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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

2 Product update

2.1 UPDATE – Keypad cables EGx010A and EGx010C

EGx010A has 2 clips for the old, phased out VFD-A series.
EGx010C are fully compatible with EGx010A, only the not needed clips are omitted.
They were released with the introduction of MS300.

We will sell EGx010A as long as we have stock. After that we will sell EGx010C.

EGx010C can be used to connect the keypad to VFD-B, VFD-E, C200, MS300.

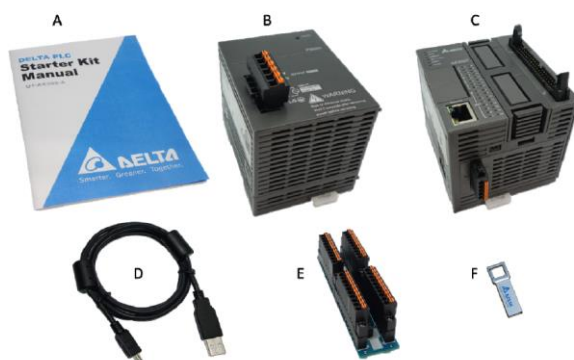


2.2 NEW – UT- AS332-C starter kit for AS300

This UT series starter kit simplifies users' entry into the world of Delta AS300 PLCs and helps users to get familiar with programming software.

UT- AS332-C Starter Kits:

- Components of the UT- AS332-C starter kit:



Item	Model name	Description
A	Starter Kit Manual	User manual
B	AS-PS02A	Power supply module, 24 V DC output Input: 100~240 VAC, 50/60 Hz Output: 24VDC/1.5A, 36W (for PLC internal use) Output: 24VDC/0.5A, 12W (for external use)
C	AS332T-A	CPU with 32 built-in I/O points CPU module NPN output 1x Ethernet port 2x RS-485 ports 1x USB port 1x Micro SD interface 2x function cards (optional) supporting 32 I/Os (16DI+16DO) and up to 1024 I/Os the program capacity:128K steps
D	UC-PRG015-01A (1.5 m)	Programming cable for a PLC
E	UB-10-IO32D	I/O board
F	UT-USB01	USB flash drive

- USB flash drive:

Item	Contents
Software	1. ISPSOft
	2. COMMGR
Manual	1. Starter Kit Manual
	2. ISPSOft User Manual
	3. AS300 Quick Start
	4. AS300 Programming Manual
	5. AS300 Operation Manual
	6. AS300 Hardware Manual
	7. AS300 Module Manual
	8. Instruction Sheet (ASPS02)
	9. Instruction Sheet (AS332T-A)
Program	1. Example

- Starter kit setup wizard:

(1) Insert the USB flash drive which is an attachment to a UT series starter kit into a computer, and double-click "StarterKit.exe" in the USB flash drive.



For more info see the ftp-site folder: Customer-Service\Industrial Automation Products\PLC Programmable Logic Controllers\AS300\AS300 Starter Kit

2.3 NEW – DOP-103WQ (3" DOP-100 series) released

We are pleased to announce the release of the 3-inch DOP-100 series HMI, DOP-103WQ.

With the advanced communication capabilities and functionalities, the DOP-100 series HMI now has three different sizes available. As with the 7" and 10" of DOP-100, you can experience and program the new DOP-100 series HMI via the software DOPSoft V4.00.

Main features and functionalities:

- Compact design: narrow frame and lighter case to save mounting space
- Web browser function: enables users to directly monitor the data via web page
- PDF files are supported for data review: manuals or instruction PDF files can be saved in USB disks or SD cards for reference
- An abundance of built-in element graphics: for a variety of industrial applications
- Smooth animation: for realistic dashboard display
- Advanced alarm function: allows users to manage machine operations and quickly eliminate problems
- Historical data review: also allows users to save the backup data in USB disk or SD cards
- Multi-language input: supports 16 languages input for localisation



- Account and authorisation management: supports 8 levels of authority and allows 8 accounts for each level
- Operation log: records actions done by each user, therefore easier to trace and analyze possible causes of malfunctions

The DOP-103WQ model is on stock and ready to be ordered.

2.4 **NEW** – DVP-02TU and DVP-02TK PID modules released

We are happy to announce the release of the new temperature solution of DVP-S series, the DVP-02TU and DVP-02TK PID modules.



These DVP right side modules are specifically designed for temperature applications. There is no need to configure the communication as they are compatible with DVP-S series CPU. When many temperature loops are required in your application, you can connect 8 modules in a row and control up to 16 temperature loops in one single pack. This module not only can reduce the cabling and commissioning, but reduce the size of your control solution for sealing, glueing or heating/cooling applications.

Moreover, the DVP-02TU and DVP-02TK PID modules can be easily configured via ISPSOft. If you do not want to use the CPU, the new software TKsoft is available for you to quickly and easily set up the module.

Technical features:

- Analogue / Temperature Input
 - Thermal resistance: PT100, JPT100, PT1000, Ni100, Ni1000, Cu50, Cu100, GNi1000
 - Thermocouple : J, K, R, S, T, E, N, B, U, L, TXK (L), C, PL II
 - Voltage input: 0~+50mV, 0~+5V, 0~+10V
 - Current input: 0mA~+20mA, 4~+20 mA
- Analogue Output
 - 12-bit: 0~+10V, 0/4~+20mA
- Digital Output
 - 4 channels digital output, 240VAC/24VDC, 2A, Relay
 - 4 channels digital output, Voltage pulse output, 24VDC, 300mA

These two modules are now on stock and ready to be ordered.

2.5 **NEW** – UB-10-IO32D terminal module released

We are happy to announce the release of a new accessory for the AS300 CPU, the UB-10-IO32D.

This terminal module is designed for the European market. Its connector is spring type, which is easy to assemble and wire. It is ideal for replacing the current cabling and the terminal units and can save up to 15% of the overall cost of AS300.

Please be informed that one box of the order contains two terminal modules.

The UB-10-IO32D is now on stock and ready to be ordered.



2.6 UPDATE – Firmware of DVP-EH3/DVP-EH3-L/DVP-SV2 updated from V2.06 to V2.20

Modified functions

- Issue: When the high-speed axis is in the specific device (see the details on the below table), if the values have been modified before executing any high-speed instructions, the modified values cannot be retained, when an electrical power interruption occurs.
Solution 1: After the value is modified, execute the high-speed output instruction first before stopping power supply to have the modified values retained.
Solution 2: Contact the company or the technicians from the agents for a firmware upgrade (V2.09 or later).

Axis Number	Output Number	Device Number (32-bit value)	Affected Firmware Version	Affected Production Week
CH0	Y0	D1336/D1337	V2.06 & V2.08	W1730
CH1	Y2	D1338/D1339		-
CH2	Y4	D1375/D1376	V2.08	W1744
CH3	Y6	D1377/D1378		-

New functions

- EH3-L and SV2 can read MAC addresses of the connected left side Ethernet modules. EH3 and EH3-L can read MAC addresses of the connected Ethernet communication cards.

• Example of reading MAC addresses:

Step 1

Enter the module number to be read to D1400. The left side module numbers of the EN01-SL are K100 to K107. The number for DVP-FEN01 communication card is K108.

Step 2

Set M1145 to ON. When the PLC clears M1145, it indicates the reading is complete.

Step 3

An example of retrieving MAC addresses from D1401 to D1403: when the MAC address is in hexadecimal format, 12:34:56:78:AB:CD, the presentation of MAC address in D1401 is H'1234, in D1402 is H'5678, and in D1403 is H'ABCD.

Note: this function works for DVPEN01-SL with firmware V1.16 or later and for DVP-FEN01 with firmware V1.04 or later.

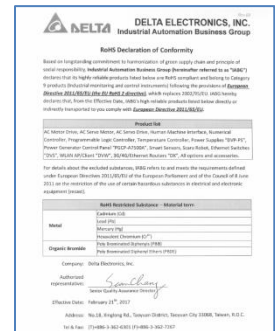
2.7 UPDATE – New RoHS certificate

A new RoHS certificate has been issued for all IABG products.

Product list
AC Motor Drive, AC Servo Motor, AC Servo Drive, Human Machine Interface, Numerical Controller, Programmable Logic Controller, Temperature Controller, Power Supplies "DVP-PS", Power Generator Control Panel "PGCP-A7500A", Smart Sensors, Scara Robot, Ethernet Switches "DVS", WLAN AP/Client "DVW", 3G/4G/Ethernet Routers "DX", All options and accessories.

You can find it on our ftp-site:

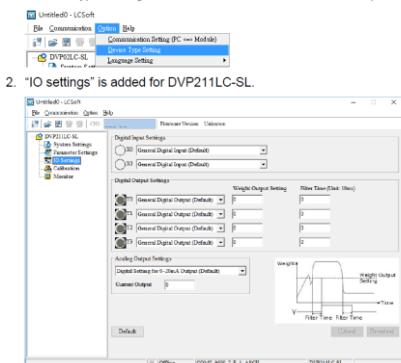
Folder Customer-Service\Industrial Automation Products_Delta Company info\Certificates\RoHS



2.8 UPDATE – Software version 1.12 for LC-SL series is released

Modified functions

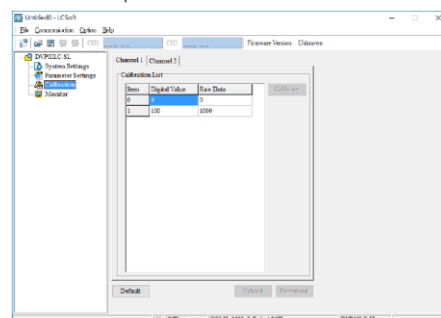
- "Device Type Setting" can be found in the context menu of "Option".



- "IO settings" is added for DVP211LC-SL.

New functions

- New functions "Upload" and "Download" are added in "Calibration".



2.9 UPDATE – Firmware AS00SCM-A updated from V1.02 to V2.00

Modified functions

1. Issues

- 1-1. When using a new AS00SCM-A for the very first time, if you have selected the RTU mode for Function Card 2 but the baud rate set on Format 2 Knob on SCM modules is not #4: 125Kbps, a communication cannot be achieved.
- 1-2. When switching to COM mode on SCM modules and using UD Link Protocol in ISPSOFT for data mapping, the results are not refreshed immediately.
- 1-3. When switching to COM mode on SCM modules and you have used SCMSOFT to set the settings to return to defaults; if you use UD Link Protocol in ISPSOFT to trigger the group ID that was no longer existed, the module should ignore this action and show no response, instead of having the PLC to send out the error code 16#1604: communication timeout on the right-side modules.
- 1-4. When switching to COM mode on SCM modules and you use UD Link Protocol in ISPSOFT for data mapping for Card 1 and Card 2; if having Card 1 and Card 2 to perform data mapping simultaneously, the module should perform the operation, instead of having the PLC to send out the error code 16#1604: communication timeout on the right-side modules.

New functions

2. Newly added functions

- 2-1. A new function card type, AS-FCOPM, is added for Card 2 in ISPSOFT, available when switching to COM mode on SCM modules, and when AS-FCOPM is selected, it supports CANopen DS301 communication protocol (only for the slave mode). New functions are available for ISPSOFT V3.03 or later.
- 2-2. A new working mode, Delta Special Driver & AS Remote Mode, is added for RTU mode (available when switching to RTU mode and set the Format 1 Knob to #8 on SCM modules). When selecting Delta Special Driver & AS Remote Mode in ISPSOFT, the AS Series PLC controls up to eight Delta servo motor drives and Delta AC motor drives each and seven AS00SCM-A (in RTU mode) modules. New functions are available for ISPSOFT V3.03 or later.
- 2-3. AS00SCM-A now can upgrade firmware through the USB port of AS Series PLC when AS00SCM-A is linked on the right side of AS Series PLC, but only one at a time.

Release W1746

2.10 UPDATE – Upgrade license for DIAView SCADA system I/O points

We are happy to announce the release of the upgrade license for DIAView SCADA system I/O points.

DIAView licensing is calculated based on the I/O points of a user's connected devices. The I/O point limit is the maximum number of a user's connected I/O device addresses that can be read. With the upgraded licenses, you can expand your DIAView SCADA system by increasing the number of external tags - input and output points.

See below for the new product codes:

DIAView Standalone version	
Product code	Description
DIAB-0012800UPC	DIAView SCADA Standalone version, Upgrade license to 128 I/O points, Watchdog USB Key
DIAB-0025600UPC	DIAView SCADA Standalone version, Upgrade license to 256 I/O points, Watchdog USB Key
DIAB-0051200UPC	DIAView SCADA Standalone version, Upgrade license to 512 I/O points, Watchdog USB Key
DIAB-0001K00UPC	DIAView SCADA Standalone version, Upgrade license to 1000 I/O points, Watchdog USB Key
DIAB-001K500UPC	DIAView SCADA Standalone version, Upgrade license to 1500 I/O points, Watchdog USB Key
DIAB-0003K00UPC	DIAView SCADA Standalone version, Upgrade license to 3000 I/O points, Watchdog USB Key
DIAB-0099K00UPC	DIAView SCADA Standalone version, Upgrade license to Unlimited I/O points, Watchdog USB Key

The upgrade license of SCADA system is ready to be ordered.

2.11 NEW – Photoelectric sensors: PS-L, PS-M, PS-R

We are pleased to announce the release of three new photoelectric sensors:

- Lateral type PS-L
- Cylindrical type PS-M
- Rectangular type PS-R

Delta's smart sensors feature a slim design with different exteriors, which can be applied to a wide range of applications, such as, food and beverage, packaging, pharmaceuticals, electronic component equipment, rubber and plastics, warehousing, machine tool industries, and other industrial automation production lines. All of the new sensors are IP67 rated, have stable quality and good performance, to provide an optimal solution for your smart manufacturing.

The lateral type of sensor is slim and easy to assemble. The cylindrical type comes with M18 nickel coated brass. With its TEACH button, customers can easily control and set the sensing distance. The



rectangular type is another type of photoelectric sensor, the TEACH function is also available on the rectangular type but has a different sensing method.

Features of the new sensors

- Wide detection range
- Teach function available
- Easy to mount
- IP67 rated

Please be informed that the minimum ordering quantity is 20pcs.

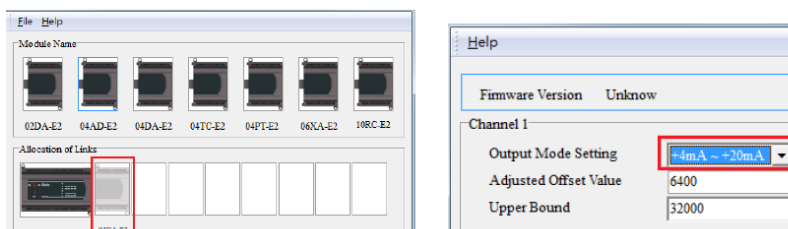
2.12 UPDATE – Firmware updates for DVP04DA-E2, DVP02DA-E2, DVP06XA-E2, DVP04DA-H3, and DVP06XA-H3

Series	Product Name	Firmware Version
ES2	DVP04DA-E2	V1.10→ V1.12
	DVP02DA-E2	V1.10→ V1.12
	DVP06XA-E2	V1.12→ V1.14
EH3	DVP04DA-H3	V1.24→ V1.26
	DVP06XA-H3	V1.26→ V1.28

Issue: The default for Digital to Analog output mode is voltage. If you wire the connection in current mode, it may output a small amount of current in the duration between PLC is powered and PLC starts to run.

Current solution for existing firmware:

If you want to wire the connection in current mode, use AIO Wizard to change the output mode to current and then download the parameters to the module.



Release: 1745

2.13 UPDATE – Firmware of DVP Slim type PLC (TC and PT series)

Series	Models	Firmware Version	Release Date
Slim	DVP04TC-S	V4.12→ V4.16	W1749
	DVP04PT-S	V4.14→ V4.18	W1749
	DVP06PT-S	V4.10→ V4.12	W1748

Modified functions

1. DVP04PT-S, DVP06PT-S, DVP04TC-S:

When trying to write an invalid value into a CR, the system ignores this action and the value in the CR stays the same.

2. DVP04PT-S, DVP04TC-S:

The CPU can use FROM/TO instructions to read/write the RS485 station number (CR#31) and the communication settings (CR#32) from the modules.

New functions

1. DVP04PT-S, DVP04TC-S:

- Added the resetting function for control registers (CRs) in non-latched areas. Write 0x4352 into CR#0 and then 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 RS485 communication format settings and new data length selections. 7 are also available, see the following part in red for more information.

are also available, see the following paragraph for more information.

					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 / 8,E,1 / 8,O,1 / 8,N,1 RTU: 8,E,1 / 8,O,1 / 8,N,1 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
				Note *1: This is only available for ASCII format.					
				Ex: Write H'C310 into CR#32 for a result of RTU, exchange low and high byte of CRC check code, 8,N,1 and baud rate at 57600 bps.					

2. DVP04PT-S, DVP06PT-S:

Added two new modes for CR#1, mode 7 (300 ohm) and mode 8 (3000 ohm).

2.14 NEW – Delta PMH Series of Panel Mount Power Supply with NEC Class 2 Approval

Delta Electronics extends the PMH series of panel mount power supplies with 24V 91.2W output certified to NEC Class 2. The PMH-24V100WCNS accepts universal input from 85~264VAC in a full corrosion resistant aluminium body. Power doesn't need to be derated over the full input voltage range, providing full output power even if the input voltage drops below the nominal voltage. The highly efficient convection cooling construction can operate from -30 ~ 70°C and it has a no-load power consumption <0.3W @ 115VAC and <0.5W @ 230VAC.

The NEC Class 2 model is specifically designed for household electrical appliances with safety approvals to pollution degree 3 as well as including IEC/EN 60335-1, IEC/EN 61558-2-16, IEC/EN/UL 60950-1 (with NEC Class 2).

In addition, the product meets the EMC approvals to EN 55014-1 / EN 55014-2 for household appliances and EN 61000-6-1 / EN 61000-6-3 for residential environment without an extra EMI filter.

Highlights & Features

- Household appliance approvals for pollution degree 3 to IEC/EN 60335-1,
- IEC/EN 61558-1 and IEC/EN 61558-2-16

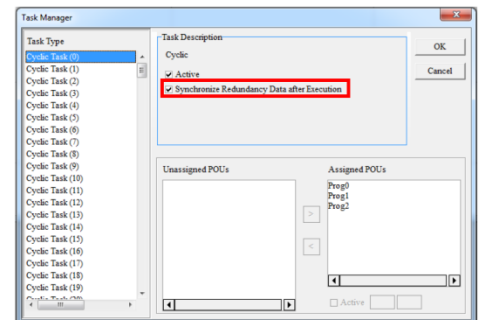


- Universal AC input voltage
- Withstand line input voltage surge 300VAC up to 7 seconds
- Full power from -20°C to +50°C operation @ 5000m or 16400 ft. altitude
- Full corrosion resistant aluminium casing
- No load power consumption < 0.3W @ 115Vac, < 0.5W @ 230Vac
- Built-in DC OK Contact and LED indicator for DC OK/ Overload
- Low earth leakage current < 0.75mA
- NEC Class 2 certified

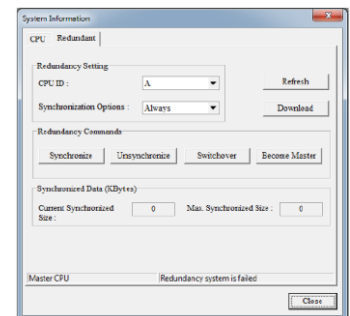
2.15 UPDATE – ISPSOFT version 3.04 is released

New and changed functions:

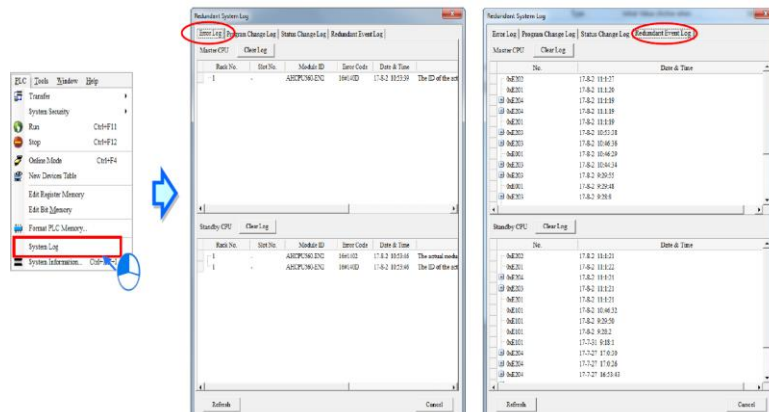
1. ISPSOFT V3.04 now supports AHCPU560-EN2models.
2. The Task Manager window now is available for AHCPU560-EN2models. A new option “Synchronize Redundancy data after Execution” is added for Cyclic Tasks. Refer to its manual for more details.



3. The System Information window now is available for AHCPU560-EN2models. When the PLC is in the standby mode, many functions concerning redundancy can be set in this window. Users can set up and control the redundancy system during communication. (When the PLC is not in the standby mode, it is in the control mode. And this window is not available for the control mode.)



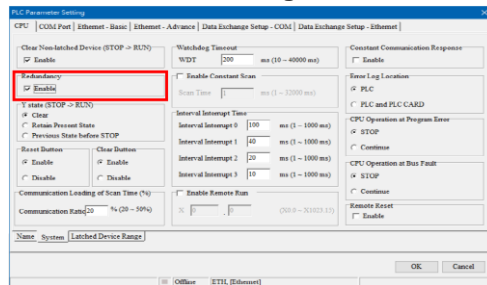
4. The System Log window now is available for AHCPU560-EN2models. Users can view different logs for the master CPU and standby CPU. For example, if the redundancy system cannot be created or the system cannot be switched between master and standby CPU, this is where users can find out the causes.



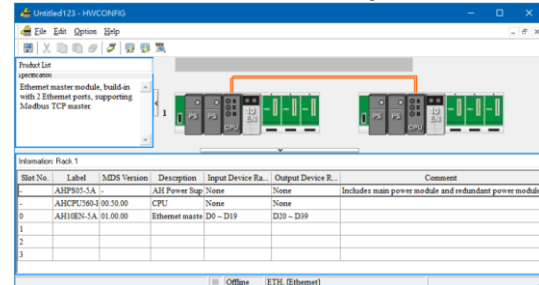
5. HWCONFIG supports AHCPU560-EN2models. Once the Redundancy function is enabled in the PLC Parameter Setting window, the redundancy

function can be used and the PLC is in the standby mode. A corresponding main backplane appears on the right side of the main backplane. In the standby mode, only the main backplane on the left can assign modules and the main backplane on the right synchronize data with the main backplane on the left. When redundancy is enabled, POU's can only be assigned to cyclic tasks and interval interrupt tasks in a program. POU cannot be used in other kinds of tasks.

PLC Parameter Setting



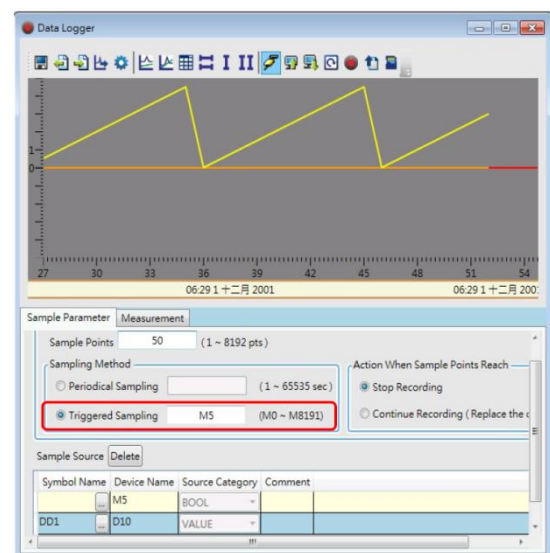
Redundant mode main backplane



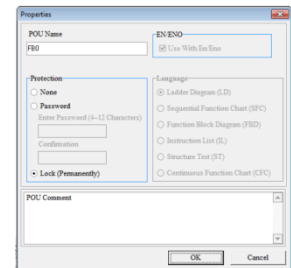
- A new used Device Report is added for AH/AS Series PLC. Users can learn the device usages and vacancies. And a new function to move devices forward or backward in a certain distance is also added so that users can have a clearer view to see the device usage in a certain distance.

Item	Device Name	Symbol Name	Status	Location
1	D10	DD1	ON	(Prog) Network Name 4
2	D10	DD1	ON	(Prog) Network Name 4
3	D10	DD1	ON	(Prog) Network Name 3
4	D10	DD1	ON	(Prog) Network Name 3
5	D15.1		+	(Prog) Network Name 6
6	D13	RR3	ON	(Prog) Network Name 3
7	D13	RR3	ON	(Prog) Network Name 3
8	D6	DD0	ON	(Prog) Network Name 3
9	D6	DD0	ON	(Prog) Network Name 3
10	D66	RR6	ON	(Prog) Network Name 3
11	D66	RR6	ON	(Prog) Network Name 3
12	D66	RR6	ON	(Prog) Network Name 3
13	D66	RR6	ON	(Prog) Network Name 3
14	M0	MasterVal1	+	(Prog) Network Name 3
15	M0	MasterVal1	+	(Prog) Network Name 1
16	M407		+	(Prog) Network Name 3
17	M407		ON	(Prog) Network Name 2
18	M2		+	(Prog) Network Name 6
19	M2		+	(Prog) Network Name 1
20	S2400		+	(Prog) Network Name 4
21	S2400		+	(Prog) Network Name 3
22	S2400		+	(Prog) Network Name 1
23	T55		+	(Prog) Network Name 2
24	T55		ON	(Prog) Network Name 2
25	T55		ON	(Prog) Network Name 1

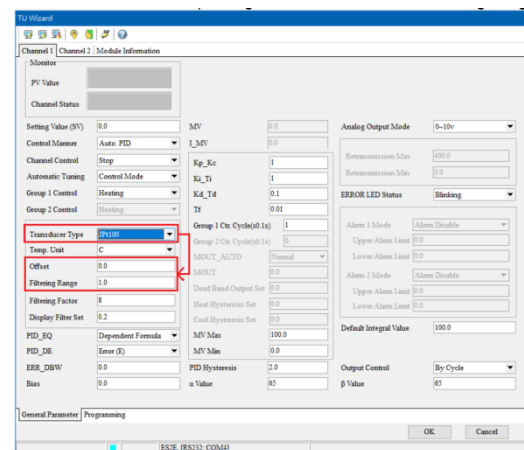
- A new function is added for Data Logger. Besides recording data from certain points periodically, users now can use Triggered Sampling to record values or states in M devices. When Trigger Sampling is selected, the appointed M device is ON and Data Logger records the data. Use this function to record the data that users want to examine.



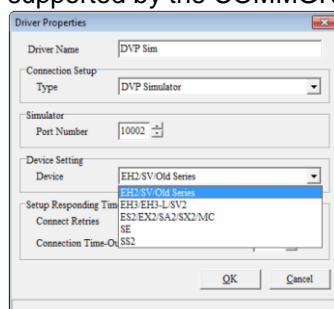
8. A **new** protection function is added for POU.
POU can be locked to prevent any modification. But once it is locked, it cannot be unlocked. Please save a backup of your project before locking the POU.



9. TU wizard: adding converted values in corresponding units for users to have easier understanding with setups.
- When a sensor type is selected, converted values in corresponding units appear. (The actual values stay the same.) For example, when transducer type is set to JPt100, its converted values in corresponding units such as Offset and Filtering Range appear.



10. ISPSOft V3.04 updates auxiliary functions
 - Card Utility: add AS300 restoring function and fix the issue that when AH5x0 restores from its backup file, an error occurs.
 - LCSOft V1.12
 - AIO Wizard
 - Extension Module Wizard (same as WPLSoft)
11. **New** DVP category is added in simulator. Users can choose the right model for simulation. It is supported by the COMMGR version 1.08 or later. See the following category for more details.



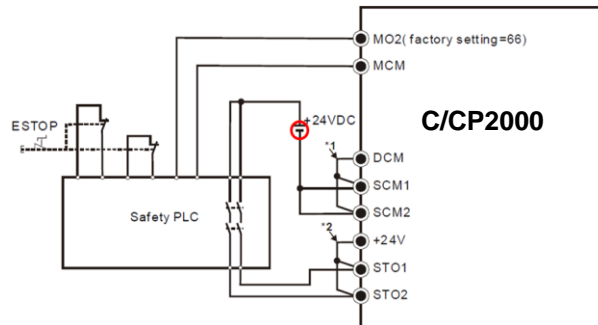
Represented product names shown in COMMGR	Products included
EH2/SV/Old Series	VFD E TYPE, VFD_MS300, VFD_MH300, VFD_C200, VFD_C2000\CH2000\CT2000, VFD_CP2000 SA, SX, SC EH, EH2, SV, EH2-L ES\EC, EX, SS
EH3/EH3-L/SV2	EH3/EH3-L/SV2
ES2/EX2/SA2/SX2/MC	ES2, EX2, SX2, SA2, 10MC, ES2-E
SE	SE
SS2	SS2, TP04P, TP70P, IO, TP70P, RM

12. User manuals for the Motion Control PLC Series are updated accordingly.

3 Application

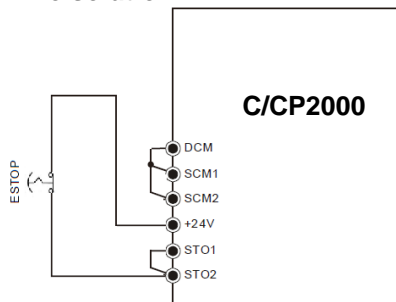
3.1 STO in C/CP2000: External or internal 24VDC

In the C/CP2000 user manuals the STO wiring with an external 24VDC power supply is shown:

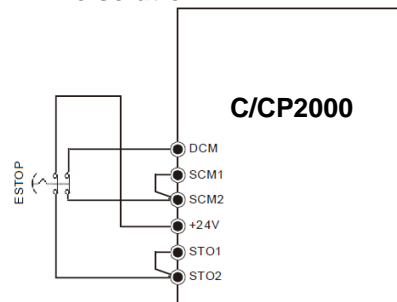


Below shows how to wire STO using the internal 24VDC terminal:

1-Wire solution

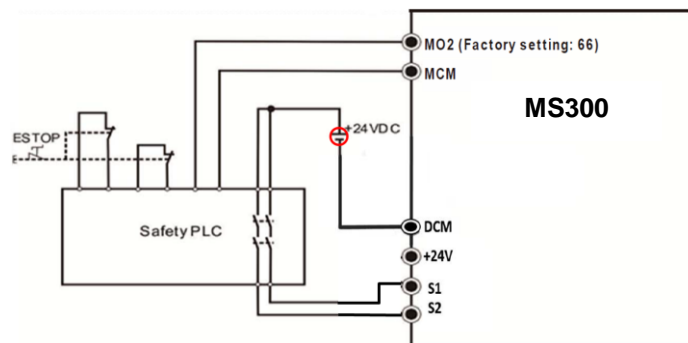


2-Wire solution



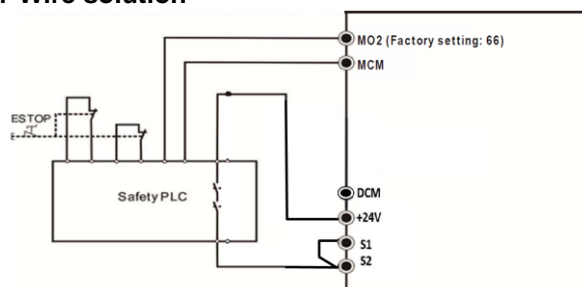
3.2 STO in MS300: External or internal 24VDC

In the MS300 user manual the STO wiring with an external 24VDC power supply is shown:

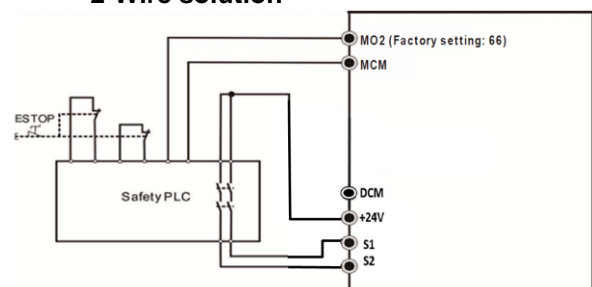


Below shows how to wire STO using the internal 24VDC terminal:

1-Wire solution



2-Wire solution



3.3 NEW – Application Notes

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

- Application note - Remaining the parameter configuration on communication mode_20180117.pdf (for ASDA-A2)
- Electronics industry notification - Automatic bearing assembler.pdf
- Electronics industry notification - Glass polish solution.pdf
- Logistics and Warehouse industry notification - AGV Automated Guided Vehicle System.pdf
- Robot industry notification - Delta IA application on automatic ultrasonic pressing machine.pdf
- Robot industry notification - Delta IA application on HMC-based Palletizer Control Solution.pdf
- Textile industry notification - Delta IA Application on Dual-frequency jig dyeing machines.pdf

4 FAQ

4.1 VFD Series AC Motor Drives

MS300

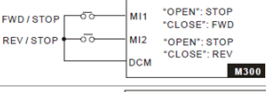
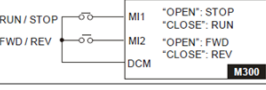
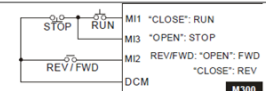
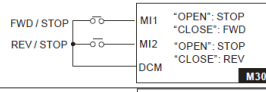
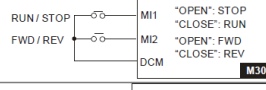
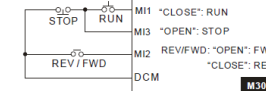
Q
A

Why is MS300 unstable at 0Hz frequency command?

When the frequency command is 0Hz, the drive goes in standby mode. Any noise on the analogue input can keep the drive switching between RUN and standby.

► Pr00-21=1 Operation command via terminals

In firmware 1.05 3 additional settings were introduced for Pr02-00.

Pr. 02-00	Control Circuits of the External Terminal
Setting value: 1 2-wire FWD / STOP REV / STOP	
Setting value: 2 2-wire RUN / STOP FWD / REV REV / FWD	
Setting value: 3 3-wire	
Setting value: 4 2-wire Quick Start	
Setting value: 5 2-wire Quick Start	
Setting value: 6 3-wire Quick Start	

Select 4-5-6 instead of 1-2-3 to avoid this problem.

The response with these settings is faster and with higher initial output voltage.

► Pr00-21≠1 Operation command **not** via terminals

- Select Pr03-50≠0.

- Using AVI or ACI:0~10V:

Set Voltage Lowest Point to 1V (Pr03-57 or 03-63).

Set Proportional Lowest Point to 10% (Pr03-58 or 03-64).

- Using ACI:0~20mA:

Set ACI Lowest Point to 2mA (Pr03-57).

Set ACI Proportional Lowest Point to 10% (Pr03-58).

With these settings some margins around 0V and 0Hz are set.

Change the values if needed.

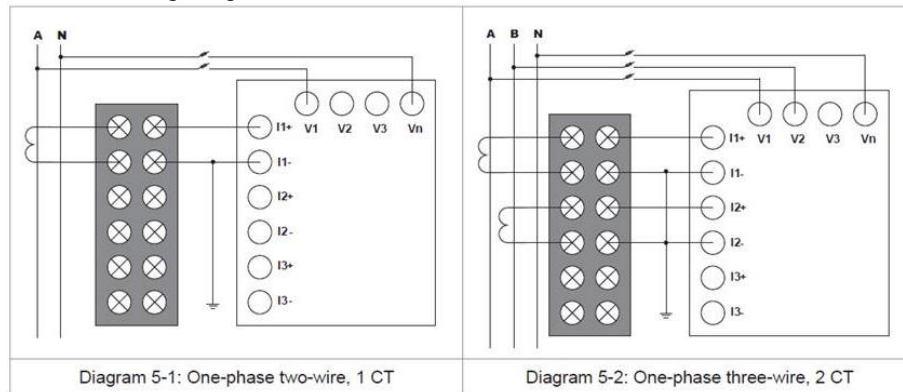
In firmware 1.06 this problem is solved and selecting Pr02-00 settings 4~5~6 is not needed anymore for solving this problem.

4.2 DPM Power Meters

DPM

Q Can DPM-D520I be used on 1-phase 2 wire, and 1-phase 3 wire systems?

A Yes, the wiring diagram is the same as for DPM-C530A.

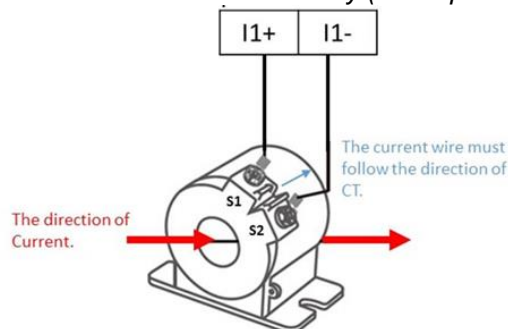


Q My DPM shows unexpected negative values for power and current. Why?

A Most of the time this is caused by incorrect wiring and/or current sensor orientation.

Please check in that case following (for Delta DCT current sensors):

- Make sure the current sensors for L1, L2, L3 are in the right phase L1, L2, L3.
- Make sure the current sensors are oriented correctly (arrow points to load)



- Make sure S1/S2 are connected to I_{x+} and I_{x-} as indicated.

For non-Delta current sensors, please connect similarly.

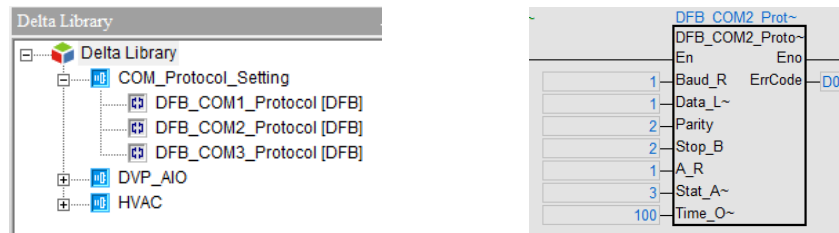
4.3 Software

ISPSOft

Q Why can a flag in the ISPSOft serial port function block not be reset?

A The problem appears only in DVP PLC series if the com protocol settings function blocks provided by Delta library are used.

In case you setup an incorrect value at one of the input pins, an error internal M device is activated and disables the FB (Function Block). The problem is that this internal M device is defined as retentive and once it is triggered there's no way to reset it, other than resetting the PLC to factory defaults using ISPSOft.



It will be corrected in the next ISPSOFT version. Until then there's a simple alternative solution: You only need to change the retentive range of M devices on your PLC from the original M2000~M4095 to a new M2000~M2999 (device auto allocation range used by function blocks uses to start at M3000...).

