

Timer Relay

- On-delay relay
- Off-delay relay
- Star-delta relay
- Multifunction relay
- Flashing relay

Monitoring Relay

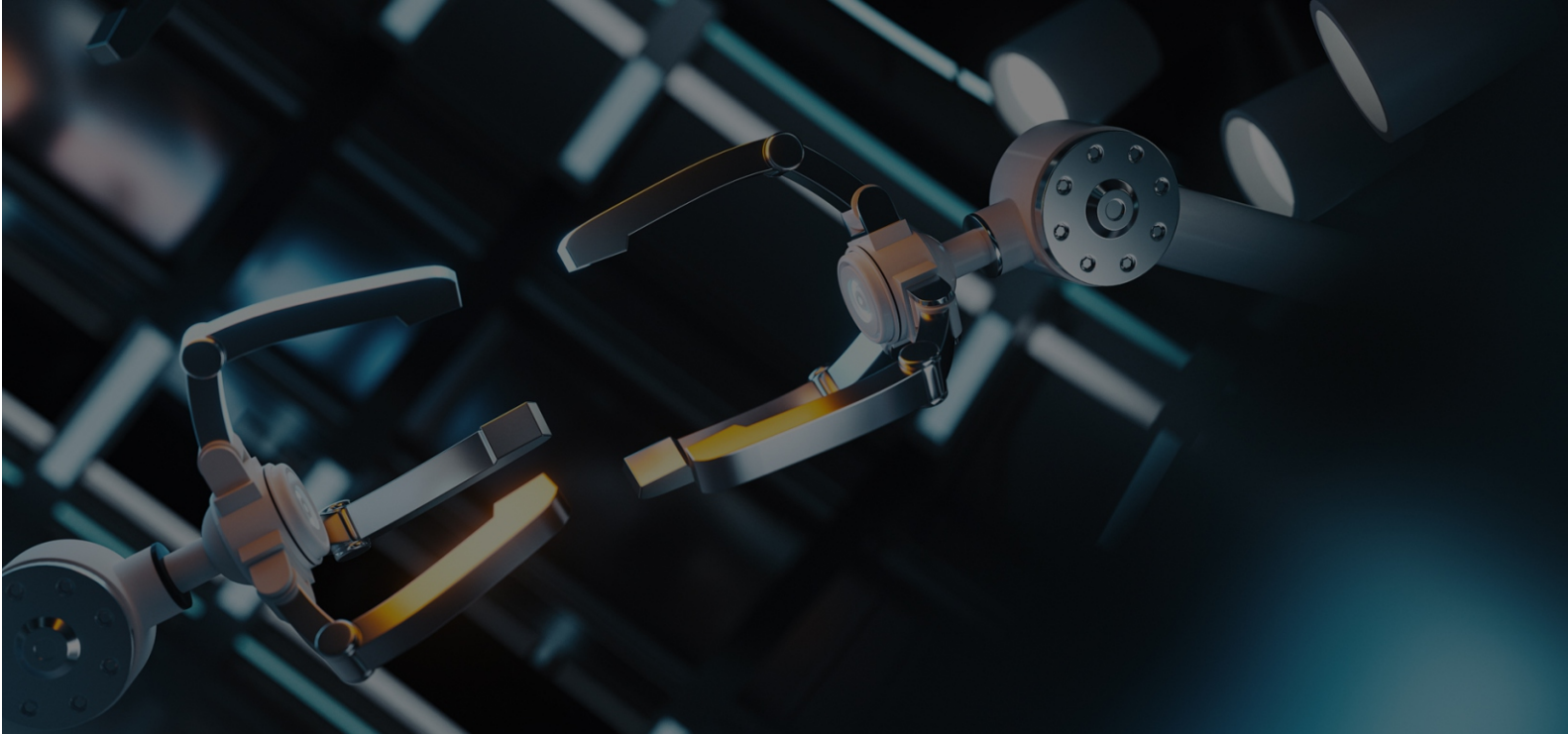
- Single phase voltage relay
- Three phase voltage relay
- Single phase current relay
- Liquid level control relay
- Staircase switch relay

VIOX ELECTRIC CATALOG

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Since its establishment in 2013, VIOX Electric Technology Co., Ltd. has been dedicated to the production and sales of relays. Our products are widely used in various automation control systems, providing high-quality electrical solutions to customers around the world.

Vision: To become a benchmark enterprise in the low-voltage electrical field, forging a sustainable, century-old enterprise that brings happiness to employees and society.

Mission: While pursuing the dual happiness of material and spiritual well-being for all partners, we are committed to making automated production more efficient and empowering technology to enhance the quality of life for every individual.

Values: We firmly believe that dedication, responsibility, reflection, optimism, and embracing change are the cornerstones of the company's continuous growth and innovation.

Products and Services: Our products have won widespread market recognition for their outstanding performance, reliability, and innovation. Our products have obtained multiple international certifications such as CE, EAC, ROHS, which is not only an affirmation of our product quality but also a reflection of our commitment to global customers.

Commitment: VIOX Electric Technology Co., Ltd. will continue to adhere to the principle of "customer first, quality foremost," constantly promote technological innovation, improve service levels, grow together with customers, and create a better future together.

Catalog

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Timer relays for industrial applications

Those relays provide simple, reliable and economical control solutions in all types of panel. They are typically used in industrial applications and OEM equipment, providing time-delayed switching to start a motor, control a load or manage a process.



Lighting control, for example the delayed switching of multiple rows of lamps in production facilities or greenhouses.



Star-delta motor starting to reduce starting current with changeover delay to prevent interphase short-circuits



Cyclic switching of machinery, for example the weekly startup of a fan to prevent them sticking or the flushing of pipes to keep them clear

Have the perfect timing everywhere with timer relays

- Control panels
- Pump controls
- Star-delta motor starting
- Movable equipment
- Machine tools
- Automatic doors
- Car park barriers
- Assembly machines
- Compressor controls
- Transportation
- Industrial refrigeration
- Packaging machines
- Backing ovens
- Water and wastewater
- Wind
- Industrial cleaning processes

Measuring and monitoring relays

Measuring and monitoring relays monitor and detect operating conditions with regard to phase, current, voltage, liquid level faults. The relays inform users about abnormal conditions and allow them to take necessary corrective actions before severe and costly failures can occur.



Three-phase voltage relays

- Voltage monitoring of mobile three-phase equipment
- Protection of personnel and installations against phase reversal
- Monitoring of the supply voltage of machines and installations
- Protection of equipment against damage caused by unstable supply voltage
- Switching to emergency or auxiliary supply



Single-phase current relays

- Monitoring of motor current consumption
- Monitoring of lighting installations and heating circuits
- Monitoring of transportation equipment overload
- Monitoring of locking devices, electromechanical brake gear and locked rotors



Single-phase voltage relays

- Speed monitoring of DC motors
- Monitoring of battery voltages and other supply networks



Liquid level monitoring relays

- Protection of pumps against dry running
- Protection against container overflow
- Control of liquid levels
- Detection of leaks
- Control of mixing ratios

FCT18-A/At

Power on-delay relay with retrigger control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- A 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
A	ON-delay	1	1CO contact	A	AC230V	N	NPN
At	ON-delay+inst	2	2CO contacts	D	DC24V	P	PNP
		* Only 2CO contacts available for At/Bt		W		AC/DC12-240V	

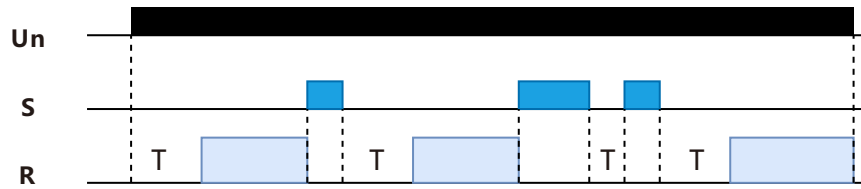


	FCT18-A1	FCT18-A2	FCT18-At
Input Terminal	A1-A2		
Voltage range	AC 230V / DC24V / AC/DC 12-240V		
Power consumption	AC 3.5VA/ DC 2.0W		
Voltage tolerance	-15%~+10%		
Supply indication	Green LED		
Relay indication	Red LED		
Time ranges	0.1s-100days		
Time setting	button		
Time deviation	0.1%		
Repeat accuracy	0.5%		
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)		
Output contact	1*SPDT	2*SPDT	1*SPDT+1*SPDT
Rated current	1*16A	2*16A	
Mechanical life	1*10 ⁷		
Electrical life	1*10 ⁵		
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C		
Mounting	DIN rail EN/IEC 60715		
IP Rating	IP20		
Stripping length	7mm (0.28in)		
Installed altitude	≤2200m		
Pollution level	2		
Max cable size	AWG13-20 0.4N·m		
Dimension	90mm*18mm*64mm		
Weight	about 90g		
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1		

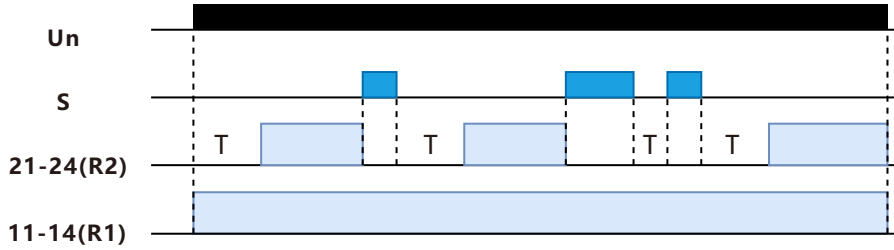
*The above information is subject to change without further notice

Timing Function

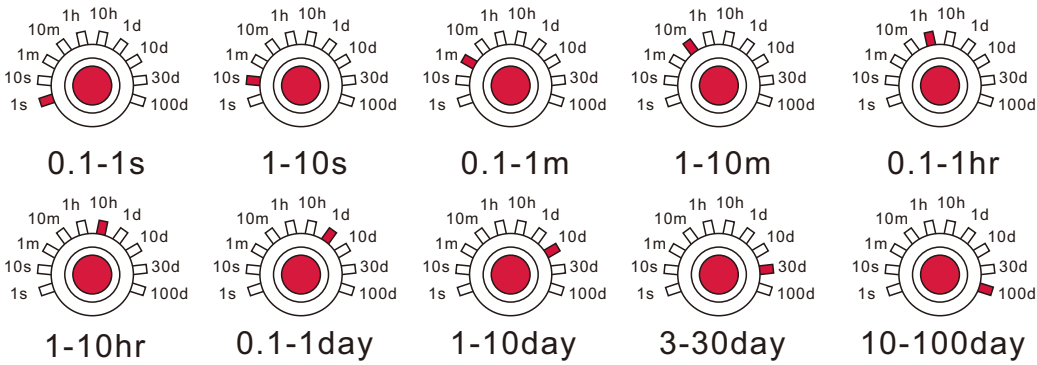
A: ON-delay



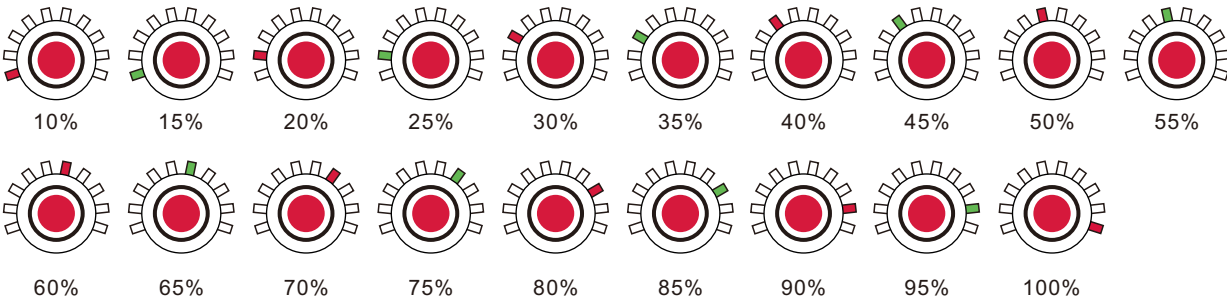
At: ON-delay + instantaneous



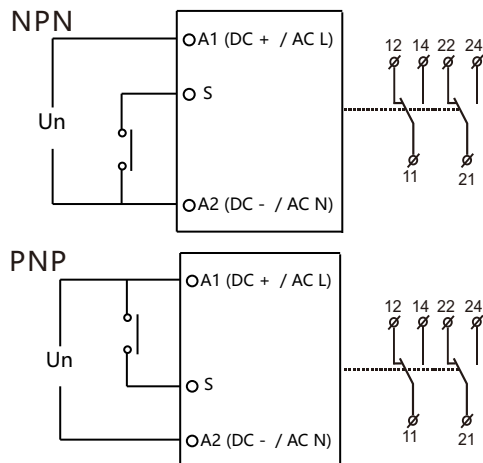
Time Setting



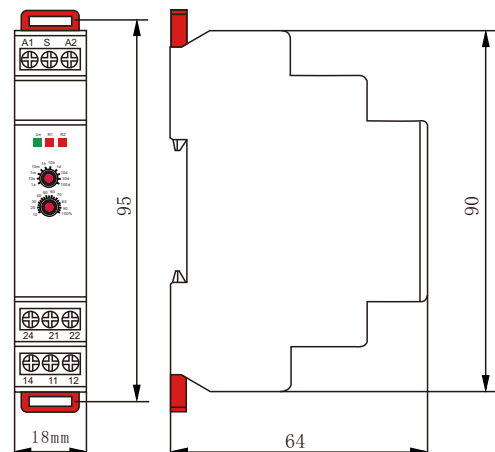
Ratio Setting



Wiring



Dimension



FCT18-B/Bt

Interval relay with retrigger control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- B 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
B	OFF-delay	1	1CO contact	A	AC230V	N	NPN
Bt	OFF-delay + inst	2	2CO contacts	D	DC24V	P	PNP

* Only 2CO contacts available for At/Bt

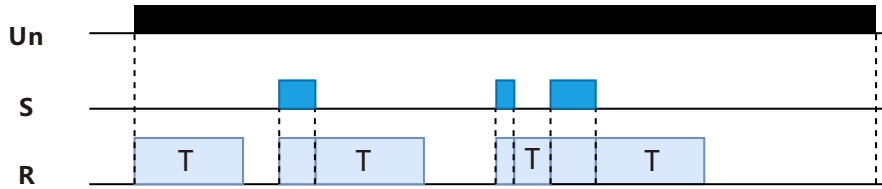
	FCT18-B1	FCT18-B2	FCT18-Bt
Input Terminal	A1-A2		
Voltage range	AC 230V / DC24V / AC/DC 12-240V		
Power consumption	AC 3.5VA/ DC 2.0W		
Voltage tolerance	-15%~+10%		
Supply indication	Green LED		
Relay indication	Red LED		
Time ranges	0.1s-100days		
Time setting	button		
Time deviation	0.1%		
Repeat accuracy	0.5%		
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)		
Output contact	1*SPDT	2*SPDT	1*SPDT+1*SPDT
Rated current	1*16A	2*16A	
Mechanical life	1*10 ⁷		
Electrical life	1*10 ⁵		
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C		
Mounting	DIN rail EN/IEC 60715		
IP Rating	IP20		
Stripping length	7mm (0.28in)		
Installed altitude	≤2200m		
Pollution level	2		
Max cable size	AWG13-20 0.4N·m		
Dimension	90mm*18mm*64mm		
Weight	about 90g		
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1		

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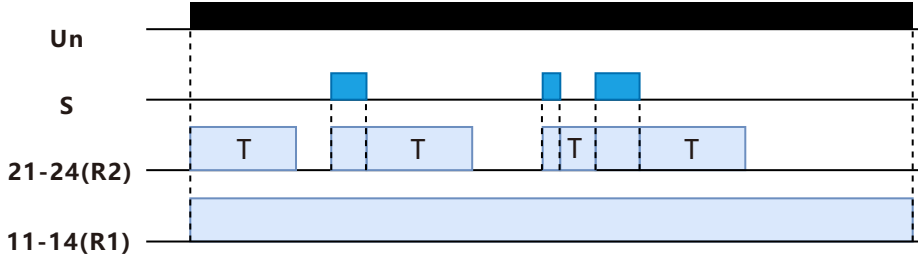


Timing Function

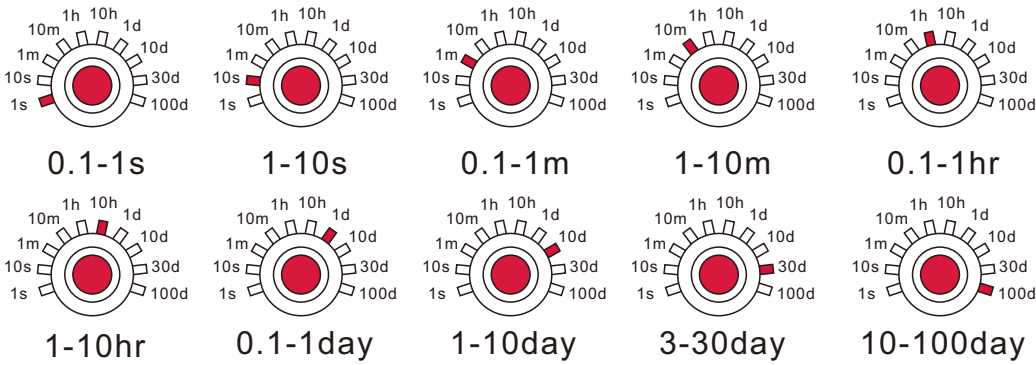
B: OFF-delay



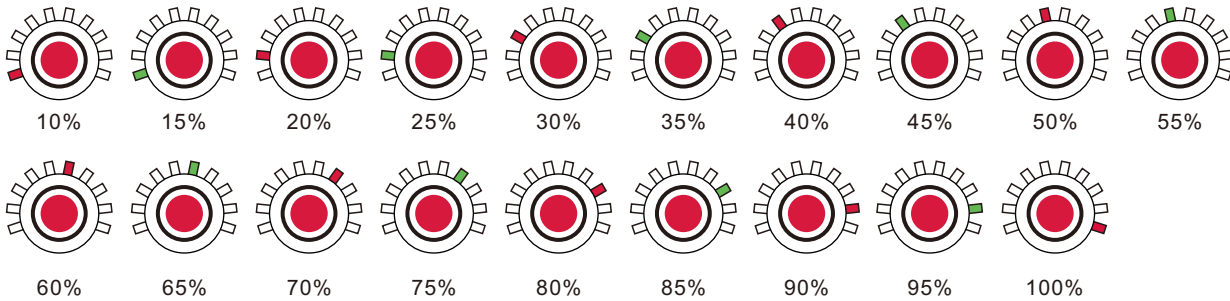
Bt: OFF-delay + instantaneous



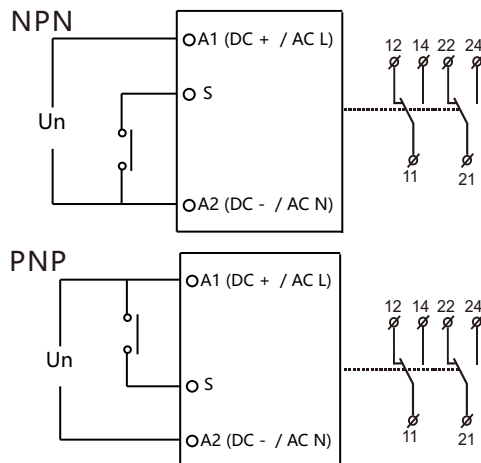
Time Setting



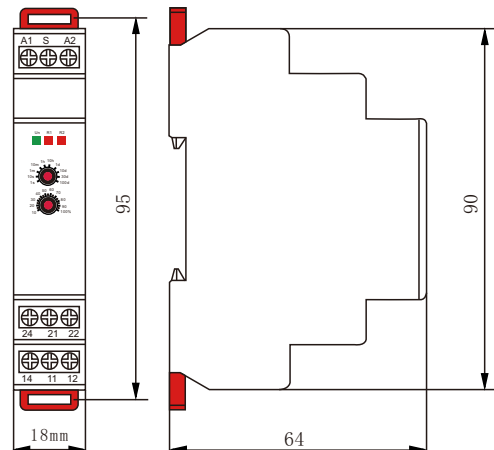
Ratio Setting



Wiring



Dimension



FCT18-M

Multifunction time relay

- **10 functions**
 - 5 power-controlled delay modes
 - 4 external signal-controlled delay modes
 - 1 ON-OFF switching mode
- **Time ranges from 0.1s-100days**
- **Wide power supply range from 12to 240 VAC/DC.**
- **Easy to set up with wiring diagrams on the side of product**
- **Time error less than 0.5%**
- **Strong anti-interference capability**



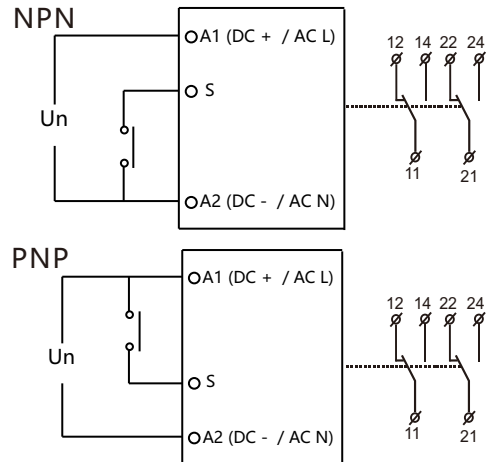
FCT18- M 1 W N
 1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.control signal	
M	Multifunction	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

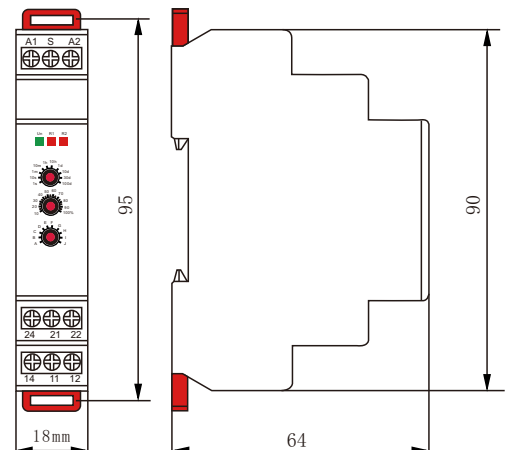
	FCT18-M1	FCT18-M2
Input Terminal		A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

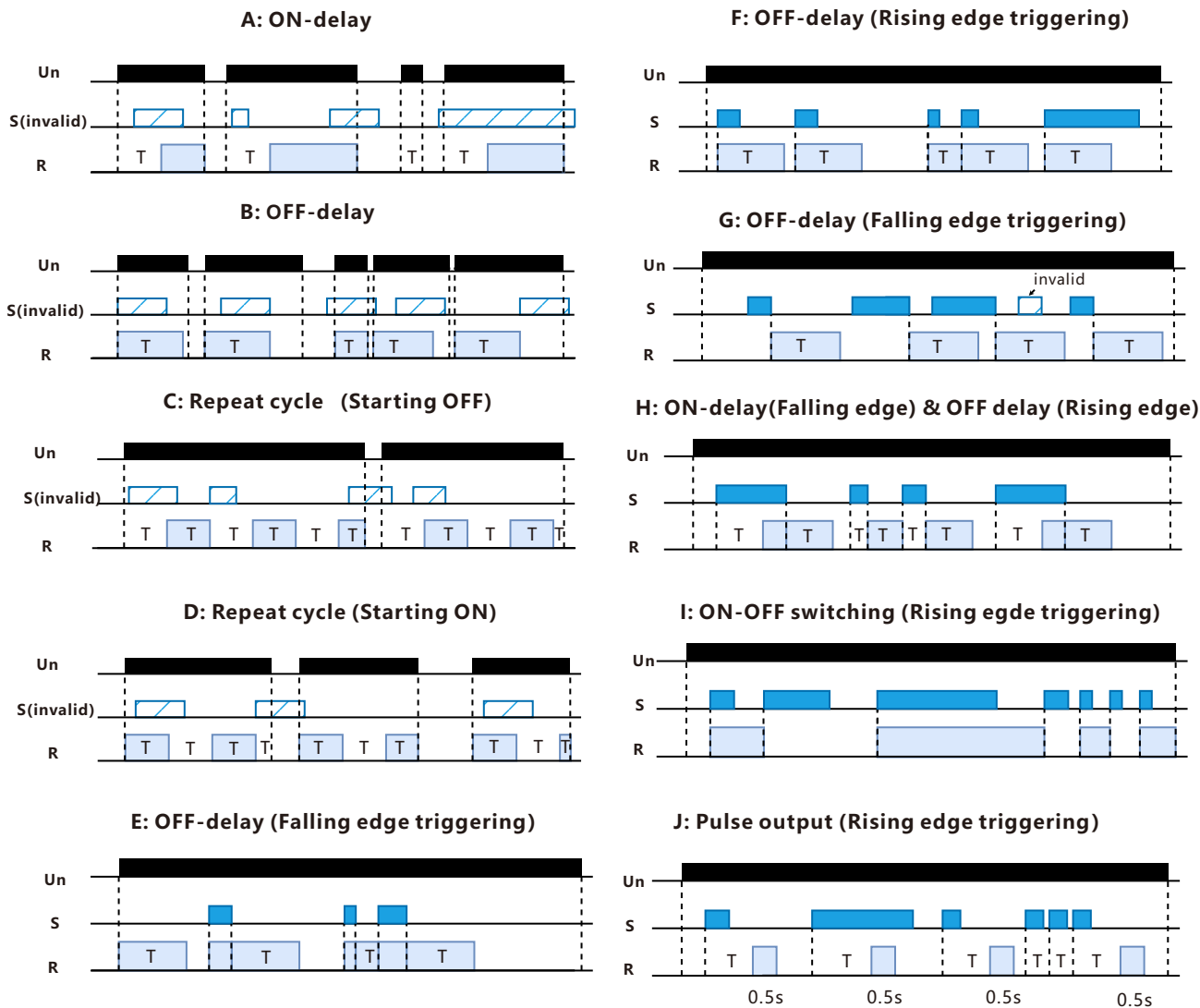
*The above information is subject to change without further notice

Wiring

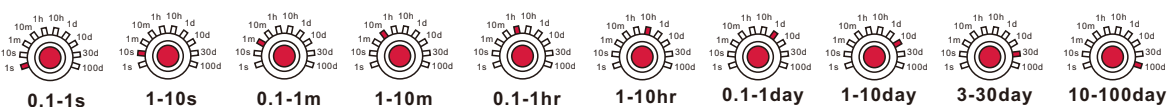


Dimension

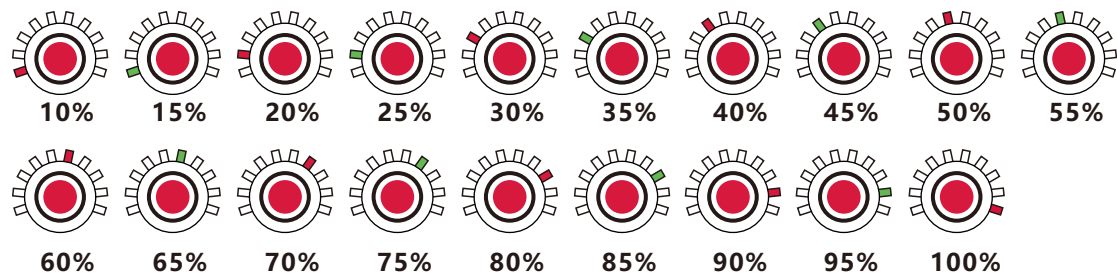




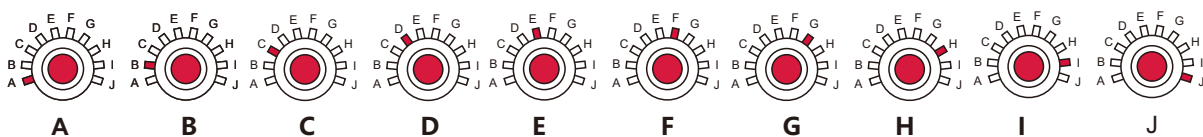
Time Setting



Ratio Setting



Function Setting



FCT18-N

Multifunction time relay

- **10 functions**
 - 2 power-controlled delay modes
 - 8 external signal-controlled delay modes
- **Time ranges from 0.1s-100days**
- **Wide power supply range from 12to 240 VAC/DC.**
- **Easy to set up with wiring diagrams on the side of product**
- **Time error less than 0.5%**
- **Strong anti-interference capability**



FCT18- N 1 W N

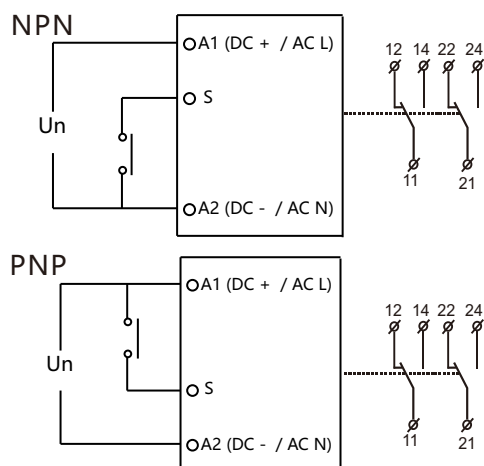
1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
N	Multifunction	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

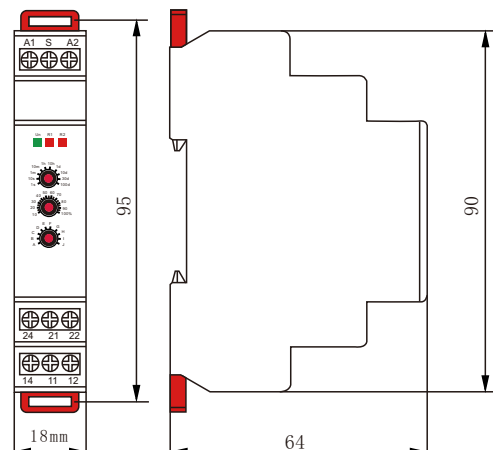
	FCT18-N1	FCT18-N2
Input Terminal		A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

*The above information is subject to change without further notice

Wiring



Dimension



FCT18-X

Multifunction time relay

- **10 functions**
 - 2 power-controlled delay modes
 - 8 external signal-controlled delay modes
- **Time ranges from 0.1s-100days**
- **Wide power supply range from 12to 240 VAC/DC.**
- **Easy to set up with wiring diagrams on the side of product**
- **Time error less than 0.5%**
- **Strong anti-interference capability**



FCT18- X 1 W N

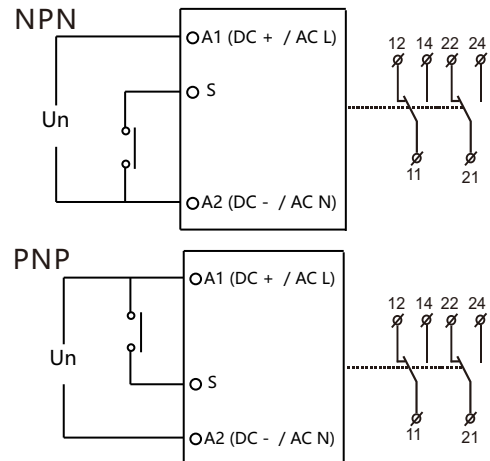
1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
X	Multifunction	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

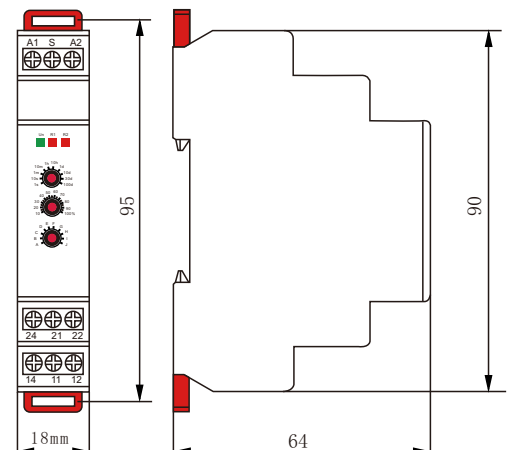
	FCT18-X1	FCT18-X2
Input Terminal		A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

*The above information is subject to change without further notice

Wiring



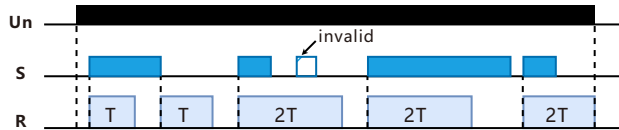
Dimension



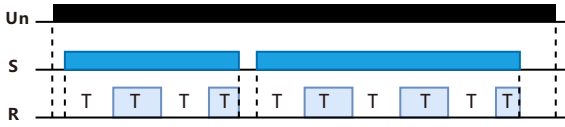
Ak: ON-delay (Rising edge triggering)



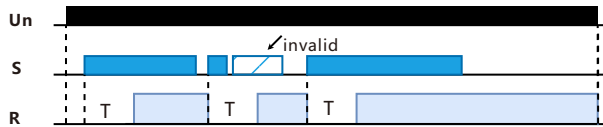
Q: Double off-delay



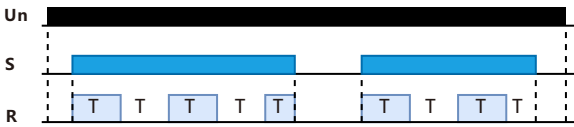
Ck: Repeat cycle (Starting off)



Gr: OFF-delay (Rising edge triggering)



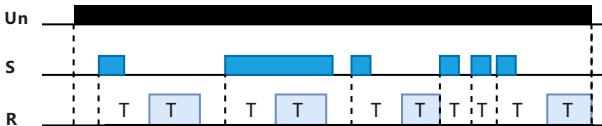
Dk: Repeat cycle (Starting on)



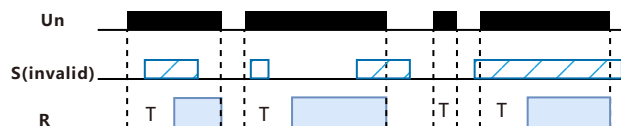
As: ON-delay (Rising edge triggering)



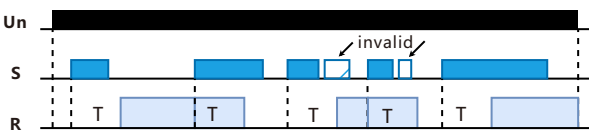
Je: ON-delay (Rising edge triggering)



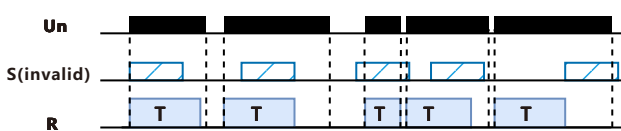
A: ON-delay



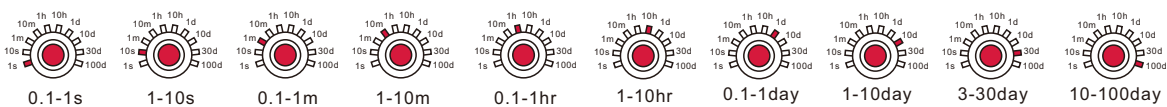
L: ON-OFF delay switching (Rising edge triggering)



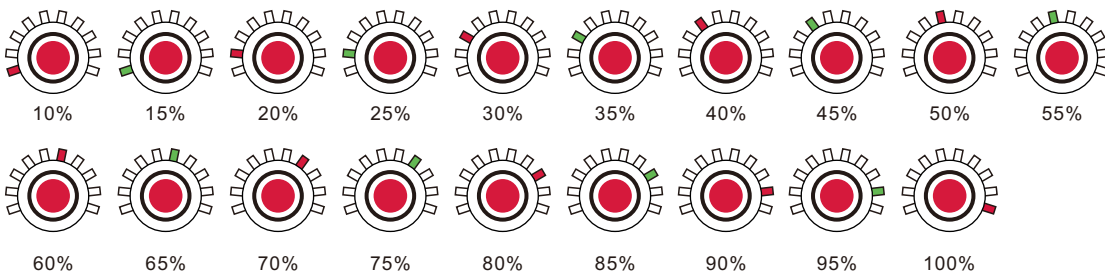
B: OFF-delay



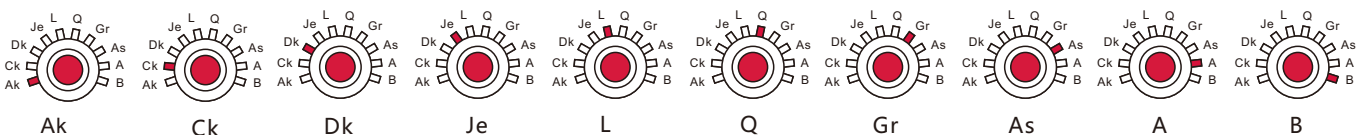
Time Setting



Ratio Setting



Function Setting



FCT18-2T

Power on-delay relay with retrigger control signal

- 2 different ON-delay time can be set.
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- 2T 2 W N
1 2 3 4

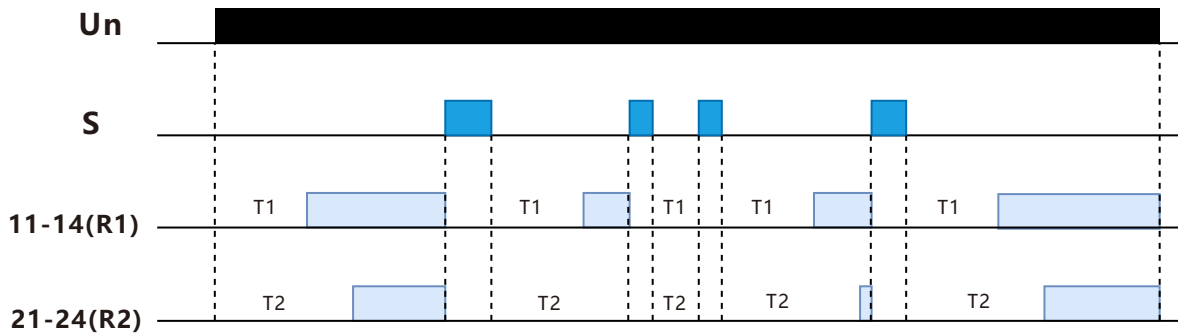
1.Function		2.Type of output		3.Supply voltage		4.Control signal	
2T	Double ON delay	2	2CO contacts	A	AC230V	N	NPN
				D	DC24V	P	PNP
				W	AC/DC12-240V		

FCT18-2T	
Input Terminal	A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V
	AC 3.5VA/ DC 2.0W
Voltage tolerance	-15%~+10%
Supply indication	Green LED
Relay indication	Red LED
Time ranges	0.1s-100day
Time setting	button
Time deviation	0.1%
Repeat accuracy	0.5%
	0.05%/°C, at=20°C (0.05%/°F, =68°F)
Output contact	2*SPDT
Rated current	2*16A
Mechanical life	1*10 ⁷
Electrical life	1*10 ⁵
	-20 ... +60 °C / -40 ... +85 °C
Mounting	DIN rail EN/IEC 60715
IP Rating	IP20
Stripping length	7mm (0.28in)
Installed altitude	≤2200m
Pollution level	2
Max cable size	AWG13-20 0.4N-m
Dimension	90mm*18mm*64mm
Weight	about 90g
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1

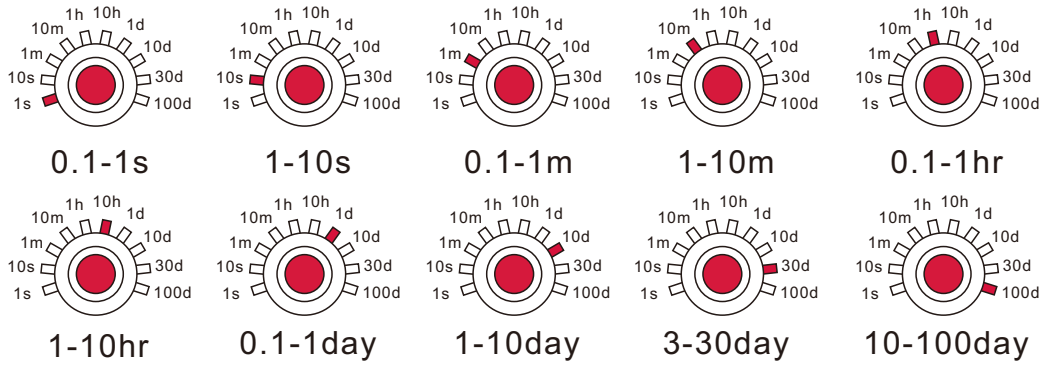
*The above information is subject to change without further notice

Timing Function

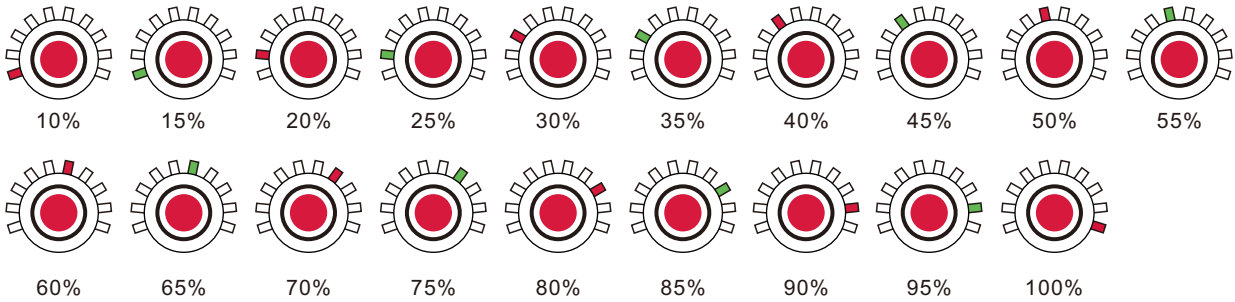
ON-delay (Falling edge triggering)



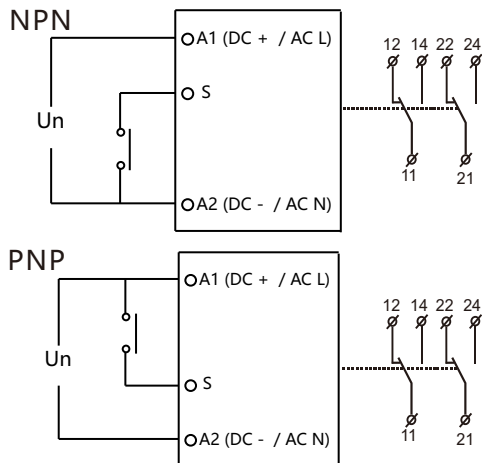
Time Setting



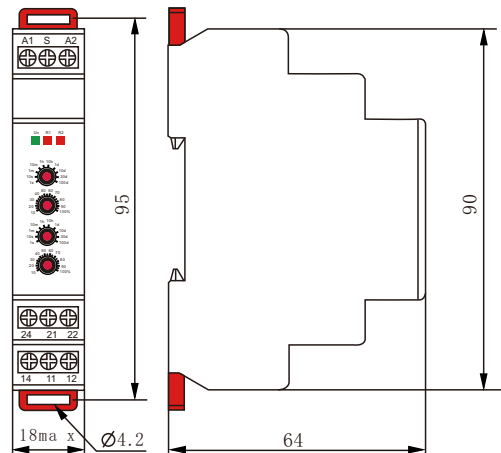
Ratio Setting



Wiring



Dimension



FCT18-S

Asymmetric cycle time relay

- Starting ON & Starting OFF can be selected
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- S 1 W
1 2 3

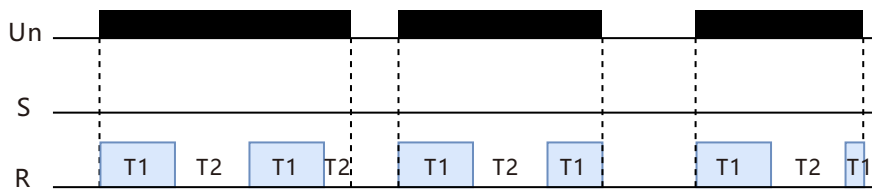
1.Function		2.Type of output		3.Supply voltage	
S	Asymmetric cycle	1	1CO contact	A	AC230V
		2	2CO contacts	D	DC24V
				W	AC/DC12-240V

	FCT18-S1	FCT18-S2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

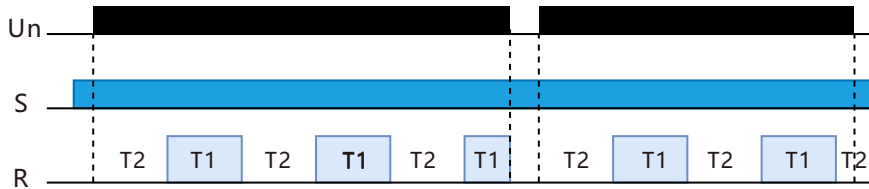
*The above information is subject to change without further notice

Timing Function

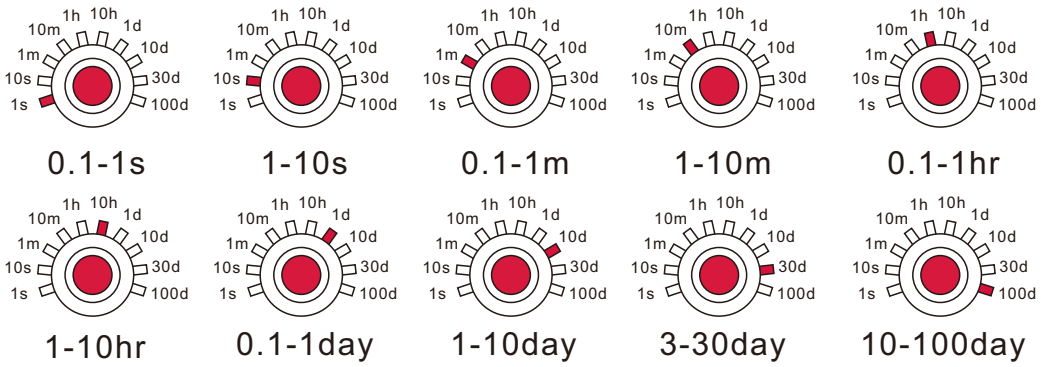
Repeat cycle Starting ON



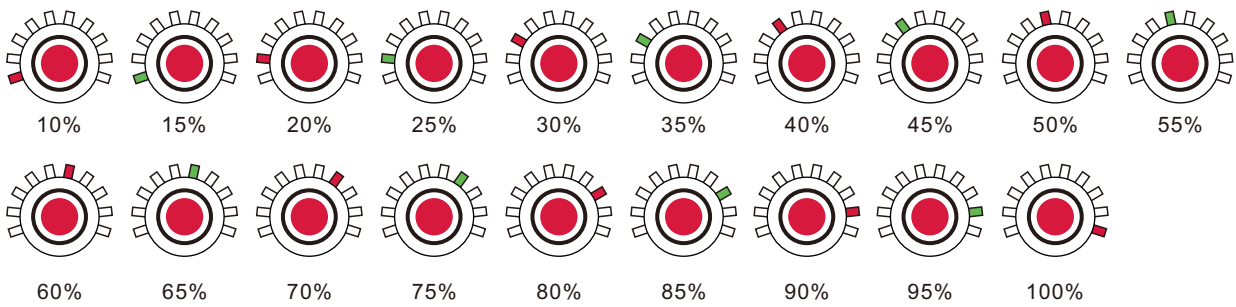
Repeat cycle Starting OFF (Jumper A1-S)



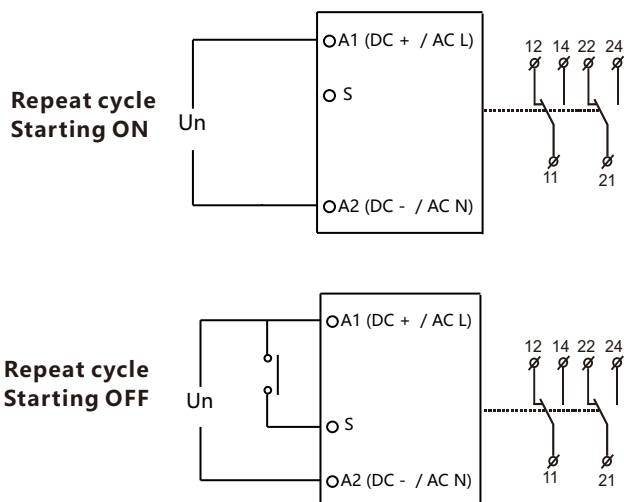
Time Setting



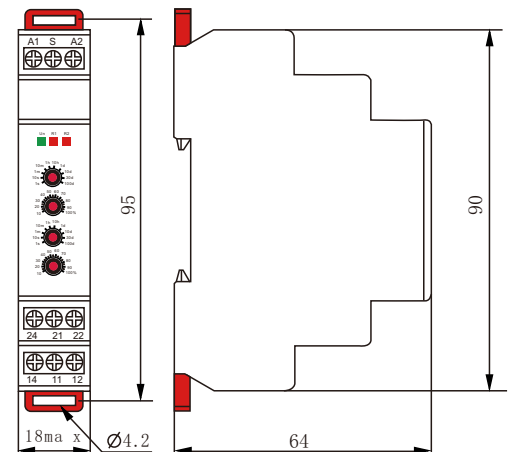
Ratir Setting



Wiring



Dimension



FCT18-P

Power on-delay relay with control signal

- Different delay times and operating times can be set
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- P 1 W N
 1 2 3 4

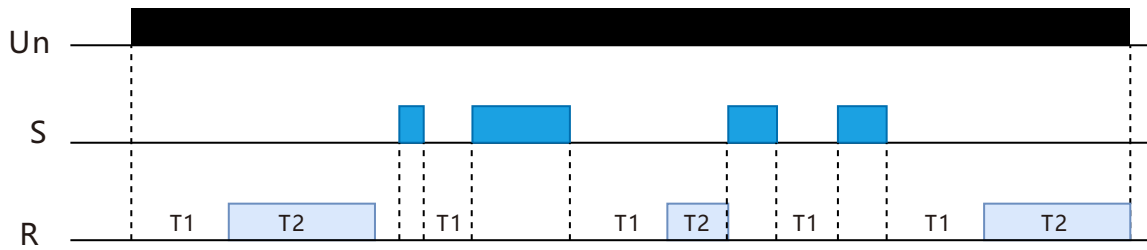
1.Function		2.Type of output		3.Supply voltage		4.Control signal	
P	Pulse output	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

	FCT18-P1	FCT18-P2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

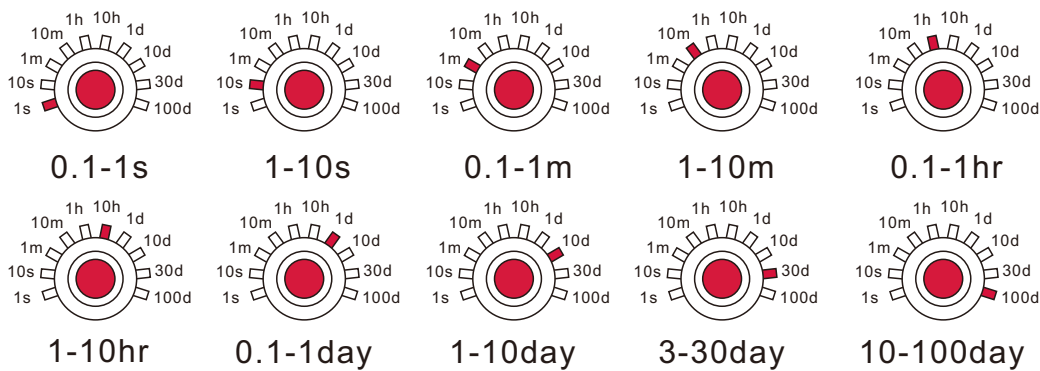
*The above information is subject to change without further notice

Timing Function

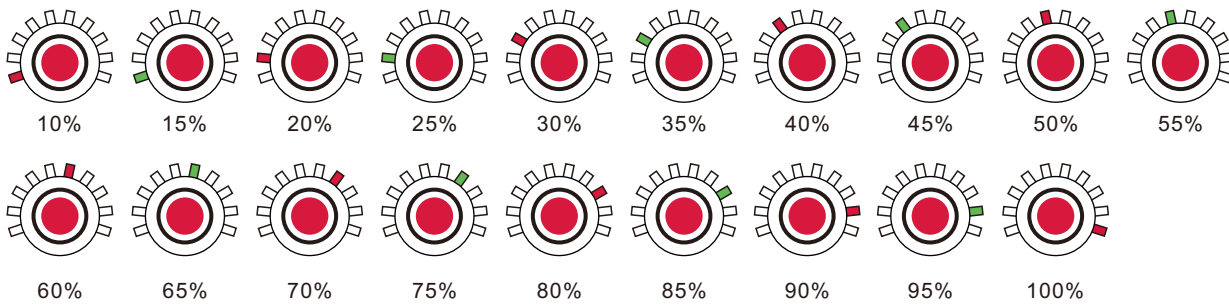
ON-delay (Falling edge triggering)



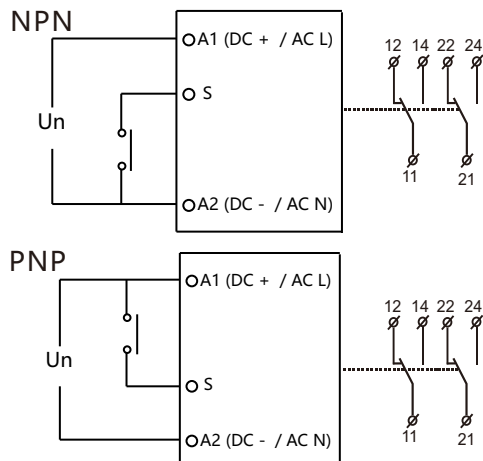
Time Setting



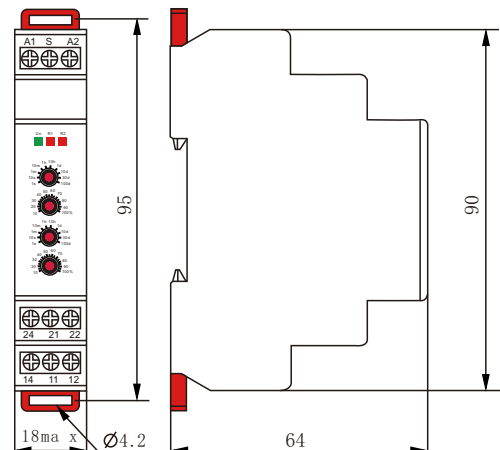
Ratio Setting



Wiring



Dimension



FCT18-RL

Alternation relay

- 2 relays running alternately.
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- RL 2 W

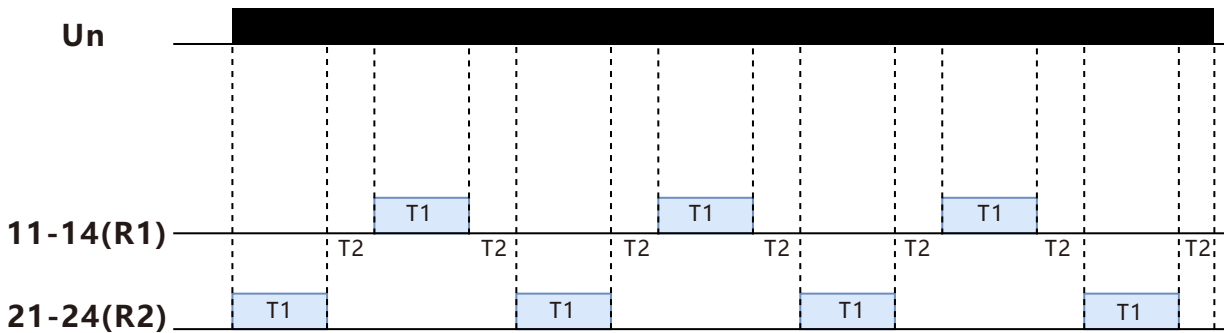
1 2 3

1.Function		2.Type of output		3.Supply voltage	
RL	Inverser timer	2	2CO contacts	A	AC230V
				D	DC24V
				W	AC/DC12-240V

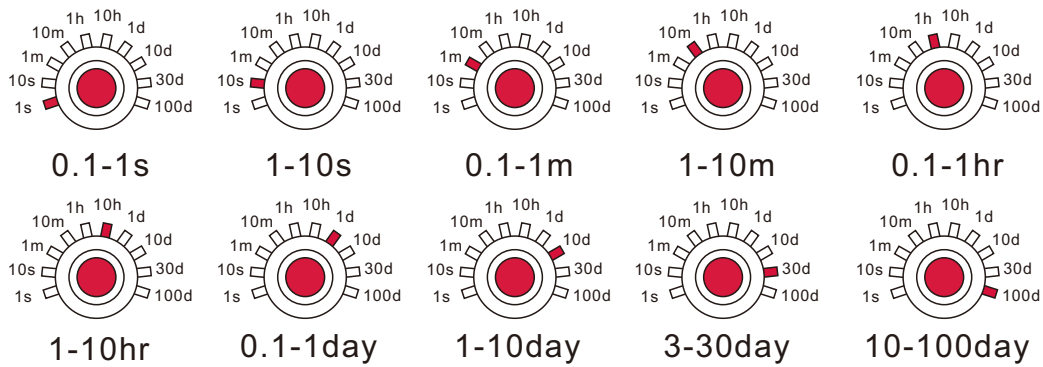
	FCT18-RL
Input Terminal	A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V
	AC 3.5VA/ DC 2.0W
Voltage tolerance	-15%~+10%
Supply indication	Green LED
Relay indication	Red LED
Time ranges	0.1s-100day
Time setting	button
Time deviation	0.1%
Repeat accuracy	0.5%
	0.05%/°C, at=20°C (0.05%/°F, =68°F)
Output contact	2*SPDT
Rated current	2*16A
Mechanical life	1*10 ⁷
Electrical life	1*10 ⁵
	-20 ... +60 °C / -40 ... +85 °C
Mounting	DIN rail EN/IEC 60715
IP Rating	IP20
Stripping length	7mm (0.28in)
Installed altitude	≤2200m
Pollution level	2
Max cable size	AWG13-20 0.4N-m
Dimension	90mm*18mm*64mm
Weight	about 90g
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1

*The above information is subject to change without further notice

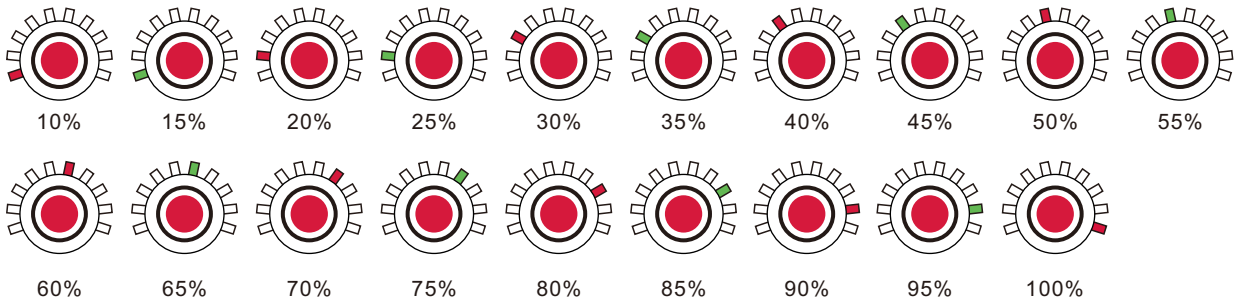
Timing Function



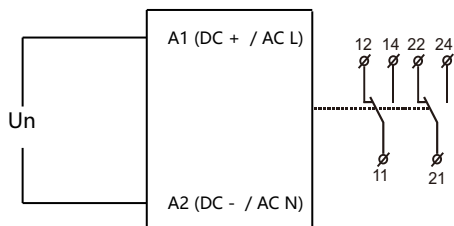
Time Setting



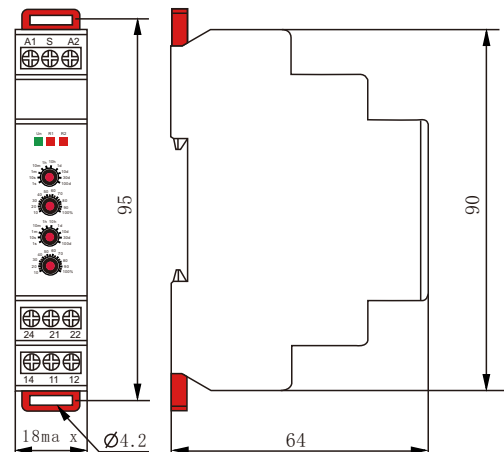
Ratir Setting



Wiring



Dimension



FCT18-ST

Start-delay time relay

- Specially design for delay ON of motors star/delta
- Time ranges from 0.1s-40mins
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



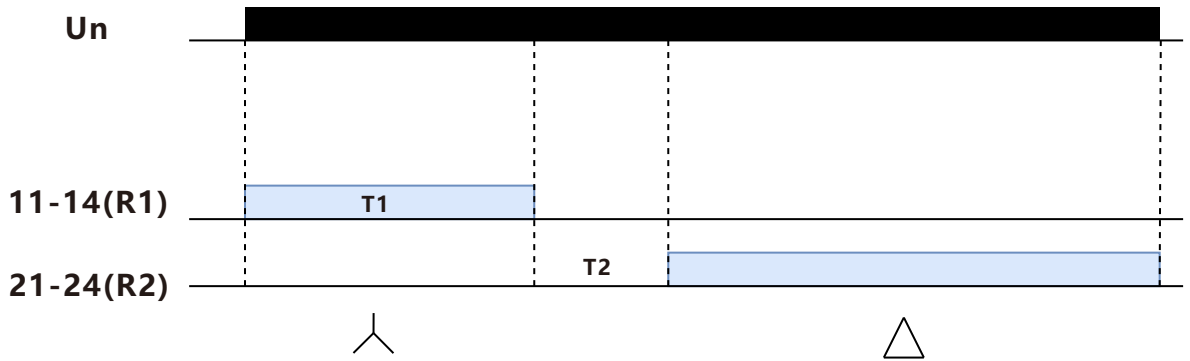
FCT18- ST 2 W
1 2 3

1.Function		2.Type of output		3.Supply voltage	
ST	Star-delta realy	2	2CO contacts	A	AC230V
				D	DC24V
				W	AC/DC12-240V

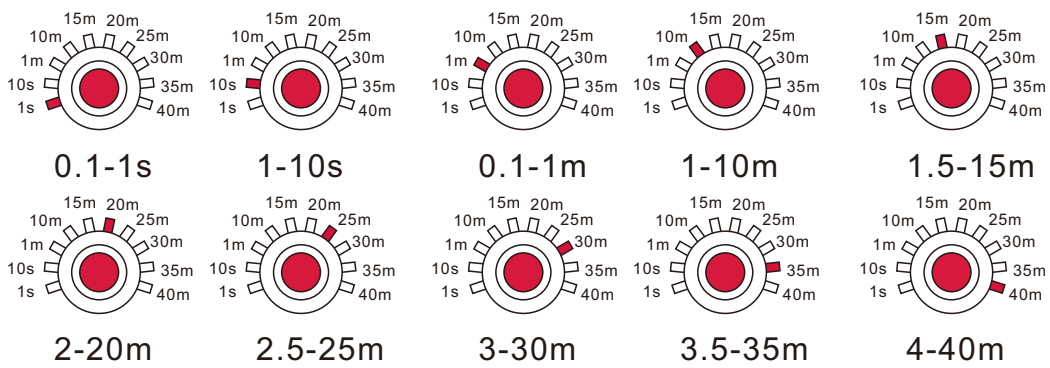
FCT18-ST	
Input Terminal	A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V AC 3.5VA/ DC 2.0W
Voltage tolerance	-15%~+10%
Supply indication	Green LED
Relay indication	Red LED
Time ranges	0.1s-40min
Time setting	button
Time deviation	0.1%
Repeat accuracy	0.5%
	0.05%/°C, at=20°C (0.05%/°F, =68°F)
Output conctact	2*SPDT
Rated current	2*16A
Mechanical life	1*10 ⁷
Electrical life	1*10 ⁵
	-20 ... +60 °C / -40 ... +85 °C
Mounting	DIN rail EN/IEC 60715
IP Rating	IP20
Stripping length	7mm (0.28in)
Installed altitude	≤2200m
Pollution level	2
Max cable size	AWG13-20 0.4N-m
Dimension	90mm*18mm*64mm
Weight	about 90g
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1

*The above information is subject to change without further notice

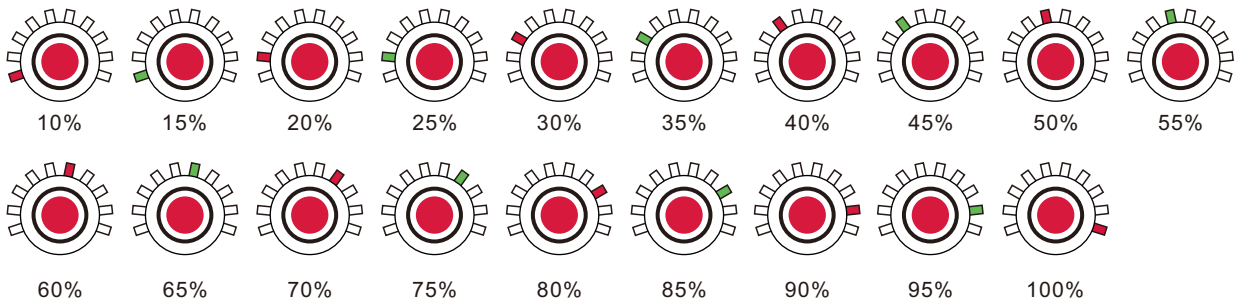
Timing Function



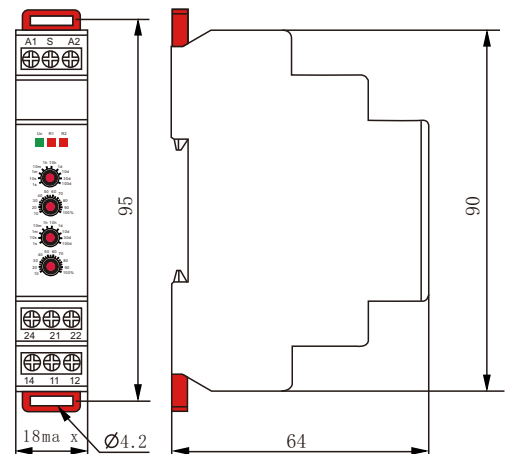
Time Setting



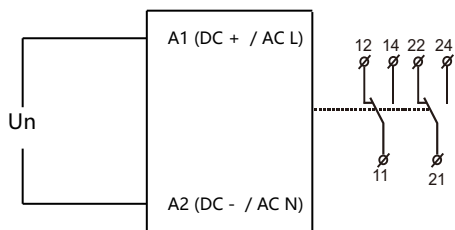
Ratio Setting



Dimension



Wiring



FCT18-Ap

Power on-delay relay

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- Ap 1 W

1 2 3

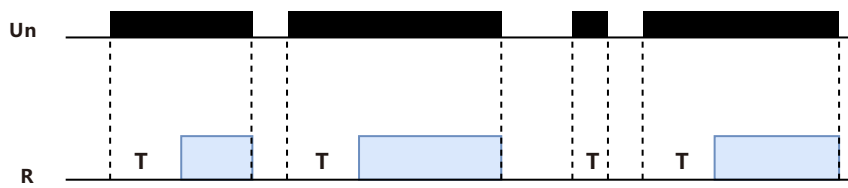
1.Function		2.Type of output		3.Supply voltage	
Ap	ON-delay	1	1CO contact	A	AC230V
		2'	2CO contacts	D	DC24V
				W	AC/DC12-240V

	FCT18-Ap1	FCT18-Ap2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

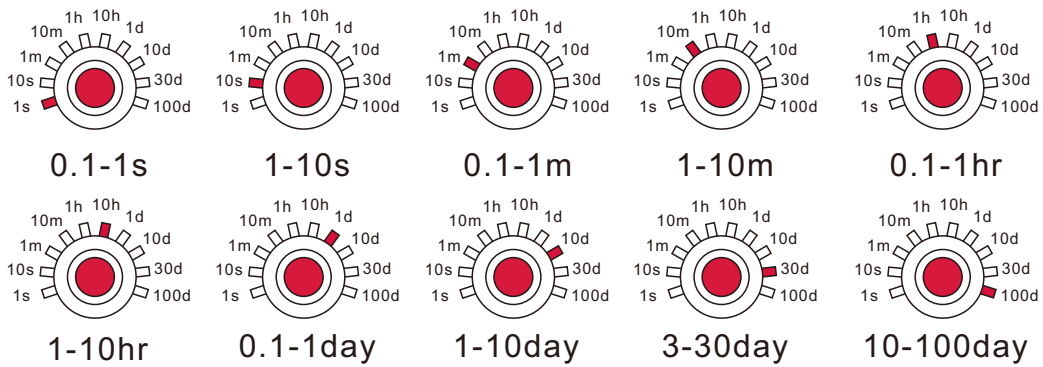
*The above information is subject to change without further notice

Timing Function

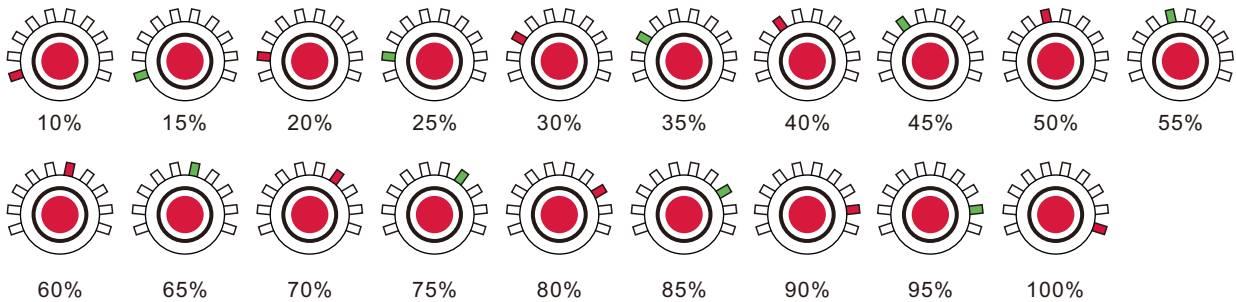
Ap: ON-delay



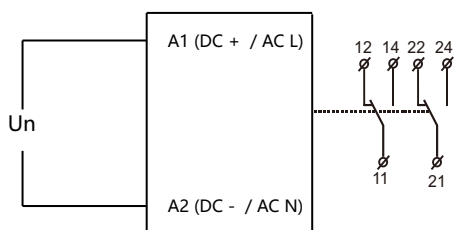
Time Setting



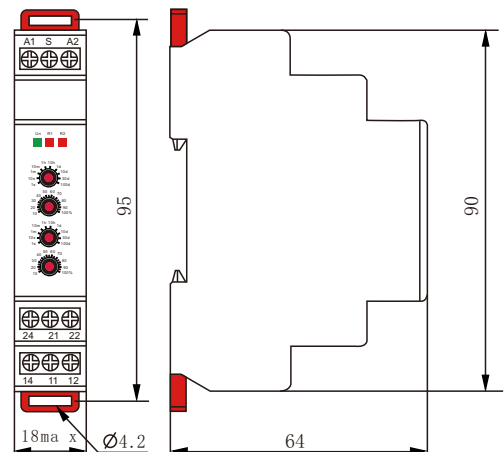
Ratio Setting



Wiring



Dimension



FCT18-Bp

Interval relay

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability



FCT18- Bp 1 W

1 2 3

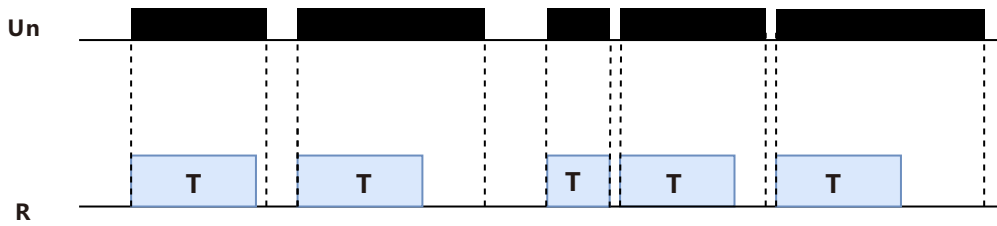
1.Function		2.Type of output		3.Supply voltage	
Bp	OFF-delay	1	1CO contact	A	AC230V
		2'	2CO contacts	D	DC24V
				W	AC/DC12-240V

	FCT18-Bp1	FCT18-Bp2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

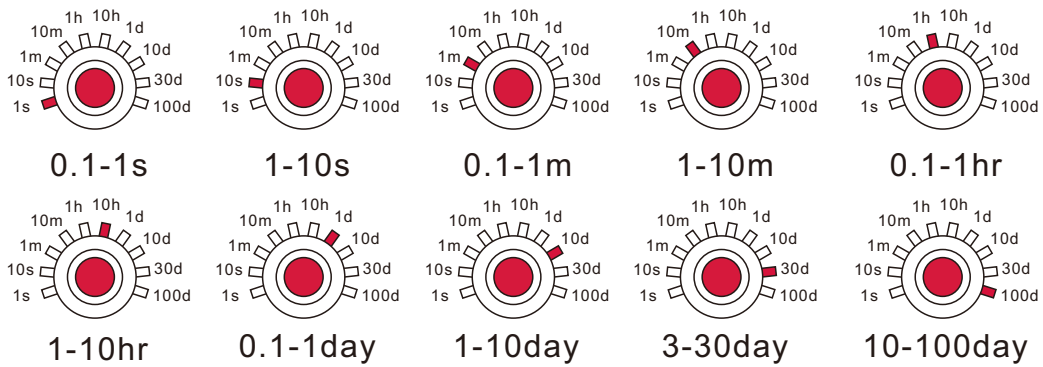
*The above information is subject to change without further notice

Timing Function

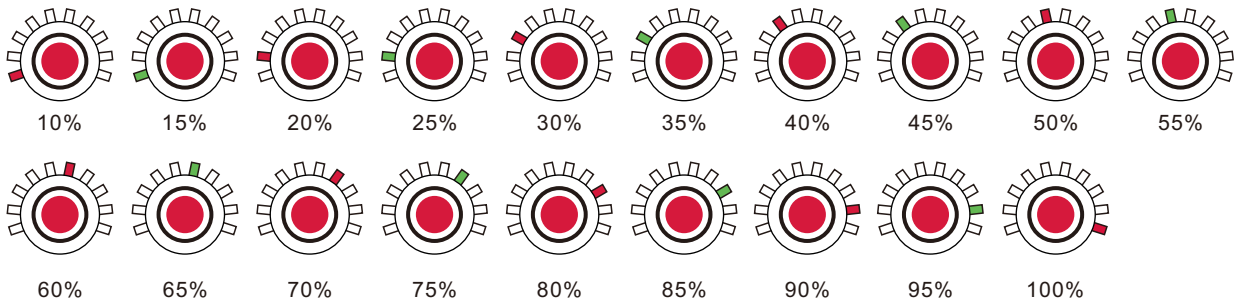
Bp: OFF-delay



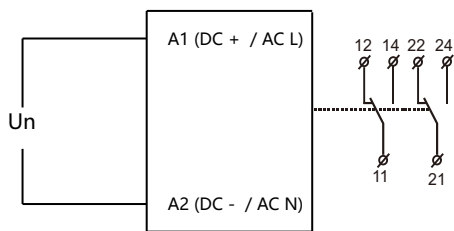
Time Setting



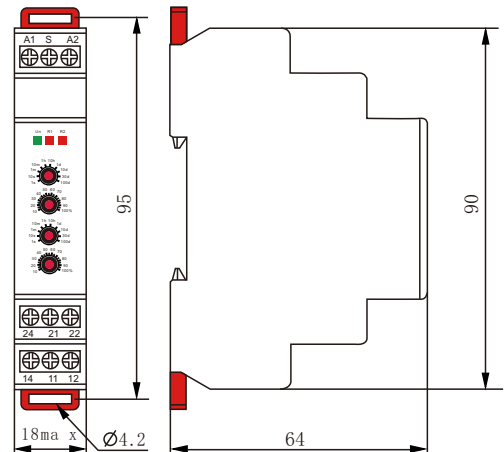
Ratio Setting



Wiring



Dimension



FCT18-AR

Pulse delayed relay with control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- AR 1 W N

1 2 3 4

1. Function		2. Type of output		3. Supply voltage		4. Control signal	
AR	ON-delay	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

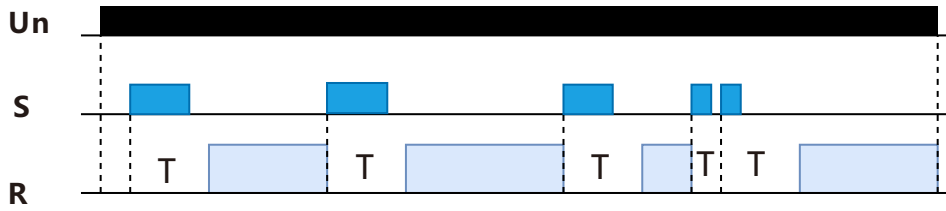
	FCT18-AR1	FCT18-AR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



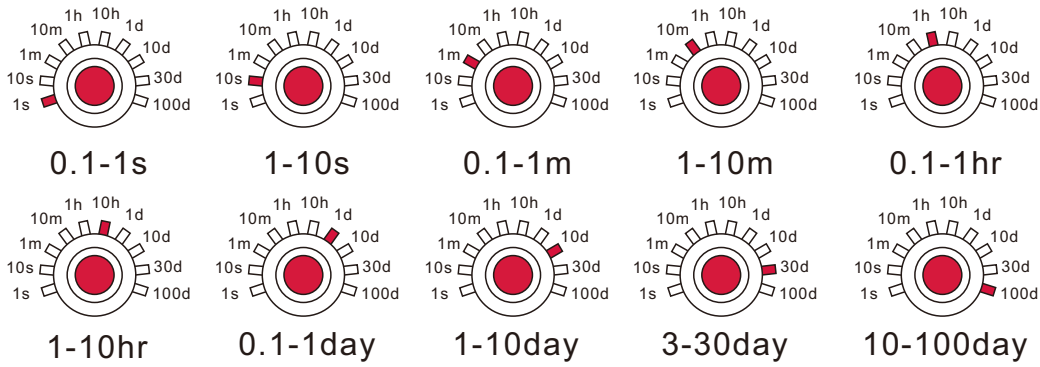
*The above information is subject to change without further notice

Timing Function

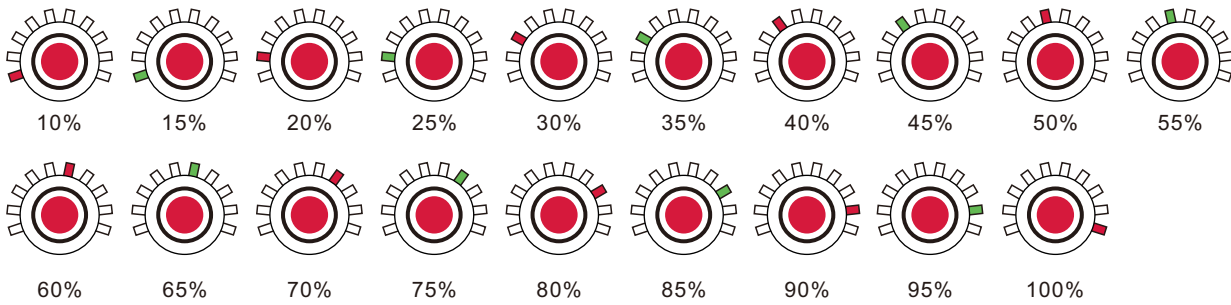
AR:ON-delay (Rising edge triggering)



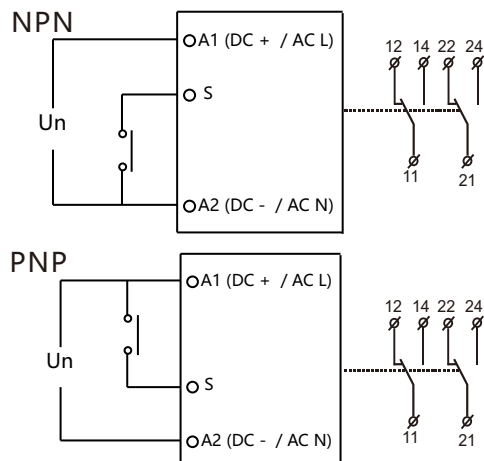
Time Setting



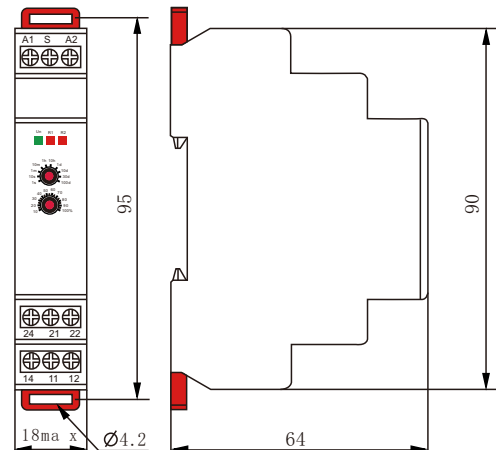
Ratio Setting



Wiring



Dimension



FCT18-BR

Single Interval relay with control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- BR 1 W N

1 2 3 4

1.Function	
BR	OFF-delay

2.Type of output	
1	1CO contact
2	2CO contacts

3.Supply voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

4.Control signal	
N	NPN
P	PNP

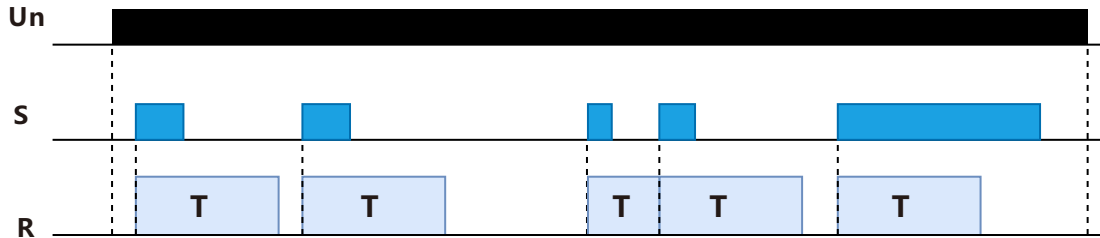
	FCT18-BR1	FCT18-BR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



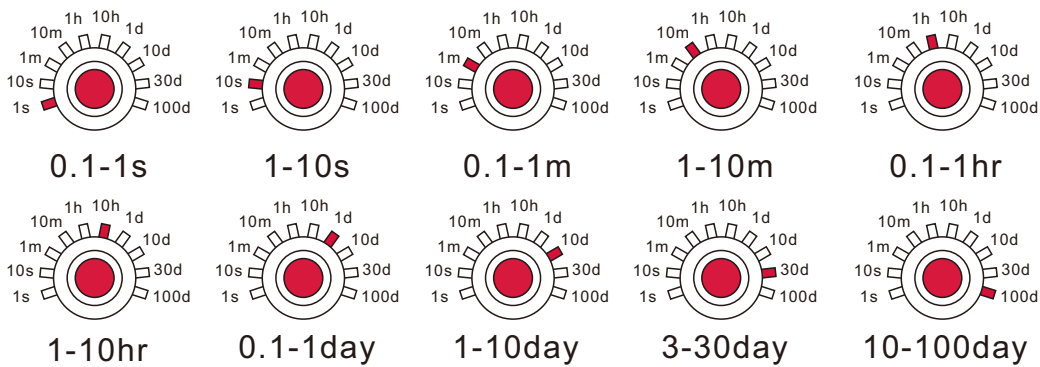
*The above information is subject to change without further notice

Timing Function

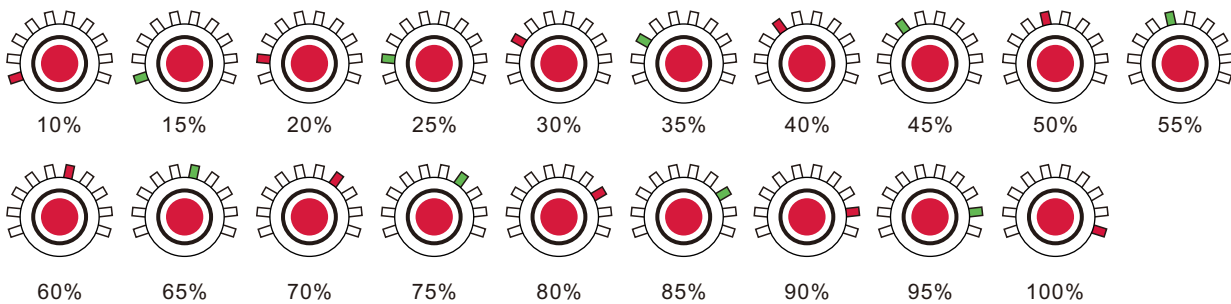
BR: OFF-delay (Rising edge triggering)



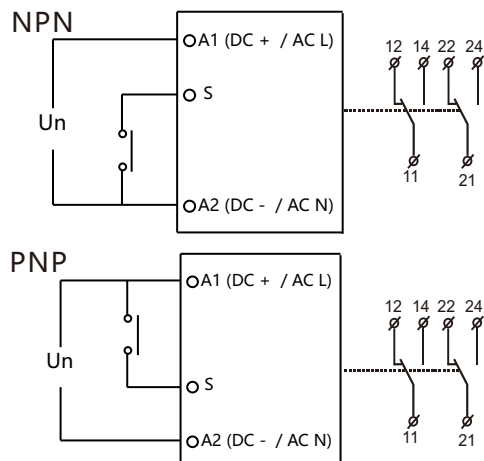
Time Setting



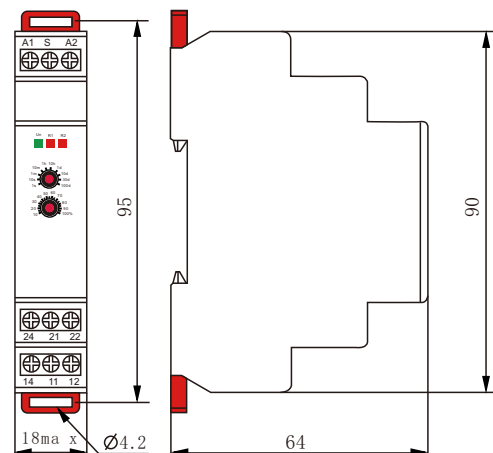
Ratio Setting



Wiring



Dimension



FCT18-Ata

Pulse delayed relay with summation control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- Ata 1 W N

1 2 3 4

1. Function	2. Type of output	3. Supply voltage	4. Control signal
Ata ON-delay	1 1CO contact 2 2CO contacts	A AC230V D DC24V W AC/DC12-240V	N NPN P PNP

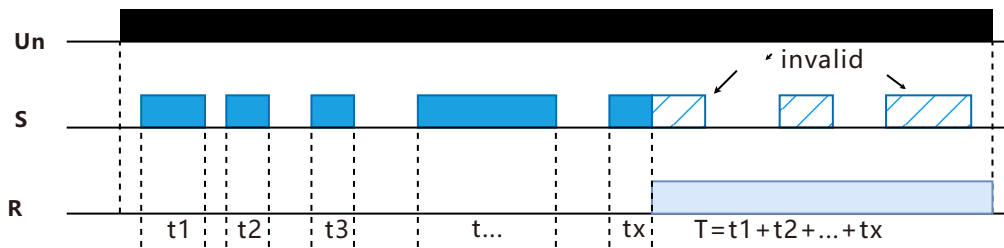


	FCT18-Ata1	FCT18-Ata2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N·m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

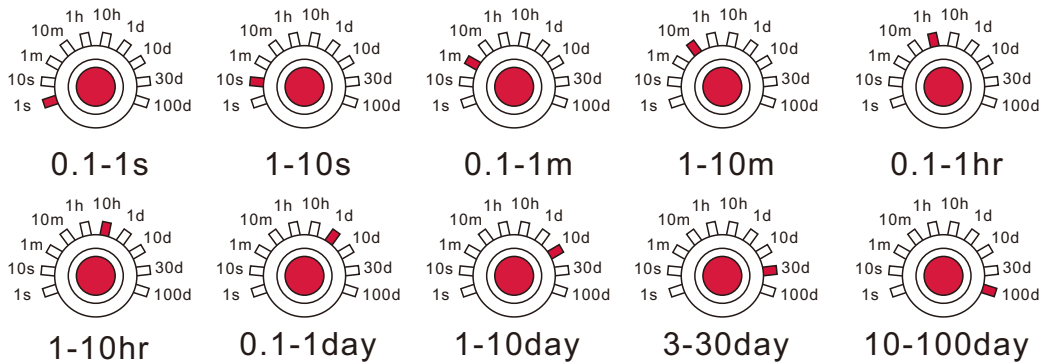
*The above information is subject to change without further notice

Timing Function

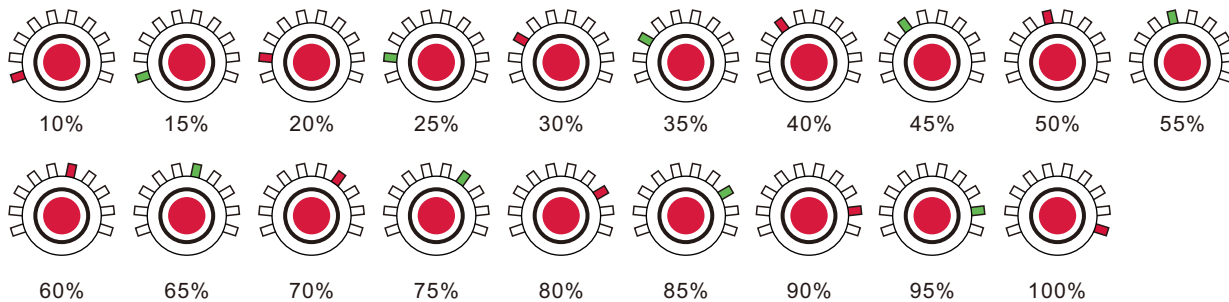
Ata: ON-delay



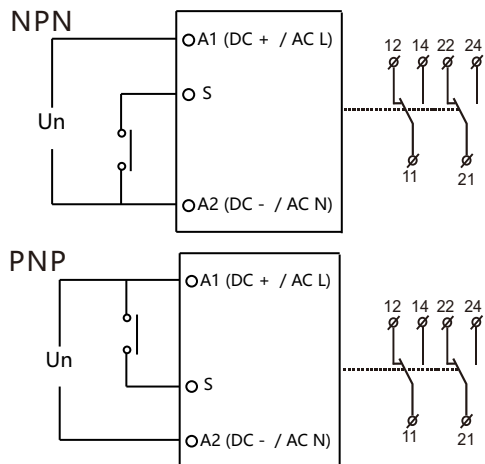
Time Setting



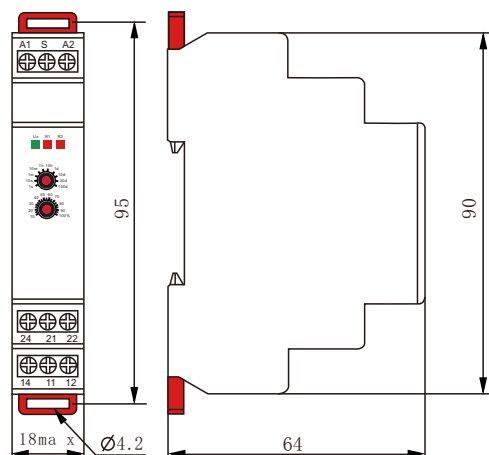
Ratio Setting



Wiring

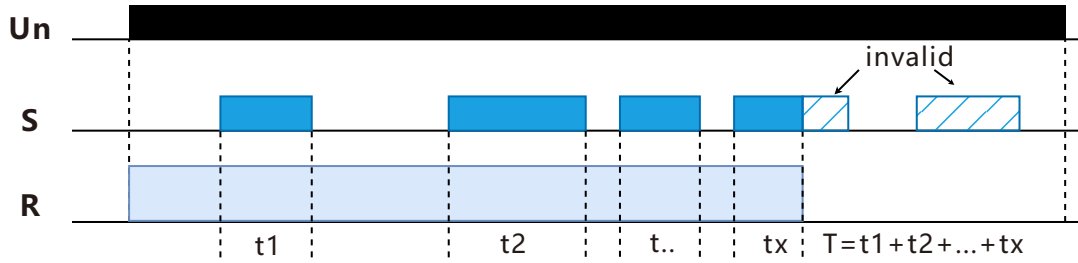


Dimension

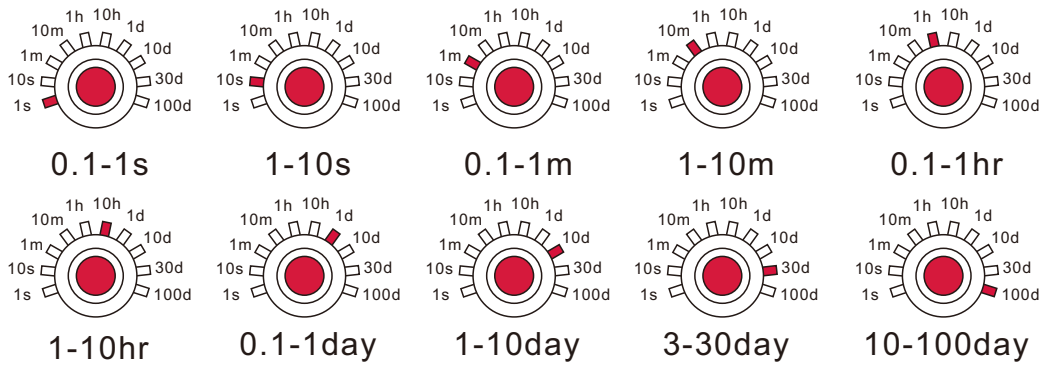


Timing Function

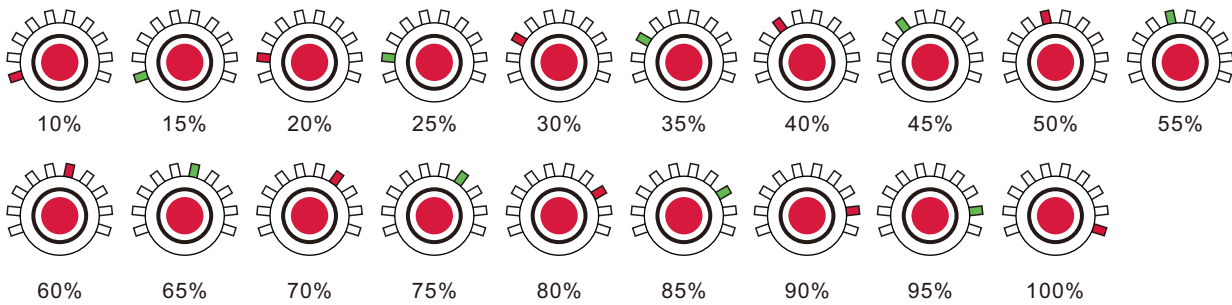
Bta: OFF-delay



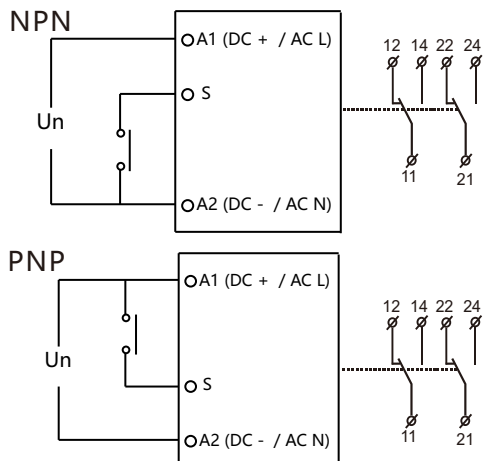
Time Setting



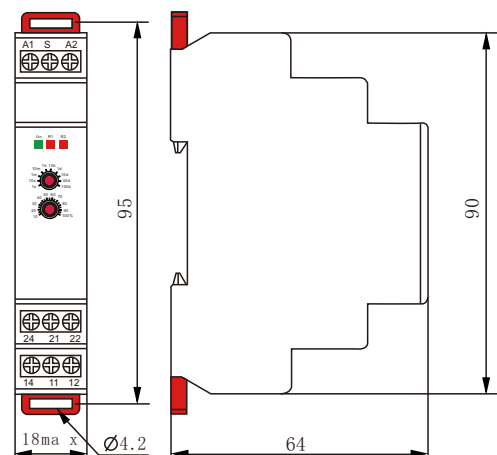
Ratio Setting



Wiring



Dimension



FCT18-AcR

Asymmetrical flashing relay (starting off)

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- AcR 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
AcR	ON-delay	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

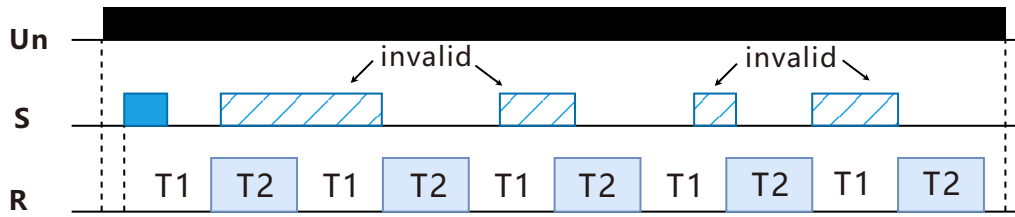


	FCT18-AcR1	FCT18-AcR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15% ~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

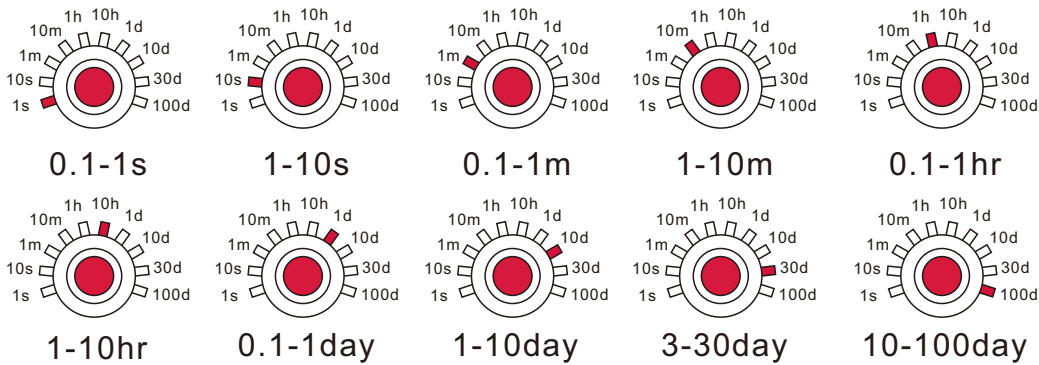
*The above information is subject to change without further notice

Timing Function

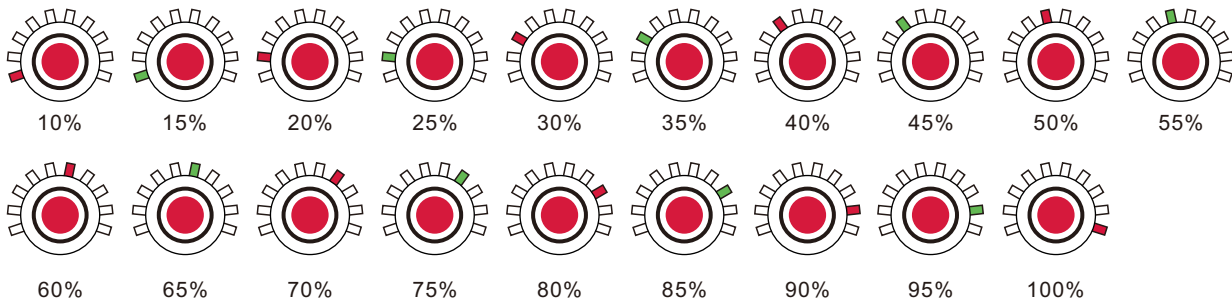
AcR: Repeat cycle Starting OFF



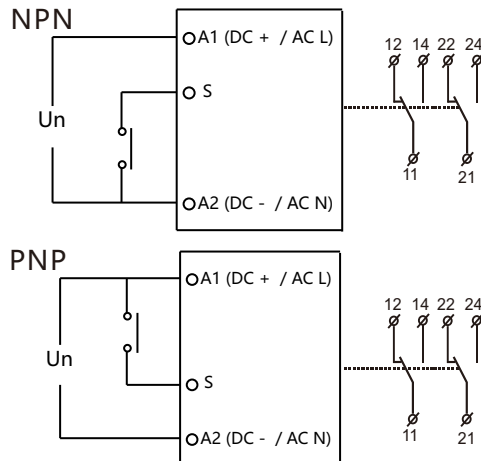
Time Setting



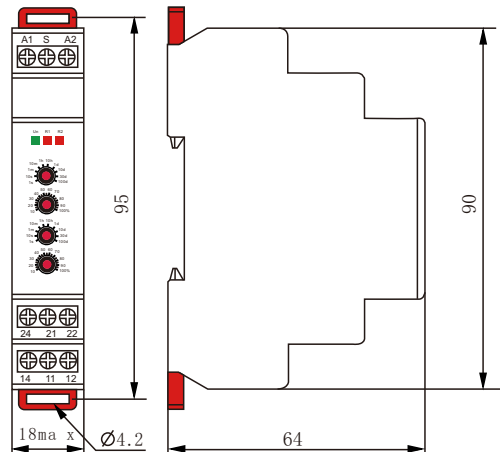
Ratio Setting



Wiring



Dimension



FCT18-BcR

Asymmetrical flashing relay (starting on)

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- BcR 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
BcR	OFF-delay	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

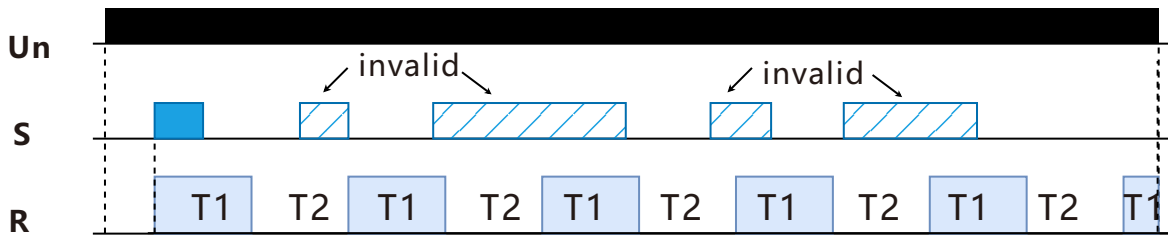


	FCT18-BcR1	FCT18-BcR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15% ~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

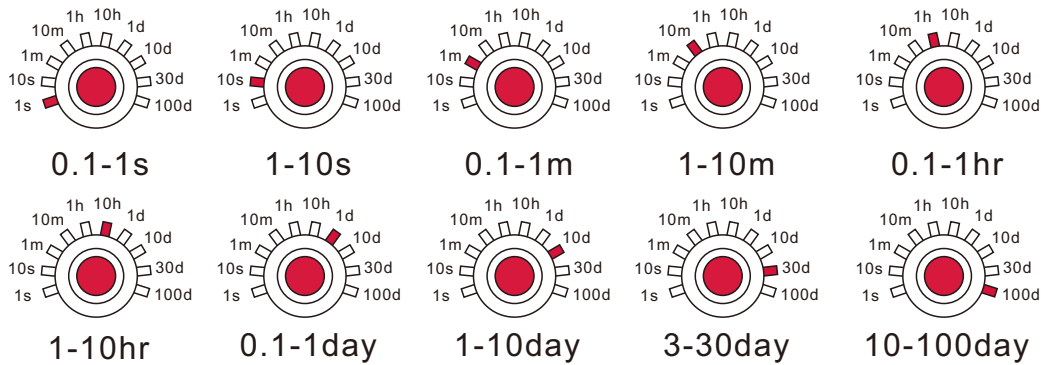
*The above information is subject to change without further notice

Timing Function

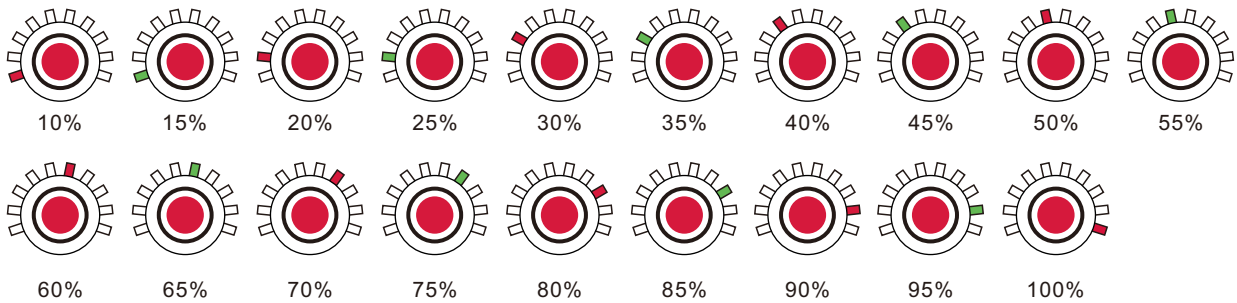
BcR: Repeat cycle Starting ON



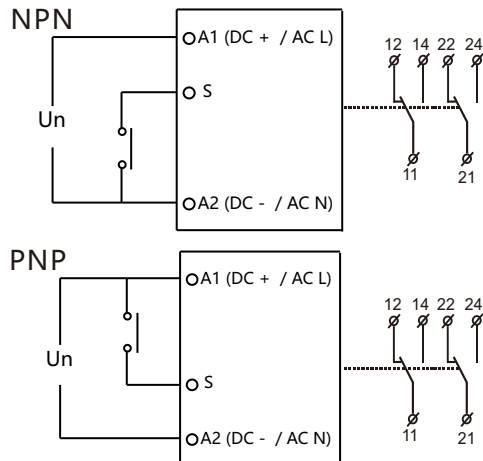
Time Setting



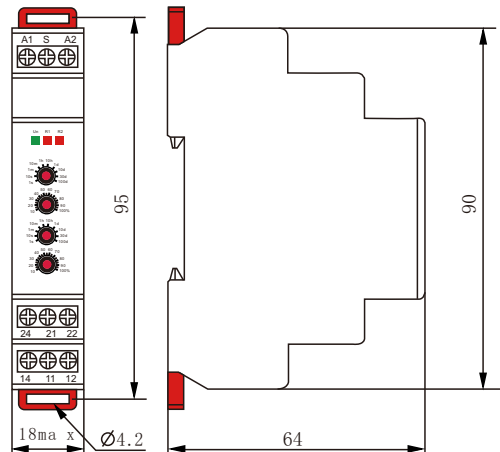
Ratio Setting



Wiring



Dimension



FCT18-BgF

Interval relay with control signal off

- The delay processing will not be affected by S
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- BgF 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
BgF	OFF-delay	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

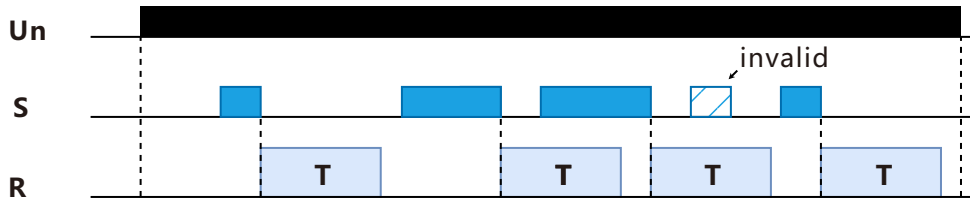
	FCT18-BgF1	FCT18-BgF2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



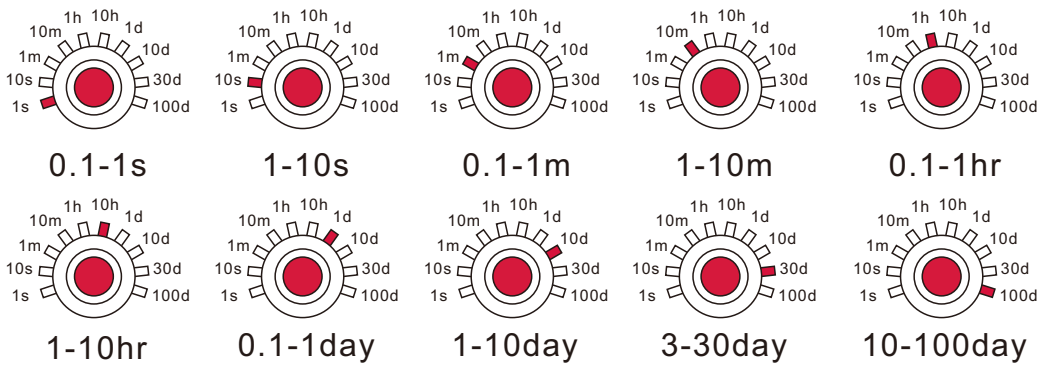
*The above information is subject to change without further notice

Timing Function

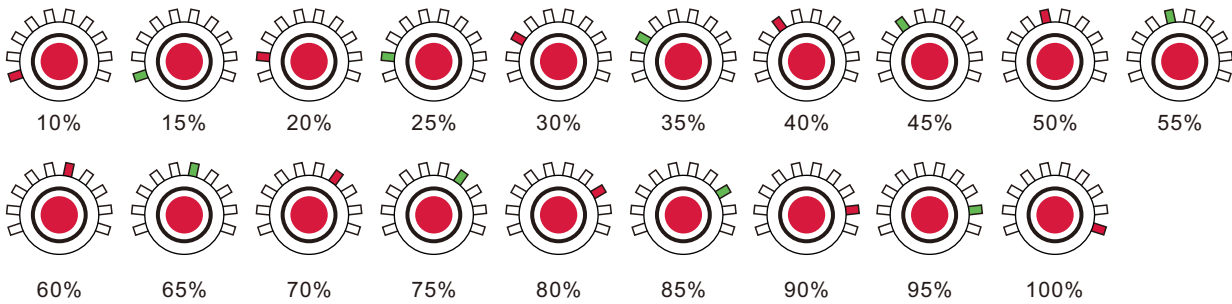
OFF-delay (Falling edge triggering)
The delay processing will not be affected by S



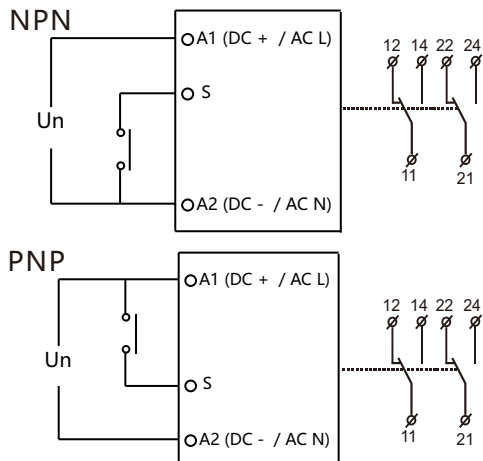
Time Setting



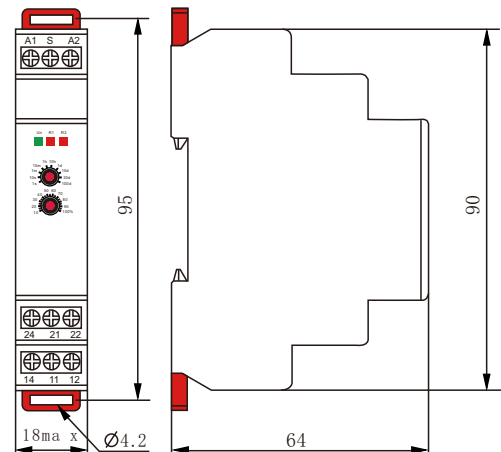
Ratio Setting



Wiring



Dimension



FCT18-Xd

Asymmetrical on-delay and off-delay relay with control signal

- Delay modes can be changed
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- Xd 1 W N

1 2 3 4

1.Function	2.Type of output	3.Supply voltage	4.Control signal
Xd ON-OFF delay switching	1 1CO contact 2 2CO contacts	A AC230V D DC24V W AC/DC12-240V	N NPN P PNP

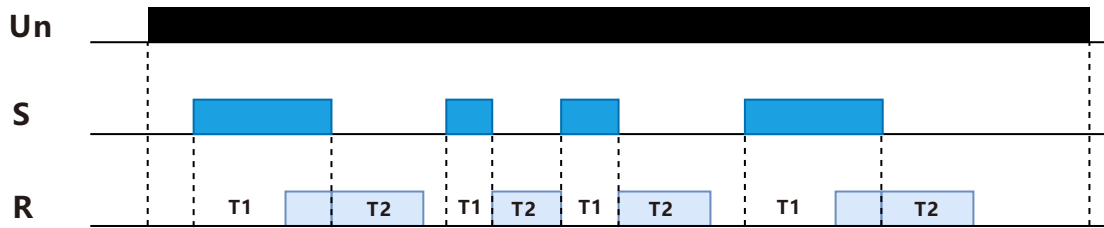
	FCT18-Xd1	FCT18-Xd2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N·m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



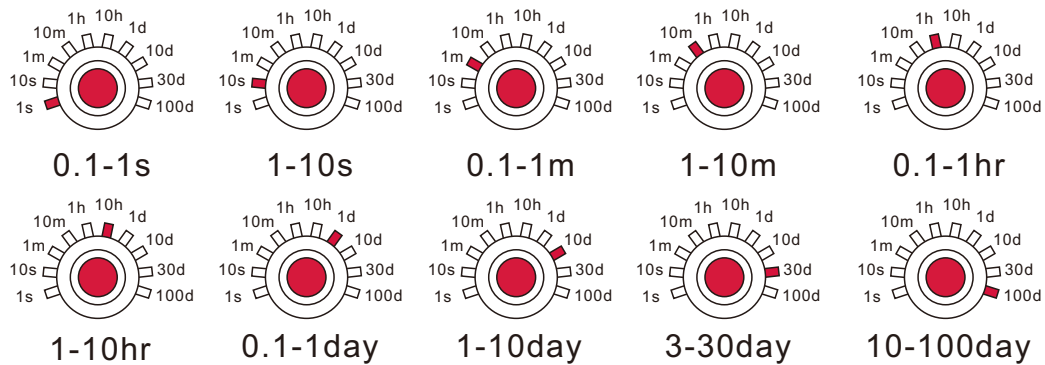
*The above information is subject to change without further notice

Timing Function

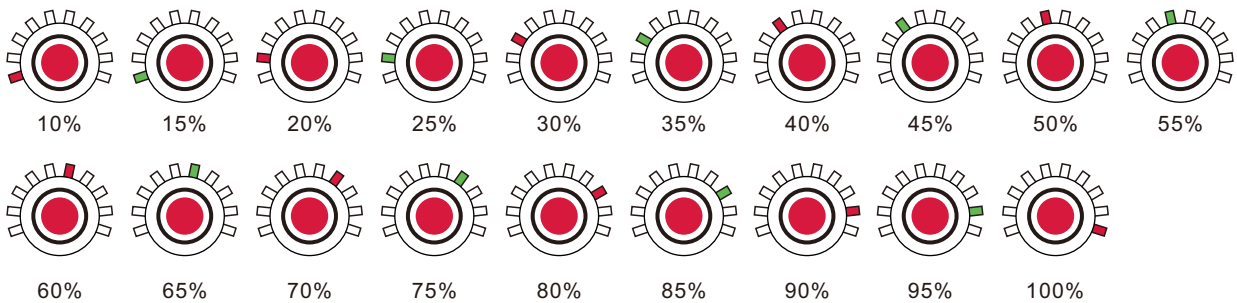
ON-delay(Rising edge) & OFF-delay(Falling edge)



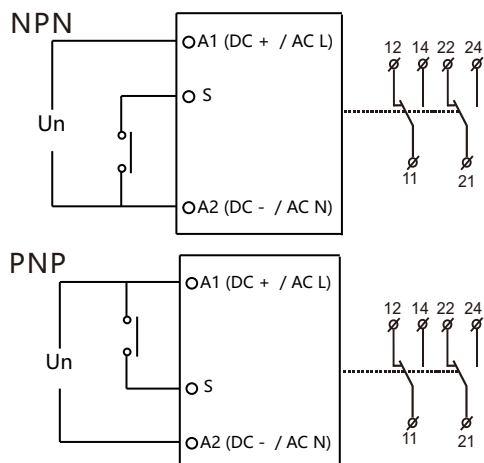
Time Setting



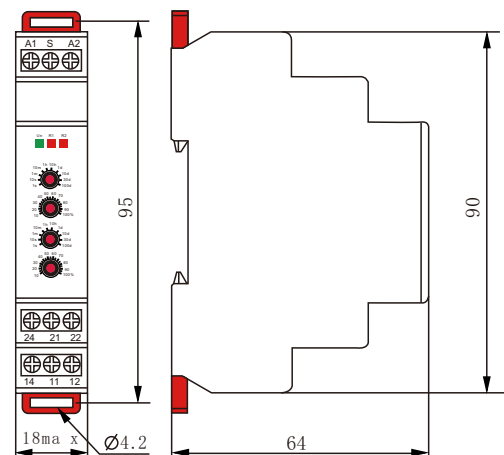
Ratio Setting



Wiring



Dimension



FCT18-CR

Bistable relay with control signal on

- Wide power supply range from 12 to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Strong anti-interference capability

FCT18- CR 1 W N
 1 2 3 4

1. Function		2. Type of output		3. Supply voltage		4. Control signal	
CR	ON-OFF Switching	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

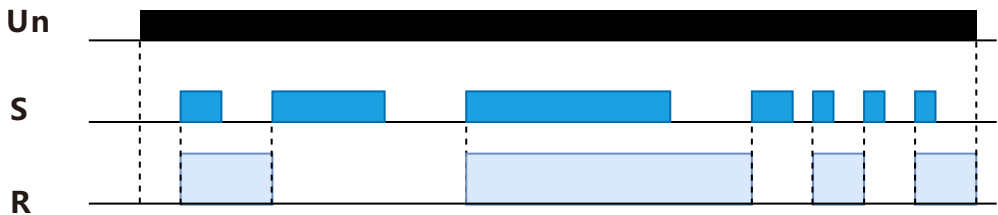
	FCT18-CR1	FCT18-CR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N·m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



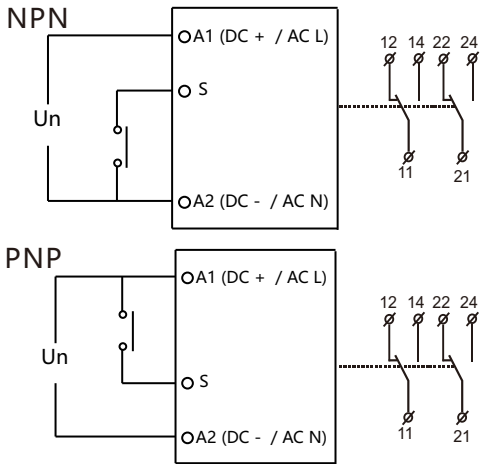
*The above information is subject to change without further notice

Timing Function

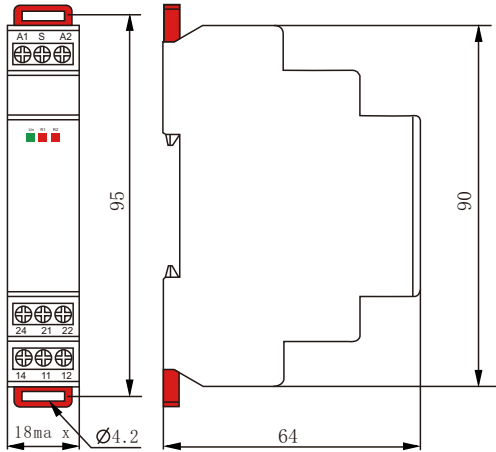
ON-OFF switching (Rising edge triggering)



Wiring



Dimension



FCT18-BD

Double interval relay with control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- BD 1 W N
 1 2 3 4

1.Function	2.Type of output	3.Supply voltage	4.Control signal
BD OFF-delay	1 1CO contact 2 2CO contacts	A AC230V D DC24V W AC/DC12-240V	N NPN P PNP

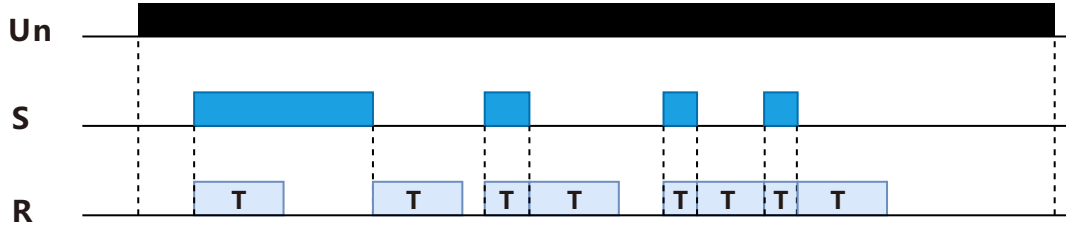
	FCT18-BD1	FCT18-BD2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



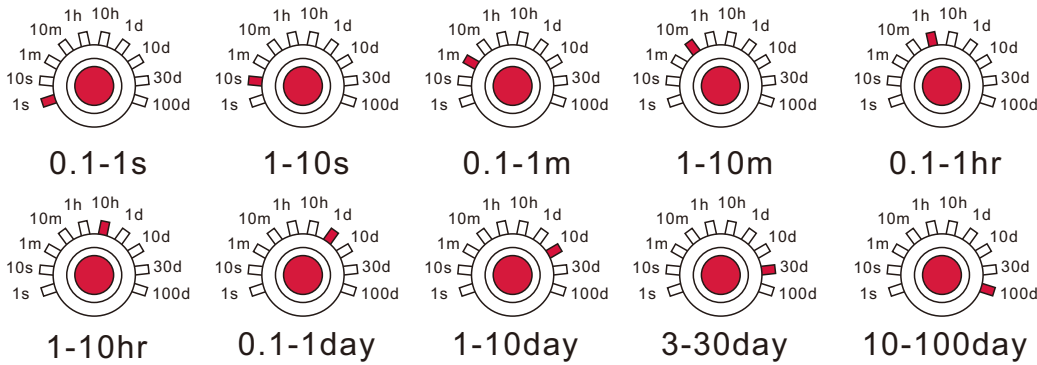
*The above information is subject to change without further notice

Timing Function

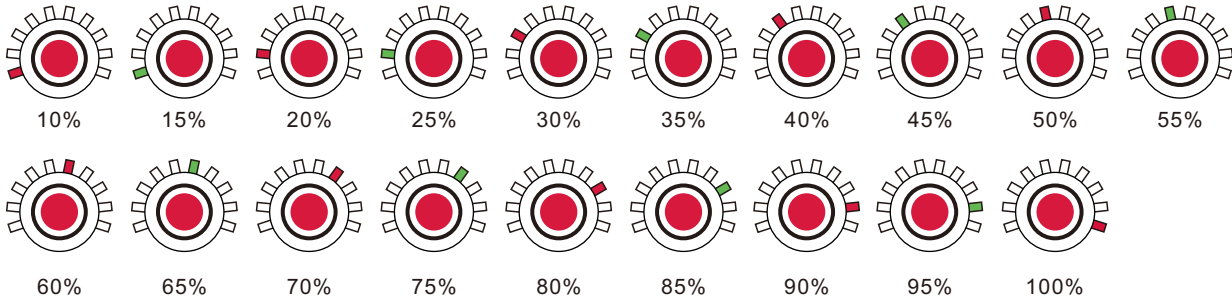
OFF-delay (Both Rising edge and Falling edge triggering)



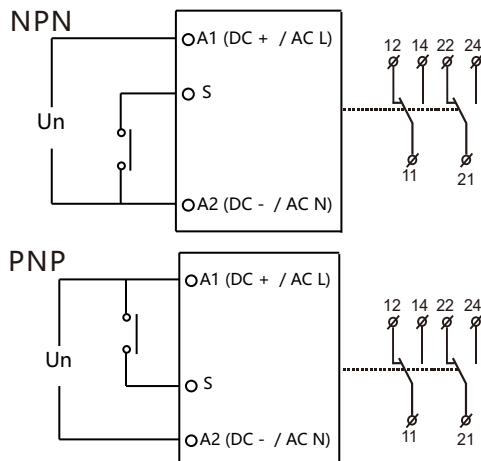
Time Setting



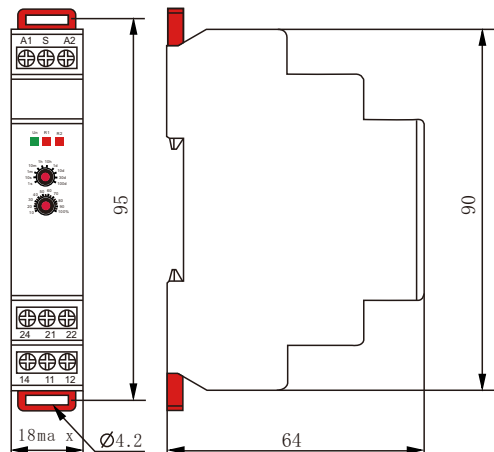
Ratio Setting



Wiring



Dimension



FCT18-AkR

Pulse delayed relay with control signal

- Relay operating time controller by S
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- AkR 1 W N

1 2 3 4

1.Function	2.Type of output	3.Supply voltage	4.Control signal
AkR ON-delay	1 1CO contact 2 2CO contacts	A AC230V D DC24V W AC/DC12-240V	N NPN P PNP

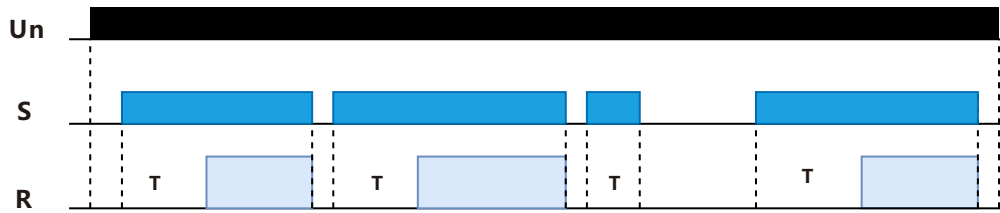
	FCT18-AkR1	FCT18-AkR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N·m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



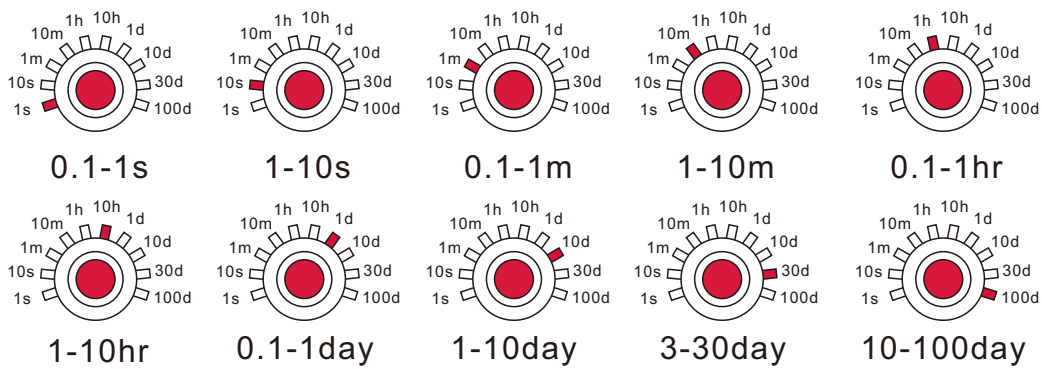
*The above information is subject to change without further notice

Timing Function

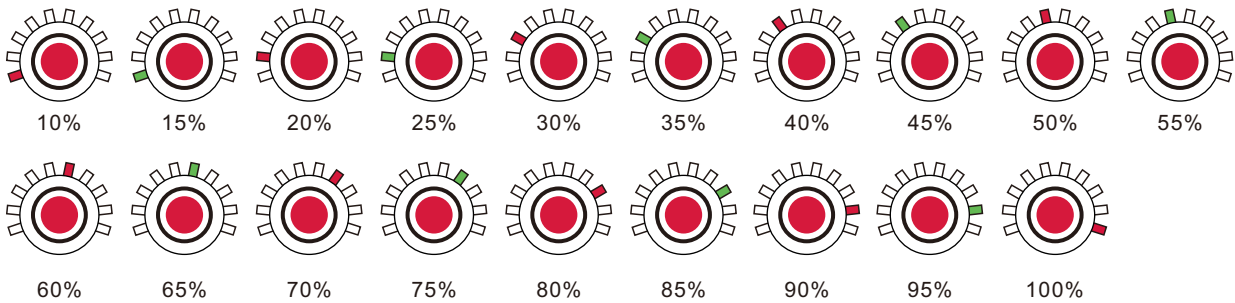
ON-delay (Rising edge triggering)
The operating time is controlled by S



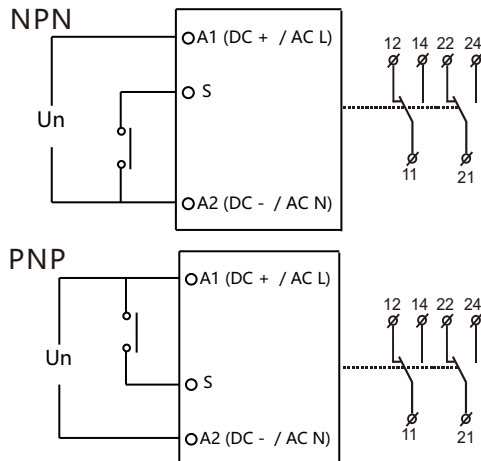
Time Setting



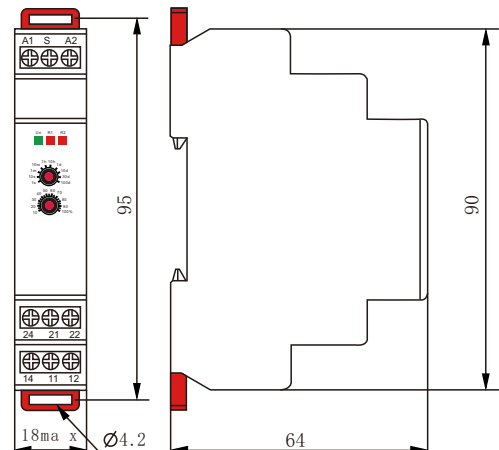
Ratio Setting



Wiring

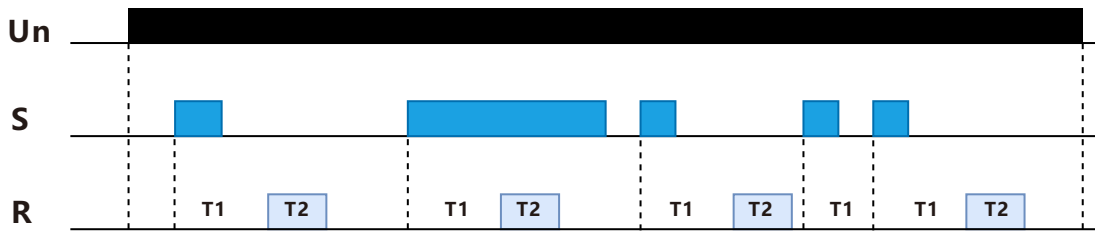


Dimension

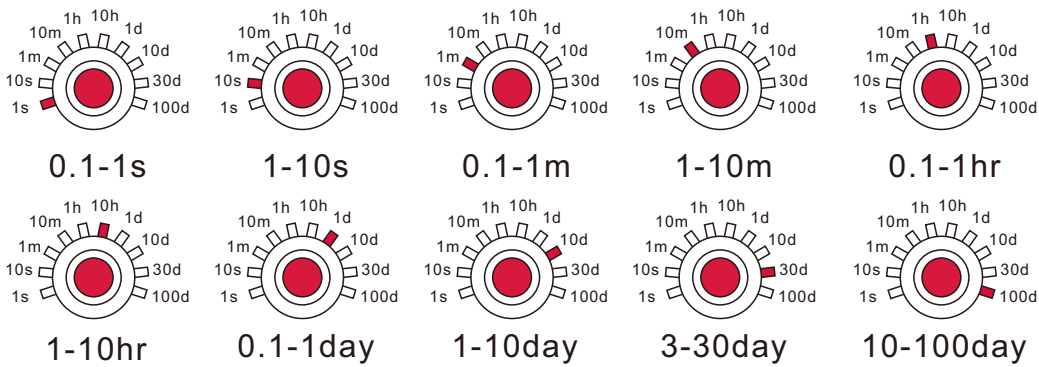


Timing Function

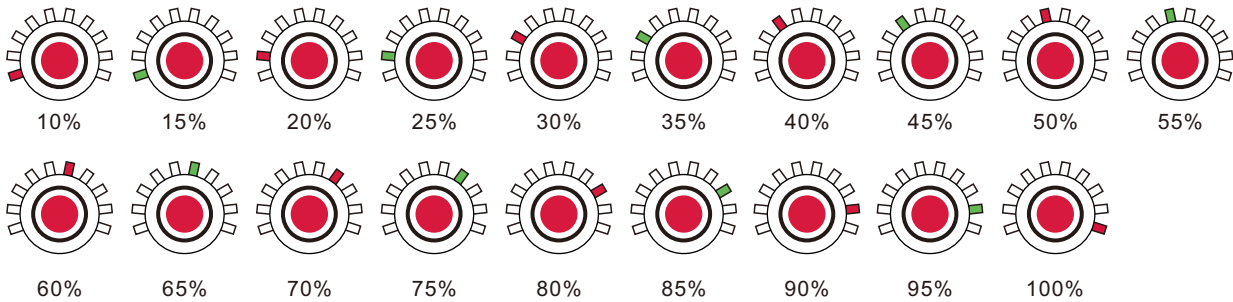
ON-delay (Rising edge triggering)



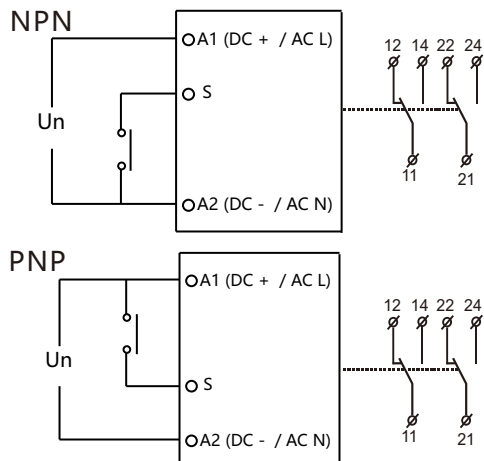
Time Setting



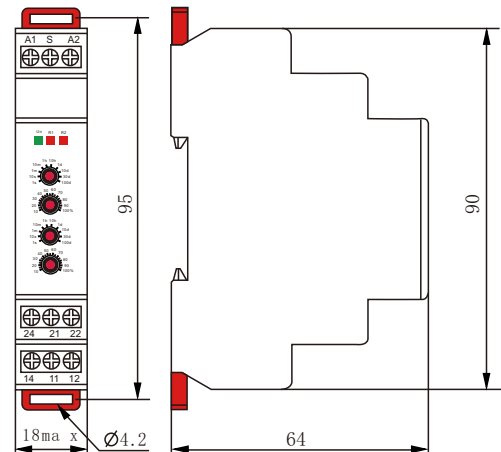
Ratio Setting



Wiring



Dimension



FCT18-WgR

Asymmetrical on-delay and off-delay relay with control signal

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- WgR 1 W N

1 2 3 4

1.Function	2.Type of output	3.Supply voltage	4.Control signal
WgR ON-delay & OFF-delay switching	1 1CO contact 2 2CO contacts	A AC230V D DC24V W AC/DC12-240V	N NPN P PNP

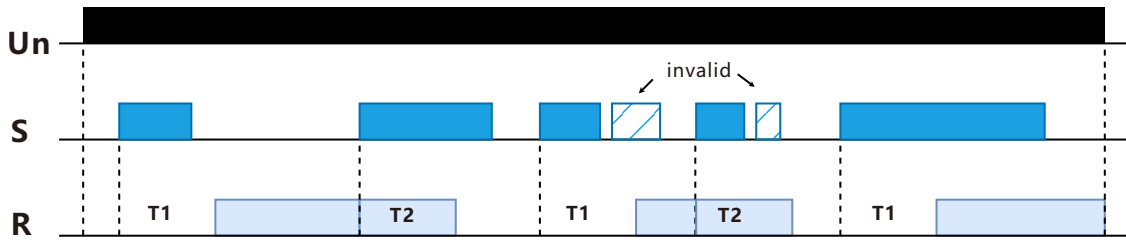
	FCT18-WgR1	FCT18-WgR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



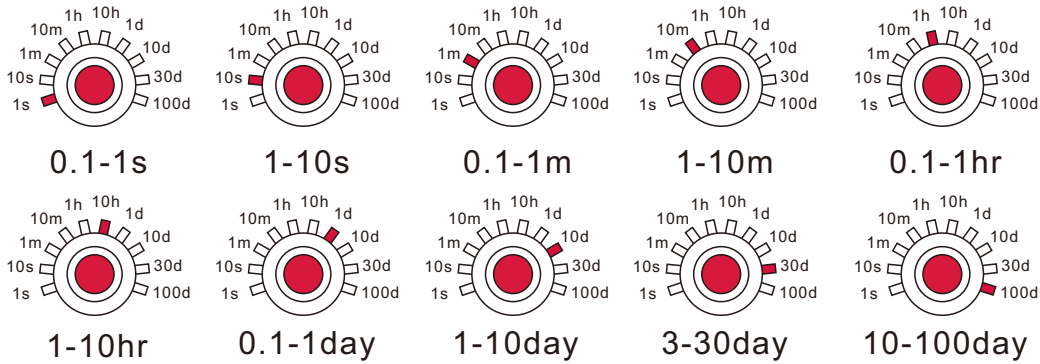
*The above information is subject to change without further notice

Timing Function

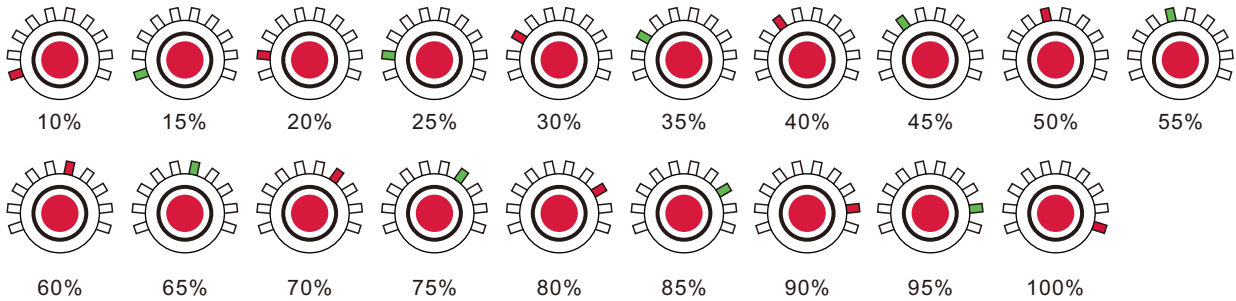
ON-delay & OFF-delay switching (Rising edge triggering)
 The delay processing will not be affected by S



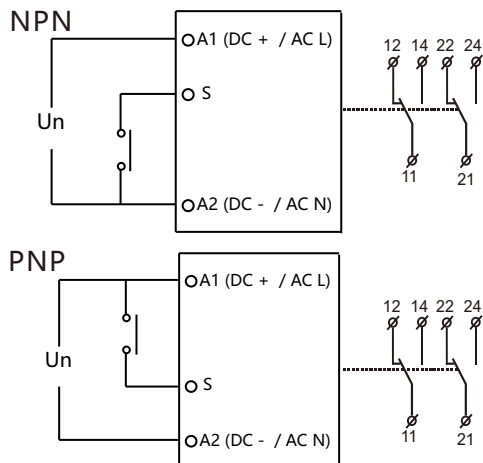
Time Setting



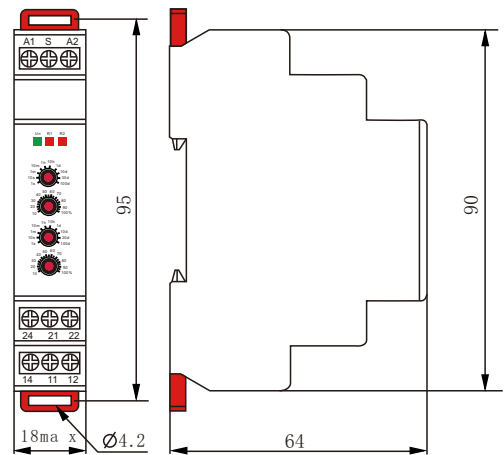
Ratio Setting



Wiring



Dimension



FCT18-Q

Single function time relay

- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- Q 1 W N

1 2 3 4

1.Function		2.Type of output		3.Supply voltage		4.Control signal	
Q	Triple OFF-delay	1	1CO contact	A	AC230V	N	NPN
		2	2CO contacts	D	DC24V	P	PNP
				W	AC/DC12-240V		

	FCT18-Q1	FCT18-Q2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

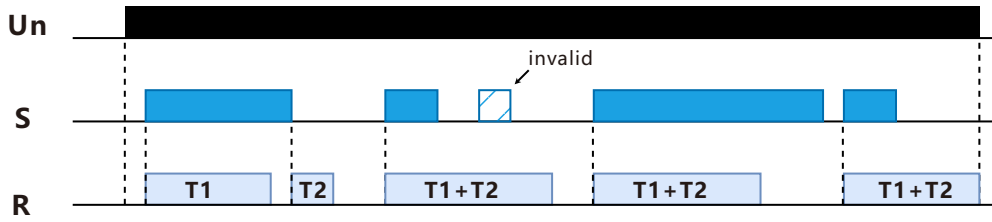


*The above information is subject to change without further notice

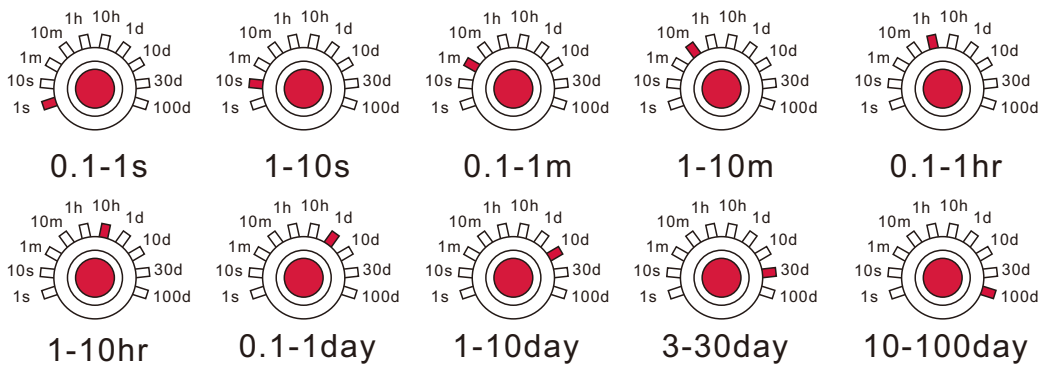
Timing Function

OFF-delay (Rising edge triggering)

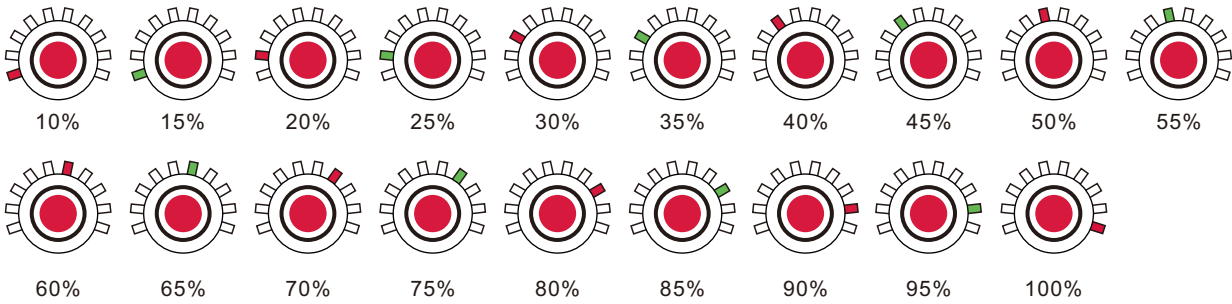
During delay processing, signal will be invalid



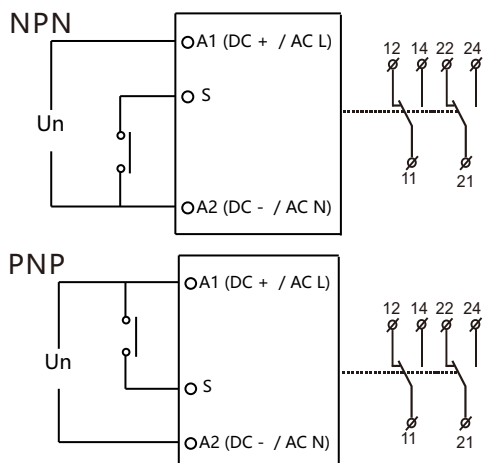
Time Setting



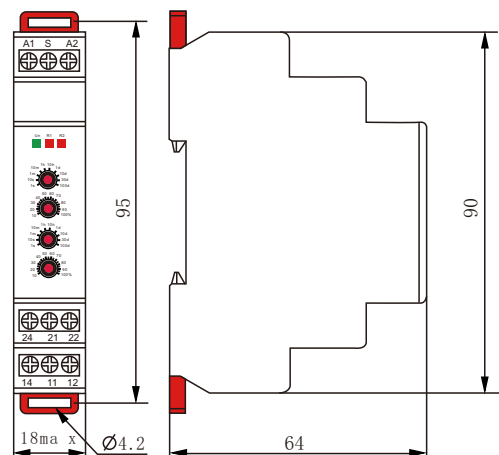
Ratio Setting



Wiring



Dimension



FCT18-AgR

Pulse delayed relay with control signal

- The delay processing will not be affected by S
- Time ranges from 0.1s-100days
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Time error less than 0.5%
- Strong anti-interference capability

FCT18- AgR 1 W N

1.Function	
AgR	ON-delay

2.Type of output	
1	1CO contact
2	2CO contacts

3.Supply voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

4.Control signal	
N	NPN
P	PNP

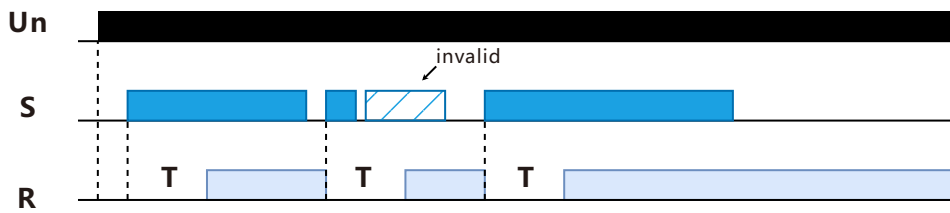
	FCT18-AgR1	FCT18-AgR2
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-100days	
Time setting	Button	
Time deviation	0.1%	
Repeat accuracy	0.5%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	2*SPDT
Rated current	1*16A	2*16A
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



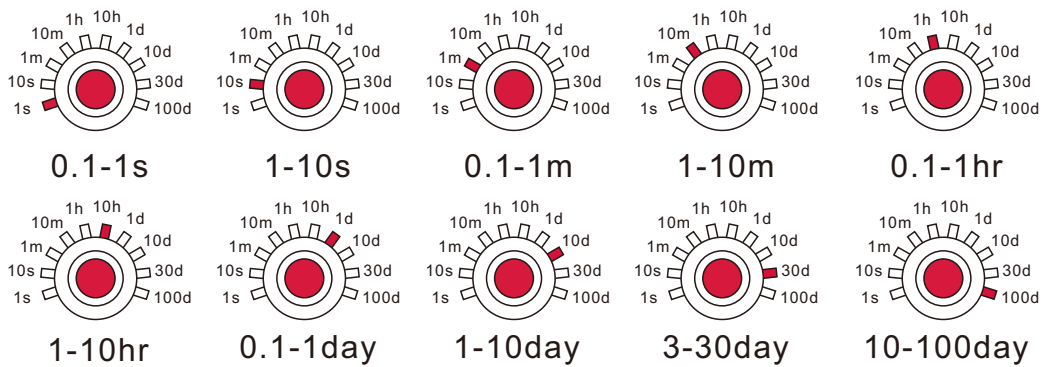
*The above information is subject to change without further notice

Timing Function

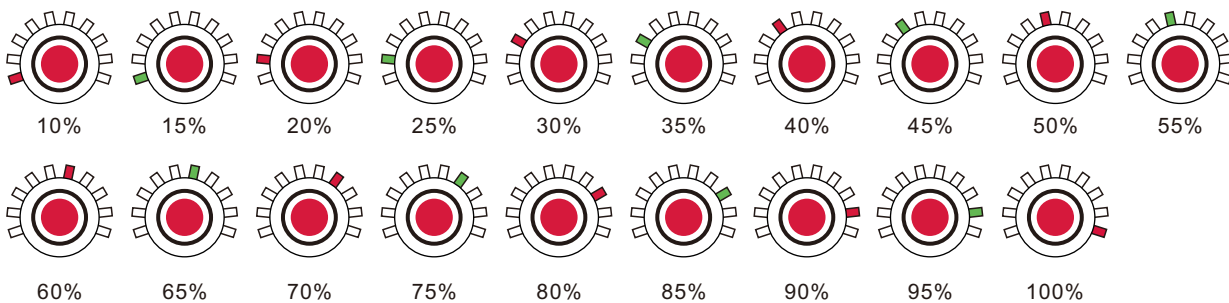
ON-delay (Rising edge triggering)
 During the delay processing, signal will be invalid



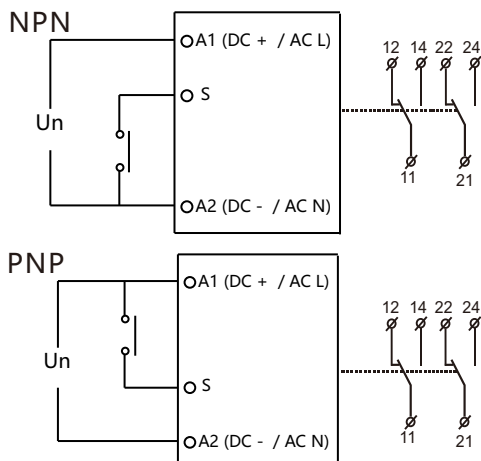
Time Setting



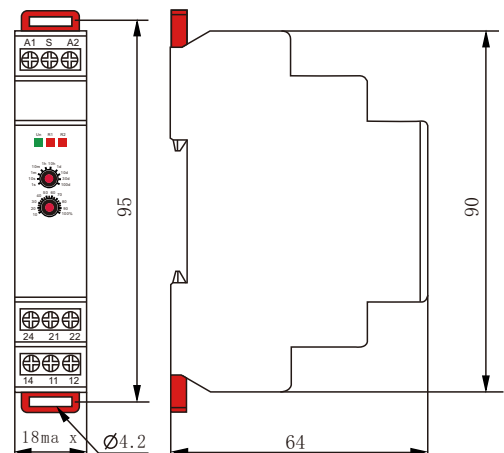
Ratio Setting



Wiring



Dimension



FCV18-01/02

Single-phase voltage relay

- Monitor for overvoltage or undervoltage
- Wide power supply range from 12 to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Strong anti-interference capability

FCV18- 01 - A240 W

1 2 3

1.Function	
01	Manul Resetting
02	Auto Resetting
3.Supply voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

2.Voltage		
	Setting Voltage	Monitoring Voltage
A48	AC20-80V	AC15-100V
A220	AC165-260V	AC140-270V
A240	AC65-260V	AC50-270V
D12	DC9-18V	DC7-25V
D48	DC20-80V	DC15-100V
D240	DC65-260V	DC50-270V

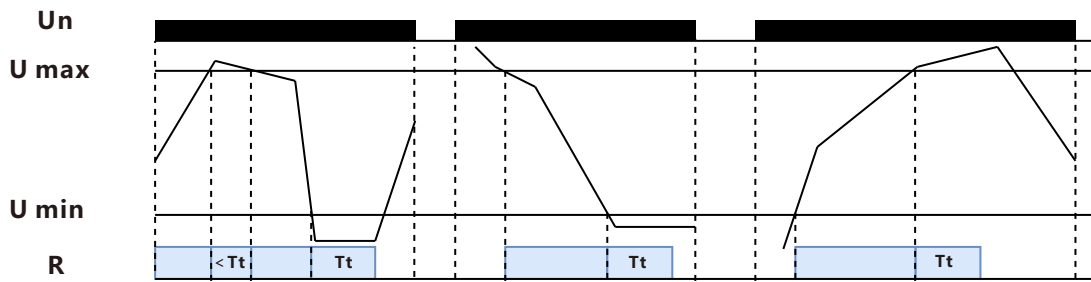
	FCV18-01	FCV18-02
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time range	0.1s-20s	
Setting	Button	
Setting deviation	0.1%	
Measurement accuracy	≤1% / ±1V	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	
Rated current	1*16A	
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	About 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	



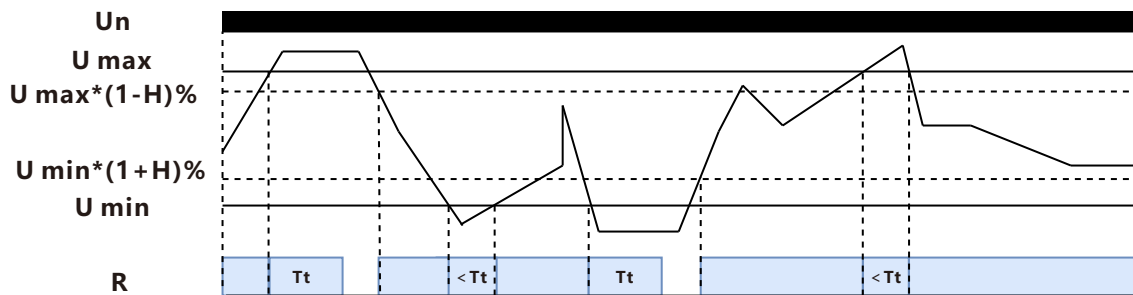
*The above information is subject to change without further notice

Function Chart

FCV18-01 (manual resetting)

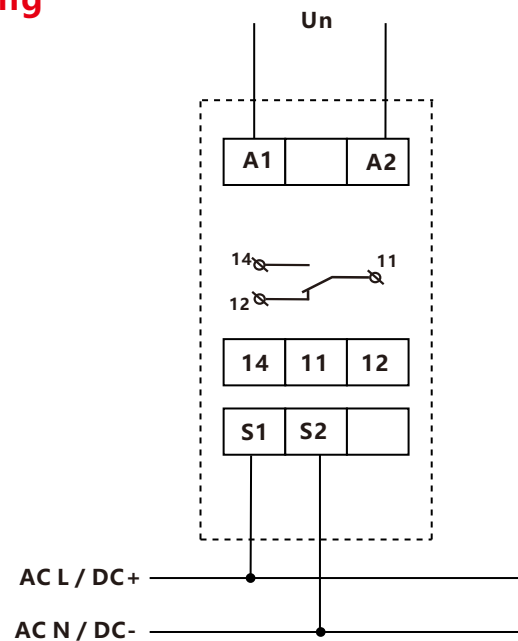
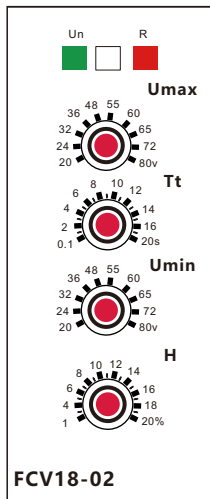
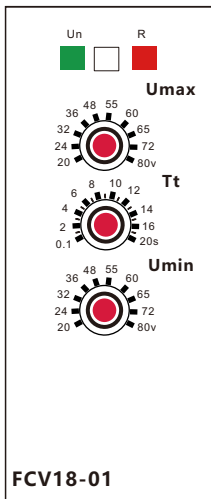


FCV18-02 (auto resetting)



*pls ensure $U_{max} > U_{max} * (1-H)\% > U_{min} * (1+H)\% > U_{min}$

Wiring



FCP18

Three-phase voltage relay

- Worldwide power specifications supported
- Relay warning status can easily be monitored by LED
- Monitor for phase sequence, phase loss, overvoltages and undervoltages

FCP18- 01 - A

1.Function						
	Over -voltage	Under -voltage	Asymmetry	Time delay	Phase sequence	Phase loss
01	N/A	N/A	N/A	5s	✓	✓
02	2%~20%	-20%~-2%	N/A	0.1~30s	✓	✓
03	2%~20%	-20%~-2%	8%	0.1~30s	✓	✓
04	2%~20%	-20%~-2%	5%~15%	5s	✓	✓
05	N/A	N/A	5%~15%	0.1~30s	✓	✓
06	15%	-15%	8%	5s	✓	✓

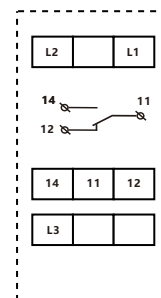
2.Supply voltage		
A	3phase 3wire	173,190,198,208,220,230,240,250,260,275 L-L
B	3phase 4wire	100,110,115,120,127,133,139,145,151,160 L-N
C	3phase 3wire	310,328,345,365,380,400,415,440,460,480 L-L
D	3phase 4wire	180,190,200,210,220,232,240,255,266,278 L-N

	FCP18(3phase 3wire)	FCP18(3phase 4wire)
Monitoring terminal	L1-L2-L3	L1-L2-L3-N
Supply terminal	L1-L2	L1-N
Rated supply frequency	45HZ-60HZ	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-30s	
Setting	Button	
Setting deviation	0.1%	
Measurement accuracy	≤1%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	
Rated current	1*16A	
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N·m	
Dimension	90mm*18mm*64mm	
Weight	About 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

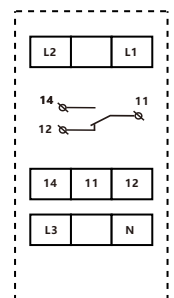


Wiring

3phase 3line

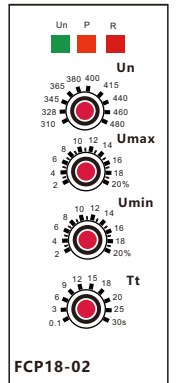
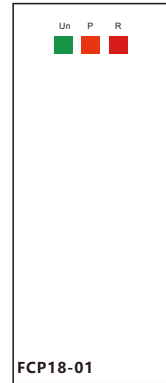
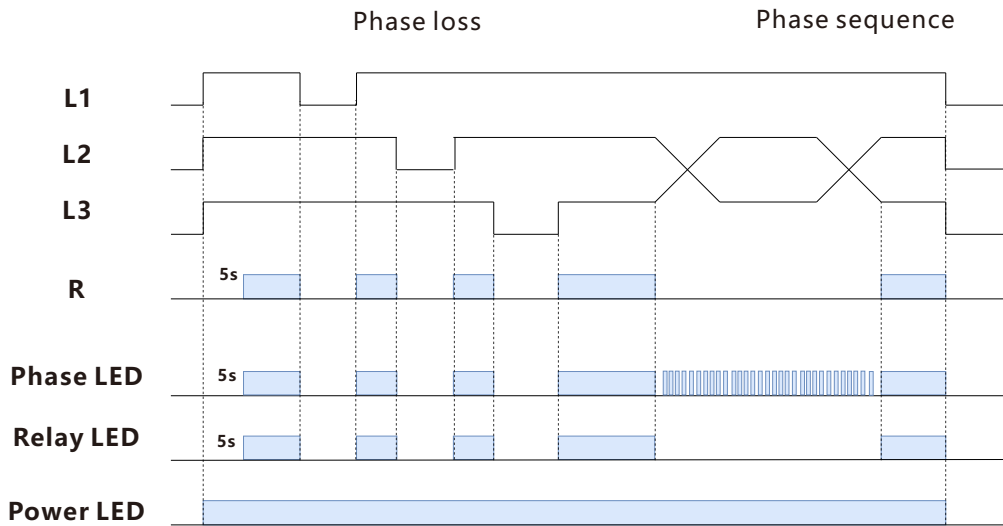


3phase 4line

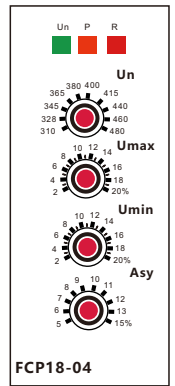
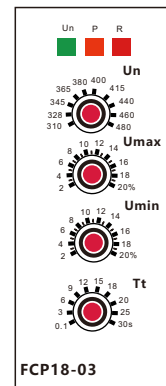
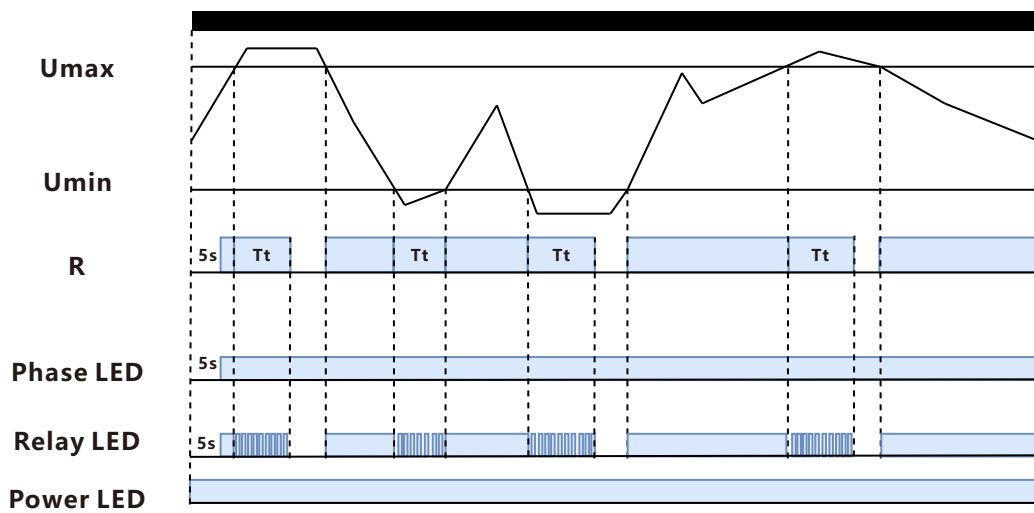


*The above information is subject to change without further notice

Phase loss & Phase sequence

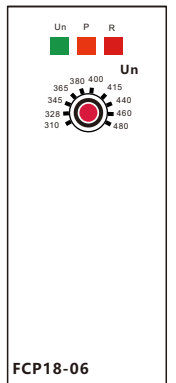
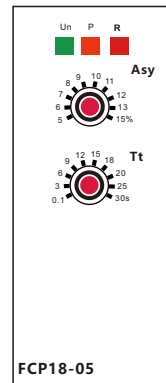
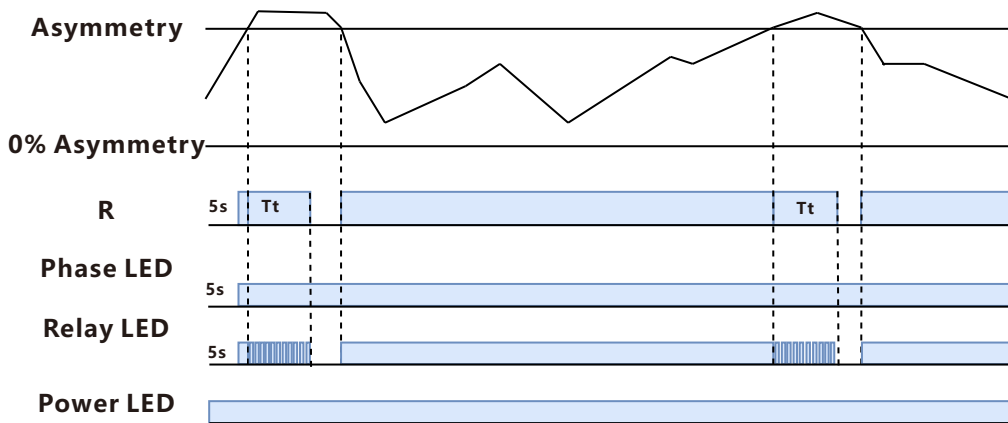


Overvoltage & Undervoltage



The voltage critical value fluctuates, the time delay increases until the voltage stabilizes

Asymmetry



$$Asy = \frac{U_{max} - U_{min}}{U_{avr}}$$

$$U_{avr} = \frac{U_1 + U_2 + U_3}{3}$$

$$U_{max} = \max(U_1, U_2, U_3)$$

$$U_{min} = \min(U_1, U_2, U_3)$$

FCC18-01/2/3/4

Single-phase current relay

- Monitor for overcurrent or undercurrent
- Manual resetting and automatically resetting supported
- Wide power supply range from 12 to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Strong anti-interference capability

FCC18- 01 - D2 W

1 2 3

1.Function	
01	Overcurrent (Manual resetting / Auto resetting)
02	Undercurrent (Manual resetting / Auto resetting)
03	Over & Under current (Manual resetting)
04	Over & Under current (Auto resetting)

3.Supply voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

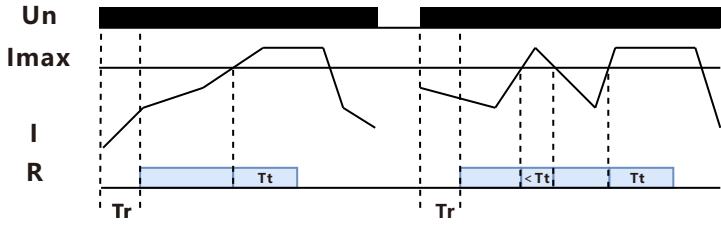
2.Current			
	Current range		Current range
A0.5	AC 0.05A-0.5A	D0.5	DC 0.05A-0.5A
A1	AC 0.1A-1A	D1	DC 0.1A-1A
A2	AC 0.2A-2A	D2	DC 0.2A-2A
A5	AC 0.5A-5A	D5	DC 0.5A-5A
A8	AC 0.8A-8A	D8	DC 0.8A-8A
A16	AC 1.6A-16A	D16	DC 1.6A-16A

	FCC18-01	FCC18-02
Input Terminal	A1-A2	
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~ +10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-20s	
Setting	Button	
Setting deviation	0.1%	
Measurement accuracy	5% / ±0.1A	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	
Rated current	1*16A	
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200m	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	About 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN61812-1	

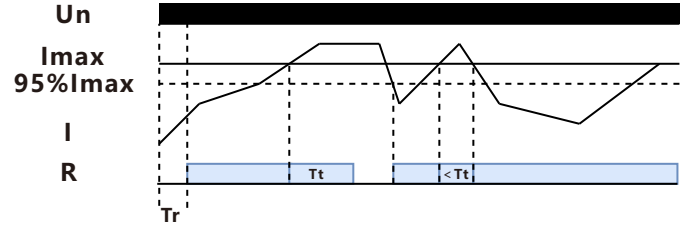


*The above information is subject to change without further notice

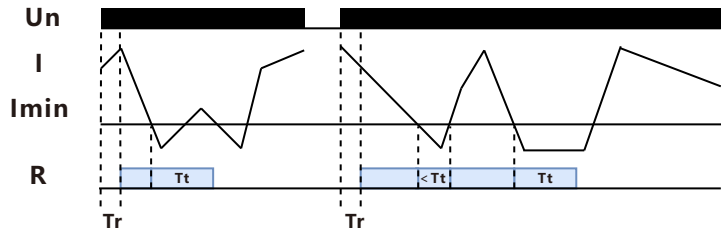
FCC18-01 (Manual resetting)



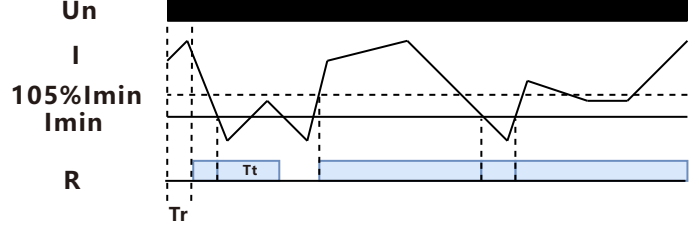
FCC18-01 (Auto resetting)



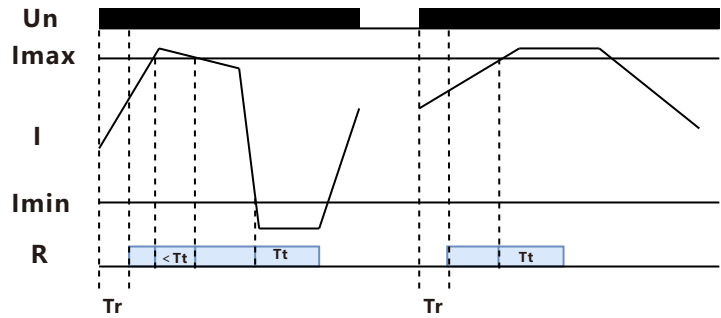
FCC18-02 (Manual resetting)



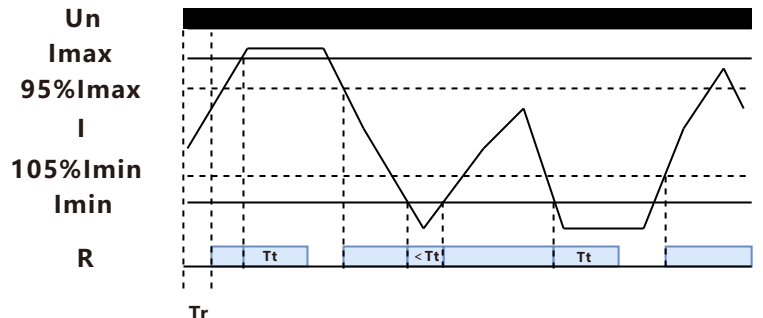
FCC18-02 (Auto resetting)



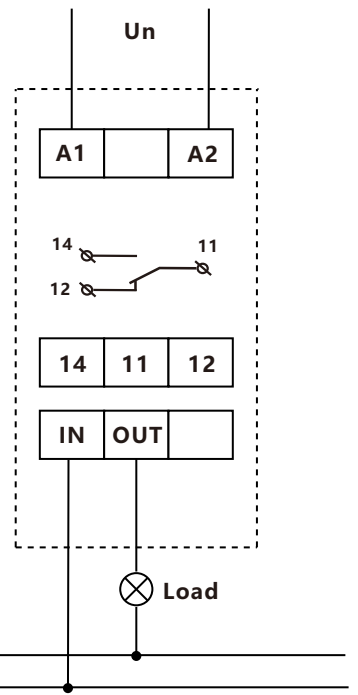
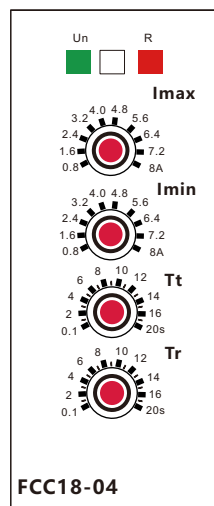
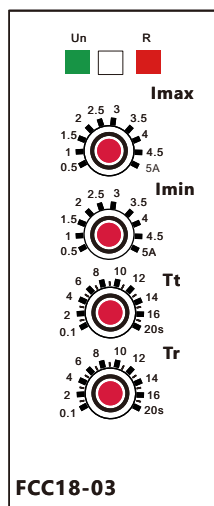
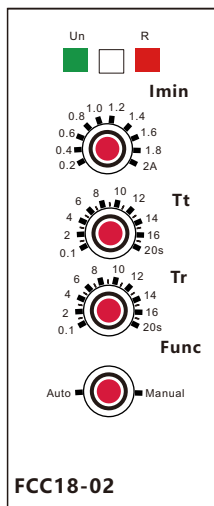
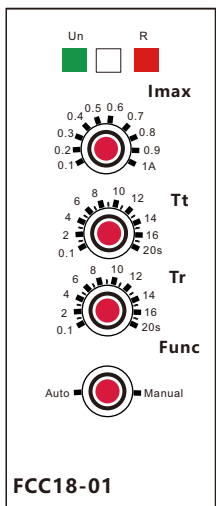
FCC18-03



FCC18-04



Wiring



FCL18-01/02

Liquid level control realy

- Monitor for overliquid or underliquid
- Wide power supply range from 12to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Strong anti-interference capability

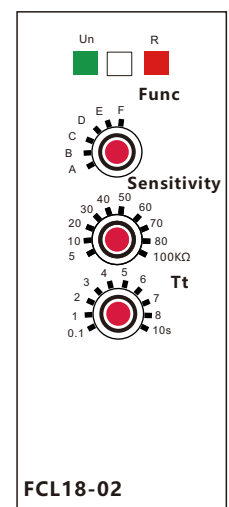
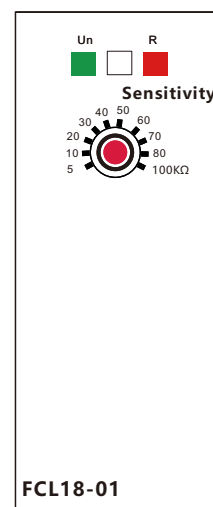


FCL18- $\frac{01}{1}$ - $\frac{W}{2}$

1.Function	
01	2 level control
02	1 or 2 level control

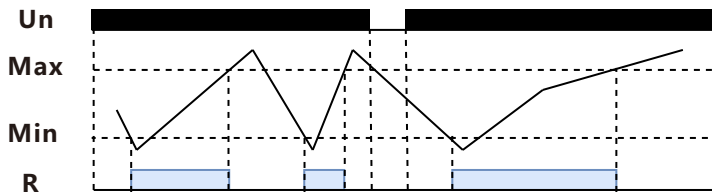
2.Supply voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

	FCL18-01	FCL18-02
Input Terminal		A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V	
Power consumption	AC 3.5VA/ DC 2.0W	
Voltage tolerance	-15%~+10%	
Supply indication	Green LED	
Relay indication	Red LED	
Time ranges	0.1s-10s	
Setting	button	
Setting deviation	0.1%	
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)	
Output contact	1*SPDT	
Rated current	1*16A	
Mechanical life	1*10 ⁷	
Electrical life	1*10 ⁵	
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C	
Mounting	DIN rail EN/IEC 60715	
IP Rating	IP20	
Stripping length	7mm (0.28in)	
Installed altitude	≤2200米	
Pollution level	2	
Max cable size	AWG13-20 0.4N-m	
Dimension	90mm*18mm*64mm	
Weight	about 90g	
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1	

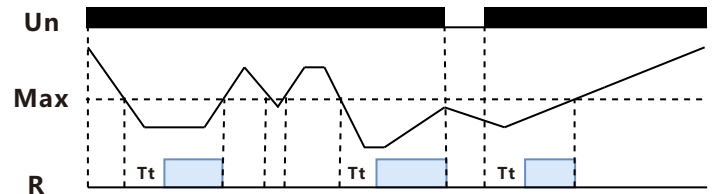


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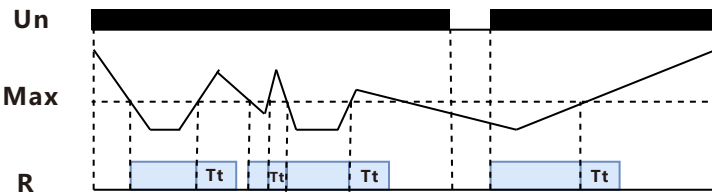
**FCL18-02 Function A
(2 level control, Fill liquid)**



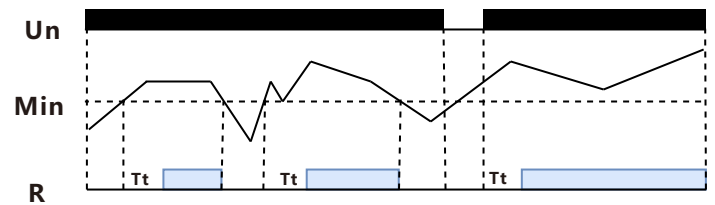
**FCL18-02 Function B
(1 level control, Fill liquid)**



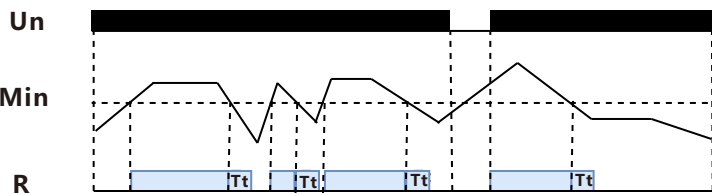
**FCL18-02 Function C
(1 level control, Fill liquid)**



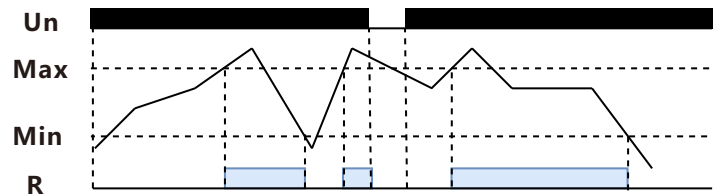
**FCL18-02 Function D
(1 level control, Empty liquid)**



**FCL18-02 Function E
(1 level control, Empty liquid)**

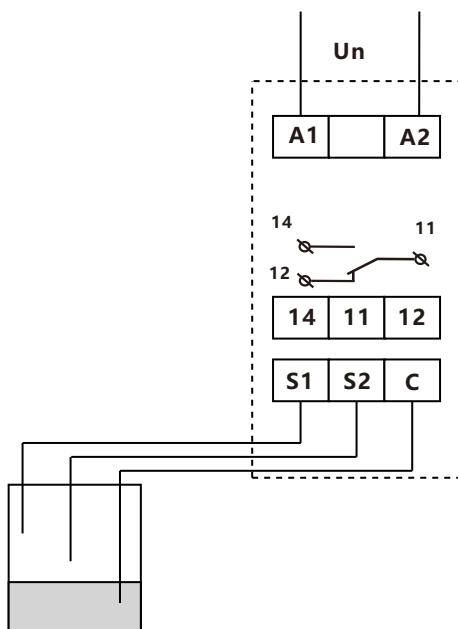


**FCL18-02 Function F & FCL18-01
(2 level control, Empty liquid)**

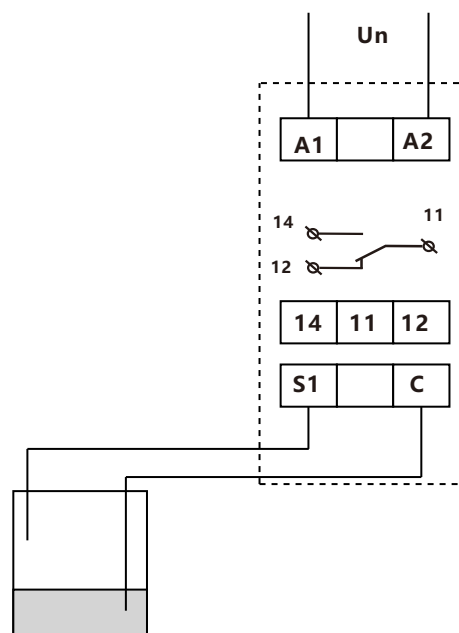


Wiring

2 level control



1 level control



Accessory



FCL-PB Liquid level probe is not included with the main body and needs to be purchased separately.
 1.5 meters in red,
 2.5 meters in white
 3.5 meters in blue.

FCB18

Twilight relay

- 3 modes: Auto, ON, OFF
- Wide power supply range from 12 to 240 VAC/DC.
- Easy to set up with wiring diagrams on the side of product
- Strong anti-interference capability

FCB18- W 1

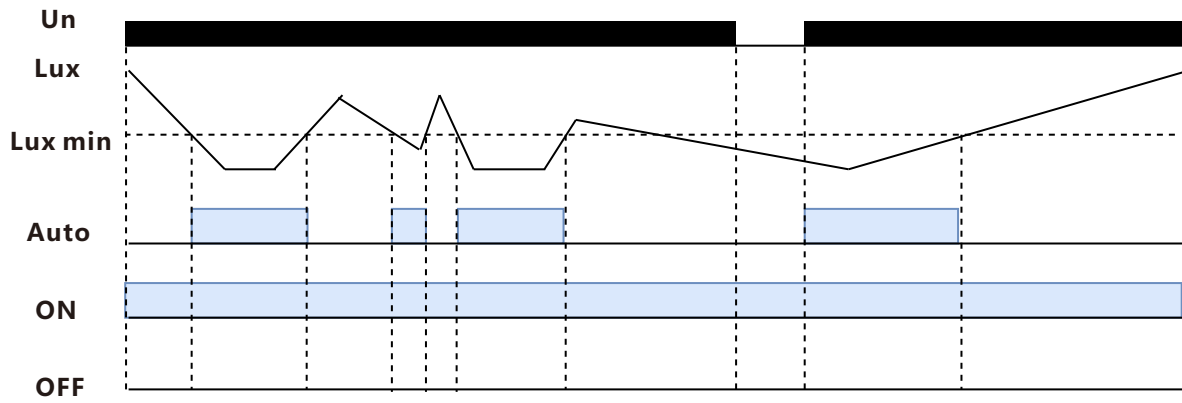
1 Supply Voltage	
A	AC230V
D	DC24V
W	AC/DC12-240V

	FCB18
Input Terminal	A1-A2
Voltage range	AC 230V / DC24V / AC/DC 12-240V
Power consumption	AC 3.5VA/ DC 2.0W
Voltage tolerance	-15%~+10%
Supply indication	Green LED
Relay indication	Red LED
Setting	button
Temperature coefficient	0.05%/°C, at=20°C (0.05%/°F, =68°F)
Output contact	1*SPDT
Rated current	1*16A
Mechanical life	1*10 ⁷
Electrical life	1*10 ⁵
Ambient Temperature	-20 ... +60 °C / -40 ... +85 °C
Mounting	DIN rail EN/IEC 60715
IP Rating	IP20
Stripping length	7mm (0.28in)
Installed altitude	≤2200米
Pollution level	2
Max cable size	AWG13-20 0.4N·m
Dimension	90mm*18mm*64mm
Weight	about 90g
Standards	GB/T 14048.5, IEC60947-5-1, EN6812-1

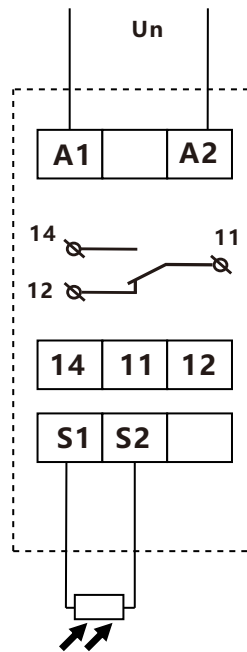
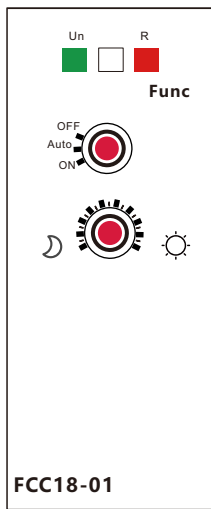


*The above information is subject to change without further notice

Wiring



Wiring



Accessory



FCB-PB 20cm sensor included with the main body