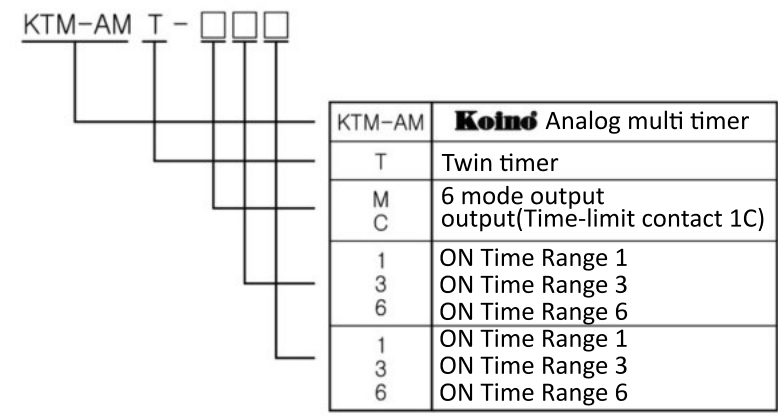


• Thank you for choosing **Koino**
After reading this manual, please use it appropriately as per this manual.

Model Number



Electrical specifications

Model Number	KTM-AMT-M	KTM-AMT-C
Time setting range	0.1sec~60hours	
Supply Voltage	20~240VAC(50/60Hz), 24~240VDC	
Operating voltage range	90% to 110% of rated supply voltage	
Power Consumption	20~240VAC MAX 1.5W, 24~240VDC MAX 3.0VA	
Control Output	①,④ mode: Time-limit 2C	Single Operation Mode:Instantaneous 1C (ON START Flicker)
	②,⑤ mode: Instantaneous 1C+Time-limit	
	③,⑥ mode: ON/OFF each instantaneous	
Ratings	250VAC 5A (Resistive Load)	
Relay mechanical life time	minimum 10,000,000 operations	
Relay electrical life time	100,000 operations (250VAC 5A/30VDC 5A Resistive Load)	
Output display	Red LED(ON) , Green LED(OFF)	
Reset Time	Min. power-opening time: 0.1 s max.	
Repeating Error	MAX. ±0.2%	
Setting Error	MAX. ±5% ±50ms	
Influence of Voltage	MAX. ±0.5%	
Influence of Temperature	MAX. ±2%	
Insulation Resistance	100MΩ(at 500VDC)	
Dielectric Strength	2,000VAC 50/60Hz for 1minute(between current-carrying metal parts and exposed non-current-carrying metal parts)	
Noise Immunity	±2kV square-wave noise by noise simulator (pulse width: 1μs)	
Vibration Resistance	Destruction: 10 to 55 Hz with 0.75mm single amplitude each in 3 directions for 2 hours each Malfunction: 10 to 55 Hz with 0.5mm single amplitude each in 3 directions for 10 minutes each	
Ambient Temperature	Operating: -10°C to 55°C Storage: -25°C to 65°C	
Ambient Humidity	35~85%RH	
Weight	Approximately 110g	

Time Specification

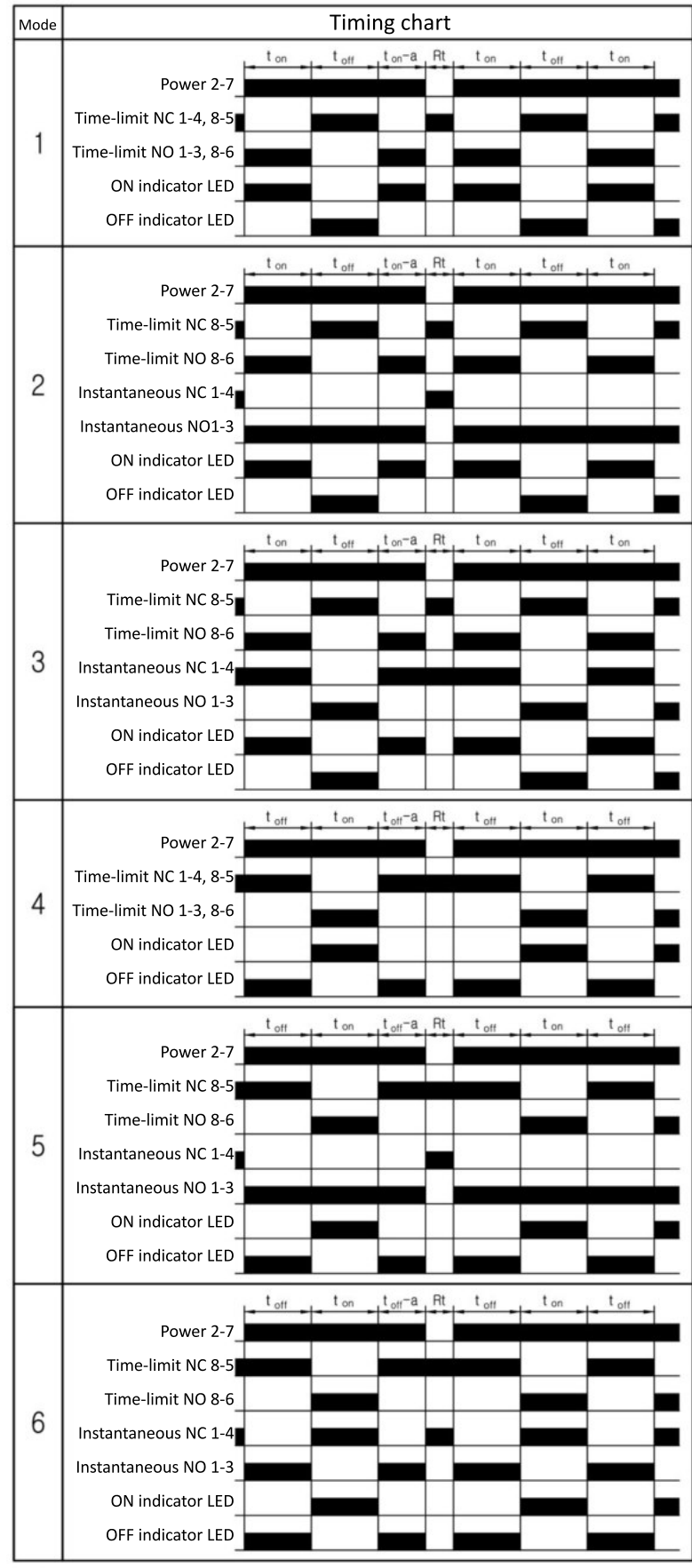
ON/OFF Time Range	Unit	Setting time
1	S, 10S M, 10M H, 10H	0.1 sec ~ 10 hours By selection of time unit, it is possible to select 1S, 10S, 1M, 10M, 1H and 10H
3		0.1 sec ~ 30 hours By selection of time unit, it is possible to select 3S, 30S, 3M, 30M, 3H and 30H
6		0.1 sec ~ 60 hours By selection of time unit, it is possible to select 6S, 60S, 6M, 60M, 6H and 60H

Mode configuration(KTM-AMT-M)

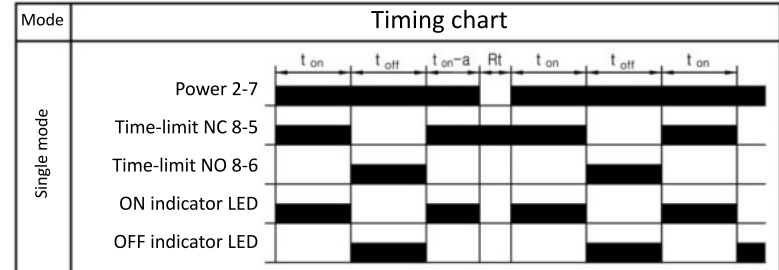
Mode	Operation mode	Control output
1	ON START Flicker 1	Time-limit 2C
2	ON START Flicker 2	Instantaneous 1C,Time-limit 2C
3	ON START Flicker 3	ON/OFF each Time-limit 1C
4	OFF START Flicker 1	Time-limit 2C
5	OFF START Flicker 2	Instantaneous 1C,Time-limit 2C
6	OFF START Flicker 3	ON/OFF each Time-limit 1C

* KTM-AMT-C: Single operation mode (Instantaneous 1C ON START Flicker mode)

Operation Mode (KTM-AMT-M)



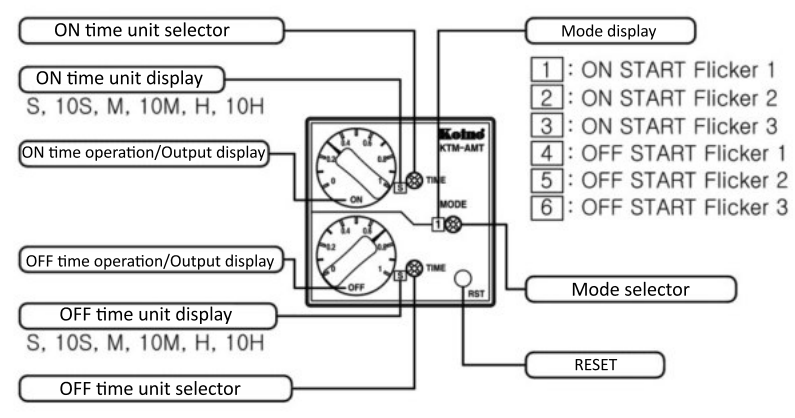
Operation Mode (KTM-AMT-C)



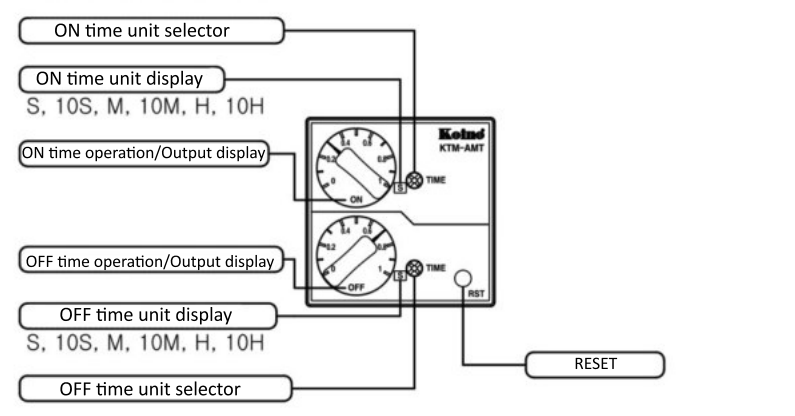
* t_{on} : ON time set , t_{off} : OFF time set , (t_{on-a}) < t_{on}, (t_{off-a}) < t_{off}
* Rt : Returning time (Minimum 100ms)

Nomenclature

• KTM-AMT-M Series



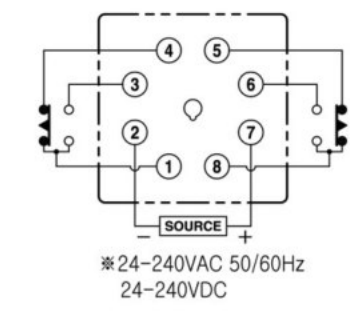
• KTM-AMT-C Series



Terminal Arrangement

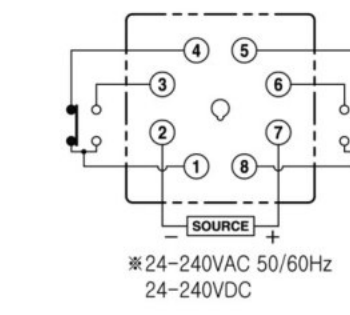
• KTM-AMT-M Series

①, ④ Operation mode



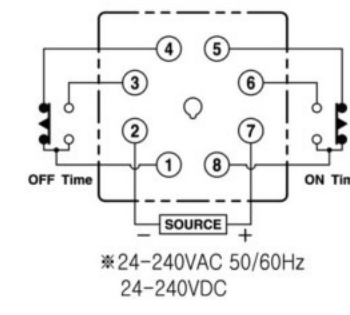
• KTM-AMT-M Series

②, ⑤ Operation mode



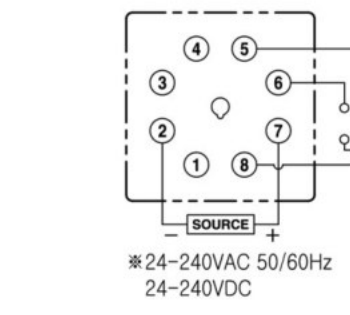
• KTM-AMT-M Series

③, ⑥ Operation mode



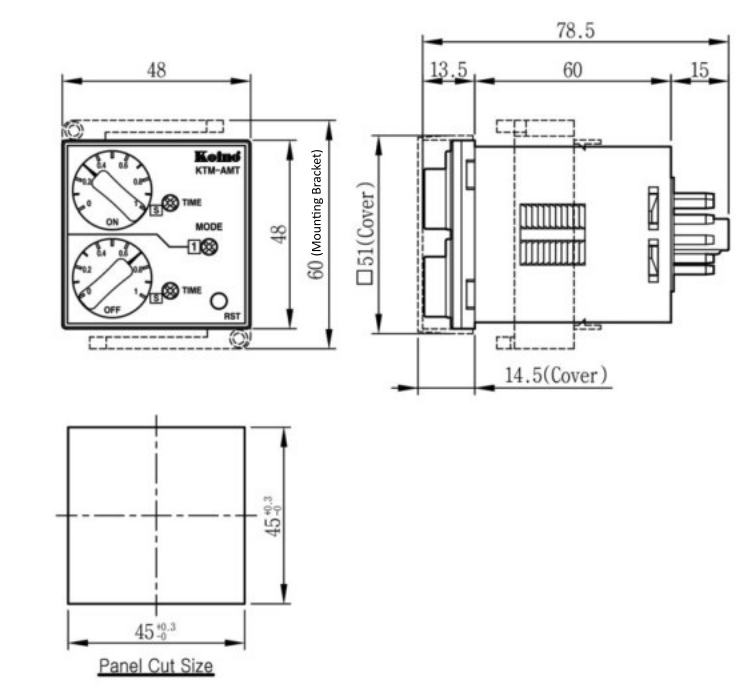
• KTM-AMT-C Series

Single Operation mode



※ For DC power, be sure to check the polarity before connection.
Terminal 2 : -input
Terminal 7 : +input

Dimensions



PRECAUTION for Use

- Please use it according to the rating.
- Apply power instantaneously using switch or relay .
- Slowly applying voltage may cause malfunction.
- AC power is not related to polarity. But, for DC power, be sure to check the polarity before turning on the power.
- When connecting a load to the relay output terminal, do not apply a current exceeding the rated current.
- To prevent malfunction, be sure to use the reset switch or turn off the power when changing the setting.
- Do not use in a place subject to vibration or shock.
- Do not use this product in locations with strong magnetic or electric noise.
- When wiring, do not connect it adjacent to the high voltage line or the power line.
- DO NOT install the product in a place where corrosive gas is generated, a place with high humidity or a place with high oil.

CAUTION!
This unit is not designed for safety. Therefore when this is applied at dangerous and serious application, be sure to install the double safety device before using