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**PMC-12V600W1BA**  
**PMC-48V600W1BA**

## 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, data sheets, 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 Delta at Hannover Messe 2019, 1~5 April

**Delta's showcase at Hannover Messe 2019 featured:**

#### **Solutions for Smart Manufacturing:**

Delta's industrial automation products are engineered to facilitate smart manufacturing and energy efficiency in fields ranging from wood-working, packaging, assembly, electronics manufacturing, and more. A key smart manufacturing highlight at Delta's booth is the Digital Factory Monitoring Solution, a state-of-the-art ecosystem of digital platforms developed by Delta for the monitoring and control of equipment, operations and energy consumption in factories. The DIASstudio is a brand new integrated



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

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

+31 (0)40 8003800

+31 (0)40 8003898 and 99

engineering software to efficiently develop a machinery system, from product selection, programming, to exporting on a unified platform. The partnership with CODESYS enables Delta to make its future motion control devices programmable with CODESYS platform and offers customers the opportunity to simplify the implementation of Delta's industrial automation hardware across their operations.

#### Solutions for Smart Buildings:



With IoT-based smart buildings at the heart of smart cities, Delta - together with its subsidiaries LOYTEC and VIVOTEK - is also showing its latest smart building management solutions. These range from surveillance systems to 3D people counting systems, smart LED lighting and control solutions for third party HVAC and sunblind systems. The LOYTEC L-ROC Room Controller is a revolutionary room automation system based on

IP integrated with native BACnet/IP networks and LonMark systems at the controller level for lighting, temperature and sunblind control, and occupancy detection.

VIVOTEK's fisheye network camera is an all-in-one surveillance solution that offers 180° panoramic (wallmount) or 360° surround views with zero blind spots (ceiling-mount). Therefore, it is ideal for monitoring indoor open areas in airports, banks, shopping malls and more. These comprehensive smart building solutions have been designed to enhance energy efficiency, safety and comfort.

#### Solutions for Smart Energy Infrastructure:

With growing demand of e-mobility in cities around the world, charging infrastructure needs to become widely available and energy-resilient. To meet that requirement, Delta will show its complete smart charging infrastructure solutions ranging from renewable power generation, Power Conditioning Systems (PCS), Battery Energy Storage Systems to EV charging solutions.



A key highlight will be its 150kW DC Ultra-Fast EV Charger, which offers a modular, scalable power architecture and the ability to charge four EVs simultaneously, and can provide 100km range within ten minutes of charging.

Delta's PCS100 is a 100kW bi-directional conversion system that converts power between energy storage and the electricity grid, along with energy and grid power quality management features. The PCS100 is available for outdoor applications and is an ideal fit for peak-shaving and load shifting planning in EV charging stations.

### 1.3 Delta at Middle East Electricity 2019

Delta's innovative, energy-efficient and complete portfolio of solutions at MEE 2019 include:

- Delta's complete HVAC solution for industrial automation includes PLCs to AC motor drives and industrial Ethernet switches for chiller, air conditioning and cooling water systems.
- The IoT-based Building Management Platform from LOYTEC, a Delta Group company, is uniquely compatible with all open protocols used in building control such as Modbus, BACnet, M-Bus, DALI, EnOcean, OPC, LON and KNX for controlling energy-related functions including heating, ventilation, air conditioning, lighting, security, renewable energy and EV chargers.
- The new M125HV series string inverter for commercial applications, offering a maximum of 140kVA output power, active cooling, and industry-leading peak efficiencies of up to 99.2%.
- Delta's residential offering comes in the form of the Solar PV Inverter Hybrid E5 energy storage system, boasts high DC charging efficiencies of up to 95% between the PV array and the battery.
- Delta's Connected Lighting Solution is a retrofitfriendly system that offers wireless connectivity and data analysis in industrial applications through the easy installation of an IoT module. The robust



Staccato series of LED high-bay lights provide multiple options for wattage and lumen output selection, coupled with Delta's high-efficiency programmable power supply.

- BoxD Small Cells series for Telecom Power Solutions, which is ideal in environments where space is scarce or site density needs to be increased cost-effectively. For energy data management, Delta's ORION is a single full site controller solution for any size system, supporting up to 128 rectifiers.
- Delta's modular 3-phase DPH 500 kVA, the ideal modular power protection for MW data centres to achieve total cost of ownership (TCO) optimisation, high power density, high power performance, and ultimate availability.

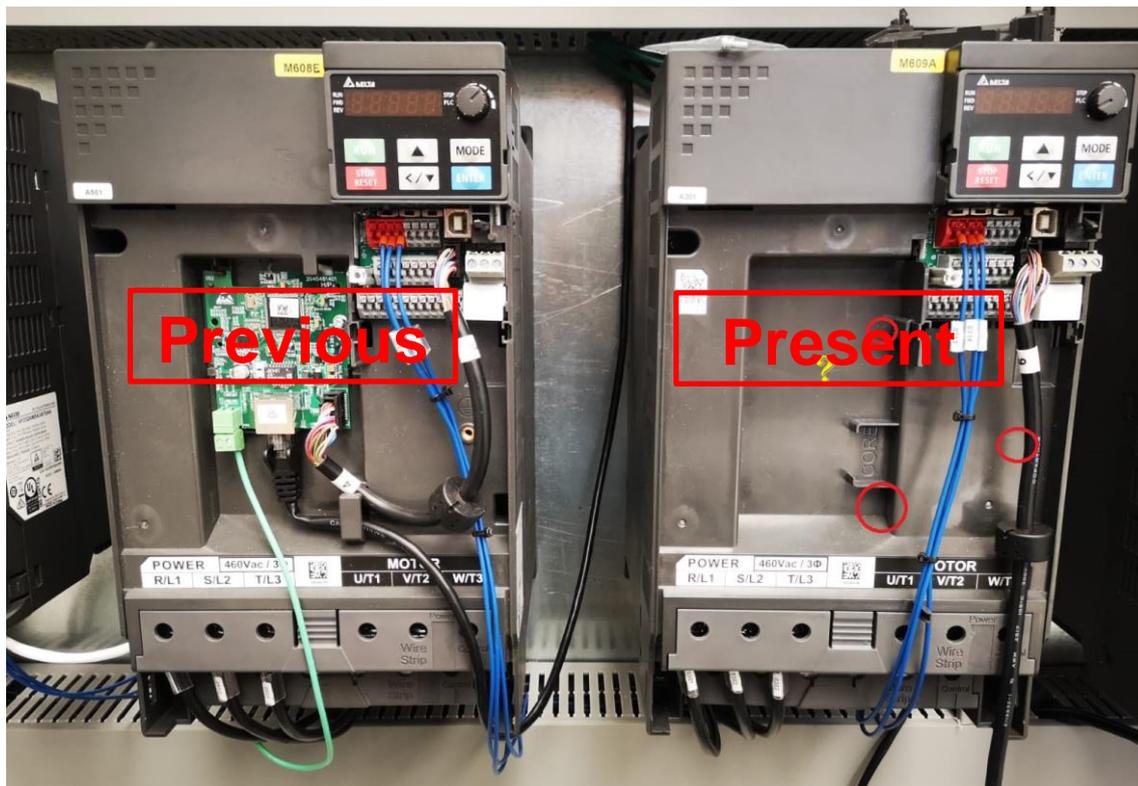
## 2 Product update

### 2.1 UPDATE –MS300 Frame E and F housing changed

The housing of MS300 Frame E and F has been changed.

It used to be the MH300 housing but now it is different.

MS300 can only accommodate **one** option card whereas MH300 can accommodate **two** option cards. In MS300 the option card is mounted on top of the control board.



This change was implemented in May 2018.

### 2.2 UPDATE – VFD-MS300 firmware updated from V1.07 to V1.08

Function correction

	Version 1.07 problem	Version V1.08
1	When Pr.00-04=7 keyboard displays the speed information, the speed information does not return to 0 when standby state.	When Pr.00-04=7 keyboard displays the speed information, when the standby state is entered, the speed information is returned to 0.
2	When AVI is switched to the frequency source with MI (for example, Pr.02-07=15), drive running direction cannot be changed.	When AVI is switched to the frequency source with MI (for example, Pr.02-07=15), drive running direction can be changed.
3	Select pulse input (Pulse) as the frequency source (pr.00-20=4). When the pulse signal stops, the inverter will run for 2 seconds before stopping.	Pulse is selected as the frequency source (Pr.00-20=4). When the pulse input signal stops, it stops immediately.
4	When setting Pr.00-07 to decrypt and Pr.00-08 to set a new password. If Pr.00-07 is set incorrectly, the number of errors will not be recorded.	When setting Pr.00-07 decryption and Pr.00-08 to set a new password, the error number will be recorded after Pr.00-07 is set incorrectly.
5	When setting operation command is external terminal control (Pr.00-21=1), quick start (Pr.02-00=4~6) and carrier 2k (Pr.00-17=2), the inverter will falsely trigger the error code GFF. /OL.	The low carrier and computing quick start current for have been modified.
6	Pr.05-00=5, PM rotation self-learning related issues: 1. Pr.05-00=5, display No Function 2. Self-learning process may trigger OL3 (low frequency and high current) 3. When self-learning fails, it may continues self-learning, not stop or display errors.	Correction Pr.05-00=5, PM rotation self-learning related issues: 1. Pr.05-00=5, display M rotation self-learning 2. Self-learning process does not trigger OL3 (low frequency and high current) 3. Self-learning mechanism has been revised
7	multi-function output terminal (AFM) has no action when setting communication card (Pr.03-20=22).	Multi-function output terminal (AFM) can set output value through communication card (Pr.03-20=22).
8	Motor Y-Δ switching If MI (function 29 & 30) / MO (function 31 & 32) setting is completed and operation is completed normally, at this time, set MO to 0 (no function) and the operation command Y-Δ switching is still valid.	Motor Y-Δ switching If MI (function 29 & 30) / MO (function 31 & 32) setting is completed and operation is completed normally, at this time, set MO to 0 (no function) and the operation command Y-Δ switching is invalid.
9	When internal communication-specific error (CP32) occurs, the machine cannot be stopped and error cannot be cleared.	When internal communication-specific error (CP32) occurs, it can be stopped and cleared.

10	When the MI multi-speed switching is set, if the switching signal frequency exceeds the MI response speed, all MI terminals will be invalid.	When the frequency command source Pr.00-20=7 is adjusted on Keypad, the decimal point of the F page can be displayed stably.
11	After setting quick start of the 2-wire mode 1 (Pr.02-00=4), the multi-function input command 3 cannot be set (Pr.02-03), and an error occurs.	After setting Pr.02-00=4, Pr.02-03 can be set.
12	When the MI multi-speed switching is set, if the switching signal frequency exceeds the MI response speed, all MI terminals will be invalid.	Optimize program judgment mechanism, and all MI terminal states are judged independently.
13	When Pr.01-45=one decimal, Pr.01-12 can be set to 6000.0, then Pr.01-45 is set back to two decimal, and the value of Pr.01-12 is incorrect.	When Pr.01-45=one decimal, set Pr.01-45 back to two decimal places, and the parameter display value is correct.
14	MO multi-function output option: 75 (forward running status) & 76 (reverse running status) displays text error.	Corrected MO multi-function output option: 75 (forward running status) & 76 (reverse running status) display text.
15	CANOpen transmission PDO (Process Data Object) TX2~4 does not respond to the information normally.	CANOpen transmission PDO (Process Data Object) TX2~4 works normally.
16	Pr.00-04=58 (Pr.00-05 User Gain Display (K) (no decimal places displayed)), text display error.	Pr.00-04=58 (Pr.00-05 User Gain Display (K) (no decimal places displayed)), the text is displayed correctly.
17	When Pr.00-26 (user-defined maximum value) is set smaller, frequency command and Pr.00-27 (using this defined setting value) will be limited to become smaller; and when Pr.00-26 is set to be larger, frequency command and Pr.00-27 remains unchanged, but can be manually modified to become larger.	Frequency command and Pr.00-27 decimal point and unit display, display according to Pr.00-26 setting.
18	Pr.00-04 (multi-function display selection) function 51, 58, 62, 63, 64 are not displayed correctly.	Corrected Pr.00-04 Function 51, 58, 62, 63, 64 text display.
19	Pr.05-00=6 (IM motor simple rotation adaptation) cannot be executed in SVC mode.	In SVC mode, Pr.05-00=6 can be executed (IM motor simple rotation adaptive).
20	For over-torque detection level, HD and ND (Pr.00-16) set the same detection level.	For over-torque detection level, HD and ND (Pr.00-16) can be set separately.
21	When set to FOC Sensorless mode, output voltage is displayed as zero.	When set to FOC Sensorless mode, output voltage value can be displayed normally.
22	ASR bandwidth Pr.11-03~11-10 has a maximum value of 100 in the PM. When Pr.05-33=2 (IPM), the maximum value of the Pr.11-03~11-05 is displayed as 100 but cannot be set to exceed 40.	When Pr.05-33 is set to PM, the maximum value of Pr. 11-03~11-05 is displayed as 100.

### Function modify

1	IMFOC control performance optimization.
2	Add PM KE self-learning to replace the traditional calculation method to improve the accuracy of KE value.
3	Change S Deceleration arrival time setting 2 (Pr. 01-27) The preset value is 0.2 from 0.
<p>When the inverter firmware is updated, the keypad is displayed from "dELtA" to:</p> <ol style="list-style-type: none"> <li>The character displayed when booting is "88888" (as shown in Figure 1)</li> <li>After receiving the PC programming command, it displays "boot" (as shown in Figure 2).</li> <li>Display the progress bar "o o o o" when burning (as shown in Figure 3)</li> </ol>	
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Figure 1</p>  </div> <div style="text-align: center;"> <p>Figure 2</p>  </div> <div style="text-align: center;"> <p>Figure 3</p>  </div> </div>	

### New function

List of New Functions:

1	Add over-flux function for Pr.01-49=3.
2	Add Pr.7-38 PMSVC Voltage Feed Forward Gain.
3	Add PID tension application related functions and optimized PID function preset values.
4	Add application macro Pr.13=00=11 (tension PID) and Pr.13=00=12 (tension PID plus main and auxiliary frequency).
5	Add an application macro (Pr.13-00=10) for the logistics application.
6	Import pulse input signal interference elimination mechanism to prevent the pulse signal from being disturbed and distorted, resulting in reduced control accuracy or malfunction.
7	Add user display function (Pr.00-04=58), Pr.00-05 user gain display (K) (no decimal places are displayed).
8	Add multi-function display selection Pr.00-04= 51 torque compensation amount display.
9	Establish 3KW machine type function.
10	Add parameters related to 575V inverter.

For more details of the new functions, please refer to the announcement on our ftp-site:  
 Folder: Customer-Service\Industrial Automation Products\AMD\MS300\MS300 Presentations&Announcements

**Firmware version 1.08 will be released in June 2019.**

### 2.3 UPDATE – Firmware of DVP04AD-E2, DVP04DA-E2, DVP06XA-E2, DVP02DA-E2, DVP04PT-E2 and DVP04TC-E2 is updated

Series	Models	Firmware Version	Release Date
E2	DVP04AD-E2	V1.08→ V1.20	March 06, 2019 (W1910)
	DVP04DA-E2	V1.12→ V1.20	
	DVP06XA-E2	V1.14→ V1.20	
	DVP02DA-E2	V1.12→ V1.20	
	DVP04PT-E2	V1.10→ V1.20	
	DVP04TC-E2	V1.08→ V1.20	

**New functions:**

- Added the resetting function for control registers (CRs). Write 0x4352 into CR#0 and have the power of CPU and module turned off and then turn the powers on again; all parameters in CRs.
- Added a new mode “Mode 5: 0 ~ 3000 Ω” for DVP04PT-E2.

### 2.4 PHASE OUT – CMC-MOD01 phased out and replaced by CMC-EIP01 (V2.0)

CMC-EIP01 V2.0 supports protocol:

1. Ethernet IP
2. MODBUS TCP

**Notes:**

1. CMC-EIP01 V1.x does not support: MODBUS TCP.
2. The appearance of CMC-EIP01 and CMC-MOD01 are the same, please confirm the model name and version are correct when ordering.



Interface	RJ-45 with Auto MDI/MDIX
Number of ports	1 Port
Transmission method	IEEE 802.3, IEEE 802.3u
Transmission cable	Category 5e shielding 100M
Transmission speed	10/100 Mbps Auto-Detect
Network protocol	ICMP, IP, TCP, UDP, DHCP, HTTP, SMTP, MODBUS OVER TCP/IP, Delta Configuration

**Phase out:**

Region	Discontinuation Date
Worldwide	March 20th, 2019

### 2.5 NEW – CMC-EIP01 (V2.0)

**Note**

The CMC-EIP01 hardware upgrade corresponds to the new firmware. Cards with firmware V1.xx **cannot** be updated to V2.00 or higher.

**New functions:**

1. Added Modbus TCP Protocol.
2. Modbus TCP Server function to support up to 16 connections.

**Specifications:**

Item		Specification
General	Category	Adapter
	Topology	Star
Modbus TCP Server	Max. Number of Connections	16
CIP Network I/O Connection	Max. Number of the CIP Connections	8 ( Servers )
	Max. Number of the TCP Connections	8 ( Servers )
	Requested Packet Interval (RPI)	5 ms ~ 1000 ms
	Max. Transmission Speed	400 pps
	Max. Data Length	500 bytes
CIP Network Explicit Message	Class 3 ( Connected Type )	8 ( Servers ) · Shared with UCMM °
	UCMM ( Non-Connected Type )	8 ( Servers ) · Shared with Class 3 °
	CIP Objects	Identity 、 Message Router 、 Assembly 、 Connection Manager 、 TCP / IP interface 、 Ethernet link 、 Vendor specific

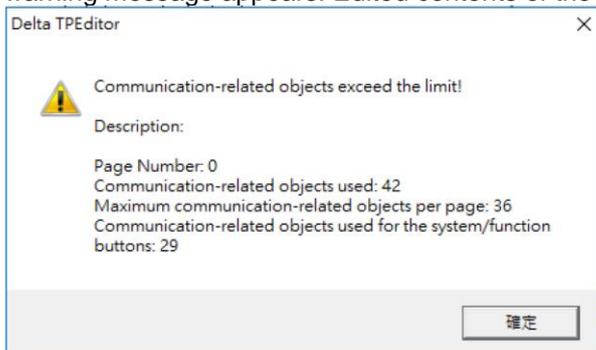
### Production

Firmware Version	Switching Period	
V2.00	Wujiang	W1910

## 2.6 NEW – TPEditor version 1.94 is released.

Modified and added functions:

1. Fixed the issue that an error occurs while compiling in TP monochrome models.
2. When opening an existing file, if the communication-related objects used exceeds the limit, a warning message appears. Edited contents of the warning message.



### 2.7 UPDATE – TKSoft version 1.05 is released

**Changes:**

1. While monitoring in the auto output mode, the column of SV Value shows current SV setting value. And the column of SV Value shows Manual Mode while monitoring in the manual mode.

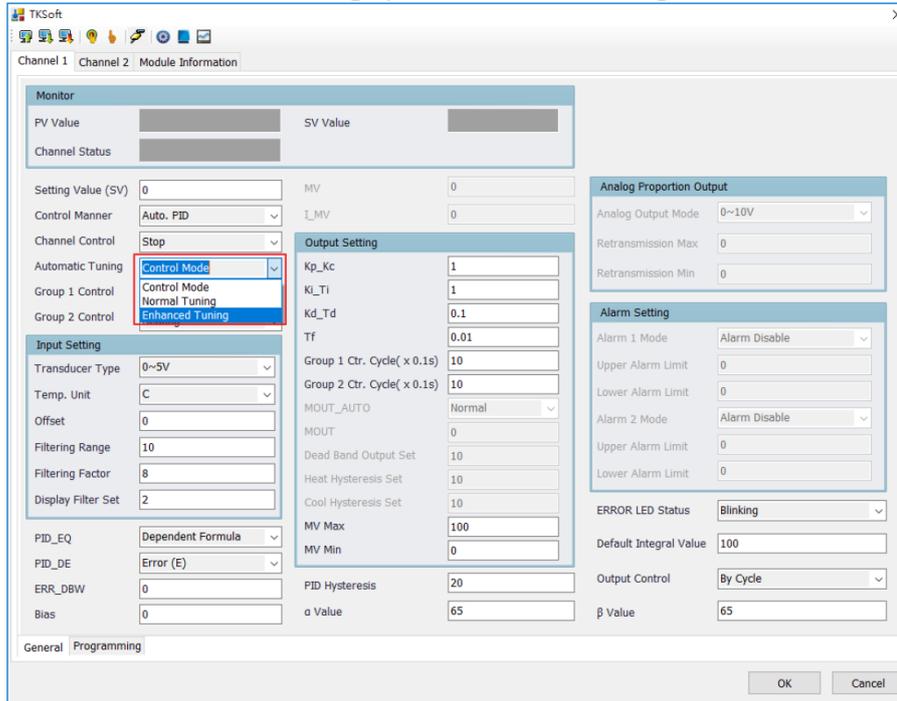
Monitor	
PV Value	4689
SV Value	50
Channel Status	CH1 Run

Monitor	
PV Value	4689
SV Value	Manual Mode
Channel Status	CH1 Run

2. Added a new control manner option, Hot Bar PID, for DVP02UHL.

The screenshot shows the TKSoft software interface for channel programming. The 'Control Manner' dropdown menu is open, showing the following options: Auto. PID, Manual PID, Program. PID, ON/OFF, and Hot Bar PID. The 'Hot Bar PID' option is highlighted with a red box. Other visible settings include: Setting Value (SV) 0, MV 0, T\_MV 0, Analog Proportion Output (0~10V), Alarm Setting (Alarm 1 Mode: Alarm Disable, Alarm 2 Mode: Alarm Disable), and Output Control (By Cycle).

- Added a new automatic tuning option, Enhanced Tuning.



- Modified the TKSoft UI and optimized the user experience.

## 2.8 UPDATE – IPC/PPC changes

- The operation system of IPC/PPC is upgraded from Windows 7 to Windows 10.

Last 2 digits of the part number	Before week 19 of 2019	After week 19 of 2019
00	Win7 Pro Simplified Chinese	Win10 Pro Simplified Chinese
02	Win7 Pro Traditional Chinese	Win10 Pro Traditional Chinese
04	Win7 Pro English	Win10 Pro English

Part numbers involved:

IPC	Win10 Pro Simplified Chinese Version: DIAVH-IPC003100, DIAVH-IPC003100A, DIAVH-IPC005100, DIAVH-IPC005100A, DIAVH-IPC00J100
	Win10 Pro Traditional Chinese Version: DIAVH-IPC003102, DIAVH-IPC003102A, DIAVH-IPC005102, DIAVH-IPC005102A, DIAVH-IPC00J102
	Win10 Pro English Version: DIAVH-IPC003104, DIAVH-IPC003104A, DIAVH-IPC005104, DIAVH-IPC005104A, DIAVH-IPC00J104

<b>PPC</b>	<b>Win10 Pro Simplified Chinese Version:</b> DIAVH-PPC153100, DIAVH-PPC153100A, DIAVH-PPC155100, DIAVH-PPC155100A, DIAVH-PPC193100, DIAVH-PPC193100A, DIAVH-PPC195100, DIAVH-PPC195100A, DIAVH-PPC10J100, DIAVH-PPC12J100, DIAVH-PPC15J100, DIAVH-PPC17J100
	<b>Win10 Pro Traditional Chinese Version:</b> DIAVH-PPC153102, DIAVH-PPC153102A, DIAVH-PPC155102, DIAVH-PPC155102A, DIAVH-PPC193102, DIAVH-PPC193102A, DIAVH-PPC195102, DIAVH-PPC195102A, DIAVH-PPC10J102, DIAVH-PPC12J102, DIAVH-PPC15J102, DIAVH-PPC17J102
	<b>Win10 Pro English Version:</b> DIAVH-PPC153104, DIAVH-PPC153104A, DIAVH-PPC155104, DIAVH-PPC155104A, DIAVH-PPC193104, DIAVH-PPC193104A, DIAVH-PPC195104, DIAVH-PPC195104A, DIAVH-PPC10J104, DIAVH-PPC12J104, DIAVH-PPC15J104, DIAVH-PPC17J104

**Release Date:** May 06, 2019 (Week 1919)

You can find the serial number on the product label of the IPC/PPC. If the serial number is IPC/PPCxxxxxxxW1919xxxx (indicating year 2019, week 19) or later, it means the product is with Win10 Pro OS.

- The ingress protection (IP) rating for the front panel of PPC is upgraded to IP65.

## 2.9 UPDATE – VFD-DD firmware upgraded from v2.10 to v2.20

Firmware Version	Switching Period	
V2.20	Taoyuan	T1907
V2.20	Wujiang	W1912

### New functions:

- Add Idle Mode function. After closing the door, it will enter the Idle Mode after T1 time, and reduce the holding current to A%. After receiving the door opening or closing the terminal command, it will return to the normal holding current. (T1 is Pr.06-30, A is Pr.06-31)

#### 06-30 Idling switching time

Control Mode VF VFPG SVC FOC PG FOC PM Factory setting: 300.0  
 Settings 0.0 ~ 6000.0 sec

To enable the idling mode, set Pr.06-30 > 0.

#### 06-31 Idling Current Level

Control Mode VF VFPG SVC FOC PG FOC PM Factory setting: 15.0  
 Settings 0.0 ~ 100.0

Idling Mode of Door Drive: When the time of outputting current is over the setting at Pr.06-30, the Door Close Holding Torque (Pr.05-11) will switch to Idling Current Level (Pr.06-31).

When the door drive is under idling mode, if Pr.06-31 > Pr.05-11, then Pr.05-11 will become the Idling Current Level.

### Changed functions

- Add new Identity code for 100V model with rated current is 0.8A.

#### 0000 Identity Code of AC Motor Drive

Control mode VF VFPG SVC FOC PG FOC PM Factory setting: Read only

Settings 0: 230V, 200W

1: 230V, 400W

10: 115V, 100W

#### 0001 Rated Current Display of AC Motor Drive

Control mode VF VFPG SVC FOC PG FOC PM Factory setting: Read only

Settings 0: 1.5A

2: 2.5A

10: 0.8A

- 2kHz easily leads to cc. Carrier frequency operating range minimum value is changed from 2kHz to 6kHz.

✓ **00.11** PWM Carrier Frequency Selection  
 Control mode VF VFPG SVC FOC PG FOC PM Factory setting: 10  
 Settings 6~15kHz

3. Modify factory setting value, from 200% to 175%, Below CC limit.

✓ **05.02** Current Boundary (rated current of motor drive)  
 Control mode FOC PG FOC PM Factory setting: 175  
 Settings 0~250%

4. Modify factory default LV value.

✓ **06.08** Low Voltage Level  
 Control mode VF VFPG SVC FOC PG FOC PM Factory setting: 160.0  
 Settings 160.0~270.0Vdc

5. Different model codes will correspond to different specifications of Delta motor parameters as factory default values.

Factory setting \ Model	0 : 230V/200W	2 : 230V/400W	10 : 115V/100W
Pr.01.01	1.00	0.95	0.7
Pr.01.02	0.08	0.1	0.07
Pr.01.03	250	280	350
Pr.01.04	16	16	10
Pr.01.05	15.8	24.3	18.7
Pr.01.07	177	273	195
Pr.01.31	33.33	37.33	29.16
Pr.01.32	33.33	37.33	29.16

## 2.10 UPDATE – DCISoft is updated to V1.21

### Changes:

- Modified the password setting for CMC and CMM series. Now not only numbers but also characters can be used for the password setting.
- When DCISoft scans and more than 5 devices / series of the same kind are found, DCISoft may crash.
- SCMSOFT is a software embedded in DCISoft. Upgrade SCMSOFT version to V1.24.14.
- Now DCISoft supports DTME series.

**Note:** DTME Temperature Controllers are not released and not available in EMEA.

### 2.11 **NEW** – Delta 12V and 48V 600W PMC Series with IEC/EN/UL 62368-1 Approvals



Delta Electronics is extending the popular 600W PMC series of panel mount power supply with output voltage 12V and 48V, namely, PMC-12V600W1BA and PMC-48V600W1BA. The products come with universal AC input at 85Vac to 264Vac and have built-in active PFC circuit. Both models also have feature Power Boost of 200% (peak load 12V 100A, 48V 25A) for 3 seconds, included the built-in fan speed control and fan lock protections.

The products are certified with IEC/EN/UL 62368-1 approval that will replace IEC/EN/UL 60950-1 for ITE which expires on December 20, 2020. EMI according to EN 55011 (Industrial, scientific and medical (ISM) radio-frequency equipment) and EMS according to EN 61000-6-2 (Immunity for industrial environments).

#### Highlights & Features

- Universal AC input range
- Built-in active PFC and high efficiency
- Power Boost of 200% for 3 seconds and 150% for 5 seconds
- SEMI F47 compliance at 120Vac
- Meet Surge Immunity IEC 61000-4-5, Level 4 (CM: 4kV, DM: 2kV)
- Built-in fan speed control and fan lock protection
- Wide operating temperature range -20°C to 70°C
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

## 3 Application

### 3.1 **NEW** – Application Notes

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

- [Delta M-R Controller Servo Motor Precision Winding Machine Solution.pdf](#)
- [IoT Industry Notification - SMT Reflow Oven Real-Time Monitoring System Solution V1903-11002.pdf](#)
- [Machine Tool Industry Notification - Cam Grinder Solution.pdf](#)
- [Robotics Industry Notification - Application of Delta IA Products In Shoe Tongue Labeling Machine.pdf](#)
- [IoT Industry Notification - Delta Energy Management Solution for Sewing Machine Manufacturing Industry.pdf](#)
- [Machine Tool Industry Notification - CNC Lathe + Gantry Robot Application.pdf](#)

- [Machine Tool Industry Notification - Delta Two Point Power Press Vector Control Solution.pdf](#)
- [Robotics Industry Notification - Toothbrush Sorting Solution with Delta Robot.pdf](#)
- [Electronics Industry Notification - Vision Positioning and Inspection of Automatic Ultrasonic Power Adapter Case Bonding Machine.pdf](#)
- [Machine Tool Industry Notification - CNC Horizontal Lathe with Hydraulic Turret.pdf](#)
- [Robotics Industry Notification - FPC Board Shuttle Conveyor System Solution with Delta IA Products.pdf](#)
- [Rubber & Plastics Industry Notification - Delta Two-Step All-Electric Electric Blow Molding Machine Solution.pdf](#)

### 3.2 C/CP2000 Keypad wizard: How to exit?

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Keypad firmware V1.31 added a wizard function to allow for a quick setup of the drive.

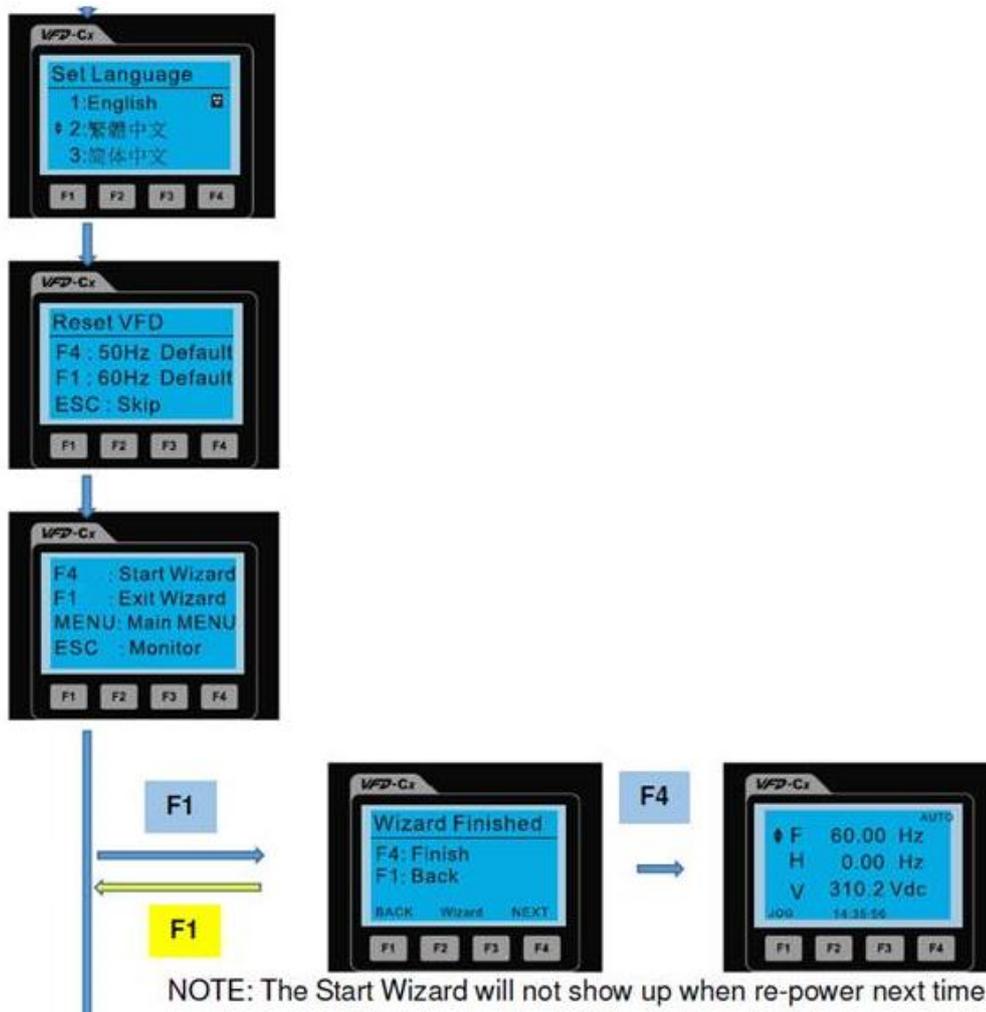
On the screen below, if you press MENU or ESC this only minimizes the wizard, it does not quit it:

```
F4   : Start Wizard
F1   : Exit Wizard
MENU: Main MENU
ESC  : Monitor
```

So after powering down and powering back up the wizard will show up again.

To correctly quit the wizard without applying any changes to the parameter settings please do as follows:

- Select language-->ESC-->F1-->F4



Note that once you reset the drive (Pr00-02=9) the wizard will reappear.

Please see the firmware release notes of the KPC-CC01 keypad on ftp-site:

Folder: Industrial Automation Products-->AMD-Options-->AMD Keypads & Cables-->KPC-CC01

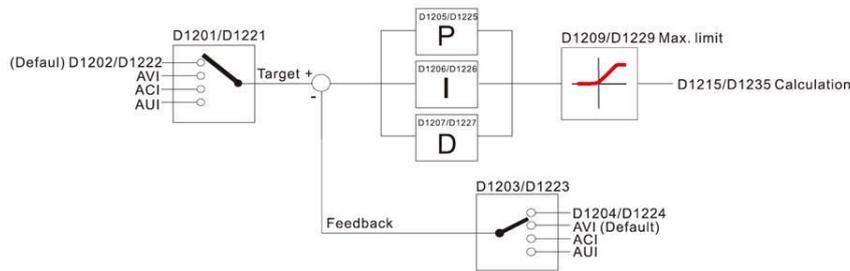
## 4 FAQ

### 4.1 VFD Series AC Motor Drives

#### Drives general

**Q** When using the internal PLC of a VFD is it possible to use the FPID function block to control other processes? Or can it only be used for the output frequency?

**A** The FPID can *only* be used to control the output frequency. However, the onboard PLC does offer two independent PID functions (not in all drives) which can be assigned to any process. These work by using the Special D registers D1200 to D1235 as shown below:



In order to enable these PID functions it is necessary to use the Special M contacts below:

M1260	PLC PID1 Enable	RW
M1262	PLC PID1 integral positive value limit	RW
M1270	PLC PID2 Enable	RW
M1272	PLC PID2 integral positive value limit	RW

A working example of such a PID function can be found on our ftp site:

Folder: Customer-Service\Industrial Automation Products\\_Delta Application Guide\General information\Built-in PID function

### MS300

**Q** How does Pr00-02=8 work?

**A** Pr00-02=8 works differently on MS300 than on VFD-E:

When Pr00-02=8 is set, the keys **RUN**, **STOP**, **▲** and **</▼** do not work.

When parameters are entered via ENTER the keys **▲** and **</▼** can be used to change parameter and settings.