Delta Newsletter

Industrial Automation Products

Contents

PMT2

low profile power supply

HANNOVER MESSE 2019, 01 - 05 April

Get new technology first
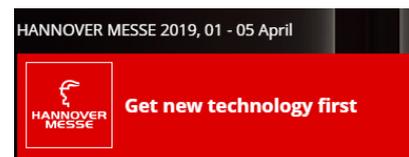
Hall 11, A57

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

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1.2 Hannover Messe 2019, 1~5 April

**Digitalization, Visualization and Integration for Smarter Manufacturing –
Delta to Present Advanced Automation Solutions at Hannover Messe 2019**

Delta will participate in the grand industrial event, Hannover Messe 2019, from April 1st ~ 5th at **Stand no. A57, Hall 11**. This year, Delta will focus on Digitalization, Visualization, Integration for smart manufacturing, and present advanced industrial automation products and monitoring software for the Digital Factory. Another highlight at Delta's booth will be the brand new **integrated engineering software DIAStudio**, with which users are able to efficiently develop a machinery system, from product selection, programming, to exporting on a unified platform. Delta will also display several advanced motion control solutions, as well as industrial solutions for woodworking, packaging, energy-saving elevators, and water treatment, to satisfy a variety of customer needs.

Delta's solutions for Digital Factory mainly include IIoT technology, data collection and monitoring platforms for equipment (SCADA system), production (Manufacturing Execution System, MES), and energy (Energy Management System, MES). All the information will be showcased with easy-to-read analytics on a huge TV wall, bringing visitors a new factory experience with automation, digitalization and visualization for smart manufacturing.

For advanced machine automation, Delta will present upgraded AC motor drives, programmable logic controllers (PLC), networking products, motion systems, CNC controllers, AC servo drives, machine vision systems, power meters, temperature controllers and more. In addition, Delta will present its new engineering software, DIAStudio, which integrates product selection, PLC programming, parameter settings, machine tuning and human machine interfaces (HMI) settings as a unified engineering platform for Delta's PLCs, HMIs, servo drives & motors and AC motor drives. DIAStudio simplifies product selection and the programming processes, and helps to save time and cost for machine makers building machinery systems.

Delta's integrated solutions for motion control, the **Motion Control Solution Based on CODESYS** and **PLC-Based EtherCAT Solution**, serve well for applications of advanced machines; and the **Machining Center Solution for Woodworking, Packaging Solution, Elevator Drives & Energy Saving Solution and Water Treatment Solution** will all be displayed at Delta's booth for machine makers and industrial customers during the 5-day event.

Delta sincerely invites you to join us and learn about our smart manufacturing at this special industrial automation show in April. We hope to see you soon in Germany!

2   Product update

2.1   UPDATE – Last two digits of the 6th generation IPC/PPC series part number has changed

The last two digits of the 6th generation IPC/PPC series part number has changed from 01 to 03. See the part number history in the following table.

OLDEST		OLD		NEW	
Last 2 digits	The 4th Generation (production date: before week 46, 2018)	Last 2 digits	The 6th Generation CPU (production date: after week 46, 2018)	Last 2 digits	The 6th Generation CPU (production date: after week 03, 2019)
01	Simplified Chinese Free Trial OS	01	Without free trial OS	03	Without free trial OS
03	Traditional Chinese Free Trial OS				
05	English Free Trial OS				

Release Date: Jan. 14, 2019 (Week 1903)
You can find the serial number on the product label of the IPC/PPC. If the serial number is IPC/PPCxxxxxxxW19030001 (indicating year 2019, week 03) or later, it means the product is without free trial OS and the last two digits of its product part number is 03.

Note:
Due to legal restrictions, the free trial Windows OS is no longer available for the 6th generation IPC/PPC series.

Therefore, Delta decided to change one digit in the part numbers.
Find below old and new part numbers that will apply from now on:

Old Part Number	New Part Number
DIAVH-IPC003105A	DIAVH-IPC003103A
DIAVH-IPC005105A	DIAVH-IPC005103A
DIAVH-IPC003105	DIAVH-IPC003103A
DIAVH-IPC005105	DIAVH-IPC005103
DIAVH-PPC153105A	DIAVH-PPC153103A
DIAVH-PPC155105A	DIAVH-PPC155103A
DIAVH-PPC153105	DIAVH-PPC153103A
DIAVH-PPC155105	DIAVH-PPC155103A
DIAVH-PPC193105A	DIAVH-PPC193103A
DIAVH-PPC195105A	DIAVH-PPC195103A
DIAVH-PPC193105	DIAVH-PPC193103A
DIAVH-PPC195105	DIAVH-PPC195103

"5" = Windows OS trial version included

"3" = Without OS

All products with old part numbers will be available for sale until the stock runs out.

2.2   NEW – PMT2 Series of Panel Mount Power Supply

Delta Introduces PMT2 Series of Panel Mount Power Supply in Low Profile Design.

PMT2 series, designed based on a low profile of < 30mm, is the latest series of panel mount power supply from Delta Electronics. This series is currently available in 50W, 100W and 150W output power with 24V output voltage. They offer a wide operating temperature range from -30°C to +70°C and can withstand shock and vibration requirements (in accordance to IEC 60068-2-27 and IEC 60068-2-6 respectively). The PMT2 series is designed for cost competitive applications without compromising on quality and reliability. The products have an expected life time of 10 years.

In view of IEC/EN 60950-1 standards expiring in December 2020, the PMT2 series will come certified with the new IEC/EN 62368-1 standard, information and communication technology equipment. EMI standard is according to EN 55032, Class B. All Delta industrial power supplies including the PMT2 series are fully compliant with RoHS Directive 2011/65/EU environmental protection.

Highlights & Features
- Safety approval IEC 60950-1, IEC 60335-1, IEC 61558-1 and IEC 61558-2-16
- Universal input and selective switch input for 150W
- No load power consumption < 0.2 for 50W, < 0.3 for 100W and < 0.5 for 150W
- Low Leakage Current < 0.75mA @ 240VAC / 50Hz
- Low profile design: < 30 mm height
- Conforms to harmonic current IEC/EN 61000-3-2, Class A

2.3   Firmware of DVP04DA-H3, DVP06XA-H3, DVP04PT-H2, DVP04TC-H2, DVP08TC-H2 is updated

Series	Models	Firmware Version	Release Date
H2/H3	DVP04DA-H3	V1.26→ V1.28	January 14, 2019 (W1903)
	DVP06XA-H3	V1.28→ V1.30	
	DVP04PT-H2	V4.04→ V4.06	
	DVP04TC-H2	V4.06→ V4.08	
	DVP08TC-H2		

Added 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, including communication parameters are restored to factory defaults.

- Added new RS485 communication format settings, including odd/even parity bit check, data length selections, 7/8 and Stop bit 1/2; see the following part in red for more information.

#32	H'40E8	○	R/W	Communication format settings	Communication baud rate: 4,800 / 9,600 / 19,200 bps / 38,400 bps / 57,600 bps / 115,200 bps Communication formats: ASCII: 7,E,1 / 7,O,1 / 7,N,1 / 8,E,1 / 8,O,1 / 8,N,1 / 7,E,2 / 7,O,2 / 7,N,2 / 8,E,2 / 8,O,2 / 8,N,2 RTU: 8,E,1 / 8,O,1 / 8,N,1 / 8,E,2 / 8,O,2 / 8,N,2 Factory defaults: ASCII,9600,7,E,1 (CR#32=H'0002)				
					b15 ~ b12		b11 ~ b8		b7 ~ b0
					ASCII/RTU, exchange low and high byte of CRC check code		Data format		Baud rate
					Description				
					H'0	ASCII	H'0	7,E,1*1	H'01	4800 bps
					H'8	RTU, do not exchange low and high byte of CRC check code	H'1	8,E,1	H'02	9600 bps
							H'2	reserved	H'04	19200 bps
					H'C	RTU, exchange low and high byte of CRC check code	H'3	8,N,1	H'08	38400 bps
							H'4	7,O,1*1	H'10	57600 bps
							H'5	8,O,1	H'20	115200 bps
							H'6	7,E,2*1		
							H'7	8,E,2		
							H'8	7,N,2*1		
							H'9	8,N,2		
							H'A	7,O,2*1		
							H'B	8,O,2		

Note
*1: This is only available for ASCII format.

Modified functions
- DVP04TC-H2 and DVP04PT-H2
1. Fixed the issue that the upper/lower limit and upper/lower output limit of PID integrals cannot be set.
2. Fixed the issue that the PID parameters in latched area cannot be retained after the power is OFF and ON again.
- DVP08TC-H2
1. When using the TO instruction, the values in CRs may be retained for some devices (firmware V4.06 or previous versions) but not all the value can be retained for other modules of this series. Modified to have the values in CRs not retainable when using the TO instruction.

2.4   DIAView version 2.5.1 is released

Changes for HMI:

1. Interface framework
   1.1 Main interface
      1.1.1 New feature: project backup and prompt message
      1.1.2 Fixed the problem that the tag can't display the name with an underline.
   1.2 Project tree
      1.2.1 New history record node
      1.2.2 New security area browser node
      1.2.3 New variable group import and export node

1.2.4 Fixed the problem that when copying and pasting the IO node, the IO device cannot be loaded properly.

1.2.5 Fixed the problem that DIAView cannot use cross-reference on the report-related variables when the report template is closed.

1.3 Toolbox

1.3.1 New Window controls: CurvedRuler and NixieTube

1.4 Toolbar

1.4.1 New shortcuts: "save", "save all", "undo", and "redo" buttons are added on the toolbar.

1.4.2 New detailed descriptions for each button on the toolbar.

2. Window panel

2.1 Take horizontal and vertical line as the reference axis to optimize vertical and horizontal flip algorithm.

2.2 New feature: displaying or hiding the window ruler

2.3 New snap feature

2.4 New zoom and pan feature

2.5 New dynamic window border is added to solve the problem when the controlled item is out of the border, it cannot be displayed.

2.6 Fixed the problem that the print is not complete when printing a full workspace.

3. Object property

3.1 Basic property

3.1.1 Optimized the toolbar style and properties classification typography.

3.1.2 Optimized the color selector.

3.1.3 New preview feature for the font editor

3.1.4 New numerical editor dragging modification feature

3.1.5 Optimized the color selector interface and fixed some known bugs.

3.1.6 When various multiple objects are selected, it is possible to edit several objects with the same property at the same time.

3.2 Extension property

3.2.1 New setup shortcut for sub-pictures of the extension property.

4. Animation

4.1 Optimized the animation classification and typesetting, moved the often-used objects to the top.

4.2 Optimized the animation rotation speed; new speed and step configurations are added.

4.3 Optimized the variable value algorithm for animation to improve efficiency.

5. Event

5.1 New event of text box "TextChanged"

5.2 New events of checkbox "Checked" and "Unchecked"

5.3 New event of combo box "SelectionChanged"

5.4 New event of date "SelectedDateChanged"

5.5 New command script for the text box focus

5.6 New command script for selecting all the contents in the text box

5.7 New command script for color selection and double-click to open color editor

5.8 New "FunctionName" column in the Window Program and its name can be self- defined.

5.9 Fixed the problem that when the window is open and then close other scripts, an error may occur.

6. Gallery

6.1 Optimized the gallery naming rule.

6.2 Optimized the dragging area in the gallery.

7. Object

7.1 New feature for selecting a sub-graph in a grouped graph

7.2 New object sorting feature: Sorting and reverse sorting

7.3 New object features for cutting, copying, pasting as well as delete and shortcut keys are also supported.

8. Basic graphs
8.1 New feature for line, polyline, pipe: Special angles can be created when using the drawing functions, including line, polyline, and pipe, along with the Shift key.

9. Window control
9.1 New Nixie Tub
9.2 New CurvedRuler
9.3 Optimized the Pipe performance
9.4 Optimized the Checkbox style; when selecting both the checkbox and font, they can be set at the same time.

10. Extended Controls
10.1 RealtimeChart
10.1.1 New data presentations for data storage mode; the refresh time should be set to be the same as the value in RecordVariable timer.
10.2 HistoryChart, XYChart, HistoryColumnChart, Report
10.2.1 Added storing new data method query; the recorded variable rules can be used to search for data from the intervals of the relevant time.
10.2.2 New feature for timely recorded variable query in a specific time frame; only a specified time frame can be searched in the intervals of the relevant time.
10.2.3 Optimized the history query performance and reduced the response time.
10.2.4 New line graph style for the HistoryChart; users can self-define the line-displaying style when there is no data or when the device is powered off.
10.2.5 New feature for HistoryChart query; displaying history data by a separate page.
10.2.6 New feature for XYChart: exporting all charts.
10.3 PieChart, ColumnChart
10.3.1 Optimized the data-refreshing feature for PieChart and ColumnChart.

11. Report
11.1 New compatibility for the previous RecordVariable
11.2 New sorting feature for query results: by ascending or descending order
11.3 After creating the associated template, the menu will be hidden.

12. Alarm Window
12.1 Fixed the problem that when an alarm is triggered, other alarms with the same alarm path will be triggered too.
12.2 Optimized the alarm status, instead of not showing the alarm status, after optimization, the record will display "Reponse|Recover" and adjusted the filter feature.
12.3 New alarm filter feature for alarm development setting.

13. RecipeBrowser
13.1 New position adjustment feature for operation buttons in the recipe tool field.
13.2 New setting feature for the RecipeBrowser column width; the width types: auto, evenly and custom; it cannot be set without the associated recipe.
13.3 New feature that the RecipeBrowser can display various editing boxes according to different recipe variable types, including string, analog and digital.
13.4 New recipe: import and export in .CSV format

Changes for RTDB:

1. VariableDictionary
1.1 New feature for variable group import and export.
1.2 New extended domain feature.
1.3 Fixed the problem that analog variables cannot recognize the Double.NaN value.

1.4 Fixed the problem that when copying and pasting, the digits of the default value after the decimal point will be lost.
1.5 Optimized the copy and paste performance; when the variable amount is large, the performance slows down.
1.6 Optimized the performance of variable replacement.

2. Alarm
　2.1 New alarm inspection script; it allows users to check if the alarm is triggered after changing the alarm limit.
　2.2 New alarm feature: alarm messages can be sent via SMS
　2.3 New security area browser feature
　2.4 Optimized multilingual function

3. History variable
　3.1 New variable recording feature, optimized storage and query performance.
　3.2 Variable group record now supports My SQL.
　3.3 Optimized the variable group record limit, the upper limit of history record increases from 128 to 256.
　3.4 Fixed the problem that when system starts to run if the IO values have not been read, an error occurs in the initial value of the previous variable record.
　3.5 Fixed the problem that time interval and dead band can be set to negatives.
　3.6 Fixed the problem that some shortcuts not working.
　3.7 Fixed the problem that previous variable record's timer error lead to timing error in the storage.

4. User program
　4.1 Fixed the problem that if using inconsistent formats to save date or time, a restore failure may occur in different systems.

5. Database access
　5.1 Optimized the database configuration interface
　5.2 Database now supports My SQL.

6. Project configuration
　6.1 Delete the display of the running module's height and width during operation.
　6.2 New configurations for the sizes of a keyboard and a mouse.
　6.3 Optimized the database style configuration and move the database configuration to the variable record node, right-click the mouse for configuration.

7 Log system
　7.1 Optimized the stability of log system.
　7.2 New self-defined filter feature for the log system.

Changes for IO Server:

1. IO framework
　1.1 Runtime environment
　　　1.1.1 Fixed the problem of data jump
　　　1.1.2 New batch write feature
　　　1.1.3 Fixed the problem that data will not be cleared off when the device is disconnected.
　　　1.1.4 More complete log features and better diagnosis for the communication.
　　　1.1.5 Added recent communication time and disconnecting time for the device.
　　　1.1.6 Added the estimated time to obtain complete data from a device.
　　　1.1.7 Fixed the problem that when IFD9506 is connected to multiple devices, an error occurs.
　　　1.1.8 New feature for obtaining a device's current IP, all the current LAN IP and MAC address.

1.1.9 Added device switching methods, including dynamic IP address, port number, COM port, baud rate and other communication parameters for switching among devices during operation.

1.1.10 Fixed the problem that when the device is acting incorrectly, but the device status still displays normal.

1.2 Development environment

1.2.1 Added write and read data in batch for testing when editing.

1.2.2 New "IODevice" to display all the devices, double-click to set up the device.

1.2.3 New feature to import and export all devices and addresses in excel format.

1.2.4 Optimized driver name and headline of configuration interface to regularize the naming.

1.2.5 New feature for IO variable, when associated with the digital variable, users can set and reverse the data.

2. Mitsubishi

2.1 Fixed the communication format of Mitsubishi ProFX Serial, only "Program" can be used now.

2.2 Optimized the Ethernet performance for Q, FX series

2.3 New feature for Q, FX series: multiple writes via Ethernet communications concurrently

3. Siemens

3.1 New S7 200 Smart TCP driver

3.2 New S7 1200 TCP driver

3.3 New writing in batch feature.

4. Delta

4.1 New DIALink driver

5. OPC

5.1 New feature to obtain OPC server items in batch

6. Stimulator

6.1 Fixed the problem that the action is invalid when clicking the periodic change from every point.

2.5   ISPSoft version 3.07 released

Changes

- ISPSoft V3.07 now supports DVP15MC11T-06, DVP50MC11T and DVP50MC11T-06.
- HWCONFIG in ISPSoft V3.07 now supports DVP15MC11T-06, DVP50MC11T and DVP50MC11T-06. You can configure PLC parameters, including CANopen station number, baud rate, E-CAM editor, Ethernet and more. You can also use CANopen Builder to configure CANopen related functions. Refer to chapter 3 in ISPSoft User Manual for more information.

HWCONFIG
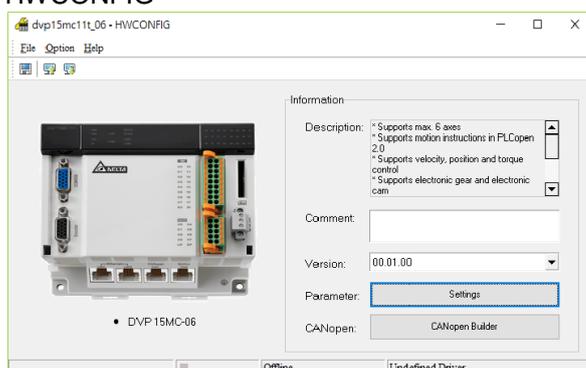
Device Setting
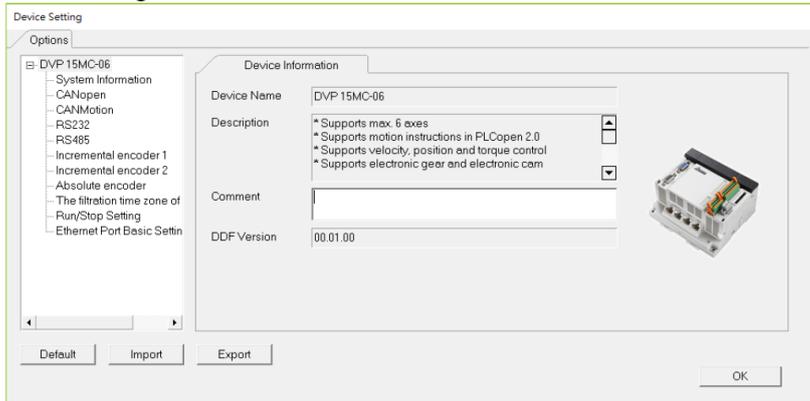
- AS300 Series PLC now supports E-CAM File Register/Servo (Upload/Download) function
  (1) AS300 series now supports E-CAM file registers and servo upload/download function. Now you can upload/download the slave axis E-CAM data.
  (2) Once the option "Synchronize data to PLC" is selected in the Slave Data Transmission setting page, the system synchronizes the current E-CAM data to the PLC. (For synchronization, the Item ID and the numbers of the E-CAM chart in the project and in the PLC must be the same.)
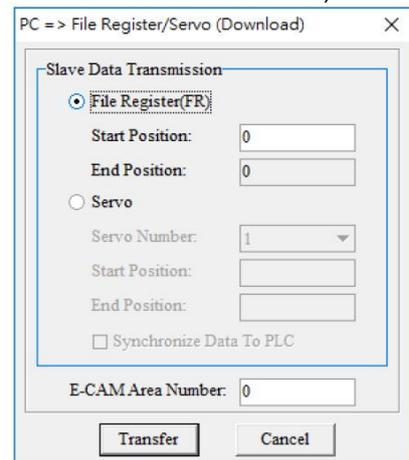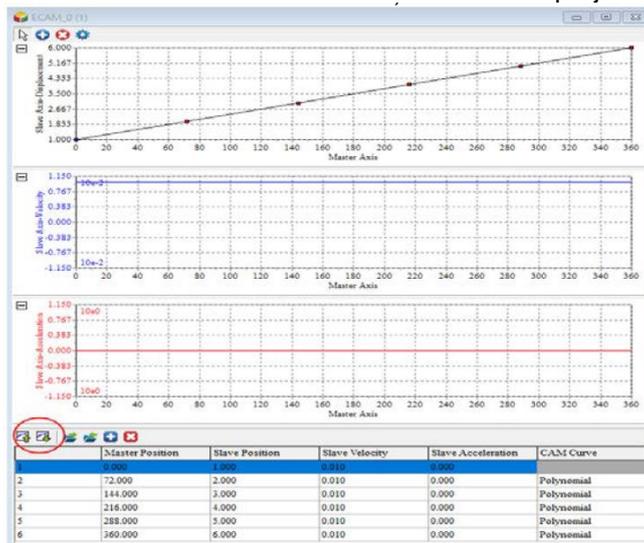
- AS200 Series PLC now supports E-CAM function and E-CAM File Register/Servo (Upload/Download) function.
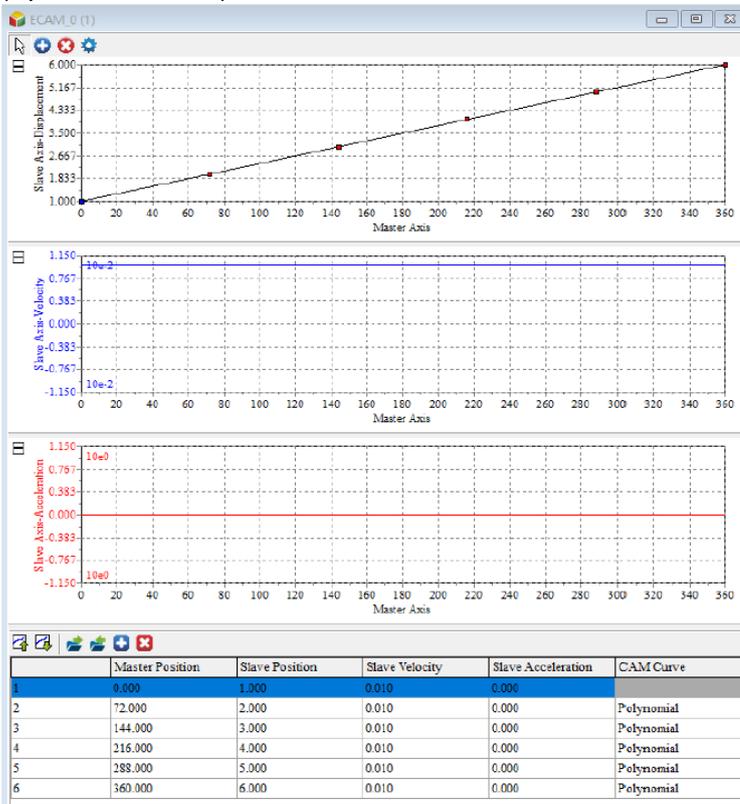
- Data Tracer is available for AH Motion Series.
  (1) Up to 10000 triggered points are supported.
  (2) Triggered points can be set in a range of 200 to 10000.
  (3) You can now monitor the variables of the STRUCT type symbols.
 (4) You can now monitor Program area symbols, axis symbols and EtherCAT symbols.
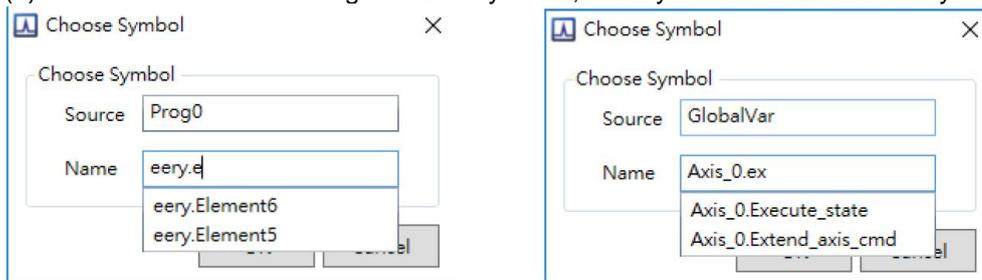
- AIO Wizard is now updated to V1.25.60.
  (1) Added new setting options "Return Pattern", "Return Stop", "Number of Repeats", "Infinite Loop" and "Waiting Function can be disabled" in Starting Set section for Channel 1 and Channel 2.
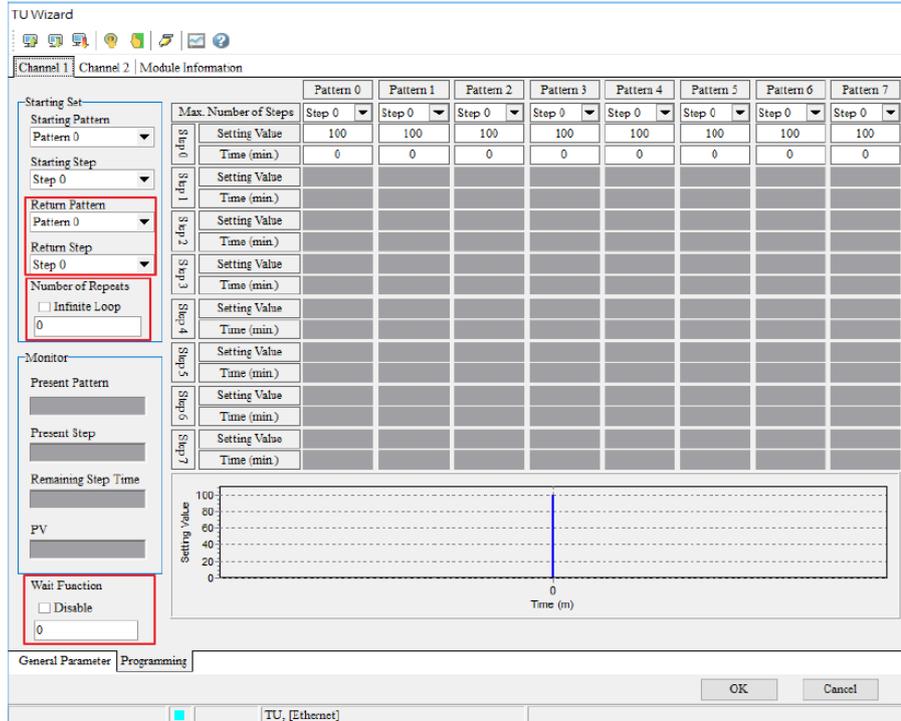

(2) The Pattern and Step of the "Present Pattern" and "Present Step" will be highlighted in Yellow on the right-side table when they are being monitored.
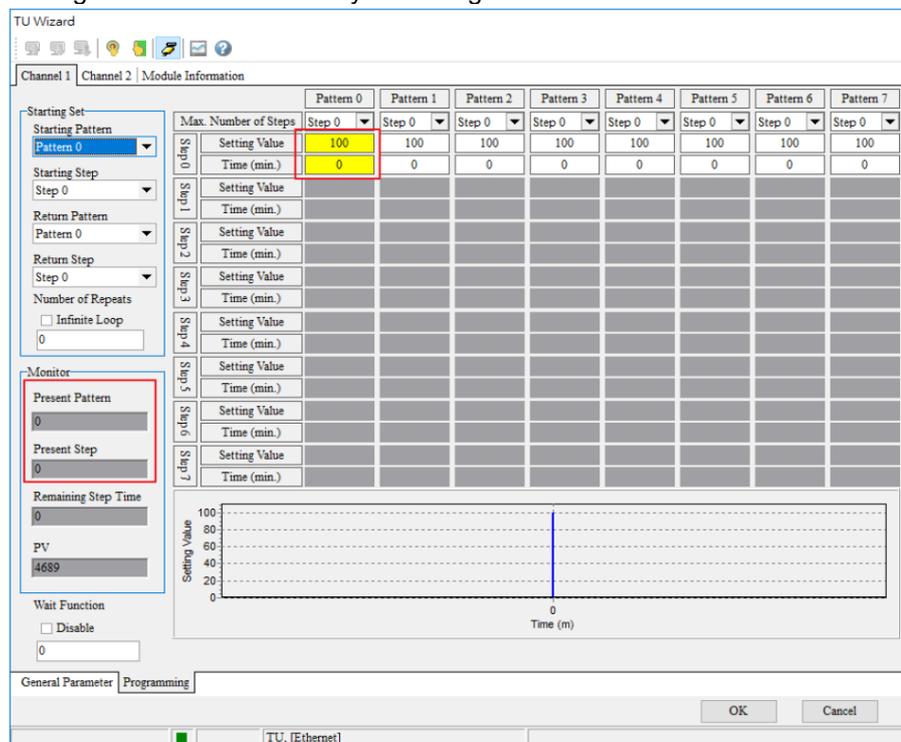

(3) AIO Wizard is now available for DVP02UHL-S.
(4) Ni120 is now available the Transducer Type.
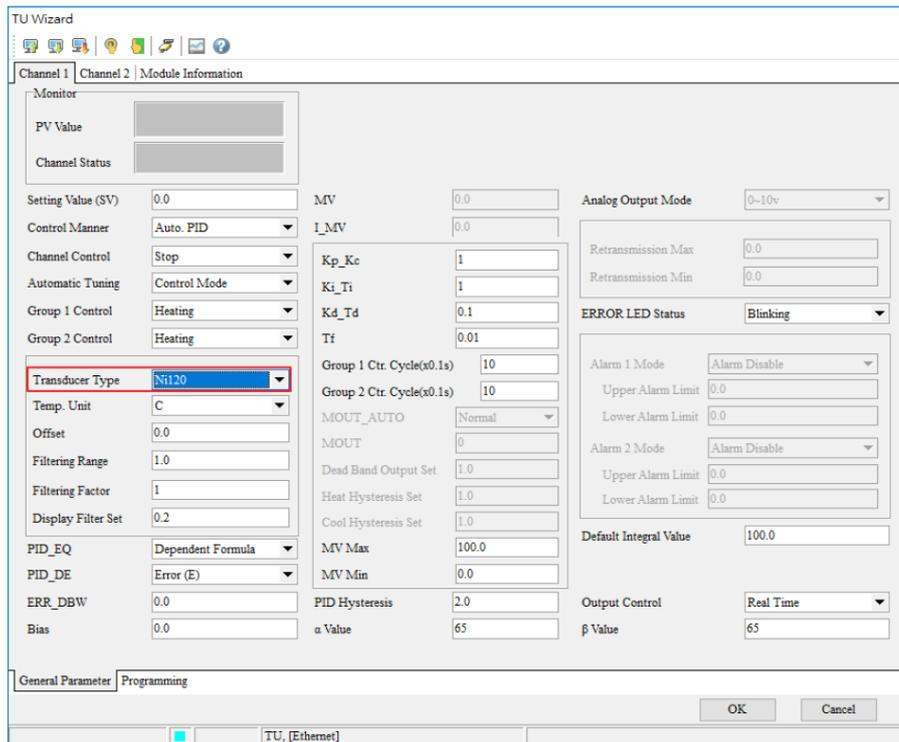
(5)Thermal Tracer is now available.
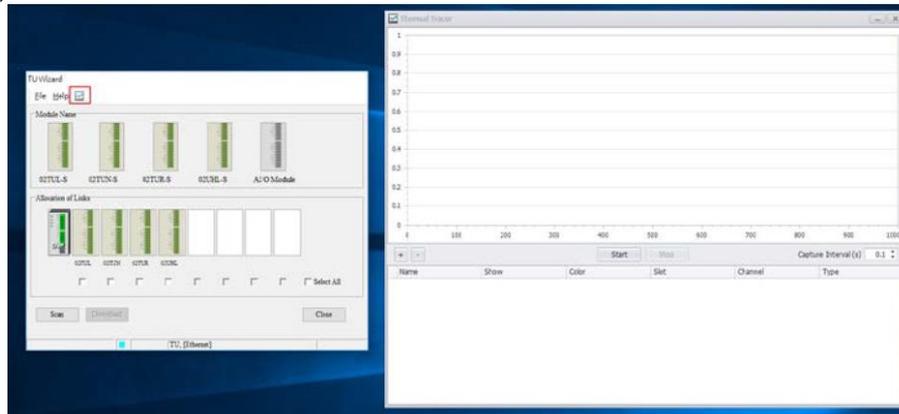

- NWCONFIG is available for TP04P and TP70P-IO.
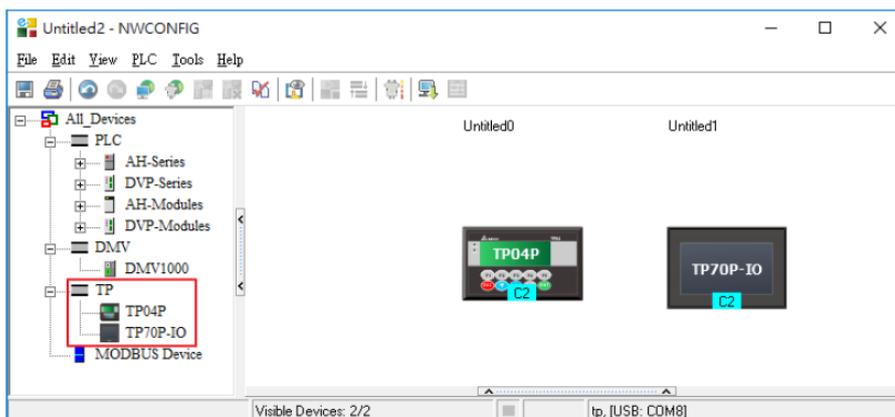
- The following issues are fixed and functions are modified:
  (1) Issue: After uploading AS series configurations, the information list shows incorrectinput device range.
  (2)Issue: Sometimes an error message may occur or the image may freeze while usingOnline Editor to edit.
  (3) Issue: When AS300 is monitoring the ST program, if there is a BOOL array type inSTRUCT variables, the display may be incorrect while scrolling down.
  (4) Issue: When numerous function blocks are present in the ISPSoft project, if usingLadder program, the image may freeze.
  (5) While programing in ISPSoft, you can use .bit (DWORDVar.16) to read/write thespecified bit data for the 32-bit symbols.
  (6) You can define the project saving path: Tools-> Options -> Workspace -> Defaultproject path.
  (7) Added Communication Protocol Wizard: Help-> Auxiliary Edition -> Protocol < = >Setting Code.
  (8) Optimized the installation process: ISPSoft now detects and removes previousinstalled version on your computer.

2.6 Firmware of DVP02TUN-S, DVP02TUR-S, DVP02TUL-S, DVP02TKN-S, DVP02TKR-S, DVP02TKL-S is updated

Series	Models	Firmware Version	Release Date
Slim	DVP02TUN-S	V4.14→ V4.16	Nov. 1, 2018 (W1844)
	DVP02TUR-S		
	DVP02TUL-S		
	DVP02TKN-S	V1.02→ V1.04	
	DVP02TKR-S		
	DVP02TKL-S		

New functions:
1. Added Ni120 Sensor type

   Transducer Type Ni120

2. Added Return pattern
3. Added Return Step
4. Added Infinite Loop

   Setting
   Start Pattern
   Pattern 0
   Start Step
   Step 0
   Return Pattern
   Pattern 0
   Return Step
   Step 0
   Number of Repeats
   □ Infinite Loop
   0
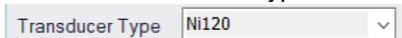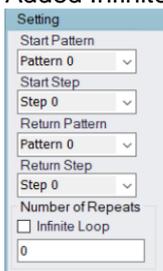
5. Added Disable Wait Function

   Wait Function
   □ Disable
   0
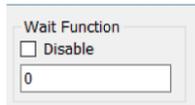
2.7 Firmware of DVP201LC-SL, DVP202LC-SL, DVP211LC-SL is updated

Series	Models	Firmware Version	Release Date
Slim	DVP201LC-SL	V1.08→ V1.10	Jan. 10, 2019 (W1902)
	DVP202LC-SL		
	DVP211LC-SL		

New functions:
1. Added the broadcasting function (set the station address to 0 for broadcasting) for RS485 communication.

Modified functions:
1. If the value exceeds the ADC upper limit, the system only shows the maximum weight value.
2. Fixed the issue that in a stable status, you can use the zero-point flag to determine where the zero-point is.
3. Fixed the issue that even when the value is accumulated gradually, the related stable flag stays stable.
4. Now the module sends its agreement to change the communication protocol before changing the communication protocol.
5. Revised the station address range from 1-255 to 1-254.
6. Fixed the issue that in the Net mode, when performing the return to zero function, the mode changes to Gross mode.
7. Fixed the issue that in the Net mode, when entering a value that is more than 0 in the field of the Zero Tracking Range in LCSoft, an error occurs.
8. To enhance the communication quality, the module does not crash even when receiving an incomplete packet.
9. DVP201/211LC-SL: Fixed the issue that you cannot enter any value in the field of Zero Tracking Time.
10. DVP201LC-SL: Fixed the issue that the module does not have input points but you can still set up the input points.
11. DVP201LC-SL: The CR104 and CR105 are with no function; delete these two control registers.
12. DVP202LC-SL: Fixed the issue that after executing the subtracting tare instruction, the system switches to the Net mode.
13. DVP202LC-SL: Fixed the issue that after performing Clear Subtracting Tare, the system switches to the Gross mode.
14. DVP202LC-SL: Fixed the issue that a flag is UP for a closed channel.
15. DVP202LC-SL: Fixed the issue that you can still execute subtracting tare or clear subtracting tare instructions on a closed channel.

2.8   Firmware of AS02LC-A is updated

Series	Models	Firmware Version	Release Date
AS	AS02LC-A	V1.00➔ V1.02	Jan. 17, 2019 (W1903)

New functions:
1. Added a new setting option "original value" for CR0 and CR59

CR#	Name	Options	Default
CR0	Display options for channel 1	0: disabled 1: gross weight 2: net weight 3: raw data	1
CR59	Display options for channel 2	0: disabled 1: gross weight 2: net weight 3: raw data	1

Modified functions:
1. Fixed the issue that even when the value is accumulated gradually, the related stable flag stays stable.
2. Fixed the issue that the setting value of the decimal place cannot be retained after power-off and power-on.
3. 0 can be set in the stability check range as the minimum value.
4. Fixed the issue that in the Net mode, when performing the return to zero function, the mode changes to Gross mode.
5. After stable flag is UP, you can only perform zero tracking for one time.
6. Enter command 0x6001 in CR201 to write the values in CR0-120 and CR604-607 into the flash memory so that the values can be retained after power-off and power-on.
7. Enter command 0x6000 in CR201 to read the values in CR0-120 and CR604-607 from the flash memory.

2.9 Update the firmware of AH series extension modules, AH10SCM-5A, AH15SCM-5A, AHRTU-ETHN-5A, AH10EN-5A, and IFD series module IFD9506

Series	Modules	Firmware Version	Release Date
AH	AH10SCM-5A	V1.04.0 → V1.06.2	Dec. 14, 2018
AH	AH15SCM-5A	V1.04.0 → V1.02.5	Jan. 31, 2019
AH	AHRTU-ETHN-5A	V1.00.0 → V1.02.1	Jan. 31, 2019
AH	AH10EN-5A	V2.00.0 → V2.04.3	Jan. 31, 2019
IFD	IFD9506	V1.62 → V2.00	Jan. 31, 2019

New functions:
1. AH10/15SCM-5A, AH10EN-5A and AHRTU-ETHN-5A now include a redundancy function to support AHCPU560 series.
2. AH10/15SCM-5A now supports AHRTU-ETHN-5A. It can be installed on the right-side of AHRTU-ETHN-5A or on its extension backplane.
3. Added output registers for AH10/15SCM-5A.
4. AH15SCM-5A adds a COMRS function to recognize the communication ending characters and determine the communication is over.
5. AH10EN-5A now supports EtherNet/IP explicit message function block.
6. AH10EN-5A now detects if there is any IP conflict every 10 sections.

Optimized functions:
1. Optimized AH10/15SCM-5A to improve their serial communication stabilities.

Hardware updated:
1. IFD9506 (firmware V2.00 or later) can only go with the hardware version B0 or later but NOT the hardware version A.

2.10 User manual DPMSoft

The user manual for DPMSoft has been released.
You can find it on our ftp-site, folder:
Customer-Service\Industrial Automation Products\DPM Power meter\DPMSoft

2.11 WPLSoft 2.47 released

You can find the firmware on our ftp-site, folder: F
Customer-Service\Industrial Automation Products\PLC Programmable Logic Controllers\PLC Software

File: DELTA_IA-PLC_WPLSoft-V2-47_SW_20181206.zip

When you install it, you first have to uninstall the previous version.

2.12 ASDA-A2-E firmware download

Thanks to IMSBU we have a very clear firmware information from the download area .(mainly available for new products)
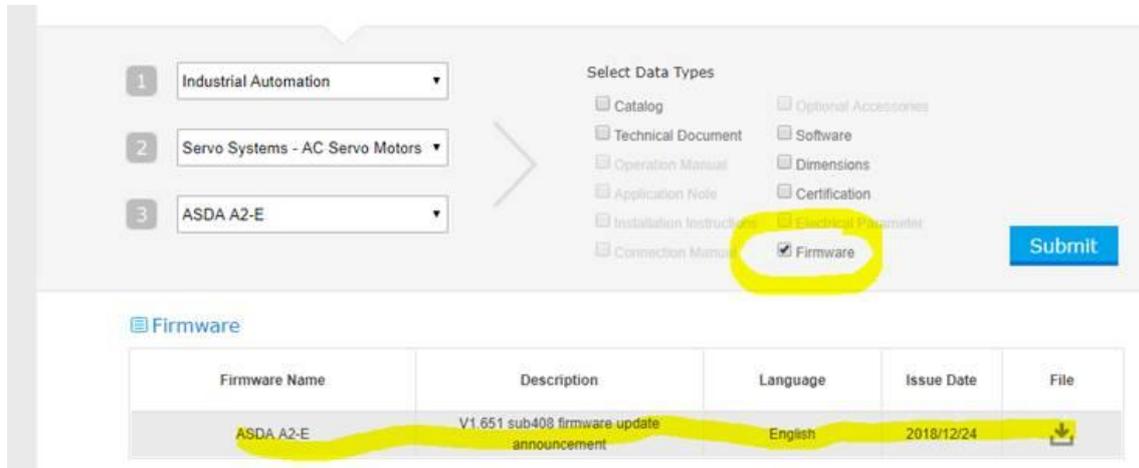
2.13 E-plan files

See also newsletter 2018-07.

IABG product data download website:
https://eplandata.de/portal/portal.php?action=partviewc&edpp=1.0&ev=1.9.11&lang=en_US&clang=en_US&mf=DEL&lastmpg=.&mcat=_eplan&tab=c&mcatsel=DEL

For the following models you can find the E-plan files
- All VFD-EL models
- All VFD-E models
- All C2000 models
- All CP2000 models
- MS300 models: Version ANSAA, ENSAA, AFSAA
- MH300 models: Version ANSAA, ENSAA, AFSAA *)
- ME300 models: Version ANNAA, AFNAA *)

*) Not released yet in EMEA.

2.14 MS300 communication cards released again

Following the announcement in Newsletter Edition 2018-11, chapter 2.11, CMM-DN01 and CMMPD01 are now ready for sale.
So all MS300 option communication cards are now ready for sale (except new EtherCAT card which is under field test).
All items are prepared with at least 3 months safety stock.

	Part Number	Function	Status
Communication card	CMM-DN01	DeviceNet	Ready for sale
	CMM-EIP01	EtherNet/IP	
	CMM-PD01	Profibus DP	
	CMM-MOD01	Modbus TCP	
	CMM-COP01	CANopen	
	CMM-EC01	EtherCAT	Field test phase

3   Application

3.1   NEW – Application Notes

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

- Delta M-R Controller Straw Packaging Machine Solution.pdf

- [Servo] Full-Closed Loop Implementation.pdf

- IoT Industry Notification - Environment and Safety Monitoring System Solution V1901-28002.pdf

- Electronics Industry Notification - Automatic FOG Bonding Machine Solution.pdf

- Elevator Industry Notification - Elevator Energy Saving Solution.pdf

- Machine Tool Industry-Hydraulic Stretch Forming Machine Position Closed-loop Control Solution.pdf

- Delta M-R Controller Servo Motor Precision Winding Machine Solution.pdf

4   FAQ

4.1   VFD Series AC Motor Drives

VFD series (generaL)
**Q   Do I need to connect the shielding on one end or on both ends?**
*A   -   Motor power cables need to be connected on both ends.*
*   -   Encoder and control cables need to be connected only at one end.*

In both cases the cable shield needs to have a 360° connection.

Below are some examples of proper shielding connection:


Collar, clamp, etc.
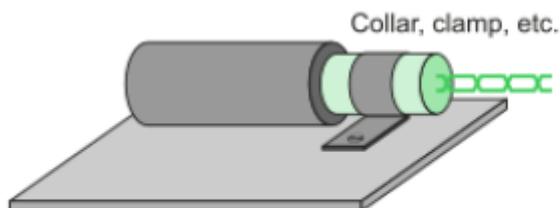
This should be on the same metal plane with the VFD
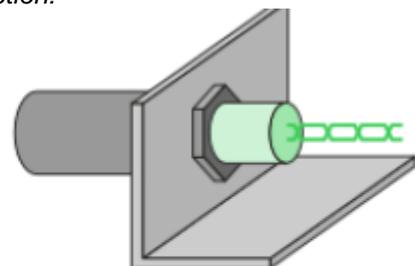
Use a metal gland to connect the shield to the motor case

Connecting the shield via a pigtail directly to the VFD ground terminal is not acceptable:

Not acceptable

Bonding wire ("pigtail")
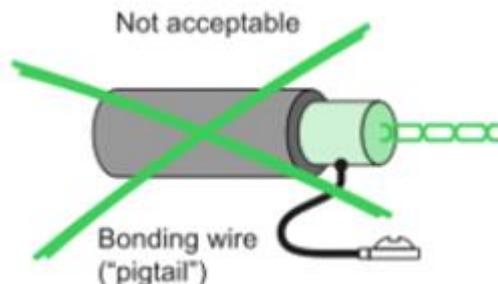
MS300

Q   **What is the difference between the Traditional OV stall prevention (Pr06-02=0) and the Smart OV stall prevention (Pr06-02=1)?**

A   *Over Voltage stall prevention is a function commonly used in applications where the goal is to decelerate the motor as quickly as possible without using a braking resistor. To enable this function parameter Pr06-01 needs to be ≠0.*

- In traditional OV stall, during deceleration the drive will maintain the output frequency at a constant level when VDC > Pr06-01.
When VDC<Pr06-01 the drive will always follow the same slope to decelerate (Hz/s = constant)
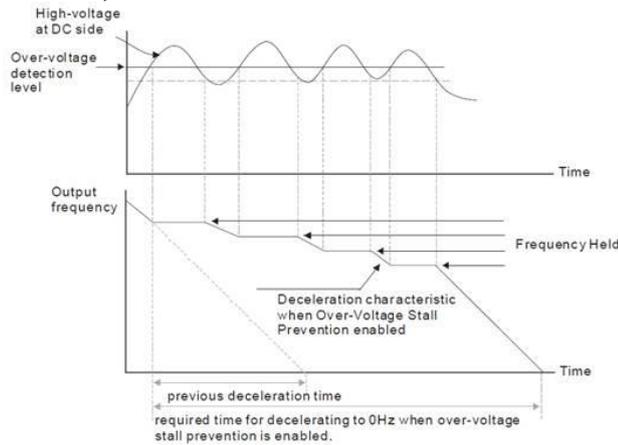
- In smart OV stall, during Acceleration/Deceleration/Normal state, the drive will maintain and/or increase the output frequency when the VDC > Pr06-01.
When VDC<Pr06-01 the drive will change the slope by which it decelerates (Hz/s not constant). In this mode the drive will calculate a new deceleration slope with the aim of maintaining a stable DC bus voltage. It will therefore ignore the deceleration ramp (Pr01-13) and the 4th S ramp (Pr01-27).
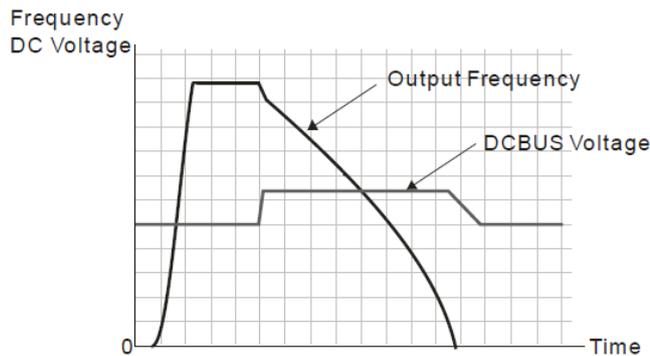
When smart OV stall is used it is recommended to also set Pr01-49=1.

VFD-E

Q   **Can I see in the PLC which keypad button is pressed?**

A   *Yes, see D1015.*

D1015	Keypad Status: Bit0: MODE; Bit1: STOP; Bit2: RUN; Bit5: UP; Bit6: DOWN; Bit7: ENTER;	R

As long as the button is pressed, the relevant bit in D1015 is set.
The buttons keep their original function.

Example

			K0	K0
M1000		MOV	D1015	D1043
		END		

Press RUN (Bit 2)

			K4	K4
M1000		MOV	D1015	D1043
		END		

Press STOP (Bit 1)

			K2	K2
M1000		MOV	D1015	D1043
		END		

Press UP (Bit 5)

			K32	K32
M1000		MOV	D1015	D1043
		END		

Press DOWN (Bit 6)

			K64	K64
M1000		MOV	D1015	D1043
		END		

Press MODE (Bit 0)

			K1	K1
M1000		MOV	D1015	D1043
		END		

Press ENTER (Bit 7)

			K128	K128
M1000		MOV	D1015	D1043
		END		