

The Drive & Control Company



Rexroth变频器 USB 蓝牙适配器

使用手册



R912006939 版本 02

简介

该**蓝牙™**适配器(SIG ID:D030876)适用于Rexroth xFC x610变频 器,配套移动设备App应用软件ConverterWorks Mobile 可实现:

- (1) 变频器参数读写
- (2) 参数文件上传和下载
- (3) 变频器固件升级
- (4) 故障诊断等

该适配器采用世界领先的无线通信芯片及系统方案供应商TI (Texas Instruments) 公司的LMX9838 蓝牙串行端口模块, 具 备完整的蓝牙2.0 协议栈。具有全速 USB 主设备接口, 支持 数据高速传输,内置天线,结构紧凑,便于携带。

外观



黄-绿指示灯说明:

黄灯	绿灯	状 态
常亮	常亮	USB驱动加载中Φ
常亮	闪烁	USB驱动加载成功,蓝牙芯片初始化中
灭	闪烁	变频器与蓝牙适配器连接成功, 等待建立蓝牙通信
灭	常亮	蓝牙适配器与手持设备成功建立蓝牙通信, 无数据 传输❷
闪烁	常亮	蓝牙适配器与手持设备成功建立蓝牙通信, 有数据 传输

- ①:如果长时间无响应、处理方法请参见"故障诊断"。
- ②:处理方法参见"故障诊断"。

连接与设置



变频器与蓝牙适配器的连接如图所示。本产品支持热插拔, 即可以在变频器通电的情况下进行操作。

使用该蓝牙适配器前,需要在移动设备中下载和安装相应的 App应用软件ConverterWorks Mobile。

目前此应用软件只提供Android版(V4.2及以上)。

- 1. 在本手册封面扫描二维码, 下载应用软件 ConverterWorks Mobile
- 2. 按照提示信息安装软件。
- 3. 将蓝牙适配器插入变频器并给变频器上电。 待蓝牙适配器的双色指示灯变为绿色闪烁,表示变频 器与蓝牙适配器连接成功, 等待建立蓝牙通信。
- 4. 打开ConverterWorks Mobile, 进入主界面后单击左上 "Rexroth"图标。
- 5. 单击左侧"蓝牙"进行蓝牙适配器的搜索(搜索结果为变频器 标签上的SN序列号),完成匹配(Pin码4917)与连接。
- 6. 提示"成功"后,单击"返回",即可进行控制操作。

D⊋ 此款蓝牙适配器只能使用在固件版本高于(含) 03V10 的变频器上。

故障诊断

故障	可能原因	解决方案
•	1. 瞬间电磁干扰 2. 变频器固件版本较低 3. 硬件检测故障	 排除电磁干扰后,重新拔插 联系技术支持工程师升级变频器固件版本 变频器重新上电复位,若故障仍存在,请联系技术支持工程师
0	1. 手持设备未发送指令 2. 由于瞬时数据量较大, 蓝牙适配器发生"锁死" 现象	1. 手持设备向蓝牙适配器发送指 令 2. 重新拔插蓝牙适配器

使用条件及安全说明

	使用温度: -1055 °C
使用条件	海拔高度: ≤ 4,000 m
	防护等级: IP 20
	远离微波辐射源
安全说明	远离利器、避免重物和挤压
	远离油类、化学制剂和有机液体等

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Rexroth Frequency Converter

USB Bluetooth Adapter Operating Instructions



Edition 02

Introduction

The Bluetooth® adapter (SIG ID: D030876) is applicable for Rexroth's frequency converter of xFC x610 series. It is designed to be in combined operation with App program of "ConverterWorks Mobile" as a means to fulfill the functions that include,

- (1) Frequency converter parameter read/write
- (2) Customer parameter upload/download
- (3) Frequency converter firmware upgrade
- (4) Error diagnosis, etc

Integrated with LMX9838, the Bluetooth serial port module manufactured by TI (Texas Instruments), the adapter supports complete Bluetooth 2.0 protocol stack. It features full speed USB connection with the master as well as high speed data transfer. With embedded antenna, it is compactly built and easy to carry.

Appearance



Light indicator status

Yellow	Green	Status	
ON	ON	USB driver is loading	
ON	Blinks	USB driver successfully loaded. Bluetooth module is initializing	
OFF	Blinks	Successfully connected between the frequency converter and the Bluetooth adapter, waiting for the Bluetooth communication to be established	
OFF	ON	Bluetooth communication successfully established between the Bluetooth adapter and hand-held devices, with no data transmission being executed ②	
Blinks	ON	Bluetooth communication successfully established between the Bluetooth adapter and hand-held devices, with data transmission being executed	

(b): If no response for a long while, please refer to "Diagnosis". 2 : Please refer to "Diagnosis"

Connection and Settings



The connection of Bluetooth adapter to the frequency converter is shown as above. This adapter supports hotplug, which allows the adapter to plug in immediately even when the frequency converter is powered-on. Make sure that "ConverterWorks Mobile" App shall be downloaded and installed on the mobile devices before using the Bluetooth adapter.

The App program is available only for Android system with version 4.2 and above.

- 1. Download the App program of "ConverterWorks Mobile" by scanning the QR code from the front cover of this application instruction.
- 2. Install the App program by following the installation guide.
- 3. Insert the adapter to frequency converter and power on the frequency converter. When the adapter's green light gets blinking, which indicates that the connection is successfully established between frequency converter and Bluetooth adapter
- 4. Open "ConverterWorks Mobile", and click "Rexroth" icon on top left after logon to the main page
- 5. Click "Bluetooth" on left-hand side to search for Bluetooth adapter and the returned result shall be the SN serial number of frequency converter. Complete the compatibility setting (Pin: 4917) and get connected.
- 6. With the message indicating installation successful, click "Return" and the system is ready to run.

The Bluetooth adapter is applicable only for the frequency converter with firmware version of 03V10 and above

Diagnosis

Error	Possible reasons	Solutions
0	Transient electromagnetic interference Low firmware version being used in the frequency converter Faulty hardware detection	Remove the electromagnetic interference and re-plug the adapter 2. Contact technical support engineers to upgrade the firmware version 3. Contact technical support engineers if the fault persists after resetting the frequency converter
8	No command given from hand-held device to the adapter The adapter becomes "deadlocked" due to overloading of instantaneous data	Send commands to the adapter from hand-held device Re-plug the adapter

Ambient Conditions and Safety Notes

	Temperature: -1055 °C
Ambient conditions	Altitude: ≤ 4,000 m
	Degrees of protection: IP 20
	Away from microwave radiation
Safety notes	Away from sharp objects and no hard pressing
	Away from oil, chemical agent, organic liquid, etc.

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