D

Smart Meter Division

CTN4 Intelligent Temperature Controller

Features

- High-speed sampling
- AI artificial intelligence adjustment algorithm
- Dual PID heating and cooling intelligent adjustment
- AT automatic calculation function
- 16-bit MCU high-speed operation accuracy
- Dual digital display (PV / SV)
- High-speed sampling rate of 100ms and display accuracy of 0.5%
- SSR Drive output / Relay output / Current output optional
- Terminal type wiring method conducive to wiring and maintenance

Model number structure

C TN 4 S - 4 1 1 □ □ □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Item	Code	Description
① Name of the company	C	CNTD
② Series	TE	Economical digital dual display PID temperature controller
	TN	Standard digital dual display PID temperature controller
	TZ	High precision digital dual display PID temperature controller
③ Digit	4	9999 (4 Digit)
④ Dimensions	S	48×48
	V	48×96
	M	72×72
	L	96×96
	H	96×48
⑤ Voltage supply	2	24VAC 50/60Hz，24-48VDC
	4	Switch power supply(100-240V AC, 50HZ)
	A-Z	Custom power supply voltage
⑥ Control output	1	Relay
	2	SSR Output
	3 □	Analog output: A: 0~20mA, 4-20mA, B: 0-5V, 1-5V
	4	Thyristor zero-crossing output
	5	Silicon controlled rectifier (5A)
	6	SSR+Relay output
	A-Z	A-Z letter combination represents other or custom control output modes

Item	Code	Description
⑦ Alarm output	1	1-Way relay
	2	2-Way relay
	3	1-way SSR
	4	2-way SSR
	A-Z	A-Z letter combination represents other or custom control output modes
⑧ Graduation	None	Thermocouple input K, E, J, L, T, R, S Thermal resistance input PT100, Cu50 (full function)
	A-Z	A-Z letter combination, representing other or customized alarm output
⑨ Transmission output	None	No such function
	T	With transmission output function
⑩ Special specifications	None	No such function
	R	With RS485 communication function

Note 1: Analog output and transmission output cannot be selected at the same time;
Note 2: Due to the limited number of 48 * 48 ports, the model selection cannot be fully met. Please contact the manufacturer if necessary;
Note 3: For 48x48 size, if 485 communication is required in the control output option, only 1/2/3 can be selected, not choose 6.

CTN4 Intelligent Temperature Controller

CNTD

Electrical specification

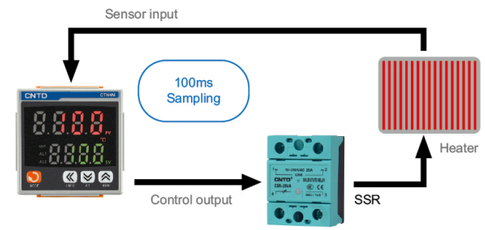
Rated voltage	100-240V AC，50HZ
Power consumption	≤ 5VA
Rated voltage	Installation type II, Pollution degree 2
Storage Temperature	-25°C -65°C (Avoid freezing)
Esolution power	1°C , 0.1°C (Adjustable)
Wiring method	Connecting terminal
Measuring accuracy	±0. 5%FS
Memory Protection	Non-volatile memory
Installation conditions	Installation type II, Pollution degree 2
Relay output	Relay contact: AC220V/DC30V,3A
Logic level output	On: DC24V; Off: dc0 Below 5V; Maximum current: 30mA, load resistance ≥ 1K

Overall dimension

Model		Shell size (length, width and height)	Hole size
CTN4S	48x48	48x48x71	45x45
CTN4V	48x96	48x96x71	46x92
CTN4H	96x48	96x48x71	91x45
CTN4M	72x72	72x72x71	68x68
CTN4L	96x96	96x96x71	92x92

High speed sampling

100ms high-speed sampling rate enables precise temperature control in applications requiring fast response speed.



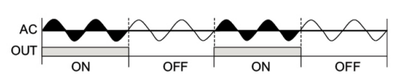
SSR drive output method

Users can choose SSR and RELAY drive output. On this basis, ON/OFF control and manual output are added to achieve ideal temperature control.

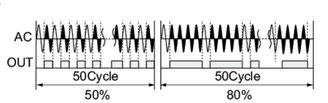
Drive output

Choose the control method

Control



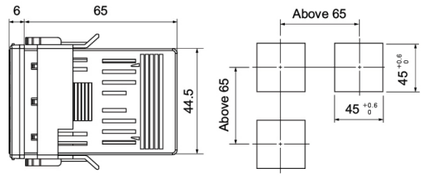
Manual output



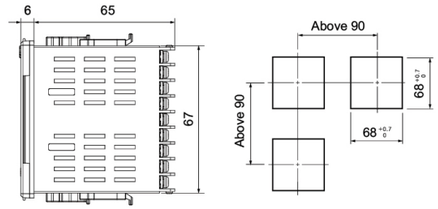
CTN4 Intelligent Temperature Controller

Appearance and dimension

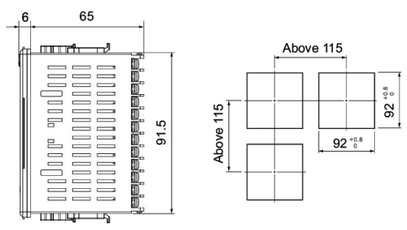
CTN4S
48×48mm



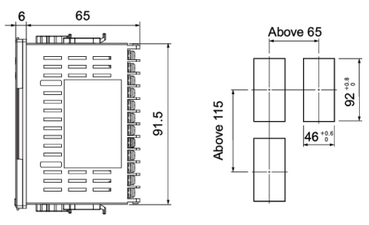
CTN4M
72×72mm



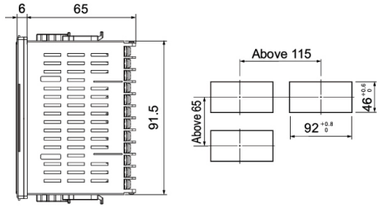
CTN4L
96×96mm



CTN4V
48×96mm



CTN4H
96×48mm



Operating interface

First display (PV)
Display measured value
Display various prompts according to the instrument status

Second display(SV)
Display given value
Display various parameter according to the instrument status

Action directive
OUT: Heating indicator, light on when it is operating
ALM1: Deviation high-limit alarm, light on when it is alarming
ALM2: Deviation low-limit alarm, light on when it is alarming

Plus key (≪)
Increase the adjustment value
Manual mode access key
Menu parameter switch key

Minus key (≪)
Decrease the adjustment value
Menu parameter switch key

Left shift (≪)
Status information view enter key
Auto-tuning state enter key

Function key (Mode)
Main menu and submenu access key
Parameter modification and confirmation key

Please scan the QR code for detailed usage parameters

Application scenario

Printing machines

Ceramic machinery

Rubber Machinery

Packaging Machinery

Injection molding machine

Food Machinery

CLN4 Intelligent Temperature Controller

Features

- High-speed sampling
- AI artificial intelligence adjustment algorithm
- Dual PID heating and cooling intelligent adjustment
- AT automatic calculation function
- 16-bit MCU high-speed operation accuracy
- Dual digital display (PV / SV)
- High-speed sampling rate of 100ms and display accuracy of 0.35%
- SSR Drive output / Relay output / Current output optional
- Terminal type wiring method conducive to wiring and maintenance

Model number structure

C LN 4 S - 4 1 1 □ □ □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Item	Code	Description
① Name of the company	C	CNTD
② Series	LN	Standard LCD dual display PID temperature controller
③ Digit	4	9999 (4 Digit)
④ Dimensions	S	48×48
	V	48×96
	M	72×72
	L	96×96
⑤ Voltage supply	2	24VAC 50/60Hz, 24-48VDC
	4	Switch power supply(100-240V AC, 50HZ)
	A-Z	Custom power supply voltage
⑥ Control output	1	Relay
	2	SSR Output
	3 □	Analog output: A: 0~20mA, 4-20mA, B: 0-5V, 1-5V
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Item	Code	Description
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	3	1-way SSR
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	A-Z	A-Z letter combination represents other or custom control output modes
⑧ Graduation	None	Thermocouple input K, E, J, L, T, R, S Thermal resistance input PT100, Cu50 (full function)
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⑨ Transmission output	None	No such function
	T	With transmission output function
⑩ Special specifications	None	No such function
	R	With RS485 communication function

Note 1: Analog output and transmission output cannot be selected at the same time;
Note 2: Due to the limited number of 48 * 48 ports, the model selection cannot be fully met. Please contact the manufacturer if necessary;
Note 3: For 48x48 size, if 485 communication is required in the control output option, only 1/2/3 can be selected, not choose 6.

CLN4 Intelligent Temperature Controller

CNTD

Electrical specification

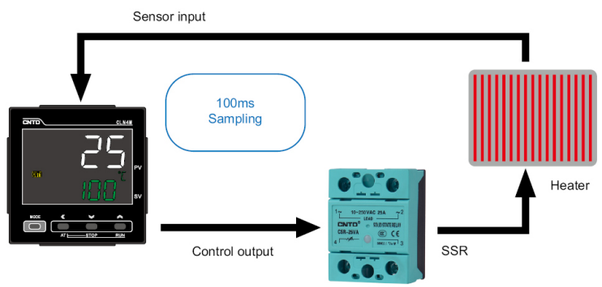
Rated voltage	100-240V AC, 50HZ
Power consumption	≤ 5VA
Rated voltage	Installation type II, Pollution degree 2
Storage Temperature	-25°C -65°C (Avoid freezing)
Esolution power	1°C , 0.1°C (Adjustable)
Wiring method	Connecting terminal
Measuring accuracy	±0.35%FS
Memory Protection	Non-volatile memory
Installation conditions	Installation type II, Pollution degree 2
Relay output	Relay contact: AC220V/DC30V,3A
Logic level output	On: DC24V; Off: dc0 Below 5V; Maximum current: 30mA, load resistance ≥ 1K

Overall dimension

Model		Shell size (length, width and height)	Hole size
CLN4S	48x48	48x48x71	45x45
CLN4V	48x96	48x96x71	46x92
CLN4M	72x72	72x72x71	68x68
CLN4L	96x96	96x96x71	92x92

High speed sampling

100ms high-speed sampling rate enables precise temperature control in applications requiring fast response speed.



CLN4 Intelligent Temperature Controller

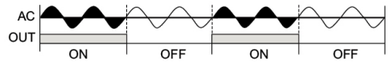
SSR drive output method

Users can choose SSR and RELAY drive output. On this basis, ON/OFF control and manual output are added to achieve ideal temperature control.

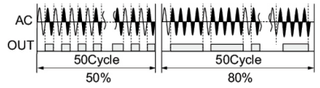
Drive output

Choose the control method

Control

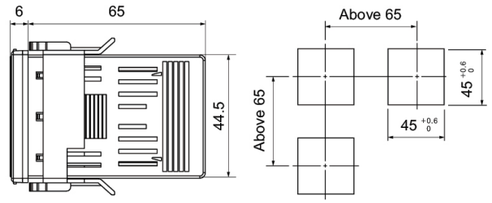


Manual output

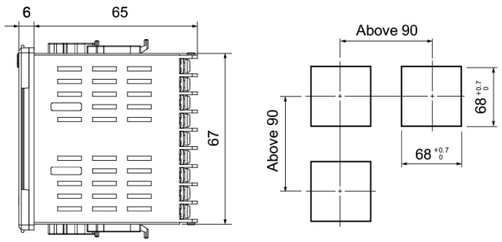


Appearance and dimension

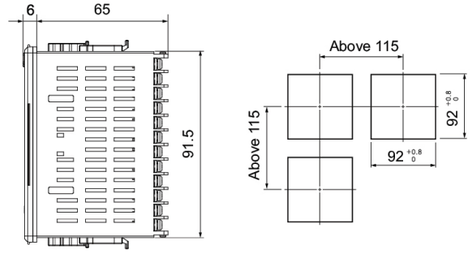
CLN4S
48×48mm



CLN4M
72×72mm



CLN4L
96×96mm

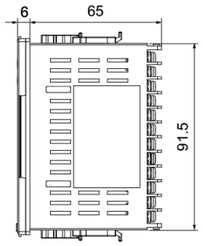


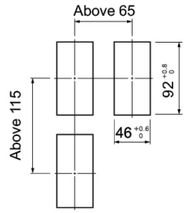
CLN4 Intelligent Temperature Controller

CNTD

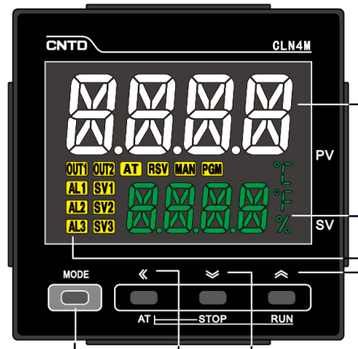
Appearance and dimension

CLN4V
48×96mm





Operating interface



First display (PV)
Display measured value
Display various prompts according to the instrument status

Second display(SV)
Display given value
Display various parameter according to the instrument status

Action directive
OUT: Heating indicator, light on when it is operating
ALM1: Deviation high-limit alarm, light on when it is alarming
ALM2: Deviation low-limit alarm, light on when it is alarming

Plus key (∧)
Increase the adjustment value
Manual mode access key
Menu parameter switch key

Minus key (∨)
Decrease the adjustment value
Menu parameter switch key

Left shift (≪)
Status information view enter key
Auto-tuning state enter key

Function key (Mode)
Main menu and submenu access key
Parameter modification and confirmation key

CME4 Modular Temperature Control Instrument

Overview

- The modular temperature control instrument is a special equipment for heating and cooling control launched by our company. It has the function of controlling multiple heating channels separately, and has the characteristics of high integration, accurate temperature control, compact size, and easy installation.It is widely used in packaging machinery, hot runner, production line and other occasions where temperature heating control is required.

Product selection

C ME 4 - 4 K 2 R - 3

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Features

- With multi-channel temperature control function, one module is equivalent to multiple temperature control meters, and the temperature control parameters of each channel are independent and do not affect each other.;
- Multi-channel intelligent temperature control algorithm, can achieve 4-channel accurate PID temperature control, can be widely used in a variety of heating models;
- With RS485 communication interface, standard modbus RTU communication protocol, easy to communicate with PLC or configuration screen, online monitoring of temperature data, real-time control by the host equipment;
- Modular structure design, optional multi-module splicing method, multiple temperature control modules are spliced through the side quick socket to achieve the effect of doubling the number of channels, multiple 4-channel modules can be spliced into 8-channel, 16-channel and more temperature control channels;
- The product has a high degree of integration and compact size. The rail-type installation method is suitable for installation places such as on-site control cabinets and power distribution cabinets.;

① Company name	C	CNTD
② Series	ME	Standard modular thermostat
	MH	High-precision modular thermostat
③ Number of channels	1	Single channel
	2	Dual channel
	4	Four channels
	8	Eight channels
	12	Twelve channels
④ Power supply voltage	2	24V AC 50/60Hz，18-32VDC
	4	100-240V AC，50/60Hz
⑤ Temperature input	K	Thermocouple (K, E, J, L, T, R, S)
	P	Thermal resistance input (PT100, Cu50)
	A	4-20mA input
⑥ Control output	1	Relay
	2	SSR output
	A	0-20mA、4-20mA
	B	0-5V、1-5V
	A-Z	A-Z letter combination represents other or custom control output modes
⑦ Communication	N	No communication output
	R	RS485 communication
⑧ Combination quick connection interface	None	No quick connection
	1	Quick connect input on the left
	2	Quick connect output on the right
	3	Left and right quick connection input and output

CME4 Modular Temperature Control Instrument

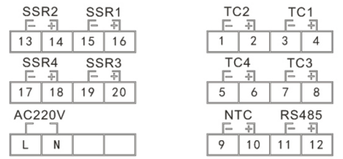
CNTD

Technical parameters

Rated voltage	100-240V AC，50Hz
Power consumption	≤5VA
Working environment	Ambient temperature: 0°C -50°C Relative humidity: 35%-85% (no condensation)
Storage temperature	-25°C -65°C (avoid freezing or condensation)
Resolution	1°C , 0.1°C (adjustable)
Wiring method	Terminal block
Detection accuracy	±0.5%FS
Memory protection	Non-volatile memory
Relay output (If the control output is a relay)	Relay contact AC220V/DC30V, 3A
Relay logic level output (If the control output is SSR)	When ON: DC12V; when OFF: below DC0.5V； Maximum current: 30mA
Thermocouple input type	K、E、J、L、T、R、S
Thermal resistance input type	PT100、Cu50

Wiring

Please refer to the wiring diagram on the side of the modular thermostat for the wiring method. The following is the explanation of the terms on the wiring diagram.:

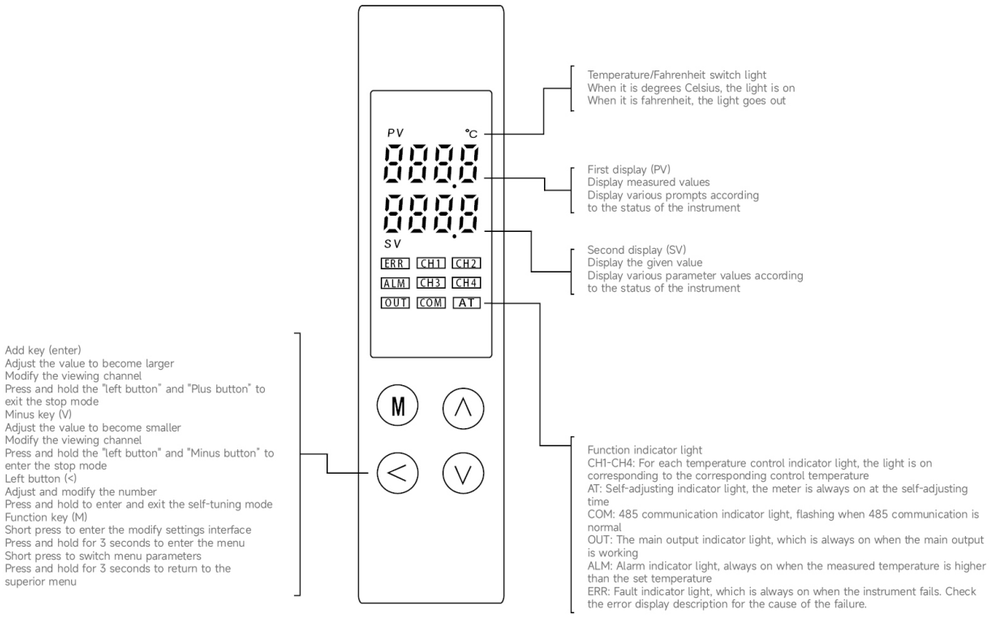


L、N	Thermostat AC220V power supply input interface, can not be divided into zero line, firewire
NTC	External cold terminal detection, can be connected to the included cold terminal resistor, the port does not distinguish between positive and negative.If the external cold terminal resistor is not connected, the internal cold terminal is automatically used
RS485	485 communication interface, you need to distinguish between positive and negative electrodes, A+, B-
TC1	The thermocouple input signal of channel 1, the positive and negative electrodes need to be distinguished
SSR1	The solid-state drive signal output of channel 1, the positive and negative electrodes need to be distinguished
AIN1	The analog input of channel 1, the default is 4-20mA signal, the positive and negative electrodes need to be distinguished
AOUT1	The analog output of channel 1, the default is 4-20mA signal, the positive and negative electrodes need to be distinguished

Note: TC1 is a channel 1 thermocouple, TC2 is a channel 2 thermocouple, and so on. SSR, AIN, and AOUT also follow this rule.

CME4 Modular Temperature Control Instrument

Control panel function description



ALM alarm parameter definition

Alarm code	Alarm form	Description
0	No alarm	No alarm output
1	Absolute upper limit alarm	Alarm when PV>ALUP
2	Alarm at the lower absolute value	Alarm when PV<ALDN
3	Deviation upper limit alarm	Alarm when PV>SV+ALUP
4	Alarm of the lower deviation limit	Alarm when PV<SV-ALDN
5	Alarm within the absolute value range	Alarm when PV<ALUP>PV>ALDN
6	Alarm outside the absolute value range	Alarm when PV>ALUP or PV<ALDN
7	Alarm within the deviation range	Alarm when PV<SV+ALUP and when PV>SV-ALDN
8	Alarm outside the deviation range	Alarm when PV>SV+ALUP or when PV<SV-ALDN
9	Absolute upper limit alarm (hold)	Alarm when PV>ALUP
10	Alarm at the lower absolute value (hold)	Alarm when PV<ALDN
11	Deviation upper limit alarm (hold)	Alarm when PV>SV+ALUP
12	Alarm of the lower limit of deviation (hold)	Alarm when PV<SV-ALDN

Note: “Hold” means power-on and power-on alarm elimination: If the thermostat is in an alarm state as soon as it is turned on, the alarm will not be carried out. The temperature control must be put into a normal state first, and the alarm condition will be reached again before the alarm will be carried out.

CME4 Modular Temperature Control Instrument

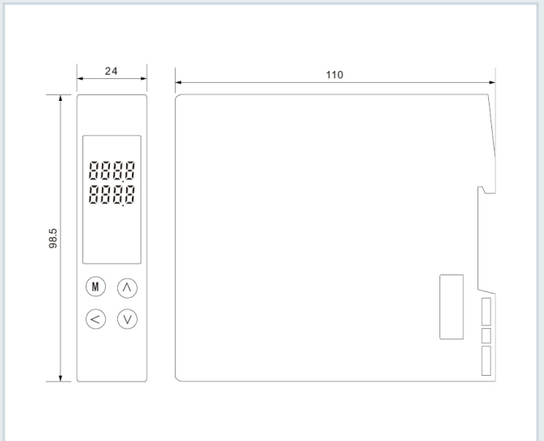
CNTD

Enter the indexing number type selection

	Input type	Symbol	Temperature measurement range
Thermocouple	K	inPK	-60-1200
	E	inPE	-60-950
	J	inPJ	-60-1150
	L	inPL	0-800
	T	inPt	-60-350
	R	inPr	0-1700
	S	inPS	0-1600

	Input type	Symbol	Temperature measurement range
Thermal resistance	PT100	Pt	-60-600
	CU	Cu	-60-150

Dimensional diagram



CTI Current Monitoring Module

Overview

- CTI series current monitoring module is a multi-channel AC current real-time monitoring and acquisition module. By collecting the signal waveform of a high-precision current transformer, the built-in 32-bit high-performance main control unit calculates the effective current value in real time, and can realize a variety of alarm logic according to user settings.Using RS-485 communication bus, data transmission is carried out through the standard MODBUS-RTU protocol.

Features

- Independent high-precision sampling of each channel;
- Has a variety of alarm logic judgment modes;
- Wide operating voltage, compatible with DC12-28V power supply;
- Sufficient threading spacing is reserved between the transformers to facilitate wiring maintenance;
- High-stability design, long-term operation without manual intervention;

Product selection

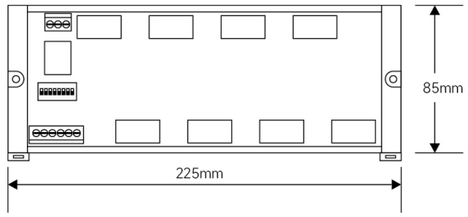
CTI - 8 RS - 100A
① ② ③

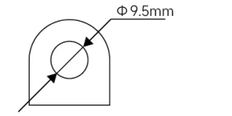
No	Item	Description
①	CTI	Current module
②	8	Number of current detection channels 4: Four-way 6: Six ways 8: Eight ways
③	100A	Upper range limit

Technical parameters

Supply voltage: DC12-28V	Power consumption: ≤ 1.5W
Working temperature: -20°C ~ 50°C	Working humidity: 15%~90% (no condensation)
Detection resolution: 0.1A	Basic error: ±1%FS
Sampling period: 100ms	Overcurrent capacity: range 150%
Input signal: 9~30V	Relay contact: AC220V/DC30V, 3A
Range range: 50A, 100A	

Dimensions

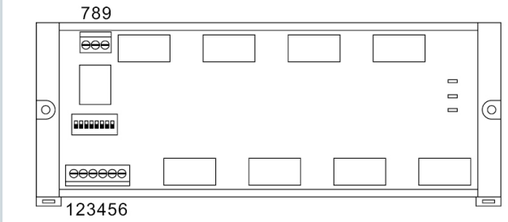




Transformer perforated inner diameter 9.5mm

Terminal definition

Terminal 1: the positive electrode of the module's power supply
Terminal 2: Negative electrode of module power supply
Terminal 3: RS485+
Terminal 4: RS485-
Terminal 5: Input signal INA
Terminal 6: Input signal INB
Terminal 7: Normally closed terminal of relay
Terminal 8: Common terminal of relay
Terminal 9: Relay normally open



Note: The input signal is internally bidirectional optocoupler, as long as a 12V or 24V voltage is connected between INA and INB, there is no need to distinguish between positive and negative electrodes.

Dial code setting

The 8th bit of the dial code of the current monitoring module is used to select the communication parameters.
When the 8th dial code is set to ON, the communication baud rate is 9600, and 8N1 has no verification.At this time, the communication address is determined by dialing code 1-dialing code 7. We regard dialing code ON as a value of 1 and dialing code OFF as a value of 0.:
Mailing address = Dial code 1+ (dial code 2×2) + (dial code 3×4) + (dial code 4×8) + (dial code 5×16) + (dial code 6×32) + (dial code 7×64)
If the 8th bit dial code is set to OFF, the communication address, baud rate, parity bit and other parameters are determined by the registers 202, 203, and 204 (see register definition for details)
Note: After adjusting the communication parameters, the module needs to be restarted to take effect!

Indicator light description

There are three indicators on the right side of the module to identify the working status.
RUN: Running state, long light indicates that the alarm is allowed, and the alarm judgment is prohibited when the short flicker is on;
COM: Communication status, flashing during communication;
ALARM: Alarm status, there is an alarm for a long time to light up;

CH6M/S Timing Counter

Application

- The timing counter can be used in industrial control occasions. It has two working modes, timing work and counting, and the corresponding functions can be selected according to the use scenario.

Features

- One-shot output time, in units of 10ms, can be set from 0.01 seconds to 99.99 seconds;
- Counter mode
  Display range 0.00001~99999.9;
  9 input modes and 11 output modes to choose from;
  BATCH counting, counting initial value setting function;
  Optional up to 10kCPS input speed;
- Timer mode
  12 time range formats are available;
  13 output modes are available;
  Wide time setting range (0.001 seconds~99999.9 hours)
  Support forward timing and countdown;
- Power-off memory function;

Product selection

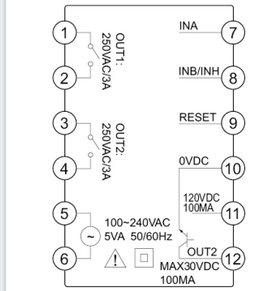
C ① H ② 6 ③ M ④ - 2P ⑤ 4 ⑥

Item	Code	Description
① Company name	C	CNTD
② Series	H	Counter/timer
③ Installation dimension	6	999999
④ Dimensions	S	DIN W48×H48mm
	M	DIN W72×H72mm
⑤ Output	1P	1 stage setting type
	2P	2-stage setting type
⑥ Supply voltage	2	24VAC 50/60Hz 24-48VDC
	4	100-240VAC 50/60Hz

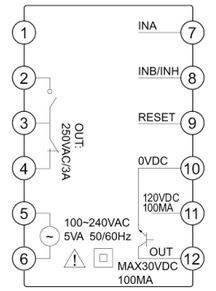
Electrical Specification

Voltage	AC power supply type	100-240VAC 50/60Hz
	DC power supply type	24VDC
Power consumption		≤ 12VA
INA/INB maximum counting speed		1cps/30cps/1Kcps/5Kcps/10Kcps can be selected
Minimum signal width	Counter	Reset input: 1ms, 20ms optional
	Timer	NA, RESET, INHIBIT, BATCH RESET reset signal: 2ms, 20ms optional
Input method		No voltage input
One-shot output time		Counter, timer, 0.01seconds~99.99 seconds
Memory storage		10 years (non-volatile semiconductor memory)
Wiring method		Terminal block
Use the surrounding humidity		-25~+70℃ (not frozen state)
Storage temperature		-30~+80℃ (not frozen state)
Humidity		35%~95%RH(Non-condensing state)

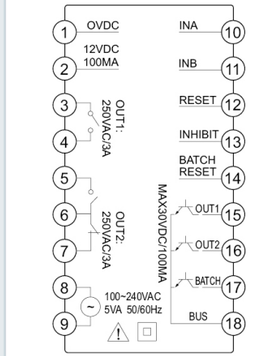
Wiring diagram



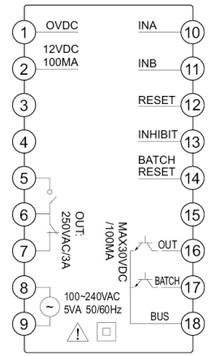
CH6S-2P



CH6S-1P

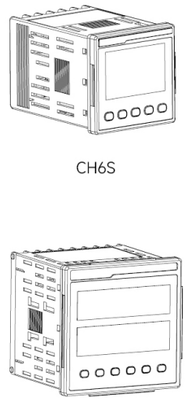


CH6M-2P



CH6M-1P

Dimensions

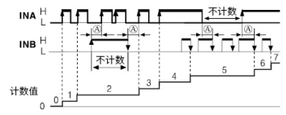
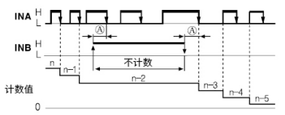
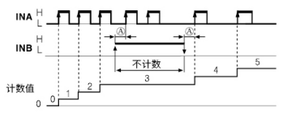
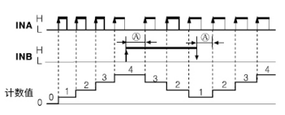
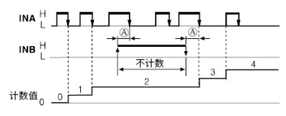
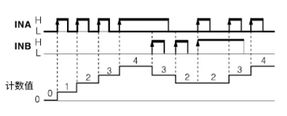
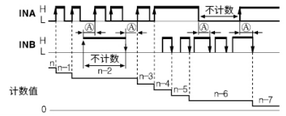
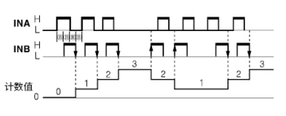
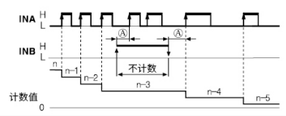


CH6S

CH6M

Model number	Panel size	Shell size (length×width ×height)	Opening size
CH6S	48×48	44.3×44.3×81	45×45
CH6M	72×72	67×67×81	68×68

Input mode (counter)

Input mode	Timing diagram	Input mode	Timing diagram
UP (Up)		dn-2 (Down-2)	
UP-1 (Up-1)		Ud-A (Up/Down-A)	
UP-2 (Up-2)		Ud-b (Up/Down-B)	
dn (Down)		Ud-C (Up/Down-C)	
dn-1 (Down-1)			

CH6M/S Timing Counter

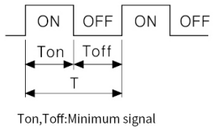
※Ⓐ is above the minimum signal width and Ⓑ is above 1/2 of the minimum signal width. When it is less than this signal width, a counting error of ±1 may occur.

※The meanings of "H" and "L" in the table below are as follows

	(PNP)	(NPN)
H	5-30VDC	(Short)
L	0-2VDC	(Open)

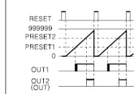
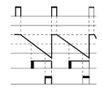
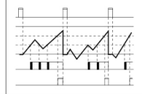
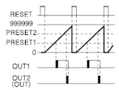
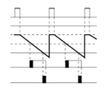
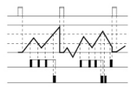
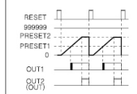
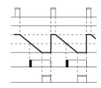
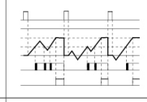
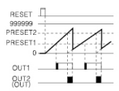
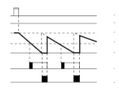
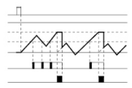
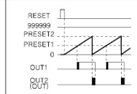
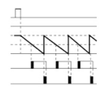
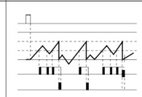
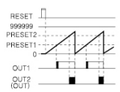
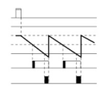
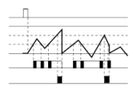
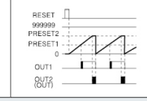
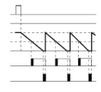
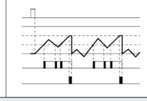
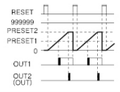
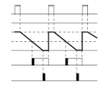
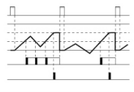
※The minimum signal width of each counting speed

Counting speed	Minimum signal width
1cps	500ms
30cps	16.7ms
1kcps	0.5ms
5kcps	0.1ms
10kcps	0.05ms



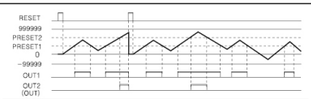
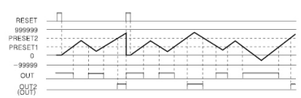
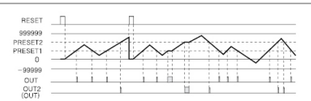
Ton,Toff:Minimum signal

Output mode (counter)

Output mode	Timing diagram			Output mode	Timing diagram		
	Up, Up-1, 2	Down, Down-1, 2	Up/Down A,B,C		Up, Up-1, 2	Down, Down-1, 2	Up/Down A,B,C
F (F)				U (K)			
n (N)				U (K)			
C (C)				q (Q)			
r (R)				A (A)			

※The OUT output in the 1-stage setting type is the same as the OUT2 output in the 2-stage setting type.
※The OUT1 output can be set to 0 in all output modes, and the corresponding value can be output.
※When the output mode is C (C),R(r),P(P),Q(q), the OUT2 output cannot be set to 0.

Output mode (counter)

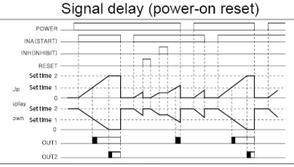
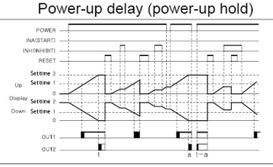
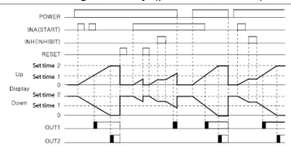
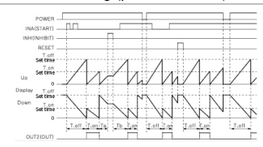
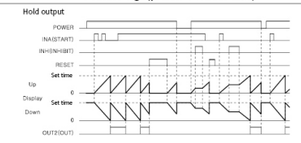
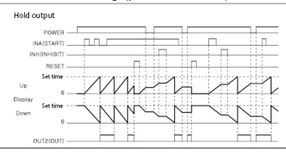
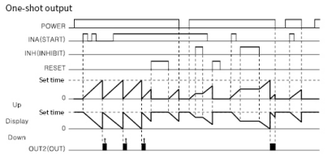
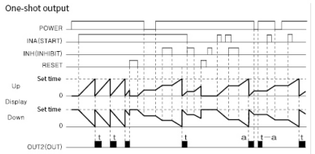
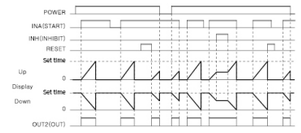
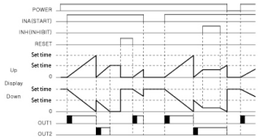
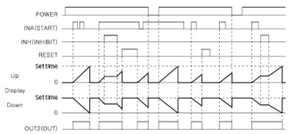
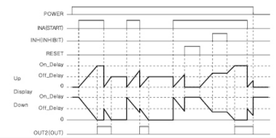
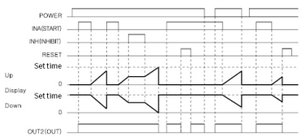
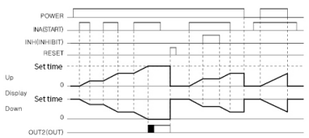
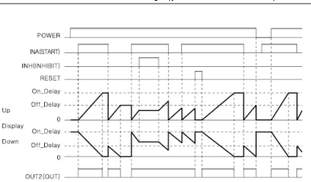
Output mode	Up/Down -A,B,C
S (S)	
t (T)	
d (D)	

※The OUT output in the 1-stage setting type is the same as the OUT2 output in the 2-stage setting type.
※In the 2-stage setting type, OUT1 can choose one-shot output or Hold output mode.
※OUT1 In all output modes, the preset value can be set to 0, and the output is consistent with the state corresponding to the preset value of 0.
※When the output mode is C (C),R(r),P(P),Q(q) , the OUT2 output cannot be set to 0.

CH6M/S Timing Counter

CNTD

Output mode (timer)

Output mode	Timing diagram	Output mode	Timing diagram
ond (OND)	Signal delay (power-on reset) 	ond.2 (OND.2)	Power-up delay (power-up hold) 
ond.1 (OND.1)	Signal delay (power-on reset) 	FLK (FLK)	Flashing (power-on reset) 
FLK.1 (FLK.1)	Flashing (power-on reset) 	FLK.2 (FLK.2)	Flashing (power-on hold) 
	One-shot output 		One-shot output 
Int (INT)	Interval (power-on reset) 	Int.2 (INT.2)	Interval 2 (power-on reset) 
Int.1 (INT.1)	Interval 1 (power-on reset) 	nFd.1 (NFD.1)	、、y 1 (power-on reset) 
oFd (OFD)	Signal OFF delay 1 (power-on reset) 	IntG (INTG)	ntegration time (power-on reset) 
nFd (NFD)	ON-OFF delay (power-on reset) 		

CDH Timer Relay

Features

- Multiple working modes
- Multiple intervals control
- Switching power supply is adopted, with wide voltage range
- Terminal type and pin type, double wiring mode, more convenient wiring and maintenance

Model description

CDH48S-1Z:
A set of time delay relay output, with reset and pause functions;
CDH48S-2Z:
Two sets of delay relay output;
CDH48S-2ZT:
Two sets of delay relay output, with reset and pause functions;
CDH48S-S:
One set of cycle delay with reset pause function;
CDH48S-2S:
Two sets of cycle delay;
CDH48S-2ST:
Two sets of cycle delay, with reset and pause functions;
CDH48S-2ZH:
One group of time delay relay output and one group of instantaneous relay output;

Product selection

C DH 48 S - □ □

① ② ③ ④ ⑤ ⑥

Item	Code	Description
① Conduit / connector size	C	CNTD
② Series	DH	Timer Relay
③ Installation dimension	48	W48xH48mm
	72	W72xH72mm
④ Installation mode	S	Panel type, 35mm guide rail type
	M	Panel type
⑤ Working mode	See model description for details	
⑥ Rated voltage	None	100-240VAC
	1	24-48VDC
	2	12VDC
	3	380VAC
	4	12VAC
	5	24VAC
	6	36VAC
	1-9 Digital combination	Custom voltage

Electrical Specification

Display digit	Four digit nixie tube display
Rated voltage	100-240VAC，50Hz
Work environment	Ambient temperature: - 25 ~ + 70 °C , relative humidity 35 ~ 95% RH (the higher the temperature, the lower the humidity, and there is no water condensation)
Wiring mode	Terminal block
Electric shock capacity	5A AC250V
Repetition error	When the delay range is greater than 1s, er ≤ 1%; When the delay range is less than 1s, Dr ≤ 50ms
Altitude	≤ 2000M
Installation mode	Panel type, 35mm guide rail type

Delay range

CDH48S Default

Switch position	Delay range
H	1M-99H99M
M	1S-99M99S
S	0.01S-99.99S

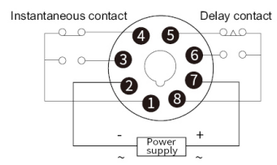
CDH48S-S

Switch position	Delay range
0.1S	0.1S-9.9S
S	1S-99S
0.1M	0.1M-9.9M
M	1M-99M
0.1H	0.1H-9.9H
H	1H-99H
10H	10H-990H

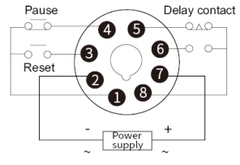
CDH48S Customized

Switch position	Delay range
M/S	1S-99M99S
H/M	1M-99H99M
0.01S	0.01S-99.99S
0.1S	0.1S-999.9S
S	1S-9999S
0.1M	0.1M-999.9M
M	1M-9999M
0.1H	0.1H-999.9H
H	1H-9999H
10H	10H-99990H

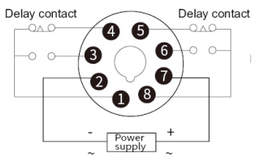
Wiring diagram



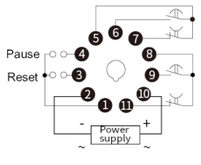
CDH48S-2ZH



CDH48S-S
CDH48S-1Z



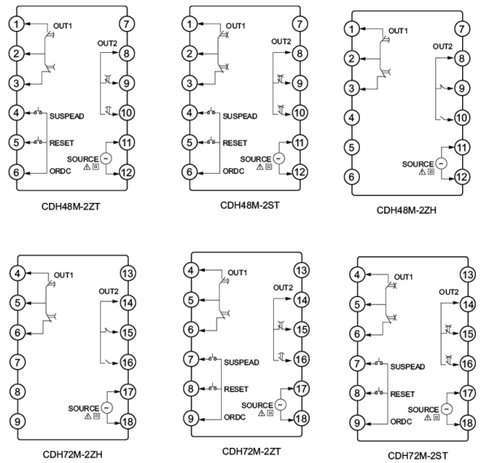
CDH48S-2S
CDH48S-2Z



CDH48S-2S
CDH48S-2Z

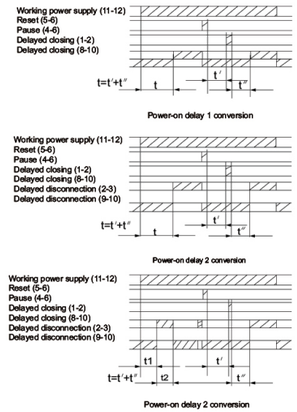
CDH Timer Relay

Wiring diagram



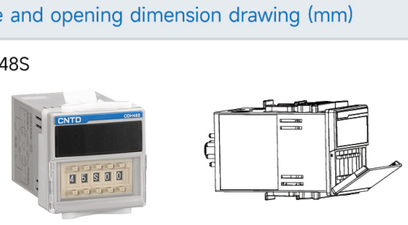
Working sequence diagram

Take CDH48M as an example:



Outline and opening dimension drawing (mm)

CDH48S



CDH72M

Model	Panel size	Shell size (H x W x L)	Opening size
CDH48S	48x48	48x48x103	45x45
CDH72M	72x72	72x72x81	68x68

Instructions

1. Delay setting:
a) Clamp the concave parts on the left and right sides of the cover plate by hand and pull outward (as shown in Figure 1);
b) Set the delay time and time period as required (as shown in Figure 2);
c) After setting, cover the cover (as shown in Figure 3).
2.According to the wiring diagram on the label of the time relay housing and the reference circuit, the wiring is correct, and the power supply voltage and frequency must meet the requirements.
3.Adjust the dial switch, preset the delay time, turn on the power supply, and the time relay starts to operate according to the working sequence.

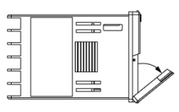


Figure 1

Figure 2

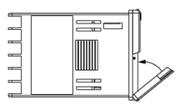
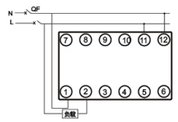
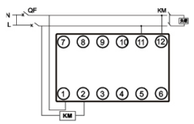


Figure 3

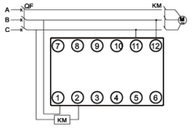
4.Due to the memory function of the time relay, the delay time shall be preset according to the above figure before power on. The preset time after power on is invalid, and the repeated start interval of the time relay shall be ≥ 0.5s.
5.Cdh48 □ - 1z Function Description: set the dial switch, turn on the power supply, start timing, reach the preset time, the indicator light in the upper left corner of the display window is on, and the delay contact is switched to realize timing control.
6.Cdh48 □ - s Function Description: see for delay setting In Figure 2 above, set T1 The time base and preset number of T2, and then turn on the power supply. The two digit nixie tubes on the right display the delay data of T2, and the T2 indicator light is on. When the delay reaches the T2 set value, the time relay acts. At the same time, the two digit nixie tubes on the left display the delay data of T1, and the T1 indicator light is on. When the delay reaches the T1 set value, the time relay releases and T2 starts to delay, so as to realize the cyclic delay control.
7.Reset function: turn on the reset terminal at any time, and the time relay will return to the initial state.
8.Pause function: in the process of timing, turn on the pause terminal, the timing will stop, and the time at the moment will be displayed. After disconnecting, continue the timing. This function can be used as a timer.
9.In strong current environment and long reset and pause termination wires, please use shielded wires.
10.Do not input voltage to reset and pause terminals to avoid damaging the product.



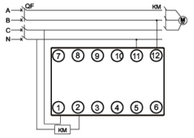
Example 1



Example 2



Example 3



Example 4

1. In case of single-phase load, if the load resistive current ≤ 3A or inductive current ≤ 0.5A, the time relay is directly controlled. Refer to example 1 for wiring; If the load resistive current is > 3A or inductive current is > 0.5A, the capacity of the time relay is expanded through the AC contactor. Refer to example 2 for wiring; In case of three-phase load, the power supply of AC contactor and time relay is AC380V. Refer to example 3 for wiring; When the power supply of AC contactor and time relay is AC220V, refer to example 4 for wiring.
2. The function of the example time relay is: when the power is connected, the load or km (AC contactor) is powered on. When the time delay reaches the preset value, the load or km (AC contactor) is powered off.
Note 1: the load can be street lamp or bulb, which can be directly connected to the two lines of the street lamp or bulb port (as shown in example 1).
Note 2: KM is the coil of AC contactor, A1 Both ends of A2 can be wired according to example 2, example 3 and example 4.
Note 3: the working power supply of time relay and KM in example 3 is AC380V. Pay attention to the voltage level of the selected product.

Please scan the QR code for detailed usage parameters

CDT6-A/B Single-Function Time Relay

Application

- Delay the connection or disconnection of the line, such as controlling the power-on time of the heating element, the working time of the water pump, and the delay disconnection of the fan.

Features

- Cost-effective, single-function time relay, the delay can be set directly through the panel knob, which is convenient and intuitive.
- 2 function modes are optional:
  A: Power-on delay
  B: Delay disconnection
- It has 1 set of delay, 2 sets of delay, 1 set of delay + 1 set of transient specifications are optional.
- Ultra-wide delay range, 0.1 seconds-10 days can be set (10 gears).
- It has AC/DC12V-240V ultra-wide operating voltage specifications to choose from.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - ① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	A	Single function time relay
		B	Single function time relay (delay off)
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
		T	1 group delay +1 group instantaneous
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		M	AC220V
		A-Z letter combination	Custom voltage

CDT6-A/B Single-Function Time Relay

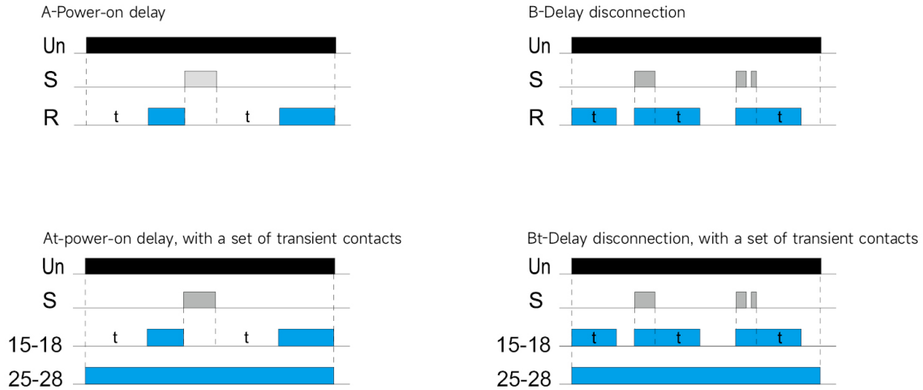
CNTD

Technical parameters

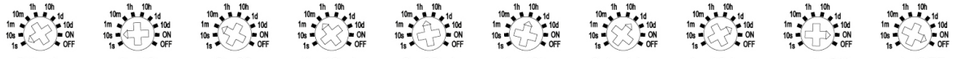
		CDT6-A1/B1	CDT6-A2/B2	CDT6-AT/BT
Function		Type A: power-on delay; type B: delay disconnection		
Power terminal		A1-A2		
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)		
Power consumption		AC 0.09-3VA/DC 0.05-1.7W		
Rated control power supply voltage	M (AC220V)	AC 220V(50-60Hz)		
Power consumption		AC max.6VA/1.3W	AC max.6VA/1.9W	
Allowable fluctuation range of power supply		-15%;+10%		
Power indicator		Green LED		
Delay range		0.1 seconds-10 days, normally open, normally closed		
Setting method		knob		
Setting accuracy		10%		
Repeatability		0.2%		
Temperature fluctuation error		0.05%°C ,at=20°C		
Output contact parameters	Number of contacts	1 set of conversions	2 sets of conversions	1 set of delay + 1 set of transient
	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC	
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC	
Minimum switching power		500mW		
Output relay indication		Red LED		
Mechanical life		1×10^7		
Electrical life (resistive load)		1×10^5		
Reset time		Maximum 200ms		
Operating ambient temperature		-20°C ~+55°C		
Storage and transportation ambient temperature		-35°C ~+75°C		
Installation method		35mm Card rail installation		
Protection level		IP20		
Installation location		Arbitrary		
Installation altitude		≤ 2000m		
Pollution level		2		
Wiring ability		$1\times2.5mm^2$or $2\times1.5mm^2$ 0.4N·m		
Dimensions		90mm×18mm×65mm		
Weight		67g	80g	

CDT6-A/B Single-Function Time Relay

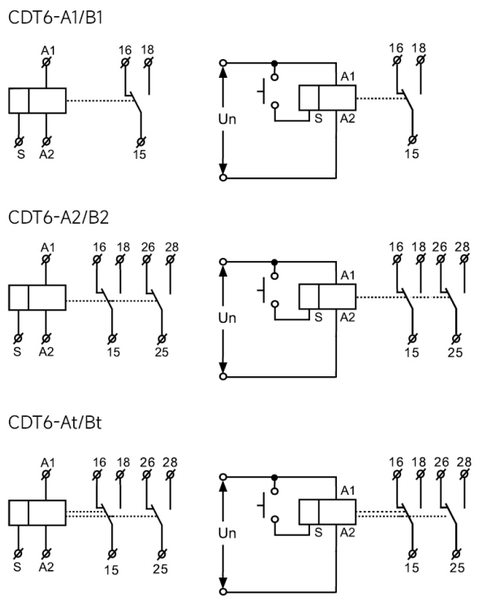
Function diagram



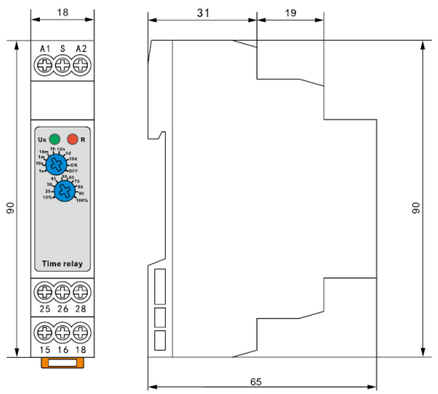
Delay setting



Wiring diagram



Shape and size (mm)



CDT6-M Multifunctional Time Relay

CNTD

Application

- The multi-function time relay can be used for industrial equipment, lighting control, heating element control, motor, and fan control. It has 10 delay modes and the delay range covers 0.1 seconds to 10 days.

Features

- 10 kinds of delay modes:
  - -5 kinds of delay modes controlled by power supply
  - -4 delay modes controlled by signal
  - -1 pulse conversion modes
- Ultra-wide delay range, 0.1 seconds-10 days can be set (10 gears).
- It has AC/DC12V-240V ultra-wide operating voltage specifications to choose from.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - M □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	M	Multi-functional time relay
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		M	AC220V
		A-Z letter combination	Custom voltage

CDT6-M Multifunctional Time Relay

Technical parameters

		CDT6-M1	CDT6-M2
Function		A,B,C,D,E,F,G,H,I,J	
Power terminal		A1-A2	
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)	
Power consumption		AC 0.09-3VA/DC 0.05-1.7W	
Rated control power supply voltage	M (AC220V)	AC 220V(50-60Hz)	
Power consumption		AC max.6VA/1.3W	AC max.6VA/1.9W
Allowable fluctuation range of power supply		-15%;+10%	
Power indicator		Green LED	
Delay range		0.1 seconds-10 days, normally open, normally closed	
Setting method		knob	
Setting accuracy		10%	
Repeatability		0.2%	
Temperature fluctuation error		0.05%°C ,at=20°C	
Output contact parameters	Number of contacts	1 set of conversions	2 sets of conversions
	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Reset time		Maximum 200ms	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm Card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$or $2\times1.5mm^2$ 0.4N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	80g

CDT6-M Multifunctional Time Relay

CNTD

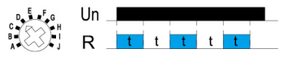
Function diagramw

A: Power-on delay
When the relay Un gets power, the relay starts to delay, and the output contact is closed after the delay T.After the relay Un is powered off, the output contact is disconnected, and the S control signal is invalid in this functional mode.

B: Delay disconnection
When the relay Un gets power, the output contacts of the relay are immediately closed and the delay begins. After the delay t, the output contacts are disconnected. If the delay time t does not reach the relay Un loses power, the output contacts are disconnected, and the S control signal is invalid in this functional mode.

C: Cycle delay (START OFF)
When the relay Un gets power, the relay starts to delay, and the output contact is closed after the delay t, and at the same time, the relay output contact is disconnected after the delay time t, and so on. The cycle is delayed until the relay Un loses power, and the S control signal is invalid in this functional mode.

D: Cycle delay (ON start)
When the relay Un gets power, the relay is closed and the delay begins. After the delay t, the output contact is disconnected. At the same time, the relay output contact is closed after the delay time t, and so on. The cycle is delayed until the relay Un loses power, and the S control signal is invalid in this functional mode.



E: Delay disconnection (the falling edge of S triggers the start)
When the relay Un is in the energized state, when the S control terminal is turned on, the relay is closed, and when the S control terminal is disconnected, the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is turned on again, and the delay t is cleared to re-delay.

F: Delay disconnection (the rising edge of S triggers the start)
When the relay Un is in the energized state, when the S control terminal is turned on, the relay is closed. At the same time, the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is turned on again, and the delay t remains unchanged. Continue to delay.

G: S falling edge triggers closure, delay disconnection
When the relay Un is in the energized state, when the S control terminal is disconnected, the relay is closed. At the same time, the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is turned on and off again, and the delay t remains unchanged. Continue to delay.

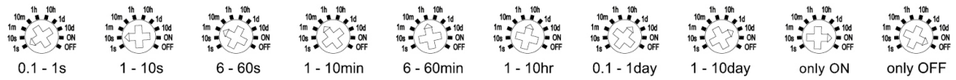
H: On-off delay
When the relay Un is in the energized state, when the S control terminal is turned on, the relay starts to delay, and the output contact is closed after the delay T. When the S control terminal is disconnected, the relay starts to delay, and the output contact is disconnected after the delay T.

I: Pulse conversion
When the relay Un is in the energized state, when the S control terminal is turned on, the state of the relay output contact transitions.

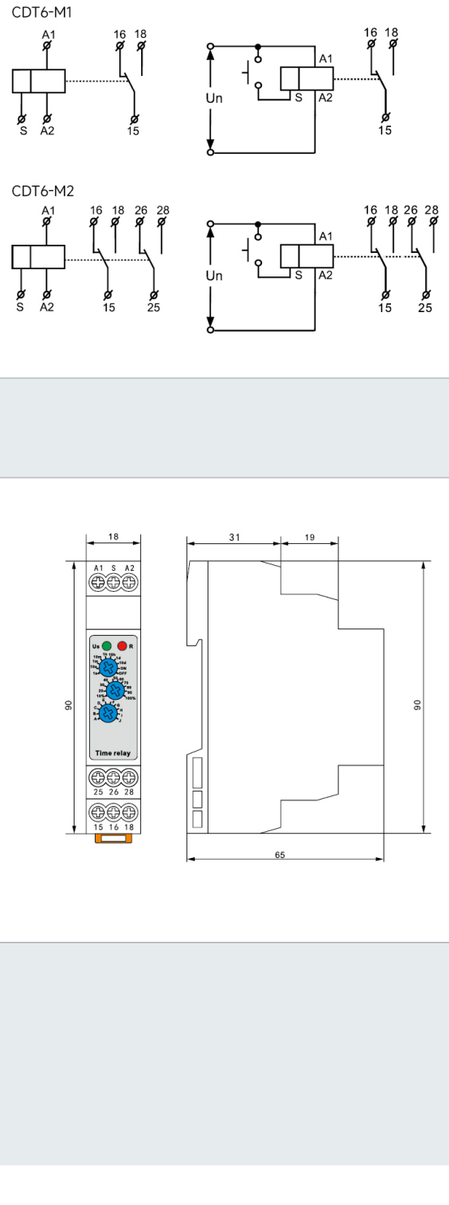
J: Pulse output
When the relay Un is powered up, the relay starts to delay. After the delay time t arrives, the relay output contact is closed for 0.5s and disconnected.

CDT6-M Multifunctional Time Relay

Delay setting



Wiring diagram



Shape and size (mm)

CDT6-EC Double Functional Time Relay

CNTD

Application

- The dual-function time relay can be used for industrial equipment, lighting control, heating element control, motor, and fan control. It has 2 delay modes, and the delay range covers 0.1 seconds to 10 days.

Features

- 2 delay modes can be set.
- At the same time, it supports two operating voltages, AC220V/ DC24V.
- Ultra-wide delay range, 0.1 seconds-10 days can be set.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - EC □ □ □
① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	EC	Dual function time relay (power delay, delay off)
③	Output the number of contact groups	1	Group 1 conversion
④	Output contact	10	Output contact 10A
⑤	Rated operating voltage	M	AC220V
		A-Z letter combination	Custom voltage

CDT6-EC Double Functional Time Relay

Technical parameters

		CDT6-EC
Function		Power-on delay, delay disconnection
Power terminal		A1-A2
Rated control power supply voltage	M (AC220V)	AC220V(50-60Hz)
Power consumption		AC 3VA 0.5W
Allowable fluctuation range of power supply		-15%;+10%
Power indicator		Green LED
Delay range		0.1 seconds-10 days
Setting method		Dial code + knob setting
Setting accuracy		5%
Repeatability		0.2%
Temperature fluctuation error		0.05%/°C ,at=20°C
Output contact parameters	Number of contacts	1 set of conversion contacts
	10A	1*10A 250VAC/24VDC
Minimum switching power		500mW
Output relay indication		Red LED
Mechanical life		1×10^7
Electrical life (resistive load)		1×10^5
Reset time		Maximum 200ms
Operating ambient temperature		-20°C ~+55°C
Storage and transportation ambient temperature		-35°C ~+75°C
Installation method		35mm Card rail installation
Protection level		IP20
Installation location		Arbitrary
Installation altitude		≤ 2000m
Pollution level		2
Wiring ability		$1\times2.5mm^2$or $2\times1.5mm^2$ 0.4N·m
Dimensions		90mm×18mm×65mm
Weight		67g

CDT6-EC Double Functional Time Relay

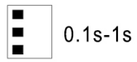
CNTD

Function diagramw

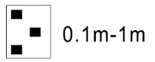
When the relay Un gets power, the relay starts to delay, and the output contact is closed after the delay T.After the relay Un is powered off, the output contacts are disconnected.

When the relay Un gets power, the output contacts of the relay are immediately closed and the delay begins. After the delay t, the output contacts are disconnected. If the delay time t does not reach the relay Un loses power, the output contacts are disconnected.

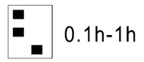
Delay setting



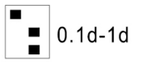
Delay range: 0.1s~1s



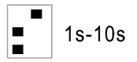
Delay range: 0.1min~1min



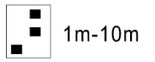
Delay range: 0.1h~1h



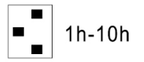
Delay range: 0.1day~1day



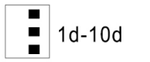
Delay range: 1s~10s



Delay range: 1min~10min

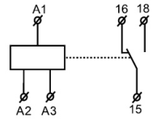


Delay range: 1h~10h

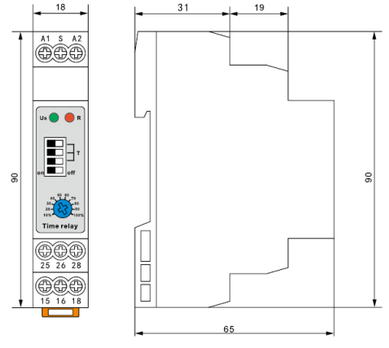


Delay range: 1day~10day

Wiring diagram



Shape and size (mm)



CDT6-K Digital Set Time Relay

Application

- The digital set time relay with digital setting can be used for industrial equipment, lighting control, heating element control, motor, and fan control. It has 4 delay modes and the delay range covers 0.1 seconds to 99 hours.

Features

- 4 delay modes can be set.
- Through the digital dial code setting, the setting is more accurate.
- Ultra-wide delay range, 0.1 seconds-99 hours can be set.
- With AC/DC12V-240V ultra-wide operating voltage specifications are optional.
- The working status of the relay is indicated by the LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - K □ □ □
① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	K	Dual function time relay (power delay, delay off)
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
④	Output contact	08	Output contact 8A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		A-Z letter combination	Custom voltage

Technical parameters

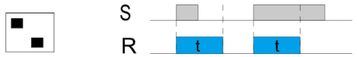
		CDT6-K1	CDT6-K2
Function		A,B,E,F	
Power terminal		A1-A2	
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)	
Power consumption		AC 0.09-3VA/DC 0.05-1.7W	
Allowable fluctuation range of power supply		-15%;+10%	
Power indicator		Green LED	
Delay range		0.1 seconds-99 hours, normally open, normally closed	
Setting method		Digital dial code setting	
Setting accuracy		1%	
Repeatability		0.2%	
Temperature fluctuation error		0.05%/°C ,at=20°C	
Output contact parameters	Number of contacts	1 set of conversion contacts	2 sets of conversion contacts
	8A	1*8A 250VAC/24VDC	2*8A 250VAC/24VDC
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Reset time		Maximum 200ms	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35 mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	80g

CDT6-K Digital Set Time Relay

Function diagramw

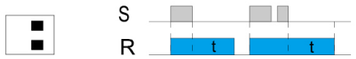
A: Power-on delay
When the relay Un gets power, the relay starts to delay, and the output contact is closed after the delay T.After the relay Un is powered off, the output contact is disconnected, and the S control signal is invalid in this functional mode.

F: Delay disconnection (the rising edge of S triggers the start)
When the relay Un is in the energized state, when the S control terminal is turned on, the relay is closed. At the same time, the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is turned on again, and the delay t remains unchanged. Continue to delay.

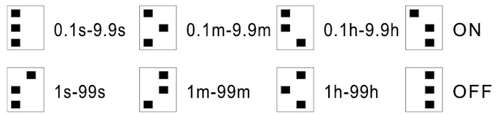


B: Delay disconnection
When the relay Un gets power, the output contacts of the relay are immediately closed and the delay begins. After the delay t, the output contacts are disconnected. If the delay time t does not reach the relay Un loses power, the output contacts are disconnected, and the S control signal is invalid in this functional mode.

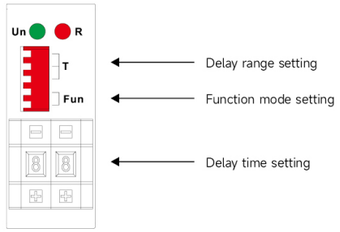
E: Delay disconnection (the falling edge of S triggers the start)
When the relay Un is in the energized state, when the S control terminal is turned on, the relay is closed, and when the S control terminal is disconnected, the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is turned on again, and the delay t is cleared to re-delay.



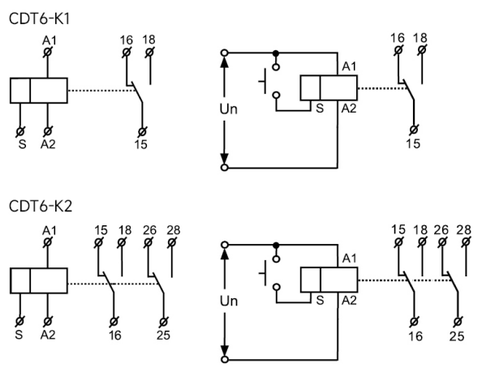
Delay setting



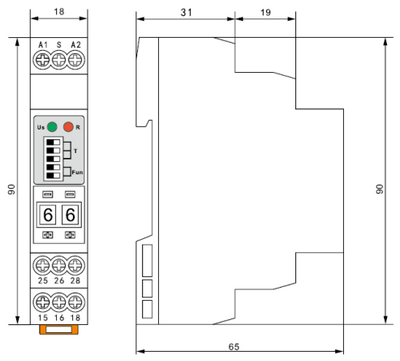
Panel diagram



Wiring diagram



Shape and size (mm)



CDT6-X Digital Display Time Relay

CNTD

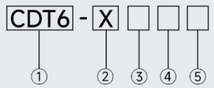
Application

- The digital display time relay can be used for industrial equipment, lighting control, heating element control, motor, and fan control. It has 20 delay modes, and the delay range covers 0.1 seconds to 99 days.

Features

- 20 kinds of delay modes:
  - -5 kinds of delay modes controlled by power supply
  - -13 delay modes controlled by signal
  - -ON, OFF mode
- Ultra-wide delay range, 0.1 seconds-99 days can be set.
- It has an ultra-wide operating voltage of AC/DC 12V-240V.
- The working status of the relay is indicated by an LED indicator.
- The ultra-small size is only 18mm wide, and the 35mm card rail is installed.

Product selection



No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	X	Digital display time relay (multi-functional)
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		M	AC220V
		A-Z letter combination	Custom voltage

CDT6-X Digital Display Time Relay

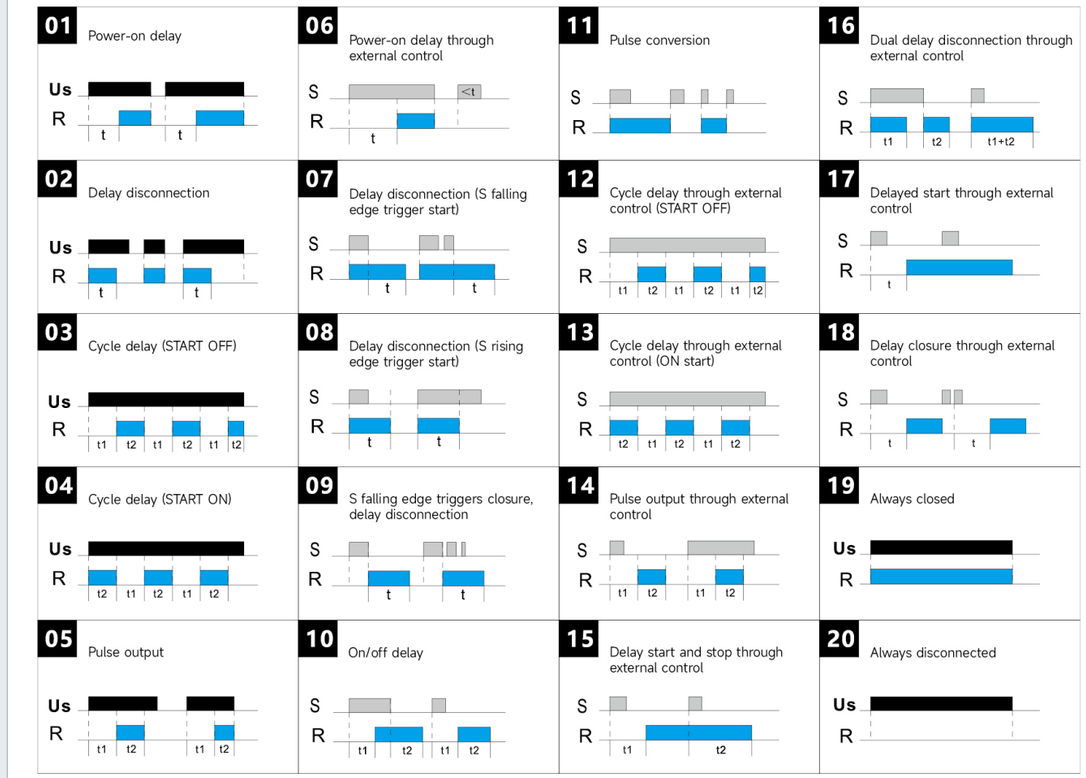
Technical parameters

		CDT6-X1	CDT6-X2
Function		20 functional modes	
Power terminal		A1-A2	
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 24-240V 50Hz	
Power consumption	W (AC/DC12V-240V)	AC 0.09-3VA/DC 0.05-1.7W	
Rated control power supply voltage	M (AC220V)	AC 220V 50Hz	
Power consumption	M (AC220V)	AC max.6VA/1.3W	AC max.6VA/1.9W
Allowable fluctuation range of power supply		-15%;+10%	
Rated impact withstand voltage		2.5kV	
Rated insulation voltage		250V	
Power indicator		Green LED	
Delay range		0.1 seconds - 99 days	
Setting method		Button setting	
Setting accuracy		2%	
Repeatability		0.2%	
Temperature fluctuation error		0.05%/°C ,at=20°C	
Output contact parameters	Number of contacts	1 set of conversion contacts	2 sets of conversion contacts
	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Reset time		Maximum 200ms	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Installation altitude		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	80g

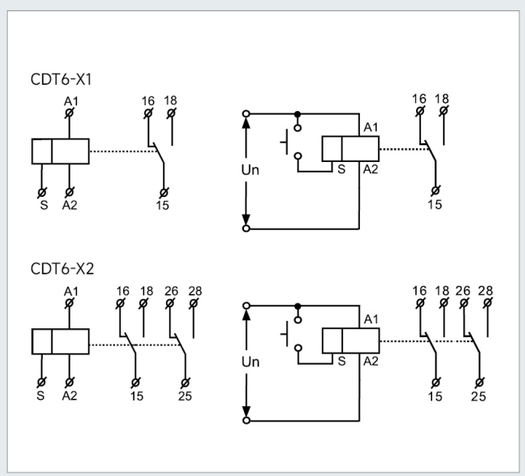
CDT6-X Digital Display Time Relay

CNTD

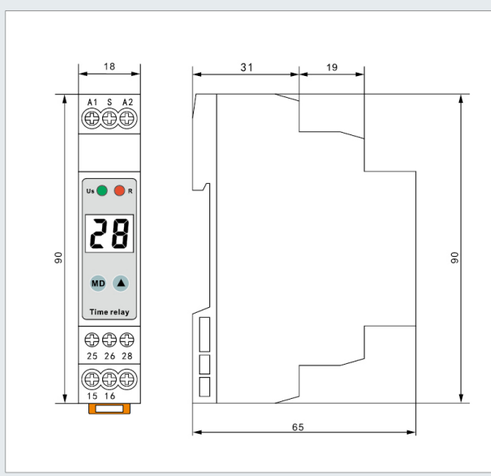
Function diagramw



Wiring diagram



Shape and size (mm)



CDT6-2T Dual Delay Type Time Relay

Application

- The dual delay time relay can set 2 sets of power-on delay time, which can be used for time-sharing input of heavy loads to prevent the peak current of the main loop from being too large.
- 2 time relays can be replaced in specific applications to save costs.

Features

- 2 sets of power-on delay settings can be set separately.
- Ultra-wide delay range, 0.1 seconds-10 days can be set (10 gears).
- It has AC/DC12V-240V ultra-wide operating voltage specifications to choose from.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - 2T □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	2T	Double delay type time relay
③	Output the number of contact groups	2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		M	AC220V
		A-Z letter combination	Custom voltage

CDT6-2T Dual Delay Type Time Relay

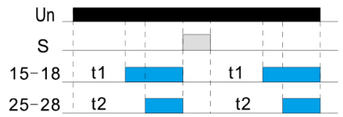
CNTD

Technical parameters

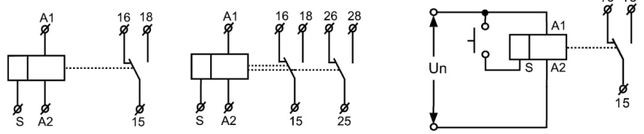
		CDT6-2T
Function		Dual-set power-on delay
Power terminal		A1-A2
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)
Power consumption		AC 0.09-3VA/DC 0.05-1.7W
Rated control power supply voltage	M (AC220V)	AC 0.09-3VA/DC 0.05-1.7W
Power consumption		AC max.6VA/1.9W
Allowable fluctuation range of power supply		-15%;+10%
Power indicator		Green LED
Delay range		0.1 seconds-10 days, normally open, normally closed
Setting method		knob
Setting accuracy		10%
Repeatability		0.2%
Temperature fluctuation error		0.05%/°C ,at=20°C (0.05%° F, at=68° F)
Output contact parameters	Number of contacts	2 sets of conversion contacts
	10A	2*10A 250VAC/24VDC
	16A	2*16A 250VAC/24VDC
Minimum switching power		500mW
Output relay indication		Red LED
Mechanical life		1×10^7
Electrical life (resistive load)		1×10^5
Reset time		Maximum 200ms
Operating ambient temperature		-20°C ~+55°C
Storage and transportation ambient temperature		-35°C ~+75°C
Installation method		35 mm card rail installation
Protection level		IP20
Installation location		Arbitrary
Installation altitude		≤ 2000m
Pollution level		2
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m
Dimensions		90mm×18mm×65mm
Weight		80g

CDT6-2T Dual Delay Type Time Relay

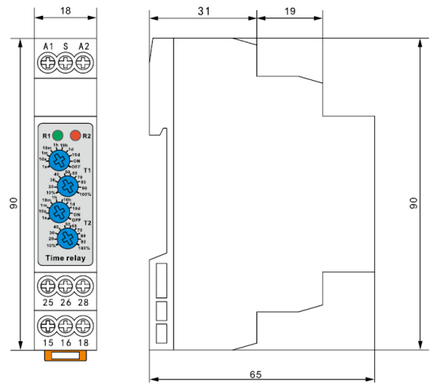
Function diagramw



Wiring diagram



Shape and size (mm)



CDT6-S Cycle Delay Type Time Relay

CNTD

Application

- Used for cycle delay control, periodic power-on, lighting control, and heating control of an electrical circuit.

Features

- There are separate delay settings for ON and OFF, and different delay times can be set.
- Ultra-wide delay range, 0.1 seconds-100 days can be set (10 gears).
- Different working modes can be switched by shorting S-A1.
- It has AC/DC 12V-240V ultra-wide operating voltage specifications to choose from.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - S □ □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	S	Cycle delay type time relay (loop delay)
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	W	AC/DC12V-240V
		M	AC220V
		A-Z letter combination	Custom voltage

CDT6-S Cycle Delay Type Time Relay

Technical parameters

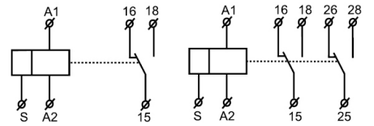
		CDT6-S1	CDT6-S2
Function		Cycle delay	
Power terminal		A1-A2	
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)	
Power consumption	W (AC/DC12V-240V)	AC 0.09-3VA/DC 0.05-1.7W	
Rated control power supply voltage	M (AC220V)	AC 220V(50-60Hz)	
Power consumption	M (AC220V)	AC max.6VA/1.3W	AC max.6VA/1.9W
Allowable fluctuation range of power supply		-15%;+10%	
Power indicator		Green LED	
Delay range		0.1 seconds - 100 days	
Setting method		knob	
Setting accuracy		10%	
Repeatability		0.2%	
Temperature fluctuation error		0.05%/°C ,at=20°C (0.05%° F, at=68° F)	
Output contact parameters	Number of contacts	1 set of conversion contacts	2 sets of conversion contacts
Output contact parameters	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC
Output contact parameters	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Reset time		Maximum 200ms	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	80g

CDT6-S Cycle Delay Type Time Relay

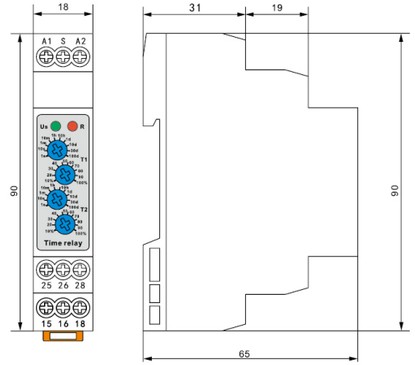
CNTD

Function diagramw

Wiring diagram



Shape and size (mm)



CDT6-P Delay Pulse Type Time Relay

Application

- Used to delay and generate a pulse, which is used to delay a certain load for a period of time.

Features

- Separate delay time and pulse width settings, different delay times can be set.
- Ultra-wide delay range, 0.1 seconds-100 days can be set (10 gears).
- The delay time can be reset by shorting S-A1.
- It has AC/DC 12V-240V ultra-wide operating voltage specifications to choose from.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - P □ □ □
① ② ③ ④ ⑤

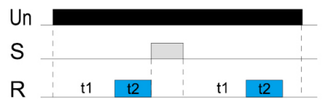
No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	P	Time delay pulse type time relay (delay pulse)
③	Output the number of contact groups	1	Group 1 conversion
		2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	M	AC220V
		W	AC/DC12V-240V
		A-Z letter combination	Custom voltage

Technical parameters

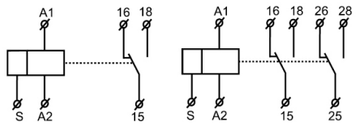
		CDT6-P1	CDT6-P2
Function		Delay pulse output	
Power terminal		A1-A2	
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)	
Power consumption		AC 0.09-3VA/DC 0.05-1.7W	
Rated control power supply voltage	M (AC220V)	AC 220V(50-60Hz)	
Power consumption		AC max.6VA/1.3W	AC max.6VA/1.9W
Allowable fluctuation range of power supply		-15%;+10%	
Power indicator		Green LED	
Delay range		0.1 seconds - 100 days	
Setting method		knob	
Setting accuracy		10%	
Repeatability		0.2%	
Temperature fluctuation error		0.05%/°C ,at=20°C (0.05%° F, at=68° F)	
Output contact parameters	Number of contacts	1 set of conversion contacts	2 sets of conversion contacts
	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Reset time		Maximum 200ms	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35 mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	80g

CDT6-P Delay Pulse Type Time Relay

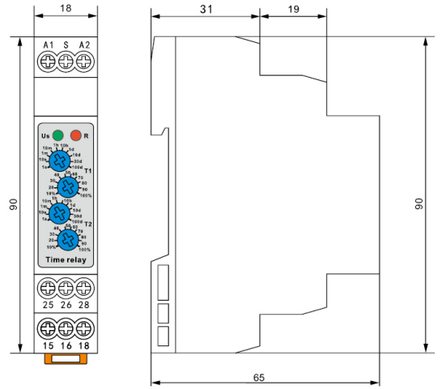
Function diagramw



Wiring diagram



Shape and size (mm)



CDT6-ST Star-Delta Relay Time Relay

CNTD

Application

- It is specially used for motor star triangle start-up control, which can greatly simplify the electrical circuit, facilitate wiring and reduce costs.

Features

- t1: The start-up delay range of 0.1s-10min can be set (knob setting).
- t2: The conversion time is 0.1s-1s can be set (knob setting).
- With AC220, AC380, AC/DC12V-240V ultra-wide operating
- voltage specifications are optional.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDT6 - ST □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description
①	Product name	CDT6	Clamp rail type time relay
②	Function code	ST	Star delta start time relay (star triangle start delay)
③	Output the number of contact groups	2	Group 2 conversion
④	Output contact	10	Output contact 10A
		16	Output contact 16A
⑤	Rated operating voltage	M	AC220V
		W	AC/DC12V-240V
		H	AC380V
		A-Z letter combination	Custom voltage

CDT6-ST Star-Delta Relay Time Relay

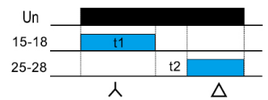
Technical parameters

		CDT6-ST
Function		Star Triangle start delay
Power terminal		A1-A2
Rated control power supply voltage	W (AC/DC12V-240V)	AC/DC 12-240V(50-60Hz)
Power consumption		AC 0.3-2VA/DC 0.1-1.2W
Rated control power supply voltage	M (AC220V) H (AC380V)	AC 220V,AC 380V(50-60Hz)
Power consumption		AC max.6VA/1.3W
Allowable fluctuation range of power supply		-15%+10%
Power indicator		Green LED
Delay range		Start-up delay: 0.1 seconds-10 minutes, conversion delay: 0.1s-1s
Setting method		knob
Setting accuracy		10%
Repeatability		0.2%
Temperature fluctuation error		0.05%/°C ,at=20°C (0.05%° F, at=68° F)
Output contact parameters	Number of contacts	2 sets of conversion contacts
	10A	2*10A 250VAC/24VDC
	16A	2*16A 250VAC/24VDC
Minimum switching power		500mW
Output relay indication		Red LED
Mechanical life		1×10^7
Electrical life (resistive load)		1×10^5
Reset time		Maximum 200ms
Operating ambient temperature		-20°C ~+55°C
Storage and transportation ambient temperature		-35°C ~+75°C
Installation method		35mm card rail installation
Protection level		IP20
Installation location		Arbitrary
Installation altitude		⩽ 2000m
Pollution level		2
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m
Dimensions		90mm×18mm×65mm
Weight		80g

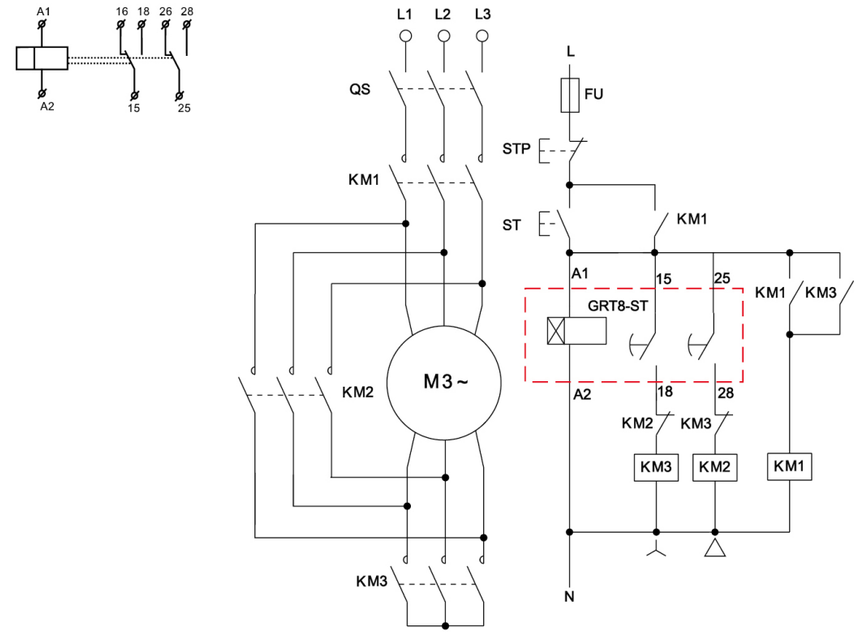
CDT6-ST Star-Delta Relay Time Relay

CNTD

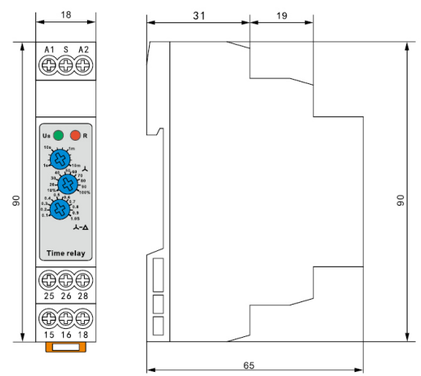
Function diagramw



Wiring diagram



Shape and size (mm)



CDT6-LS Corridor Delay Switch

Application

- Used for corridor, corridor, hall, bathroom lighting delay control.

Features

- Has three modes of operation:
  ON: The output contact remains ON, AUTO: Automatic delay control, OFF: The output contact remains OFF
- L-3 can be connected with neon light switch.
  Delay range 0.5-20min can be set (knob setting).
- Relay operating status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mount.

Product selection

CDT6 - LS 1 16

① ② ③ ④

No	Item	Description
①	CDT6 series time relay	-
②	Corridor delay switch	-
③	Output the number of contact groups	1:Group 1 conversion
④	Output contact	16:Output contact 16A

Technical parameters

	CDT6-LS
Function	Corridor delay switch
Power terminal	L-N
Rated control power supply voltage	AC220V(50-60Hz)
Power consumption	AC max.6VA-1.3W
Allowable fluctuation range of power supply	-15%+10%
Power indicator	Green LED
Delay range	AUTO:0.5-20min ON OFF

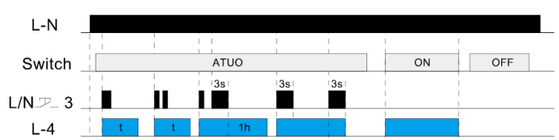
CDT6-LS Corridor Delay Switch

CNTD

Technical parameters

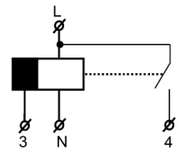
	CDT6-LS
Setting method	knob
Setting accuracy	10%
Repeatability	0.2%
Neon connection	Yes (N-3 or L-3)
Maximum number of neon connections	230V, up to 75 PCS (about 0.68mA/230VAC at neon current)
Temperature fluctuation error	0.05%/°C ,at=20°C
Output contact parameters	2 sets of conversion contacts
	16A/AC1
	250VAC/24VDC
Minimum switching power	500mW
Output relay indication	Red LED
Mechanical life	1×10^7
Electrical life (resistive load)	1×10^5
Reset time	Maximum 200ms
Operating ambient temperature	-20°C ~+55°C
Storage and transportation ambient temperature	-35°C ~+75°C
Installation method	35mm card rail installation
Protection level	IP20
Installation location	Arbitrary
Installation altitude	≤ 2000m
Pollution level	2
Wiring ability	$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.4N·m
Dimensions	90mm×18mm×65mm
Weight	61g
Meet the standard	GB/T 14048.5,IEC60947-5-1,IEC60669-2-3,EN 61812-1

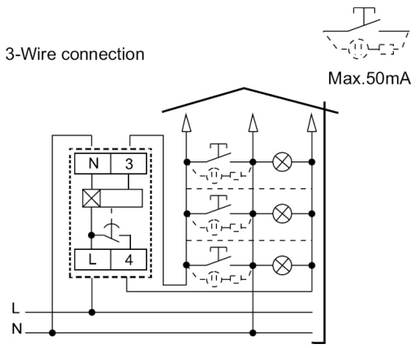
Function diagramw

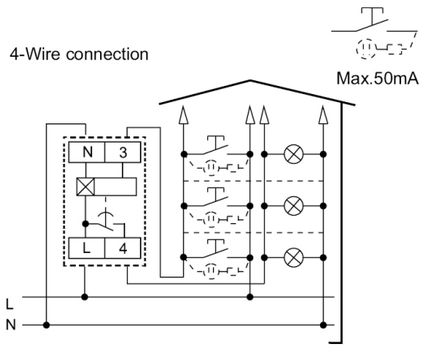


CDT6-LS Corridor Delay Switch

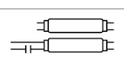
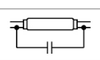
Wiring diagram



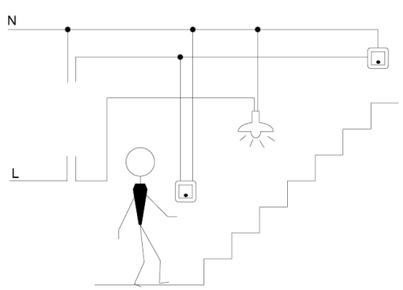




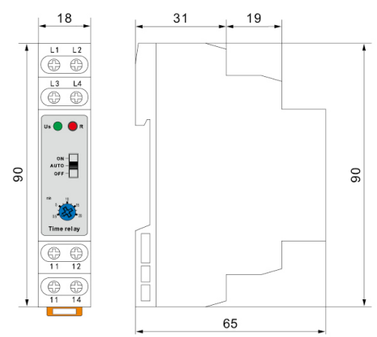
Load type

					
2000W	2000W	1000W	900W(125uF)	400W	300W

Application example



Shape and size (mm)



CDA6 AC Current Monitoring Relay

CNTD

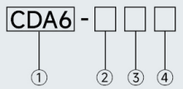
Application

- Elevator overload monitoring, light load monitoring.
- Single-phase motor monitoring current monitoring.
- Current overload/under load indication and protection.

Features

- The action delay time is adjustable from 0.1s to 10s to avoid peak current.
- The power-up delay time is adjustable from 0.1s to 10s to avoid the start-up current of the motor load.
- 6-speed current specifications are optional.
- Built-in isolated current transformer, and at the same time, an external current transformer can be connected to expand the monitoring current range.
- The working power supply voltage is AC 85-240V.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection



No	Item	Code	Description
①	Product name	CDA6	Voltage monitoring relay
②	Function code	1	Overcurrent protection
		2	Undercurrent protection
		3	Over/under current protection
		4	Overcurrent protection
③	Output contact	10	10A Output contact 10A
		16	16A Output contact 16A
④	Current detection range	A05	0.05A-0.5A
		A1	0.1A-1A
		A2	0.2A-2A
		A5	0.5-5A
		A8	0.8-8A
		A16	1.6A-16A

CDA6 AC Current Monitoring Relay

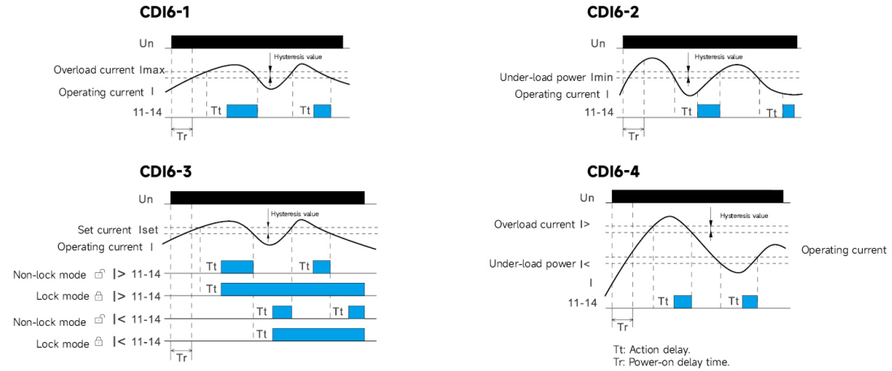
Technical parameters

		CDA6-1	CDA6-2	CDA6-3	CDA6-4
Function		Overcurrent protection	Under-current protection	Over/under current protection	Overcurrent protection
Power terminal		A1-A2			
Rated supply voltage		AC85-240V			
Rated power frequency		50/60Hz,0			
Power consumption		max 25VA			
Allowable fluctuation range of power supply		-15%;+10%			
Current setting range		0.05A-0.5A/0.1A-1A/0.2A-2A/0.5A-5A/0.8A-8A/1.6A-16A			
Measuring current frequency		AC50HZ			
Maximum passing current		1A/2A/5A/8A/12A/22A			
Current setting method		Knob setting			
Action delay time		0.1s~10 s			
Power indicator		Green LED			
Setting accuracy		10%			
Current measurement accuracy		5%（0.05-0.5A 为 10%）			
Temperature fluctuation error		<0.1%/°C			
Hysteresis value		5%			
Output contact parameters	10A	2*10A 250VAC/24VDC			
	16A	2*16A 250VAC/24VDC			
Minimum switching power		500mW			
Output relay indication		Red LED			
Mechanical life		1×10^7			
Electrical life (resistive load)		1×10^5			
Operating ambient temperature		-20°C ~+55°C			
Storage and transportation ambient temperature		-35°C ~+75°C			
Installation method		35mm card rail installation			
Protection level		IP20			
Installation location		Arbitrary			
Installation altitude		≤ 2000m			
Pollution level		2			
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m			
Dimensions		90mm×18mm×65mm			
Weight		67g			

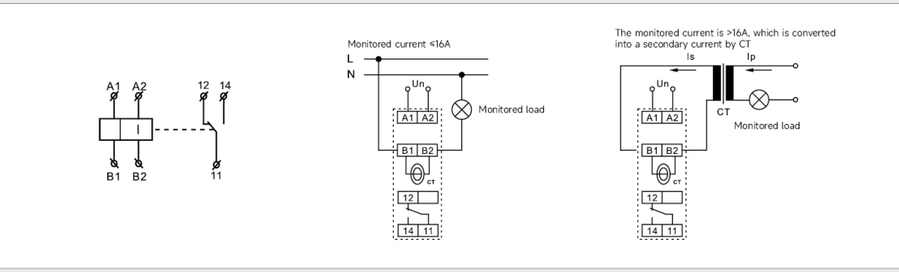
CDA6 AC Current Monitoring Relay

CNTD

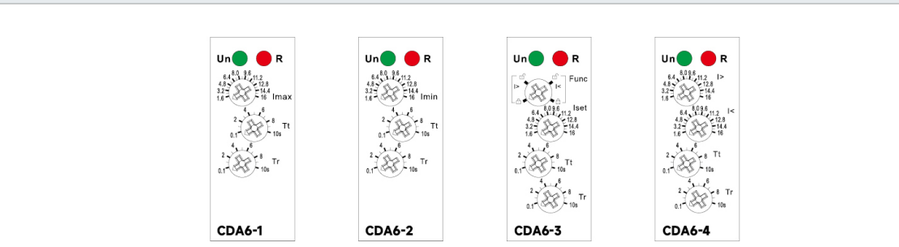
Function diagramw



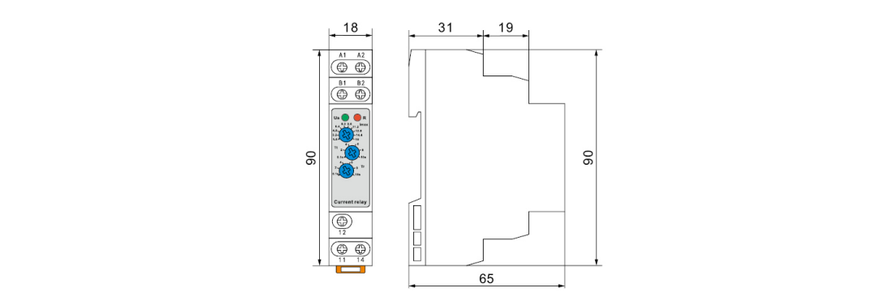
Wiring diagram



Panel diagram



Shape and size (mm)



CDA6-516 Current Monitoring Relay (Through core type)

Application

Electrical equipment overcurrent and undercurrent monitoring

Features

- Through the core design, no need to disconnect the current circuit, through the core installation is easy to use
- The jumper can set the over/undercurrent monitoring mode
- Specifications with AC/DC general detection are optional
- Using isolated current transformer, while the external current transformer can expand the monitoring current range
- Working power supply voltage AC/DC85V-240V
- Relay operating status is indicated by LED indicator
- Ultra-small size, only 18mm width, 35mm card rail mounting

Model designation

CDA6 - 516 / □

① ② ③

No	Item	Description	
①	CDA6 series current monitoring relay	-	
②	Design sequence number	-	
③	Function code	Designation	Function description
		A	AC detection type
		B	AC-DC detection type

Technical parameters

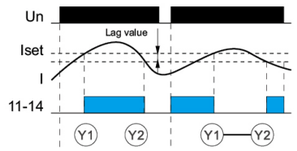
	CDA6-516
Feature	AC detection type
Power terminal	A1-A2
Rated supply voltage	AC/DC 85V-240V
Rated power frequency	50/60Hz,0
Power consumption	Max 25VA
Power supply allowed fluctuation range	-15%; +10%

Technical parameters

	CDA6-516
Current setting range	2A-20A
Measuring current frequency	AC 50Hz
Current setting mode	knob
Action delay time	0.1s~10s
Power indicator light	Green LED
Setting accuracy	10%
Current measurement accuracy	5%
Temperature fluctuation error	<0.1%/°C
Lag value	5%
Exportation	1xSPDT
	10A/AC1
	250VAC/24VDC
Minimum switching power	500mW
Output relay indication	Red LED
Mechanical life	1×10^7
Electrical life	1×10^5
Operating ambient temperature	-20°C ~+55°C
Storage and transportation ambient temperature	-35°C ~+75°C
Installation mode	35mm card rail installation
Class of protection	IP20
Installation position	Arbitrary
Installation elevation	≤ 2000m
Pollution level	2
Wiring capacity	$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m
Overall dimension	90mm×18mm×86mm
Weight	75g
Meet the standard	GB/T 14048.5,IEC60947-5-1,IEC60669-2-3,EN 61812-1

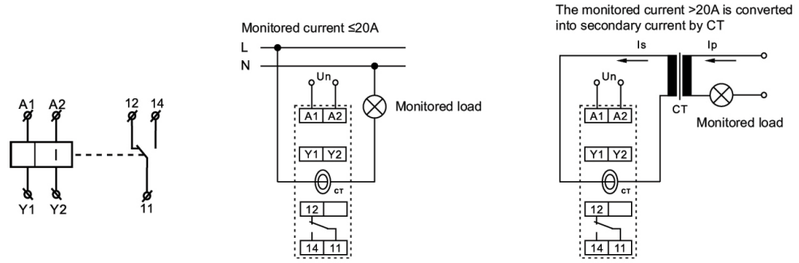
CDA6-516 Current Monitoring Relay (Through core type)

Function diagramw



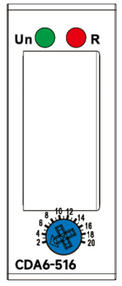
Note: Factory default Y1-Y2 no short circuit, the product is overcurrent monitoring, if you need undercurrent monitoring, please short Y1-Y2.

Wiring diagram

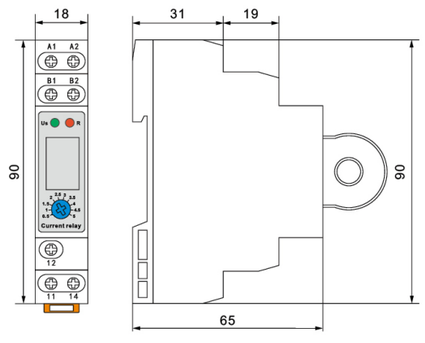


Note: CDA6-516 should pay attention to the through-center direction when detecting DC, otherwise it cannot be accurately detected, such as current less than 2A,It can be done multiple times through the heart.

Panel diagram



Shape and size (mm)



CDB6 Sensitivity Adjustable Light Control Switch

CNTD

Application

- Used for corridor, outdoor, light box automatic lighting.
- For devices that need to be turned on automatically at night.

Features

- Light sensitivity (illuminance) can be adjusted as needed.
- Built-in light detection sensor.
- Can be set to work in on-auto-off mode.
- An external switch can be used to turn off the output.
- Working power supply voltage AC110V~240V.
- The working status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mounting.

Accessory

Sensor line

Product selection

CDB6 - 1 1 16

① ② ③ ④

No	Item	Description	
①	CDB6 series light-controlled switch	-	
②	Function code	Designation	Function description
		1	2-pole liquid level monitoring
		2	1 or 2 level monitoring
③	Output the number of contact groups	Group 1 conversion	
④	Output contact	Output contact 16A	

Technical parameters

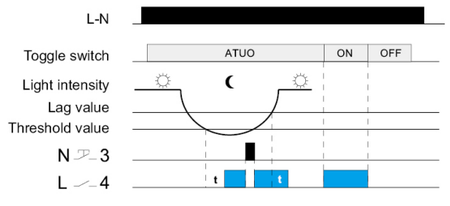
	CDB6-1116
Feature	Light-controlled switch
Power terminal	L-N
Rated supply voltage	AC 110V-240V
Rated power frequency	50/60Hz
Power consumption	Max 2VA
Power supply allowed fluctuation range	-15%; +10%

CDB6 Sensitivity Adjustable Light Control Switch

Technical parameters

	CDB6-1116
Sensitivity adjustment range	About 1-100Lx
Working mode	On-auto off can be set
Power indicator light	Green LED
Sensor detection error	±35%
Action delay time	2min
Probe lead length	Max 50m
Output contact parameters	1xSPST
	16A/AC1
	250VAC/24VDC
Minimum switching power	500mW
Output relay indication	Red LED
Mechanical life	1×10^7
Electrical life	1×10^5
Operating ambient temperature	-20°C ~+55°C
Storage and transportation ambient temperature	-35°C ~+75°C
Installation mode	35mm card rail installation
Class of protection	IP20
Installation position	Arbitrary
Installation elevation	≤ 2000m
Pollution level	2
Wiring capacity	$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m
Overall dimension	90mm×18mm×65mm
Weight	62g
Meet the standard	GB/T 14048.5, EN 60255-1

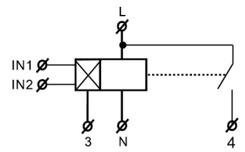
Function diagramw

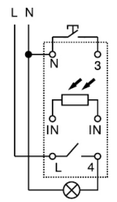


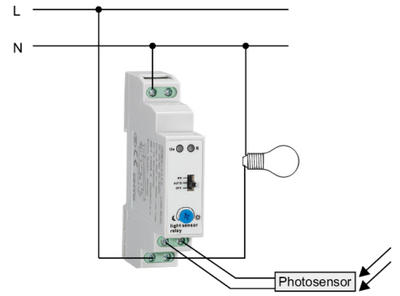
CDB6 Sensitivity Adjustable Light Control Switch

CNTD

Wiring diagram

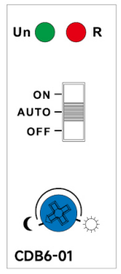




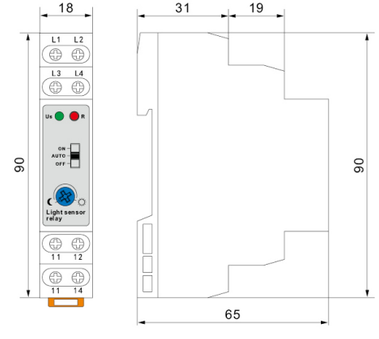


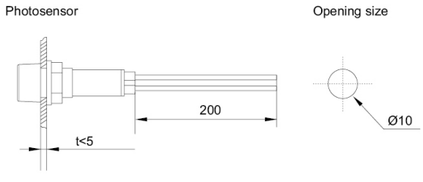
Note: If it is not necessary to connect the close control button externally, terminal 3 can be left unconnected.

Panel diagram



Shape and size (mm)



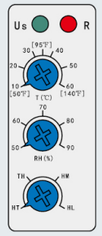


CDE6 Temperature and Humidity Controller

Features

- Four working modes are optional, and the ambient temperature and humidity thresholds can be set.
- Capacitive humidity sensor, low power consumption, stable performance;
- Passive relay output, can be used to drive cooling fan, TEC, heating wire and other devices;
- The working status of the relay is indicated by the LED indicator;
- Working power supply voltage AC 85-240V;
- Ultra-small size, only 18mm width, 35mm card rail installation;
- Applicable to control the temperature and humidity range of power distribution cabinets;

Placard



Model designation

CDE6 - 1 10 M

① ② ③ ④

No	Item	Designation	Description
①	Product name	CDE6	Clamp rail temperature and humidity controller
②	Function code	1	1 group output
③	Output contact	10	Output contact 10A
④	Rated operating voltage	M	AC85-240V 50/60Hz
	Design sequence number	A-Z letter combination	Custom voltage

Common model

Product Model	Function	Output contact parameter	Rated voltage
CDE6-110M	Temperature and humidity control	Output contact 10A	AC220V 50/60Hz

Technical parameters

Feature	Temperature and humidity control
Power terminal	A1-A2
Rated operating voltage	AC85-240V 50/60Hz
Power consumption	<1.7W
Power indicator light	Green LED
Relay status light	Red LED

CDE6 Temperature and Humidity Controller

CNTD

Technical parameters

Set range	Temperature	10 °C ~60 °C
	Humidness	50%~90%RH
Precision error	Temperature	±2°C
	Humidness	±3% (20%-80% range),±7% (<20% or >80%)
Output contact parameters		1 set output, 10A 250VAC/24VDC
Operating ambient temperature		-20 °C ~+ 55°C
Storage and transportation ambient temperature		-35 °C ~+75°C
Installation mode		35mm card rail installation
Installation elevation		≤ 2000m
Pollution level		2
Wiring capacity		1x2.5mm^2 or 2x1.5mm^2 0.4N·m
Overall dimension		90mm×18mm×50mm
Weight		65g

Working mode

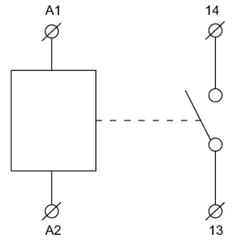
HT: RH > RHset or Tamb > Tset, the relay draws when the humidity is greater than the set humidity or temperature is greater than the set temperature.

TH: RH > RHset or Tamb < Tset, the relay draws when the humidity is greater than the set humidity or the temperature is less than the set temperature.

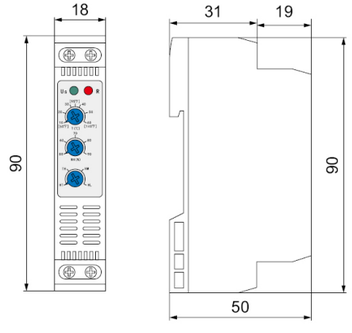
HL: RH < RHset, the relay draws when the humidity is less than the set humidity.

HM: RH > RHset, the relay draws when the humidity is greater than the set humidity.

Wiring diagram



Shape and size (mm)



Precautions for use

The installation position must be well ventilated and ventilated. Do not be near the heat source to avoid affecting the accuracy of temperature and humidity detection.
(Other general notes are copied)

CDV6 Single-Phase Voltage Monitoring Relay

Application

- Used for overvoltage protection of electrical equipment or compressors.
- Switching control of emergency/backup power supply.

Features

- Monitor its own operating voltage (true RMS measurement)
- The working mode can be selected through the knob.
- The voltage measurement accuracy is ≤1%.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDV6 - □ □ - □
① ② ③ ④

No	Item	Code	Description		
①	Product name	CDV6	Voltage monitoring relay		
②	Fonction code	1	Overvoltage/undervoltage is selected by knob		
		2	It also has over and under voltage function		
③	Output contact	10	Output contact 10A		
		16	Output contact 16A		
④	Rated operating voltage	Code name	Rated supply voltage	Limit operating voltage	Set voltage range
		D12	DC12V	DC 7...20V	DC 9...15V
		AD48	AC/DC 24...48V	AC/DC 15...270V	AC/DC 20...80V
		AD240	AC/DC 110...240V	AC/DC 50...270V	AC/DC 65...260V
		A220	AC 220V	AC 160...270V	AC 180...260V

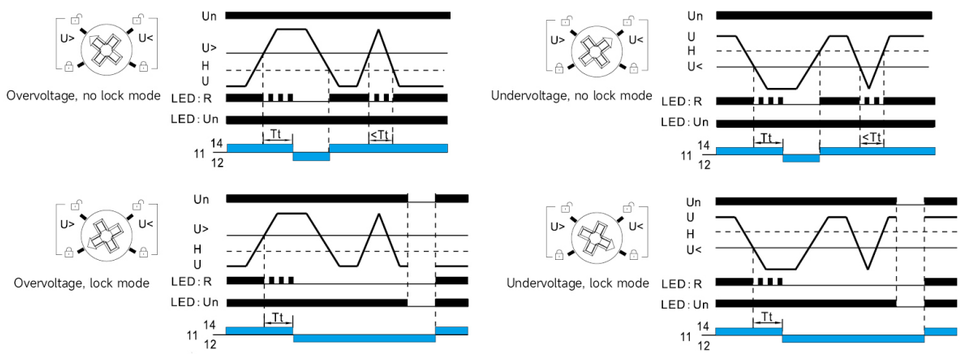
Technical parameters

		CDV6-01	CDV6-02
Function		Voltage monitoring	
Power terminal (monitoring terminal)		A1(+)-A2(-)	
Rated supply voltage		DC12V,AC/DC24V-48V,AC/DC110V-240V,AC220V	
Rated power frequency		45Hz-65Hz,0	
Rated insulation voltage		460V	
Hysteresis value		5%-20%	3% fixed
Power indicator		Green LED	
Action delay time		0.1s-10s,10%	
Voltage measurement error		≤ 1%	
Power-on delay time		0.5s	
Knob setting accuracy		10%	
Reset time		1s	
Temperature fluctuation error		0.05%/°C ,at=20°C	
Output contact parameters	10A	1*10A 250VAC/24VDC	2*10A 250VAC/24VDC
	16A	1*16A 250VAC/24VDC	2*16A 250VAC/24VDC
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	

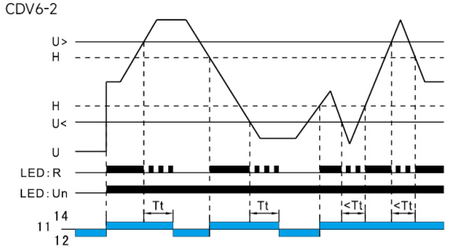
CDV6 Single-Phase Voltage Monitoring Relay

Function diagramw

CDV6-1

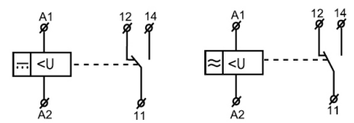


CDV6-2

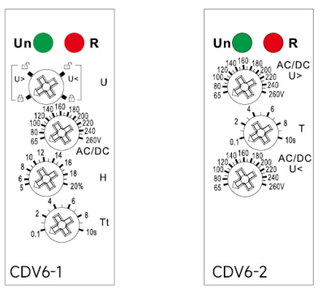


U>: Overvoltage threshold
U<: Undervoltage threshold
H : Hysteresis value
U : Operating voltage value
Tt : Action delay time

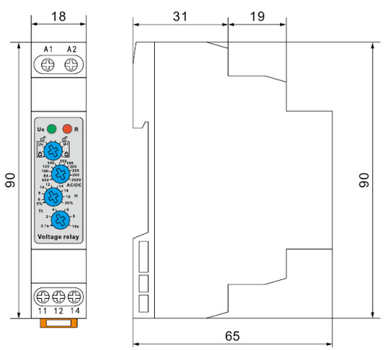
Wiring diagram



Panel diagram



Shape and size (mm)



CDV6 Three-Phase Voltage Monitoring Relay

CNTD

Application

- Used for equipment protection and control (tower cranes, air conditioners, elevators, agricultural equipment, refrigerated trucks).
- Protect the equipment to prevent accidents caused by reverse operation.
- Normal/emergency power switch.
- Prevent phase disconnection of the power load.

Features

- Monitor its own operating voltage (true RMS measurement), 45Hz~65Hz wide frequency measurement.
- 8 kinds of rated voltages are adjustable, suitable for voltages in various regions of the world.
- 3-phase 3-wire and 3-phase 4-wire specifications are optional.
- The voltage measurement accuracy is ≤1%.
- It has an anti-harmonic model, which is optimized for high anti-interference occasions.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDV6 - □ □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description					
①	Product name	CDV6	Voltage monitoring relay					
②	Function code	Function code	Overvoltage	Undervoltage	Voltage imbalance	Action delay	Phase sequence protection	Phase-off protection
		3	-	-	-	-	•	•
		4	2%...20%	-20%...2%	-	0.1s...10s	•	•
		5	2%...20%	-20%...2%	8%	0.1s..10s	•	•
		6	2%...20%	-20%...2%	5%...15%	2s	•	•
		7	-	-	5%...15%	0.1s...10s	•	•
		8	15%	-15%	8%	2s	•	•
③	Output contact	16	Output contact 16A					
④	Form	None	Common type					
		X	Anti-harmonic type					
⑤	Rated operating voltage	Code name	Rated voltage gear					
		P	220-230-240-380-400-415-440-460VAC(P-P)					
		N	127-132-138-220-230-240-254-265VAC(P-N)					

CDV6 Three-Phase Voltage Monitoring Relay

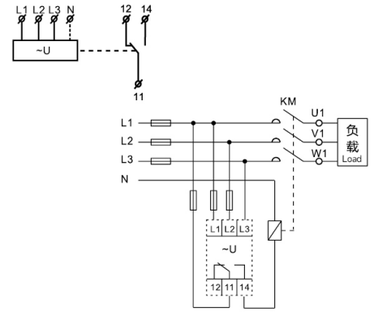
Technical parameters

		P	N
Function		Monitor L-L voltage (3-phase 3-wire system)	Monitor L-N voltage (3-phase 4-wire system)
Monitoring terminal		L1-L2-L3	L1-L2-L3-N
Power supply		L1-L2	L1-N
Rated operating voltage selection		220-230-240-380-400 -415-440-460(P-P)	127-132-138-220-230 -240-254-265(P-N)
Measuring frequency range		45Hz-65Hz	
Measuring range		176V-552V	101V-318V
Voltage threshold range		2%-20% (rated voltage)	
Unbalanced value threshold range		5%-15%	
Voltage fixed hysteresis rate		2%	
Power indicator		Green LED	
Action delay time		0.1s - 10s(Adjustable)	
Voltage measurement error		≤ 1%	
Power-on delay time		0.5s	
Knob setting accuracy		10%	
Reset time		1s	
Temperature fluctuation error		0.05%/°C ,at=20°C	
Output contact parameters	16A	2*16A 250VAC/24VDC	
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	

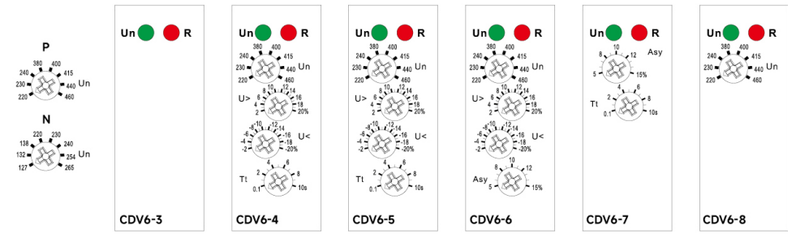
CDV6 Three-Phase Voltage Monitoring Relay

CNTD

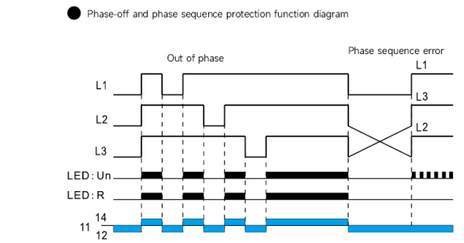
Wiring diagram

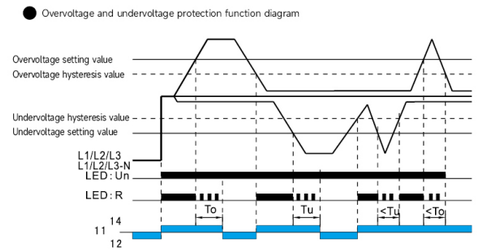


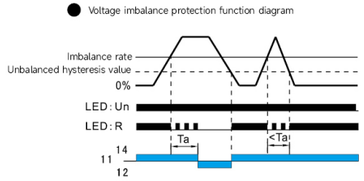
Panel diagram



Function diagramw

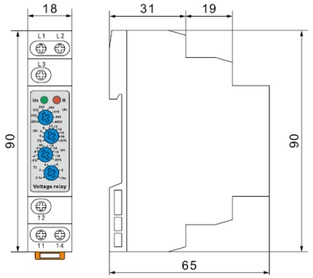






To: The delay time of overvoltage operation.
Tu: The delay time of undervoltage operation.
Ta: Unbalanced action delay time.

Shape and size (mm)



CDV6 Three-Phase Voltage Monitoring Relay (2 Sets Of Outputs)

Application

- Used for equipment protection and control (tower cranes, air conditioners, elevators, agricultural equipment, refrigerated trucks).
- Protect the equipment to prevent accidents caused by reverse operation.
- Normal/emergency power switch.
- Prevent phase disconnection of the power load.

Features

- Monitor its own operating voltage (true RMS measurement), 45Hz ~ 65Hz wide frequency measurement.
- Two sets of output contacts are used for protection and fault alarm.
- 8 kinds of rated voltages are adjustable, suitable for voltages in various regions of the world.
- 3-phase 3-wire and 3-phase 4-wire specifications are optional.
- The voltage measurement accuracy is ≤1%.
- Anti-harmonic design, optimized for high anti-interference occasions.
- The working status of the relay is indicated by an LED indicator.
- Ultra-small size, only 18mm width, 35mm card rail installation.

Product selection

CDV6 - □ □ □ □

① ② ③ ④ ⑤

No	Item	Code	Description					
①	Product name	CDV6	Voltage monitoring relay					
②	Function code	Function code	Overvoltage	Undervoltage	Voltage imbalance	Action delay	Phase sequence protection	Phase-off protection
		3D	-	-	-	-	•	•
		4D	2%...20%	-20%...2%	-	0.1s...10s	•	•
		5D	2%...20%	-20%...2%	8%	0.1s..10s	•	•
		6D	2%...20%	-20%...2%	5%...15%	2s	•	•
		7D	-	-	5%...15%	0.1s...10s	•	•
		8D	15%	-15%	8%	2s	•	•
③	Output contact	08	Output contact 8A					
④	Form	None	Common type					
		X	Anti-harmonic type					
⑤	Rated operating voltage	Code name	Rated voltage gear					
		P	220-230-240-380-400-415-440-460VAC(P-P)					
		N	127-132-138-220-230-240-254-265VAC(P-N)					

CDV6 Three-Phase Voltage Monitoring Relay (2 Sets Of Outputs)

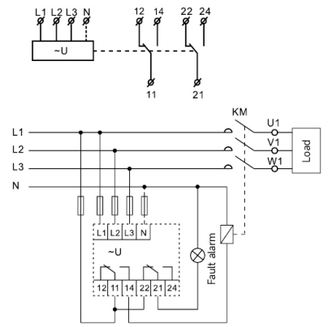
CNTD

Technical parameters

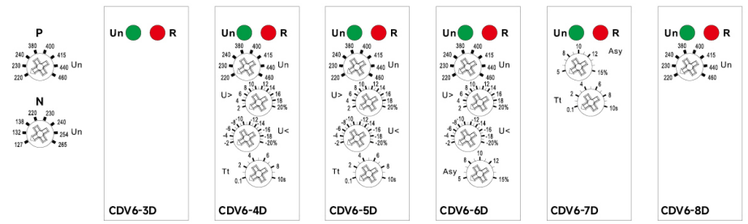
		P	N
Function		Monitor L-L voltage (3-phase 3-wire system)	Monitor L-N voltage (3-phase 4-wire system)
Monitoring terminal		L1-L2-L3	L1-L2-L3-N
Power supply		L1-L2	L1-N
Rated operating voltage selection		220-230-240-380-400 -415-440-460(P-P)	127-132-138-220-230 -240-254-265(P-N)
Measuring frequency range		45Hz-65Hz	
Measuring range		176V-552V	101V-318V
Voltage threshold range		2%-20% (rated voltage)	
Unbalanced value threshold range		5%-15%	
Voltage fixed hysteresis rate		2%	
Power indicator		Green LED	
Action delay time		0.1s - 10s(Adjustable)	
Voltage measurement error		≤ 1%	
Power-on delay time		0.5s	
Knob setting accuracy		10%	
Reset time		1s	
Temperature fluctuation error		0.05%/°C ,at=20°C	
Output contact parameters	8A	2*8A 250VAC/24VDC	
Minimum switching power		500mW	
Output relay indication		Red LED	
Mechanical life		1×10^7	
Electrical life (resistive load)		1×10^5	
Operating ambient temperature		-20°C ~+55°C	
Storage and transportation ambient temperature		-35°C ~+75°C	
Installation method		35mm card rail installation	
Protection level		IP20	
Installation location		Arbitrary	
Installation altitude		≤ 2000m	
Pollution level		2	
Wiring ability		$1\times2.5mm^2$ or $2\times1.5mm^2$ 0.8N·m	
Dimensions		90mm×18mm×65mm	
Weight		67g	

CDV6 Three-Phase Voltage Monitoring Relay (2 Sets Of Outputs)

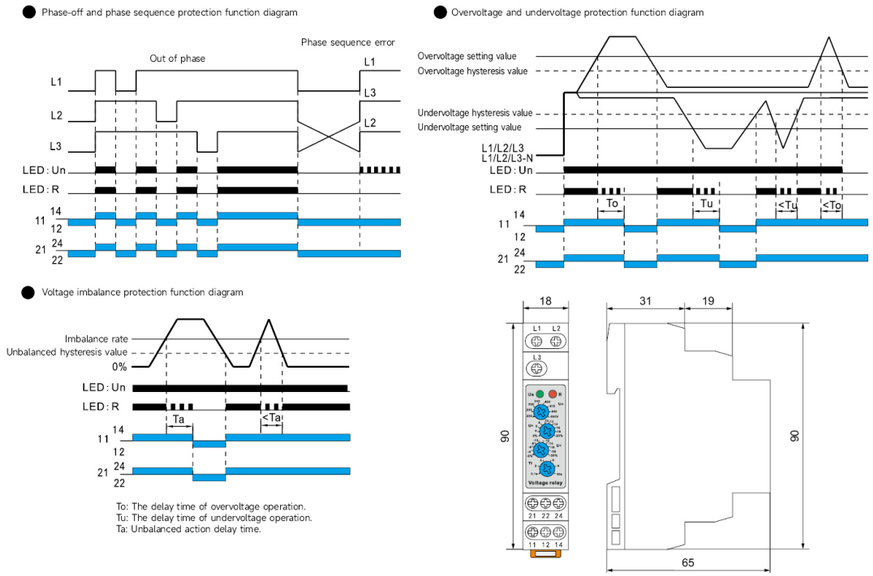
Wiring diagram



Panel diagram



Function diagram



CDL6 Water Level Relay

CNTD

Application

- Liquid level detection

Features

- The following two modes of operation can be implemented on one specification:
  2-pole level control
  1 pole liquid level control
- Drainage and water supply mode can be set.
- Action delay 0.1s-10s adjustable.
- Working power supply voltage AC/DC 85~240V, isolated power supply design.
- Relay operating status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mounting.

Model designation

CDL6 - 1 1 16
① ② ③ ④

No	Item	Description	
①	CDL6 series water level relay	-	
②	Function code	Designation	Function description
		1	2-pole liquid level monitoring
		2	1 or 2 level monitoring
③	Output the number of contact groups	Group 1 conversion	
④	Output contact	Output contact 16A	

Technical parameters

	CDL6-1116	CDL6-2116
Feature	2-pole liquid level monitoring	1 or 2 level monitoring
Power terminal	A1-A2	
Rated supply voltage	AC/DC 24V-240V(50-60Hz)	
Power consumption	Max 2VA	

CDL6 Sensitivity Adjustable Level Relay

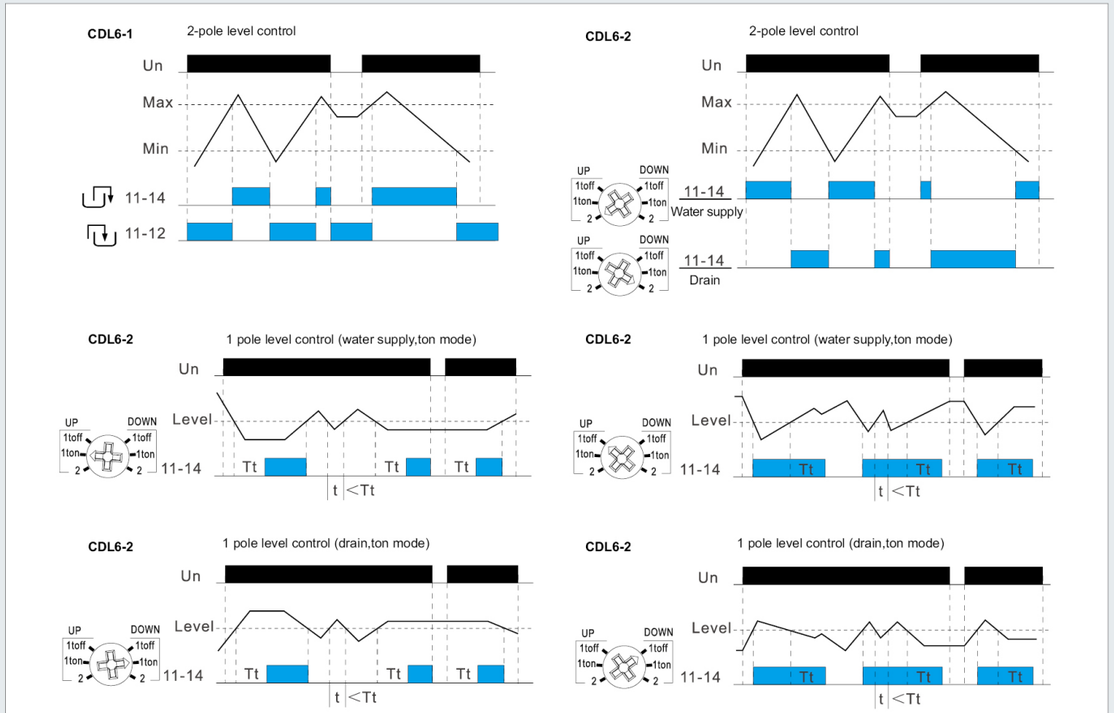
Technical parameters

	CDL6-1116	CDL6-2116
Power supply allowed fluctuation range	-15%;+10%	
Electrode detection voltage	Max.AC5V	
Electrode current	AC<0.1mA	
Response time	Max.400ms	
Electrode cable allowable distributed capacitance (Max.)	800nF(sensitivity max),100nF(sensitivity min)	
Electrode cable length	Up to 100 meters	
Action delay time	0.1s-10s (adjustable)	
Setting accuracy	10%	
Output contact parameters	1xSPDT	
	10A/AC1	
	250VAC/24VDC	
Minimum switching power	500mW	
Output relay indication	Red LED	
Mechanical life	$1x10^7$	
Electrical life	$1x10^5$	
Operating ambient temperature	-20° C ~+55° C	
Storage and transportation ambient temperature	-35° C~+75° C	
Installation mode	35mm card rail installation	
Class of protection	IP20	
Installation position	Arbitrarily	
Installation elevation	≤ 2000 m	
Pollution level	2	
Wiring capacity	1x2.5mm^2 or 2x1.5mm^2 0.4N·m	
Overall dimension	90mm×18mm×65mm	
Weight	61g	81g
Meet the standard	GB/T 14048.5, EN 60255-1	

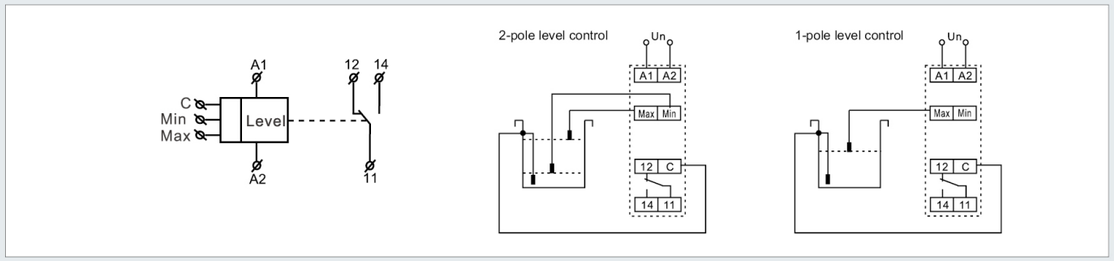
CDL6 Sensitivity Adjustable Level Relay

CNTD

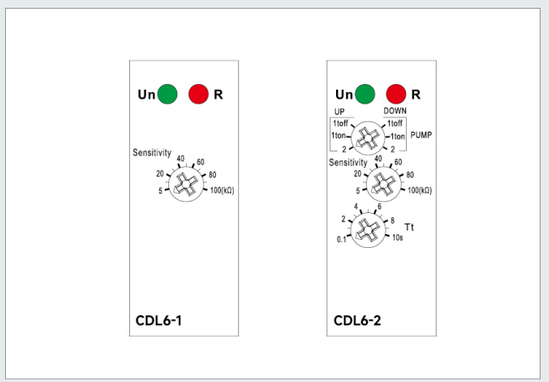
Function diagramw



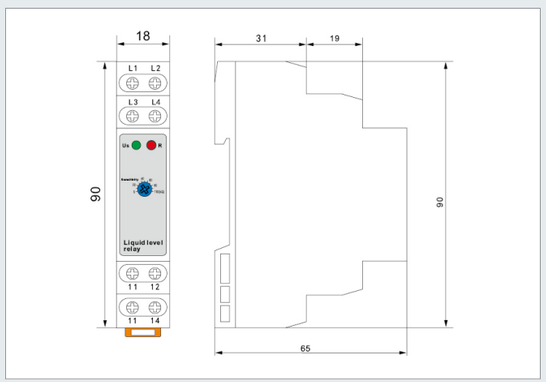
Wiring diagram



Shape and size (mm)



Panel diagram



CDM6 Electronic Pulse Relay

Application

- Pulse relay, can be controlled from multiple different positions (unlimited number), can replace the 3-way switch, wiring is more simple, economical and convenient.

Features

- Two voltage specifications,AC220V or AC/DC12V~240V.
- AC220V specification can be connected with neon light switch.
- Relay operating status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mounting

Model designation

CDM6 - 11 □ □

① ② ③ ④

No	Item	Description
①	CDM6 series electronic pulse relay	-
②	Output the number of contact groups	11:1 Group conversion
		22:2 Group conversion
③	Output contact	10:Output contact 10A
		16:Output contact 16A
④	Rated power supply voltage	M:AC220V W:AC/DC12V-240V

Technical parameters

	CDM6-1	CDM6-2
Functional model	1	2
Power terminal	A1-A2	
Rated supply voltage	AC/DC 12V-240V(50-60Hz)	
Power consumption	AC 0.09-3VA/DC 0.05-1.2W	

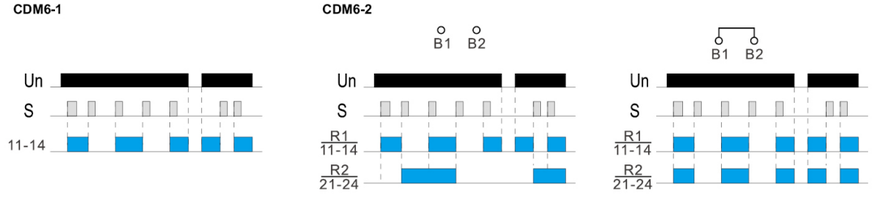
CDM6 Electronic Pulse Relay

CNTD

Technical parameters

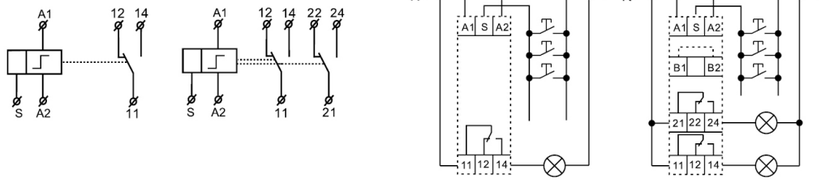
	CDM6-1	CDM6-2
Rated supply voltage	AC 230V(50-60Hz)	
Power consumption	AC max.12VA/1.3W	AC max.12VA/1.9W
Power supply allowed fluctuation range	-15%;+10%	
Power indicator light	Green LED	
Control terminal	A1-S	
Neon connection	AC 230V specifications available (A1-S)	
Maximum number of neon connections	230V, up to 75 PCS (about 0.68mA/230VAC at neon current)	
Control signal width	Min. 25ms	
Output relay	1xSPDT	2xSPDT
	16A/AC1	
	250VAC/24VDC	
Minimum switching power	500mW	
Output relay indication	Red LED	
Mechanical life	$1x10^7$	
Electrical life	$1x10^5$	
Reset time	Max. 200ms	
Operating ambient temperature	-20° C~+55° C	
Storage and transportation ambient temperature	-35° C~+75° C	
Installation mode	35mm card rail installation	
Class of protection	IP20	
Installation position	Arbitrarily	
Installation elevation	≤ 2000 m	
Pollution level	2	
Wiring capacity	$1x2.5mm^2$ or $2x1.5mm^2$ 0.4N·m	
Overall dimension	90mm×18mm×65mm	
Weight	W240-58g, A220-57g	W240-79g, A220-77g
Meet the standard	GB/T 14048.5, EN 60810-1	

Function diagramw



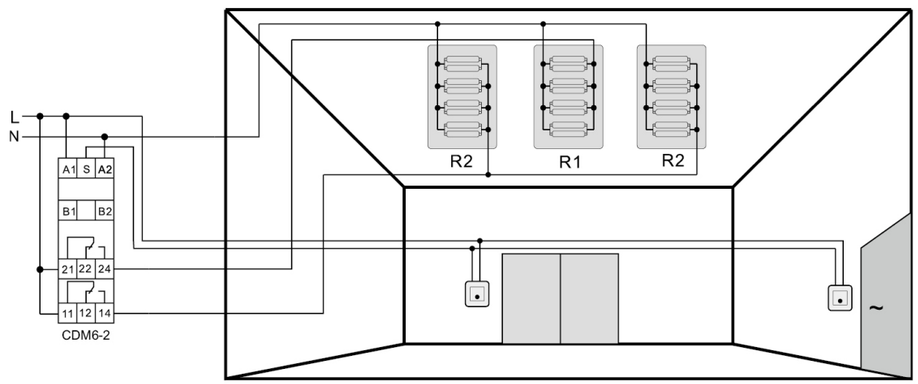
CDM6 Electronic Pulse Relay

Wiring diagram

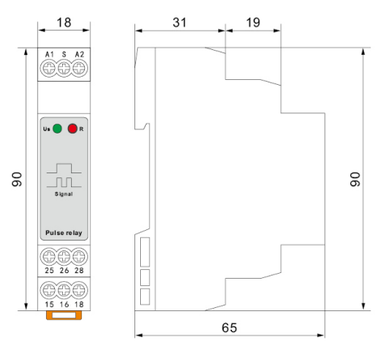


Panel diagram

The lights can be controlled at different locations in a room, and different sets of lights can be turned on according to actual needs.



Shape and size (mm)



CDW6 Temperature Control Relay

Application

- Used for heater temperature control, equipment, room temperature control, cabinet equipment risk control system.

Features

- Using NTC sensor, with sensor short circuit, open circuit monitoring.
- Optional heating/cooling operation mode.
- Working power supply voltage AC/DC 24V to 240V.
- The working status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mounting.

Model designation

CDW6 - 1 1 16

① ② ③ ④

No	Item	Description	
①	CDW6 series temperature control relay	-	
②	Design sequence number	Designation	Operating voltage
		1	High/low temperature monitoring
		2	Temperature range monitoring
③	Output the number of contactgroups	1	1 groups
④	Output contact	16	Output contact 16

Technical parameters

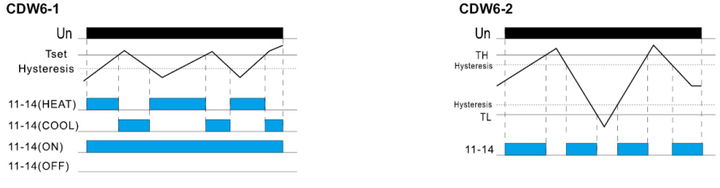
	CDW6-1	CDW6-2
Functional model	Monitor high/low temperatures	Monitoring temperature range
Power terminal	L-N	
Rated supply voltage	AC/DC 24V-240V	
Rated power frequency	50/60Hz	
Power consumption	Max. 2VA	
Power supply allowed fluctuation range	- 15%; + 10%	

CDW6 Dual Mode Temperature Control Relay

Technical parameters

	CDW6-1	CDW6-2
Temperature control range	-15C to +45C	
Temperature measurement error	±2°C	
Temperature adjustment lag value	0.5°C to 5°C	
Working mode	Heating - cooling - on - off can be set	
Power indicator light	Green LED	
Output contact parameters	1xSPST	
	16A/AC1	
	250VAC/24VDC	
Minimum switching power	500mW	
Output relay indication	Red LED	
Mechanical life	$1x10^7$	
Electrical life	$1x10^5$	
Operating ambient temperature	-20°C -+55°C	
Storage and transportation ambient temperature	-35°C -+75°C	
Installation mode	35mm card rail installation	
Class of protection	IP20	
Installation position	Arbitrarily	
Installation elevation	2000 m	
Pollution level	2	
Wiring capacity	1x2.5mm² or 2x1.5mm² 0.8N-m	
Overall dimension	90mm×18mm×65mm	
Weight	62g	
Meet the standard	GB/T 14048.5,EN 60255-1	

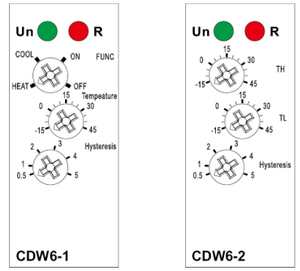
Function diagramw



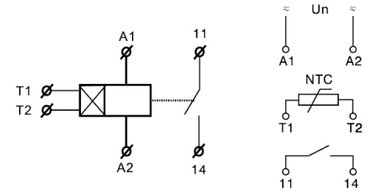
CDW6 Dual Mode Temperature Control Relay

CNTD

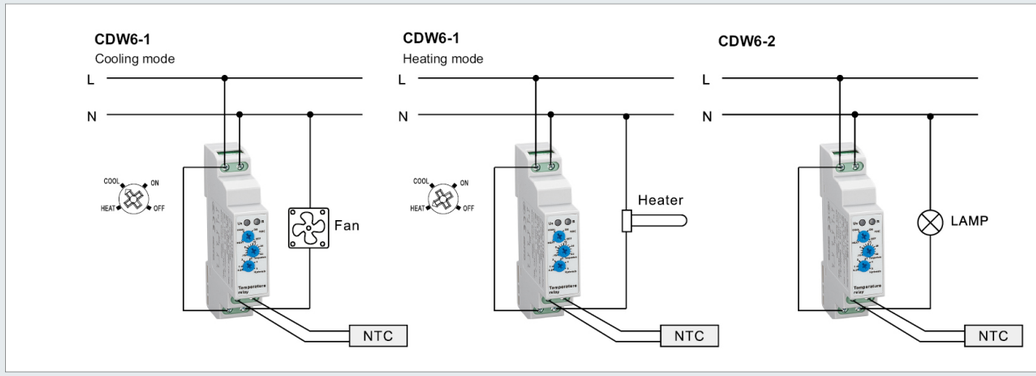
Shape and size (mm)



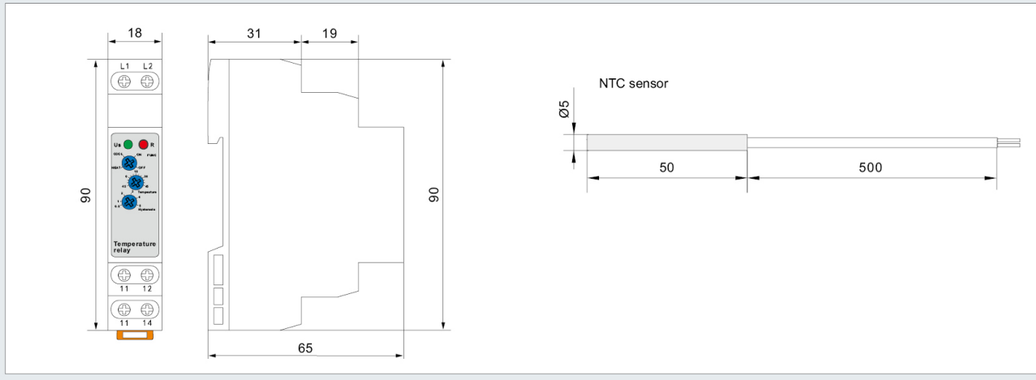
Wiring diagram



Application case diagram



Panel diagram



CDR6 Modular Intermediate Relay

Application

- Intermediate relays are used to switch a certain current load, increase the load capacity or increase the number of contact groups.

Features

- Rated voltage: AC/DC12V, 24V, 48V, 110V, AC220V.
- CDR6-316 can be used to switch three-phase circuits.
- Relay operating status is indicated by LED indicator.
- Ultra-small size, only 18mm width,35mm card rail mounting.

Model designation

CDR6 - 1 / □

① ② ③

No	Item	Description	
①	CDR6 series intermediate relay	-	
②	Output the number of contact groups	Designation	Operating voltage
		1116	1xSPDT 16A
		2216	2xSPDT 16A
		1110	1xSPDT 10A
		2210	2xSPDT 10A
③	Function code	Designation	Operating voltage
		12	AC/DC 12V
		24	AC/DC 24V
		48	AC/DC 48V
		110	AC/DC 110V
		M	AC220V

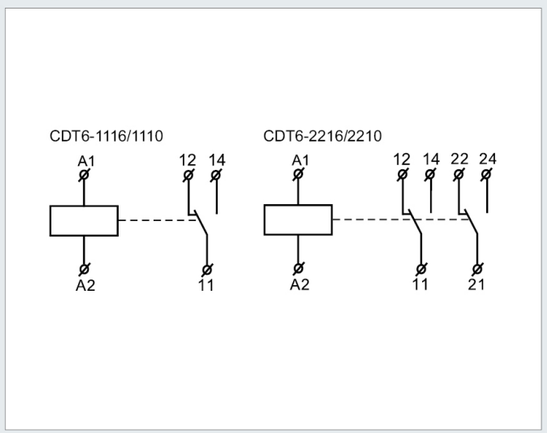
CDR6 Modular Intermediate Relay

CNTD

Technical parameters

	CDR6-1116	CDR6-2216	CDR6-1110	CDR6-2210
Power terminal	A1-A2			
Rated supply voltage	AC/DC 12V,24V,48V,110V			
Power consumption	AC.max 12VA/DC.max1.9W			
Power terminal	A1-A2-A3			
Rated supply voltage	AC220V(A1-A2), AC/DC24V(A1-A3)			
Power consumption	AC.max 12VA/DC.max1.9W			
Power supply allowed fluctuation range	-15%;+10%			
Maximum switching time	40ms			
Output contact parameters	1xSPDT	2xSPDT	1xSPDT	2xSPDT
	1x16A	2x16A	1x10A	2x10A
	250VAC/24VDC			
Minimum switching power	500mW			
Output relay indication	Red LED			
Mechanical life	$1x10^7$			
Electrical life	$1x10^5$			
Reset time	max.200ms			
Operating ambient temperature	-20°C ~+55°C (-4° F to 131° F)			
Storage and transportation ambient temperature	-35°C ~+75°C (-22° F to 158° F)			
Installation mode	35mm card rail installation			
Class of protection	IP20			
Installation position	Arbitrarily			
Overvoltage class	III			
Pollution level	2			
Wiring capacity	$1x2.5mm^2$ or $2x1.5mm^2$ 0.8N-m			
Overall dimension	90mm×18mm×65mm			
Weight	67g	80g	55g	70g

Wiring diagram



Shape and size (mm)