DAUDIN Delta PLC Modbus RTU Connection User Manual

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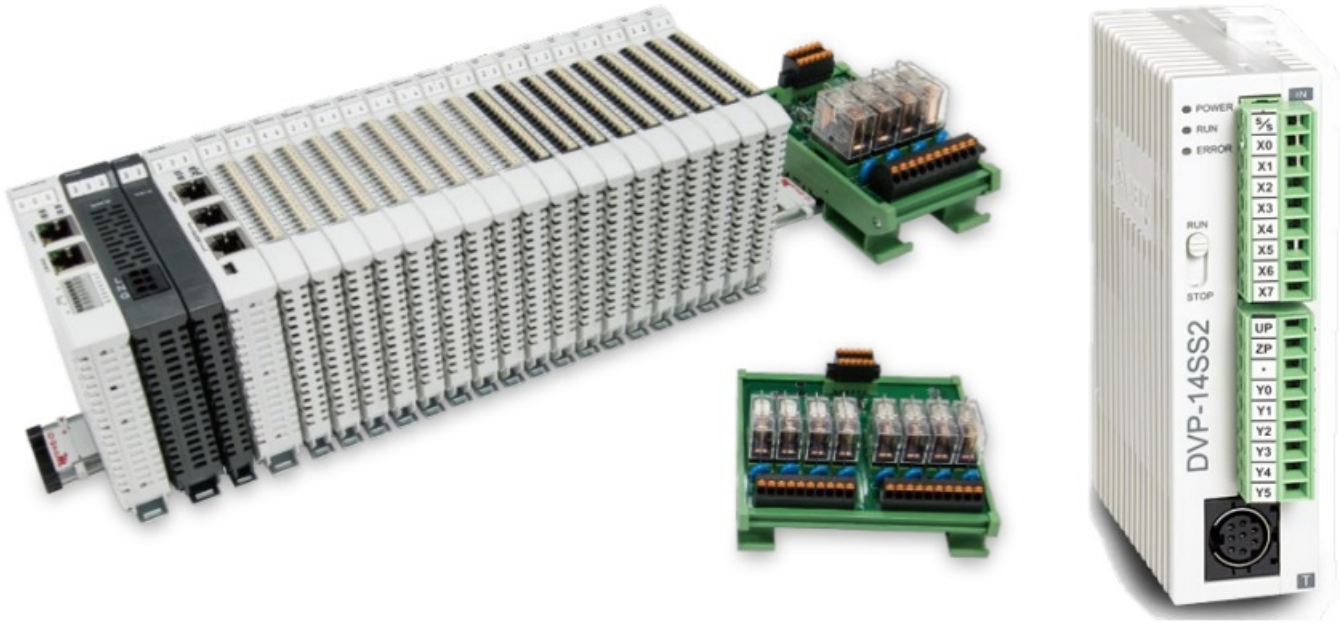
User Manual



2302EN
V1.0.0

and Delta PLC
Modbus RTU Connection
Operating Manual

Contents

Remote I/O Module System Configuration List

Part No.	Specification	Description
GFMS-RM01S	Master Modbus RTU, 1 Port	Main Controller
GFDI-RM01N	Digital Input 16 Channel	Digital Input
GFDO-RM01N	Digital Output 16 Channel / 0.5A	Digital Output
GFPS-0202	Power 24V / 48W	Power Supply
GFPS-0303	Power 5V / 20W	Power Supply
0170-0101	8 pin RJ45 female connector/RS-485 Interface	Interface Module

1.1 Product Description

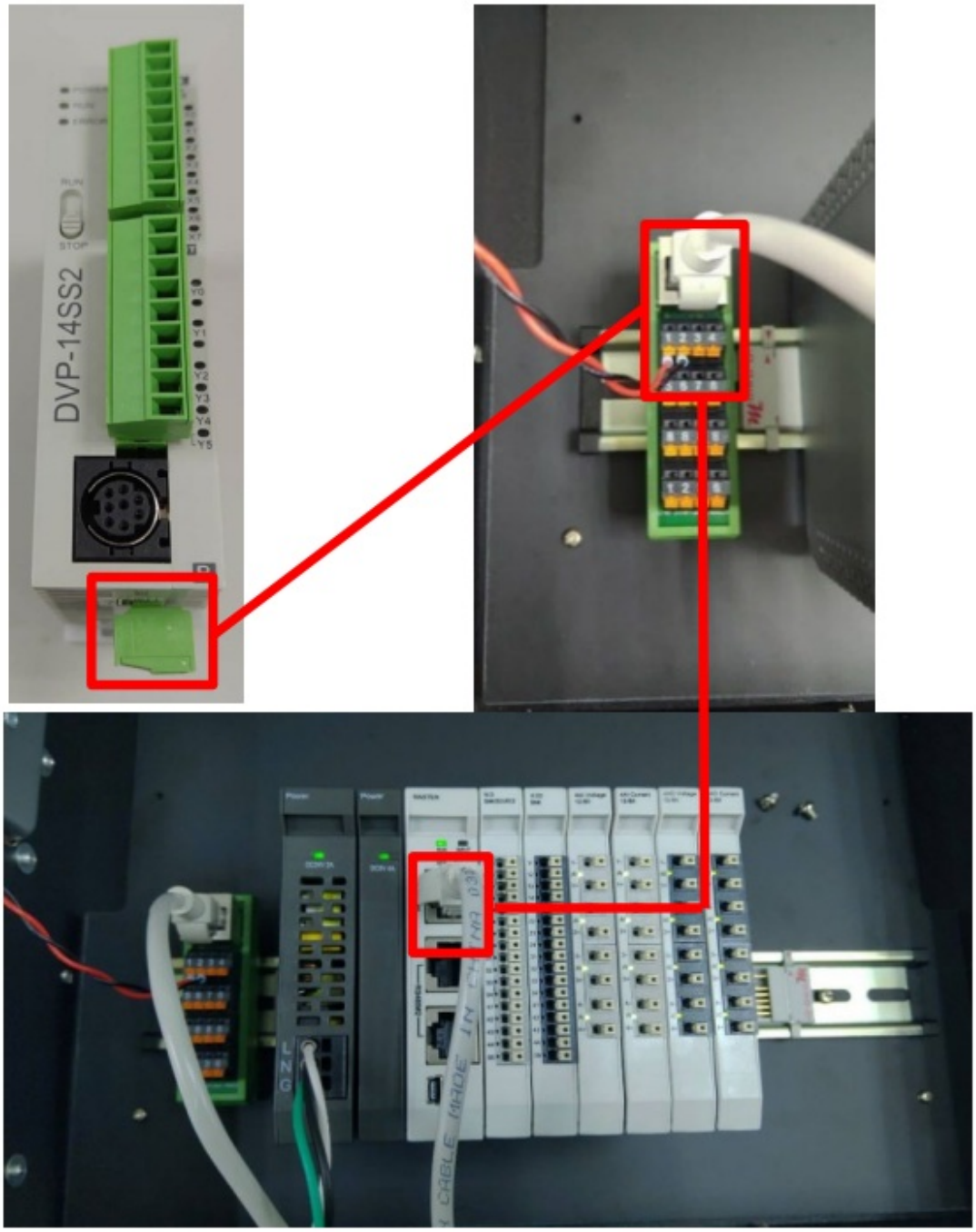
I. The interface module is used externally to convert Delta PLC RS485's communication port (Modbus RTU) to a RJ45 connector
II. The main controller is in charge of the management and dynamic configuration of I/O parameters and so on.
III. The power module and interface module are standard for remote I/Os and users can choose the model or brand they prefer.

Delta PLC Connection Setup

This chapter explains how to use the ISPSoft program to connect Delta PLC with iO-GRID M.
For detailed information, please refer to ISPSoft User Manual

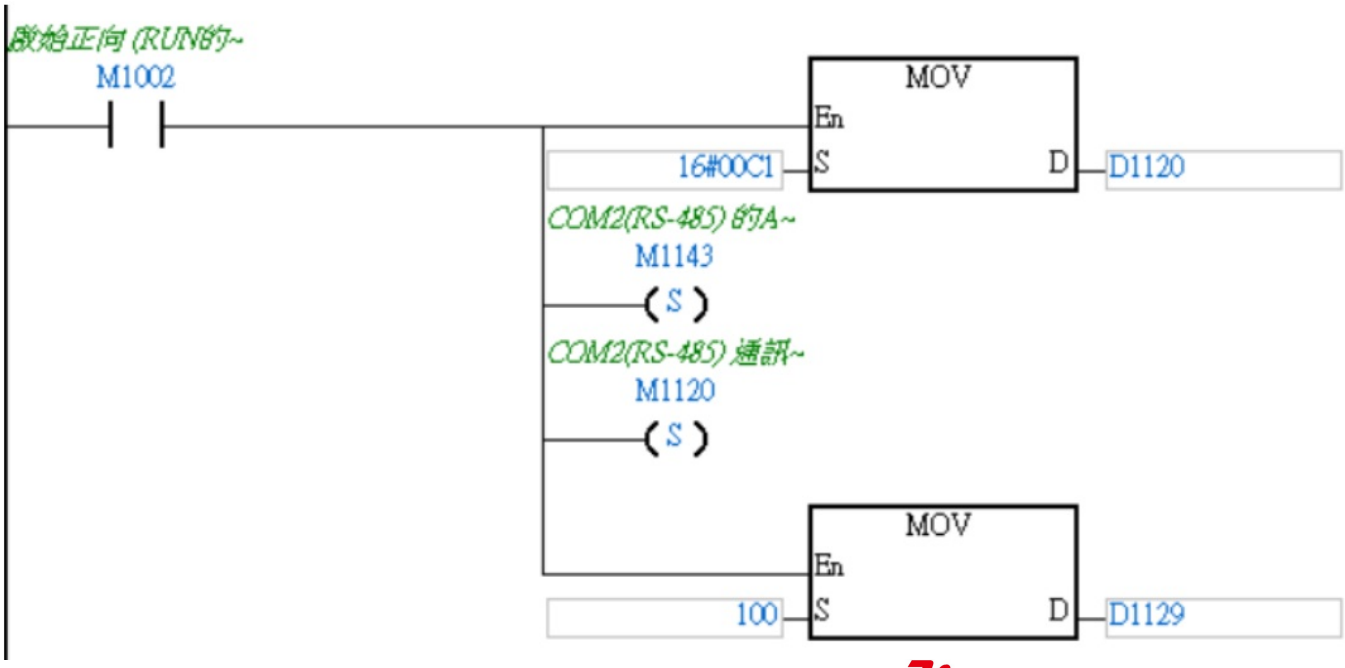
2.1 Delta PLC Hardware Connection

I. The connection port is at the bottom of the machine. Using DVP-14SS2 for demonstration, connect Port 2(RS485 A/B) to the interface module (1/2) to convert it into a RJ45 connection, which will be connected to the main controller.



2.2 Delta PLC Connection Setup

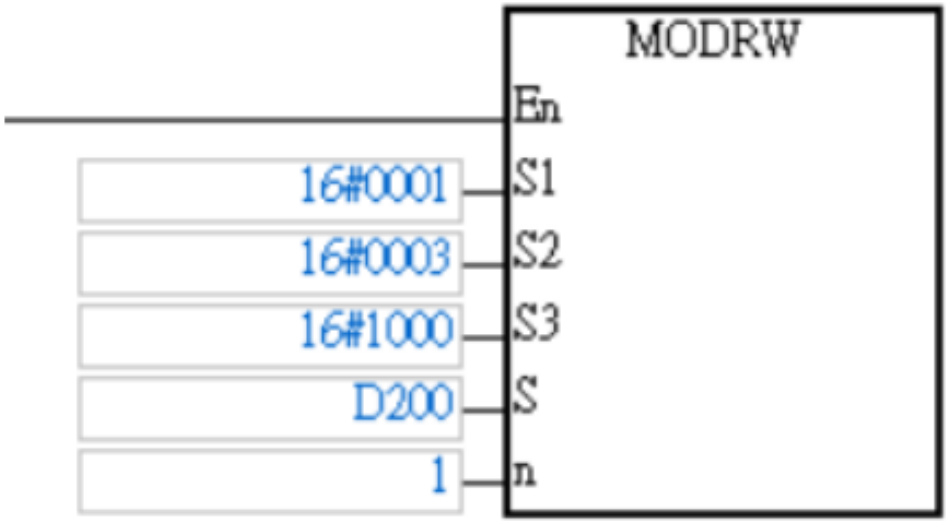
I. Launch ISPSoft and set COM2's communication settings to the RTU mode, 115200bps, 8 data bits, None parity and 1 stop bits (115200, 8,N, 1). Programming Example:



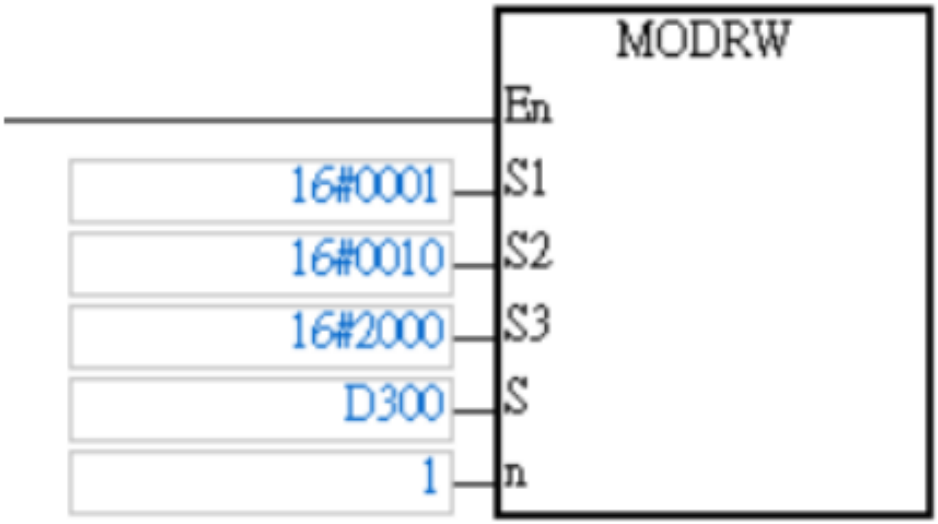
※The communication parameter setting must be consistent with iO-GRID M to enable communication

II. Use the MODRW command to setup the reading/writing of iO-GRID M's I/O module

Reading



Writing



S1: Connected device addresses: K1~K254
S2: Communication function code
S3: The address where data will be read/written
S: The register where the data to be read/written is tored
N: Length of the data to be read/written

※iO-GRID M 's first GFDI-RM01N has the register address at 1000(HEX)

※iO-GRID M 's first GFDO-RM01N has the register address at 2000(HEX)

※Note: When using the read command, please use register D1296 to start using the stored data

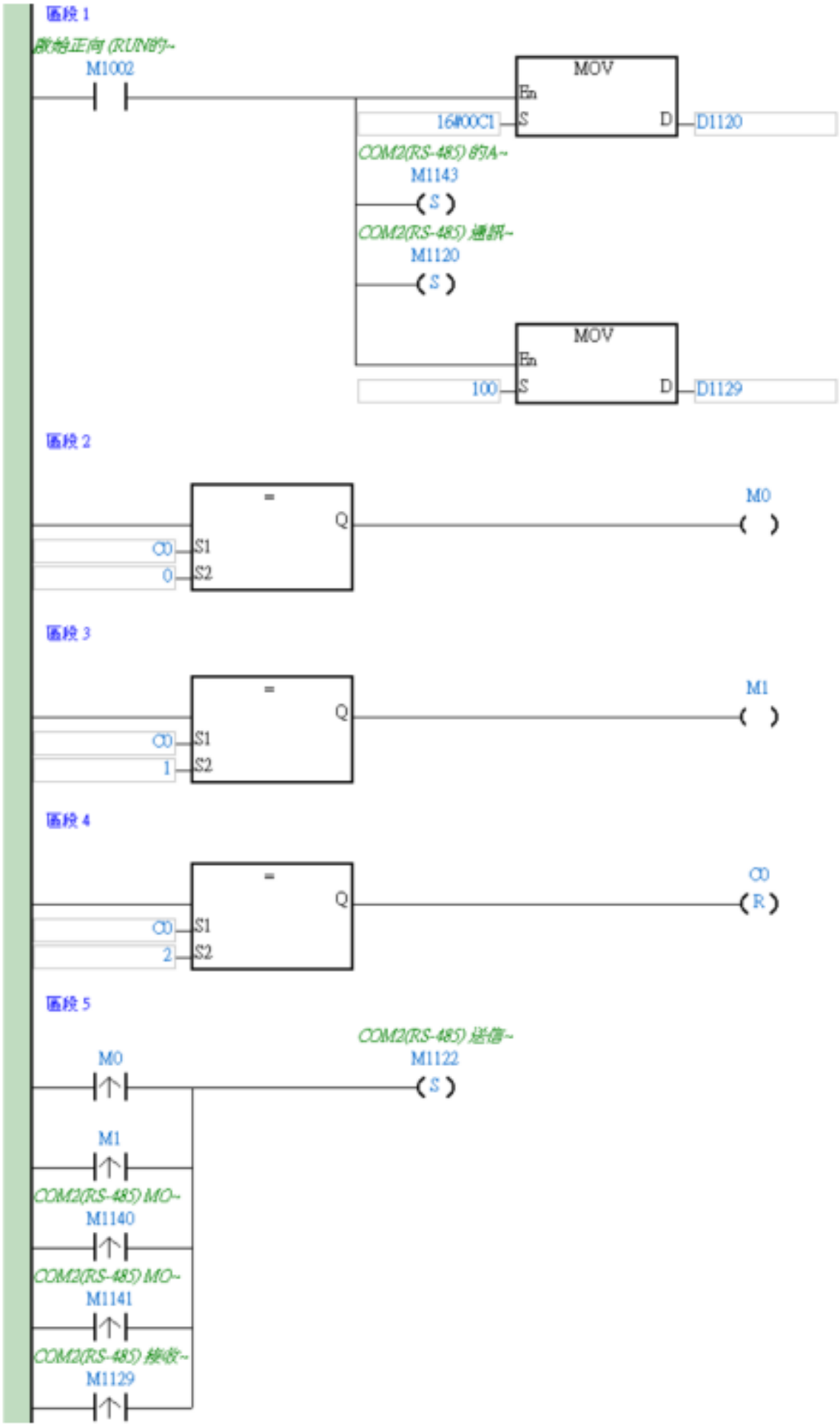
Use the “read” command above to set up D200 to read 2 registers with first point of DI as the example.

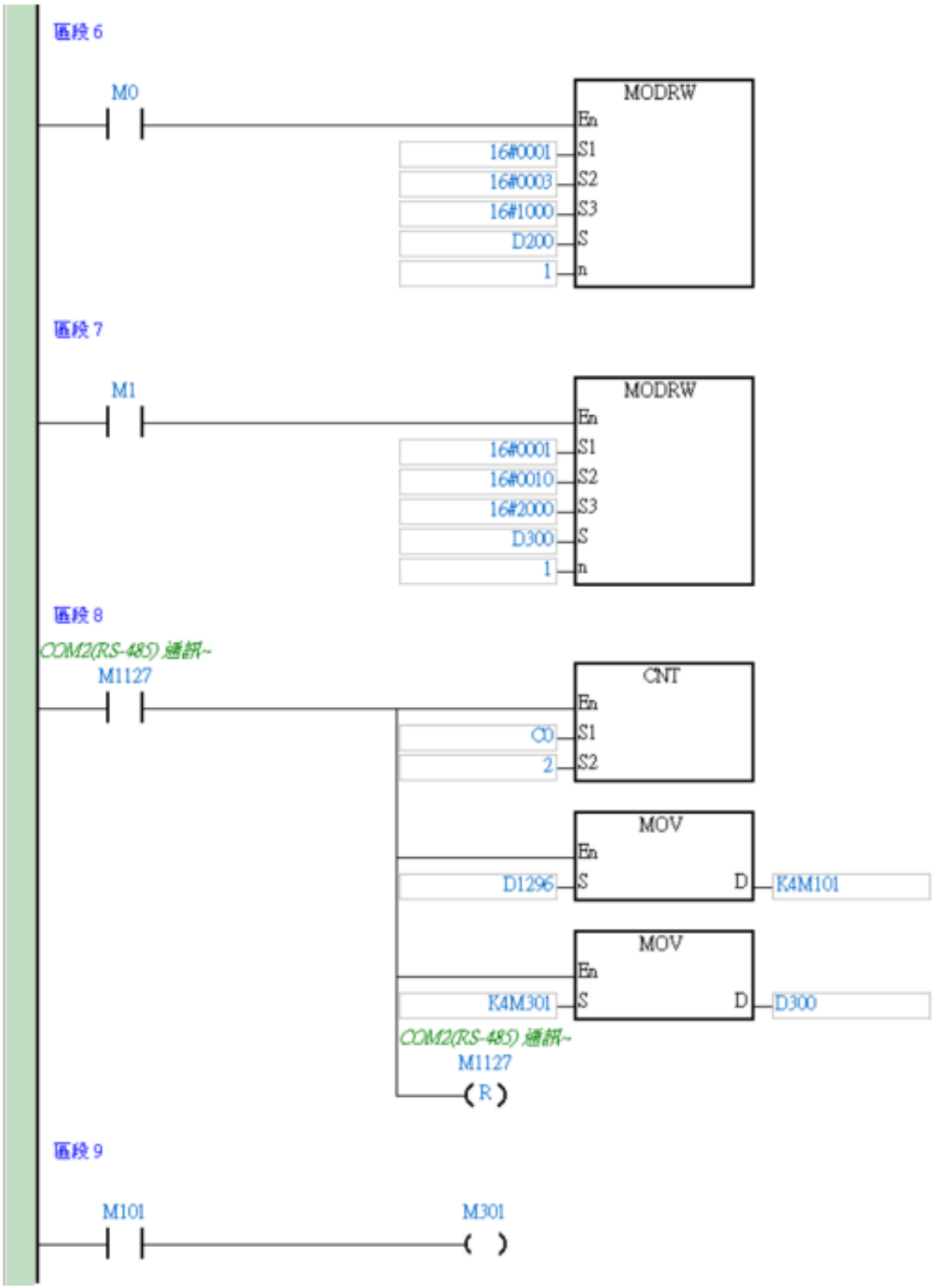
Register	DATA	Description	
D200 (Low- order by te)	“0”	ADR 1 ADR 0	
D200 (Highoder byte)			
D201 (Low- order by te)		CM D 3 C MD 0	
D201 (High- order b yte)	“3”		
D202 (Low- order by te)	44044	Data Bytes	
D202 (High- order b yte)	“2”		
D203 (Low- order by te)	44044	Content at the address 2100 I-1	PLC will automatically convert ASCII characters into values and sto re them at D1296=H0001
D203 up	4,019		
D204 down	44044		
D204 up	4414,		
D205 down	440,4	Content at the address 2101 1-1	PLC will automatically convert ASCII characters into values and sto re them at D1297=1-10000
D205 up	44044		
D206 down	4404,		
D206 up	440,4		
D207 down	LRC CHK 1		
D207 up	LRC CHK 0		

Based on this table, users can use D1296 register to read the entire data (Word).

III. rogramming Example:

This example is for communications and using RS485 communication to read/write iO-GRID M module


区段 1
初始正向 (RUN时)~
M1002
MOV
En
16#00C1
S
D
D1120
COM2(RS-485) 8为A~
M1143
S
COM2(RS-485) 通讯~
M1120
S
MOV
En
100
S
D
D1129
区段 2
=
Q
C0
S1
0
S2
M0
区段 3
=
Q
C0
S1
1
S2
M1
区段 4
=
Q
C0
S1
2
S2
C0
R
区段 5
COM2(RS-485) 送信~
M1122
S
M0
M1
COM2(RS-485) MO~
M1140
COM2(RS-485) MO~
M1141
COM2(RS-485) 接收~
M1129



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