

# Pro-face

by **Schneider** Electric



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# EZ Numpad Installation Guide

A thick, dark grey curved line that starts from the bottom left and sweeps upwards and to the right, ending near the top right corner of the page.

 **WARNING****UNINTENDED EQUIPMENT OPERATION**

- Do not use the unit as the only means of control for critical system functions such as motor start/stop or power control.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

 **WARNING****LOSS OF CONTROL**

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure.
- The machine control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine, or making errors in the control of the machine.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

 **WARNING****HAZARD OF ELECTRIC SHOCK OR EXPLOSION**

- Do not disassemble or remodel the unit in any way.
- Do not use the unit in areas where flammable gases are present.
- Do not allow water to enter the connector.
- Do not touch the connector with wet hands.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

 **WARNING****UNINTENDED EQUIPMENT OPERATION OR LOSS OF CONTROL**

- Do not use the unit at temperatures outside the range specified in this guide.
- Do not use or store the unit at very high temperatures.
- Do not use or store the unit in direct sunlight or excessively dusty or dirty environments.
- Do not use or store the unit in an environment where it may be exposed to chemical vapors or fumes.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

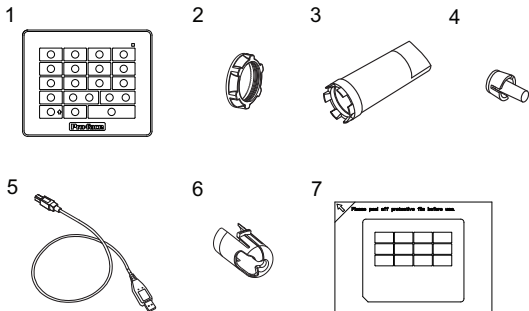
 **CAUTION****BROKEN EQUIPMENT**

- Do not use sharp objects or tools to operate the unit.

**Failure to follow these instructions can result in injury or equipment damage.**

## Package Contents

The following items are included in the EZ Numpad package (PFXZCCEUKB1). Before using the unit, please confirm that all items listed here are present.



- 1 EZ Numpad (1)
- 2 Installation Nut (1)
- 3 Socket Wrench (1)
- 4 Anti-rotation Tee (1)
- 5 USB cable (Type A/mini-B, 1.8 m [5.91 ft]) (1)
- 6 USB clamp (Type mini-B) (1)
- 7 Function Key Label for EZ Numpad (1)
- 8 Installation Guide <this document>

This unit has been carefully packed, with special attention to quality. However, should you find anything damaged or missing, please contact your local distributor immediately.

## About the Manual

This manual describes wiring and installation procedures. For more detailed information, refer to the Screen Editing Software manual.

| Manual                     | Contents             |
|----------------------------|----------------------|
| GP-Pro EX Reference Manual | Using the EZ Numpad. |

You can download the manual from our website at  
<http://www.pro-face.com/trans/en/manual/1001.html>.

## General Specifications

### General Specifications

|                |         |                                          |
|----------------|---------|------------------------------------------|
| Connector Type | USB I/F | Type mini-B (socket), USB 2.0 Full Speed |
|----------------|---------|------------------------------------------|

### Electrical Specifications

|              |                      |                              |
|--------------|----------------------|------------------------------|
| Power Supply | Rated Input Voltage  | 5 Vdc (Powered from USB bus) |
|              | Input Voltage Limits | 4.75...5.25 Vdc              |
|              | Power Consumption    | 0.75 W or less               |

### Environmental Specifications

|                        |                                       |                                                                                                                                                                              |
|------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Environment   | Surrounding Air Operating Temperature | 0...55 °C (32...131 °F)                                                                                                                                                      |
|                        | Storage Temperature                   | -20...60 °C (-4...140 °F)                                                                                                                                                    |
|                        | Surrounding Air and Storage Humidity  | 10...90% RH (Non-condensing, wet bulb temperature 39 °C [102.2 °F] or less)                                                                                                  |
|                        | Dust                                  | 0.1 mg/m <sup>3</sup> (10 <sup>-7</sup> oz/ft <sup>3</sup> ) or less (non-conductive levels)                                                                                 |
|                        | Pollution Degree                      | For use in Pollution Degree 2 environment                                                                                                                                    |
|                        | Corrosive Gasses                      | Free of corrosive gas                                                                                                                                                        |
|                        | Operating Altitude                    | 2000 m [6561 ft] or lower                                                                                                                                                    |
| Mechanical Environment | Vibration Resistance                  | IEC/EN 61131-2 compliant<br>5...9 Hz Single amplitude 3.5 mm (0.14 in)<br>9...150 Hz Fixed acceleration: 9.8 m/s <sup>2</sup><br>X, Y, Z directions for 10 cycles (100 min.) |
|                        | Concussion Resistance                 | IEC/EN 61131-2 compliant<br>(147 m/s <sup>2</sup> , X, Y, Z directions for 3 times)                                                                                          |
| Electrical Environment | Electrical fast transient/burst       | IEC61000-4-4<br>2 kV Power port (Display unit)<br>1 kV Signal ports                                                                                                          |
|                        | Electrostatic Discharge Immunity      | IEC61000-4-2<br>6 kV Contact discharge<br>8 kV Air discharge                                                                                                                 |

## External Specifications

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| External Dimensions | W97.6 x H80.0 x D31.5 mm (W3.84 x H3.15 x D1.24 in)                                               |
| Structure*1         | IP65 UL50E TYPE 4X (Indoor Use Only) (on the front panel when properly installed in an enclosure) |
| Weight              | 150 g (0.33 lb) or less                                                                           |

\*1. The front face of the unit, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification. Therefore, prior to installing the unit, be sure to confirm the type of conditions that will be present in the unit's operating environment.

If the installation gasket is used for a long period of time, or if the unit and its gasket are removed from the panel, the original level of protection cannot be kept. To maintain the original protection level, the periodical maintenance is essential.

### Note :

- A gasket with scratches or dirt could have lost much of its water resistance. The periodical maintenance is essential (e.g. once a year, or as soon as scratches or dirt become visible) for water resistance equivalent to IP65.

## DANGER

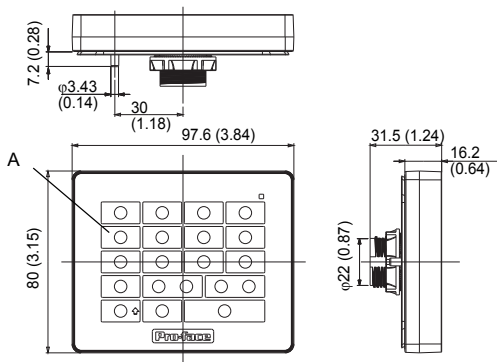
### POTENTIAL FOR EXPLOSION

- Verify that the power, input and output (I/O) wiring are in accordance with Class I, Division 2 wiring methods.
- Substitution of any component may impair suitability for Class I, Division 2.
- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable gases concentrations.
- Remove power before attaching or detaching any connectors to or from this product.
- Ensure that power, communication, and accessory connections do not place excessive stress on the ports. Consider the vibration in the environment when making this determination.
- Securely attach power, communication, and external accessory cables to the panel or cabinet.
- Suitable for use in Class I, Division 2, Groups A, B, C, and D Hazardous Locations.
- Confirm that the USB cable has been attached with the USB clamp before using the USB interface.

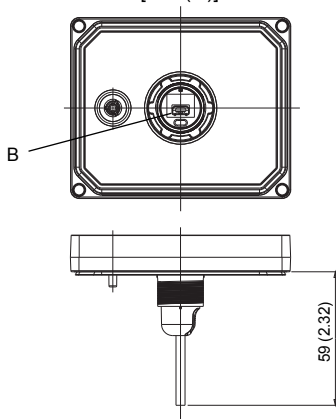
**Failure to follow these instructions will result in death or serious injury.**

## Dimensions

### External Dimensions [mm (in)]



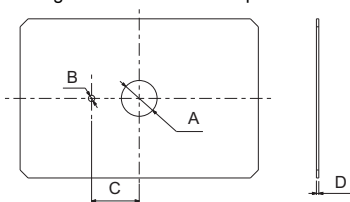
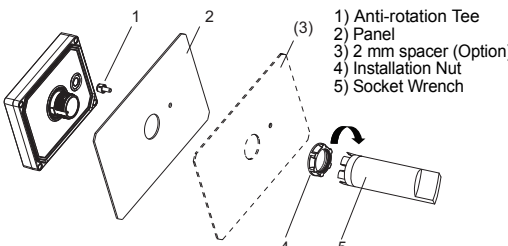
### Dimensions with cable [mm (in)]



A. Num Key / Function Key

B. USB (Type mini-B) Interface

# Installation

| Step                                                                                | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                   |                                |   |   |                                                                                     |                                                                                  |                                                                                   |                                |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------|---|---|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------|
| 1                                                                                   | <p>Create a panel cut-out and insert the unit into the panel from the front. The following illustration shows the panel cut-out for the unit:</p>  <table><thead><tr><th>A</th><th>B</th><th>C</th><th>D</th></tr></thead><tbody><tr><td>22.50<sup>+0</sup><sub>-0.30</sub> mm<br/>(0.88<sup>+0</sup><sub>-0.01</sub> in)</td><td>4<sup>+0</sup><sub>-0.20</sub> mm<br/>(0.15<sup>+0</sup><sub>-0.007</sub> in)</td><td>30<sup>+0</sup><sub>-0.20</sub> mm<br/>(1.18<sup>+0</sup><sub>-0.007</sub> in)</td><td>1.5...6 mm<br/>(0.06...0.23 in)</td></tr></tbody></table>                                                                       | A                                                                                 | B                              | C | D | 22.50 <sup>+0</sup> <sub>-0.30</sub> mm<br>(0.88 <sup>+0</sup> <sub>-0.01</sub> in) | 4 <sup>+0</sup> <sub>-0.20</sub> mm<br>(0.15 <sup>+0</sup> <sub>-0.007</sub> in) | 30 <sup>+0</sup> <sub>-0.20</sub> mm<br>(1.18 <sup>+0</sup> <sub>-0.007</sub> in) | 1.5...6 mm<br>(0.06...0.23 in) |
| A                                                                                   | B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | C                                                                                 | D                              |   |   |                                                                                     |                                                                                  |                                                                                   |                                |
| 22.50 <sup>+0</sup> <sub>-0.30</sub> mm<br>(0.88 <sup>+0</sup> <sub>-0.01</sub> in) | 4 <sup>+0</sup> <sub>-0.20</sub> mm<br>(0.15 <sup>+0</sup> <sub>-0.007</sub> in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 30 <sup>+0</sup> <sub>-0.20</sub> mm<br>(1.18 <sup>+0</sup> <sub>-0.007</sub> in) | 1.5...6 mm<br>(0.06...0.23 in) |   |   |                                                                                     |                                                                                  |                                                                                   |                                |
| 2                                                                                   | <p>Insert the unit into the panel hole.<br/>Screw in the nut using torque of 1.2...2 N•m (10.62...17.70 lb-in)</p>  <p>1) Anti-rotation Tee<br/>2) Panel<br/>3) 2 mm spacer (Option)<br/>4) Installation Nut<br/>5) Socket Wrench</p> <p><b>Note :</b></p> <ul style="list-style-type: none"><li>Install the 2 mm spacer (Option) when the panel thickness is 1 mm (0.04 in) or more, and less than 1.5 mm (0.06 in). The spacer is unnecessary if the panel thickness is 1.5 mm (0.06 in) or more.</li><li>Remove the USB cable before removing the unit.</li><li>If using an anti-rotation tee, insert it into the unit securely.</li></ul> |                                                                                   |                                |   |   |                                                                                     |                                                                                  |                                                                                   |                                |

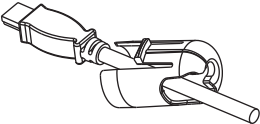
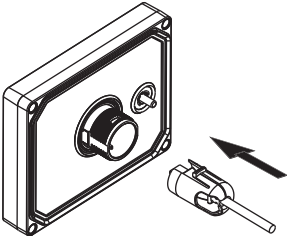


**⚠ DANGER****HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

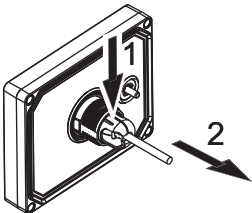
- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from the Module the power supply.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace and secure all covers or elements of the system before applying power to this product.

**Failure to follow these instructions will result in death or serious injury.**

**USB Clamp****Attachment**

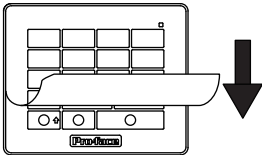
| Step | Action                                                                                                                                                                                                    |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Pass the USB cable through the USB clamp.<br>                                                                            |
| 2    | Insert the USB cable into the USB (Type mini-B) interface on the unit. Insert the USB clamp into the mounting hole.<br> |

## Removal

| Step | Action                                                                                                                                            |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p>Hold the locking tab of the clamp and pull to remove it.</p>  |

## Function Key Label for EZ Numpad

Use the function key label to change the labels on the key.

| Step | Action                                                                                                                                                                                                                                                                                                                                                                |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <p>Peel off the protective sheet of the function key label.</p>                                                                                                                                                                                                                                                                                                       |
| 2    | <p>Print a new label onto the function key label.</p> <p><b>Note :</b></p> <ul style="list-style-type: none"> <li>The function key label is A6 size. For more detailed information on the printing method, refer to the Screen Editing Software manual.</li> <li>If you rub the function key label hard, the print on the function key label may come off.</li> </ul> |
| 3    | <p>Attach the function key label.</p>  <p><b>Note :</b> When replacing the function key label, slowly peel off the chamfered part on the lower left of the label. If not, the film of the unit may peel off.</p>                                                                   |

## Options

### Options

| Product Name                              | Model No. | Description                                                   |
|-------------------------------------------|-----------|---------------------------------------------------------------|
| 2mm Spacer for panel thickness adjustment | PFXZCCAT1 | 2 mm (0.08 in) spacer to adjust installation panel thickness. |

### Wall Adapter Attachment Options

| Product Name                      | Model No.     | Description                                                                                                                 |
|-----------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------|
| EZ Series Wall Adaptor Attachment | PFXZCEATWM1   | This attachment allows you to mount the EZ Series Unit on the wall. Please use it when holding the EZ Series in your hands. |
| USB Front Cable (1m)              | CA5-USBEXT-01 | Extension cable attaching USB (Type A) interface to front panel.                                                            |

### Maintenance Options

| Product Name                  | Model No.   | Description                                                                                                                                     |
|-------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Installation Nut              | PFXZGMNT1   | Nut for installation to a solid panel (10 pcs/set)                                                                                              |
| Socket Wrench                 | PFXZGMSW1   | Socket Wrench to tighten and loosen the installation nut. (1 piece/set)                                                                         |
| Accessories Kit for EZ Numpad | PFXZCCAKKB1 | Anti-rotation Tee (5 pcs), USB cable clamp to prevent disconnection (USB/mini-B, 1 port, 5 pcs), Function Key Label for EZ Numpad (2 pcs/sheet) |

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## Relevant Standards

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For information on certifications and standards, such as certified models and certificates, see the product markings or the following URL:

<http://www.pro-face.com/trans/en/manual/1002.html>

The unit is manufactured in accordance with:

- Standard UL 508 and CSA C22.2 n°142 for Industrial Control Equipment
- Standard ANSI/ISA - 12.12.01 and CSA C22.2 n°213 for Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

**Note :**

- For use in Pollution Degree 2 environments.
- For use on a flat surface of a Type 1 or Type 4X (Indoor Use Only) Enclosure.
- Suitable for use in Class I, Division 2, Groups A, B, C and D Hazardous Locations, or Non-hazardous Locations only.

 **DANGER****POTENTIAL FOR EXPLOSION**

- Always confirm that this product is suitable for use in hazardous locations by checking that the ANSI/ISA 12.12.01 or CSA C22.2 N°213 certification appears on the product labeling.
- Do not attempt to install, operate, modify, maintain, service, or otherwise alter this product except as permitted in this manual. Unpermitted actions may impair the suitability of this product for Class I, Division 2 operation.
- To power on or power off this product installed in a Class I, Division 2 hazardous location, you must either:
  - Use a switch located outside the hazardous environment, or
  - Use a switch certified for Class I, Division 1 operation inside the hazardous area.
- Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous. This applies to all connections including power, ground, serial, parallel, and network connections.
- Never use unshielded/ungrounded cables in hazardous locations.
- When enclosed, keep enclosure doors and openings closed at all times to avoid the accumulation of foreign matter inside the workstation.
- Securely lock externally connected units and each interface before turning on the power supply.
- Do not use, connect, or disconnect USB cable unless area is known to be nonhazardous.
- Potential electrostatic charging hazard: wipe the front panel of the terminal with a damp cloth before turning ON.

**Failure to follow these instructions will result in death or serious injury.**

 **CAUTION****ENVIRONMENTAL HAZARDS TO THE EQUIPMENT**

- Allow the unit to reach the surrounding air temperature, not exceeding the 55 °C (131 °F), before turning the unit on.
- Do not turn on the unit if condensation has occurred inside the unit. After it is completely dry again, the unit may be turned on.
- Do not expose the unit to direct sunlight.
- Remove any dust from the unit before turning it on.
- Ensure that the USB clamp is not damaged. Replace them, if necessary.

**Failure to follow these instructions can result in injury or equipment damage.**

The unit is a device for use in factory systems.

When using the unit in a system, the system should comply with the following standards in regards to the installation environment and handling.

- Standard WEEE, Directive 2012/19/EU
- Standard RoHS, Directive 2011/65/EU
- Standard RoHS China, Standard SJ/T 11364

## CE Markings

This product conforms to the necessary requirements of the following

Directives for applying the CE label:

- 2004/108/EC EMC Directive

This conformity is based on compliance with EN61000-6-4, EN61000-6-2

## KC Markings

### 사용자안내문

| 기종별                    | 사 용 자 안 내 문                                                                     |
|------------------------|---------------------------------------------------------------------------------|
| A급 기기<br>(업무용 방송통신기자재) | 이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다. |

### NOTE

Please be aware that Digital Electronics Corporation shall not be held liable by the user for any damages, losses, or third party claims arising from the use of this product.



# 中国 RoHS 相关资料

(本资料是中国 RoHS 的必备资料。)( This information is essential for China RoHS.)

| <br>部件名称<br>Part Name | 有害物质 Hazardous Substances |           |           |                  |               |                 |
|----------------------------------------------------------------------------------------------------------|---------------------------|-----------|-----------|------------------|---------------|-----------------|
|                                                                                                          | 铅<br>(Pb)                 | 汞<br>(Hg) | 镉<br>(Cd) | 六价铬<br>(Cr (VI)) | 多溴联苯<br>(PBB) | 多溴二苯醚<br>(PBDE) |
| 金属部件<br>Metal parts                                                                                      | ○                         | ○         | ○         | ○                | ○             | ○               |
| 塑料部件<br>Plastic parts                                                                                    | ○                         | ○         | ○         | ○                | ○             | ○               |
| 电子件<br>Electronic                                                                                        | ×                         | ○         | ○         | ○                | ○             | ○               |
| 触点<br>Contacts                                                                                           | ○                         | ○         | ○         | ○                | ○             | ○               |
| 线缆和线缆附件<br>Cables & cabling accessories                                                                  | ○                         | ○         | ○         | ○                | ○             | ○               |

本表格依据 SJ/T 11364 的规定编制。

○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

This table is made according to SJ/T 11364.

○：Indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.

×：Indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.