

Figure 21: Write Multiple Outputs state diagram

**6.12 16 (0x10) Write Multiple registers**

This function code is used to write a block of contiguous registers (1 to 123 registers) in a remote device.

The requested written values are specified in the request data field. Data is packed as two bytes per register.

The normal response returns the function code, starting address, and quantity of registers written.

**Request**

Function code	1 Byte	0x10
Starting Address	2 Bytes	0x0000 to 0xFFFF
Quantity of Registers	2 Bytes	0x0001 to 0x007B
Byte Count	1 Byte	2 x N*
Registers Value	N* x 2 Bytes	value

\*N = Quantity of Registers

**Response**

Function code	1 Byte	0x10
Starting Address	2 Bytes	0x0000 to 0xFFFF
Quantity of Registers	2 Bytes	1 to 123 (0x7B)

**Error**

Error code	1 Byte	0x90
Exception code	1 Byte	01 or 02 or 03 or 04

Here is an example of a request to write two registers starting at 2 to 00 0A and 01 02 hex:

Request		Response	
Field Name	(Hex)	Field Name	(Hex)
Function	10	Function	10
Starting Address Hi	00	Starting Address Hi	00
Starting Address Lo	01	Starting Address Lo	01

Quantity of Registers Hi	00	Quantity of Registers Hi	00
Quantity of Registers Lo	02	Quantity of Registers Lo	02
Byte Count	04		
Registers Value Hi	00		
Registers Value Lo	0A		
Registers Value Hi	01		
Registers Value Lo	02		

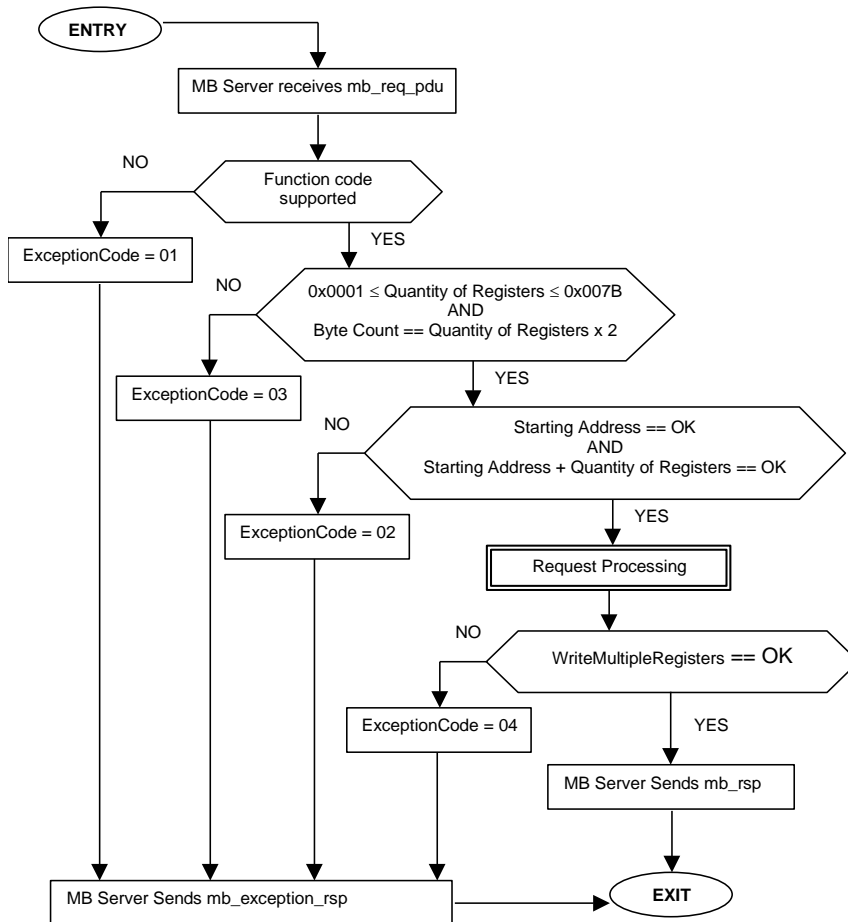


Figure 22: Write Multiple Registers state diagram

6.13 17 (0x11) Report Server ID (Serial Line only)

This function code is used to read the description of the type, the current status, and other information specific to a remote device.

The format of a normal response is shown in the following example. The data contents are specific to each type of device.

Request

Function code	1 Byte	0x11
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Response

Function code	1 Byte	0x11
Byte Count	1 Byte	
Server ID	device specific	
Run Indicator Status	1 Byte	0x00 = OFF, 0xFF = ON
Additional Data		

Error

Error code	1 Byte	0x91
Exception code	1 Byte	01 or 04

Here is an example of a request to report the ID and status: