AQ Recover on Modbus and test

Based on Procedure given by temcoSpring on the 16th of march

1.First do a direct connection from your PC to the AQ over RS485, just the AQ sensor and your PC connecting for now.

Result

T3000 S	Scanning			
) is sca _{xit}	nning, ple	ease wa	it
Scanning Mo	ode	Status	Reply	Notes
Etherne	t Scan	Finished	0	Network scan finished.
COM1	9600	Detecting	0	Automatic detecting ,please wait!
COM1	19200	Detecting	0	Automatic detecting ,please wait!
COM1	38400	Detecting	0	Automatic detecting ,please wait!
COM1	57600	Detecting	0	Automatic detecting ,please wait!
COM1	76800	Detecting	0	Automatic detecting ,please wait!
COM1	115200	Detecting	0	Automatic detecting ,please wait!
COM3	9600	Detecting	0	Automatic detecting ,please wait!
COM3	19200	Detecting	0	Automatic detecting ,please wait!
COM3	38400	Detecting	0	Automatic detecting ,please wait!
COM3	57600	Detecting	0	Automatic detecting ,please wait!
COM3	76800	Detecting	0	Automatic detecting ,please wait!
COM3	115200	Detecting	0	Automatic detecting ,please wait!
COMD				

COM3 (USB to RS485) is properly detected

T3000	Scanning			
T 000	0			-
1300	U IS SCA	nning, ple	ease wa	IT
E	Exit			
Scanning M	ode	Status	Reply	Notes
_	et Scan	Finished	0	Network scan finished.
COM1	9600	Finished	0	Scan finished
COM1	19200	Finished	0	Scan finished
COM1	38400	Finished	0	Scan finished
COM1	57600	Finished	0	Scan finished
COM1	76800	Finished	0	Scan finished
COM1	115200	Finished	0	Scan finished
COM3	9600	Finished	0	Scan finished
COM3	19200	Finished	0	Scan finished
COM3	38400	Finished	0	Scan finished
COM3	57600	Finished	0	Scan finished
COM3	76800	Finished	0	Scan finished
	115200	Finished	0	Scan finished

But scan result is empty

Check the RS485 connection on the AQ side found one wired not properly blocked in terminal.

After rewiring: new scan works better

Scanning Mo	ode	Status	Reply	Notes
Etherne	et Scan	Finished	0	Network scan finished.
COM1	9600	Finished	0	Scan finished
COM1	19200	Finished	0	Scan finished
COM1	38400	Finished	0	Scan finished
COM1	57600	Wait	0	There is no data on the transmission line!
COM1	76800	Wait	0	There is no data on the transmission line!
COM1	115200	Wait	0	There is no data on the transmission line!
COM3	9600	Finished	0	Garbage data received!
COM3	19200	Finished	0	Garbage data received!
COM3	38400	Finished	0	Garbage data received!
COM3	57600	Finished	0	Bacnet MSTP protocol is detected !
COM3	76800	Finished	0	Garbage data received!
COM3	115200	Finished	0	Garbage data received!
Bacnet	MSTP	Wait	0	

T3000 is scanning, please wait..

Exit

anning Mo	de	Status	Reply	Notes	
Etherne	t Scan	Finished	0	Network scan finished.	
COM1	9600	Finished	0	Scan finished	
COM1	19200	Finished	0	Scan finished	
COM1	38400	Finished	0	Scan finished	
COM1	57600	Finished	0	Scan finished	
COM1	76800	Finished	0	Scan finished	📮 🛶 📥 Local Network
COM1	115200	Finished	0	Scan finished	temcopanel
COM3	9600	Finished	0	Garbage data received!	69
COM3	19200	Finished	0	Garbage data received!	× 🔝 T3_PT12
COM3	38400	Finished	0	Garbage data received!	🛓 📇 Serial Port
COM3	57600	Finished	0	Bacnet MSTP protocol is detected !	
COM3	76800	Finished	0	Garbage data received!	🗎 🛁 Com3
COM3	115200	Finished	0	Garbage data received!	CO2 Node:131477-
Bacnet	MSTP	Finished	1	Scan Bacnet mstp.Found 1 BACNET device relpy who is	📇 Virtual Device

AQ is detected on Bacnet but scan result is empty

Scan Result									
SCAN RESULT:									
Model	Building	Floor	Room	Sub_net	Serial#	Address	Port	Protocol	
									-

After clicking on CO2 node, AQ name come back and status can be read

Default_Building Local Network Ta_max I temcopanel Ta_PT12 Serial Port Com2	Serial Num Modbus Roll time inter Backlight time ((ID:	131477 10 0 0	 	Baudrate Protoco mperature Uni	ol : Bacne	t MSTP	~	The poor alar	ppm setpoint of CO2 m ppm setpoint of CO	2 sensor : 1000		
Com3					Scroll	l Display		-1	1.5.1				
AQ								Show	Hide				
嚞 Virtual Device			Show	Hide		TX / RX		•	0				
	Temperature		۲	0		Alarm		•	0				
	Humidity		•	0		CO2 Status		۲	0				
						Temperature		۲	0				
	CO2		۲	0		Humidity		۲	0				
	Temperature	Setpoint	۲	0		002		۲	0				
	Humidity Set	point	۲	0	т	Temperature	Setpoint	_	۲				
	CO2 Setpoin	t	۲	0	H	Humidity Setp		۲	0				
	User Messag	e	۲	0		CO2 Setpoint		0	۲				
	AQ Value		۲	0	C	Outdoor Temp	perature	0	۲				
					L	User Message		0	۲				
	Name	Value		Unit	Setpoint)utput Valu		Range	Output Min Value	Output Max Value	Calibration	
		0		ppm	81	0.			4-20ma	0	2000	0	
	Temperature	29.9		Deg.C	0.0	0.			4-20ma	0.0	100.0	0	
	Humidity	34.0		%	53.0	0.	5		4-20ma	0.0	100.0	0	

We have got the confirmation that AQ was properly changed to Bacnet with Baudrate 57600!

No chance to be detected though Nano which never scan 57600 Bds...

2.Switch the protocol from BACnet MSTP to Modbus and then set the baud rate to 115200.

Building->Default_Building 4 × Building 4 ×				_						
📥 Derault_Building	Serial Nu	mber :	131477		Baudrate :	57600	✓ The fair a	alarm ppm setpoint of CO2	2 sensor : 800	
	Modbu	us ID :	10		Protocol :	Modbus RS485	✓ The poor	alarm ppm setpoint of CC	02 sensor : 1000	
× 🛐 T3_PT12	Roll time inte	erval:	0		Femperature Unit :	Deg.C	~			
E Serial Port	Backlight time	(On);	0					C	к	
	backight une	(On).	0		Scroll D	splay				
							Show Hide			
Virtual Device			Show	Hide		/RX	• •			
	Temperatu	r.a.	۲	0	Ala		• •			
	Humidity		۲	0		2 Status	• •			
	CO2		۲	0		nperature	● ○ ● ○			
	Temperatu	re Setnoint		0	CO	nidity 2	● ○ ● ○			
	Humidity Se		•	0		- nperature <u>Setpoint</u>				
	CO2 Setpo		۲	0		nidity Setp T3000	×			
	User Messa		•	0	со	2 Setpoint				
	AQ Value		۲	0	Ou	door Temp Change	baudrate failed!			
			Ŭ	0	Use	er Message				
							ОК		1	1 1
	Name	Value		Unit	Setpoint	Output valu		Output Min Value	Output Max Value	
	CO2 Temperature	0 30.3		ppm Deg.C	81	0.0	4-20ma 4-20ma	0.0	2000 100.0	0
	Humidity	33.6		%	53.0	0.7	4-20ma	0.0	100.0	0

Retry change baud rate without more success

Try to connect with modbus Poll without success (baudrate presetted to 57600)

Try a scan with discovery tool

Sci	an Result									
	SCAN RESULT:									
	Model	Building	Floor	Room	Sub_net	Serial#	Address	Port	Protocol	
	AQ	fault_Buildi	floor1	room1	fault_Buildi	131477	10	COM3	Modbus 485	

Default_Building Local Network Local Network T3_PT12 Serial Port Com3	Serial Nu Modbu Roll time inte Backlight time	us ID :	131477 10 0 0			Protocol : [ture Unit : [115200 Modbus RS485 Deg.C	~]	ppm setpoint of CO2 n ppm setpoint of CO OI	2 sensor : 1000		
AQ	Temperatu Humidity CO2 Temperatu		Show (a) (b) (c) (c) (c) (c) (c) (c) (c) (c	Hide O O O		Scroll Display TX / RX Alarm CO2 Sta Tempera Humidity CO2	tus ture	Show (*) (*) (*) (*) (*) (*) (*) (*)	Hide O O O O O				
	Humidity Se CO2 Setpoi User Messa AQ Value	int	 • • • 	0 0 0		Humidity CO2 Set	Temperature	○ ● ○ ○	 <ul< td=""><td></td><td></td><td></td><td></td></ul<>				
	Name CO2 Temperature Humidity	Value 0 31.2 32.9		Unit ppm Deg.(%	8: C D.	etpoint 1 0 3.0	Output Va 0.2 0.5 0.6		Range 4-20ma 4-20ma 4-20ma	Output Min Value 0 0.0 0.0	Output Max Value 2000 100.0 100.0	Calibration 0 0	

So in fact, popup saying changed failed is wrong!!!! Connection is lost because T3000 did not change his baudrate

3. This is the right time to try the reset of factory settings

🧺 Temco Modbus Poll - ModbusPoll1

File	e Edit Co	onnection	Setu	Functions Display View Window Help
ŧ) 🖆		ÈÉ	🖥 🗞 🔀 🗙 💭 1x 05 06 15 16 22 23 🗲 💿 🛛
9	ModbusPoll	11		
M	odel Nam	ne:		Tx=5: Err=1: ID=10: F=03: Tx=1000ms
N	O CONNE	CTION		
Τ	Description	Address	Value	
0		169	0	
1		170	0	
2		171	0	Modbus Poll X
3		172	0	Modbus Poll X
4		173	0	
5		174	0	Port0 Can't open
6		175	0	
7		176	0	
8		177	0	ОК
9		178	0	

Trying to use the T3000 modbus poll but not working....

As I saw that TemcoSpring is using another version, I try with the official modbustool version (evaluation licence)

There I can choose the speed an get the connection, reading REG 169 to 178

lodbus Poll - Mb		D: 1 1	c			
	on Setup Function			-		
🎽 🖬 🖨 🗙	1월 후 고	05 06 15	16 17 22 2	:3 TC 🗵 🔄	🛛 🤋 💦	
41						
/lbpoll1						
= 11: Err = 1: I	D = 10: F = 03: S	R = 1000ms	;			
Alias	00160	Alias	00170			
			447			
			0			
			0			
			0			
			0			
			-934			
			778			
			0			
			2000			
			3			
	503					

Writing the registers for reset to factory settings following indication from TemcoSpring in his procedure from last week

ile	Edit Connect	ion Setup Fu	nctions Display	View Window	Help			
D	🖻 🖬 🎒 🗲	< 🗂 🗏 🏚	05 06 1	5 16 17 22 23	B TC 🗵 🚘	🤋 💦		
Doc	Mbpoll1							
		1: ID = 10: F =	03: SR = 1000)ms				
L								
	Alias	00160	Alias	00170				
0				139				
1				0				
2				0			•	~
3				0		Write Single R	egister	×
4				-934			10	
5				778		Slave ID:	10	Send
6				0		Address:	178	Cancel
7				2000				Current
6				3		Value:	이	
9		259						
-	,		II			Result N/A		
						Close dia	log on "Response (ok"
						-Use Functio	n	
							e single register	
						00. 00.	e single register	

It_Building->Default_Building **μ** × 📇 Default_Building Baudrate : 115200 \sim The fair alarm ppm setpoint of CO2 sensor : Serial Number : 131477 800 🚊 🔤 🔓 Local Network Protocol : Modbus RS485 \sim Modbus ID : 10 The poor alarm ppm setpoint of CO2 sensor : 1000 temcopanel -----× 🛐 T3_PT12 0 Temperature Unit : Roll time interval : Deg.C \sim ОК 🚊 🔤 📇 Serial Port Backlight time (On): 0 📇 Com3 Scroll Display 📄 AQ Show Hide ۲ 0 TX / RX 📇 Virtual Device Show Hide Alarm ۲ Ο Temperature ۲ 0 ۲ CO2 Status \bigcirc ۲ 0 Humidity ۲ Ο Temperature 0 ۲ CO2 Ο ۲ Humidity ۲ CO2 0 ۲ Temperature Setpoint 🔘 Temperature Setpoint 0 ۲ 0 ۲ Humidity Setpoint ۲ Humidity Setpoint 0 Ο ۲ CO2 Setpoint ۲ CO2 Setpoint Ο Ο ۲ User Message ۲ 0 Outdoor Temperature ۲ Ο AQ Value User Message 0 ۲ Value Unit Output Min Value Output Max Value Calibration Name Setpoint Output Value Range 0 0 81 0.0 4-20ma 0 2000 CO2 ppm 30.0 Deg.C 0.0 0.5 4-20ma 0.0 100.0 0 Temperature Humidity 32.3 % 54.0 0.4 4-20ma 0.0 100.0 0

Reading the AQ status after factory setting reset

4.Keypad trouble are not solved by Factory setting reset

Nothing seems to be changed except radio button selection.

Setpoint registers are kept

Temperature SP was not 0 at factory setting as far as I remember.

Trying the keypad to see if change the Temperature SP is now possible... No chance, the SP display is not coming anymore when pressing the Left/Right arrows

Trying to change the show/hide selection of first frame for T SP and H SP but no effect on AQ...

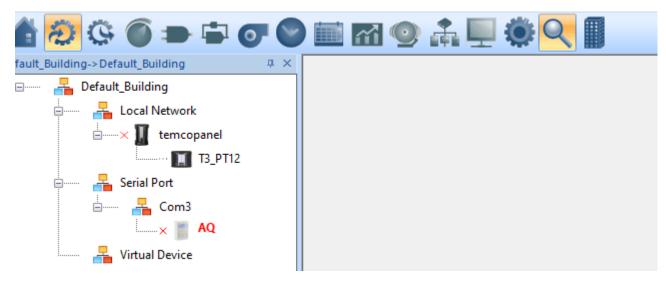
But It seems now possible to change the Setpoint from the T3000 status grid

Serial Number : 131477]		Ba	audrate :	115200	~	The fair alarr	n ppm setpoint of CO2	sensor : 800		
Modbu	us ID :	10]		P	rotocol :	10dbus RS485	~	The poor ala	rm ppm setpoint of CO	2 sensor : 1000	
Roll time inte	erval :	0]	Ten	mperatu	ire Unit :	Deg.C	~	•	O	<	
Backlight time	(On):	0]			Scroll Display						
						,		Show	Hide			
						TX / RX		۲	0			
		Show	Hide			Alarm		۲	0			
Temperature 💿		۲	0		CO2 State		tus	0	۲			
Humidity	Humidity		0			Tempera	ture	۲	0			
CO2		0	۲		Humidity			0	۲			
Temperatu	re Setpoint	۲	0		CO2			õ	۲			
Humidity Se	-	۲	0		Tempe		ture Setpoint	0	۲			
							Setpoint	õ	۲			
CO2 Setpoi		0	۲			CO2 Set		õ	۲			
User Messa	age	\circ	۲				Temperature	õ	۲			
AQ Value		۲	0	0		User Mes		0				
						USEI MES	saye	0	۲			
Name	Value			Unit	Se	tpoint	Output Val	ue	Range	Output Min Value	Output Max Value	Calibration
CO2	0			ppm	81		0.0		4-20ma	0	2000	0
Temperature	30.0			Deg.C	30.	0	0.5		4-20ma	0.0	100.0	0
Humidity	32.3			%	54.	0	0.4		4-20ma	0.0	100.0	0

And when changing from 0.0 to 30.0, display of temp SP changed in the scrolling display

5.Next step is to connect again AQ on the Nano Subnet like the PT12

First scan give PT12 detected but not the Nano nor AQ



How is it possible that the T3000 can see the PT12 though the Nano but not the Nano itself?

Perhaps an effect of the Nano routing...

Retry a second scan

Scan Result											
SCAN RESULT:											
Model	Ruilding	Floor	Peem	Sub act	Corial#	Addross	Doct	Brotocol			
Model	Building	Floor	Room	Sub_net	Serial#	Address	Port	Protocol			
Model temcopanel	Building fault_Buildi	Floor Floor1	Room Room1	Sub_net Sub_net1	Serial# 131370	Address 192.168.1.19	Port 502	Protocol TCP/IP			

Here all Temco devices are showing

I will reactivate a simple program copying Registers 136 137 167 168 to some VARS. This program was already encoded in PRG2 but was deactivated to avoid disturbing others tests. Here are the VAR and PRG definitions

🛔 🕀 🤄 💽 🖿 🐨 🜑	≜ ② ⓒ ● ➡ ♂ ◎ 函 ◎ ♣ Щ 尊 < 🛙												
)efault_Building->Default_Building & A ×		S VARIABLE											
Image: Serial Port Image: Default_Building Image: Default_Building	Variable VAR1 VAR2 VAR3 VAR4 VAR5 VAR6	Full Label	Auto/Manual Auto Auto Manual Manual Auto	Value 28.352 28.342 3.000 4.000 5.000 6.000	Units Deg.C Deg.C Unused Unused Unused	Label F14 P14 AQ_T AQ_H AQ_AQ CT							
Virtual Device	VAR7 VAR8 VAR9 VAR10 VAR11		Manual Manual Manual Auto Auto	7.000 8.000 9.000 Off On	Unused Unused Unused On/Off On/Off	AQ_TSP BLINK COIL							
	VAR12 VAR13 VAR14 VAR15 VAR16		Auto Auto Auto Auto Auto	Start Start Start Start Alarm	Start/Stop Start/Stop Start/Stop Start/Stop Alarm/Normal	C1 C2 C3 C4 F1							
	VAR17 VAR18 VAR19		Auto Auto Auto	Normal 0.000 0.000	Normal/Alarm Unused Unused	F2 F3 F4							

AQ Vars 3 to 7 were forced to manual to make tests reading values from raspberry using codesys.

PROGR	PROGRAM										
Program	Full Label	Status	Auto/Manual	Size	Run Status	Label					
V 1	FILTER	ON	Auto	182	Normal						
2	AQ_READ	OFF	Auto	107	Normal						
3	TO4	OFF	Auto	136	Normal						
					N 1						

fault_Building Input Panel Full Label Auto/Manual Value Units Range Calibration Sign Filter Status Signal Type Label External Local Network Input Panel Full Label Auto/Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al0 External IN2 3-254 T14 bureau test Auto 28.05 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry T14 External IN3 3-254 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 10 Open Themistor Dry T15 External IN4 3-254 Al3 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al3 External IN5 3-254 Al4 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External IN5 <th>al T3-PT12 Input1 al T3-PT12 Input2 al T3-PT12 Input3 al T3-PT12 Input4 al T3-PT12 Input4 al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input7</th>	al T3-PT12 Input1 al T3-PT12 Input2 al T3-PT12 Input3 al T3-PT12 Input4 al T3-PT12 Input4 al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input7
Intra 3:254 Allo Manual -253:26 Deg.C G3K 40 to 120 0.0 + 1 Open Themistor Dry Allo External IN2 3:254 Allo Manual -253:26 Deg.C G3K 40 to 120 0.0 + 1 Nomal Themistor Dry TI4 External AQ IN3 3:254 Alla Auto -255:26 Deg.C G3K 40 to 120 0.0 + 10 Open Themistor Dry TI5 External IN3 3:254 Alla Auto -255:26 Deg.C G3K 40 to 120 0.0 + 10 Open Themistor Dry TI5 External IN5 3:254 Alla Auto -255:26 Deg.C G3K 40 to 120 0.0 + 1 Open Themistor Dry Alla External IN5 3:254 Alla Auto -255:26 Deg.C G3K 40 to 120 0.0 + 1 Open Themistor Dry Alla External IN6 3:254 Alla Auto	al T3-PT12 Input2 al T3-PT12 Input3 al T3-PT12 Input4 al T3-PT12 Input4 al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input7
AQ IN3 3-254 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 10 Open Themistor Dry T15 External IN4 3-254 Al3 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al3 External IN5 3-254 Al4 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External Serial Port IN6 3-254 Al5 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External IN6 3-254 Al5 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External IN7 3-254 Al6 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al6 External IN8 3-254 Al7 Aut	al T3-PT12 Input3 al T3-PT12 Input4 al T3-PT12 Input4 al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input7
NG IN4 3-254 Al3 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dy Al3 External Serial Port IN6 3-254 Al4 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dy Al4 External Serial Port IN6 3-254 Al5 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External IN6 3-254 Al5 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al4 External IN7 3-254 Al6 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al6 External IN8 3-254 Al7 Auto -255.26 Deg.C G3K +40 to 120 0.0 +	al T3-PT12 Input4 al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input6 al T3-PT12 Input7
Image: Note of the state o	al T3-PT12 Input5 al T3-PT12 Input6 al T3-PT12 Input7
Serial Port IN6 3-254 AI5 Manual -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry AI5 External Virtual Device IN8 3-254 AI6 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry AI6 External IN8 3-254 AI7 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry AI6 External	al T3-PT12 Input6 al T3-PT12 Input7
IN7 3-254 Al6 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al6 External irtual Device IN8 3-254 Al7 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Themistor Dry Al6 External	al T3-PT12 Input7
rtual Device IN7 3-254 AI6 Auto -255.26 Deg.C G3K-40 to 120 0.0 + 1 Open Themistor Dry AI6 External IN8 3-254 AI7 Auto -255.26 Deg.C G3K-40 to 120 0.0 + 1 Open Themistor Dry AI7 External	
1188 3-234 A17 Auto -233.26 Deg.C 337.4010120 0.0 + 1 Open Themistor Dry A17 External	T3-PT12 Input8
IN9 3-254 AI8 Auto -255.26 Deg C G3K 40 to 120 0.0 + 1 Open Theories Dev AI8 External	a lot the hippens
	al T3-PT12 Input9
IN10 3-254 AI9 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Thermistor Dry AI9 External	al T3-PT12 Input10
IN11 3-254 AI10 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Thermistor Dry AI10 External	al T3-PT12 Input11
IN12 3-254 AI11 Auto -255.26 Deg.C G3K -40 to 120 0.0 + 1 Open Thermistor Dry AI11 External	al T3-PT12 Input12
) Clear (F3) Load File (F7) Save File (F6) Refresh (F8) Settings	
2) Clear (F3) Load File (F7) Save File (F6) Refresh (F8) Settings Panel : 3 Program : 2 Name : PRG2	
Send (F2) Clear (F3) Load File (F7) Save File (F6) Refresh (F8)	Settings
Send (F2) Clear (F3) Load File (F7) Save File (F6) Refresh (F8)	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT INTERVAL (00:00:01) THEN GOSUB 100	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT INTERVAL (00:00:01) THEN GOSUB 100 ND 10 REM READ DATA FROM AQ SENSOR	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT INTERVAL (00:00:01) THEN GOSUB 100 ND REM FILTERING	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT INTERVAL (00:00:01) THEN GOSUB 100 ND REM FILTERING I 0 REM READ DATA FROM AQ SENSOR 20 AQ_H = 3.10MB_REG137 20 AQ_T = 2.10MB_DEC126	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT FINTERVAL (00:00:01) THEN GOSUB 100 ND REM FILTERING F14 = (T14 - F14) / CT + F14	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT FINTERVAL (00:00:01) THEN GOSUB 100 ND REM FILTERING F14 = (T14 - F14) / CT + F14	Settings
The first field of the field o	Settings
EM TESTING FILTER AND FORECAST ON MESUREMENT FINTERVAL (00:00:01) THEN GOSUB 100 ND REM FILTERING F14 = (T14 - F14) / CT + F14 Hand P Program + 2 - Name + + 2 - Nam	Settings

PRG2 is supposed to read data from AQ, Line 55 is used to see if program is executed

3.10MB_REGxxx is because AQ is ID10 on panel 3, am I right?

PRG3 is trying to read coils status from met connect triac output module (ID38)

Panel: 3 Program: 3 Name: PRG3 Send (F2) Clear (F3) Load File (F7) Save File (F6) Refresh (F8) Settings

10 REM TEST COMM TO MR-TO4 20 C1 = 3.38MB_COIL1 30 C2 = 3.38MB_COIL2 40 C3 = 3.38MB_COIL3 50 C4 = 3.38MB_COIL4 60 F1 = 3.38MB_COIL5 70 F2 = 3.38MB_COIL5 70 F2 = 3.38MB_COIL6 80 F3 = 3.38MB_COIL7 90 F4 = 3.38MB_COIL8 140 IF INTERVAL (00:00:10) THEN BLINK = NOT BLINK 100 END

Line 140 is used to check that this program is really running or not

So I activated the PRG2

PROGRAM

Program	Full Label	Status	Auto/Manual	Size	Run Status	Label
1	FILTER	ON	Auto	182	Normal	
V 2	AQ_READ	ON	Auto	107	Normal	
3	TO4	OFF	Auto	136	Normal	
4		ON	Auto	0	Normal	

And checked VARS after switching them back to AUTO

VARIABLE

Variable	Full Label	Auto/Manual	Value	Units	Label
VAR1		Auto	28.259	Deg.C	F14
VAR2		Auto	28.239	Deg.C	P14
VAR3		Auto	3.000	Unused	AQ_T
VAR4		Auto	4.000	Unused	AQ_H
VAR5		Auto	5.000	Unused	AQ_AQ
VAR6		Auto	6.000	Unused	СТ
VAR7		Auto	7.000	Unused	AQ_TSP
(400		Manual	0.000	I far used	

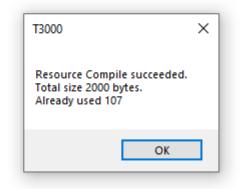
But values or VAR 3 to VAR7 are not refreshed

So activating PRG2 seems not enough

Trying recompile PRG2

Panel: 3 Program: 2 Name: PRG2 Send (F2) Clear (F3) Load File (F7) Save File (F6) Refresh (F8) Settings

```
10 REM READ DATA FROM AQ SENSOR
20 AQ_H = 3.10MB_REG137
30 AQ_T = 3.10MB_REG136
40 REM AQ_AQ = 3.10MB_REG184
50 AQ_TSP = 3.10MB_REG167
55 AQ_AQ = AQ_AQ + 0.010
60 END
```



VARIABLE

Variable	Full Label	Auto/Manual	Value	Units	Label
VAR1		Auto	28.238	Deg.C	F14
VAR2		Auto	28.216	Deg.C	P14
VAR3		Auto	0.000	Unused	AQ_T
VAR4		Auto	0.000	Unused	AQ_H
VAR.5		Auto	6.010	Unused	AQ_AQ
/AR6		Auto	6.000	Unused	ст
/AR7		Auto	0.000	Unused	AQ_TSP

So now PRG2 is really executed

But register from AQ are not properly read.

So please advice for the good syntax to do this

7.Recheck the AQ status before trying to read/write AQ register from Modbus Poll

Serial Number : 131477			Ba	audrate : 11	15200	~	The fair alarm	ppm setpoint of CO2	sensor : 800		
Modbu	us ID :	10		Pr	rotocol : Mo	odbus RS485	~	The poor alarn	n ppm setpoint of CO	2 sensor : 1000	
Roll time interval : 0		Te	emperatu	ure Unit : De	eg.C	~]	O	ĸ		
Backlight time (On): 0				Scroll Display							
					Scroll Display		Show	Hide			
					TX / RX		۲	0			
	Show Hide		Alar			۲	õ				
Temperatur	re	۲	0		CO2 Statu	IS	0	۲			
Humidity	Humidity (0		Temperature		۲	0			
CO2		0	۲		Humidity		0	۲			
Temperatur	re Setpoint	۲	0		CO2		0	۲			
Humidity Se	etpoint	۲	0		Temperatu	ure Setpoint	0	۲			
CO2 Setpoi		0	۲		Humidity S	etpoint	0	۲			
User Messa		0	•		CO2 Setpo	pint	0	۲			
AQ Value	.9-		0		Outdoor T	emperature	0	۲			
ng tube		0	0		User Mess	age	0	۲			
Name	Value		Unit	Set	tpoint	Output Va	ue	Range	Output Min Value	Output Max Value	Calibration
CO2	0		ppm	81		0.9		4-20ma	0	2000	0
Temperature	31.8		Deg.C	30.	0	0.5		4-20ma	0.0	100.0	0
Humidity	31.8		%	54.	0	1.0		4-20ma	0.0	100.0	0
1											

📴 Mbpoll1

Tx = 130: Err = 0: ID = 10: F = 03: SR = 1000ms Alias Alias Alias Alias 1 3 4 6 7 8 9 AQ_T AQ_H T_SP H_SP

Alias were added manually to show were registers are supposed to be. This comply with the AQ documentation and is coherent from the reading on the scrolling display and status windows in T3000.