BARTEC

User Manual

POLARIS Web Client/Remote PC

17-71V3-....

BARTEC

User Manual

POLARIS Web Client/Remote PC

15"/ 19.1"

Type 17-71V3-....

ATEX Zone 1

Document no. 11-71V3-7D0002

Status: 26. January 2011

Technical data subject to change without notice!

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Notes on this manual

Important

Read carefully
before putting
the devices
into operation.

The user manual is a constituent part of the product and must be kept in the direct vicinity of the device and accessible at all times to installation, operating and maintenance personnel.

It contains important notes, safety instructions and test certificates which are necessary for perfect functioning when the devices are being operated and handled. It is written for technically qualified personnel.

Familiarity with and the technically perfect implementation of the safety instructions and warnings described in this manual are preconditions for safe installation and commissioning. The safety notes and warnings given in this documentation are given in a general way and only qualified personnel will have the necessary specialised know-how to interpret and implement them correctly in specific cases.

Qualifications of the personnel working with the devices

The user manual is written for all people who carry out assembly, installation, commissioning and service work on the product, whereby the directives and standards 99/92/EC, EN 60079-17, EN 60079-19 for the gas area and EN 61241-17 and EN 61241-19 for the dust area must be observed.

Changes to the document

BARTEC reserves the right to alter the contents of this document without notice. No guarantee is given for the correctness of the information. In case of doubt, the German safety instructions shall apply because it is not possible to rule out errors in translation or in printing. In the event of a legal dispute, the "General Terms and Conditions" of the BARTEC group shall apply in addition.

The respective up-to-date versions of data sheets, manuals, certificates, EC Declaration of Conformity may be downloaded from the "Ex Visualisation and Communication Systems" product page at www.bartec-group.com or ordered directly from BARTEC GmbH.

Handing the Product

The documents are currently available in German and English.

The product described in this manual has been tested and left the factory in perfect condition as regards meeting safety requirements.

To maintain this condition and ensure that this product operates perfectly and safely, it may be used only in the manner described by the manufacturer. Appropriate transportation, suitable storage and careful operation are also essential for the perfect and safe operation of this product.

Safety Instructions

Important

Read carefully before putting the devices into operation.

Safety instructions and warnings are specially highlighted in this manual and marked by symbols.

The safety instructions and warnings are assigned to the individual work steps. Careful handling and consistent observation of the instructions will prevent accidents, personal injuries and damage to property.

The adherence to all directions and safety instructions in this manual is a precondition for safe working and the correct handling of the device.

The graphic representations in these instructions serve to show the information being described and are not necessarily true to scale and they may deviate slightly from the actual construction of the device.

Marking

Particularly important points in these instructions are marked with a symbol:

Danger!

Non-observance leads to death or serious physical injury.
The necessary safety measures must be taken.

Caution!

Warning of damage to property and financial and penal disadvantages
(e.g. loss of guarantee rights, liability etc.).

Attention!

Important instructions and information on preventing disadvantageous behaviour

Note

Important instructions and information on effective, economical
and environmentally compatible handling.

1. Product Description

1.1 Definition

The **POLARIS Web Client/Remote PC 15" and 19.1"** is a display with keyboard and mouse, with which a PC in the safe area can be operated in the hazardous area, Zone 1.

The POLARIS Web Client/Remote PC series offers the user the possibility of controlling other computers by means of Windows RDP (Remote Desktop Protocol) or, in connection with the **BMS-Graf-pro V7,** taking over the function of an operator terminal.

The devices are also available as turn-key system solutions in stainless steel enclosures for mounting on walls, ceilings or floors.

The POLARIS Web Client/Remote PC 19.1" screen is a TFT display with SXGA resolution (1280 x 1024 pixels) and the POLARIS Web Client/Remote PC 15" screen has XGA resolution (1024 x 768 pixels). They are characterised by outstanding brilliance and a very large reading angle.

A keyboard, touchpad, track ball and finger mouse are available.

A touchscreen is available as an option for the POLARIS Web Client/Remote PC 15" and the POLARIS Web Client/Remote PC 19.1".

1.2 Use for the Intended Purpose

The POLARIS Web Client/Remote PC has been constructed in conformance to the latest technical developments and the recognised safety regulations. Nevertheless, its use can still cause injury and even fatal injury to the user and damage to the device and other property.

The POLARIS Web Client/Remote PC has been specially developed for use in the hazardous area of Zones 1 and 2 and also for Zones 21 and 22.

The manufacturer will not be liable for any resulting damage. The user alone bears the risk. Use for the intended purpose also requires following the instructions in the user manual. The POLARIS Web Client/Remote PC may be used and maintained only by people who are familiar with it and have been instructed about the risks involved.

2. Technical Data

2.1 Explosion Protection

Type	17-71V3-….
Ex protection type (Zone 1)	⟨Ex⟩ II 2 G Ex e q [ib] IIC T4
	⟨Ex⟩ II 2 D Ex tD A21 IP6X T80°C
Product marking	CE 0044
Certification	IBExU05ATEX1117 X
Standards	EN 60079-0:2004 IEC 60079-5:2005 EN 60079-7:2003 IEC 60079-11:2005 EN 61241-0:2004 EN 61241-1:2004 EN 61000-6-2:2001 EN 61000-6-4:2001 EN 60950-1:2005
Directives	94/9/EG 2004/108/EG

2.2 Characteristics

Construction		- Front-panel installation - optional system solution in stainless steel enclosure for wall, floor or ceiling mounting
Basis		LX 800 processor with 500 MHz
Connection		Through local network 10/100 MBit
Interface		- PS/2 for mouse and keyboard - USB Ex i for BARTEC USB Ex I memory-stick - USB Ex e to connect an external USB device
Optional		Touchscreen for 15" and 19.1"
Precondition for base station		A computer that supports Windows RDP must be connected to the network.
Supply voltage		AC 110 V to 230 V ± 10%, 50 Hz to 60 Hz
Rated voltage		AC 90 V to 253 V, 50 Hz to 60 Hz
Max. power consumption		P_{max} <50 W
Storage and transport temperature		-20 °C to + 50 °C
Cut-in and operating temperature		0 °C to + 50 °C
Humidity		5 to 95 % non-condensing
Vibration		0.7 G/1 mm; 5 Hz - 500 Hz pulse in all 3 axes
Shock		15 G, 11 ms pulse in all 3 axes
Material	Front side	Polyester foil on anodised aluminium plate (Conditionally UV-resistant)
	Rear side	Sheet steel bichromated
Protection class	Front side	IP65
	Rear side	IP54
Below +10 °C the unit has to be heated in order to guarantee the lifetime of the backlight illumination		

2.3 Characteristics data for the POLARIS Web Client/Remote PC 19.1"
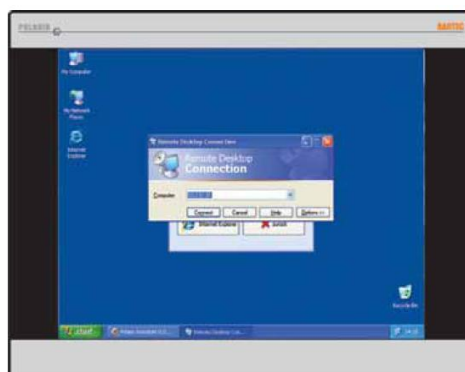
Display	19.1" TFT graphic display
	SXGA resolution 1280 x 1024 pixels
	16.2 million colours
	Brightness 300 cd/m^2
	Visible area approx. 376 mm x 301 mm
	Contrast 1300:1
	Anti-reflection coating glass pane
	Optional touch screen
Dimensions	498 mm x 400.5 mm x 135 mm
Wall cut-out	484 mm x 386.5 mm ± 0.5 mm
Weight	approx. 33 kg
Backlight illumination	CFL technology Service life approx. 40,.000 hours at +25 °C

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2.4 Characteristics data for the POLARIS Web Client/Remote PC 15"
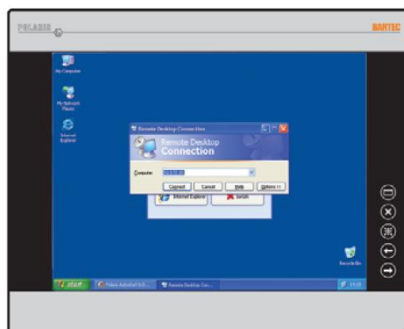
Display	15" TFT graphic display
	XGA resolution 1024 x 768 pixels
	262,144 colours
	Brightness 400 cd/m^2
	Visible area approx. 304 mm x 228 mm
	Contrast 400:1
	Anti-reflection coating glass pane
	Optional touch screen
Dimensions	411 mm x 332 mm x 135 mm
Wall cut-out	394.5 mm x 315.5 mm ± 0.5 mm
Weight	approx. 23 kg
Backlight illumination	CFL technology Service life approx. 40;000 hours at +25 °C

2.5 Characteristics Data for the Keyboard
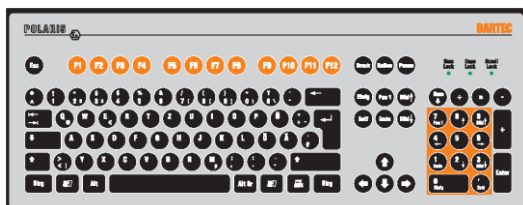
Type	17-71VZ-40**
Ex protection type	⟨Ex⟩ II 2 G Ex e q [ib] IIC T4
	⟨Ex⟩ II 2 D Ex ibD A21 T120°C
Certification	IBExU05ATEX1117 X
Standards	EN 55022:2006 + A1:2007 Kl. A EN 55024:1998 + A1:2001 + A2:2003 EN 61000-6-2:2005 EN 61000-6-4:2007 EN 61241-0:2006 EN 61241-1:2004
Type of protection (front side)	IP65
Design	Front-panel fitting
Material	Polyester foil on aluminium plate (conditionally UV-resistant)
Dimensions (length x width)	420 mm x 170 mm
Wall cut-out	391 mm x 140 mm
Mounting depth	18 mm
Weight	approx. 700 g

Dimensions and wall cut-out for keyboard (mm)

Borehole diameter: 3.3 mm

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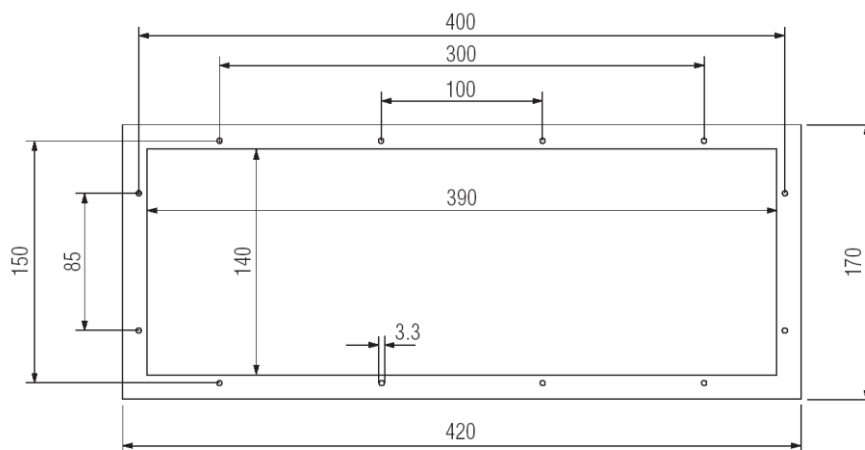
2.6 Characteristics Data Finger Mouse, Trackball and Touchpad

2.6.1 Finger mouse

Type	17-71VZ-1000
Ex protection type	⟨Ex⟩ II 2 G Ex e q [ib] IIC T4
	⟨Ex⟩ II 2 D Ex ibD A21 T120°C
Certification	IBExU05ATEX1117 X
Standards	EN 55022:2006 + A1:2007 Kl. A EN 55024:1998 + A1:2001 + A2:2003 EN 61000-6-2:2005 EN 61000-6-4:2007 EN 61241-0:2006 EN 61241-1:2004
Type of protection (front side)	IP65
Design	Front-panel fitting
Material	Polyester foil on aluminium plate (Conditionally UV-resistant)
Dimensions (length x width)	130 mm x 170 mm
Wall cut-out	100 mm x 140 mm
Mounting depth	15 mm
Weight	approx. 270 g

2.6.2 Trackball
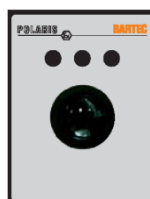
Type	17-71VZ-2000
Ex protection type	⟨Ex⟩ II 2 G Ex e q [ib] IIC T4
	⟨Ex⟩ II 2 D Ex ibD A21 T120°C
Certification	IBExU05ATEX1117 X
Standards	EN 55022:2006 + A1:2007 Kl. A EN 55024:1998 + A1:2001 + A2:2003 EN 61000-6-2:2005 EN 61000-6-4:2007 EN 61241-0:2006 EN 61241-1:2004
Type of protection (front side)	IP65
Design	Front-panel fitting
Material	Polyester foil on aluminium plate (Conditionally UV-resistant)
Dimensions (length x width)	130 mm x 170 mm
Wall cut-out	100 mm x 140 mm
Mounting depth	43 mm
Weight	approx. 500 g

2.6.3 Touchpad

Type	17-71VZ-3000
Ex protection type	⟨Ex⟩ II 2 G Ex e q [ib] IIC T4
	⟨Ex⟩ II 2 D Ex ibD A21 T120°C
Certification	IBExU05ATEX1117 X
Standards	EN 55022:2006 + A1:2007 Kl. A EN 55024:1998 + A1:2001 + A2:2003 EN 61000-6-2:2005 EN 61000-6-4:2007 EN 61241-0:2006 EN 61241-1:2004
Type of protection	IP65 (front side)
Design	Front-panel fitting
Material	Polyester foil on aluminium plate (Conditionally UV-resistant)
Dimensions (length x width)	130 mm x 170 mm
Wall cut-out	100 mm x 140 mm
Mounting depth	15 mm
Weight	approx. 250 g

Dimensions and wall cut-out for mouse, trackball and touchpad (mm)

Borehole diameter: 3.3 mm

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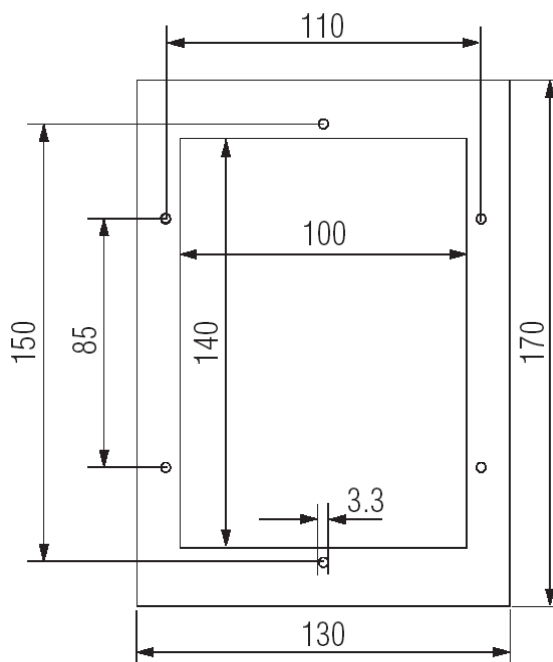
2.7 Product Marking

A Type label	

Device name
Type no.

POLARIS
Typ 17-71V
II 2 G Ex eq [ib] IIC T4
II 2 D Ex tD A21 IP6X T80°C
IBExU 05 ATEX 1117 X
0°C ≤ T$_a$ ≤ +50°C

BARTEC
D-97980 Bad Mergentheim

Serial numbers in code 39

Serial number,
year of manufacture
and calendar week

S/N:

Version:

elektrische Daten siehe Baumusterprüfbescheinigung
electrical data see EG-type examination certificate

Voltage value

Version accordance
basic data text

Add-on

B Warnings	**Dieses Gehäuse ist werksseitig verschlossen. Nicht öffnen!** **Cette enveloppe est scellée en usine. Ne pas l'ouvrir!** **This enclosure is factory sealed. Do not open!**

C Licence sticker	Windows® XP Embedded 00039-418-904-737 **X11-15305**

3. Safety Instructions

	DANGER FROM ELECTROSTATIC CHARGING

⚠️ **Danger!**	– The POLARIS Web Client/Remote PC must be connected to earth potential. – To avoid the risk of static charging, do not clean the POLARIS Web Client/Remote PC with a dry cloth. – Do not mount in a direct stream of particles.

	The device is factory-sealed. Do not open it! **The device may be opened in the factory only!**

⚠️ **Caution!**	– It is essential to adhere to the safety and accident-prevention rules that are relevant to the respective application. – Protect the device from impact effects! Do not expose the equipment to corrosive/ aggressive liquids, vapours or mist! If the device manlfunctions or the enclosure is damaged, take it out of the hazardous area immediately and bring it into the safe area. – Put the device out of operation immediately also if you suspect that it can no longer be operated safely on account of harmful effects or general irregularities (e.g. penetration of water, fluids and the effects of temperatures that are outside the specified range, etc.). – The POLARIS Web Client/Remote PC must be put out of operation immediately if its glass pane is damaged! – Only operate the device if it is mounted securely. – It must be possible at all times to disconnect the devices from the voltage supply (in fixed installations by means of an all-pole mains isolating switch or fuse). – It must be ensured that the supply voltage agrees with the specifications in the manual and the tolerances must be observed. Malfunctioning cannot be ruled out if levels exceed or drop below the specified tolerances.

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⚠️ **Caution!**	– If there is a power failure or if the power supply is interrupted, make sure the system has not been put into a dangerous, undefined condition. – EMERGENCY STOP mechanisms must remain effective throughout all modes and states of operation. – Connection cables (particularly data transmission cables) must be selected and laid in a way that ensures that capacitive and inductive interference will not adversely affect the equipment. Appropriate measures must be taken to handle line interruptions to prevent any undefined states occurring. – Wherever malfunctioning can cause material damage or personal injuries, additional external safety circuits must be provided (e.g. limit switch, mechanical interlocking devices etc.).

4. Assembly and Installation

Before assembling the device, make sure you have all the components and documents.

Scope:	1 x POLARIS Web Client/Remote PC
	1 x Holding clamp
	1 x User manual
Optional:	Keyboard, mouse, track ball, touchpad
	enclosure, stand and wall-mounting bracket
Not included:	Assembly material, stiffening frame,
	cable for voltage supply and data line

⚠️ **Caution!**	The POLARIS Web Client/Remote PC must be connected, assembled and disassembled by qualified personnel who are authorised and trained to assemble electrical components in hazardous areas.

🛈 **Note**	We recommend setting up the complete system under laboratory conditions and testing it before it is permanently installed. If a long connection cable is not available, please use a patch cable to test the basic functions.

4.1 Schematic diagram

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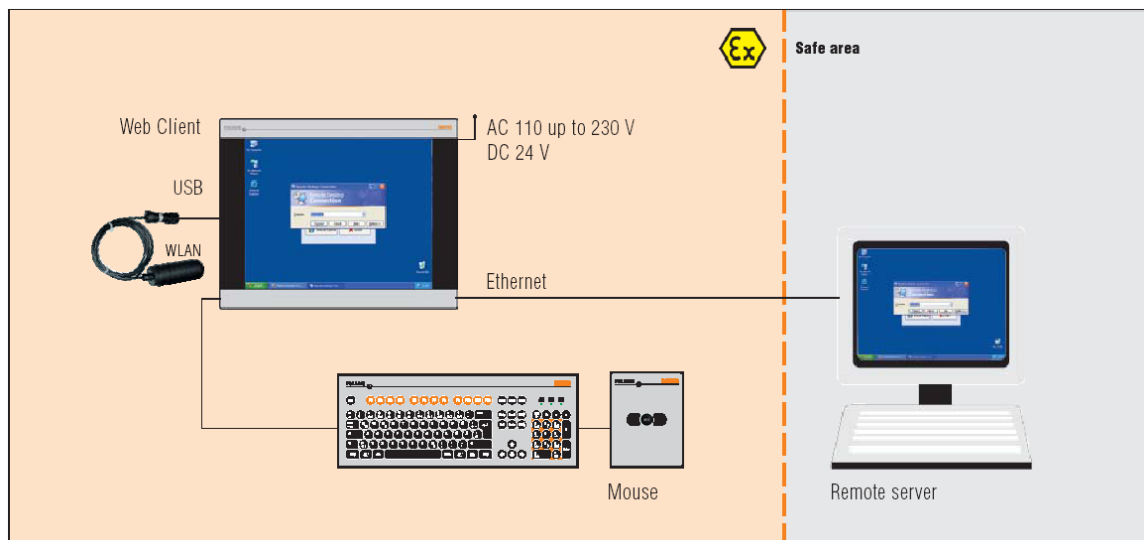
4.2 Mechanical installation

⚠️
Caution!

Make sure the POLARIS Web Client/Remote PC is installed on a load-bearing and stable base. It must be fixed in place with suitable mounting material.

Risk of accident! As the device is heavy and difficult to handle, 2 people are needed to assemble/disassemble it.

For a good transmission of contact pressing force, a stiffening frame (not included in the scope of supply) is placed between the holding clamps (included in the scope of supply) and the enclosure material. This ensures an even transmission of power.

- The screws on the holding clamp must be tightened slightly.

- Check the display bearings and the sealing.

- Tighten the clamping screws to ensure that the POLARIS Web Client/Remote PC is sealed adequately.

4.2.1 Recommended enclosure

Stainless steel enclosure with a wall thicknesses as of 2 mm, whereby the stiffening frame must be used between the holding clamps and the enclosure material.

Stiffening frame for maintaining the IP65 type of protection for:	
POLARIS Web Client/Remote PC 19.1"	05-0205-0010
POLARIS Web Client/Remote PC 15	05-0205-0009

4.2.2 Special installation conditions

To maintain the IP degree of protection (= IP54 when installing in 2G enclosures with Ex-e type of protection [e.g. controls] and = IP6X when installing in 2D enclosures in areas with combustible types of dust with the protection by enclosure type of protection), the stiffening frame must be used when affixing to the front.

4.2.3 Cover of Ex i terminal compartment

When using an outer enclosure with at least IP 20, the cover for the Ex-i compartment can be dispensed with.

4.3   Mounting

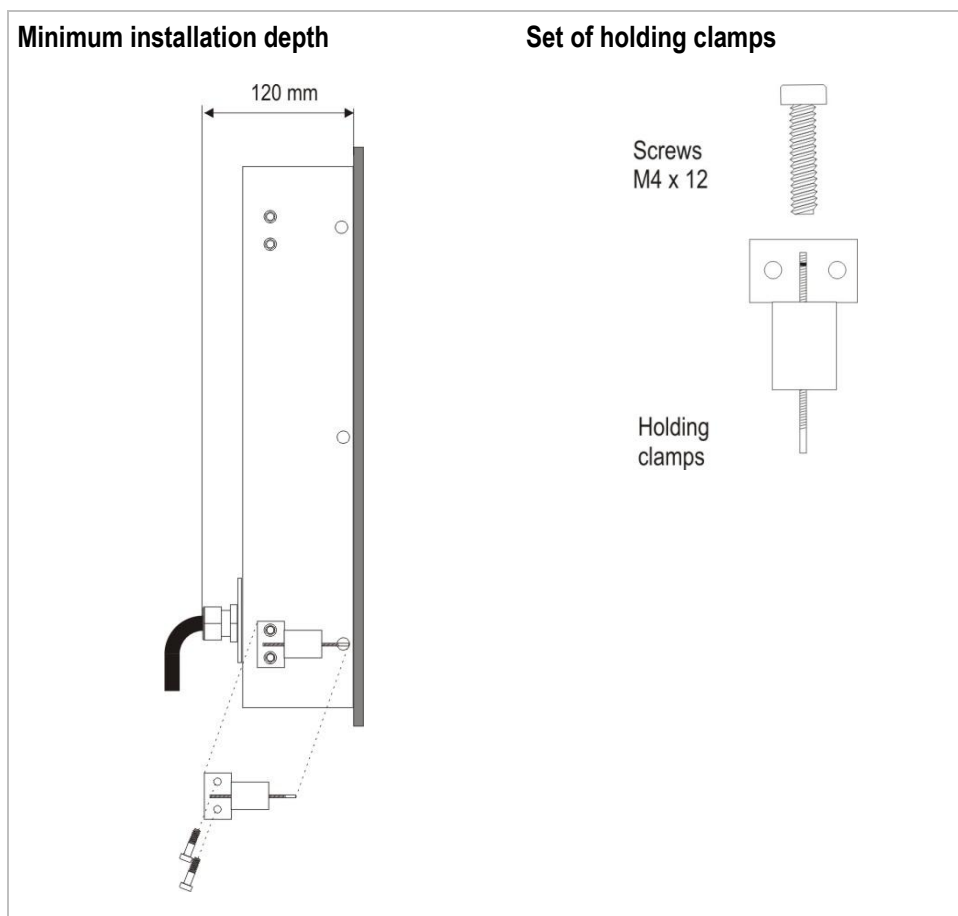**Select the mounting location on the basis of the following criteria:**

−   choose the optimum height for operating the device

−   ensure good lighting conditions for a perfectly legible display

−   do not mount in direct proximity to switching or current changing devices.

4.3.1   Installation in wall cut-out

Insert the POLARIS into the wall cut-out. If necessary, place the stiffening frame over the POLARIS from the back.

Use the M4x12 screws (included in the scope of supply) to fasten the holding clamps to the POLARIS and tighten the clamping screws evenly.

Make sure the seal is positioned correctly between the POLARIS and the mounting surface.

Minimum installation depth	Set of holding clamps
120 mm	Screws M4 x 12
	Holding clamps

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### 4.3.2   Installation in stainless steel enclosure

The POLARIS Web Client/Remote PCs are available as a turn-key system solution in the stainless steel enclosure for wall or floor mounting. (See chapter 10 for "accessories".)
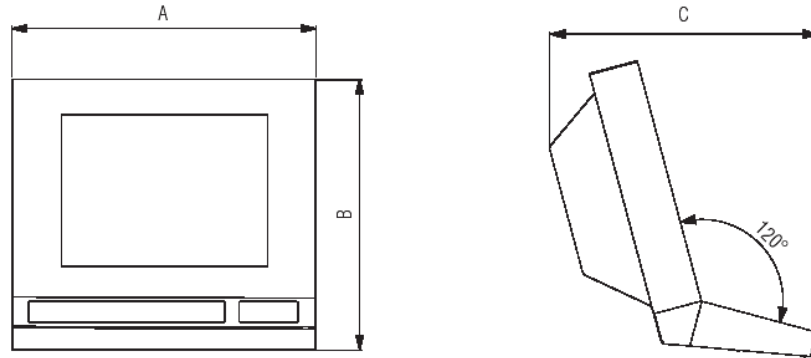
⚠ Caution!

It is important to rule out any highly energetic charging mechanisms at the user interface of the POLARIS Web Client/Remote PC or the keyboard (e.g. pneumatic particle transport).

1. Preparation for voltage and data cabling

2. Option of conducting cables through the flange or through a side opening near the flange through the pipe to the POLARIS Web Client/Remote PC.

3. Drill holes for the holders for wall mounting or floor mounting in accordance with the drilling pattern.

4. Fasten the holder to the wall or floor.

5. Put the POLARIS Web Client/Remote PC onto the holder and fasten it with 2 hexagonal socket-head cap screws and a hand knob screw.
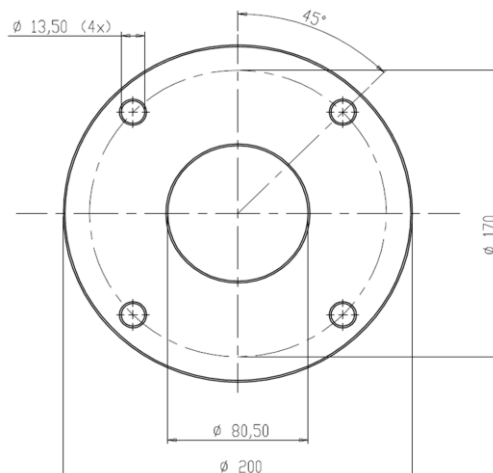
ℹ Note

Connect the POLARIS Web Client/Remote PC to the PE conductor.

4.4 Terminal assignment

⚠️ **Caution!** | The electrical installation work may be done only by a qualified electrician or a person instructed in electrical engineering and must conform to the applicable regulations.

⚠️ **Caution!** | When connecting cables and conductors to operating equipment, it is important to use Ex-certified entries that are suitable for the respective cable and conductor types. They must preserve the "e" type of protection and contain a suitable sealing element so that the IP 54 type of protection at least will be maintained.
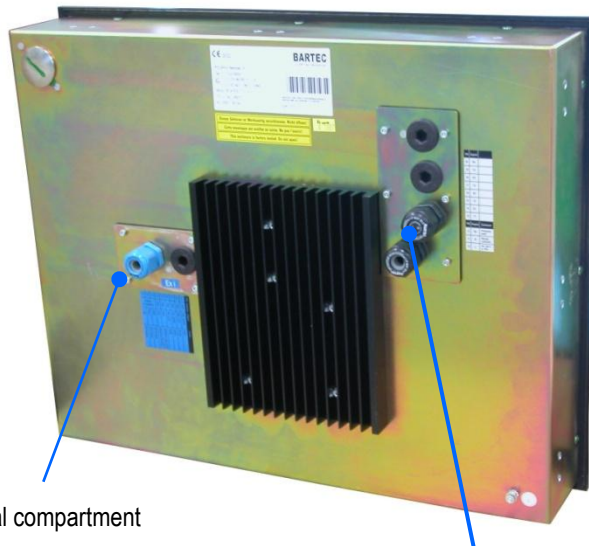
Ex i Terminal compartment
Terminals X19 - X24+ USB Ex i-interface

Ex e Terminal compartment
Terminals X1 - X15

⚠️ **Caution!** | Do not connect the keyboard, mouse, track ball or touchpad when they are energised!

Only an intrinsically safe USB stick from BARTEC may be connected to the existing USB Ex-i interface. The internal fuse can be destroyed if a USB device (or USB memory stick) that has not been tested is connected.
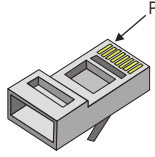
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4.4.1 Terminal compartment Ex e

Terminal	Interface	Signal AC/DC		Description AC/DC
		AC	**DC**	
1	Supply	PE	PE	Protective earth
2	Supply	L1 / +	+	AC 90 V - 253 V or DC 18 V - 26 V
3	Supply	N / -	-	Neutral conductor
4	Not Used			
5	Not Used			
6	Not Used			
7	Not Used			
8	Ethernet	RxD+		Receive positive
9	Ethernet	RxD-		Receive negative
10	Ethernet	TxD+		Transmit positive
11	Ethernet	TxD-		Transmit negative
12	USB	+5V		Power DC +5V
13	USB	-Data		Data negative
14	USB	+Data		Data positive
15	USB	GND		Ground

4.4.2 Terminal compartment Ex i

Terminal	Interface	Signal	Description	Colour
19	PS2	MS_Data	Transmit positive	RD
20	PS2	MS_CLK	Transmit negative	BL
21	PS2	KB_Data	Power DC +5V	GY
22	PS2	KB_CLK	Data negative	PK
23	PS2	GND	Data positive	GR/YE
24	PS2	VCC	Ground	BN/WH

4.4.3 Terminal assignment in conformance to T568B

Assembly					
RJ45	PIN	Colour		Interface	Signal
	1	OG/WH		Transmit positive	TxD+
	2	OG		Transmit negative	TxD-
PIN1	3	GN/WH		Receive positive	RxD+
	4	BU			
	5	BU/WH			
	6	GN		Receive negative	RxD-
	7	BN/WH			
	8	BN			

4.5 EMC (Electromagnetic Compatibility)

4.5.1 Note

Attention!

This is a class A unit and can cause radio interference in residential areas; if it does, the owner/managing operator may be required to implement suitable measures and pay for loss or damage.

i

Note

Only shielded conductors may be used as connecting conductors. This applies both to the data line and to all other conductors too.

The data lines must be stranded in pairs.
Example 4 x 2 x 0.75 mm² LIYCY TP.

As far as possible, separate conductors should be used for power supply and data.

4.5.2 Interference suppression

Certain basic measures must be taken to ensure freedom from interference when the graphic display are installed:

- Interference voltages injected into the device via power and signal cables and static charges caused by contact are to be conducted to earth (e.g. grounding screw terminal fixed to the back of the device). This earthing point must be connected to the PE conductor by means of the shortest possible low resistance copper conductor or must be integrated in the equipotential bonding. If this point is not observed, the measures taken to suppress interference and preclude damage to the device effectively will be impaired.

- The installation point should be as far as possible away from fields of electromagnetic interference. This is especially important if there are frequency converters in the vicinity. Under certain circumstances will it be advisable to set up partitions to isolate the graphic display from interference.

- If inductive devices are fitted in the vicinity (e.g. contactor, relay or solenoid coils), especially if they are powered from the same source, protective circuits (e.g. RC elements) must be installed.

- Power supply and data cables must be laid so as to avoid interference. This can be achieved, for example, by avoiding laying such cables in close proximity to high-current carrying cables.

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4.5.3 Shielding

■ Only cables with braided shielding should be used
(recommended cover density > 80%).

■ Sheet shielding should not be used.

■ Generally, connection of the shielding at both ends results in optimum damping of all
interference frequencies.

■ Connection of the shielding at one side only may be more advisable if a difference in
potential exists and no equipotential bonding cable can be laid.

4.5.4 Connection of shielding

■ A low impedance connection to the circuit protective conductor is important to ensure
a low current fault path.

■ When sub-D connectors are used, the shielding should always be connected to the
metal casing of the sub-D plug.

■ The plug casing of some controllers is not always well connected to earth. In such
cases it may prove advantageous to insulate the shielding from the sub-D plug of the
controller and connect it directly to the protective earth conductor by means of a
cable that should be kept as short as possible (0.75 mm² …1.5 mm²).

4.5.5 Examples of how shielding can be connected

Shielding connected at both ends
of connecting cables between the controller and POLARIS Web Client/Remote PC:
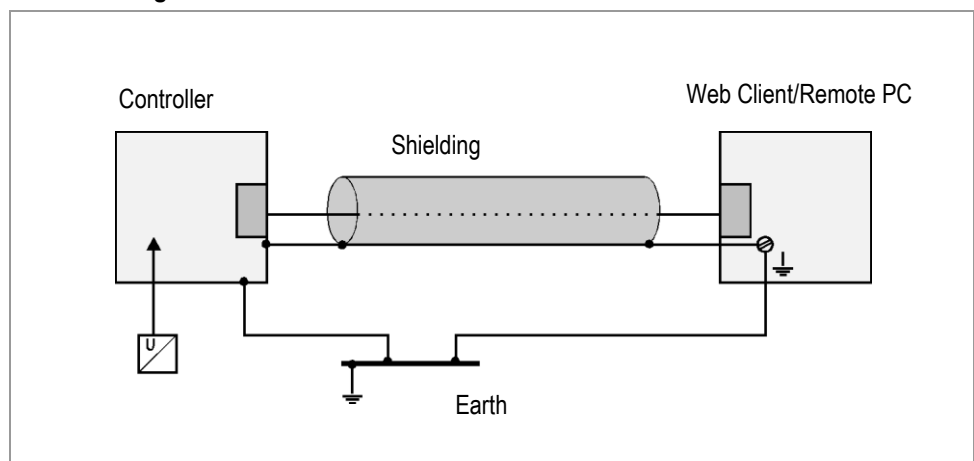
Generally, connection of the shielding at both ends results in optimum damping of all
interference frequencies. This method is to be recommended when there is good
equipotential bonding between the individual units. In such cases it is possible to make
use of the controller's voltage supply cable even if this is not electrically isolated.

**Connection of shielding at one end
of connecting cables between the host and the Web Client/Remote PC:**
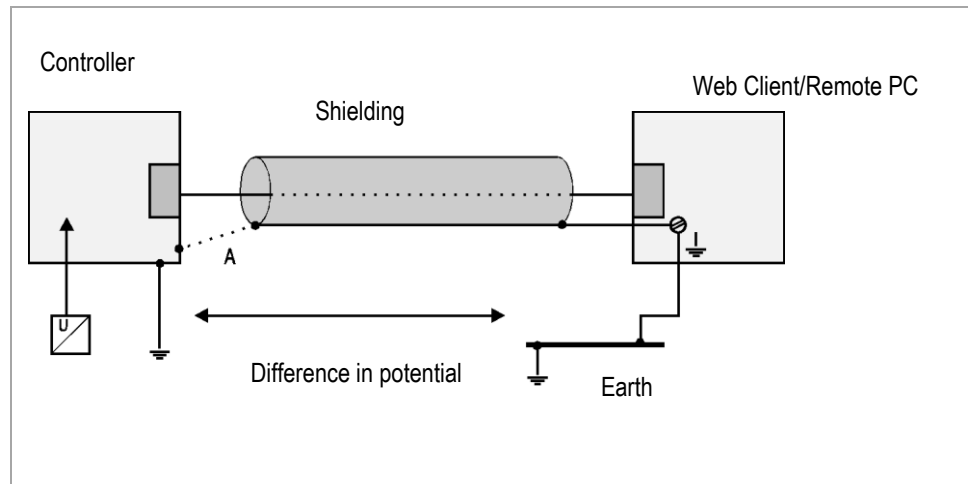
Connection of the shielding at one end only is recommended when there is inadequate equipotential bonding, or none at all. In such cases an electrically isolated power supply unit must be used.

If the shielding were connected at both ends, the equipotential bonding current would flow to point A and this must be avoided at all costs, as the resultant interference pulses could be passed on to the devices via the data cable. When shielding is connected at one end only it must be on the side that has the lowest resistance earth connection.

Before the equipment goes into service the directions from the controller manufacturer regarding proper assembly and operation must be read carefully. They should then be applied taking full account of the recommendations we make here.

4.5.6 Connecting the Ethernet cable to the POLARIS Web Client/Remote PC

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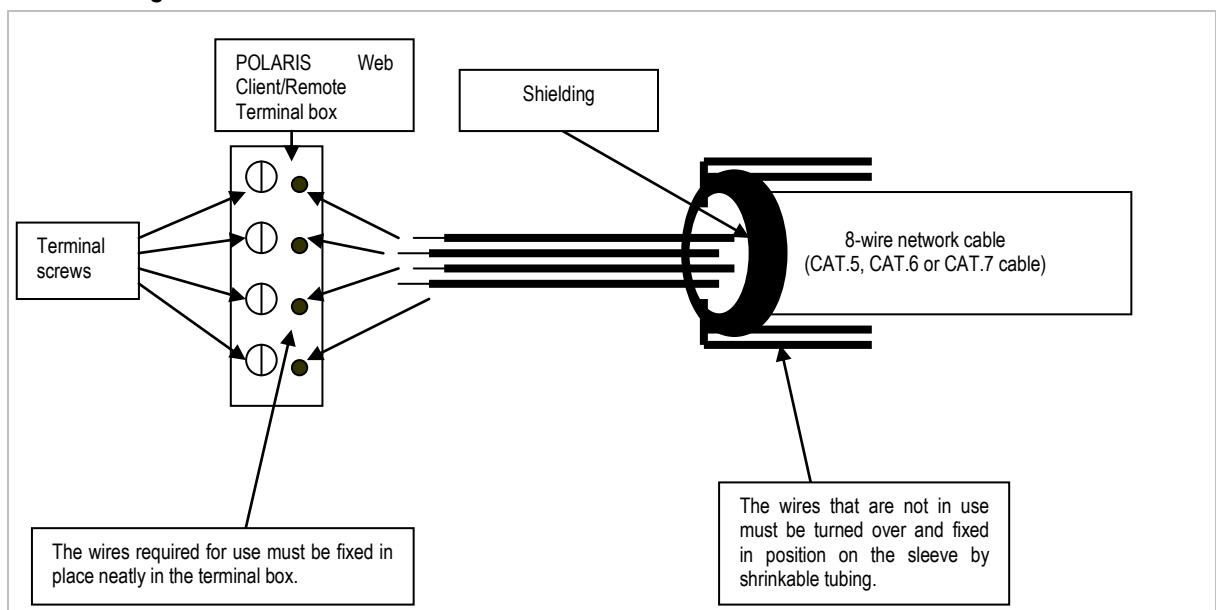
5.   Commissioning

For electrical systems the relevant installation and operating specifications (e.g. Directives 99/92/EC and 94/9/EC, BetrSichV and the applicable national ordinances, IEC 60 079-14 and the DIN VDE 0100 series) must be observed.

The operator of an electrical system in a hazardous environment must keep the operating equipment in an orderly condition, operate it correctly, monitor it and do the required maintenance and repairs.

Before commissioning the devices, check that all components and documents are there.

⚠️
Caution!

Only trained and qualified personnel may commission and do maintenance work on the POLARIS Web Client/Remote PC! Trained qualified personnel are people who are familiar with the installation, assembly, commissioning and operation of the POLARIS Web Client/Remote PC, have been instructed about the risks and have the appropriate qualifications by virtue of the work they do.

The following conditions must be met before the device may be commissioned:

−   Check the POLARIS Web Client/Remote PC for damage to seals, screw connections or the glass pane.

−   Make sure the voltage and data cabling is in place.

−   Close the covers on the Terminal compartments on the POLARIS Web Client/Remote PC.

−   Make sure all screwed connections have been tightened securely.

−   All connected sources of voltage and power must conform to the device's technical data.

−   Disconnect the circuit for the POLARIS Web Client/Remote PC

6. Remote Desktop Configuration

6.1 Configuration of the host computer by the example Windows XP

(1) Right-click **"My Computer"**.

(2) Select **"Properties"**.

(3) Select the **"Remote"** tab and tick the check box in the **"Remote desktop"** field.
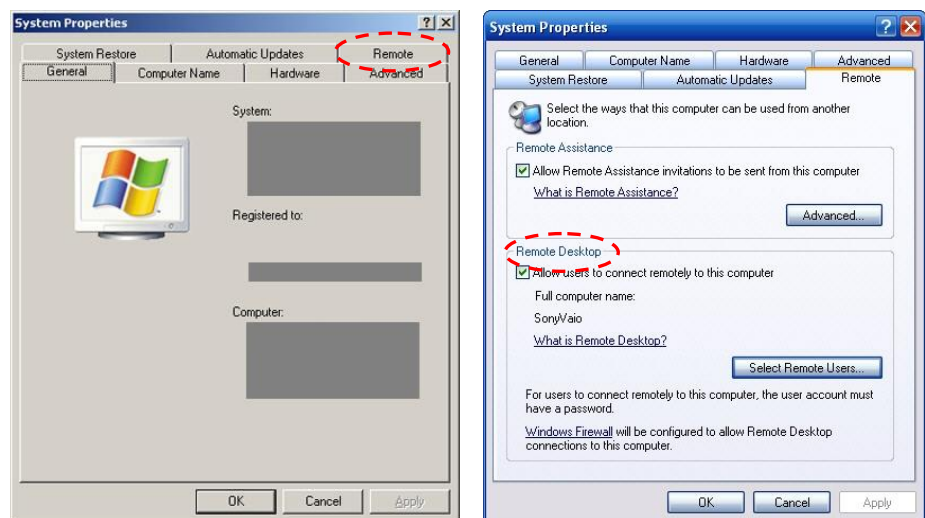
(4) The computer can be controlled now from the POLARIS Web Client/Remote PC.

Alternatively you can click on the buttons

– Start

– Properties

– Control Panel

– System Properties

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6.2 Quick Start

The remote desktop function in Windows XP Professional is a terminal service session for individual users. The connection for communication with the host is based on the RDP (Remote Desktop Protocol). The remote desktop user accesses applications that run on the host system.

The client software for the remote desktop connection requires one of the following operating systems on the host computer:

– Windows XP Professional

– Windows Vista Business

– Windows 7 Professional, Ultimate and Enterprise edition

Optionally, VNC Software (not part of the delivery scope) can be installed on the POLARIS Web Client/Remote PC to remote control further operating systems (detailed information available from the respective manufacturer).

During a remote desktop session it is possible to use client resources such as file system objects, printers, serial connections, audio devices and the clipboard depending on the requirement. The remote desktop connection is started automatically after the system start.

6.3 "Remote Desktop Connection" Dialog Box

A corresponding **"name"** or the **"IP address"** of the host computer to be connected can be entered into the **"Computer"** field

Click on the **"Connect"** button.

6.4 "Log on to Windows" Dialog Box

To set up a connection with the host computer, an enabled **"user name"** of the host computer and the corresponding **"password"** must be entered in the log-in screen.

To log onto the host computer, click on the **"OK"** button.

The host computer's desktop is shown on the POLARIS Web Client/Remote PC's display.

6.5 Optional settings for the POLARIS Web Client/Remote PC

It is possible to operate several host computers from a POLARIS Web Client/ Remote PC.

To log onto different host computers, click on the "Options" button in the "**Remote Desktop Connection**" log-in screen to reach the optional menu.

In the **"Logon settings"** dialog box, the **"name"** or **"IP address"** and **"the user name"** with **"password"** can be entered and saved.

In the **"Connection settings"** dialog box a host computer that was saved before can be opened again and used by simply clicking the **"Open"** button.

6.6 Logging onto a number of different host computers

It is possible to set up several remote desktop connections at the same time on a POLARIS Web client/Remote PC.

By clicking on the different tasks in the task bar, you can switch between the individual remote desktop connections.

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7. Troubleshooting

No image	– Check voltage connection
No network recognised	– Check Ethernet connection to the POLARIS Web Client/Remote PC
	– Check connection cable to the network; it might not be connected
No remote access	– Check the host computer's IP address
	– The host computer must be set up to allow remote access.
	– The host computer and the POLARIS Web Client/Remote PC must both be in the same subnet mask - particularly in a point-to-point connection
	– Even without a network connection a log-in name and a password must be set up on the host computer

8. Touch Screen

8.1 Key to the touch screen symbols in the system tray

The mouse symbol indicates which function of the mouse will be implemented when the touch screen is touched. In this case it is the function of the left mouse button. Touching the system once changes the function to the right mouse button until it is touched the next time, when it then returns to the standard setting.

The touch screen symbol indicates that the touch screen software is installed and it is ready for operation.

If the symbol for the change between left and right mouse button function is too small, it is possible to have a larger symbol shown on the screen.

Go to "Mouse button selection". The following window opens. It is possible to switch between the left and right mouse buttons.

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9.   Order Numbers

```
1 7 - 71V3 -   [ ] 0 [ ][ ] / [ ][ ][ ] 0
```

Device		
Display without touch	15"	4
Display without touch	19.1"	5
Display with touch	15"	6
Display with touch	19.1"	7
Power Supply		
AC 90 V - 253 V		0 0
DC 24 V		0 1
National language		
without classification of type		0
German		1
English (UK)		2
French		3
Italian		4
Swedisch		5
English (US)		6
other languages on request		
Enclosure		
Wall mounting	Basic	1
Floor mounting	Basic	2
Floor mounting	Exclusive	6
Table mounting rotatable/inclinable	Exclusive	8
other versions on request		
Input device		
without classification of type		0
Finger mouse		1
Trackball		2
Touchpad		3

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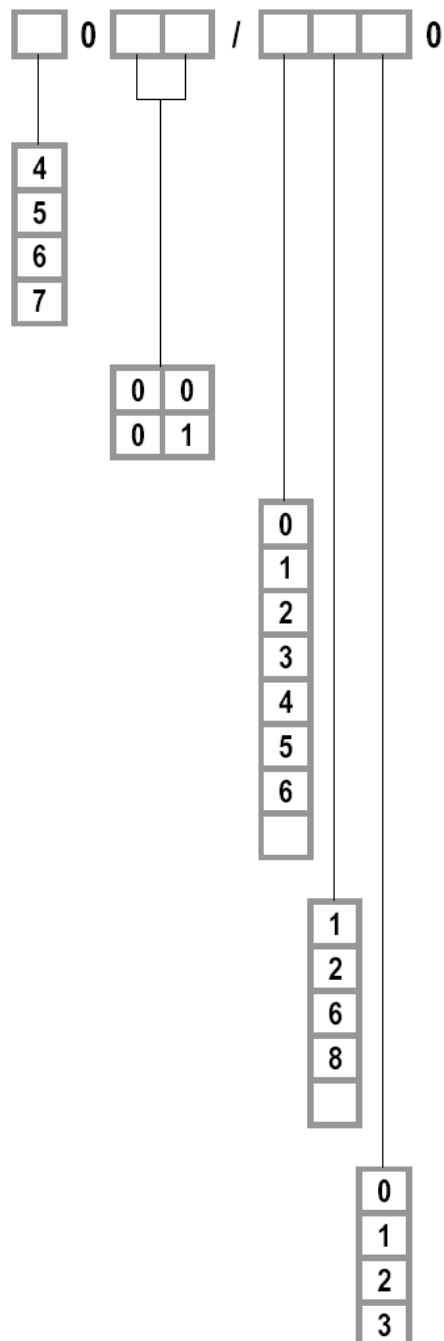
10. Accessories

Designation	Order no.
Keyboard	
German	17-71VZ-40.0
English (UK)	17-71VZ-40.1
French	17-71VZ-40.2
Italian	17-71VZ-40.3
Swedisch	17-71VZ-40.4
English (US)	17-71VZ-40.5
other languages on request	
Input device	
Finger mouse	17-71VZ-1000
Trackball	17-71VZ-2000
Touchpad	17-71VZ-3000
Connection cable for keyboard and finger mouse	
Total length: 1.8 m	05-0068-0163
Total length: 3.0 m	05-0068-0204
Connection cable for keyboard and trackball	
Total length: 1,8 m	05-0068-0205
Total length: 3.0 m	05-0068-0204
Connection cable for keyboard and touchpad	
Total length: 1.8 m	03-0068-0183
Total length: 3.0 m	05-0068-0206
Reinforcement frame	
for POLARIS Web Client/Remote PC 19.1"	05-0205-0010
for POLARIS Web Client/Remote PC 15"	05-0205-0009
Enclosure	
Wall mounting Basic	
Floor mounting Basic	
Floor mounting Exclusive	
Table mounting rotatable/inclinable Exclusive	
other versions on request	
Further Accessories	
USB Ex i-memory stick 4 GB	17-71VZ-5000/0100

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11. Maintenance, Inspection, Repair

⚠️
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Maintenance intervals

The mechanical status of the devices should be checked at regular intervals. The length of the maintenance intervals depends on the ambient conditions. We recommend checking at least once a year. Regular maintenance is not necessary if operated appropriately in conformance with the installation instructions and with due consideration to the ambient conditions.

Inspection

Under IEC 60079-19 and EN 60079-17, the owner/managing operator of electrical installations in hazardous areas is obliged to have these installations checked by a qualified electrician to ensure that they are in a proper condition.

Servicing

Adhere to the applicable regulations under Directive 99/92/EC, IEC 60079-19 and IEC 60079-17 when servicing, doing maintenance work on and testing associated operating equipment!

Assembly/disassembly, operating and maintenance work may be done only by trained specialists. The statutory rules and other binding directives on workplace safety, accident prevention and environmental protection must be observed.

Observe the national waste disposal regulations when disposing of the equipment.

Instructions for Repairs

If you wish to send in a defective device for repair, please read the RMA procedure guidance first. Then fill in and sign the RMA (Return Merchandise Authorisation) form and send it to our "Retouren Center".

Email: services@bartec.de   Fax: +49 7931 597-119

We cannot guarantee any contractually agreed processing times for devices that are sent in without an RMA number.

The RMA guide and the RMA form are available on our homepage for downloading.

http://www.bartec-group.de > Quality and culture > RMA form

Have you any questions? Write us an e-mail or call us.

E-mail: services@bartec.de   Phone: +49 7931 597-444

12. Disposal

The component of the POLARIS Web Client/Remote PC contains metal, plastic parts and electronic components.

The statutory requirements for electrical scrap must be observed therefore (e.g. disposal by an approved disposal company).

13. Dispatch and Packaging Instructions

Important information regarding transport and dispatch

> **! Sensitive Devices!**
>
> **Take the device's maximum weight into consideration when selecting packaging and mode of transport.**
> **Stable pallets, for example, are suitable.**

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14. Additional information

Resistance list – polyester front foil
POLARIS series

BARTEC

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The polyester front foil material used for the POLARIS series in accordance with DIN 42115, section 2, is resistant against the testing material specified as follows:

Alcohols	
Ethyl acohol	
Cyclohexanone	
Glycol	
Glycerol	
Isopropanol	
Methanol	

Aldehydes	
Acetaldehyde	
Formaldehyde	

Caustic solutions	
Ammonia	< 2 %
Caustic soda	< 2 %

Hydrocarbons	
Aliphatic hydrocarbons	
General	
Benzine	
Benzene	
Toluene	
Xylene	

Saline solutions	
Alkalicarbonate	
Bichromate	
Prussiate of potash	

Different substances	
Molecular chlorine	
Liquid cresolphenole soaps	
Oxygen	
Tricresyl phosphate	
Water	< 100 °C
Hydrogen peroxide	< 25 %

Chlorinated hydrocarbons	
Chlorofluorocarbon	
Perchloroethylene	
III-trichloroethane	
Trichloroethylene	

Ester	
Ethyl acetate	

Detergents, scavengers and cleaning agents	
Potassium soap	
Detergent solutions (tenside)	
Fabric softeners	

Other organic solvents	
Aether	
Dimethyl formamide	
Dioxane	

Technical oils and fats	
Cutting emulsion	
Diesel oil	
Varnish	
Heating oil	
Paraffin oil	
Ricinus oil	
Silicone oil	
Turpentine oil and turpentine oil substitute	

Acids	
Formic acid	< 50 %
Acetic acid	
Phosphoric acid	< 30 %
Hydrochloric acid	≤ 10 %
Nitric acid	≤ 10 %

(Where not stated otherwise: concentration = 100%)

Polyester membranes have a limited resistance to UV light and should therefore not be exposed to direct sunlight for extended periods of time.

D_BMS791.doc • Resistance list Polyester front foil • Revision 1 / Status: July, 18th 2006 • Technical data subject to change

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EG-Konformitätserklärung
EC-Declaration of Conformity
CE-Déclaration de Conformité

BARTEC

Wir	We	Nous

BARTEC GmbH, Max-Eyth-Strasse 16, 97980 Bad Mergentheim

erklären, dass das Produkt	declare, that the product	attestons, que le produit

POLARIS Serie   **POLARIS series**   **POLARIS série**

Typ-Nr.: 17-71Vx-xxxx/xxxx

CE

auf das sich diese Erklärung bezieht, den Bestimmungen der folgenden Richtlinien entspricht	to which this declaration relates is in accordance with the provision of the following directives	se référant à cette attestation correspond aux dispositions des directives suivantes
94/9/EG, **89/336/EWG**	**94/9/EC,** **89/336/EEC**	**94/9/CE,** **89/336/CEE**
und mit folgenden Normen oder normativen Dokumenten übereinstimmt	and is in conformity with the following standards or other normative documents	et est conforme aux normes ou documents normatifs ci-dessous

EN 60 079 - 0: 2004
E IEC 60 079 - 5: 2005
EN 60 079 - 7: 2003
E IEC 60 079 - 11: 2005
E EN 61 241 - 0: 2004 mit EN 61 241 - 1: 2004
EN 61 000 - 6 - 2: 2001
EN 61 000 - 6 - 4: 2001
EN 60950 - 1: 2001

EG-Baumusterprüf-bescheinigung	EC-Type Examination Certificate	Attestation d'examen CE de type

IBExU 05 ATEX 1117 X

Qualitätssicherung Produktion	Production Quality Assessment	Assurance Qualitée Production

TÜV 96 ATEX 1086 Q

Kennzeichnung	Marking	Marquage

CE0032
    II 2G Ex e q [ib] IIC T4
bzw.   II 2G Ex d e q [ib] IIC T4 (Visualisierungsgerät)
    II 2G Ex ib IIC T4 (Zubehör)
    II 2D Ex tD A21 IP6X T80°C (Visualisierungsgerät, USB-Stick)
    II 2D Ex ibD 21 T120°C (Tastatur, Maus, Trackball, Touchpad)

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim

Bad Mergentheim, den 07.09.2006

Lothar Mezger
Geschäftsführung