

- In step ladder programming, it is allowed to use the instructions of MC、MCE、SKP and SKPE。
- Change the default value of updating time for temperature measurement, the new updating time is 4 seconds, it means the default value of R4004 is 666 and 1000 for R4014 (Refer to FUN72、FUN73、FUN85)。
- (The original default value of updating time is 2 seconds, it means the default value of R4004 is 333 and 500 for R4014)
- Add the selection items of 16 and 32 seconds to define the solution interval between PID temperature control (Refer to FUN73、FUN86), it is useful when using the magnetic contact as the actuator for PID temperature control。
- R4005 : The content of Low Byte to define the solution interval between PID calculation;
  - =0, perform the PID calculation every 2 seconds (System default)
  - =1, perform the PID calculation every 4 seconds
  - =2, perform the PID calculation every 8 seconds
  - =3, perform the PID calculation every 1 second
  - =4, perform the PID calculation every 16 seconds
  - ≥5, perform the PID calculation every 32 seconds
- : The content of High Byte to define the cycle time of PID ON/OFF (PWM) output;
  - =0, PWM cycle time is 2 seconds (System default)
  - =1, PWM cycle time is 4 seconds
  - =2, PWM cycle time is 8 seconds
  - =3, PWM cycle time is 1 second
  - =4, PWM cycle time is 16 seconds
  - ≥5, PWM cycle time is 32 seconds
- The silent interval for Modbus RTU communication protocol may be defined by the user or by system。
- For Modbus RTU communication protocol, the entire message frame must be transmitted as a continuous stream, following the last transmitted character, a silent interval of at least 3.5 character times marks the end of the message。
- While M1956=0, the silent interval is detected by the system automatically according to the baud rate of the transmission;
- While M1956=1, the silent interval is defined by the user; the High Byte of R4148 is for this setting (It is valid for Port 1 and Port 2) and the resolution is 1 mS。
- When writing the ladder program into the Flash ROM with optional data registers, the content of the optional data registers (located at working RAM) will be initialized with the values which previously stored in the Flash ROM while every power up; it is very useful for mass production or long term maintenance consideration。
- But in many applications, it needs only one time initialization for optional data registers while the first power up and then the contents of the data registers will be retentive after followings' power up。
- User may control the value of R4046 to accomplish above mentioned applications,
  - R4046 = 5530H : The optional data registers will not be initialized with the values which previously stored in the Flash ROM while power up.
  - R4046 = Others : The optional data registers will be initialized with the values which previously stored in the Flash ROM while power up.
- If it needs only one time initialization for optional data registers while the first power up, fill the register R4046 with the value 5530H in the ladder program.
- Improve the implementation for backlash compensation of High Speed Pulse Output (FUN140) instruction。
- The parameter No.6 of M PARA (FUN141) instruction makes no sense。