

Electronic Counters

Preset type

MC4

Electronic counter/MC4-D DIN-sized 48mm sq.

■ Description

MC4-D digital setting and display type preset counters are based on a one-chip microprocessor.

■ Features

- Miniature DIN-sized, 48 × 48mm
- Highly reliable and consume little power
- Controlled by a one-chip micro-processor
- Maximum counting speeds of 30Hz or 100Hz.

■ Specifications

Type	Ordering code	Input voltage	Counting speed	Counter input signal	Digital display	Output contact	Mounting and socket
MC4-DS	MC4NS-AHS	100–110V AC	30Hz	Relay contact or solid-state contact Pulse min. width: 16.7ms(On-off ratio 1:1)	7-segment LED	1NO 250V AC 2A	Surface: TP28X-UL Flush: ATX1NS TP48SB Rail: TP28X-UL
	MC4NS-AMS MC4NS-DES	200–220V AC 24V DC			4-digit		
MC4-DH	MC4NM-AHM MC4NM-AMM MC4NM-DEM	100–110V AC 200–220V AC 24V DC	100Hz	Solid-state contact Pulse min. width: 5ms(On-off ratio 1:1)			

Note: Input voltages from 24V to 240V AC are available on request. Operating voltage range: 0.85 to 1.1 times input voltage

■ Technical data

Counter input signal: See the table above.

Reset and gate:

- Power reset
Minimum power OFF time: 1s
Reset time after power ON: 50ms
- External reset, manual reset and gate
Reset and gate time: 30ms
Reset time after reset and gate signal ON: 30ms

Operating temperature: -10°C to 50°C

Mechanical durability: 20 million operations

Electrical durability:

250000 operations 220V AC 2A (Res. load)

Dielectric strength:

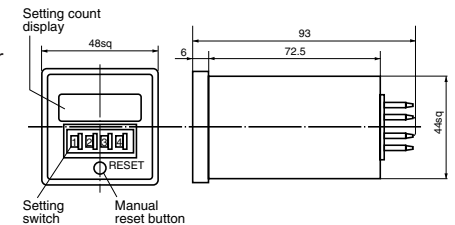
1500V AC rms. 1min. between circuit and earth
1500V AC rms. 1min. between all circuits
1000V AC rms. 1min. between open contacts
Insulation resistance: 100MΩ at 500V DC megger
Power consumption: 1.6VA at 110V AC
1.8VA at 220V AC
1.5W at 24V DC

■ Ordering information:

Specify the following:

1. Ordering code or type number
2. Input voltage

■ Dimensions, mm



Mass: 170g

■ Notes on use

Refer to the instruction manual.

■ Wiring diagrams

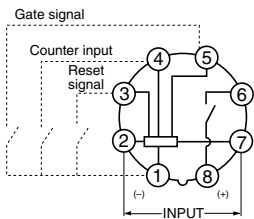


Fig. 1
Connection of relay contact input

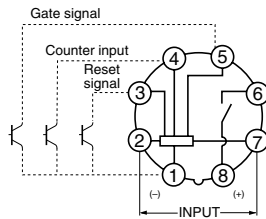
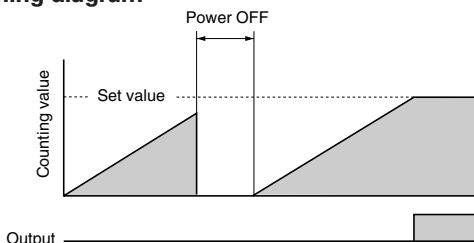


Fig. 2
Connection of solid-state input

■ Timing diagram



1. The counter input signal must satisfy the specified minimum input pulse width.
2. The counter stops counting while terminals 1 and 5 are short-circuited (gate input ON). The counter restarts counting when the gate input is turned off.
3. Upper zeros in the MC4 counter display are not shown.