Program Description Program AMCMON

Version 1.61

The program AMCMON E x is catching and displaying all data, which is transmitted via the serial port of the AMC running in converter mode. It shows the internal values of the AMC-III and can therefore also be used for troubleshooting.

Preparations:

Connect the AMC-III with the AMC-Computer-Special Cable to COM1 or COM2 of the PC and turn on the AMC main switch.

Start of the Program WITHOUT Datalogging:

AMCMON x
and you will be prompted for the AMC-type

or

AMCMON x yyy, whereas yyy = AMC-Type e.g. 325

x determines the used COM-Port of the PC, that means:
AMCMON E 1 uses COM1
AMCMON E 2 uses COM2

Start of the Program WITH Datalogging:

- AMCMON.EXE LOG: XYZ.CSV,
  whereas XYZ is any name of the log-file, which shall be saved to disc. The place of the saving is the same directory as the program is. The command line can be realized under Windows in such a way, that you create an icon on the desktop. With a right click at „Properties“, then at „Program“ and „Command Line“, you can fill in the above mentioned extensions after the whole path. With this proceeding, you can easily open the file with „Excel“.

- It will be asked for the type of the AMC after the double click, please fill in the correct type (e.g. “f” for AMC 320) because of the different possible scalings of the voltage or the current.

- Then fill in at the top line a number for the intervall time in seconds for the datalogging and then <Enter>.

- It can be chosen any value individually, which shall be logged or not:

  - By means of the arrow keys or the <Tab> key to go to the desired value
  - By means of <Enter> to mark the value
  - By means of a further <Enter> to remove this value from the data logging list
  - By means of <Esc> to start the datalogging

At the screen appear following values:

Pedal operation	Amps
Motor Curent Demand	Amps
Motor Current Measured Value	Amps
Battery Current Demand	Amps
Battery Current Calculated Value (only approximate value)	Amps
Battery Voltage	Volts
Temperature Power Stage	°C (minimum 40°C)
Rotor Speed (roughly filtered)	rpm
Rotor Speed (fine filtered)	rpm
Slip Frequency	mHz
Slip Frequency Integral value	mHz
Max. slip -Integral	mHz
Processor Port 2	16-Bit binary value

<u>Port 2 of µP</u> (16-Bit binary)

	BOF	ROF	TO-	TO+	DRE	REK	HUB	LUB	IBF	10K	CTO	CTU	CSO	CSU	CRO	CRU
	Drive Current Disable	Regeneration Off	Cruise Control TO- key	Cruise Control TO+ key	Motor Triangle	Brake Relay on for. Regeneration	LED High Voltage (inverted)	LED Low Voltage (inverted)	Battery Current as Clock Signal	Clock Signal 10kHz	PWM	PWM	PWM	PWM	PWM	PWM
Input or Output in relation to µP	Input	Input	Input	Input	In- or Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output	Output

Port 3 of µP (16-Bit binary)

	RUK	DO	WRE	BHE	RX0	TX0	RX1	TX1	BER	GZP	GZH	GZR	GZL	DI	SK	CS
	Forward-/Reverse Switch	EEPROM-Control	Bus-Control Signal		Serial Interfaces				Ready Signal = inverted malfunction	Speed Sensor Pulses / -Direction Motor				EEPROM-Control		
In- or Output in relation to µP	Input	Output	Output	Output	In-/ Output	In-/ Output	Iin-/ Output	In-/ Output	Input	Input	Input	Input	Input	Output	Output	Output

Furthermore, there is shown the time since program start. It can be reset manually to 0 by hitting the <SPACE> key.

The program can be terminated by the key <F10>.

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