm以下、ポリ臭化ジフェニルエーテル類(PBDE) 1000ppm以下、フタル酸ビス(2-エチルヘキシル) (DEHP)(別名:DOP) 1000ppm以下、フタル酸ブチルベンジル (BBP) 1000ppm以下、フタル酸ジブチル (DBP) 1000ppm以下、フタル酸ジブチル (DBP) 1000ppm以下、フタル酸ジブチル (DBP) 1000ppm以下、フタル酸ジブチル (DBP) 1000ppm以下、フタル酸ジブチル (DBP) 1000ppm以下、フタル酸ンプチル (DBP) 1000ppm以下、カドミウム(Cd) 100ppm以下、六価クロム(Cr(VI)) 1000ppm以下、プタル酸ブチルベンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、カルマンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、フタル酸ンプチルベンジル (BBP) 1000ppm以下、フタル酸ンプチル (DBP) 1000ppm以下、フタル酸シスタル酸シスタル酸シスタル酸シスタル酸シスタル (DBP) 1000ppm以下、フタル酸シスタル (DBP) 1000ppm以下、DBP (DBP) 1000ppm以下、D

※2 対応予定月

部品在庫の切り替え状況などにより、予定月が前後することがあります。

※3 非含有証明書ダウンロード

下記の非含有証明書をダウンロードすることができます。

- ・EU RoHS指令(10物質)の非含有証明書
- ・49物質の非含有証明書(当社基準)
- ※本証明書は発行日時点で非含有を証明するもので、過去に遡って非含有を証明するものではありません。

また、RoHS指令のフタル酸エステル類 4 物質の対応では、対応完了までの期間は出荷製品に未対応品が混在することから備考欄に対応日を記載しておりました。

既に当社にて対応品への在庫切替を完了していることから、特段のことがない限り、2022年1月12日より割愛しております。

規格認証/適合状況

UL認証	CSA認証	CEマーキング適合	CCC認証
Yes	Yes	Yes	Yes

LR型式承認	DNV型式承認	BV型式承認	KR型式承認	NK型式承認	ABS型式承認
(イギリス	(ノルウェー	(フランス	(韓国	(日本	(アメリカ
船舶規格)	船舶規格)	船舶規格)	船舶規格)	船舶規格)	船舶規格)
No	No	No	No	No	No

この製品の規格認証/適合状況ページへ > その他の認証はこちらのページからご検索ください >