

TECHNICAL BULLETIN

[Issue No.] T04-0007 Ver.B

[Page] 1/2

[Title] Measures Regarding Year 2000 Problem
for MELSEC-K/A/QnA Series CPU Modules

[Date of Issue] November '99

[Relevant Models] All CPU modules in MELSEC-K/A/QnA Series

Thank you for your continued patronage of the Mitsubishi general-purpose PLC MELSEC-K/A/QnA Series.

The year 2000 problem includes recognizing the years before 1999 and after 2000, and compensating the date in leap years.

This will be handled as follows for the MELSEC-K/A/QnA Series PLCs.

In this revision Version B, the explanations regarding problems that occur when processing the year data with two digits and examples of revisions have been deleted. An explanation to refer to the newly prepared Technical Bulletin that explains examples of problems and measures to be taken in detail has been added.

The CPUs corresponding to the year 2000 problem are the following CPUs having a clock function.

- AnNCPU
- AnACPU
- AnUCPU
- A1SCPU
- A1SCPUC24-R2
- A1SHCPU
- A1SJCPU (-S3)
- A73CPU (-S3)
- A7BD-A3N-*
- A7BD-A3A-*
- A80BD-A2USH-S1
- A1SJHCPU
- A2SCPU
- A2SHCPU
- A2USCPU (-S1)
- A2USHCPU-S1
- A1FXCPU
- A2CCPUC24 (-PRF)
- A52GCPU (T21B)
- QnACPU
- Q4ARCPU
- Q2ASCPU (-S1)
- Q2ASHCPU (-S1)

Remarks : K Series CPUs, A0J2, A0J2H, A2C(J), An, A3H, A3M, A3K and A3V CPUs do not have a clock function, so measures for the year 2000 are not necessary.

Whereas

[Details]

1. Compensation of date in leap years

The clock element built into the CPU module will automatically compensate the date, so the user does not need to reset the date in the clock element.



MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE MITSUBISHI DENKI BLDG. MARUNOUCHI. TOKYO 100-0005. TELEX J24532 CABLE MELCO TOKYO

[Issue No.] T04-0007 Ver.B

[Page] 2/2

[Title] Measures Regarding Year 2000 Problem
for MELSEC-K/A/QnA Series CPU Modules

[Date of Issue] November '99

[Relevant Models] All CPU modules in MELSEC-K/A/QnA Series

2. Recognition of year following year 2000

Only the last two digits of the year are read by the clock element. Thus, when the year data is used for sequence control, the year data must be compensated by the sequence program depending on the data usage application.

Year 1999	"99"	If the last two digits of the read year are judged only with the size comparison command, it will be judged that the years following the year 2000 occurred before the year 1999.
Year 2000	"00"	

For examples of problems that could occur when processing the year data with the last two digits and examples of measures, refer to the Technical Bulletin "T05-0006", explaining the specific examples of year 2000 problems and examples of measures for MELSEC-A/QnA/Q Series CPU module.

In a system that reads the CPU module device and controls the results with a personal computer or computer, etc., via a computer link module or MELSECNET(II)/10 module, if the CPU module clock data is also read and rearranged in the time order, the data following year 2000 will be handled as data older than data before the year 2000.

In this case, the program must be changed with the personal computer or computer application module so that the year data is handled as four digits.

The general method for changing the year data from two digits to four digits is to convert the year into a "19□□" four-digit data by adding "19" before the last two digits of year data when the last two digits are "50 to 99". If the last two digits are "00 to 49", add "20" to convert the data into a "20□□" four-digit data.

3. Correspondence to A52GCPU monitor function

For details on the year 2000 problem regarding the A52GCPU monitor function, refer to the Technical bulletin "T10-0005 Ver.A" for the correspondence of the GOT Series graphic operation terminal to the year 2000 problem.