YASKAWA

A World of Automation Solutions[TM]

CUSTOM SOFTWARE DESCRIPTION

ENHANCED MEMOBUS SOFTWARE

Software Number: VSP018090 / VSP018100		Base Version: VSP010024 / VSP010103
Product: V7 Low & High HP		Part Number: CIMR-V7AMXXXX-034
Release Date: 2/15/01	Author: Ty Phillips	☐ Beta Version
Overview: Support for Memobus function code 06H is added.		
Revision History:		

Background:

All inverters in Yaskawa's current product line support Memobus communication protocol, which is based on Modbus RTU. However, not every function code of Modbus is supported by Memobus, which can cause incompatibility issues with certain HMIs and PLCs.

Specifically, Modbus function code 06H (single register write) is not supported on standard Yaskawa product. Some HMI/PLC software configuration programs do not permit manual selection of the function code. Therefore, if the user needs to write one word of data to the inverter, function code 06H will automatically be selected instead of function code 10H (multiple register write). Therefore, the inverter will not recognize the query message.

This software adds support for function code 06H to the V7. The correct version must be selected based on inverter capacity as shown:

VSP018090	$\leq$ 4.0kW
VSP018100	5.5/7.5kW

Detailed Description of Functionality:

Support for function code 06H is added. The format for the message is shown below.

(Example)

Query Message

Slave address		01H
Function code		06H
Register Address	Upper	00H
	Lower	01H
Setting Data	Upper	00H
	Lower	03H
CRC-16	Upper	98H
	Lower	0BH

Response Message (Normal)

Slave address		01H
Function code		06H
Register Address	Upper	00H
	Lower	01H
Setting Data	Upper	00H
	Lower	03H
CRC-16	Upper	98H
	Lower	0BH

Response Message (Error)

Slave address		01H
80H + Function Code		86H
Error code		21H
CRC-16	Upper	82H
	Lower	78H