Miniature Multi-Range Timer

The S1DXM is a small, low-cost time delay relay available in Power On-Delay, Power Flicker, Power One-Shot, and Power One-Cycle configurations. Other features include flush mount capability, quickset dial, LED status indictators, and more!

Key Features

- Easy and Safe Handling
- Wide Time Range
- Indicator LEDs Provide Status at a Glance
- Flush Mountable with Accessories
- 12 Time Ranges Available
- S1DXM-M Multifunctional
- Useable with HJ Relay Terminal Socket
- Space-Saving Design - 22.1 x 51.7 x 29.5mm
- UL Recognized, CSA Approved

S1DXM Models

You may sort models by clicking the arrows in the appropriate column. If you are searching for a particular model but can't find it, give our model search utility a try. All downloads have moved to our separate downloads center.

Click one of the links below to view all related models. Models will appear below the links.

- **Timers**
- **Accessories**

Currently viewing: S1DXM Timers

Model Name	Operation Mode	Time Range	Terminal Type	Control Output Current / voltage	Mounting Method	Mounting Parts	Operating Voltage	Min. Power Off Time (ms)
Sort	Sort	Sort	Sort	Sort	Sort	Sort	Sort	Sort
S1DXM-A2C10H-AC120V	Power ON Delay	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	100 to 120 V AC	100
S1DXM-A2C10H-AC220V	Power ON Delay	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	200 to 220 V AC	100
S1DXM-A2C10H-AC240V	Power ON Delay	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	220 to 240 V AC	100
S1DXM-A2C10H-AC24V	Power ON Delay	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	24 V AC	100
S1DXM-A2C10H-DC12V	Power ON Delay	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	12 V DC	100

S1DXM-A4C60M-DC24V	Power ON Delay	0.5 s to 60 min	Relay timed-out	5 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	24 V DC	100
S1DXM-M2C10H-AC120V	Power On delay-Power Flicker OFF start-Power Flicker On start-Power One Shot	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	100 to 120 V AC	100
S1DXM-M2C10H-AC220V	Power On delay-Power Flicker OFF start-Power Flicker On start-Power One Shot	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	200 to 220 V AC	100
S1DXM-M2C10H-AC240V	Power On delay-Power Flicker OFF start-Power Flicker On start-Power One Shot	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	220 to 240 V AC	100
S1DXM-M2C10H-AC24V	Power On delay-Power Flicker OFF start-Power Flicker On start-Power One Shot	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	24 V AC	100
S1DXM-M2C10H-DC12V	Power On delay-Power Flicker OFF start-Power Flicker On start-Power One Shot	0.05 min to 10 hr	Relay timed-out	7 A 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap, panel cover, rubber gasket, mounting frame, fitting sockets, protective cover	12 V DC	100

Panasonic
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MULTI-RANGE ANALOG TIMER

S1DXM-A/M Timers

UL File No.: E122222
C-UL File No.: E122222

FEATURES

1. Multiple functions built in
The operation mode and time range can be switched by using the MODE and RANGE switches on the front panel.
2. Part number consolidation
1) The lineup consists of 64 easy-to-choose models.
2) An operation mode fixed type (S1DXM-A) and 4-operation mode switching type (S1DXM-M) are available.
3. Cadmium-free contacts used
To eliminate environmentally harmful chemical substances, relays with cadmium-free contacts are used.
4. Economically priced
1) Prices set to lower costs.
2) Further cost reduction when used with HJ Relay terminal socket.
5. CE marking supported
UL and C-UL approved.

PRODUCT TYPES

1. S1DXM-A multi-range timer
No MODE switch, Operation mode (fixed): Power ON-delay

Operating voltage	Time range	Timed-out 2 Form C	Timed-out 4 Form C
		Part number	Part number
12V DC	0.05 s to 10 min	S1DXM-A2C10M-DC12V	S1DXM-A4C10M-DC12V
	0.2 s to 30 min	S1DXM-A2C30M-DC12V	S1DXM-A4C30M-DC12V
	0.5 s to 60 min	S1DXM-A2C60M-DC12V	S1DXM-A4C60M-DC12V
	0.05 min to 10 hr	S1DXM-A2C10H-DC12V	S1DXM-A4C10H-DC12V
24V DC	0.05 s to 10 min	S1DXM-A2C10M-DC24V	S1DXM-A4C10M-DC24V
	0.2 s to 30 min	S1DXM-A2C30M-DC24V	S1DXM-A4C30M-DC24V
	0.5 s to 60 min	S1DXM-A2C60M-DC24V	S1DXM-A4C60M-DC24V
	0.05 min to 10 hr	S1DXM-A2C10H-DC24V	S1DXM-A4C10H-DC24V
24V AC	0.05 s to 10 min	S1DXM-A2C10M-AC24V	S1DXM-A4C10M-AC24V
	0.2 s to 30 min	S1DXM-A2C30M-AC24V	S1DXM-A4C30M-AC24V
	0.5 s to 60 min	S1DXM-A2C60M-AC24V	S1DXM-A4C60M-AC24V
	0.05 min to 10 hr	S1DXM-A2C10H-AC24V	S1DXM-A4C10H-AC24V
100 to 120V AC	0.05 s to 10 min	S1DXM-A2C10M-AC120V	S1DXM-A4C10M-AC120V
	0.2 s to 30 min	S1DXM-A2C30M-AC120V	S1DXM-A4C30M-AC120V
	0.5 s to 60 min	S1DXM-A2C60M-AC120V	S1DXM-A4C60M-AC120V
	0.05 min to 10 hr	S1DXM-A2C10H-AC120V	S1DXM-A4C10H-AC120V
200 to 220V AC	0.05 s to 10 min	S1DXM-A2C10M-AC220V	S1DXM-A4C10M-AC220V
	0.2 s to 30 min	S1DXM-A2C30M-AC220V	S1DXM-A4C30M-AC220V
	0.5 s to 60 min	S1DXM-A2C60M-AC220V	S1DXM-A4C60M-AC220V
	0.05 min to 10 hr	S1DXM-A2C10H-AC220V	S1DXM-A4C10H-AC220V
220 to 240V AC	0.05 s to 10 min	S1DXM-A2C10M-AC240V	S1DXM-A4C10M-AC240V
	0.2 s to 30 min	S1DXM-A2C30M-AC240V	S1DXM-A4C30M-AC240V
	0.5 s to 60 min	S1DXM-A2C60M-AC240V	S1DXM-A4C60M-AC240V
	0.05 min to 10 hr	S1DXM-A2C10H-AC240V	S1DXM-A4C10H-AC240V

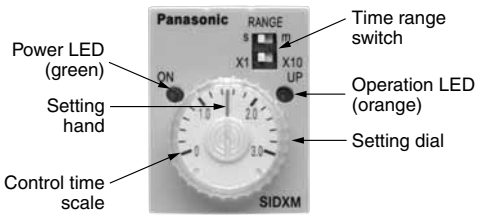
2. S1DXM-M multi-range timer

With MODE switch, Operation mode (switchable): Power ON-delay, Power Flicker ON start, Power Flicker OFF start, Power One-shot

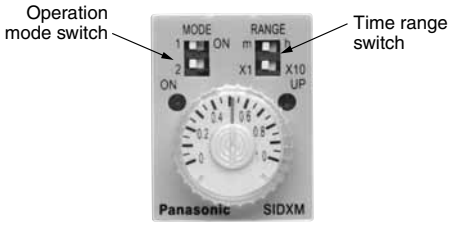
Operating voltage	Time range	Timed-out 2 Form C	Timed-out 4 Form C
		Part number	Part number
12V DC	0.05 s to 10 min	S1DXM-M2C10M-DC12V	S1DXM-M4C10M-DC12V
	0.2 s to 30 min	S1DXM-M2C30M-DC12V	S1DXM-M4C30M-DC12V
	0.5 s to 60 min	S1DXM-M2C60M-DC12V	S1DXM-M4C60M-DC12V
	0.05 min to 10 hr	S1DXM-M2C10H-DC12V	S1DXM-M4C10H-DC12V
24V DC	0.05 s to 10 min	S1DXM-M2C10M-DC24V	S1DXM-M4C10M-DC24V
	0.2 s to 30 min	S1DXM-M2C30M-DC24V	S1DXM-M4C30M-DC24V
	0.5 s to 60 min	S1DXM-M2C60M-DC24V	S1DXM-M4C60M-DC24V
	0.05 min to 10 hr	S1DXM-M2C10H-DC24V	S1DXM-M4C10H-DC24V
24V AC	0.05 s to 10 min	S1DXM-M2C10M-AC24V	S1DXM-M4C10M-AC24V
	0.2 s to 30 min	S1DXM-M2C30M-AC24V	S1DXM-M4C30M-AC24V
	0.5 s to 60 min	S1DXM-M2C60M-AC24V	S1DXM-M4C60M-AC24V
	0.05 min to 10 hr	S1DXM-M2C10H-AC24V	S1DXM-M4C10H-AC24V
100 to 120V AC	0.05 s to 10 min	S1DXM-M2C10M-AC120V	S1DXM-M4C10M-AC120V
	0.2 s to 30 min	S1DXM-M2C30M-AC120V	S1DXM-M4C30M-AC120V
	0.5 s to 60 min	S1DXM-M2C60M-AC120V	S1DXM-M4C60M-AC120V
	0.05 min to 10 hr	S1DXM-M2C10H-AC120V	S1DXM-M4C10H-AC120V
200 to 220V AC	0.05 s to 10 min	S1DXM-M2C10M-AC220V	S1DXM-M4C10M-AC220V
	0.2 s to 30 min	S1DXM-M2C30M-AC220V	S1DXM-M4C30M-AC220V
	0.5 s to 60 min	S1DXM-M2C60M-AC220V	S1DXM-M4C60M-AC220V
	0.05 min to 10 hr	S1DXM-M2C10H-AC220V	S1DXM-M4C10H-AC220V
220 to 240V AC	0.05 s to 10 min	S1DXM-M2C10M-AC240V	S1DXM-M4C10M-AC240V
	0.2 s to 30 min	S1DXM-M2C30M-AC240V	S1DXM-M4C30M-AC240V
	0.5 s to 60 min	S1DXM-M2C60M-AC240V	S1DXM-M4C60M-AC240V
	0.05 min to 10 hr	S1DXM-M2C10H-AC240V	S1DXM-M4C10H-AC240V

PART NAMES

S1DXM-A



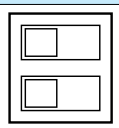
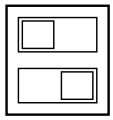
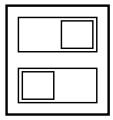
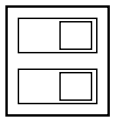
S1DXM-M

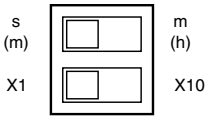


- [RANGE] Time range switch
  (4 different time ranges can be switched.)
  10M type: 1 s/10 s/1 min/10 min
  30M type: 3 s/30 s/3 min/30 min
  60M type: 6 s/60 s/6 min/60 min
  10H type: 1 min/10 min/1 hr/10 hr

- [MODE] Operation mode switch
  (4 different operation modes can be switched.)
  Power ON-delay
  Power Flicker OFF start
  Power Flicker ON start
  Power One-shot

OPERATION MODE AND TIME RANGE SETTING

Operation mode	Operation mode switch
Power ON-delay	
Power Flicker OFF start	
Power Flicker ON start	
Power One-shot	

Time range switch


The time setting can be switched among 4 ranges each for 4 types for an interval between 0.05 seconds and 10 hours.

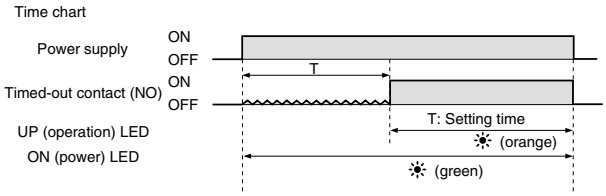
Notes: 1. The product is factory shipped with all settings on the OFF side (left).
2. Do not operate the switches with a sharp-edged object such as a knife blade.
3. The power must be turned off when setting the time range or operation mode. Operating the switches with the power on is a cause of breakdown and malfunction.
4. Use a force of under 5 N to operate the DIP switches when setting the time range and operation mode.

OPERATION MODE

1. S1DXM-A multi-range timer

Power ON-delay operation

• When power is turned on, the output contact operates after the set time. The output contact remains on until the power is turned off.

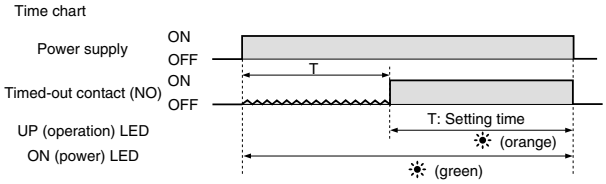


2. S1DXM-M multi-range timer

Power ON-delay operation

[MODE] switch 1: OFF, switch 2: OFF

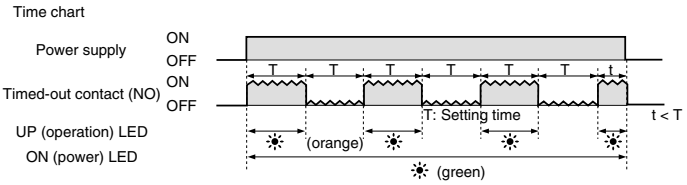
• When power is turned on, the output contact operates after the set time. The output contact remains on until the power is turned off.



Power Flicker ON start operation

[MODE] switch 1: ON, switch 2: OFF

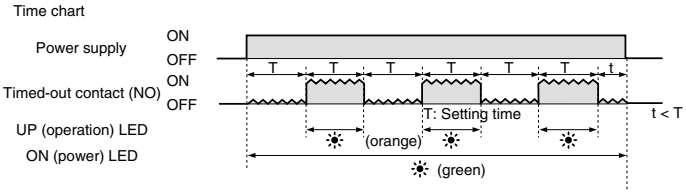
• When power is turned on, the output contact operates repeatedly at the set time. The output contact outputs at the same time power turns on.



Power Flicker OFF start operation

[MODE] switch 1: OFF, switch 2: ON

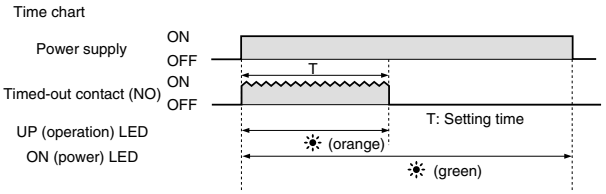
• When the power is turned on, the output contacts repeatedly operate at the set time. The output contact begins from the off state.



Power One-shot operation

[MODE] switch 1: ON, switch 2: ON

When power is turned on, the output contact performs the on operation at the same time power turns on, only for the set time.



TIME RANGE SETTING

Type		Time scale		Time unit		Min. scale	Max. scale	Setting range			
S1DXM-A	10M type	X1	X10	s	m	0.05	1	0.05 to 1s	0.5 to 10s	0.05 to 1m	0.5 to 10m
	30M type			s	m	0.2	3	0.2 to 3s	2 to 30s	0.2 to 3m	2 to 30m
	60M type			s	m	0.5	6	0.5 to 6s	5 to 60s	0.5 to 6m	5 to 60m
	10H type			m	h	0.05	1	0.05 to 1m	0.5 to 10m	0.05 to 1h	0.5 to 10h
S1DXM-M	10M type	X1	X10	s	m	0.05	1	0.05 to 1s	0.5 to 10s	0.05 to 1m	0.5 to 10m
	30M type			s	m	0.2	3	0.2 to 3s	2 to 30s	0.2 to 3m	2 to 30m
	60M type			s	m	0.5	6	0.5 to 6s	5 to 60s	0.5 to 6m	5 to 60m
	10H type			m	h	0.05	1	0.05 to 1m	0.5 to 10m	0.05 to 1h	0.5 to 10h

Note: The time setting range is the combination of the time scale (X1 or X10) on the dial and the time unit (s, m, or h).
Example: When dial reads 1, time scale is X1 and time units is seconds, then it is 1 second.

ORDERING INFORMATION

Ex. S1DXM- [A] [2C] [30M] — [DC24V]

Operation mode	Control output arrangement	Time range	Operating voltage*
A M	2C: Timed-out 2 Form C 4C: Timed-out 4 Form C	10M: 0.05 s to 10 min 30M: 0.2 s to 30 min 60M: 0.5 s to 60 min 10H: 0.05 min to 10 hr	DC12V: 12 V DC DC24V: 24 V DC AC24V: 24 V AC AC120V: 100 to 120 V AC AC220V: 200 to 220 V AC AC240V: 220 to 240 V AC

* For other operating voltage types, please consult us.

SPECIFICATIONS

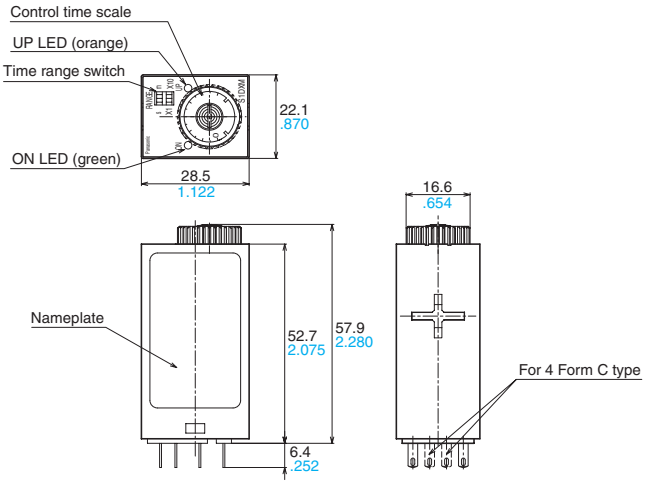
Item			Specifications					
Rating	Rated operating voltage		24VAC	100 to 120VAC	200 to 220VAC	220 to 240VAC	12VDC	24VDC
	Rated frequency		50/60Hz common				—	
	Rated power consumption		Max. 3 VA (at 24 VAC)	Max. 3 VA (at 100 VAC)	Max. 3 VA (at 200 VAC)	Max. 3 VA (at 220 VAC)	Max. 2 W (at 12 VDC)	Max. 2 W (at 24 VDC)
		During time delay	Approx. 3mA	Approx. 3mA	Approx. 3mA	Approx. 3mA	Approx. 5mA	Approx. 3mA
		After time delay	Approx. 80mA	Approx. 20mA	Approx. 13mA	Approx. 13mA	Approx. 70mA	Approx. 40mA
	Rated control capacity		Timed -out 2 Form C: 7A 250V AC (resistive load)					
			Timed -out 4 Form C: 5A 250V AC (resistive load)					
	Operation mode		S1DXM-A Power on delay operation fixed (Power display: ON/green; Operation display (when output is on): UP/orange)					
			S1DXM-M 4 switchable operations: Power ON-delay/Power Flicker OFF start/Power Flicker ON start/Power One-shot (Power display: ON/green; Operation display (when output is on): UP/orange)					
Time accuracy*1	Operating time fluctuation & Power off time change error		Max. ±1 %, (power off time change at the range of 0.1 s to 1 h), 1 s range: Max. ±1 % and 10 ms*3					
	Voltage error		Max. ±1 % (at the operating voltage changes between –20 to +10%), 1 s range: Max. ±1 % and 10 ms*3					
	Temperature error		Max. ±5% (at 20°C ambient temp. at the range of –10 to +50°C +14 to +122°F)					
	Setting error		Max. ±10%, 1 s range: Max. ±10% and 20 ms					
Contact	Contact arrangement		Timed-out 2 Form C, Timed-out 4 Form C					
	Contact resistance (Initial value)		Max. 100mΩ (at 1A, 6V DC)					
	Contact material		Timed-out 2 Form C type: Silver alloy, Au plating					
			Timed-out 4 Form C type: Silver alloy, Au plating					
Life	Mechanical (constant)		Min. 10^7					
	Electrical (constant)		2×10^5 (at rated control capacity)					
Mechanical	Vibration resistance	Functional	10 to 55Hz: 1 cycle/min double amplitude of 0.25mm (10min on 3 axes)					
		Destructive	10 to 55Hz: 1 cycle/min double amplitude of 0.375mm (1h on 3 axes)					
	Shock resistance	Functional	Min. 98m/s^2 (4 times on 3 axes)					
		Destructive	Min. 980m/s^2 (5 times on 3 axes)					
Electrical	Allowable operating voltage range		80 to 110% of rated operating voltage					
	Reset time		Max. 0.1s					
	Insulation resistance (Initial value)		Between live and dead metal parts, between input and output, between contact sets, between contacts Min. 100 MΩ (at 500 V DC megger)					
	Breakdown voltage (Initial value)		Between live and dead metal parts: 1,500 Vrms for 1 min Between input and output: 1,500 Vrms for 1 min Between contact sets: 1,500 Vrms for 1 min Between contacts: 1,000 Vrms for 1 min					
	Max. temperature rise		70°C 158°F					
Operating conditions	Ambient temperature		–10 to 50°C +14 to 122°F					
	Ambient humidity		35 to 85% RH (non-condensing)					
	Air pressure		860 to 1060 hPa					
	Ripple rate		DC type only, transmission wave rectification (ripple rate: approx. 48%)*2					
	Mass (Weight)		Approx. 45 g					
	Protective construction		IEC standard: IP40 (IP50 when using ADX18008 protective cover)					

Notes: *1. Unspecified measuring conditions are rated operating voltage (in case of DC type, ripple rate of 5% or less), ambient temp. 20°C 68°F, and power off time 1 second.
*2. When using with a transmission wave rectification, vibration resistance and shock resistance properties worsen compared to when using a stabilized power supply.
*3. Power one-shot 1 s range: +2% and 10 ms

DIMENSIONS

mm inch

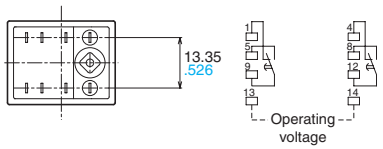
1. S1DXM-A



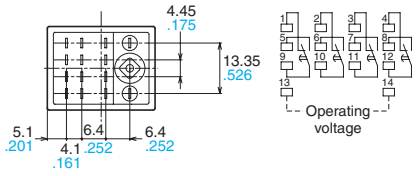
Tolerance: ±05 ±.020

Terminal layouts and Wiring diagram

Timed-out 2 Form C type

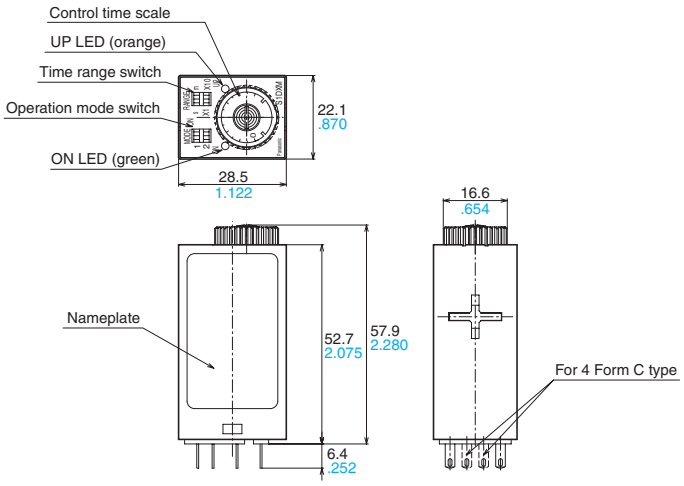


Timed-out 4 Form C type



* For the DC operating type, terminal 14 is "+" and terminal 13 is "–".

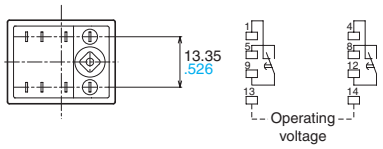
2. S1DXM-M



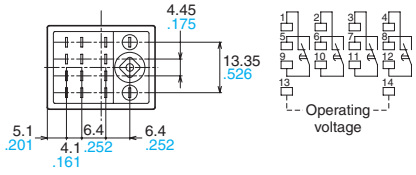
Tolerance: ±05 ±.020

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 "–".

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)EN61000-4-4	
	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 (level 2) 8 kV air (level 2)
	RF electromagnetic field immunity	EN61000-4-3 10 V/m AM modulation (80 MHz to 1 GHz) (level 3) 10 V/m pulse modulation (895 MHz to 905 MHz) level 3)
	EFT/B immunity	EN61000-4-4 2 kV (power supply line) (level 3) 1 kV (signal line) (level 3)
	Surge immunity	EN61000-4-5 1 kV (power line) (level 2)
	Conductivity noise immunity	EN61000-4-6 10 V/m AM modulation (0.15 MHz to 80 MHz) (level 3)
	Power frequency magnetic field immunity	EN61000-4-8 30 A/m (50 Hz) (level 4)
	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)