Panasonic
ideas for life

COMPACT SIZE HIGH PRECISION TIMERS VARIOUS OUTPUT & OPERATION MODE TYPES

S1DX

Features

RoHS compliance

- **Large dial for improved visibility and operability**
- **Four operation modes (Power ON-delay, Power flicker, Power one-shot, Power one-cycle)**
- **LED display for easy operation check.**
- **Mounting frame available for easy panel installation.**

Product types

■ Plug-in terminal

1) Power ON-delay AC operating type

	Time range	24V AC	100 to 120V AC	200 to 220V AC	220 to 240V AC
		Part No.	Part No.	Part No.	Part No.
Time-out 2 Form C type	0.05 to 0.5 s	S1DX-A2C0.5S-AC24V	S1DX-A2C0.5S-AC120V	S1DX-A2C0.5S-AC220V	S1DX-A2C0.5S-AC240V
	0.1 to 1 s	S1DX-A2C1S-AC24V	S1DX-A2C1S-AC120V	S1DX-A2C1S-AC220V	S1DX-A2C1S-AC240V
	0.1 to 3 s	S1DX-A2C3S-AC24V	S1DX-A2C3S-AC120V	S1DX-A2C3S-AC220V	S1DX-A2C3S-AC240V
	0.2 to 5 s	S1DX-A2C5S-AC24V	S1DX-A2C5S-AC120V	S1DX-A2C5S-AC220V	S1DX-A2C5S-AC240V
	0.5 to 10 s	S1DX-A2C10S-AC24V	S1DX-A2C10S-AC120V	S1DX-A2C10S-AC220V	S1DX-A2C10S-AC240V
	1 to 30 s	S1DX-A2C30S-AC24V	S1DX-A2C30S-AC120V	S1DX-A2C30S-AC220V	S1DX-A2C30S-AC240V
	3 to 60 s	S1DX-A2C60S-AC24V	S1DX-A2C60S-AC120V	S1DX-A2C60S-AC220V	S1DX-A2C60S-AC240V
	0.1 to 3 min	S1DX-A2C3M-AC24V	S1DX-A2C3M-AC120V	S1DX-A2C3M-AC220V	S1DX-A2C3M-AC240V
	0.5 to 10 min	S1DX-A2C10M-AC24V	S1DX-A2C10M-AC120V	S1DX-A2C10M-AC220V	S1DX-A2C10M-AC240V
	1 to 30 min	S1DX-A2C30M-AC24V	S1DX-A2C30M-AC120V	S1DX-A2C30M-AC220V	S1DX-A2C30M-AC240V
	3 to 60 min	S1DX-A2C60M-AC24V	S1DX-A2C60M-AC120V	S1DX-A2C60M-AC220V	S1DX-A2C60M-AC240V
	0.1 to 3 h	S1DX-A2C3H-AC24V	S1DX-A2C3H-AC120V	S1DX-A2C3H-AC220V	S1DX-A2C3H-AC240V
Time-out 4 Form C type	0.05 to 0.5 s	S1DX-A4C0.5S-AC24V	S1DX-A4C0.5S-AC120V	S1DX-A4C0.5S-AC220V	S1DX-A4C0.5S-AC240V
	0.1 to 1 s	S1DX-A4C1S-AC24V	S1DX-A4C1S-AC120V	S1DX-A4C1S-AC220V	S1DX-A4C1S-AC240V
	0.1 to 3 s	S1DX-A4C3S-AC24V	S1DX-A4C3S-AC120V	S1DX-A4C3S-AC220V	S1DX-A4C3S-AC240V
	0.2 to 5 s	S1DX-A4C5S-AC24V	S1DX-A4C5S-AC120V	S1DX-A4C5S-AC220V	S1DX-A4C5S-AC240V
	0.5 to 10 s	S1DX-A4C10S-AC24V	S1DX-A4C10S-AC120V	S1DX-A4C10S-AC220V	S1DX-A4C10S-AC240V
	1 to 30 s	S1DX-A4C30S-AC24V	S1DX-A4C30S-AC120V	S1DX-A4C30S-AC220V	S1DX-A4C30S-AC240V
	3 to 60 s	S1DX-A4C60S-AC24V	S1DX-A4C60S-AC120V	S1DX-A4C60S-AC220V	S1DX-A4C60S-AC240V
	0.1 to 3 min	S1DX-A4C3M-AC24V	S1DX-A4C3M-AC120V	S1DX-A4C3M-AC220V	S1DX-A4C3M-AC240V
	0.5 to 10 min	S1DX-A4C10M-AC24V	S1DX-A4C10M-AC120V	S1DX-A4C10M-AC220V	S1DX-A4C10M-AC240V
	1 to 30 min	S1DX-A4C30M-AC24V	S1DX-A4C30M-AC120V	S1DX-A4C30M-AC220V	S1DX-A4C30M-AC240V
	3 to 60 min	S1DX-A4C60M-AC24V	S1DX-A4C60M-AC120V	S1DX-A4C60M-AC220V	S1DX-A4C60M-AC240V
	0.1 to 3 h	S1DX-A4C3H-AC24V	S1DX-A4C3H-AC120V	S1DX-A4C3H-AC220V	S1DX-A4C3H-AC240V

Notes: 1. Wire springs for HC relay terminal socket (ADX18005) are included.
2. You cannot use socket line holding clip when using the HJ relay terminal socket. Therefore, please procure a S1DX socket leaf holding clip B (ADX18012: dedicated socket leaf holding clip for HJ relay terminal socket).

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Power ON-delay DC operating type

	Time range	12V DC	24V DC	48V DC	100 to 110V DC
		Part No.	Part No.	Part No.	Part No.
Time-out 2 Form C type	0.05 to 0.5 s	S1DX-A2C0.5S-DC12V	S1DX-A2C0.5S-DC24V	S1DX-A2C0.5S-DC48V	S1DX-A2C0.5S-DC110V
	0.1 to 1 s	S1DX-A2C1S-DC12V	S1DX-A2C1S-DC24V	S1DX-A2C1S-DC48V	S1DX-A2C1S-DC110V
	0.1 to 3 s	S1DX-A2C3S-DC12V	S1DX-A2C3S-DC24V	S1DX-A2C3S-DC48V	S1DX-A2C3S-DC110V
	0.2 to 5 s	S1DX-A2C5S-DC12V	S1DX-A2C5S-DC24V	S1DX-A2C5S-DC48V	S1DX-A2C5S-DC110V
	0.5 to 10 s	S1DX-A2C10S-DC12V	S1DX-A2C10S-DC24V	S1DX-A2C10S-DC48V	S1DX-A2C10S-DC110V
	1 to 30 s	S1DX-A2C30S-DC12V	S1DX-A2C30S-DC24V	S1DX-A2C30S-DC48V	S1DX-A2C30S-DC110V
	3 to 60 s	S1DX-A2C60S-DC12V	S1DX-A2C60S-DC24V	S1DX-A2C60S-DC48V	S1DX-A2C60S-DC110V
	0.1 to 3 min	S1DX-A2C3M-DC12V	S1DX-A2C3M-DC24V	S1DX-A2C3M-DC48V	S1DX-A2C3M-DC110V
	0.5 to 10 min	S1DX-A2C10M-DC12V	S1DX-A2C10M-DC24V	S1DX-A2C10M-DC48V	S1DX-A2C10M-DC110V
	1 to 30 min	S1DX-A2C30M-DC12V	S1DX-A2C30M-DC24V	S1DX-A2C30M-DC48V	S1DX-A2C30M-DC110V
	3 to 60 min	S1DX-A2C60M-DC12V	S1DX-A2C60M-DC24V	S1DX-A2C60M-DC48V	S1DX-A2C60M-DC110V
	0.1 to 3 h	S1DX-A2C3H-DC12V	S1DX-A2C3H-DC24V	S1DX-A2C3H-DC48V	S1DX-A2C3H-DC110V
Time-out 4 Form C type	0.05 to 0.5 s	S1DX-A4C0.5S-DC12V	S1DX-A4C0.5S-DC24V	S1DX-A4C0.5S-DC48V	S1DX-A4C0.5S-DC110V
	0.1 to 1 s	S1DX-A4C1S-DC12V	S1DX-A4C1S-DC24V	S1DX-A4C1S-DC48V	S1DX-A4C1S-DC110V
	0.1 to 3 s	S1DX-A4C3S-DC12V	S1DX-A4C3S-DC24V	S1DX-A4C3S-DC48V	S1DX-A4C3S-DC110V
	0.2 to 5 s	S1DX-A4C5S-DC12V	S1DX-A4C5S-DC24V	S1DX-A4C5S-DC48V	S1DX-A4C5S-DC110V
	0.5 to 10 s	S1DX-A4C10S-DC12V	S1DX-A4C10S-DC24V	S1DX-A4C10S-DC48V	S1DX-A4C10S-DC110V
	1 to 30 s	S1DX-A4C30S-DC12V	S1DX-A4C30S-DC24V	S1DX-A4C30S-DC48V	S1DX-A4C30S-DC110V
	3 to 60 s	S1DX-A4C60S-DC12V	S1DX-A4C60S-DC24V	S1DX-A4C60S-DC48V	S1DX-A4C60S-DC110V
	0.1 to 3 min	S1DX-A4C3M-DC12V	S1DX-A4C3M-DC24V	S1DX-A4C3M-DC48V	S1DX-A4C3M-DC110V
	0.5 to 10 min	S1DX-A4C10M-DC12V	S1DX-A4C10M-DC24V	S1DX-A4C10M-DC48V	S1DX-A4C10M-DC110V
	1 to 30 min	S1DX-A4C30M-DC12V	S1DX-A4C30M-DC24V	S1DX-A4C30M-DC48V	S1DX-A4C30M-DC110V
	3 to 60 min	S1DX-A4C60M-DC12V	S1DX-A4C60M-DC24V	S1DX-A4C60M-DC48V	S1DX-A4C60M-DC110V
	0.1 to 3 h	S1DX-A4C3H-DC12V	S1DX-A4C3H-DC24V	S1DX-A4C3H-DC48V	S1DX-A4C3H-DC110V

Notes: 1. Socket line holding clips for HC relay terminal socket (ADX18005) are included.
2. You cannot use socket line holding clip when using the HJ relay terminal socket. Therefore, please procure a S1DX socket leaf holding clip B (ADX18012: dedicated socket leaf holding clip for HJ relay terminal socket).

2) Power flicker (Please change “A” to “F” of the part number with the same specifications as the power on-delay type.)
Example: S1DX-A2C1S-DC12V → S1DX-F2C1S-DC12V

	Time range	100 to 120 V AC	200 to 220 V AC	12 V DC	24 V DC	48 V DC	100 to 110 V DC
		Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Timed-out 2 Form C type	0.1 to 1 s	S1DX-F2C1S-AC120V	S1DX-F2C1S-AC220V	S1DX-F2C1S-DC12V	S1DX-F2C1S-DC24V	S1DX-F2C1S-DC48V	S1DX-F2C1S-DC110V
	0.1 to 3 s	S1DX-F2C3S-AC120V	S1DX-F2C3S-AC220V	S1DX-F2C3S-DC12V	S1DX-F2C3S-DC24V	S1DX-F2C3S-DC48V	S1DX-F2C3S-DC110V
	0.2 to 5 s	S1DX-F2C5S-AC120V	S1DX-F2C5S-AC220V	S1DX-F2C5S-DC12V	S1DX-F2C5S-DC24V	S1DX-F2C5S-DC48V	S1DX-F2C5S-DC110V
	0.5 to 10 s	S1DX-F2C10S-AC120V	S1DX-F2C10S-AC220V	S1DX-F2C10S-DC12V	S1DX-F2C10S-DC24V	S1DX-F2C10S-DC48V	S1DX-F2C10S-DC110V
	1 to 30 s	S1DX-F2C30S-AC120V	S1DX-F2C30S-AC220V	S1DX-F2C30S-DC12V	S1DX-F2C30S-DC24V	S1DX-F2C30S-DC48V	S1DX-F2C30S-DC110V
	3 to 60 s	S1DX-F2C60S-AC120V	S1DX-F2C60S-AC220V	S1DX-F2C60S-DC12V	S1DX-F2C60S-DC24V	S1DX-F2C60S-DC48V	S1DX-F2C60S-DC110V
	0.1 to 3 min	S1DX-F2C3M-AC120V	S1DX-F2C3M-AC220V	S1DX-F2C3M-DC12V	S1DX-F2C3M-DC24V	S1DX-F2C3M-DC48V	S1DX-F2C3M-DC110V
Timed-out 4 Form C type	0.1 to 1 s	S1DX-F4C1S-AC120V	S1DX-F4C1S-AC220V	S1DX-F4C1S-DC12V	S1DX-F4C1S-DC24V	S1DX-F4C1S-DC48V	S1DX-F4C1S-DC110V
	0.1 to 3 s	S1DX-F4C3S-AC120V	S1DX-F4C3S-AC220V	S1DX-F4C3S-DC12V	S1DX-F4C3S-DC24V	S1DX-F4C3S-DC48V	S1DX-F4C3S-DC110V
	0.2 to 5 s	S1DX-F4C5S-AC120V	S1DX-F4C5S-AC220V	S1DX-F4C5S-DC12V	S1DX-F4C5S-DC24V	S1DX-F4C5S-DC48V	S1DX-F4C5S-DC110V
	0.5 to 10 s	S1DX-F4C10S-AC120V	S1DX-F4C10S-AC220V	S1DX-F4C10S-DC12V	S1DX-F4C10S-DC24V	S1DX-F4C10S-DC48V	S1DX-F4C10S-DC110V
	1 to 30 s	S1DX-F4C30S-AC120V	S1DX-F4C30S-AC220V	S1DX-F4C30S-DC12V	S1DX-F4C30S-DC24V	S1DX-F4C30S-DC48V	S1DX-F4C30S-DC110V
	3 to 60 s	S1DX-F4C60S-AC120V	S1DX-F4C60S-AC220V	S1DX-F4C60S-DC12V	S1DX-F4C60S-DC24V	S1DX-F4C60S-DC48V	S1DX-F4C60S-DC110V
	0.1 to 3 min	S1DX-F4C3M-AC120V	S1DX-F4C3M-AC220V	S1DX-F4C3M-DC12V	S1DX-F4C3M-DC24V	S1DX-F4C3M-DC48V	S1DX-F4C3M-DC110V

Notes: 1. Socket line holding clips for HC relay terminal socket (ADX18005) are included.
2. You cannot use socket line holding clip when using the HJ relay terminal socket. Therefore, please procure a S1DX socket leaf holding clip B (ADX18012: dedicated socket leaf holding clip for HJ relay terminal socket).

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3) Power one-shot (Please change “A” to “S” of the part number with the same specifications as the power on-delay type.)
Example: S1DX-A2C1S-DC12V → S1DX-S2C1S-DC12V

	Time range	100 to 120 V AC	200 to 220 V AC	12 V DC	24 V DC	48 V DC	100 to 110 V DC
		Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Timed-out 2 Form C type	0.1 to 1 s	S1DX-S2C1S-AC120V	S1DX-S2C1S-AC220V	S1DX-S2C1S-DC12V	S1DX-S2C1S-DC24V	S1DX-S2C1S-DC48V	S1DX-S2C1S-DC110V
	0.1 to 3 s	S1DX-S2C3S-AC120V	S1DX-S2C3S-AC220V	S1DX-S2C3S-DC12V	S1DX-S2C3S-DC24V	S1DX-S2C3S-DC48V	S1DX-S2C3S-DC110V
	0.2 to 5 s	S1DX-S2C5S-AC120V	S1DX-S2C5S-AC220V	S1DX-S2C5S-DC12V	S1DX-S2C5S-DC24V	S1DX-S2C5S-DC48V	S1DX-S2C5S-DC110V
	0.5 to 10 s	S1DX-S2C10S-AC120V	S1DX-S2C10S-AC220V	S1DX-S2C10S-DC12V	S1DX-S2C10S-DC24V	S1DX-S2C10S-DC48V	S1DX-S2C10S-DC110V
	1 to 30 s	S1DX-S2C30S-AC120V	S1DX-S2C30S-AC220V	S1DX-S2C30S-DC12V	S1DX-S2C30S-DC24V	S1DX-S2C30S-DC48V	S1DX-S2C30S-DC110V
	3 to 60 s	S1DX-S2C60S-AC120V	S1DX-S2C60S-AC220V	S1DX-S2C60S-DC12V	S1DX-S2C60S-DC24V	S1DX-S2C60S-DC48V	S1DX-S2C60S-DC110V
	0.1 to 3 min	S1DX-S2C3M-AC120V	S1DX-S2C3M-AC220V	S1DX-S2C3M-DC12V	S1DX-S2C3M-DC24V	S1DX-S2C3M-DC48V	S1DX-S2C3M-DC110V
Timed-out 4 Form C type	0.1 to 1 s	S1DX-S4C1S-AC120V	S1DX-S4C1S-AC220V	S1DX-S4C1S-DC12V	S1DX-S4C1S-DC24V	S1DX-S4C1S-DC48V	S1DX-S4C1S-DC110V
	0.1 to 3 s	S1DX-S4C3S-AC120V	S1DX-S4C3S-AC220V	S1DX-S4C3S-DC12V	S1DX-S4C3S-DC24V	S1DX-S4C3S-DC48V	S1DX-S4C3S-DC110V
	0.2 to 5 s	S1DX-S4C5S-AC120V	S1DX-S4C5S-AC220V	S1DX-S4C5S-DC12V	S1DX-S4C5S-DC24V	S1DX-S4C5S-DC48V	S1DX-S4C5S-DC110V
	0.5 to 10 s	S1DX-S4C10S-AC120V	S1DX-S4C10S-AC220V	S1DX-S4C10S-DC12V	S1DX-S4C10S-DC24V	S1DX-S4C10S-DC48V	S1DX-S4C10S-DC110V
	1 to 30 s	S1DX-S4C30S-AC120V	S1DX-S4C30S-AC220V	S1DX-S4C30S-DC12V	S1DX-S4C30S-DC24V	S1DX-S4C30S-DC48V	S1DX-S4C30S-DC110V
	3 to 60 s	S1DX-S4C60S-AC120V	S1DX-S4C60S-AC220V	S1DX-S4C60S-DC12V	S1DX-S4C60S-DC24V	S1DX-S4C60S-DC48V	S1DX-S4C60S-DC110V
	0.1 to 3 min	S1DX-S4C3M-AC120V	S1DX-S4C3M-AC220V	S1DX-S4C3M-DC12V	S1DX-S4C3M-DC24V	S1DX-S4C3M-DC48V	S1DX-S4C3M-DC110V

Notes: 1. Socket line holding clips for HC relay terminal socket (ADX18005) are included.
2. You cannot use socket line holding clip when using the HJ relay terminal socket. Therefore, please procure a S1DX socket leaf holding clip B (ADX18012: dedicated socket leaf holding clip for HJ relay terminal socket).

4) Power one-cycle (Please change “A” to “C” of the part number with the same specifications as the power on-delay type.)
Example: S1DX-A2C1S-DC12V → S1DX-C2C1S-DC12V

	Time range	100 to 120 V AC	200 to 220 V AC	12 V DC	24 V DC	48 V DC	100 to 110 V DC
		Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Timed-out 2 Form C type	0.1 to 1 s	S1DX-C2C1S-AC120V	S1DX-C2C1S-AC220V	S1DX-C2C1S-DC12V	S1DX-C2C1S-DC24V	S1DX-C2C1S-DC48V	S1DX-C2C1S-DC110V
	0.1 to 3 s	S1DX-C2C3S-AC120V	S1DX-C2C3S-AC220V	S1DX-C2C3S-DC12V	S1DX-C2C3S-DC24V	S1DX-C2C3S-DC48V	S1DX-C2C3S-DC110V
	0.2 to 5 s	S1DX-C2C5S-AC120V	S1DX-C2C5S-AC220V	S1DX-C2C5S-DC12V	S1DX-C2C5S-DC24V	S1DX-C2C5S-DC48V	S1DX-C2C5S-DC110V
	0.5 to 10 s	S1DX-C2C10S-AC120V	S1DX-C2C10S-AC220V	S1DX-C2C10S-DC12V	S1DX-C2C10S-DC24V	S1DX-C2C10S-DC48V	S1DX-C2C10S-DC110V
	1 to 30 s	S1DX-C2C30S-AC120V	S1DX-C2C30S-AC220V	S1DX-C2C30S-DC12V	S1DX-C2C30S-DC24V	S1DX-C2C30S-DC48V	S1DX-C2C30S-DC110V
	3 to 60 s	S1DX-C2C60S-AC120V	S1DX-C2C60S-AC220V	S1DX-C2C60S-DC12V	S1DX-C2C60S-DC24V	S1DX-C2C60S-DC48V	S1DX-C2C60S-DC110V
	0.1 to 3 min	S1DX-C2C3M-AC120V	S1DX-C2C3M-AC220V	S1DX-C2C3M-DC12V	S1DX-C2C3M-DC24V	S1DX-C2C3M-DC48V	S1DX-C2C3M-DC110V
Timed-out 4 Form C type	0.1 to 1 s	S1DX-C4C1S-AC120V	S1DX-C4C1S-AC220V	S1DX-C4C1S-DC12V	S1DX-C4C1S-DC24V	S1DX-C4C1S-DC48V	S1DX-C4C1S-DC110V
	0.1 to 3 s	S1DX-C4C3S-AC120V	S1DX-C4C3S-AC220V	S1DX-C4C3S-DC12V	S1DX-C4C3S-DC24V	S1DX-C4C3S-DC48V	S1DX-C4C3S-DC110V
	0.2 to 5 s	S1DX-C4C5S-AC120V	S1DX-C4C5S-AC220V	S1DX-C4C5S-DC12V	S1DX-C4C5S-DC24V	S1DX-C4C5S-DC48V	S1DX-C4C5S-DC110V
	0.5 to 10 s	S1DX-C4C10S-AC120V	S1DX-C4C10S-AC220V	S1DX-C4C10S-DC12V	S1DX-C4C10S-DC24V	S1DX-C4C10S-DC48V	S1DX-C4C10S-DC110V
	1 to 30 s	S1DX-C4C30S-AC120V	S1DX-C4C30S-AC220V	S1DX-C4C30S-DC12V	S1DX-C4C30S-DC24V	S1DX-C4C30S-DC48V	S1DX-C4C30S-DC110V
	3 to 60 s	S1DX-C4C60S-AC120V	S1DX-C4C60S-AC220V	S1DX-C4C60S-DC12V	S1DX-C4C60S-DC24V	S1DX-C4C60S-DC48V	S1DX-C4C60S-DC110V
	0.1 to 3 min	S1DX-C4C3M-AC120V	S1DX-C4C3M-AC220V	S1DX-C4C3M-DC12V	S1DX-C4C3M-DC24V	S1DX-C4C3M-DC48V	S1DX-C4C3M-DC110V

Notes: 1. Socket line holding clips for HC relay terminal socket (ADX18005) are included.
2. You cannot use socket line holding clip when using the HJ relay terminal socket. Therefore, please procure a S1DX socket leaf holding clip B (ADX18012: dedicated socket leaf holding clip for HJ relay terminal socket).
Also, power flicker, power one-shot and power one-cycle types can be used with other time ranges (10 minutes to 3 hours). Please inquire.
24 V AC and 240 V AC types can also be ordered.

■ PC board terminal

1) Power ON-delay

	Time range	100 to 120V AC	200 to 220V AC	24V DC
		Part No.	Part No.	Part No.
Time-out 2 Form C type	0.05 to 0.5 s	S1DX-A2C0.5S-AC120VP	S1DX-A2C0.5S-AC220VP	S1DX-A2C0.5S-DC24VP
	0.1 to 1 s	S1DX-A2C1S-AC120VP	S1DX-A2C1S-AC220VP	S1DX-A2C1S-DC24VP
	0.1 to 3 s	S1DX-A2C3S-AC120VP	S1DX-A2C3S-AC220VP	S1DX-A2C3S-DC24VP
	0.2 to 5 s	S1DX-A2C5S-AC120VP	S1DX-A2C5S-AC220VP	S1DX-A2C5S-DC24VP
	0.5 to 10 s	S1DX-A2C10S-AC120VP	S1DX-A2C10S-AC220VP	S1DX-A2C10S-DC24VP
	1 to 30 s	S1DX-A2C30S-AC120VP	S1DX-A2C30S-AC220VP	S1DX-A2C30S-DC24VP
	3 to 60 s	S1DX-A2C60S-AC120VP	S1DX-A2C60S-AC220VP	S1DX-A2C60S-DC24VP
Time-out 4 Form C type	0.05 to 0.5 s	S1DX-A4C0.5S-AC120VP	S1DX-A4C0.5S-AC220VP	S1DX-A4C0.5S-DC24VP
	0.1 to 1 s	S1DX-A4C1S-AC120VP	S1DX-A4C1S-AC220VP	S1DX-A4C1S-DC24VP
	0.1 to 3 s	S1DX-A4C3S-AC120VP	S1DX-A4C3S-AC220VP	S1DX-A4C3S-DC24VP
	0.2 to 5 s	S1DX-A4C5S-AC120VP	S1DX-A4C5S-AC220VP	S1DX-A4C5S-DC24VP
	0.5 to 10 s	S1DX-A4C10S-AC120VP	S1DX-A4C10S-AC220VP	S1DX-A4C10S-DC24VP
	1 to 30 s	S1DX-A4C30S-AC120VP	S1DX-A4C30S-AC220VP	S1DX-A4C30S-DC24VP
	60 s	S1DX-A4C60S-AC120VP	S1DX-A4C60S-AC220VP	S1DX-A4C60S-DC24VP

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Specifications

Type		AC operating type	DC operating type
Rated operating voltage		100 to 120V, 200 to 220V (50/60Hz common)	12V, 24V, 48V, 100 to 110V
Rated power consumption		Max. 3VA	Max. 2W
Rated control capacity		Timed -out 2 Form C: 7A 250V AC Timed -out 4 Form C: 5A 250V AC (resistive load)	
Time accuracy	Operating time fluctuation & Power off time change error	[Except 0.5s & 1s types] Within ±1%* [0.5s type]: Within ±(2%+10ms), [1s type]: Within ±(1%+10ms) (power off time change at the range of 0.1 s to 1 h)	
	Voltage error	[Except 0.5s & 1s types] Within ±1%* [0.5s type]: Within ±(2%+10ms), [1s type]: Within ±(1%+10ms) (at the operating voltage changes between –20 to +10%)	
	Temperature error	Within ±5% (at 20°C 68°F ambient temp. at the range of –10 to +50°C +14 to +122°F)	
	Setting error	Within ±10% (Full-scale value)	
Contact resistance (Initial value)		Max. 100mΩ (at 1A, 6V DC)	
Life	Mechanical (constant)	Min. 10^7	
	Electrical (constant)	Min. 2×10^5 (at rated control capacity)	
Allowable operating voltage range		80 to 110% of rated operating voltage	
Insulation resistance (Initial value)		Min. 100MΩ Between live and dead metal parts/input and output Between contact sets (at 500V DC) Between contacts	
Breakdown voltage (Initial value)		1500Vrms for 1min Between live and dead metal parts/input and output 1500Vrms for 1min Between contact sets 1000Vrms for 1min Between contacts	
Temperature rise		Max. 70°C 158°F	
Power off time		Max. 0.1s	
Vibration resistance	Functional	10 to 55Hz: 1 cycle/min single amplitude of 0.25mm (10min on 3 axes)	
	Destructive	10 to 55Hz: 1 cycle/min single amplitude of 0.375mm (1h on 3 axes)	
Shock resistance	Functional	Min. 98m/s² (4 times on 3 axes)	
	Destructive	Min. 980m/s² (5 times on 3 axes)	
Ambient temperature		–10 to 50°C +14 to 122°F	
Ambient humidity		30 to 85% RH (at 20°C 68°F, non-condensing)	

Note: * Power one-shot type of 1 s type: +(2% + 10 ms)

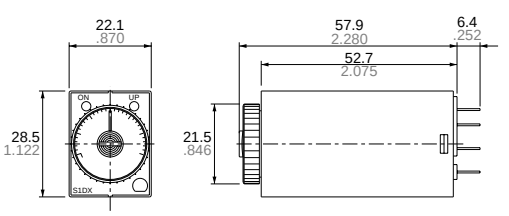
Dimensions (mm inch)

The CAD data of the products with a CAD Data mark can be downloaded from: http://panasonic-electric-works.net/ac

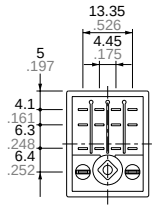
Tolerance: ±0.5 ±.020

Plug-in terminal CAD Data

Timed-out 2 Form C type

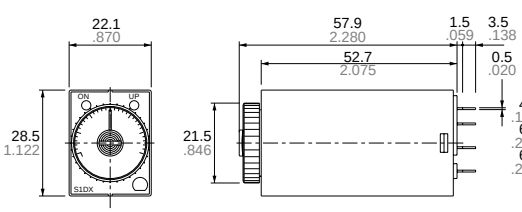


Timed-out 4 Form C type

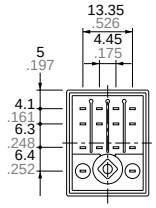


Printed circuit board terminal CAD Data

Timed-out 2 Form C type

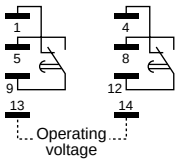


Timed-out 4 Form C type

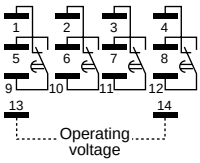


Terminal layouts and Wiring diagram

Timed-out 2 Form C type



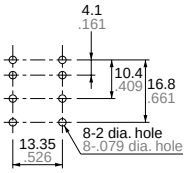
Timed-out 4 Form C type



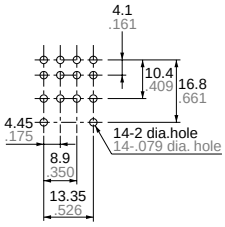
(For the DC operating type, terminal 14 is +, and terminal 13 is –.)

PC board pattern

Timed-out 2 Form C type



Timed-out 4 Form C type



General tolerance: ±0.1 ±.004

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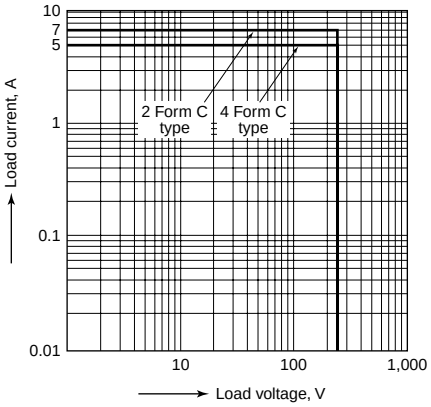
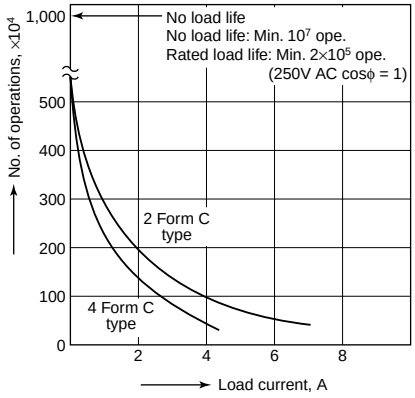
Data

1. Load control capacity and life

• Switching capacity

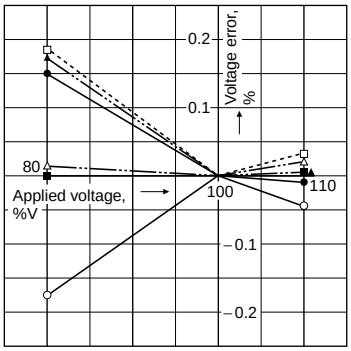


• Life curve

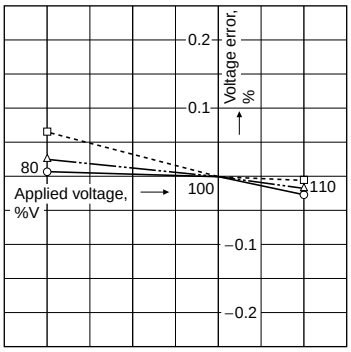


2. Time accuracy

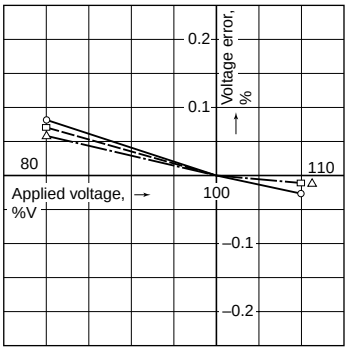
• Voltage error test I (typical)
3 s range, 100V AC operating type 6 pcs.



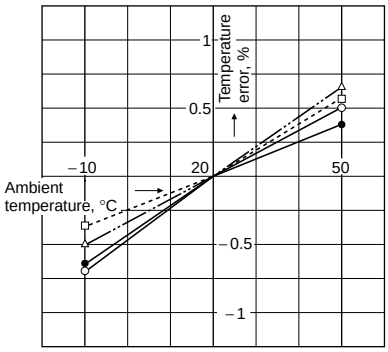
• Voltage error test II (typical)
3 s range, 200V AC operating type 3 pcs.



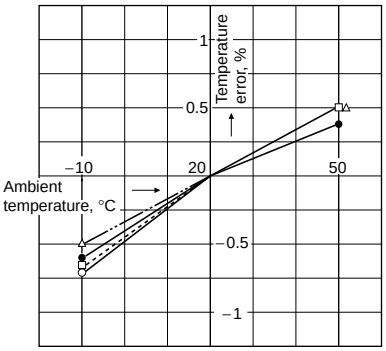
• Voltage error test III (typical)
3 s range, 24V DC operating type 3 pcs.



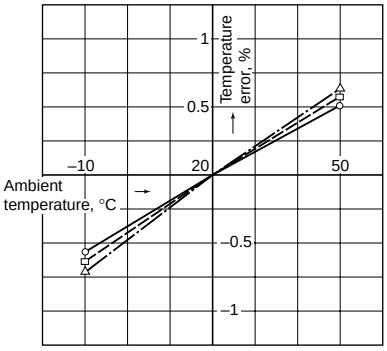
• Temperature error test I (typical)
3 s range, 100V AC operating type 4 pcs.



• Temperature error test II (typical)
3 s range, 200V AC operating type 4 pcs.



• Temperature error test III (typical)
3 s range, 24V DC operating type 3 pcs.



3. Environmental durability

• Surge testing

Model	100 to 120V AC	200 to 220V AC	12V DC	24V DC	48V DC	100 to 110V DC
Surge voltage	4,000V	4,000V	1,000V	1,000V	4,000V	4,000V

Applied voltage: Unipolar full-wave voltage of ±(1.2 × 50) µs
No. of times applied: 5 times, continuously
Locations at which voltage is applied: Between power supply terminals (between 13 and 14)
Results: No differences from withstand surge voltages listed above.

• Noise testing

Item	Noise generation	Results
Power line impulse noise	Noise simulator 1,000 V Rise: 1 ns Pulse width: 1 µs, 50 ns Repetition cycle: 10 ms Pulse polarity: Positive, negative Applied modes: Normal mode and Common mode	Not affected

• Cold and heat testing

Conditions	Results
Left for 1 hour at high temperature of 80°C 176°F and low temperature of –25°C –13°F (25 times)	Appearance Operation Insulation performance —No irregularities

• Humidity testing

Conditions	Results
Left for 500 hours at ambient temperature of 40°C 104°F, at relative humidity of 90 to 95%.	Appearance Operation Insulation performance —No irregularities

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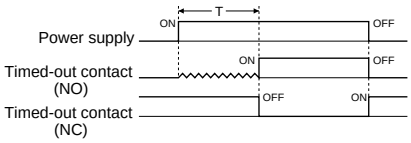
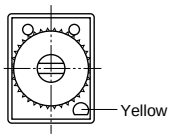
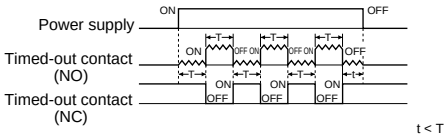
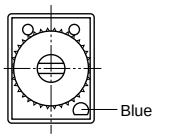
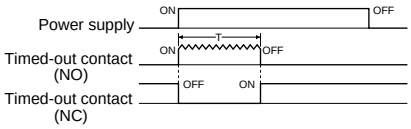
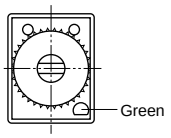
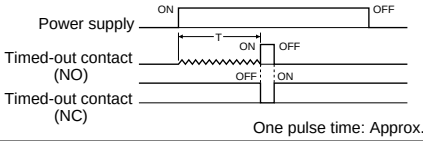
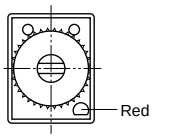
Operation mode and color

Operation type	Description	Time chart	Operation mode indicator color
Power ON-delay	Timing operation will start when the power is supplied, and the control output turns on after the setting time.		
Power Ficker	When the power is supplied, the control output turns on after the setting time and then turns off after the setting time. This operation is repeated sequentially.		
Power One-shot	When the power is supplied, control output turns on for the setting time.		
Power One-cycle	When the power is supplied, the control output turns on for one pulse after the setting time.		

Note: Time unit labels are color coded so that you can distinguish the operation mode from the front panel.

Scale intervals

Time type	Scale intervals
0.5	0.05 (0.02 in a range of 0.1 to 0.5)
1	0.05
3	0.1
5	0.2
10	0.5
30	1
60	2

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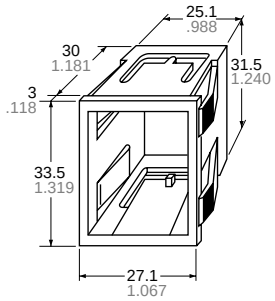
S1DXM-A/M/S1DX COMMON OPTIONS

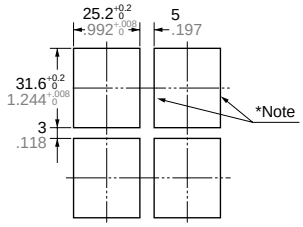
■ Accessory (Unit: mm inch)

• Mounting frame (for panel mounting type)

ADX18002 (Titanium-gray)
ADX18006 (Gray)
ADX18007 (Black)

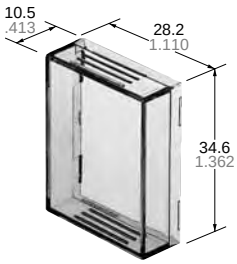


Panel cutout dimensions



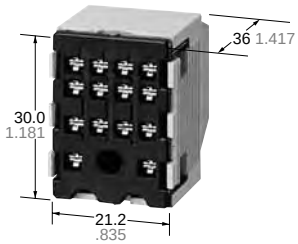
Board thickness 1 to 3 mm
Note: Make sure the holes area stays as right angles.

• Protective cover



ADX18008

• Cap block

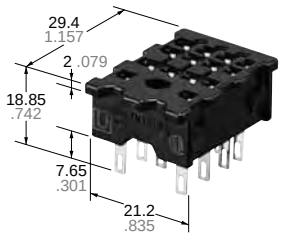


ADX18011

• Cap for cap block

ADX18004

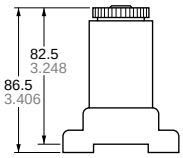
• Socket for cap block



ADX18003

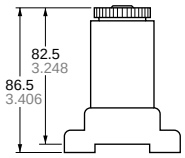
■ Terminal socket

• HC2 slim DIN terminal socket



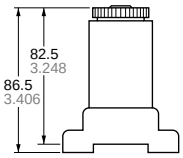
HC2-SFD-S

• HC2 DIN high terminal socket



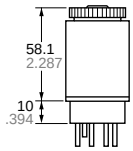
HC2-SFD-K

• HC4 DIN high terminal socket



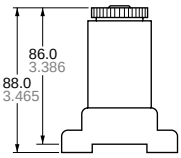
HC4-SFD-K

• HC4 socket



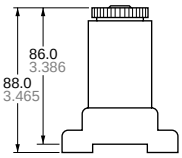
HC4-SS-K

• HJ2 terminal socket



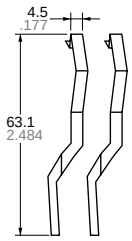
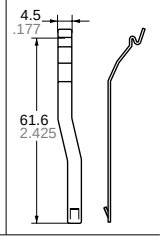
HJ2-SFD/HJ2-SFD-S

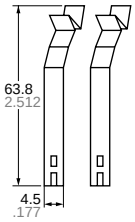
• HJ4 terminal socket



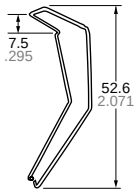
HJ4-SFD/HJ4-SFD-S

■ Socket leaf holding clip

ADX18001		ADX18012	
Appearance	Dimensions	Appearance	Dimensions
(2 pieces per set)		(2 pieces per set)	

AD68002	
Appearance	Dimensions
(2 pieces per set)	

■ Socket line holding clip for S1DXM-A/M
(Sold separately)



ADX28005

Terminal socket \ Type		Application				
		ADX18001	ADX18012	AD68002	ADX28005 *2	ADX18005 *1
For HC relay	HC2-SFD-S*3	–	–	○	○	–
	HC2-SFD-K*3	○	–	△	○	–
	HC4-SFD-K*3	○	–	△	○	–
	HC2-SF-K	–	–	–	○	○
	HC4-HSF-K	–	–	–	○	○
	HC2-SS-K	–	–	–	○	○
	HC4-SS-K	–	–	–	○	○
For HJ relay	HJ2-SFD*3	–	○	–	–	–
	HJ2-SFD-S*3	–	○	–	–	–
	HJ4-SFD*3	–	△	–	–	–
	HJ4-SFD-S*3	–	△	–	–	–

Notes: The triangles indicate that removal will be slightly difficult when installed laterally in succession.
*1. The socket line holding clip ADX18005 is enclosed in the S1DX timer.
○: Available, –: Not available
*2. The socket line holding clip (ADX28005) is not included with the S1DXM-A/M timer.
*3. For use where there is a lot of vibration and shock, please use a compliant socket leaf holding clip or socket line holding clip.

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■ HC relay terminal sockets

	Name/Model No.	Dimensions	Terminal layout	Mounting hole dimensions	Applicable timers S1DX(2c) S1DXM(2c)	Applicable timers S1DX(4c) S1DXM(4c)
For general rails	• Terminal socket, HC 2-pin HC2-SF-K	Oval hole: 2-4.2×5 .165×.197 Terminal screw M3 Note) Only socket line holding clips can be used. (Socket leaf holding clip cannot be used.)	1 5 9 13 4 8 12 14	2-M3.5 screw hole (or 4.2±0.1 dia. hole) 2-M.138 screw hole (or .165±.004 dia. hole) Panel hole dimensions for side-by-side mounting	Available	Not available
For general rails	• High terminal socket, HC 1-, 2- and 4-pin HC4-HSF-K	Oval hole: 2-4.2×9 .165×.354 Terminal screw M3 Screw hole size Note) Only socket line holding clips can be used. (Socket leaf holding clip cannot be used.)	2 6 10 1 5 9 13 4 8 12 14 3 7 11	2-M3.5 screw hole (or 4.2±0.1 dia. hole) 2-M.138 screw hole (or .165±.004 dia. hole) Panel hole dimensions for side-by-side mounting	Available	Available
For DIN rails	• Slim DIN terminal socket, HC2 HC2-SFD-S	Terminal screw M3	4 1 8 5 12 9 14 13	Screw hole: 2-M3.5 (or φ4.2±0.1 hole) (or φ.165±.004 hole)	Available	Not available
For DIN rails	• DIN high terminal socket, HC2 HC2-SFD-K	Terminal screw M3	4 1 8 5 12 9 14 13	Screw hole: 2-M3.5 (or φ4.2±0.1 hole) (or φ.165±.004 hole) Drilling size of panel holes for installing the terminal sockets parallel	Available	Not available
For DIN rails	• DIN high terminal socket, HC4 HC4-SFD-K	Terminal screw M3	4 3 2 1 8 7 6 5 12 11 10 9 14 13		Available	Available

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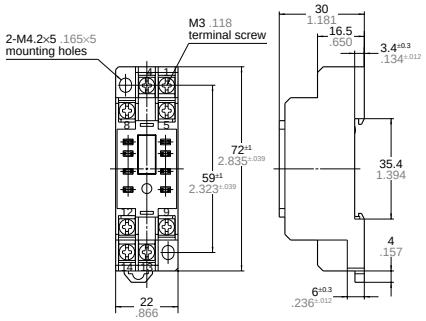
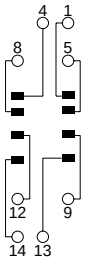
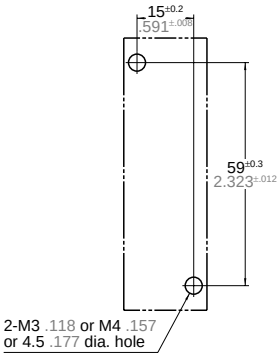
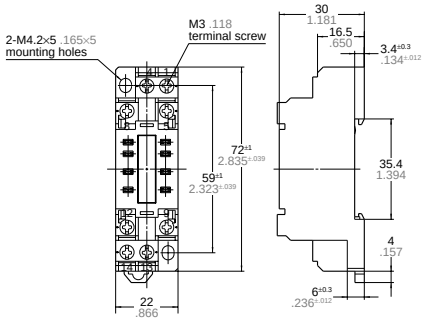
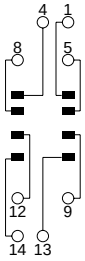
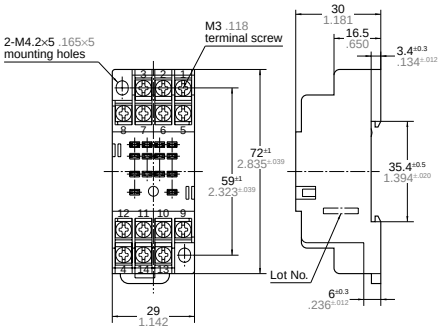
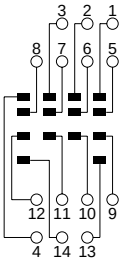
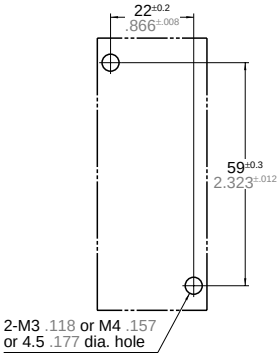
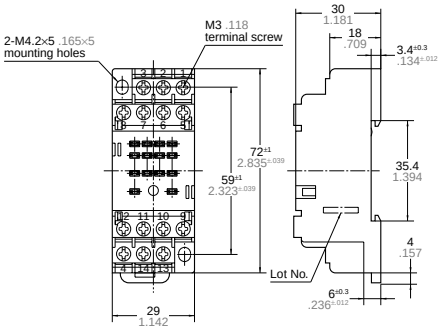
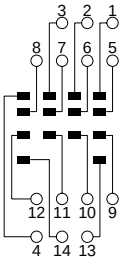
S1DXM-A/M/S1DX COMMON OPTIONS

■ HJ relay terminal sockets

Name/Model No.	Dimensions	Terminal layout	Mounting hole dimensions	Applicable timers	
				S1DX(2c) S1DXM(2c)	S1DX(4c) S1DXM(4c)
• HJ2 terminal socket HJ2-SFD				Available	Not available
• HJ2 terminal socket (Finger protect type) HJ2-SFD-S				Available	Not available
• HJ4 terminal socket HJ4-SFD				Available	Available
• HJ4 terminal socket (Finger protect type) HJ4-SFD-S				Available	Available

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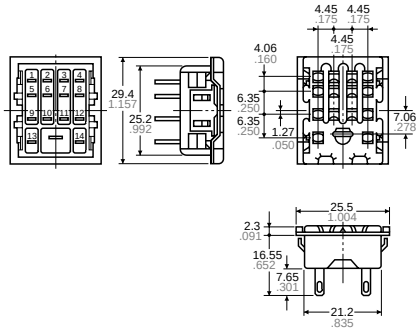
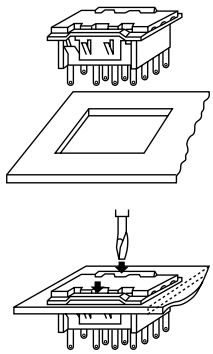
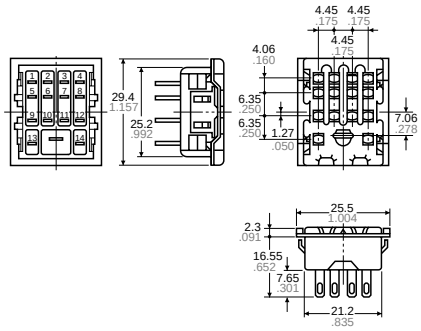
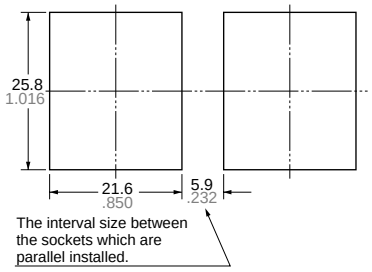
■ Sockets

Name/Model No.	Dimensions	Mounting hole dimensions	Applicable timers	
			S1DX(2c) S1DXM(2c)	S1DX(4c) S1DXM(4c)
• Socket, HC 2-pin HC2-SS-K	• The difference between the HC2 and HC4 sockets is only the number of the pins. Their appearances and sizes are the same.  General tolerance: ±0.5 ±.020	• The thickness of applicable chassis plates ranges from 1.0 to 2.0 mm .039 to .079 inch. • To install the socket easily, insert the socket top surface into the drilled holes and press the two points on the fastening plate indicated by arrows as shown in the fig. below. 	Available	Not available
• Socket, HC 4-pin HC4-SS-K	 	 Dimensional tolerance of machining: ±0.1 ±.004	Available	Available

• Sockets for PC board
  HC2-Socket for PC board: HC2-PS-K
  HC4-Socket for PC board: HC4-PS-K

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PRECAUTIONS IN USING S1DXM-A/M AND S1DX

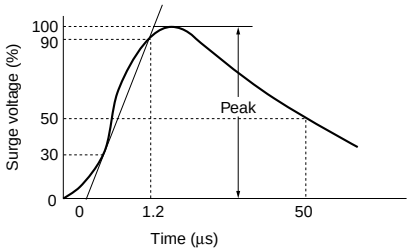
■ Reset periods

After unscheduled operations have been completed, or if the timer operation power supply has been turned off at any time during operation, a reset period of at least 0.1 seconds should be allowed before resuming operation.

■ External surge protection

External surge protection may be required if the following values are exceeded. Otherwise, the internal circuit will be damaged. The typical surge absorption elements include a varistor, a capacitor, and a diode. If a surge absorption element is used, use an oscilloscope to see whether or not the foreign surge exceeding the specified value appears.

Single-pole, full-wave voltage for surge waveform [±(1.2 × 50) μs]



Operation voltage	Surge voltage
100 to 120V AC, 200 to 220V AC	4,000V
12V DC, 24V DC	1,000V

Since the main body cover and knob are made of polycarbonate resin, prevent contact with organic solvents such as methyl alcohol, benzine and thinner, or strong alkali materials such as ammonia and caustic soda.

■ Terminal wiring

Make sure that terminals are wired carefully and correctly, referring to the terminal layout and wiring diagrams. Particularly, since the DC type has polarity, do not operate it with reverse polarity.

■ Assembly

1) When installing, use a terminal socket or socket intended for HC/HJ relay. For adjacent installations, be sure to first verify the installation conditions of the terminal sockets or sockets you will be using.

2) Use the separately-sold dedicated socket leaf holding clip to secure terminal sockets and sockets to the timer unit. The conditions of use for dedicated socket leaf holding clip will differ depending on the terminal socket or socket you will be using. Therefore, please test under actual conditions before putting into operation.

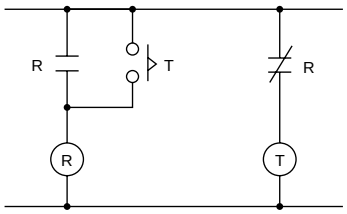
3) If terminals are to be soldered directly, please hand solder with a 30 to 60 W solder iron with a tip temperature of 300°C for no more than 3 seconds. Automatic soldering should be avoided.

4) A flux-tight construction is not used with this timer, so be careful that flux or cleaning fluid does not get inside the case.

5) To assure that characteristics are maintained, do not remove the case.

■ Long Continuous Current Flow

Long continuous current flow through the timer cause generation of heat internally, which degrade the electronic parts. Use the timer in combination with a relay and avoid long continuous current flow through the timer. (Refer to the circuit diagram below when using a safety circuit for continuous operation.)



■ Phase synchronization using AC load

If the turning on of the timer output relay is synchronized to the AC power supply phase, there may be times when the service life is shortened because of electrical factors, or when a locking phenomenon (defective relay return) occurs because of contact point welding or a shift in the contact relay. Check the operation using the actual timer.

■ Acquisition of CE marking

Please abide by the conditions below when using in applications that comply with EN61812-1.

1) Overvoltage category II,
pollution degree 2 (2 Form C type)
Overvoltage category II,
pollution degree 1 (4 Form C type)

2) The load connected to the output contact should have basic insulation. This timer is protected with basic insulation and can be double-insulated to meet EN/IEC requirements by using basic insulation on the load.

3) Please use a power supply that is protected by an overcurrent protection device which complies with the EN/IEC standard (example: 250 V 1 A fuse, etc.).

4) You must use a terminal socket or socket for the installation. Do not touch the terminals or other parts of the timer when it is powered. When installing or un-installing, make sure that no voltage is being applied to any of the terminals.

5) Do not use this timer as a safety circuit. For example when using a timer in a heater circuit, etc., provide a protection circuit on the machine side.

■ Applicable standard

Safety standard	EN61812-1	Pollution Degree 2/Overvoltage Category II (2 Form C type) Pollution Degree 1/Overvoltage Category II (4 Form C type)
EMC	(EMI)EN61000-6-4	
	Radiation interference electric field strength	EN55011 Group1 ClassA
	Noise terminal voltage	EN55011 Group1 ClassA
	(EMS)EN61000-6-2	
	Static discharge immunity	EN61000-4-2 4 kV contact 8 kV air
	RF electromagnetic field immunity	EN61000-4-3 10 V/m AM modulation (80 MHz to 1 GHz) 10 V/m pulse modulation (895 MHz to 905 MHz)
	EFT/B immunity	EN61000-4-4 2 kV (power supply line) 1 kV (signal line)
	Surge immunity	EN61000-4-5 1 kV (power supply line)
	Conductivity noise immunity	EN61000-4-6 10 V/m AM modulation (0.15 MHz to 80 MHz)
	Power frequency magnetic field immunity	EN61000-4-8 30 A/m (50 Hz)
	Voltage dip/Instantaneous stop/Voltage fluctuation immunity	EN61000-4-11 10 ms, 30% (rated voltage) 100 ms, 60% (rated voltage) 1,000 ms, 60% (rated voltage) 5,000 ms, 95% (rated voltage)

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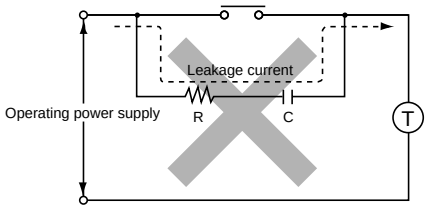
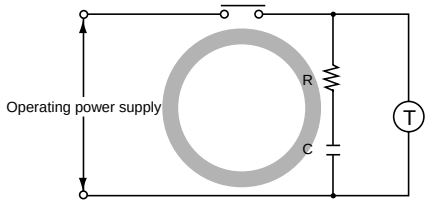
■ **Others**

1) When setting the time, the dial should be kept within the range indicated on the dial face. The “0” marking on the dial indicates the minimum time during which the control time can be varied (it does not indicate 0 seconds).
2) Do not rotate the knob past the stopper.
3) Turn off the power before changing the DIP switch settings. Changing the DIP switch with the power on can cause breakdown.
4) When connecting the operating power supply, make sure that no leakage current enters the timer. For example, when performing contact protection, if set up like that of fig. A, leaking current will pass through C and R, enter the timer, and cause incorrect operation. The fig. B shows the correct setup.



(Fig. A) **WRONG**

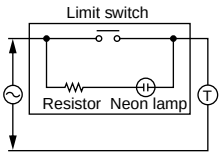


(Fig. B) **CORRECT**

When a contact switch having an operation indicating lamp (lamp equipped limit switch, etc.) is used to apply power to the timer, a resistor having a value equal to or greater than the value below shall be connected in series with the lamp.

100 to 120V AC operating type:
Min. 33kΩ

200 to 220V AC operating type:
Min. 82kΩ



Example of limit switches with lamp.

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