

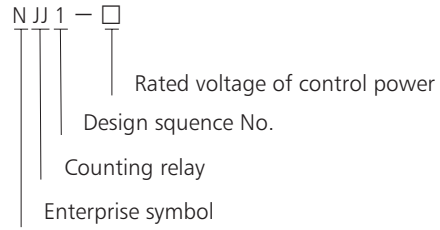


NJJ1 Counting Relay

1. General

NJJ1 Counting Relay is applicable for controlling circuit @ A.C. 50Hz/60Hz, 240V rated voltage of control power supply and D.C. 240V rated voltage of control power supply as counting or counting control element.

2. Type designation



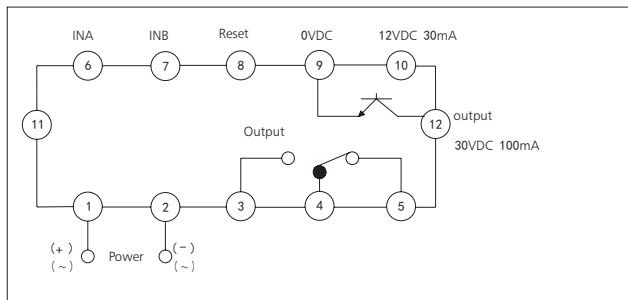
Note: this product is applicable for wide range of operating voltage, for instance, operating voltage within AC/DC100V~240V means it can operate normally within the voltage range of AC/DC 100V to 240V.

3. Technical data

Operating mode	85%-110% of rated voltage AC50Hz/60Hz AC/DC100V-240V, DC24V
Electrical life	1×10^5
Mechanical life	1×10^6
Output mode	1group changeover contact, open-collector output (30VDC 100mA Max)
Contact capacity	Ue/Ie:AC-15 220V/0.75A; DC-13 220V/0.27A; Ith:5A
Number of counting digits	At CR mode: 4-digit counting relay (4-digit red LED is count value, 4 digit green LED is preset value) At CT mode: 8 digit reversible summation counter (green LED is low 4-digit, red is high 4-digit)
Counting speed	1 time/s, 30 times/s, 1000times/s are provided for selection
Counting mode	Plus, minus, plus minus inverse A, plus minus inverse B, plus minus inverse C
Input signal	Contact input, sensor input (NPN type/ PNP type are provided for selection)
Magnitude setting	With magnitude setting, range 0.01~9.99
Output mode	N, F, C, R, K, P, Q, A
Output time	Settable output time 0.01s~9.99s (when output mode is C, R, K, P, Q, A)
Ambient temperature	-5°C ~ +40°C
Power consumption	≤3W
Installation mode	Panel type
External dimension	W58×H48×L197 mm
Current failure memory	> 10 years

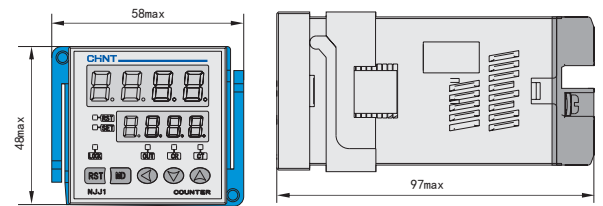
4. Wiring diagram

Count wiring diagram

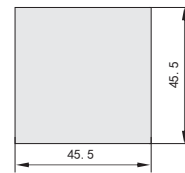


5. Overall and mounting dimensions (mm)

External dimension



Opening size



6. Sequence diagram of counting mode

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

Counting mode	Timing-sequence diagram	Remark
ρ Subtraction counting mode		Count at INA rising edge, stop counting at INB input.
		Count at INB input falling edge at INA input.
$\Delta\rho Z\Pi$ Reversible counting mode A		Reversible counting mode A: Addition counting at INA input, subtraction counting when INB input is active.
$\Delta\rho Z\Pi$ Reversible counting mode B		Reversible counting mode B: Addition counting at INA input, subtraction counting at INB input.
$\Delta\rho ZP$ 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	Plus counting mode	Minus counting mode	Inverse counting mode A, B, C
$\Gamma(N)$			
$F(F)$			

Output mode	Plus counting mode	Minus counting mode	Inverse counting mode A, B, C
ξ (C)			
Γ (R)			
ξ (K)			
ρ (P)			
φ (Q)			
β (A)			

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

