



**W1000**  
**Customer Self Service Kiosk**

User Guide (October 2017, Version 1.0)

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your opinion on this publication.**

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if you have any constructive criticism on:

- the contents
- the layout
- the product.

We would like to thank you in advance  
for your comments.

With kind regards,

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Your opinion

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# 1 Scope of the Document



Notes are marked by this symbol.



**Caution!** Identifies action requiring caution.

The responsibility for all technical and special prerequisites for installation of W1000 is with the customer.

Installation as well as connection of W1000 may only be executed by technically trained personnel.

The safety instructions given in this document should be strictly followed when handling the W1000. Further safety, installation and maintenance instructions can be found in the manuals supplied with the components.

In case of doubts or questions please contact Diebold Nixdorf.

# 2 Warranty

Diebold Nixdorf guarantees generally a warranty engagement for 12 months beginning with the date of delivery. This warranty engagement covers all damages which occur despite a normal use of the product.

Damages because of

- improper or insufficient maintenance,
- improper use of the product or unauthorized modifications of the product,
- inadequate location or surroundings

will not be covered by the warranty.

For further information on the stipulation consult your contract.

All parts of the product which are subject to wear and tear are not included in the warranty engagement. For detailed warranty arrangements please consult your contract documents.



Your *service* contract is different. Please contact your local service provider for all questions.

### 3 Important Notes

Terminals supplied by Diebold Nixdorf comply with the respective safety regulations for data-processing installations and information technology installations, including electrical office equipment for use within an office environment.

- After the assessment and evaluation of the structural conditions on-site the installation must be conducted by a trained professional.



Whenever work of any kind is done on the device, as well as when data cables are plugged and unplugged, the device must be completely disconnected from the line voltage.

- Terminals may only be repaired by authorized technicians.
- Unauthorized opening of the housing or inexperienced repairs can result not only in considerable personal danger, but will also invalidate your warranty and liability protection.
- Always consult the enclosed documentation before doing any work with this terminal.
- If this terminal is brought from a cold environment into a heated place of business, condensation may occur. Before operation, the terminal must be completely dry. Therefore, an acclimatization period of at least two hours must be adhered to.
- Always lay the supply leads and cables in such a way that they cannot be stepped on or tripped over.
- Exchange damaged cables immediately.
- In order to completely disconnect the terminal from the power source use the separator in the fuse box\building installation.
- Make sure that no objects (such as paper clips) can reach the interior of the terminal, since electrical shocks or short-circuits could result.
- Ensure that the W1000 receives adequate ventilation to avoid overheating.
- During an electrical storm, data cables should not be plugged in or being unplugged.
- Keep the terminal away from vibrations, dust, humidity and heat.
- Ensure that used parts are disposed of in an environmentally friendly manner.
- In case of an accident (such as a damaged housing, entry of liquids or foreign objects), switch the terminal off and use the separator to completely disconnect the terminal from power source.
- The W1000 is the result of state-of-the-art technology. Therefore, please also ensure that the W1000 is operated under modern building and technical conditions in order to ensure flawless and efficient operation. The terminal and other information technology hardware should only be connected to electrical supply networks with a separate protective earth wire (PE). This type of electrical supply network is referred to as a TN-S network. Do not use PEN conductors. Also follow the recommendations set forth in DIN VDE 0100 Part 540, Appendix C2 as well as EN50174-2, §5.4.3 ([www.DIN.de](http://www.DIN.de)). This will help prevent malfunctions.
- National Electrical Code ANSI/NFPA 70



- Canadian Electrical Code, Part I, CSA C22.1
- Transport the terminal only in its original packaging (to protect it against knocks and bumps).
- Always keep the ventilation slots free of obstruction to ensure adequate air circulation and avoid overheating.
- If a lithium battery is supplied with the terminal, ensure that the battery is replaced with an equivalent type. Otherwise there is danger of explosion! Lithium batteries may only be replaced with identical types or other types recommended by the manufacturer.
- Batteries must be disposed of according to local regulations on the disposal of special waste.

### **3.1 Connecting Peripherals**

Use only shielded cables when connecting terminals to the system to ensure compliance with international Rules and Regulations for radiated emission as well as to achieve a high immunity against external disturbances.

### **3.2 Note on the Laser**

The barcode reader contains a light-emitting diode (LED), classified according to LASER Class 1:

## 4 Scope of Delivery

Unpack the parts and make sure that every item at the packing list is included.

If you find

- shipping damage **or**
- discrepancies between the contents of the package and the packing list **or**
- defects,

please inform your vendor or Diebold Nixdorf sales location immediately. Also provide the packing list and the packing list item and serial numbers for the effected unit.

### 4.1 Serial Number

Please find the Serial Number on the type label attached inside the housing.



## 5 Electrostatic sensitive devices (ESD)



Your *service* contract is different. Please contact your local service provider or all questions.

When you handle components fitted with ESDs, you must observe the following points under all circumstances:

- Unplug the power before inserting or removing components containing ESDs.
- While working with ESDs you must discharge yourself by using an ESD wrist strap or grounding cable to connect yourself at all times to the earth connector of power socket or a grounded object.
- Place all components containing ESDs on a static-safe base.
- The equipment and tools you use must be free of static charges.
- Always hold boards with ESDs by their edges. Do not touch the components.
- Never touch pins or conductors on boards fitted with ESDs.

## 6 W1000 – Components

### 6.1 Exterior



1	Display	4	Scanner
2	Printer	5	EFT
3	Magnetic Lock	6	Card Reader

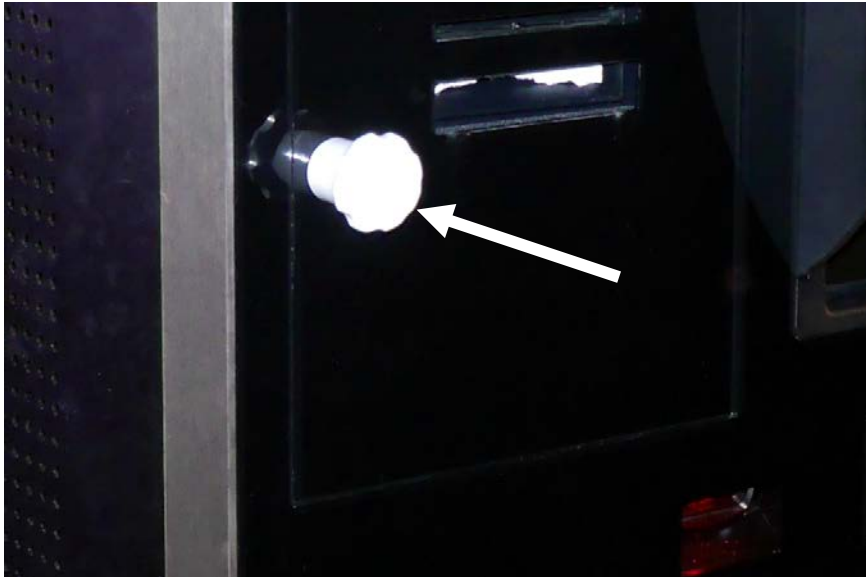
## 6.2 Interior



1	BEETLE /M-II or M-III	6	Display
2	Power Distributor	7	EFT
3	Printer	8	Card Reader
4	Speaker	9	Scanner
5	Backlight		

## 7 Opening the W1000

Open the printer flap with the magnetic key. To do so, slightly press the key on to the marking at the housing.



Unlock the door with the key and open the device to reach all components.



Close the device in reverse order.



Remove the key before closing the printer cover.

## 8 Start up / Shutdown the System

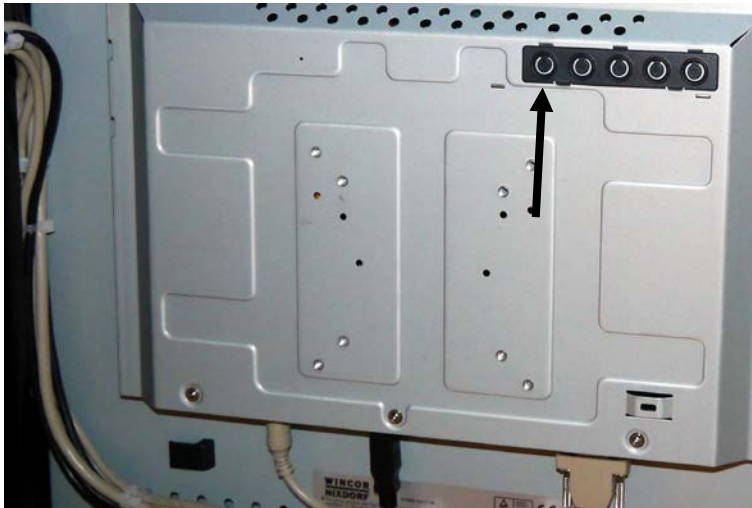
### 8.1 Start up the System



The system will start up automatically, when it will be provided with power. If this does not work, please open the device (see chapter Opening the W1000) and push the ON/OFF button at the BEETLE to switch the system on (see picture below).



If the display does not start up push the ON/OFF button at the display to switch it on (see picture below).



Ensure that the W1000 has been installed correctly to the house installation and the LAN cable is properly connected.

The delivered system is completely configured. There are just a few things to do, before starting up the W1000.



A 16A fuse complying with IEC60127 (breaking capacity of 1500A) must be part of the building installation.

The power supply system must be equipped with separately guided protective earth conductors (PE). This kind of electricity system is known as TN-S network. Do not use PEN conductors!

**Rating** of 22" W1000:

- 100-240 V, 50 Hz, 2 A

## 8.2 Shutdown the System

Shut down the device by finishing the application.



### 8.3 Disconnecting the System from the Mains

To remove the system completely from the mains open the device (see chapter Opening the W1000) and unplug the power cable at BEETLE.



## 9 TH230+

### 9.1 Safety Instructions



The printer should only be disassembled or repaired by a technician, who is certified by Diebold Nixdorf.



To ensure quality print and normal lifetime, use recommended or good quality paper.



Do not allow the printer to start printing when there is no recording paper installed, otherwise the print head and platen roller will be damaged.



Do not touch the cutter and tear bar of the printer.



The thermal head is an ESD-sensitive terminal. To prevent damage, do not touch either its printing part or connecting parts.



The print head is a thermal element and it is at high temperature during printing or just after operation, therefore please do not touch it and its peripherals for safety reasons.

### 9.2 Operator Panel



#### FEED

If you push this button once and release it, the printer feeds paper for one line (1/6 inch).

If you push this button and hold it down, the printer feeds the paper as long as the button is not released.

The button can be locked by the application software and then will be without function.

## POWER

All LED off	Power is not stable
Green POWER LED on	Power is stable
Green POWER LED blinking	Printing speed may be low (*) if necessary contact your technical support

(\*) The printer will run with the lowest power value (48W) if a non current power supply unit from Diebold Nixdorf or an external power supply unit without automatic current identification is used. With a suitable power supply unit type the maximal power value can be defined with the *configuration menu* from 48 Watt up to 90 Watt.

## PAPER

Yellow PAPER LED off	Paper is properly inserted.
Yellow PAPER LED on	Paper roll near end.
Yellow PAPER and red ERROR on	Paper end is reached.

## ERROR

Red ERROR LED off	Normal condition
Red ERROR LED on	Not ready for operating. Printer cover is not closed or in combination with Yellow PAPER LED on, paper end is reached
Red ERROR LED blinking	An error occurs. Switch the printer off and on again. In case of no success contact your technical support.

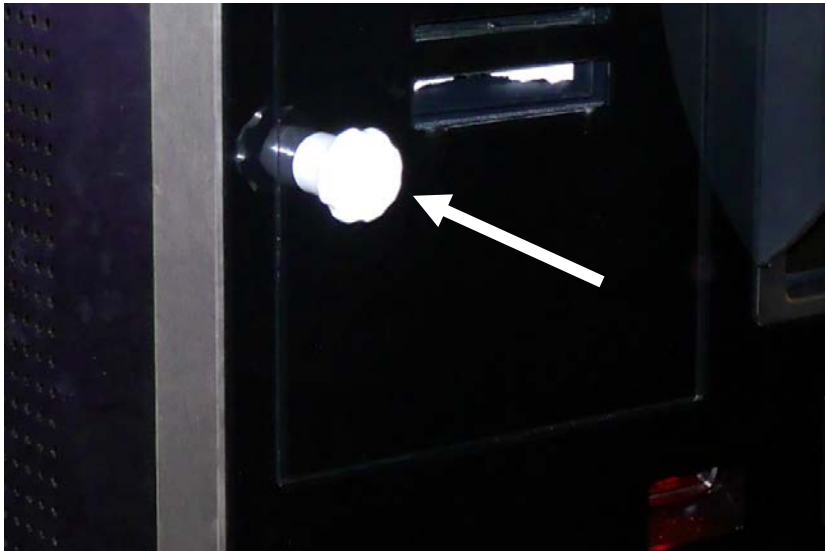
LED overview	POWER green	PAPER yellow	ERROR red	Meaning
	off	off	off	No power
Power	on			Power on
	blinking			If necessary call for technical support
		off		Paper properly inserted
Paper		on		Paper near end
		on	on	Paper end
Error			blinking	If necessary call for technical support
			on	Cover not closed

## 9.3 Changing the Paper Roll



In the W1000 paper rolls with 90mm outer diameter cannot be installed.

Open the printer flap with the magnetic key. To do so, slightly press the key on to the marking at the housing.



Press the OPEN button to open the printer cover.



For a paper roll exchange follow the steps below:

- Remove the (nearly) empty paper roll and any residual paper.



The print head is a thermal element and it is at high temperature during printing or just after operation, therefore please do not touch it and its peripherals for safety reasons.

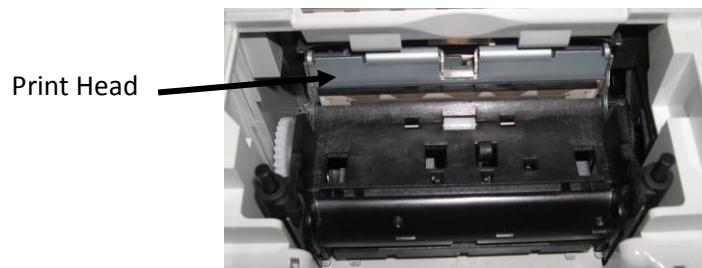
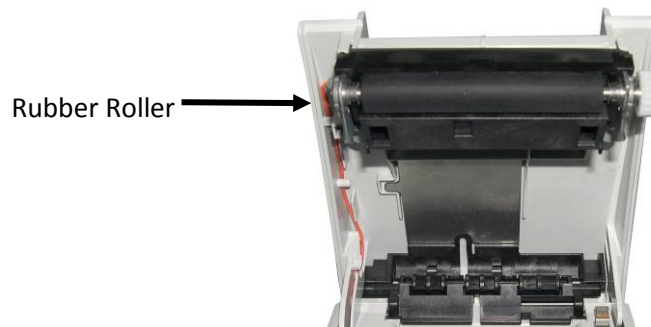
- If necessary clean the print head and the rubber roller (see next chapter).
- Unwind the outer layer (winding) of the paper roll.
- Insert the paper roll. Lay the unwinded paper over the front edge of the printer.



Close the printer cover.

## 9.4 Cleaning the TH230 Print Head

Clean the print head and the rubber roller at least every three months. In case of an intensive use of the printer clean both items more often to guarantee a stable print quality.



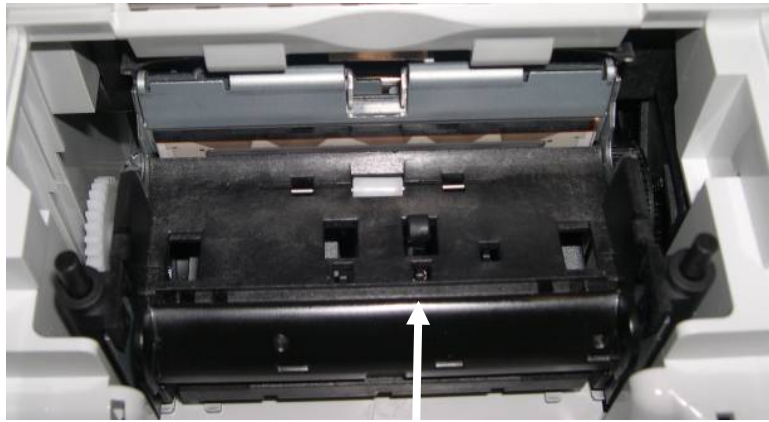
Open the printer cover and remove the paper-roll; the rubber roller and the print head mechanism are then visible.



Let the print head cool down before cleaning it.

Clean print head and rubber roller with a soft lint-free cloth moistened with pure Isopropyl alcohol (e.g. ISOPADS which can be ordered from Diebold Nixdorf, spare part number 01750104065)

Visually inspect the print head. If you can still see dirt, the cleaning procedure must be repeated. You can identify the relevant and important thermal element zone by the thin line crossed by wires.



Paper End Sensor



Pay attention not to damage the paper end sensor when cleaning the print head.



Do not touch the rubber roll with your fingers.

While cleaning turn the rubber roller by hand with the lateral gear wheel. Make sure that the entire roller will be cleaned.



Cleaning the print head not properly, may cause an early failure.  
Wait until the isopropyl alcohol is evaporated.



Insert the (new) paper-roll and close the cover. Print out a test ticket (see application handbook) and verify the printing quality (density, alignment and consistency).



## 10 Technical Data

### 10.1 Dimensions

The terminal will be delivered in a box: 1100 mm x 78mm x 500 mm.

#### 10.1.1 Weight

Device: ca. 48 kg

Base plate: ca. 80 kg

Pillar: ca.25 kg

### 10.2 Display 19"

Item	Specification		Unit
Outline dimension	396 * 324 * 9.9(Typ)		mm
Display area	376.32 (H) x301.056 (V) (19.0" diagonal)		mm
Number of Pixel	1280(H) x 1024(V)		Pixels
Pixel pitch	0.294(H) x 0.294(V)		mm
Pixel arrangement	RGB Vertical Stripe		
Display color	16.7M (6-bits+Hi FRC)		
Color temperature	6500K		
Display mode	Normally white		
Surface treatment	Antiglare, Hard-Coating (3H)		
Weight	1600		g
Back-light	White LED		
Input signal	2-ch LVDS		
Power consumption	System	3.6(Typ.), 4.2(Max.) L0 pattern	W
	B/L	11.83 (Max.)	

## 10.3 LCD Display

### Display

Dimensions (including stand)	517.4 (W) X 313.3 (H) X 46.0 (D) mm
Net Weight (Approx.)	5.5 kg
Power Supply	DC 12V, 4.16A
Power Consumption Operating:	45W (typ.) / Sleep: 3W / Off: 1W
LCD Size / Type	21.5" diagonal TFT Active Matrix Panel
Active Area	476.64 (H) X 268.11 (V) mm
Pixel Pitch	0.24825 (H) X 0.24825 (V) mm
Panel Resolution	1920 X 1080 (Max.)
Display Mode	VGA 720 X 400 (70 Hz) VGA 640 X 480 (60/66/70/72/75 Hz) SVGA 800 X 600 (60/70/72/75 Hz) XGA 1024 X 768 (60/70/75 Hz) SXGA 1280 X 1024 (60/70/75 Hz) WXGA+ 1440 X 900 (60/75 Hz) WSXGA 1680 X 1050 (60 Hz) 1920 X 1080 (60 Hz)
Display Color	16.7M (6 bits + HI-FRC)
Contrast Ratio	1000:1
Brightness (without touch)	300 nits (typical)
(Projected Capacitive)	270 nits (typical)
Response Time	5ms (typical)
Viewing Angle --	Horizontal 170.(typical)
Viewing Angle --	Vertical 160.(typical)
Video Input Format Video:	RGB Analog 0.7V peak to peak
Video Sync Format	Separated H&V Sync. / Composite Sync. / Sync-on Green
Video Input Frequency	31.47kHz ~ 82.3kHz / 56Hz ~ 75Hz (Horizontal / Vertical)
Video Signal Input	D-sub 15 pin Female (Analog) / DVI-D

### Environment

Temperature	- Operating 0.C ~ +40.C
Temperature	- Storage -20.C ~ +60.C
Humidity	- Operating 20% ~ 80% (Noncondensing)
Humidity	- Storage 10% ~ 90% (Noncondensing)

### OSD Keys

Control Key	Power On/Off, Select, Down, Up, Menu
OSD Option	Contrast, Brightness, Auto Adjust, Left / Right, Down / Up
Horizontal Size,	Fine, OSD Left / Right, OSD Down / Up
OSD Timeout,	Factory Reset, Language, RGB

### Plug & Play

DDC 2B Compatible

### Compliance

TUV, CE, UL, CUL, FCC-B, RoHS

### Touch

Touch Technology	Projected Capacitive
Touch Interface	USB (Type-B)

## 10.4 Printer TH230+

<b>Technology</b>	High-speed thermal print
<b>Resolution</b>	8 dots/mm (203 dpi)
<b>Printing speed</b>	one colour: 220 mm/s, two colour: 110 mm/s
<b>Cash drawer interface</b>	6pin RJ12, 1A@24V max.
<b>Interface options</b>	USB 2.0 full speed, RS232c
<b>Cutter</b>	Material: tempered steel, Speed full cut: < 300ms
<b>Paper transport</b>	Forward; to use paper to full capacity after cutting: up to 12mm backwards (approx. 3.5 lines at 7.52 lpi)
<b>Control functions</b>	Print head temperature control with adjustment of print speed Paper near end control and paper end control Paper cutter error message Printer cover open/closed Self test with printout
<b>Option</b>	Paper width 57,5mm, Print width =51mm = 408 dot
<b>Housing colour</b>	Light grey or black
<b>Power supply</b>	24 V DC Automatic and manual capacity control: 48 – 110 Watt
<b>Dimensions</b>	148 x 145 x 195mm (H x W x D)
<b>Weight</b>	Approx. 2kg (w/o paper roll)
<b>Features</b>	Simple Paper roll exchange: Optional two colour print with special paper (100mm/sec) Paper near end message: adjustable by user

<b>Statistical data</b>	Total number of dots Total line feeds Total number of cuts Max. head temperature Paper jam counter Cutter error counter Thermistor error counter High voltage/low voltage error counter Number of firmware updates Power on time in hours Power on counter
<b>Environmental conditions</b>	5° - +45° Celsius
<b>Humidity</b>	5 % - 95% (not condensed)
<b>Noise</b>	<= 55dB(A) operation
<b>Reliability</b>	55 Mio lines 1,5 Mio cuts with 55g/m <sup>2</sup> 150km at 12,5% print density
<b>Graphic feature</b>	TH230 is fully graphic-compliant
<b>Paper width</b>	79.5mm - 80mm
<b>Paper weight</b>	55g/m <sup>2</sup> ± 5 g/m <sup>2</sup>
<b>Paper thickness</b>	0,055mm – 0.1mm
<b>Thermo-Coat</b>	Back of paper
<b>Paper roll Outer diameter</b>	80mm max.
<b>Paper roll width</b>	80.3 max.
<b>Paper length</b>	~100m
<b>Core size</b>	Core diameter: 10mm +2mm wall thickness of the core: max. 2mm ± 0.3mm; Paper end not glued to core. Length of paper fold over at core: 35mm
<b>Print width</b>	72mm = 576 dot



All informations about the BEETLE systems please find on the Diebold Nixdorf Internet.

# 11 Cleaning Instructions

## 11.1 General Information



Caution! Contact the floor fixing of the W1000 terminal with a floor cleaning machine may cause damages!

- Always **turn off the terminal** before cleaning.
- The glass surface of the Touch Screen should be cleaned with a mild, abrasive-free, commercially available glass cleaning product.
- All pH neutral materials (pH 6 to 8) are good for cleaning. Cleaners with pH values 9 to 10 are not recommended. Cleaning with water and isopropyl alcohol is possible as well.
- Do **not use** solvents containing acetic acid.
- Use a soft, fine-meshed cloth to clean the surface. Dampen the cloth slightly and then clean the screen.

A wrong maintenance may cause damages to the screen, which are not covered by guarantee or warranty.

## 11.2 Maintenance and Service

When carrying out work on the components and modules that carry an electrical charge, this equipment must first be disconnected from the power supply.

## 11.3 Terminal Housing

Clean the housing with a vacuum cleaner or cloth.

## 11.4 Approved Cleaning Materials

The items listed below can be ordered from Diebold Nixdorf branch office or your Diebold Nixdorf sales partner.

Product Name	Order Number	Explanations
Professional cleaning set for EDP terminals  100ml plastic cleaner in a pump bottle  50 dust cloths  10 keyboard swabs for places difficult to reach	01750097335	For cleaning and maintaining keyboards and varnished and plastic-coated housing
Damp cleaning cloths  Dispenser box with 100 cloths	01750097332	For cleaning and maintaining delicate EDP terminals, keyboards and housing
Dry cleaning cloths  Antistatic and fluff free  (Pack with 300 cloths)	01750097334	For cleaning display panes
Compressed air spray  PRESSAIR  400ml bottle without a valve,  70cm hose	01750097331	Cleaned compressed air, FCKW-free, for removing loose dust and dirt particles
Cloth with ISOPROPYL 1000 pieces	01750104065	Pure isopropyl alcohol for cleaning display
Cleaning card	01750016388	For cleaning magnetic heads and chip contacts in ID card readers

Please note the *manufacturer's specifications* on the packaging and on the information sheet included in the packaging. The product may be damaged or soiled if materials are used that are not approved or if they are used improperly.

## 12 Certificates

### 12.1 CE Marking



This device complies with the requirements of EMC directive 2004/108/EC with regard to "Electromagnetic Compatibility", 2006/95/EC, "Low Voltage Directive" and RoHS directive 2011/65/EU.

Therefore, you will find the CE mark on the device or on its packaging.

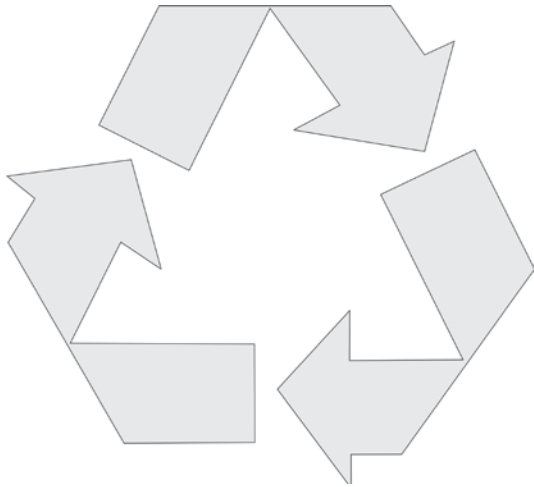
### 12.2 FCC-Class A Declaration

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications not authorized by the manufacturer may void users authority to operate this device. This class A digital apparatus complies with Canadian ICES-003.

*Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.*

## 13 Recycling the W1000



The W1000 was designed according to the Diebold Nixdorf standard "Environmentally Conscious Product Design and Development".

The W1000 is manufactured without the use of CFCs and CCHs and is manufactured to a great extent out of materials and components which are recyclable.

For recycling purposes do not attach any additional adhesive labels to the terminal.

Diebold Nixdorf disposes of old terminals in an environmentally responsible manner at a recycling center that is ISO 9001 and ISO 14001 certified, as is the entire company.

Follow your local regulations on the disposal of toxic waste (such as the system ribbons).

Your Diebold Nixdorf vendor will answer any questions you have concerning returns, recycling, and disposal of our products.



Wincor Nixdorf International GmbH  
D-33094 **Paderborn**

**Order No.** of this Manual: **1750269380B**