Application Notes uPC3

CAREL

Several notes useful or not presents in online help of c.suite:

- Standard application that it using uPC3 : none

- Size: Extra Small, Small, Medium

- uPC3 is similar as c.pCO with:

    - 128Mb flash memory
    - 32Mb for OS and application
    - 96Mb for file storage
    - 8 or 16Mb RAM in the version with ethernet
    - up to 2Mb for log. It depends on how you do the application and how to configure the log)

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- Manage up to 5 serial ports:

Extra Small	pLAN (6ways telephone + 4pins phoenix)
	BMS
	BMS/Fieldbus by jumper
	Ethernet
Small/Medium	Fieldbus

- Manage UNIPOLAR valve (up to 2) integrated inside OS (it can manages also BIPOLAR valve with external EVD EVO in FB)

Extra Small/Small	1 port Manage UNIPOLAR
Medium	2 port Manage UNIPOLAR

UNIPOLAR	EVD_Emb_2
BIPOLAR	EVDEVO_2

- System variable sysread board info hw = 17
- System variable sysread board info size = 12 extra *small*
- System variable sysread board info size = 11 *small*
- System variable sysread board info size = 10 *medium*

- No RS232, therefore no GSM and print

- Digital inputs: they are all voltage free (And analog inputs B1,B2,B3,B4 can be configured as digital inputs). B1 and B2 can be used with fast digital inputs

- Analog inputs: normal channel as uPC1, not universal channel with ChipIO

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- Out7: voltage free contact (COM, NC, NO, typical application as alarm);

- Analog outputs: Y1,Y2 (0-10V); Y3,Y4 (0-10V, 2kHz, 100Hz, phase-cutting with main frequency, synchronous with main frequency)

		Y1, Y2	Y3, Y4
Mode 0	0-10V	**OK**	**OK**
Mode 1	PWM in sync with main frequency	NO	**OK**
Mode 2	PWM phase cutting in sync with main frequency	NO	**OK**
Mode 3	PWM 100 Hz	NO	**OK**
Mode 5	PWM 2 KHz	NO	**OK**

- SSR digital outputs: Out6,7,11 and 12 can mount max 4 SSR instead of 4 relays

- Stand-By input: free contact for low power consumption mode

- PT: Primary side power voltage is 0-230Vac, secondary side input signal is 0-0.115Vac on uPC3 board

- TAM: Primary side power voltage is 0-50A, secondary side input signal is 0-25mA on uPC3 board

- Micro-USB port: a little different from c.pCOmini, only USB device function included, USB host function is not available

- BACnet is only available in the Ethernet version, the procedures license is the same already in use in c.pCO

- The non-volatile memory, accessible by CFB, is lost in the event of a change of button battery

- Manual code: +050001595

- Simulator code: CM00002048

- Product codes:

    o UP3A00*00***0
    o UP3B00*00***0
    o UP3CON0***

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- To create an application for uPC3 , is necessary an plugin that is possible to download from KSA website:

Setup for uPC3 c.suite
Software & Support -> uPC3 -> uPC3 c.suite plugin (link)

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