



MODBUS COMMUNICATION FOR CAREL CONTROLLERS

APPENDIX TO OPERATION AND MAINTENANCE MANUAL FOR CONTROL BOXES VS... CG uPC...



THE FOLLOWING MANUAL ASSUMES GOOD KNOWLEDGE OF TECHNICAL DOCUMENTATION INCLUDED WITH THE AIR HANDLING UNIT (AHU). THIS MANUAL CONSIDERS ONLY THE CONTROL AND COMMUNICATION CIRCUITS. THE INSTALLATION OF THE FREQUENCY CONVERTER AND INSTALLATION OF MAINS AND MOTOR CABLES SHOULD BE DONE ACCORDING TO THE LG IGSA MANUAL.

1. NEW COMMUNICATION SETTINGS INTRODUCED IN SEPTEMBER 2014

在 2014 年 9 月新的通讯设置介绍

For better stability of local Modbus communication, default baudrate was reduced from 19200bps to 9600bps. 为了 Modbus 更加稳定, 默认的波特率已经被减少从 19200bps 到 9600bps

NOTE! All devices connected to the Modbus line must be set to the same baudrate. Otherwise the communication will not work. 注意: 所有设备连接到 Modbus 必须被设置成同样的波特率, 否则通讯将不工作。

Device 设备	Version and setting	Version and setting
HMI BASIC	Until August 2014 Default baudrate 19200 到 2014 年 8 月默认的波特率是 19200	Since September 2014 Default baudrate 9600 从 2014 年 9 月后默认的波特率为 9600
CONTROLLER CAREL UPC 卡罗尔控制	APP version until 1.12 Default baudrate 19200 APP 版本直到 1.12 默认波特率 19200	APP version since 1.13 Default baudrate 9600 APP 版本自 1.13 默认波特率 9600
Variable Frequency Drive LS iC5 / iG5A 变量变频驱动	Default baudrate always 9600 默认波特率一直是 9600	

2. HOW TO CHECK MY VERSION? 怎么检查我的版本

2.1. HMI BASIC OLD – 19200bps 老版本-19200bps



2.2 HMI BASIC NEW – 9600bps 新的版本-9600bps “NEW FIRMWARE”新的固件



2.3 APPLICATION CAREL UPC 运用卡罗尔 UPC

SERVICE MENU, screen SYSTEM INFO, field Program info 服务手册, 屏幕系统通知, 区域程序通知

```
SYSTEM INFO
Program info
APP uPC v.1.10
Controller
00000 00000
T_Mem_Cnt 00000
Password 1357
```

All controllers up to APP uPC v.1.12 have default baudrate of 19200bps
所有的控制 高于 APP uPC v.1.12 已经默认波特率 19200bps.

All controllers since APP uPC v.1.13 have default baudrate of 9600bps and easy access to change that setting.

所有的控制自 APP uPC v.1.13 后 默认波特率是 9600bps, 非常容易的进入改变设置。

3. HOW TO SET THE BAUDRATE EASILY? 怎么样简单的设置波特率?

3.1. HMI BASIC

Power up the HMI BASIC 打开电源

Hold FAN and POWER buttons for 3 seconds to enter the settings 按住风扇的电源键 3 秒进入设置页面。



Enter the code 进入的代码

000
Code

>> change >>

022
Code

改变

Find BAUD setting and set the right value 发现 BAUD 设定和新的数值

1
baud

for 9600 bps

2
baud

for 19200 bps

Find ESC 发现 ESC

ESC

and press the knob to leave the settings

Done. 按下旋钮设置完成

3.2. APPLICATION CAREL UPC 运用卡罗尔 UPC

APP uPC v.1.13 and newer APP uPC v.1.13 and 和更新

Power up the controller and connect the HMI ADVANCED 打开控制电源连接 HMI 高级设置

Enter the password and go to SERVICE MENU 输入密码和进入服务菜单

Set parameter Modbus bps 设置 Modbus 参数

```
CONFIG 1/5
APPLICATION CODE ERROR
Program mode Config
Unit size US10-15
Application AD 0000
Main sensor SUPPLY
HMI Basic No
Modbus bps 9600
```

Restart the controller by switching the power off/on. 重新启动控制系统通过开和关。Done.

3.3. VARIABLE FREQUENCY DRIVE 变量频率驱动

Power up the VFD 打开变频器的电源

Find I61 in the menu 在菜单中发现 I 61

161

Enter the right baudrate setting 进入正确的波特率设置

3

for 9600 bps

4

for 19200 bps

Done. 完成