

KKATR

Time Delay Relay

Features

- Delay time can be customized according to customer requirements
- Two functions available: Delay-on (energization delay) and Delay-off (de-energization delay)
- Optional contact configurations: 1 NO, 1 changeover, or 1 double NO

Typical Applications

Mainly used in delay operation scenarios such as fuel pumps, vehicle lights, radiators, machinery and equipment, etc.



Part Number Explanation

Example	KKATR-DO	-012	1H	20M	-P+	(XXX)	
Relay Model	TR-DO: Delay-on Make TR-DO: Delay-on Make						
Coil Voltage	012:12VDC 024:24VDC						
Contact Arrangement	1H: 1 Form A (SPST-NO) 1Z: 1 Form C (SPDT) 1D: 1 Double Make (DPST-NO)						
Delay Time	15: 1.5 seconds 1M: 1 minute 1H: 1 hour (customizable)						
Trigger Polarity	P+: Positive trigger N-: Negative trigger						
Feature Code	(XXX): Special customer requirements: over-voltage protection / reverse polarity protection						

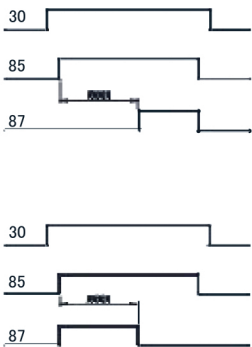
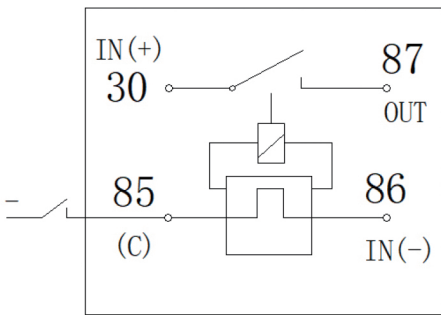
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Technical Parameters

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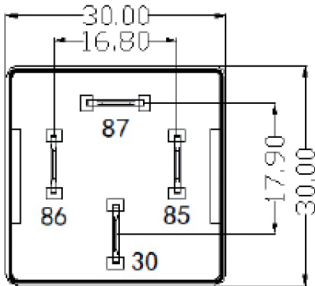
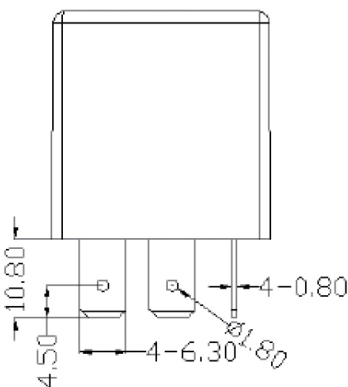
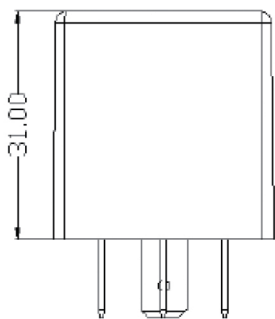
Electrical Life	100000 Times (under rated load)	Enclosure	Dust cover or fully sealed plastic case
Operating Temperature	-40°C ~85°C	Mechanical Characteristics	Housing retention force (pull & push) ≥ 200 N Terminal retention force (pull & push) ≥ 100 N
Vibration	10Hz ~ 50Hz , 5.0G	Weight	Approx. 30 g
Shock	196m/s²	Function	Delay time can be customized according to customer requirements
Terminal Type	Quick-connect termination port		

Wiring Diagrams



1. KKATR-ON Delay-on Make Type
30 (+): Connect to positive power supply
87 (Output): Connect to load (86 is the other output terminal)
86 (-): Connect to negative power supply (ground)
30 (Control): Connect to negative for delay trigger control
Delay-on Make function: Upon energization of terminal 30, contacts 85-86 close immediately. After the set delay, contacts 30-87 open.
2. KKATR-OFF Delay-off Break Type
30 (+): Connect to positive power supply
87 (Output): Connect to load
86 (-): Connect to negative power supply (ground)
30 (Control): Connect to negative for delay trigger control
Delay-off Break function: Upon energization of terminal 30, contacts 85-86 close immediately. After terminal 30 is de-energized, contacts remain closed for the set delay time, then open.

Outline Dimensions



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