

# DIN48<sup>□</sup> Electronic Counter

## DC-JB/JC CE

### Various functions in DIN size 48×48

- Excellent Visibility (white & yellow LCD).
- It can be changed to easy mode or multi mode. It can show the setting condition.
- 12 digits total counter is built-in. (It can show producing numbers per day, month or year)
- Corresponding to each input mode (Increment/decrement independence, Phase-difference, Increment, Decrement, Increment/decrement command).
- Pre-scale function provides. Read out the unit such as length/flowing directly. Pre-scale function provides.
- Corresponding to each input mode. (Increment/decrement independence, Phase-difference, Increment, Decrement, Increment/decrement command)
- CE marking  
Protective structure IP66. (Only front panel when using rubber bushing)  
Protective structure with terminal cover.  
Key protecting function provides for preventing mishandling by careless touch.



### Specifications

Type	1 preset counter				2 preset counter			
Model No.	DC-JB6-AW	DC-JB6-AY	DC-JB6-DW	DC-JB6-DY	DC-JC6-AW	DC-JC6-AY	DC-JC6-DW	DC-JC6-DY
Power source	100 to 240VAC (50/60Hz)		24VDC (ripple 20% or less)		100 to 240VAC (50/60Hz)		24VDC (ripple 20% or less)	
Allowable voltage fluctuation range	±10% at 24VDC, 85 to 250VAC							
Power consumption	4VA*1 (at 240VAC)		1W (at 24VDC)		5VA*1 (at 240VAC)		1W (at 24VDC)	
Numbers of digits	6 digit, range: -99999 to 999999 (12 digits for total counter)							
Memory function	EEP-ROM (rewriting numbers: 0.1 million times or more)							
Counting speed	30Hz/5kHz changeover 30Hz: contact/open-collector, min. signal width 16.7msec (make ratio 1:1) 5kHz: open-collector, min. signal width 100 μsec (make ratio 1:1)							
Reset	External reset (Min.reset time: 50msec, manual reset, automatic reset)							
Re-scale	0.001 to 9.999							
Decimal point	Lower 4 digits							
One-shot time	0.005 to 9.999sec							
Display color (Counting part)	White	Yellow	White	Yellow	White	Yellow	White	Yellow
Input mode	Increment/decrement independence, Phase-difference, Increment, Decrement, Increment/decrement command							
Output operation	One-shot return, Self-holding free, One-shot free, Agree free, Comparing free							
Counter mode	Standard/digit-up				Standard/Batch/Prediction			
Input signal	Contact or open-collector Impedance when ON (short-circuit): 1k ohm or less Impedance when OFF (opened): 100k ohm or more Flowing current when short-circuit: approx. 4mA							
Control output	Transistor output (NPN open-collector): 100mA or less, 40V or less Contact output (1c · 1a*2): 250VAC/30VDC 3A resistance load (cos φ = 1)							
Power source for sensor	12VDC, 50mA*3				12VDC, 50mA*3			
Ambient temperature	-10 to +50°C (-25 to +55°C when stored)							
Ambient humidity	35 to 85%RH or less (not icing, not condensing)							
Vibration resistance	Double amplitude 4mm, 16.7Hz, each 1 hour in X, Y and Z directions. Malfunction: Double amplitude 0.5mm, 10 to 55Hz, each 10 minutes in X, Y and Z directions							
Impact resistance	294m/s <sup>2</sup> , each 3 times in X, Y and Z directions. Malfunction: 98m/s <sup>2</sup> , each 3 times							
Starting time when power-ON	2.5sec or less							
Protective structure	IP66 (IEC Standard, only front panel when using rubber packings)							
Case material	Polycarbonate							
Weight	Approx. 120g							
Accessory	Mounting hook, rubber packings, tightening screw for terminal cover (M3×8 P tight)							

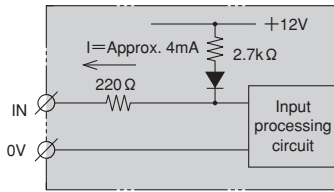
\*1. Including external power source. \*2. 1a relay is provided with DC-JC6-AY/DC-JC6-AW only.

\*3. If power source is 120VAC or less, it is possible to supply 100mA outside.

★Dust-proof cover(GZ00007) is available as option.

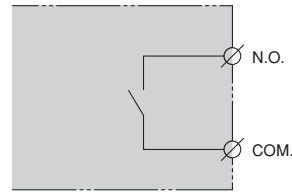
## Input/Output circuit

### Input (Count1/count2/reset)

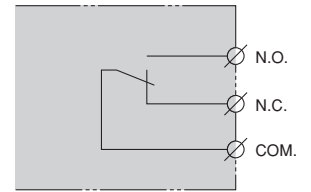


### Contact output

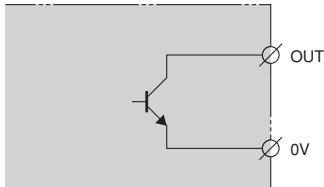
#### ● 1a relay



#### ● 1c relay

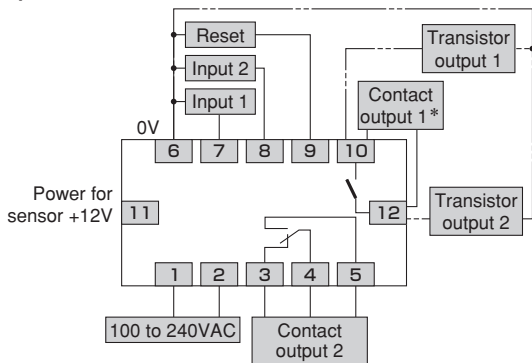


### Transistor output



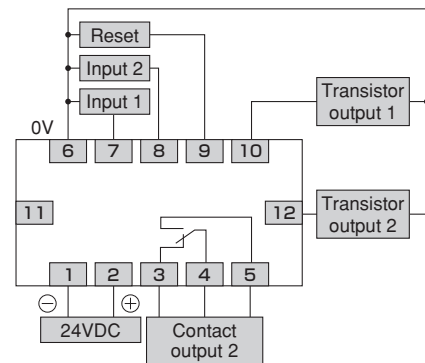
## Connection

### AC power



\* In case of DC-JC  
DC-JB is 10: transistor output 1 and 12: transistor output 2(-----).

### DC power

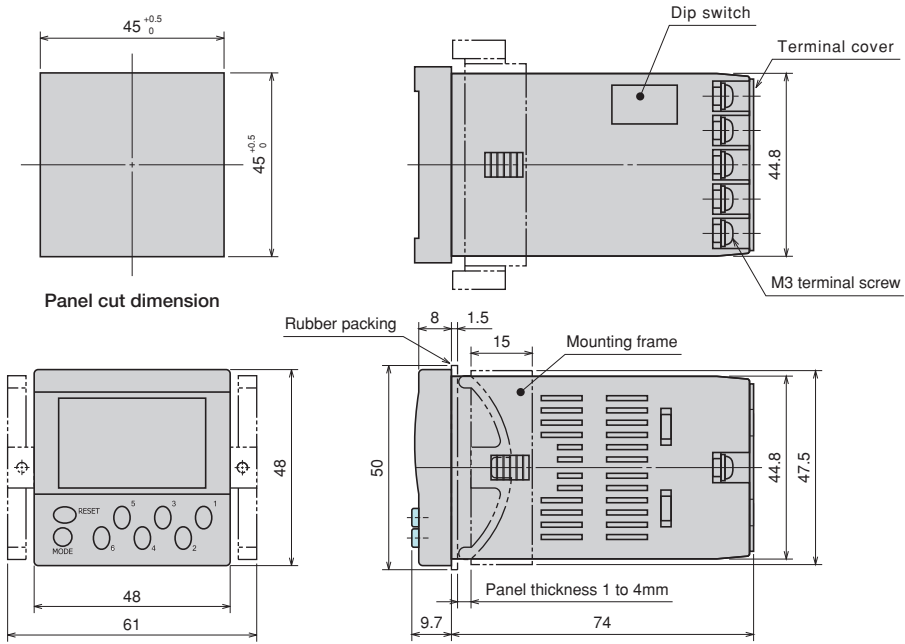


Note) Power source for sensor isn't provided.

### (Caution)

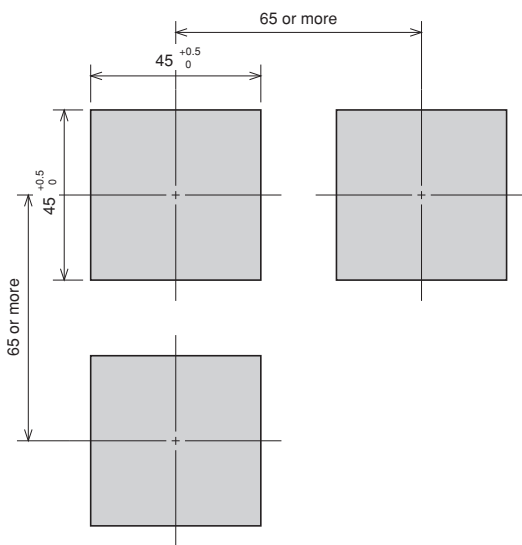
- Don't use empty terminal as relay terminal.
- Each input for counting and reset is common use for contact and transistor. Make a wiring with 2-core shield wire and metal conduit as short as possible. Also, don't make a wiring with power and high voltage line etc.
- Use solderless terminal for M3.
- Function of output 1 is different between DC-JB and DC-JC. DC-JB: digit-up output, DC-JC: standard, batch and prediction output (depending on counter mode). Output 2 is standard output for both DC-JB and DC-JC.

## External dimensions



## Mounting

Panel cut dimension is as follows:



### Mounting frame 60 to 48 (GZ00003)

Use mounting frame (60 to 48) if using as substitutes for the counter with 60×60 such as DC-NXB series etc.

