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1 News

1.1 ftp-site link

Just to let you know (again), you can find the latest info about our products (manuals, pictures, catalogues, application notes, presentations, software, etc) on our ftp-site.

<ftp://den-eindhoven:BuPd2175@ftp2.delta-europe.com/deltronics-eindhoven/customer-service>

Name and password are included in the link.

Name: den-eindhoven

Password: BuPd2175

1.2 SPS/IPC/drives in Nuremberg

This year Delta will exhibit again at SPS/IPC/drives in Nuremberg from 22-24 November 2016.



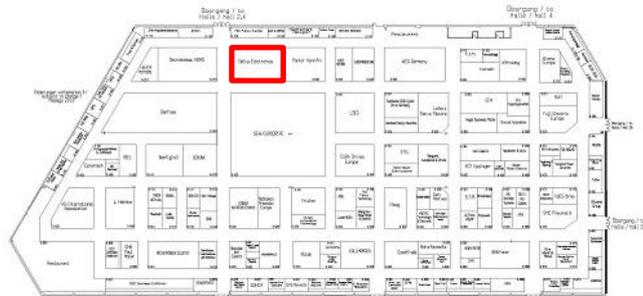
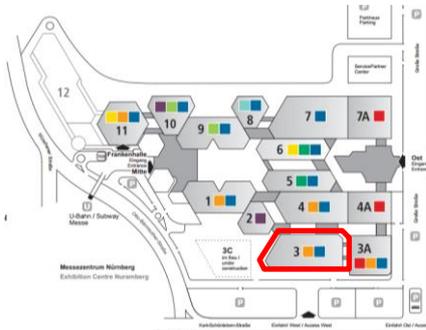
We will show you our latest developments and solutions.

Deltronics (Netherlands) B.V., De Witbogt 20, 5652 AG Eindhoven, The Netherlands

 +31 (0)40 8003800

 +31 (0)40 8003898 and 99

We cordially invite you to visit us. If you make an appointment with Monique Appeldoorn, tel +31 40 8003880, e-mail mappeldoorn@deltaww.com, you'll be sure we'll be there at your most convenient time.



2 Product update

2.1 UPDATE – Spare fans are option

For C/CP2000, C200, and VFD-E the fans are defined as option, not as spare part any longer (since some time now).

It means we have (limited) stock.

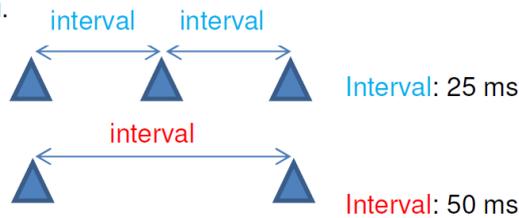
You can find info in the user manuals and prices in your price list.

2.2 NEW – VFDSOft 1.54 (updated from 1.50)

A. New Function

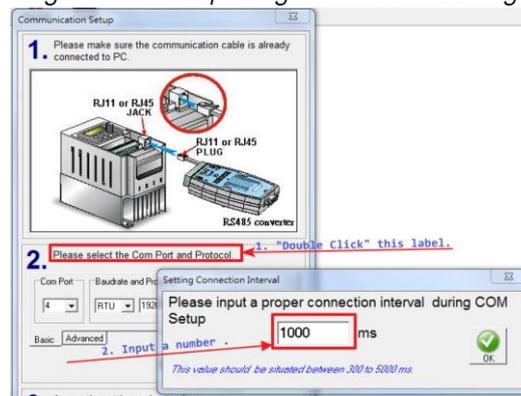
- I. Add Japanese language user interface to VFDSOft software language function.
- II. Support VFD-PP, CFP2000, TM-2.
- III. Add a “Setting Connection Interval” window in “Communication Setup” function. User can arbitrarily set an interval when connecting to a VFD device.

E.g.



: Connect to VFD device

The following figure is the guideline for opening the hidden “Setting Connection Interval” window.



B. Modified Function

	Problems found in v1.50	Solution in v1.54
1	DPD-T, DPD-K, TM can not successfully be distinguished by VFDSOft.	All of three VFD inverters can use the full-function in VFDSOft.

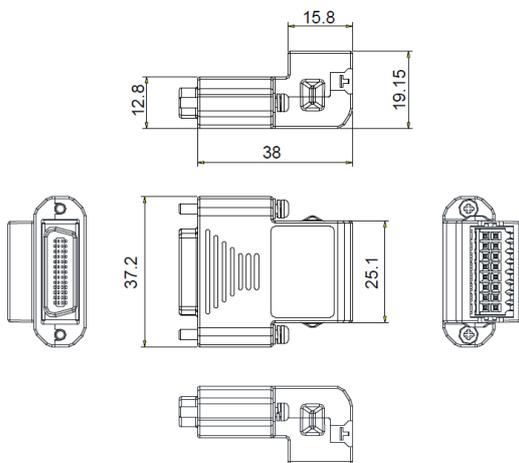
2.3 NEW – ASD-IF-SC2616 quick connector for ASD-A2-*-E series

This new connector can replace the connector ASD-CN5C0026 below if the user does not want to do soldering. However, this new connector has only 16 pins, and therefore cannot 100% replace the original CN1 connector (25 pins).

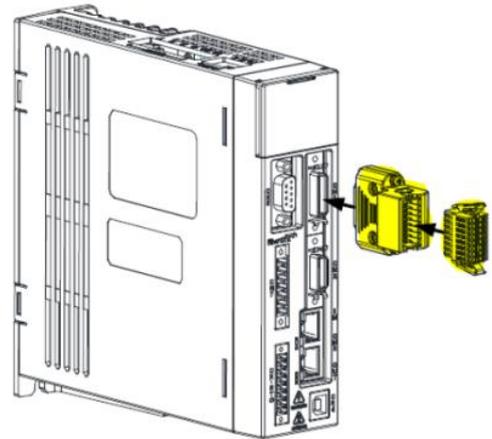
Features:

- Easy, convenient and fast wiring
- Easy installation
- 5 digital inputs
- 2 digital outputs
- 1 pulse output

Product Appearance and dimensions

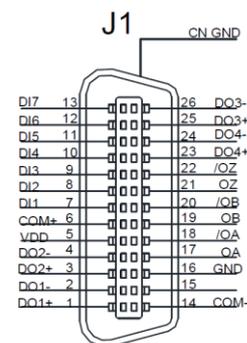
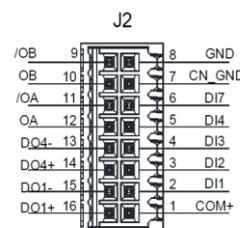


Unit: mm

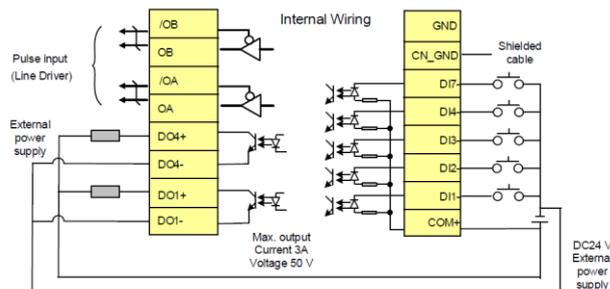


Pin assignment

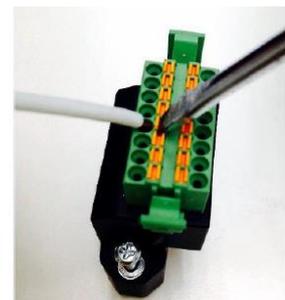
J2		J1	
PIN	Description	PIN	Description
1	COM+	6	COM+
2	DI1	7	DI1
3	DI2	8	DI2
4	DI3	9	DI3
5	DI4	10	DI4
6	DI7	13	DI7
7	CN_GND	-	-
8	GND	16	GND
9	/OB	20	/OB
10	OB	19	OB
11	/OA	18	/OA
12	OA	17	OA
13	DO4-	24	DO4-
14	DO4+	23	DO4+
15	DO1-	2	DO1-
16	DO1+	1	DO1+



Standard Wiring Method:



Use the flat-head screwdriver to press down the spring clip, and then insert the wire.



2.4 UPDATE – VFD-L with PNP inputs now standard

The status of the following VFD-L drives has been changed from BTO to standard. That means we will normally have them on stock.

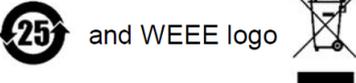
VFD004L21D
VFD007L21D
VFD004L21E
VFD007L21E

The D version has PNP inputs and no filter.
 The E version has PNP inputs and built-in filter (like VFDxxxL21B)

2.5 UPDATE – Product labels for drives have changed

The product labels for drives have changed because of RoHS in China and WEEE.

Reasons

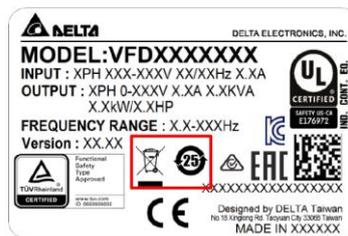
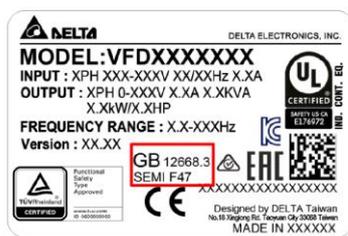
- Adding China RoHS logo  and WEEE logo 
 - Remove SEMI F47 and GB12668.3 in model label, but reserve it in carton label.
- * SEMI F47 and GB12668.3 is standard regulation numbers, not certificated regulation logo.
 - * SEMI F47: Semiconductor Equipment Materials International specifies the required voltage sag tolerance for semiconductor fabrication equipment.
 - * GB12668.3: Adjustable speed electrical power drive systems. Part 3: EMC requirements and specific test methods.

The different labels on products and boxes:

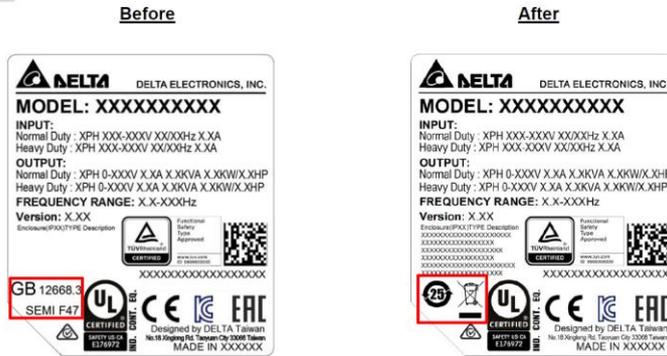
Type I

Before

After



Type II



Type III



Type IV



Type V



The change was done in 2016 WK36

Item	Switching period	
New label layout	TW	T1636
New label layout	WJ	W1636

2.6 UPDATE – MKE-EP not for VFD-E Frame D

The earthing plate MKE-EP cannot be mounted on VFD-E Frame D. In the next manual a note will be included

2.7 NEW - COMMGR version 1.06 is released

1. COMMGR V1.06 now supports multiple languages including Traditional Chinese, Simplified Chinese and English.

2. COMMGR V1.06 now adds three more baud rates for selection, including 4800, 230400, 460800 and 921600bps.
3. COMMGR V1.06 now supports AS3000 series, AH10EMC, AH08EMC and AH20EMC series.
4. COMMGR V1.06 now adds 2 more types in the Connection Setup including AH5x1 Simulator and AH5x0 Simulator.
5. COMMGR V1.06 now enhances the stability of Directlink.
6. COMMGR V1.06 now supports closing the COM port automatically once the communication with ISPSOft is done.

COMMGR V.06 can be downloaded from our ftp-site.

2.8 NEW - AH10EN-5A firmware version 2.00

AH10EN-5A firmware version 2.00 includes new and modified functions as described below.

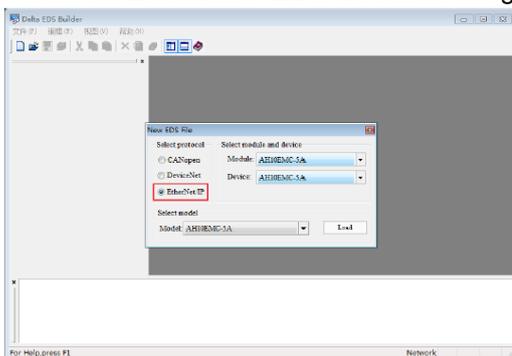
1. AH10EN-5A now supports EtherNet/IP
EtherNet/IP works on a TCP/UDP/IP based Ethernet network and uses most widely deployed collections of Ethernet standards to provide a broad range of applications in different industries that require high-speed and stability such as Factory Automation (FA), Building Automation (BA), Process Automation (PA) and so on.
2. AH10EN-5A of Delta AH series is an Ethernet communication module, supporting MODBUS TCP communication protocol. For the benefits of users, AH10EN-5A V2.00 now supports EtherNet/IP communication protocol as well; simply upgraded the AH10EN-5A to firmware V2.00 to have this feature.
3. AH10EN-5A supports lots of EtherNet/IP related functions, including serving as network redundant, allowing data mapping cyclically or non-cyclically via EtherNet/IP, acting as a scanner / an adapter and many more. Users can also download the EDS file and connect to the EtherNet/IP devices of other brands with the downloaded EDS file.

Software

For EtherNet/IP functions of AH10EN-5A, please download Delta EtherNet/IP software, EIP Builder V1.01, which can be called through the ISPSOft software. Download the software EIP Builder V1.01 and ISPSOft V3.02 from the ftp-site.

2.9 NEW - EDS Builder V3.00

1. Add and edit the EtherNet/IP EDS files.
2. Create an EtherNet/IP EDS file as the image shown below.



EDS Builder V3.00 can be downloaded from our ftp-site.

2.10 NEW - CMC-EIP01 firmware version 1.06

CMC-EIP01 firmware version 1.06 includes new and modified functions as described below.

Note: CMC-EIP01 V1.06 works with VFD-C2000 V2.01

1. **One more CIP connection is added**
- CMC-EIP01 now can edit the VFD-C2000 parameters in the EtherNet/IP mapping table (user-defined addresses). Users can select VFD-C2000 for editing. (Editing the mapped parameters

cannot be done in V1.04.)

- 32 sets of IN/OUT parameters are available for this new connection. (The parameter sets for IN/OUT were 16/3 for V1.04)

For more information on CIP Connection setups, please refer to its operation manual. The parameter sets for mapping are listed below.

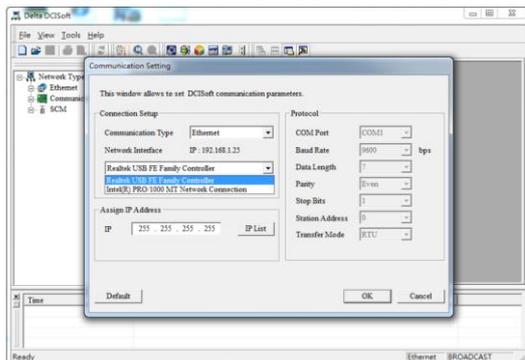
IN		OUT	
[0]	[2100H]	[0]	[2000H]
[1]	[2101H]	[1]	[2001H]
[2]	[2102H]	[2]	[2002H]
[3]	[2103H]	[3]	Reserved
[4]	[2104H]	[4]	[6000H]
[5]	[2105H]	[5]	[6001H]
[6]	[2106H]	[6]	[6002H]
[7]	[2107H]	[7]	[6003H]
[8]	[2108H]	[8]	[6004H]
[9]	[2109H]	[9]	[6005H]
[10]	[210AH]	[10]	[6006H]
[11]	[210BH]	[11]	[6007H]
[12]	[210CH]	[12]	Reserved
[13]	[210DH]	[13]	Reserved
[14]	[210EH]	[14]	Reserved
[15]	[210FH]	[15]	Reserved
[16]	[6100H]	[16]	[FFFFH]: user-defined address
[17]	[6101H]	[17]	[FFFFH]: user-defined address
[18]	[6102H]	[18]	[FFFFH]: user-defined address
[19]	[6103H]	[19]	[FFFFH]: user-defined address
[20]	[6104H]	[20]	[FFFFH]: user-defined address
[21]	[6105H]	[21]	[FFFFH]: user-defined address
[22]	[6106H]	[22]	[FFFFH]: user-defined address
[23]	Reserved	[23]	[FFFFH]: user-defined address
[24]	Reserved	[24]	[FFFFH]: user-defined address
[25]	[FFFFH]: user-defined address	[25]	[FFFFH]: user-defined address
[26]	[FFFFH]: user-defined address	[26]	[FFFFH]: user-defined address
[27]	[FFFFH]: user-defined address	[27]	[FFFFH]: user-defined address
[28]	[FFFFH]: user-defined address	[28]	[FFFFH]: user-defined address
[29]	[FFFFH]: user-defined address	[29]	[FFFFH]: user-defined address
[30]	[FFFFH]: user-defined address	[30]	[FFFFH]: user-defined address
[31]	[FFFFH]: user-defined address	[31]	[FFFFH]: user-defined address

2. **The number of connections via MODBUS TCP has increased for CMC-EIP01 from 1 to 4,** providing more MODBUS TCP connections with inverters for software and PLC systems.
3. **CMC-EIP01 now supports Bootstrap Protocol (BOOTP).**
Users can set up the network via the BOOTP server software from Delta or other brands. Please select BOOTP for CMC-EIP01 via DCISoft V1.16 or a keypad. BOOTP server software can be found in the section of IP management tool of the EIP Builder.

2.11 NEW - DCISoft software version 1.17

DCISoft software version 1.17 includes new and modified functions as described below.

1. **The network card now can be selected in the Communication Setting section.**

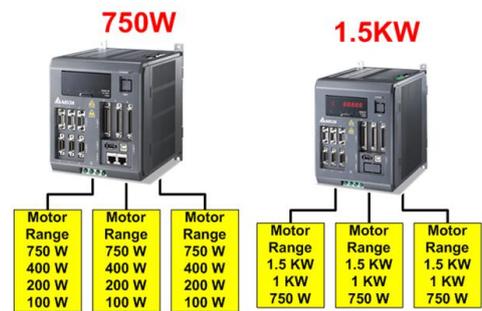
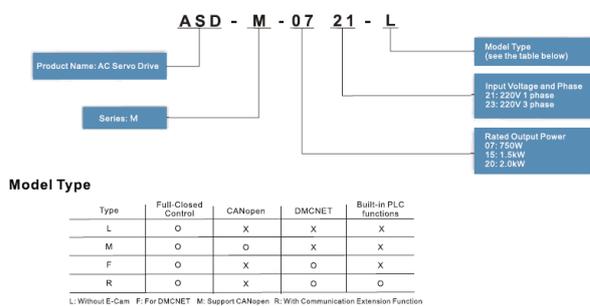


2. SCMSoft now supports AS300 series communication modules ASAS00SCM-A

Old	Only supported DVPSCM12-SL, DVPSCM52-SL, AH10SCM-5A				
New	Now supports AS00SCM-A communication modules and can work with the following extension cards, AS-F232, AS-F422, and AS-F485.				
Applications	Users can self-define the formats of the communication packets.				
		DVPSCM12-SL	DVPSCM52-SL	AH10SCM-5A	AS00SCM-A
	COM Port Setups	Y	Y	Y	N (Set up via HWCONFIG)
	UD Link	Y	Y	Y	Y
	Log	Y	Y	Y	Y
BACnet	N	Y	Y	N	

DCISoft software version 1.17 can be downloaded from our ftp-site.

2.12 UPDATE - ASD-M-M replaced by ASD-M-F



- Only F models (750W and 1.5kW) available in European market.
- F and M models have the same functions with different communication interfaces.
- R models BTO only.

2.13 NEW - EMI Filter for ASD-A2 and ASD-B2

New EMI footprint filters have been released for ASD-A2 and ASD-B2.

Features

- Supports ASD-A2 and ASD-B2 200V signal phase products
- EMI filter model:
RF-1007-ASDB for 100W~750W
RF-1011-ASDB for 1kW~1.5kW
- CE certification: Class C1 with standard 5m unshielded cable
- Compact size

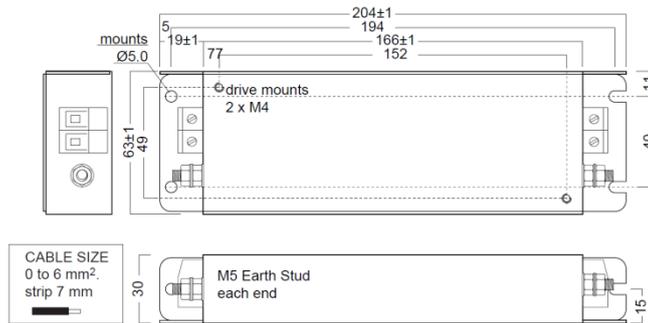


Models

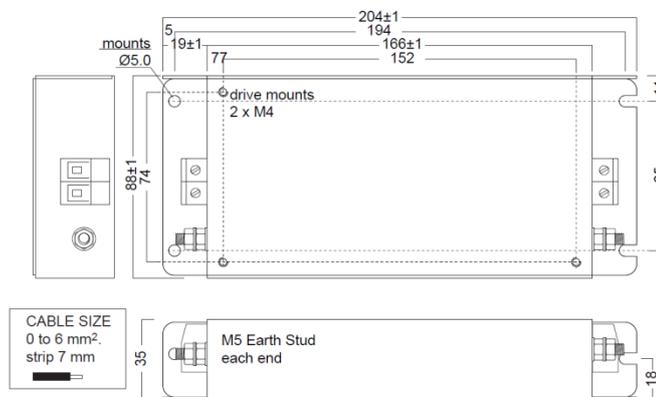
EMI Filter	ASD-A2	ASD-B2
RF-1007-ASDB	ASD-A2-0121-M	ASD-B2-0121-B
	ASD-A2-0221-M	ASD-B2-0221-B
	ASD-A2-0421-M	ASD-B2-0421-B
	ASD-A2-0721-M	ASD-B2-0721-B
RF-1011-ASDB	ASD-A2-1021-M	ASD-B2-1021-B
	ASD-A2-1521-M	ASD-B2-1521-B

Dimensions

- RF-1007-ASDB



- RF-1011-ASDB



Availability

From Sep 2016 onwards.

2.14 UPDATE - All cable nomenclature unified

In order to organize the actual situation with all the Delta cables, we decided to unify all components using the same nomenclature as follows:

UC	Unified Cable	PRG	Programming	XXX	Cable Type
		MS	Master/Slave		
		ET	Extension Cables		
		CMC	CANOpen		
		EMC	Ethercat		
		PF	Profibus		

To help you finding the proper cable for the proper device configuration, we created a specific Delta PLC/HMI Cable selection guide that you can find on our ftp-site:

There are 3 types of cable update:

1. Name/Color update – Same cable with new unified name and new color (eg. UC-MS030-01A ⇔ DVP-ACAB2A30)
2. Specs Update – Same functionality cable with better specs than the old one (eg. UC-PRG015-02A ⇔ DOP-CAUSBAB)
3. New Product - Brand new product to fulfill some previously lacking cables (eg. UC-MS010-02A ⇔ serial communication cable HMI/PLC with 90° mini DIN connector)

3 Application

3.1 NEW – Application Notes

New application notes have been published recently on our ftp-site:

- Fluid Industry Notification - Underground integrated pipe gallery monitoring system.pdf
- Elevator Industry Notification-Machine roomless elevator energy saving system.pdf
- Industry Notification-The removable tissue paper folding machine.pdf
- Elevator Industry Notification-Machine roomless elevator energy saving system.pdf
- IOT Industry Notification-state monitoring system for production equipment.pdf
- Robot Industry Notification--Delta Robot for Dynamic Tracking.pdf
- Electronics Industry Notification- Motor Stator Winding Machine.pdf
- Robot Industry Notification - Screw Locking Robot.pdf

4 FAQ

4.1 VFD-series AC Motor drives

General

Q What is the maximum output frequency with the 599Hz limitation?

A - In VF Mode the maximum output frequency is **599Hz**.

- In SVC or Vector Mode the maximum output frequency, including slip compensation, is 599Hz. Therefore the max frequency command is **599Hz-Slip** !

- In FOC mode (C2000) , the max frequency command is limited to $(F_{set} + Pr10-29) \leq 599Hz$, to make sure the actual output frequency is limited to 599.00Hz.

VFD-E

Q **EME-PG01: What is the number of output pulses on A0 and B0?**

A The ratio of input/output pulses is 1:1.

Q **How to switch between 2 different setpoints for PID?**

A Pr00-02=9 (50Hz default)

Pr02-00=1

Pr04-19=1 and switch AVI to use ACI=AVI2 0-10V for feedback

Pr05-00=25Hz (=50% setpoint)

Pr08-00=1 (setpoint acc. to Pr02-00)

Prt08-00=3 (neg feedback on AVI2)

Pr04-05=1 (MI3)

So setpoint can be switched between AVI and Preset1 (value in Pr05-00 and active via MI3)

C/CP2000

Q What is the fan behaviour when Pr07-19=3?

A When Pr07-19=3:

When IGBT temperature >60°C **or** CAP temperature >60°C, the fan is ON.

When IGBT temperature <40°C **and** CAP temperature <40°C, the fan is OFF.

It will be corrected in the next user manual.

Q What does fault CE3 mean?

A

03	ILLEGAL DATA VALUE	A value contained in the query data field is not an allowable value for server (or slave). This indicates a fault in the structure of the remainder of a complex request, such as that the implied length is incorrect. It specifically does NOT mean that a data item submitted for storage in a register has a value outside the expectation of the application program, since the MODBUS protocol is unaware of the significance of any particular value of any particular register.
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Q What is the function of Pr08-15?

A

Contrary to what's in the manual, Pr08-15 is reserved and has no function.