

LIST OF SUPERVISION VARIABLES MODBUS

**LIST OF CONTROL VARIABLES
FOR WATER-AIR units (1 circuit)**

Supervision variables – WATER-AIR MODBUS 1 circuit

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INTRODUCTION

List of the supervision variables for RTU Modbus communication protocols (connection to the standard port).
Please contact Hitecsa for other communication protocols.

SUPPORT DEVICE

MODBUS is integrated in the PCB of the unit (μ PC3).

CONFIGURATION

Communication type: asynchronous. The defect values are as follows:

Bits per second	19200
Data bits	8
Parity	None
Stop bits	1

UNIT MODELS

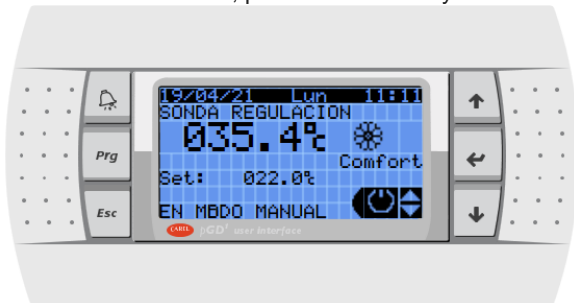
Models
91
121
141
171
201
251
271
401
501
701
721
751
1001
1201
1501

CHANGING ADDRESSES AND BAUD RATE

FROM THE pGD1 or MINI pGD TERMINAL

(It is not possible to make these changes from the TH-Tune terminal).

From the main screen, press the **Prg** key:






Enter password:

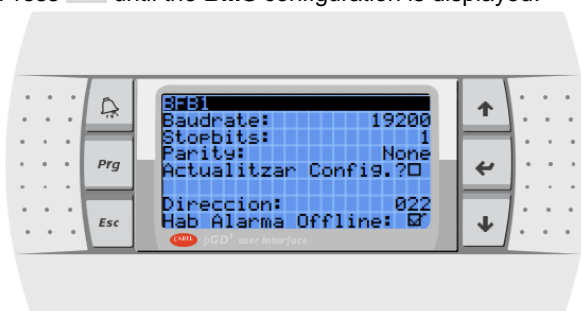


Select "Settings":



Press  until  **Network** is displayed then press **Enter** .

Press  until the **BMS** configuration is displayed:



LIST OF VARIABLES

LEGENDS

REGISTER TYPE	
HR	Holding Register
IR	Input Register
C	Coils

PERMISSION	
R	Read only
W	Write only
R/W	Read and write

Description	Permission	Modbus RTU	Type
Final regulation set point	R/W	1	HR
Regulation probe value	R	2	IR
Outdoor temperature value	R	3	IR
Return or room temperature value	R	4	IR
Supply temperature value	R	5	IR
Liquid pressure value	R	6	IR
Water inlet temperature value	R	10	IR
Outlet water temperature value	R	11	IR
Compressor status	R	50	DI
Cooling differential	R/W	57	HR
4-way valve status	R	57	DI
Heating differential	R/W	59	HR
Indoor fan status	R	61	DI
On/Off by BMS	R/W	90	Coil
Reset BMS alarms	R/W	91	Coil
Status alarm – Outdoor temperature probe	R/W	100	DI
Status alarm – Inlet water temperature probe	R/W	101	DI
Status alarm – Outlet water temperature probe	R/W	102	DI
Status alarm – Supply temperature probe	R/W	104	DI
Status alarm – Liquid pressure transducer	R/W	105	DI
Status alarm – High pressure manual switch	R/W	124	DI
Status alarm – High pressure switch CRITICAL	R/W	125	DI
Status alarm – Low pressure	R/W	126	DI
Status alarm - Low pressure CRITICAL	R/W	127	DI
Status alarm – Flow switch	R/W	128	DI
Status alarm - Flow switch CRITICAL	R/W	129	DI
Status alarm – Anti-frost CRITICAL	R/W	145	DI
Status alarm - Klixon resistances	R/W	152	DI
Status alarm – Thermal - indoor fan	R/W	153	DI
Status alarm - Compressor overload	R/W	156	DI
Status alarm - Th-Tune off-line	R/W	173	DI
Fan regulation	R/W	209	HR
On/Off by keyboard	R/W	210	HR
Regulation mode (Cooling/Heating)	R/W	211	HR
Present day	R/W	238	IR
Software actual version - X	R/W	243	IR
Software actual version - Y	R/W	244	IR

LIST OF MODBUS VARIABLES
1 circuit WATER-AIR units

Description	Permission	Modbus RTU	Type
Software actual version - Z	R/W	245	IR
Present month	R/W	246	IR
Present year	R/W	247	IR
Minimum waiting time compressor ON	R/W	248	HR
Present hour	R/W	248	IR
Minimum waiting time compressor OFF	R/W	249	HR
Present minute	R/W	249	IR
Minimum waiting time same compressor ON	R/W	250	HR
Minimum waiting time, low pressure alarm occurs at unit start-up	R/W	254	HR
Minimum waiting time, low pressure alarm occurs, during operation	R/W	255	HR
Minimum waiting time Alarm, flow switch at unit start-up	R/W	256	HR
Minimum waiting time Alarm flow switch during operation	R/W	257	HR
Baud rate BMS (0-9)	R/W	300	HR
Address BMS	R/W	301	HR
Update Configuration	R/W	302	Coil
Enable emergency heating resistance	R/W	303	Coil
Reset unit	R/W	303	HR
Enable emergency heating resistance (heating mode only) - Alarm status	R/W	304	Coil
Pressure regulating valve value	R	398	IR

REGISTER TYPE	
HR	Holding Register
IR	Input Register
C	Coils



**HIPLUS AIRE
ACONDICIONADO S.L.**

Masia Torrents, 2
Tel. +34 93 893 49 12
Fax. +34 93 893 96 15
08800 Vilanova i la Geltrú
Barcelona, Spain

www.hitecsa.com