XL2000HMI-A
External HMI

HONEYWELL EXCEL 5000 OPEN SYSTEM

PRODUCT DATA

General

The XL2000HMI-A External HMI is a cost effective, versatile mountable HMI for those Excel Web II controllers not equipped with a built-in HMI.

It represents a third operating option, besides the two existing web-based operating options (the 5.7" Excel Touch operator panel and 3rd party industrial touch-panels).

The XL2000HMI-A can be connected and used with the following Excel Web II controllers:

- XL2000B3A;
- XL2014B3B;
- XL2026B3A.

Features

- **Local language operation**
  The XL2000HMI-A allows the Excel Web II controller to be operated in the following languages: English, German, French, Italian, Spanish, Greek, Norwegian, Finnish, Danish, Russian, Ukrainian, and Czech. The default language can be pre-selected, and also changed online.

- **Reduced cost for service, operation and maintenance**
  Maintenance or upgrade of Operator Interface Software is superfluous because it resides in the Excel Web II controller, itself (single-source principle).

- **Application- or user-oriented operation**
  A configurable start-screen allows for viewing custom fast access lists, which can contain a random combination of data-point and parameters.

- **Intuitive push & turn wheel operation**
  Navigation, selecting, and changing values is done using the push & turn wheel, which conforms to industry standards.

- **Backlight with automatic time-out**
  The display backlight will automatically turn ON upon pressing any key or operating the push & turn wheel. The backlight will automatically turn OFF if none of the keys or the button are used for two minutes.

- **Full display of long text information**
  Automatic left & right scrolling enables lengthy texts to be viewed in their entirety.

- **Versatile mounting options**
  The following mounting options are available:
  - Screw mounting into panel door cut-outs;
  - Screw mounting onto panel doors or cabinets;
  - Magnetic mounting onto metal surfaces;
  - Screw mounting onto walls.

- **Standard Ethernet connection cable**
  A standard Ethernet connection cable (max. length: 5 m) is used to establish a connection between the RJ45 socket of the XL2000HMI-A and the HMI port on the front of the Excel Web II controller. (NOTE: This is not a physical Ethernet interface.)

- **Password protected access**
  Changing of values and other data is restricted to registered users, by a four digit password.

- **No extra power supply needed**
  The XL2000HMI-A does not require an extra power supply – rather, it derives needed energy from the controller via the standard Ethernet connection cable.
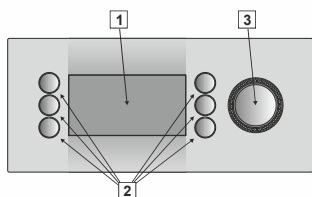
Hardware Interfaces

Fig. 1. XL2000HMI-A operating elements

LEGEND
1 LCD display
2 Six operating keys
3 Push & Turn button

The LCD display presents items for application-specific system information, operator entries, and menus of functions. It can show max. five lines of alphanumeric text with max. 20 characters per line.

The display's backlight is switched ON once an operating key or the push & turn button is pressed, and switched OFF if no operating key or button is used for 2 minutes.

The six operating keys consist of three fixed-function keys (left) and three soft keys (right).

The push & turn button is used to navigate through menus and lists; to highlight items (menu, list, option, value, command symbol), and to adjust options (ON, OFF, etc.) and values (temperature in °C, etc.).

Mounting

See also XL2000HMI-A External HMI – Mounting Instructions (MU1B-0559GE51) for details.
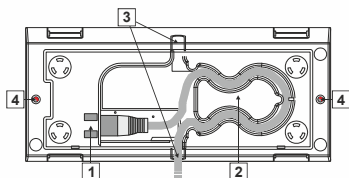
Cabling

Fig. 2. Rear view of XL2000HMI-A, with connector cable

LEGEND
1 RJ45 socket for connection cable (see also WARNING in section "Electrical Data" on pg. 4)
2 Cable guide for strain relief
3 Cable outlets
4 Screw holes (for mounting into panel doors)

Magnetic Mounting onto Metal Surfaces

For magnetic mounting, proceed as follows:
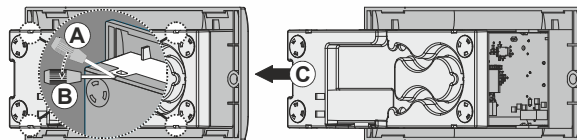1. Remove the cover (see Fig. 3).

Fig. 3. Removing cover

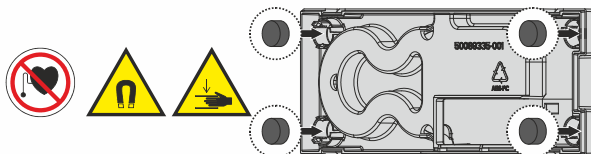2. Insert the four magnets (incl. in delivery) (see Fig. 4).

Fig. 4. Inserting magnets into cover

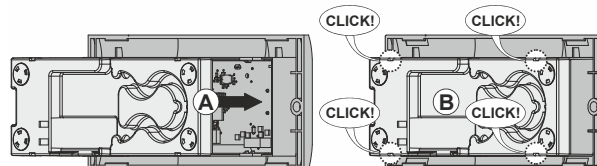3. Click the cover back into place (see Fig. 5).

Fig. 5. Clicking cover back into place

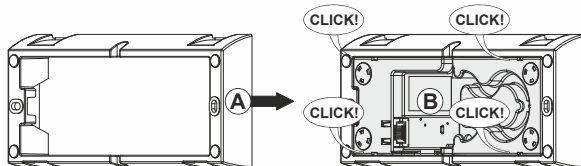4. Click the sub-base into place (see Fig. 6).

Fig. 6. Clicking sub-base into place

5. Plug the connection cable into the RJ45 socket and loop through the cable guide for strain relief (see Fig. 7). The cable can exit the unit either through the upper (B) or lower (B') outlet.
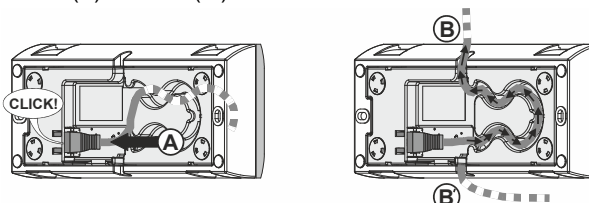

Fig. 7. Plugging cable and looping through guide

6. The unit can then be conveniently attached to any metal surface (see Fig. 8).
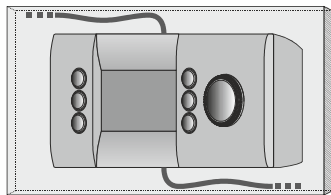
Fig. 8. Wall mounting example (magnet option)

Alternatively, a metal plate (incl. in delivery) can be attached for handheld use (see section "Handheld Option" below).

Handheld Option

In the case of the handheld option, proceed as described in Fig. 3 to Fig. 7). Finally, attach the metal plate (see Fig. 9), which completely covers the rear of the device.
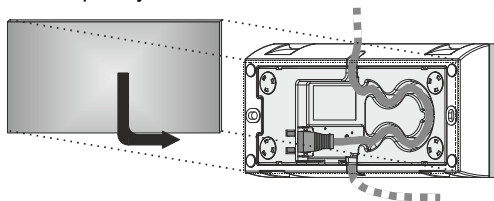

Fig. 9. Attaching metal plate

Screw-Mounting into Panel Door Cut-Out

In the case of screw-mounting into a panel door cut-out (door thickness: 1…2.5 mm), proceed as follows (see also Fig. 10):

1. Prepare a suitably dimensioned (157 X 58 mm) cut-out with bore-holes (Ø 5 mm) at a distance of 166 mm apart and slide the XL2000HMI-A into place.
2. Insert and fasten the two M4x6 (DIN 7985A) screws (incl. in delivery).
3. Finally, plug the connection cable into the RJ45 socket and loop it through the cable guide and cable outlet (see Fig. 7).
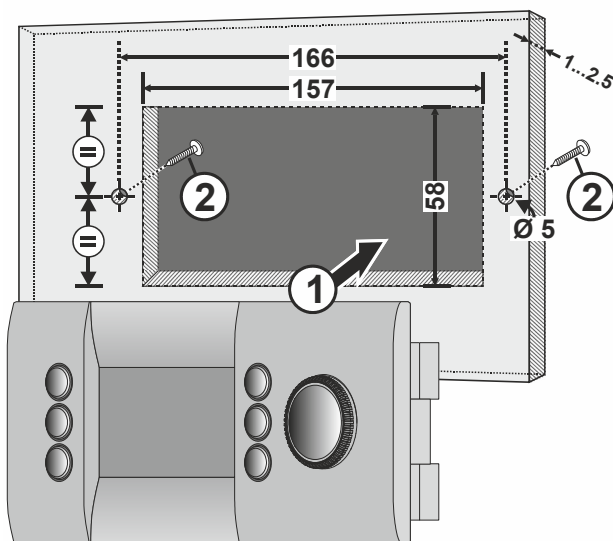

Fig. 10. Panel door mounting (in mm)

Wall-Mounting (Screw Option)

In the case of wall-mounting with screws, proceed as follows (see also Fig. 11 and Fig. 13):

1. Place two suitably dimensioned bore-holes (Ø 6 mm, with a min. depth of 35 mm) at a distance of 164 mm apart. Installation over a standard flush-mounted box (max. 140 X 35 mm) is optional.
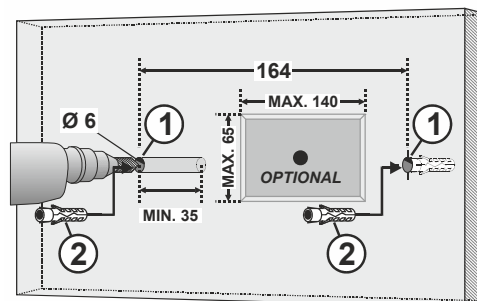2. Insert the two dowels (incl. in delivery) until snug.

Fig. 11. Wall-mounting (screw option), steps 1+2

3. Position the sub-base (with the connection cable already in position through the upper [a'] or lower [a] cable outlet or from the flush-mounted box [a"]) over the two bore holes and insert and fasten using the two screws (incl. in delivery).
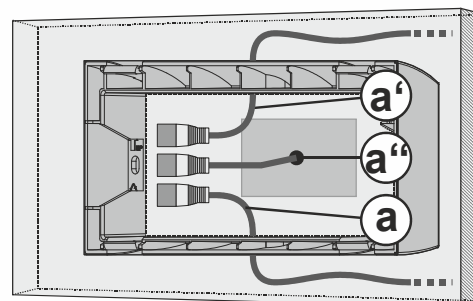

Fig. 12. Positioning sub-base and cables

4. Finally, plug the connection cable into the RJ45 socket, loop it through the cable guide and cable outlet (see Fig. 7), and then click the XL2000HMI-A into the sub-base.
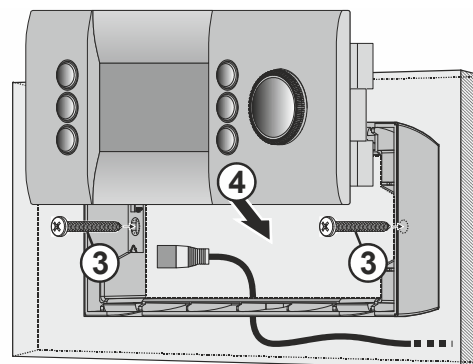

Fig. 13. Wall-mounting (screw option), steps 3+4

Specifications

Table 1. Specifications

Ambient temperature	0 … 50 °C
Storage temperature	-20 … +70 °C
Humidity	5 … 95% r.h. non-condensing
Dimensions	See Fig. 14.
Degree of protection	IP30 (panel- or wall-mounted)
Fire class	V0
Shock protection	Class II
Pollution degree	2
Installation	Class 3
Software class	Class A
Ball-pressure test temperature	Housing parts >75°C
Max. cable length	5 meters
Display	Dot matrix display, black & white, 160 x 80 dots, 5 lines with 20 characters

Electrical Data

Table 2. Electrical data

Power supply	From Excel Web II controller attached via standard Ethernet cable
Increased power consumption of Excel Web II	dc: max. 0.2 W; ac: max. 0.2 VA
Increased heat dissipation	max. 0.2 W at dc power supply max. 0.2 W at ac power supply

⚠ WARNING

Risk of electric shock or equipment damage!
► It is prohibited to connect the RJ45 socket of the XL2000HMI-A to a so-called PoE-enabled device ("**P**ower **o**ver **E**thernet").

Mechanical Data

Housing Dimensions (L x B x T): 178 x 78 x 32 mm
Housing Material: ABS blend; flame retardant V0
Weight: 160 g (without sub-base, packaging)
Protection Class: IP 30 (panel- or wall-mounted)

Standards, Approvals, etc.

- Device meets EN 60730-1, EN 60730-2-9
- C UL® US-listed (file E340062)

Order Numbers

XL2000HMI-A: External HMI and two M4x6 (DIN 7985A) screws

XL2000HMI-BASE: Sub-base for wall-mounting and hand-held use. Includes sub-base itself, two screws (4x35 mm) and two dowels (6x30) for wall-mounting, metal cover plate for convenient handheld use, and four magnets for mounting to metal surfaces.
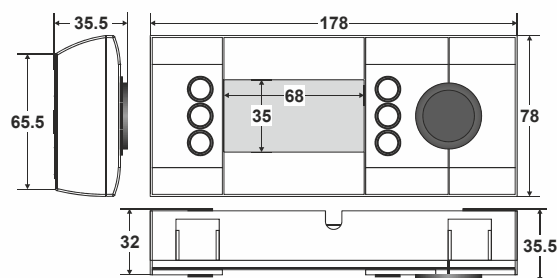
Dimensions
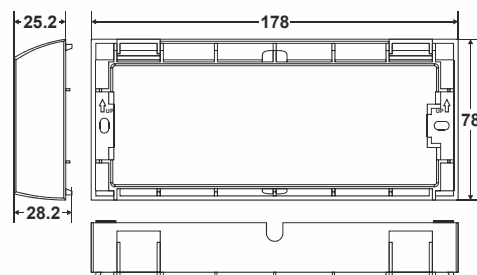

Fig. 14. Dimensions of XL2000HMI-A (in mm)

Fig. 15. Dimensions of sub-base XL2000HMI-BASE (in mm)

Honeywell