

NJJ3 Counting Relay

1. General

NJJ3 counting relay is mainly used as counting or counting control component in the control circuit with AC frequency of 50Hz/60Hz, rated control power supply voltage up to 240V and DC rated control power supply voltage up to 240V.

Standards:IEC 60947-5-1.

2. Type designation

N JJ 3

- 3 — Design sequence No.
- JJ — Counting relay
- N — Enterprise featured code

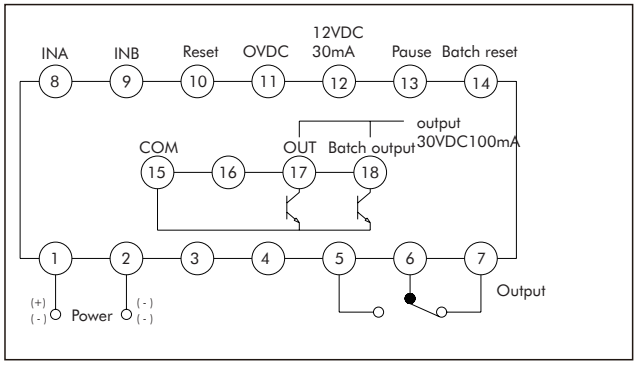
Note: This product is applicable for wide range of operating voltage, for instance, operating voltage within AC/DC100V~240V means it can operate normally within the voltage range of AC/DC 100V to 240V.

3. Technical data

Rated control supply voltage Us,frequency	AC/DC100V~240V,50Hz/60Hz
Allowable fluctuation range of rated control	85%Us~110%Us
power supply voltage Output method	1 group of change-over contact,collector open output(30VDC,100mA max)
Counting digit	6 digits(6-digit red LED is the count value,6-digit green LED is the preset value)
Counting speed	1time/s,30 times/s,1000 times/s optional
Counting mode	Add, subtract, reversible A, reversible B, reversible C
Batch processing	Can be set as 0~999999
Display form	Nixie tube display
Input signal	Contact input, sensor input(NPN type, PNP type optional)
External sensor power supply	12VDC,30mA max
Value setting	Setting range 0.001~99.999
Output mode	N,F,C,R,K,P,Q,A
Output time	The output time can be set as 0.01s~9.99s(when the output mode is C,R,K,P,Q,A)
Contact capacity	Ue/Ie: AC-15 220V/0.75A,380V/0.47A; DC-13220V/0.27, Ith:5A
Electrical life/mechanical life(10,000 times)	10/100
Ambient temp	-5℃ ~+40℃
Installation method	Panel type
Power-off memory	More than 10 years(settable)

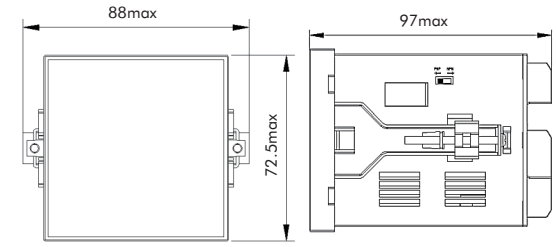
4. Wiring diagram

Count wiring diagram

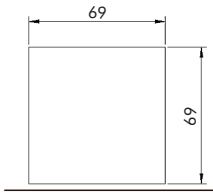


5. Overall and mounting dimensions (mm)

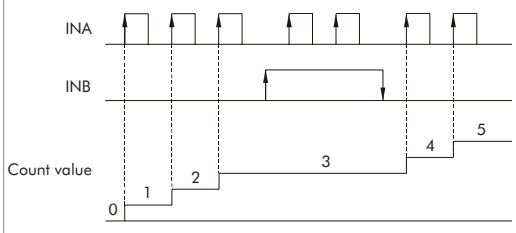
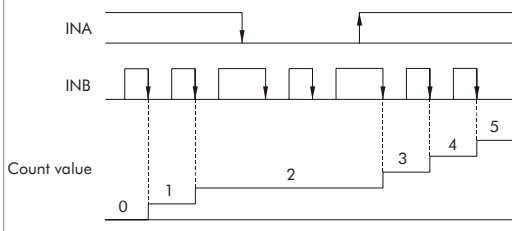
External dimension

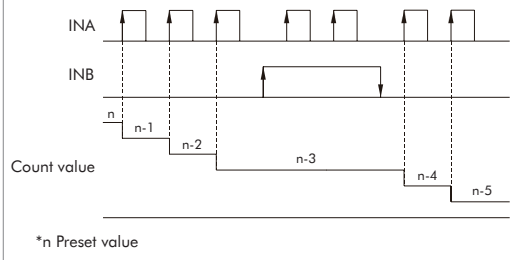
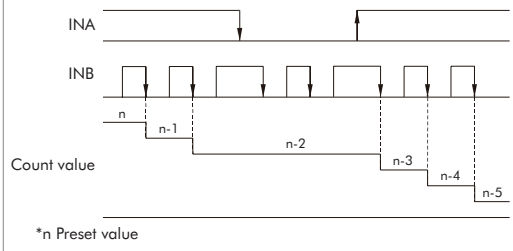
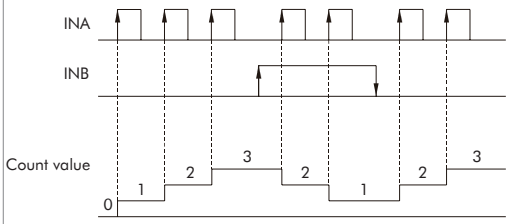
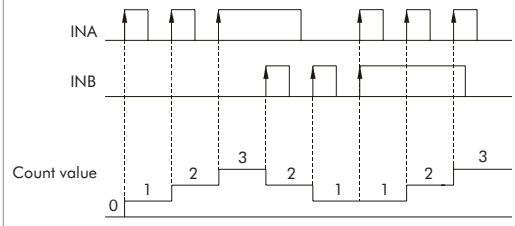
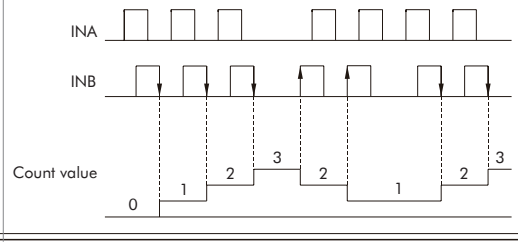


Opening size

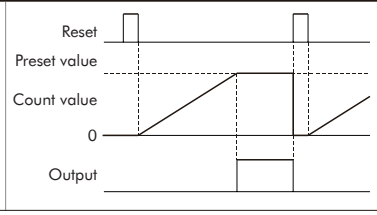
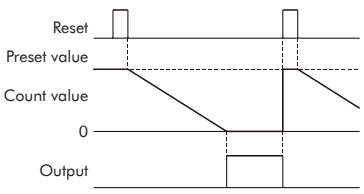
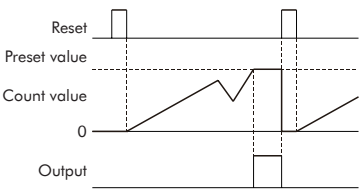


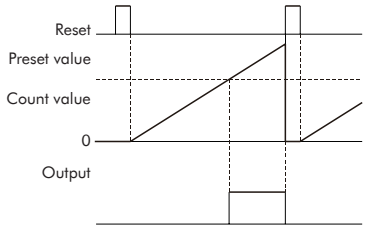
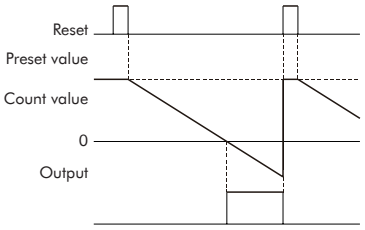
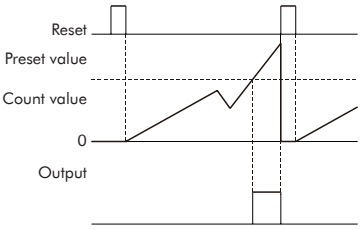
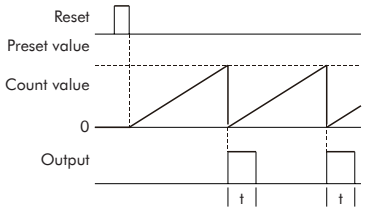
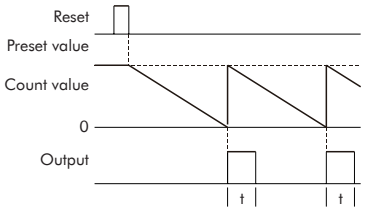
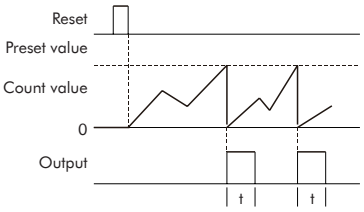
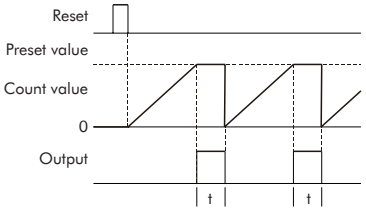
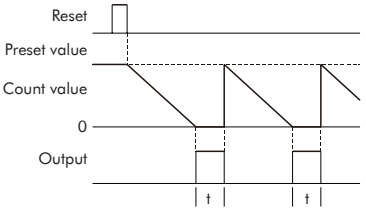
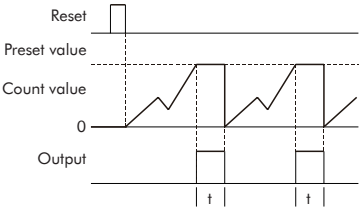
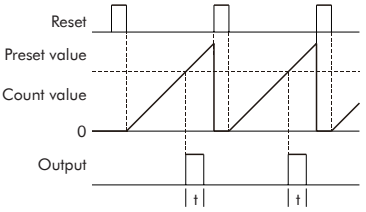
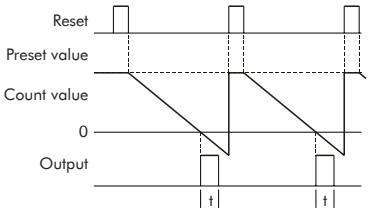
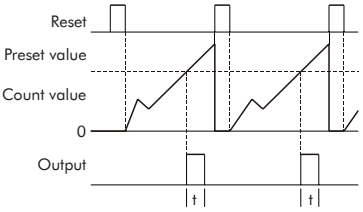
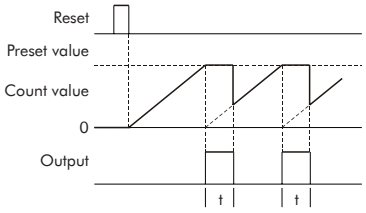
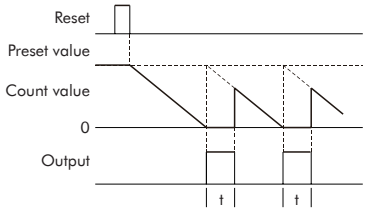
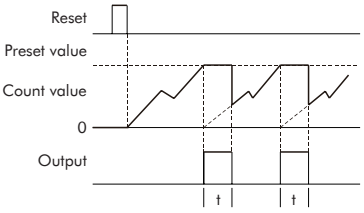
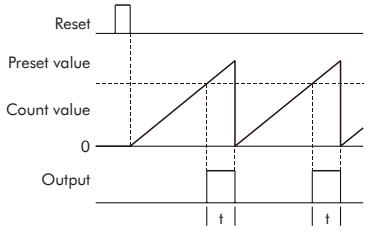
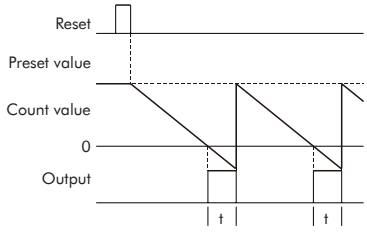
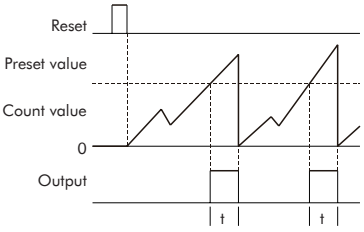
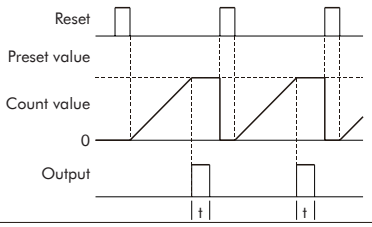
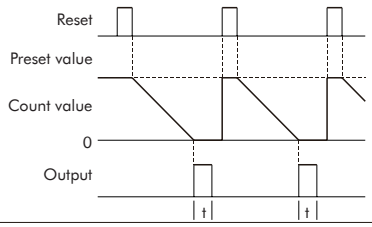
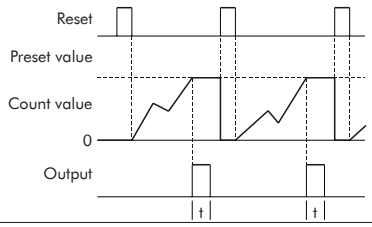
6. Sequence diagram of counting mode

Counting mode	Timing-sequence diagram	Remark
V Addition counting mode		Count at INA rising edge, stop counting at INB input.
		Count at INB input falling edge at INA input.

Counting mode	Timing-sequence diagram	Remark
D Subtraction counting mode		Count at INA rising edge, stop counting at INB input.
		Count at INB input falling edge at INA input.
UD-A Reversible counting mode A		Reversible counting mode A: Addition counting at INA input, subtraction counting when INB input is active.
UD-B Reversible counting mode B		Reversible counting mode B: Addition counting at INA input, subtraction counting at INB input.
UD-C Reversible counting mode C		Reversible counting mode C: Automatic recognition of positive and reverse rotations, addition and subtraction counting.

7. Sequence diagram of output mode

Output mode	U Plus counting mode	d Minus counting mode	Inverse counting mode A,B,C
⊓I(N)			

Output mode	Plus counting mode	Minus counting mode	Inverse counting mode A,B,C
F(F)			
C(C)			
R(R)			
K(K)			
P(P)			
Q(Q)			
A(A)			

Note: It is the output time, which can be set by the user.