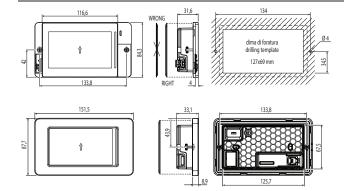


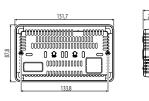


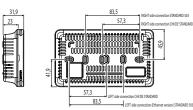


尺寸 (mm) / Dimensions (mm)

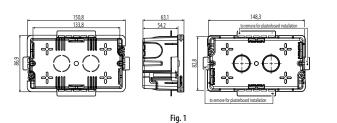


墙面安装配件(如图3d)-产品代码: PGTA00SM40 Accessory for wall surface installation (ref. Figure 3d) - P/N: PGTA00SM40

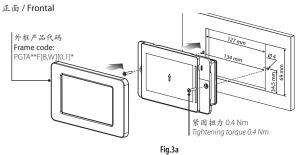


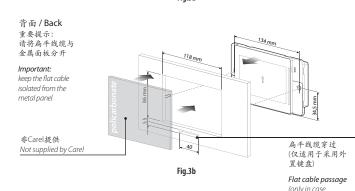


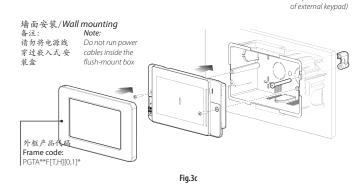
嵌入式安装配件(如图3c)-产品代码: PGTA00RM40 Accessory for flush-mounted wall installation (ref. Figure 3c) - P/N: **PGTA00RM40**

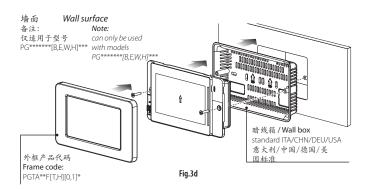


组装和安装 (mm) / Assembly and installation (mm)









pGDx 4.3寸图形终端是触摸式显示屏产品系列中的一部分,专为简化与pCO sistema 系列控制器的对接而设计。此图形终端采用的电子技术及新型的65K色彩显示,可 提供高品质图像和先进的功能,图形界面更加出众。触摸式面板简化了不同界面之 间的导航,使用户和机组之间的互动更加简单。有多种安装类型的不同产品可提 供:正面或背板、墙面安装或嵌入式安装。但不管采用哪种型号,此终端均可以水 平安装或垂直安装。

产品代码

代码	RS485端口 数量	ETH端口 数量	Wi-Fi连接	RJ12 端口 数量	电源口
PGR04****A***	-	-	-	1	-
PGR04****B***	1	-	-	-	1
PGR04****C***	1	1	-	-	1
PGR04****R***	1	1	✓	-	1
PGR04****W***	1	-	✓	-	1
PG[B,R]04****E***	-	1	-	-	1
PG[B,R]04****H***	-	1	✓	-	1

pGDx终端, 电源和RS485连接头(仅适用带此接头的型号); 紧固螺丝; 技术文 档, Wi-Fi天线(仅适用带此接头的型号PG*04***D[H,R,W]***)。不包括:塑料外 框,PGTA00TRX0电源和暗线盒。

安装注意事项

为确保安装正确,请联络有资质的安装工。

- 请勿将终端安装在具有下列特点的环境中:
- 相对湿度高于技术规格中规定的值;
- 具有强烈震动或冲击;
- 暴露于侵蚀和污染中的环境(例如: 硫和氨的气体、盐雾、烟雾), 以防止腐蚀 和/或氧化;
- 存在强烈磁性和/或无线电频率干扰的环境(因此切勿安装在发射天线附近);
- 暴露在阳光直射的环境中。
- 房间温度波动大且急速;
- 存在爆炸物或可燃气体混合物。
- 以下要求必须满足:
- 如果内置温度/湿度传感器,建议:
- 只使用配置通风口的面板
- 将显示屏安装在远离制冷制热系统气流外
- 如果是垂直安装,请将传感器定位在显示屏下方
- 仅使用屏蔽线,用于Ethernet和RS485通讯网络;
- 如使用标定以外的电压可能会严重损坏系统;
- 使用适合于相应终端的线缆头。松开每个螺丝并插入线缆头,然后紧固螺丝。操 作完成后,轻轻拉动线缆,检查线缆是否已固定好;
- 如触摸屏使用外置WiFi天线,确保至少基本的隔离 (500 Vac,根据IEC 60730-1) 在 RP-SMA接头和保护接地之间:
- 请勿在上电时打开本终端:
- 低温运行可能导致显示屏反应速度的显著下降。此种现象被视为正常现象,而不 会标识为故障;
- 对于防护等级为IP65的型号,正确安装方式为螺丝紧固扭力为0.4 Nm;
- 避免接触终端上任何带电的部件;
- 确保线缆固定准确,避免接触带电部件,以防终端发生意外断开。

通知栏上的颜色含义

上电时,通知栏短时显示一个蓝色信号,表示boot阶段启动。随后的信号将由 c.touch 开发的应用程序进行管理。

HMI运行时间和/或程序更新

1. 根据用c.touch生成("Update package")"更新包"时选择的 选项,将包含运行时间或程序或两个都有的的更新包 (.ZIP file)、复制到一个USB驱动器、然后再将USB驱动器 插到pGDx、按住pGDx终端显示屏持续几秒钟、直到显 示快捷菜单,可使程序侧失效(参考右侧图)



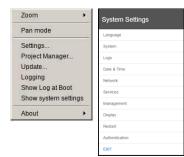
运行时间和/或程序 更新。启动更新, 然 后将显示下面这个



然后按照引导的 步骤,选择保存 在USB驱动器上 的文件, 并且点 击下一个按钮以

系统设定

触动并按住pGDx终端界面持续几秒 钟,直到显示快捷菜单(如下图), 选择"显示系统设定"("Show system settings"); 主要配置程序界面将显示(如侧面图):



下表为与不同菜单项目有关的功能清单:

语言	设定系统语言(非c.touch程序)
系统	包含在pGDx上的信息: BSP版本,存储器,定时器和温度/湿度传感器(如果已配置)
日志	下载系统日志文件
日期&时间	使用自动或手动步骤设定pGDx的日期和时间
网络	显示当前系统IP数据(地址、子网络、网关、DHCP、DNS)并访问以太网和WiFi界面
服务	启动/停止不同系统设备(Modbus服务器端口, pGDx网络地址)
管理	更新不同pGDx BSP分区(ConfigOS, MainOS, Bootloader, 开机图像,等等)
显示重启	设定亮度,背光超时,界面方向和触控面板校准
重启	重启系统
授权 退出	设定密码,用于访问
退出	退出菜单

Introduction

The pGDx 4.3 inch graphic terminal is part of the family of touchscreen terminals designed to simplify user interface with the pCO sistema family controllers. The electronic technology used and the new 65K colour display means high quality images and advanced functions are available for a superior appearance. The touchscreen panel moreover makes interaction between the user and the unit much easier by simplifying navigation between the various screens. Different types of installation are available, depending on the model: front or back panel, wall surface or flush-mount. In any case, the device can be mounted either horizontally or vertically.

Part numbers

Codice	No. RS485	No. ETH	Wi-Fi	No. RJ12	Power supply
Couice	ports	ports	connectivity	ports	port
PGR04****A***	-	-	-	1	-
PGR04****B***	1	-	-	-	1
PGR04****C***	1	1	-	-	1
PGR04****R***	1	1	✓	-	1
PGR04****W***	1	-	✓	-	1
PG[B,R]04***E***	-	1	-	-	1
PG[B,R]04****H***	-	1	✓	-	1

Packaging contents

pGDx; power supply and RS485 connectors (only on models where featured); fastening screws; technical leaflet, Wi-Fi antenna (only for models where fitted, PG*04***D[H,R,W]***). Not included: frame, PGTA00TRX0 power supply and wall mounting boxes.

Installation warnings

For correct installation contact a qualified installer.

- Do not install the terminals in environments with the following characteristics:
- relative humidity greater than the value specified in the technical specifications;
- strong vibrations or knocks:
- exposure to aggressive and polluting atmospheres (e.g.: sulphur and ammonia fumes, salt spray, smoke) so as to avoid corrosion and/or oxidation;
- strong magnetic and/or radio frequency interference (therefore avoid installing the units near transmitting antennae);
- exposure to direct sunlight or the elements in general;
- large and rapid fluctuations in the room temperature;
- environments where explosives or mixes of flammable gases are present.

The following requirements shall be met:

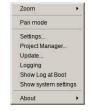
- with built-in temperature/humidity sensor, it is recommended to:
 - only use faceplates fitted ventilation openings
 - install the display away from air streams coming from heating/cooling systems
- if installed vertically, position the probe at the bottom of the display only use shielded cables for Ethernet and RS485 communication networks
- power supply voltages other than those specified may seriously damage the system;
- use cable ends suitable for the corresponding terminals. Loosen each screw and insert the cable ends, then tighten the screws. When the operation is completed, slightly tug the cables to check they are sufficiently tight;
- in models with an external WiFi antenna, ensure at least basic insulation (500 Vac according to IEC 60730-1) between the RP-SMA connector and the protective earth;
- do not open the product when powered;
- operation at low temperatures may cause a noticeable decline in the response speed of the display. This should be considered normal and does not indicate a malfunction.
- for one correct installation of IP65 models be safe of a 0,4 Nm screws tightening and a correct assembly of the gasket.
- avoid any contact of the product with live parts. • be sure that cables are accurately fixed in order to avoid contact with live parts in case of
- their accidentally disconnection.

Meaning of the colours on the notification bar At power-on, the notification bar briefly shows a blue signal to indicate the start of the

boot phase. The subsequent signals are then managed by the application program developed using c.touch.

HMI Runtime and/or application update

Copy the update package (.ZIP file) containing the runtime or application, or both, depending on the options selected when generating the "Update package" using c.touch, to a USB pendrive and then plug the pendrive into the pGDx and hold the pGDx terminal screen for a few seconds until the shortcut menu is displayed, disableable application side (see the figure on the side):



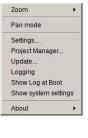
2. Select "Update..." to start the Runtime and/ or application update procedure. The update utility will start and the following window will be displayed:



3. Then follow the quided procedure, selecting the file saved on the USB pen drive and clicking the next button to confirm

System settings

Touch and hold the pGDx terminal screen for a few seconds until the shortcut menu is displayed (see the figure below). Select "Show system settings"; the main configuration program screen will be displayed (figure on the side):





Below is a list of the functions relating to the different menu items:

Language	Set the system language (not the c.touch application)				
System	Contains information on the pGDx: BSP version, Memory, Timers				
System	and temperature / humidity sensor (if featured)				
Logs	Download the system log files				
Date & Time	Set pGDx date and time using the automatic or manual procedure				
Network	Show current system IP data (address, subnet, Gateway, DHCP, DNS)				
Network	and access the Ethernet and WiFi interface				
Services	Start/stop various system services (Modbus server port, pGDx				
Services	network address,)				
Management	Update the different pGDx BSP partitions (ConfigOS, MainOS,				
Management	Bootloader, Splash image, etc)				
Display	Set brightness, backlight timeout, screen orientation and touch				
Display	panel calibration				
Restart	Restart the system				
Authentication	Set the password used to access				
EXIT	Exit the menu				

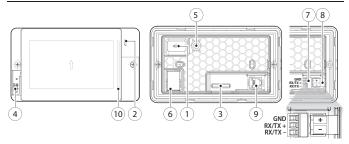


		Fig.4						
		Мо	unting/身	子装	Cor	nnecti	vity/i	且讯
	Description 描述	PG*04***[F/T]**** Front Panel Mounting/ 前面核安装	PG*04***D**** Rear Panel Mounting 背板安装	PG*04***W**** Wall Mounting 墙面安装	PGR04****A***	PGR04***[B/W]***	PGR04***[C/R]***	PG04***[E/H]***
2	MicroUSB rear/背面	• (*)	•					
2	MicroUSB front/正面	•	•	•				
3	external keypad connector/外置小键盘连接头		•					
4	temperature and humidity probe (6)/温度和湿度传感器(6)			● (option)/ 可选				
5	Wi-Fi antenna SMA connector (RP-SMA)/Wi-Fi 天线SMA连接头 (RP-SMA)		•					
6	Ethernet port/以太网口						•	•
6 7 8	RS485 port/RS485端口					•	•	
8	power supply port/供电口					•	•	•
9	RJ12 connector (power/RS485)/				•			
10	RJ12接口							
10	notification bar/通知栏				•	•	•	
								Tab. 2

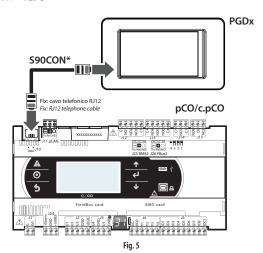
如果RS485端口被作用pLAN (Modbus通过pLAN协议)或显示端口:请勿在RS485网络中的第一个和最后一个设备上连接120欧姆电阻,因为RS485端口是HW从控类型。可连接到网络中的最大设备数量为32个,最长距离为500m。 (6)定期检查传感器通风孔是清洁的。

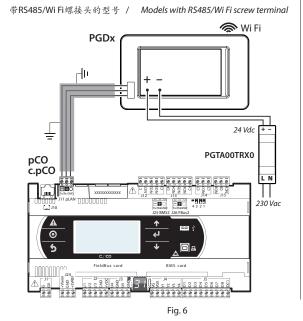
(*) 除型号PGRO4***FA***以外

If the RS485 port is used as pLAN (Modbus over pLAN) or display port: DO NOT connect the 120 Ohms terminal resistors into the first and the last devices of the RS485 network, this is because the RS485 port is HW Slave type. The maximum number of devices which can be connected in the network is 32, and the maximum lenght of it is 500meters. (6) Periodically check that the probe ventilation holes are clean. (*) Excepted PGR04***FA*** model.

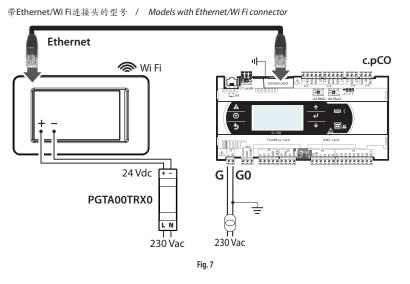
连接到pCO/c.pCO控制器 Connection to pCO/c.pCO

带RJ12连接头的型号 / Models with RJ12 connector









System signal LED Interfaces Ethernet por Auto-MDIX 10/100 Mbit <u>STP CAT 5 cable Lmax = 100 m</u> IEEE 802.11 b/g/n - STATION/ACCESS POINT mode Wi Fi Built-in/external antenna based on model Max Transmit Power = 17dBm External antenna remote mounting Lmax = 2 mExternal antenna connector RP-SMA female (for models PG*04***D[H,R,W]***) Host interface 2.0 - micro USB -B - 150 mA max USB port (1) (do not use to charge devices) - Lmax = 1m RS485 max 115.2 Kb/s Serial port with RJ12 connector -wire telephone cable Lmax = 2m S485 max 115,2 Kb/s Serial port with screw terminal (2) Removable screw connector 3,81mm pitch Shielded twisted pair cable AWG 20-22 for \pm $\max = 500\text{m} - \text{tightening torque } 0.25\text{Nm } (2.2\text{lbf x in})$ to 50 °C / 20 to 80% rH Temperature / humidity probe to 50 °C ±1 °C (static air) 20 to 80% +5% (static air) (1) a only for service. The USB port can be damaged by ESD (Electro-Static Discharges). It's recommended to adopt appropriate precautions in order to avoid failures. (2) opto-isolated for model PGR04****[C_i R]*** **Functions** Vector graphics
Dynamic objects
TrueType fonts Yes, includes SVG 1.0 support Yes Visibility, position, rotation Multi-protoco Logs and trends Multilanguage Yes. Limited to Flash memory capacity Yes, run-time language setting and limited only by available memory Recipes es. Limited to Flash memory capacity Alarms Event list Passwords
Real Time Clock (3)
Screen saver es, with backup battery "Beep" when pressing the touchscreen (settable Buzzer (3) (3) only on models where featured Electrical
DCR04****A*** power supply ower supply from pCO via RJ12 telephone connector check that the power supplied by the controller is compatible with PGDx power consumption) 24Vdc supplied by PGTA00TRX0 accessory PG*04****[B,C,E,H,R,W]***power supply $_{\text{max}} = 50 \text{ m}(4-5-6)$ - cable cross section AWG 12-20 ghtening torque 0.8 Nm (7 lbf x in) W, exception PGR04****A*** = 3W Max Power Absorption Automatic Approx. 250 g Fuse Weight on-rechargeable lithium model BR122 Software class and structure operation control Purpose of control independently mounted control (PG*04* Controller construction ncorporated control (PC Type of automatic action type 1 action Heat and fire resistance Overvoltage category Cat. III Insulation class | Class III (4) For models PGR04***[F,T]****. To connect -Vdc to earth follow the instructions on the connection diagrams (5) For models– for flush mounting the PGTA00TRX0 accessory must be installed in a dedicated box (6) Power supply range: 24 Vdc ± 10% **Environmental conditions** Operating temperature Storage temperature Maximum operating and storage @ 40 °C non-condensing relative humidity Ingress protection G*04***T****: IP65, NEMA Type 1 (front) coupled with PGTA**F [B,W][0,1]* (frame)
PG*04***[D,F,R,W]****: IP20, NEMA Type 1 (from Pollution degree

4.3" diagonal

LCD - Lifetime 20 khrs @ 25 °C Yes - auto-off by default after 15 min

Up/Down (40/50 deg.) - Left/Right (50/50 deg.)

Technical specifications

Resolution

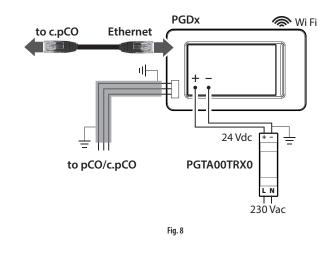
Backlighting

User interface

Active display area

Brightness control Visual angle (CR ≥10

帯Ethernet连接头和RS485/Wi Fi螺接头的型号 Models with Ethernet connector and RS485/Wi Fi screw terminal



重要说明 CAREL产品是一种先进的装置,其操作在产品随附的技术文件中有详细说明,也可在购买之前从www.carel.com网站下载。对于为达到与最终安装和/或设备相关的特定预期结果相关的产品配置上的一切责任和风险,均由客户(最终设备的制造商、开发商或安装供应商)承担。如果在所述阶段未完成用户手册中要求指示的内容,就可能导致最终产品故障;在这种情况下,CAREL不承担任何责任。客户必须通过与产品相关的文档所描述的方式使用产品。在CAREL—报合约条件中,对CAREL在产品方面的责任进行了规定,详情可从

www.carel.com网站和/或与客户签订的特定协议进行了解。

IMPORTANT WARNINGS: The CAREL product is a state-of-the-art product, whose operation is specified in the technical documentation supplied with the product or can be downloaded, even prior to purchase, from the website www.carel.com. - The client (builder, developer or installer of the final equipment) assumes every responsibility and risk relating to the phase of configuration the product in order to reach the expected results in relation to the specific final installation and/or equipment. The lack of such phase of study, which is requested/indicated in the user manual, can cause the final product to malfunction of which CAREL can not be held responsible. The final client must use the product only in the manner described in the documentation related to the product itself. The liability of CAREL in relation to its own product is regulated by CARELS general contract conditions edited on the website www.carel.com and/or by specific agreements with clients.



产品处置: 本装置(或产品)必须依照当地关于废弃物处理的有效法规单独进行处理/ Disposal of the product: The appliance (or the product) must be disposed of separately in compliance with the local standards in force on waste disposal.



管内。

合规性

安全	UL	UL60730-1
	sch. CB	IEC60730-1
EMC	CE	EN61000-6-1 / EN61000-6-2
		EN61000-6-3 / EN61000-6-4
		EN55014-1 / EN55014-2
Radio	Red	EN301489-1/EN301489-17
TECH.CODE /		EN300328
	FCC	Part.15 Subpart.B
PGDX04001	SRRC	CMIIT ID: 2019DJ11772 (for PGDX04001)
PGDX04002		2019DJ11773 (for PGDX04002)
	ANATEL	ID: 09607-19-05684
		本设备无权获得有害干扰保护,也不会在经过
		正式授权的系统中造成干扰。
		TENIX (VIII MAN I VENA I VIII)
其他获得批	准的认证	正、请联系Carel代表以获取其他详细信息
		, ,,,,,



Always keep the signal cables and power cable in separate conduits.

Safety	UL	UL60730-1
	sch. CB	IEC60730-1
EMC	CE	EN61000-6-1 / EN61000-6-2
		EN61000-6-3 / EN61000-6-4
		EN55014-1 / EN55014-2
Radio	Red	EN301489-1/EN301489-17
TECH.CODE /		EN300328
MODEL	FCC	Part.15 Subpart.B
PGDX04001	SRRC	CMIIT ID: 2019DJ11772 (for PGDX04001)
PGDX04002		2019DJ11773 (for PGDX04002)
	ANATEL	ID: 09607-19-05684
		This equipment is not entitled to protection
		against harmful interference and may not caus
		interference in duly authorized systems.