PGDE000F*0/PGDE000W*0 pCO 图形显示手操器 / pCO Graphic Display

CAREL

嵌入式面板安装 /
Panel mounting terminal

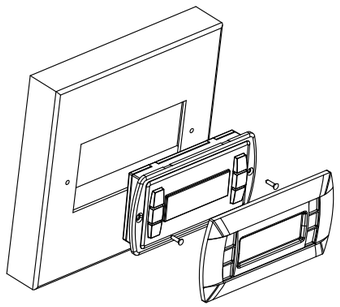

Fig. 1

墙面安装 /
Wall mounting terminal

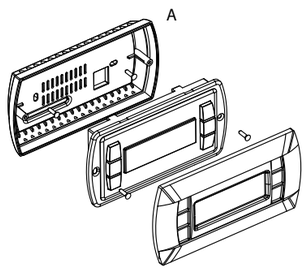

Fig. 2

设置地址 / Configuring the address

Fig. 3

Fig. 4

设置专用和共享手操器 /
Assigning the list of private and shared terminals

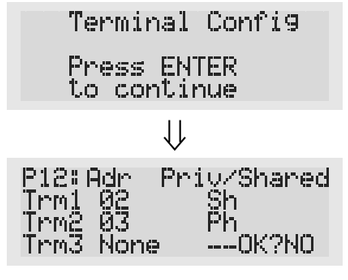

Fig. 5

(RC) PGD图形手操器是一种电子设备，它完全兼容先前的PCOI/PCOT系列手操器；它允许完全通过图标显示（在应用软件程序开发阶段定义）进行图形管理，以及国际通用字体符号管理。有两种规格可供选择：5x7和11x15像素。
应用程序驻存在pCO主板上，因此，运行时手操器不需要任何软件。
另外，手操器运行温度范围很大（-20~60 °C），有内置手操器的版本可供选择，前面板有很高的防护等级（IP65）。

型号代码

	白色背光	白色背光带蜂鸣器
内置式或嵌入式安装型	PGDE000F00	PGDE000FZ0
墙面安装型	PGDE000W00	PGDE000WZ0

面板安装型 (代码PGDE000F*0)

这款手操器专为墙面安装而设计；安装开孔尺寸为127x69mm，有两个圆孔，直径为4mm，如图8如所示，安装过程如下：

- 连接好电话线缆；
- 把移走前面板的手操器插入开口处，使用包装袋中提供的扁平螺钉把设备固定在面板上。
- 最后安装前面框。

墙面安装型 (代码PGDE000W*0)

墙壁安装型手操器首先需要配置一个背部支柱盒来支撑手操器（如Fig. 2所示），使用标准三模开关盒。
安装过程如下：

- 使用包装袋中提供的圆头螺钉把背部盒固定在墙壁上；
- 连接好电话型电缆线；
- 移走手操器的前面板，使用包装袋中的扁平螺钉把手操器固定背部支撑盒上，如Fig. 2所示；
- 最后安装前面框。

电气连接

用电话型电缆线(S90CONN00*)连接pCO主板和手操器，使用手操器后面的专用接口(RJ12)。

配置地址

手操器地址只能在电源接通后才能设置，使用RJ12电话型接口（工厂默认值32）。
要进入配置模式，同时按压 ↓ ↑ ↵ 键（所有型号的图形显示手操器中都有这三个按键）至少5秒钟；显示屏将显示如Fig. 3的界面，光标会在显示屏的左上角闪烁。
- 更改手操器地址（显示地址配置），按下 ↵ 键一次：光标会移到地址值区域（nn）。
- 使用 ↓ ↑ 键选择所需的地址，然后再次按下 ↵ 键确认。如果选择的值与之前保存的那个值不同，将显示如Fig. 4的界面，并且这个新值将被保存永久性存储器中。

如果这一区域值nn设为0，手操器和pCO之间使用“点对点”通讯协议（不是PLAN），“O/I板地址区域：xx”将不再显示，因为没有意义。

pCO: 设置专用和共享手操器

如果与每个单独的pCO主板关联的手操器需要修改，请按如下方式进行：

- 使用 ↓ ↑ ↵ 键，进入配置模式，与前一节的说明相同；
- 按下 ↵ 键直到光标移动到xx区域（I/O地址），如Fig. 3；
- 使用 ↓ ↑ 键选择pCO主板，可用的值对应有效的在线pCO主板。如果PLAN网络工作不正确，或者如果pCO主板不存在，这个区域则不能修改，显示“—”符号。
- 再次按下 ↵ 按键，依次将显示如Fig. 5的内容；
- 在这里，同样使用 ↵ 键，光标会从一个区域移到另一个区域，使用 ↓ ↑ 键改变当前区域的值。这一区域P:xx显示的是所选择的主板的地址值；在如下面的范例所示，12这个数值已经被选择了。
- 要退出配置程序并保存数值，选择 “OK ?” 区域，选择 Yes 并按下 ↵ 键确定。

在这个区域中“Adr”栏表示，与pCO主板相关联的手操器地址值为12，而“Priv/shared”栏表示手操器的类型。
<u>注意：</u> PGD手操器不能被配置为“Sp”(共享打印机)，因为它没有打印机接口。
如果手操器上的按键超过30秒钟没有被按压，配置程序会自动退出，不会保存任何改变。

(ENG) The pGD graphic display is an electronic device that is compatible with the previous PCOI/PCOT line terminals; it allows complete management of graphics by the display of icons (defined at an application software development level), as well as the management of international fonts, in two sizes: 5x7 and 11x15 pixels.The application software resides on the pCO board, and therefore the terminal does not require any additional software for operation.
Furthermore, the terminals feature a wide operating temperature range (-20T60 °C) and in the built-in version, the front panel ensures a high index of protection (IP65).

Model codes

	White Backlight	White Backlight with buzzer
Built-in or panel-mounted version	PGDE000F00	PGDE000FZ0
Wall-mounted version	PGDE000W00	PGDE000WZ0

Panel-mounted version (code PGDE000F*0)

These terminals have been designed for panel installation; the drilling template measures 127x69 mm and has 2 circular holes, 4 mm in diameter, as shown in Fig. 8. For installation, proceed as follows:
- Connect the telephone cable;
- Insert the terminal, with the front frame removed, into the opening, and fasten the device to the panel using the flush-head screws, supplied in the packaging, as shown in Fig. 1;
- Finally, fit the click-on frame.

Wall-mounted version (code PGDE000W*0)

The wall-mounting of the terminal first requires the back piece of the container A (Fig. 2) to be fitted, using a standard three-module switch box.
- Fasten the back piece to the box using the rounded-head screws supplied in the packaging;
- Connect the telephone cable;
- Rest the front panel on the back piece and fasten the parts together using the flush-head screws supplied in the packaging, as shown in Fig. 2;
- Finally, fit the click-on frame.

Electrical connection

Connect the telephone cable (code S90CONN00*) from the pCO board to the connector provided (RJ12) on the rear of the terminal.

Configuring the address

The address of the terminal can be configured only after having connected the power supply, using the RJ12 telephone jack (the factory default value is 32).
To access configuration mode, press the ↓ ↑ ↵ buttons (present on all versions) together and hold them for at least 5 seconds; the screen shown in Fig. 3 will be displayed, with the cursor flashing in the top left corner:
- To change the address of the terminal (display address setting), press the ↵ button once: the cursor will move to the address field (nn).
- Use the ↓ ↑ buttons to select the desired value, and confirm by pressing ↵ again. If the value selected is not the same as the one saved previously, the screen shown in Fig. 4 will be displayed, and the new value will be saved to the permanent memory.

If the field nn is set to 0, the terminal will communicate with the pCO board using “point-to-point” protocol (not pLAN) and the field “I/O Board address: xx” will not be displayed, as it has no meaning.

pCO: assigning the list of private and shared terminals

At this point, if the list of terminals associated with each individual pCO board needs to be modified, proceed as follows:
- Access configuration mode using the ↓ ↑ ↵ buttons, as described in the previous paragraph;
- Press the ↵ button until the cursor moves to the field xx (I/O board address) Fig. 3;
- Use the ↓ ↑ buttons to select the pCO board in question. The values available correspond to the pCO boards that are effectively on line. If the pLAN network is not working correctly, or if no pCO board is present, the field cannot be modified, and the symbol “—” will be displayed;
- Pressing ↵ again displays the screens shown in Fig. 5, in sequence;
- Here too, the ↵ button moves the cursor from one field to the next, and the ↓ ↑ buttons change the value of the current field. The field P:xx shows the address of the board selected; in the example shown in the figure, the value 12 has been selected;
- To exit the configuration procedure and save the data, select the field “OK ?”, choose Yes and confirm by pressing ↵.

The fields in the “Adr” column represent the addresses of the terminals associated with the pCO board that has address 12, while the Priv/Shared column indicates the type of terminal.
<u>Note:</u> the pGD terminals cannot be configured as “Sp” (shared printer), as they have no printer port.
If the terminal remains inactive (no button is pressed) for more than 30 seconds, the configuration procedure is exited automatically, without saving any changes.

设置专用和共享手操器 /
Assigning the list of private and shared terminals

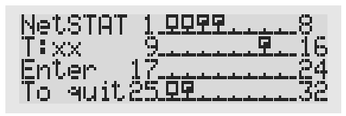

Fig. 6

Fig. 7

尺寸 / Dimensions

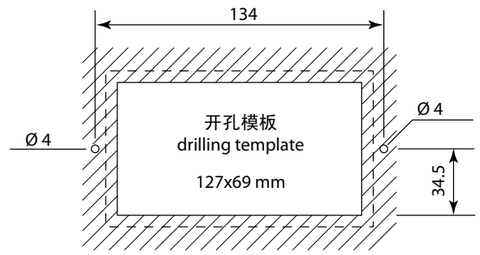

Fig. 8

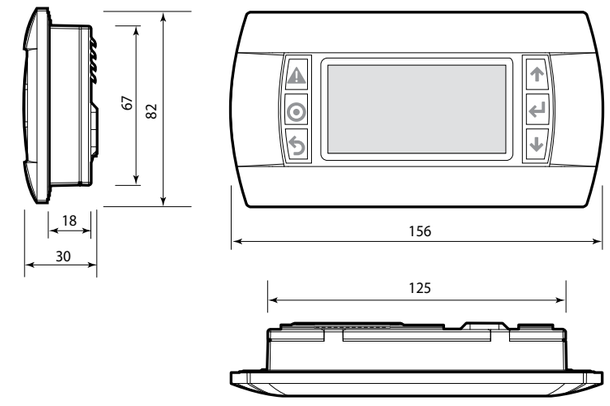

Fig. 9

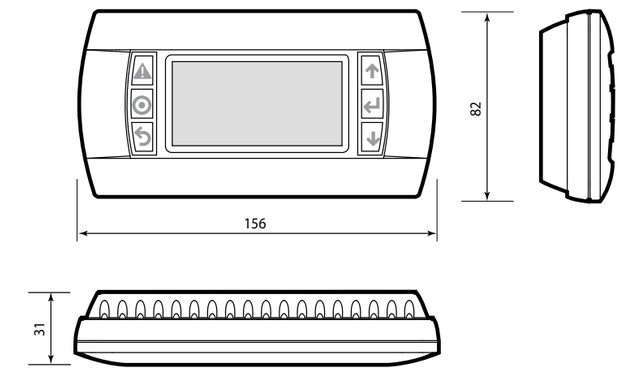

Fig. 10

产品处理

本设备（或产品）必须按照当地强制的废物处理法规进行分开处理。

重要提示：

CAREL产品是具有先进技术的产品，随产品一同提供的技术资料中有详细的操作说明，用户也可从www.carel.com网站下载说明（购买产品前也可下载）。为了使特定的装置和/或设备最终能达到预期的效果，用户（设备最终的制造商、开发商或安装人）要承担与产品配置相关的所有风险和责任。若不能按照用户手册的要求/说明完成上述各项操作，可能会导致最终产品出现故障，这种情况下，CAREL不承担任何责任。客户必须按照与产品相关的文件中的说明来使用产品。CAREL就其产品应承担的责任在CAREL一般合同条款中有所说明，可以从www.carel.com网站上和/或与客户签订的特定协议中获得。

故障信号

如果手操器检测到自身所连接的pCO主板掉线将会显示如下信息： `I/O Board xx fault`.
另一方面如果手操器没有接收到来自网络的信号会有如下显示： NO LINK。

显示网络状态和固件版本

同时按压设置键 (↓↑↵)至少10秒钟(仅在PLAN模式下)，显示屏显示如Fig. 6所示内容。
Fig. 6中显示了PLAN的状态，显示所连接设备和有多少设备以及这些设备对应的地址。

图标编码：

: 在网络中有效的pCO控制器

: 在网络中有效的手操器

: 没有连接的设备

Fig. 4中表示一例：
- 在网络中有效的pCO控制器地址为：1, 2, 25;
- 在网络中有效的手操器地址为：3, 4, 15, 26.

使用 ↓↑↵ 键可以显示驻存在手操器上的固件版本（如Fig. 7）；
要退出NetSTAT程序，按压↵键。

对比度调节

使用 ⚠+ ⊙ + ↓↑ 按键调节对比度。

技术参数

显示

类型	FSTN图形
背景光	白色LED（由应用软件控制），取决于产品代码
图形分辨率	132x64 像素
文本模式	8 行 x 22列 (字体是5x7和11x15像素) 4 行 x 11列 (字体是11x15像素) 或者混合模式
字高	3.5 mm (字体是5x7像素) 7.5 mm (字体是11x15像素)
显示区有效面积尺寸	66x32 mm
显示区域面积	72x36 mm

按键LED灯/蜂鸣器

2个LED灯可通过“应用软件”编辑，红色和橙色(⊙+⚠ 按键)
4个绿色LED灯，用做LCD背光 (↓↑↵和 ↩ 按键)
蜂鸣器（可选的 - 型号*Z0）

电源

电压	电源通过电话型电缆来自pCO主板或来自外部电源18/30 Vdc，带2个250 mA，T型保险丝
最大输入功率	0.8 W

最大距离

pLAN 的最大长度pLAN	500 m米，带AWG22双绞屏蔽电缆
pCO手操器距离	50 m米，电话线型电缆 500 m米，AWG22双绞屏蔽电缆和ITCONN6J000 **注意：**为了达到最大距离，可使用总线结构布线，最大距离不超过5米

材质

透明前面板	透明聚碳酸酯
深灰色背板（墙面安装/嵌入式面板安装）	聚碳酸酯+ABS
按键	硅胶
透明盖板玻璃/框	透明聚碳酸酯
自熄灭等级	对于透明前面板和背板为V0 对于硅胶键盘和其余部件为HB

其它

防护等级	对于面板安装型为IP65 对于墙面安装型为IP40 UL 类型1
工作条件	-20~60 °C, 90% r.H. 无凝露
储存条件	-20~70 °C, 90% r.H. 无凝露
软件等级和结构	A
防电击等级	归为I类设备或II类设备
绝缘材质的PTI	PCB: PTI 250；绝缘材料PTI 175
电压作用于绝缘部件的时间	长
阻燃特性	D类
抗浪涌电压等级	II类
环境污染	2类

Fault signals

If the terminal detects the off-line status of the pCO board it is associated with, the display shows the message: `I/O Board xx fault`.
On the other hand, if the terminal receives no signal from the network, the display shows the following message: NO LINK.

Displaying the status of the network and firmware version

Pressing the configuration buttons (↓↑↵) together for at least 10 seconds (in pLAN mode only), displays the screen shown in Fig. 6.
The screen shown in Fig. 6 provides an example of the status of the pLAN, displaying which and how many devices are connected, and the corresponding addresses.

Key:

: pCO controllers active in network

: terminals active in network

: no device connected

The example in Fig. 4 represents:
pCO controllers active in network, addresses: 1, 2, 25
terminals active in network, addresses: 3, 4, 15, 26.
The ↓↑↵ buttons can be used to display the version of the firmware resident in the terminal (Fig. 7). To exit the NetSTAT procedure, press ↵.

Contrast adjustment

Use ⚠+ ⊙ + ↓↑ buttons to adjust the contrast.

Technical specifications

Display

Type	FSTN graphic
Backlighting:	white LEDs (controlled by “application software”), depending on the cod.
Graphic resolution:	132x64 pixel
Text mode:	8 rows x 22 columns (font sizes 5x7 and 11x15 pixels) 4 rows x 11 columns (font size 11x15 pixels) or mixed modes
Character height:	3,5 mm (font 5x7 pixel) 7,5 mm (font 11x15 pixel)
Size of active area:	66x32 mm
Size of display area:	72x36 mm

Keypad LEDs / Buzzer

2 programmable by “application software”, red and orange (⊙ +⚠ buttons)
4 green LEDs, used as backlighting for LCD (↓↑↵ and ↩)
Buzzer (optional - models *z0)

Power supply

Voltage:	power supply from pCO through telephone cable or external source 18/30 Vdc protected with 2 250 mAT fuse
Maximum power input:	0,8 W

Maximum distances

Maximum pLAN length:	500 m with AWG22 twisted pair cable
pCO terminal distance:	50 m with telephone cable 500 m with AWG22 twisted pair cable and TCONN6J000 **Note:** to reach the maximum length, use a bus layout, with branches not exceeding 5 m.

Materials

Transparent front panel:	transparent polycarbonate
Charcoal grey container back piece (wall/built-in):	policarbonate +ABS
Keypad:	silicon rubber
Transparent cover glass/frame:	transparent polycarbonate
Self-extinguishing classification:	V0 for transparent front panel and back piece HB for silicon keypad and remaining parts

Others

Index of protection:	IP65 for panel mounting IP40 for wall mounting UL type 1
Operating conditions:	-20T60 °C, 90% U.R. non-condensing
Storage conditions:	-20T70 °C, 90% U.R. non-condensing
Software class and structure:	A
Classification according to protection against electric shock:	To be integrated into class 1 or 2 devices
PTI of insulating materials:	PCB: PTI 250; insulation material PTI 175
Period of electric stress across insul. parts:	long
Category of resistance to fire and heat:	D
Immunity against voltage surges:	Category II
Environmental pollution:	2

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